URD 2019

Universal Registration Document

MERSEN

Universal Registration Document

page

This document is a free translation into English for convenience purposes only of the French URD filed with the Autorité des Marchés Financiers on March 10, 2020.

1 Group Profile

2019 Highlights

2019 was a new 12 months of growth for Mersen and another in a succession of three very positive years. The Group achieved the strategic objectives it set itself: to develop its expertise, to underpin growth, in particular in sustainable development markets, to continue to improve profitability, but also to ensure the development of the Group's greatest asset, its human capital.

This performance was made possible by the transformation that the Group has made in its organization and methods over the past four years.

Consolidated sales reached €950 million in 2019, up 8.2% as reported and 4.1% like for like, in line with the targets announced throughout the year and with sustainable development markets accounting for approximately 51%. All major geographical areas saw growth: in Europe, the growth in consolidated sales was driven by brisk business levels in the majority of countries, and Italy and Spain in particular. In Asia, Group sales accelerated at the end of the year thanks to the expected improvement in the solar market in China in the second half of the year and business activity was also very strong in India and Japan. In North America, Group sales were buoyed by the chemicals and electronics markets.

Thanks to strong sales and a good price positioning on its products, Mersen now has an operating margin before non-recurring items of 10.8% of sales (reported figure, after IFRS 16). The negative effects of the Group's product and geographic mix and cost inflation were also offset by a ramp-up in productivity.

Net income increased to €60 million, despite significant non-recurring costs. They take into account the Group's decision to impair certain development costs related to the electric vehicle market, following the end to negotiations with a major car manufacturer. Mersen continues to develop and adapt its offerings to a changing market.

Combined with this performance was a strong push in acquisitions. Firstly, the acquisition of specialty graphite production capacities in Columbia in the United States is a major move to prepare for the future. Together with the acquisition of AGM Italy, it enables Mersen to strengthen its position as a key player in specialty materials worldwide: in terms of expertise, production capacity and global coverage. It also allows for a modular production capacity, which is necessary to remain flexible. Last but not least, the acquisition of GAB Neumann in Germany, which was finalized in February 2020, brings additional service business in the chemicals market.

There were also significant capital expenditure during the year. Nearly a third of investments were in sustainable development, either for the SiC semiconductor or solar markets or to make our plants safer and more environmentally friendly.

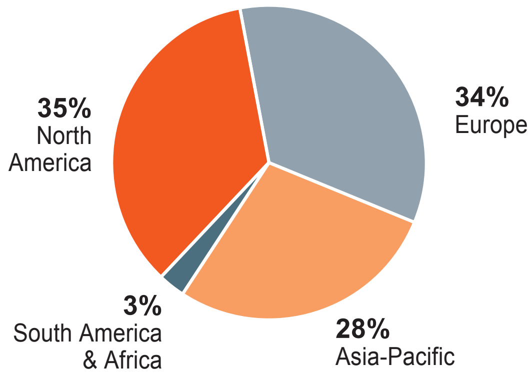
These investments were made while maintaining a solid financial structure: debt was virtually stable compared to last year, showing that the Group is able to fund all its investments. In 2019, free cash flow amounted to €48 million, an increase of more than 45% compared to 2018.

All of these performances mean its Board of Directors will be proposing a dividend of €1 per share at the General Meeting of Shareholders, an increase on 2018.

KEY FIGURES 2019

SALES

€950m
+ 8% vs 2018



17% ENERGY	20% ELECTRONICS	17% TRANSPORTATION	12% CHEMICALS	34% PROCESS INDUSTRIES

RESULTS

€155m
(€142m before IFRS16)
in EBITDA
+ 9% vs 2018

€102m
(€101m before IFRS16)
operating income before non-recurring items
+ 10% vs 2018

€60m
(€61m before IFRS16)
Net income
+ 3% vs 2018

FINANCIAL STRUCTURE

11.3%
(€11.7m before IFRS16)
Return on capital employed

1.5x
leverage

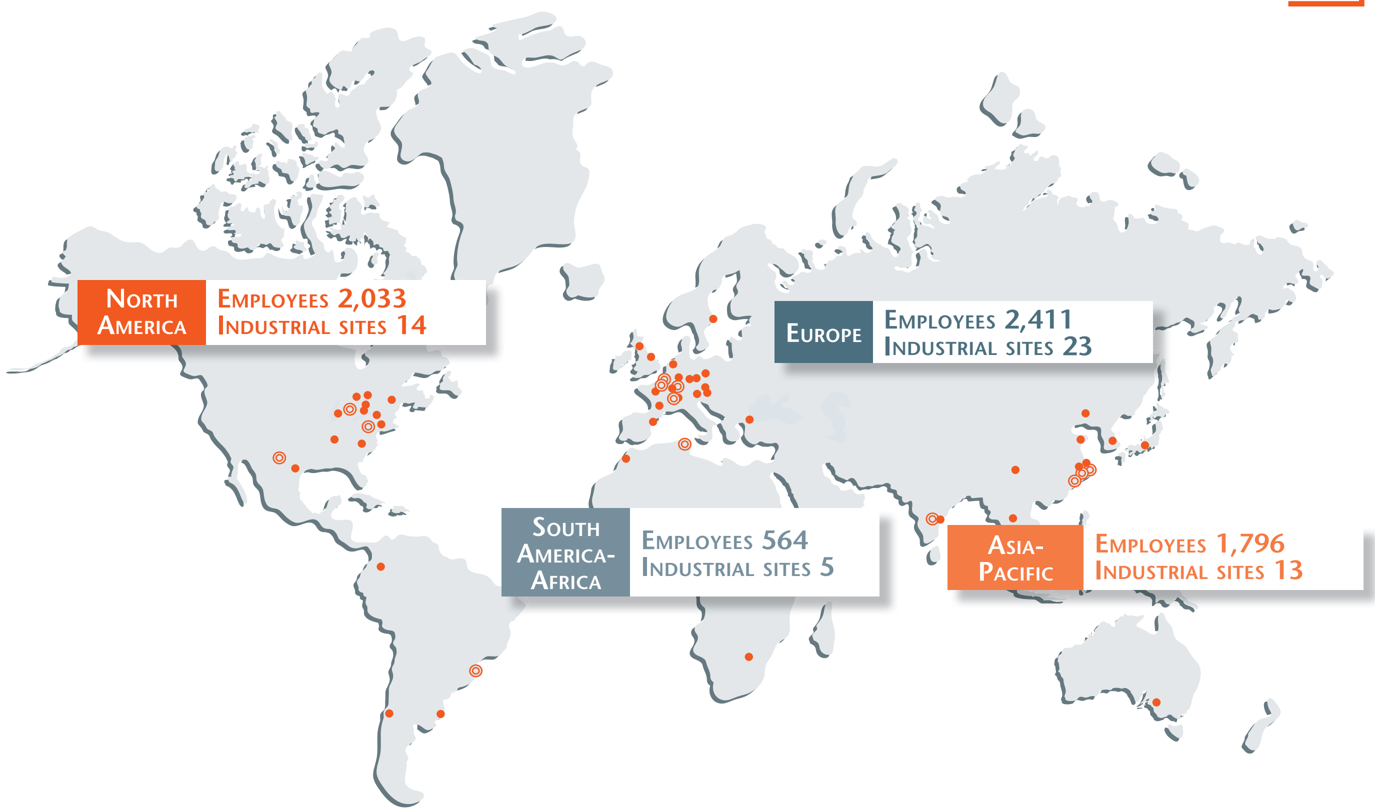
DIVIDEND PER SHARE*

€1.0

** Subject to shareholder's approval at the General Meeting.*

Mersen worldwide

6,804 employees



16
R&D centers

89%
of plant managers recruited locally

55
sites in the world (with 15 > 125 employees)

Commitment

WE SUPPORT

A signatory of the United Nations Global Compact since 2009

51%
of Sales geared towards sustainable development markets

Bronze medal Ecovadis

MISSION
We provide manufacturers all over the world with innovative

OUR RESOURCES

HUMAN CAPITAL
6,804 employees in 35 countries

SOCIETAL CAPITAL
Code of ethics

Purchasing charter

89% of plant manager recruited locally

INDUSTRIAL CAPITAL
55 industrials sites

€63m in Capex

INTELLECTUAL CAPITAL
16 R&D centers

FINANCIAL CAPITAL
Net debt/EBITDA = 1.5

OUR BUSINESSES

DESIGN

TRANSFORMATION, ASSEMBLY
including baking, graphitization, purification, brazing

TREATMENT PROCESS, FINISHING
Machining, coating

OUR ASSETS

2 EXPERTISES

Advanced Materials
- Graphite specialties
- Anti-corrosion equipment
- Power transfer technologies

Electrical Power
- Electrical protection & control
- Power management solutions

5 VALUES
Excellence
Collaboration
People-Conscious
Agility & Entrepreneurial Spirit
Partnering with our Customers

All data above refer to 2019.

solutions to enhance the performance of their offer

VALUE CREATION

SOCIAL

€260m in fixed salaries

€25m in profit sharing plans

13.7 hours of training/employee

89% of employees proud to belong to the group

Safety / LTIR(1) = 1.4

SOCIETAL

€480m in purchase

CSR Commitment (Ecovadis bronze medal)

ENVIRONMENTAL

51% of sales geared to sustainable development

59% sites > 125 employees certified ISO 14001

53% of waste recycled

ECONOMICAL

€20m in dividend paid(2)

€16m in income tax

€8m in interest paid to banks

OUR MID-TERM AMBITION

Optimize the **development of human capital** through a collaborative organization and a strong health and safety culture

Accompanying growth, particularly in **markets contributing to sustainable development**

Pursue the development of solutions adapted to the needs of our customers by relying on our **high value-added expertise**

Pursue the **competitiveness program** as part of a social and societal responsibility approach

(1) Lost-time injury rate.

(2) Amount paid in 2019 for 2018.

Vision, mission and values

At Mersen, our vision, mission and values inspire the decisions and actions that drive our development.

Our ambition is to contribute to technological progress across the globe

Mersen designs innovative solutions tailored to its customers' needs that enable them to leverage their manufacturing performance in sectors such as energy, transportation, electronics, corrosive chemicals and process industries.

To implement our vision and fulfill our purpose, the Group adheres to a set of shared values: Excellence, because it enhances our competitiveness and protects our flexibility and future; **Collaboration,** because by pooling our skills and working together we will progress together more rapidly and more effectively; **People-Conscious,** because our people are part of our culture; **Agility & Entrepreneurial Spirit,** because they are a game changer in today's complex environment; and **Partnering with our Customers,** because they are the strategic allies for whom we develop innovative products.

Group strategy

As a global expert in electrical power and advanced materials, Mersen is a key player in manufacturing industries around the world. Its strategy is anchored by four major pillars:

1. **Pursue the development of solutions tailored to our customers' needs by relying on our high value-added expertise.**

   Mersen offers a wide range of products, services and solutions in our two areas of expertise – electrical power and advanced materials. To effectively address customers' specific needs, the Group draws on its network of 16 R&D centers located close to its customers across the world. This proximity gives Mersen unique insight into the challenges facing each player and enables the Group to offer custom-designed, innovative solutions backed by state-of-the-art technology. Mersen is also pursuing its policy of targeted acquisitions to provide its customers with an enhanced experience and expand its operations in certain regions.

2. **Supporting growth in buoyant markets that contribute to sustainable development by capitalizing on a balanced portfolio of business lines and a global manufacturing presence**

   Mersen works closely with major industry players around the world and uses its international sales and manufacturing network to strengthen its leadership positions in each of its markets. It focuses its efforts on markets with significant medium-term growth potential that contribute to the sustainable development of the planet, including from solar energy to electronics, energy storage and green transportation with rail networks and electric vehicles.

3. **Continuing to implement its competitiveness and performance program while taking a socially responsible approach**

   Mersen wants to gain in operational efficiency while constantly improving the security and safety of its plants and the people who work there and strengthening its ties with stakeholders in its host communities. The Group has implemented a global operational excellence initiative for all parts of the Company, from operations through to sales.

4. **Optimizing human capital development by providing a motivating working environment**

   Developing Mersen's human capital is something to which all Group employees can contribute. Mersen is committed to sharing and developing its expertise, both technical and managerial, and to promoting and transferring the values that underpin its identity throughout the world while still taking care to protect local cultures. The Group also strives to strengthen synergies between segments and geographic areas and to strengthen the expertise and collective capabilities of its teams and encourage employee autonomy.

Resources

Mersen works side-by-side with its customers all over the world. The Group draws on its production base of more than 50 sites in about 35 countries, the majority of which are overseen by local managers to facilitate interaction with local stakeholders.

The Group leverages its knowledge of its customers' challenges to offer innovative products and solutions, which are sometimes developed jointly and draws on its network of 16 R&D centers across the world. Its agile strategy and structure means it is able to stay ahead of market and environment trends and seamlessly adapt its products and services to changing needs.

But Mersen's major strength is its 6,804 employees around the world who drive its development according to a strict code of ethics. That guides all of the Group's activities and operations.

Research and development policy

Mersen group devotes around 3% of its sales to research and development for products, materials and processes, and to technical sales efforts so as to constantly adapt its solutions or services to each customer's specific requirements.

Most of this expenditure is financed internally.

R&D is coordinated centrally, which safeguards the Group's long-term vision and ensures that its priorities are managed in line with the Company's strategy. It is rolled out via operational services managed by the business units, which share their "in-the-field" innovations and highly ambitious projects to overcome challenges and address development issues faced by Mersen. To boost its R&D efforts, the Group works with external players such as universities and large national research centers, which play a key role in helping the Company to develop core knowledge without which it would quickly become impossible for Mersen to deliver solutions to the increasingly complex problems which its customers need to solve.

The above three facets of Mersen's innovation strategy are essential to the Company's smooth operation as they enable the Group to preserve its market share and competitiveness in a constantly-changing world, become a major player in emerging markets and gradually transform the Company by expanding its number of products and services.

The main results and progress made in 2019 include the following:

- Development of a comprehensive range of metal/carbon brushes adapted to the new generations of wind-mills with powers from 2 MW to 5 MW, used in all climatic conditions. The brushes have been first tested on scale 1 equipment in controlled laboratory conditions, then field tested in various climates, and demonstrated a reliable performance and reduced wear rates vs older metal/carbon brushes.
- Confirmation of the success of our ISOMAXX cooling plate design, which brings two key advantages versus more traditional designs: a higher cooling efficiency for the same cooling liquid flow-rate and a perfect temperature homogeneity when the plate is used to cool simultaneously the multiple IGBTs used by modern and powerful DC/AC inverters.
- Development of a robust graphite purification process allowing to routinely produce graphite parts with no detectable impurities. Such parts contain less than 20 mg of non-carbon elements per ton of graphite (or less than 20 ppb of impurities) and are suited to the needs of the most demanding processes used for the production of semiconductor components.
- Introduction of a complete range of compact products: fuses, fuse-holders and finger-safe power distribution boxes; allowing to reduce the foot print of our device used to build electricity distribution panels.
- Development of new fuses adapted to the protection of large battery storage units delivering 1500 V. Our branch fuses have demonstrated their ability to protect lines with a nominal DC current up to 500 AMP in this particularly demanding application where short circuits can result in extremely high current values.
- Development of a new generation of hybrid fuse, adapted to the protection of high power electrical vehicle operating with voltage up to 1000 V, offering additional features and particularly the ability to safely isolate the battery pack with one single device, whether it is to protect the electrical component against an actual short-circuit or because a decision is made to isolate the battery following a crash, including when the car itself is not moving. This improvement adds a significant value to our hybrid fuses without any impact on their mass or on their volume.

Expertise

Since its beginnings at the end of the 19th century, Mersen has gradually transformed into an industrial group with recognized expertise in two key areas – Advanced Materials and Electrical Power – where it holds leadership positions or is the joint world leader. The Group primarily develops innovative solutions tailored to its customers' needs[(1)].

The Group's value chain is built on a series of key stages that apply to:

- Bespoke product and solution design
- Supply of raw materials or components
- Manufacture, processing and/or assembly and machining
- Finishing and treatments
- Transportation, delivery and service

1. Advanced Materials segment (AM)

- Sales of €545 million
- 57% of total sales
- World no. 1-2[(1)] in graphite anticorrosion equipment
- World no. 1-2[(1)] in brushes and brush holders for industrial electric motors
- World no. 1-2[(1)] in high-temperature applications of isostatic graphite

(1) Some businesses are covered by the regulations on the control of exports of dual-use items and technology.

1.1. Product range and applications

In the Advanced Materials segment, the Group operates across the entire value chain, from the manufacture of materials (graphite, silicon carbide and carbon fiber insulation) to the design of final products in line with customer needs.

The Advanced Materials segment offers a range of solutions and products designed to perform the following principal functions:

- Resistance against very high temperatures: Mersen's range includes isostatic graphite equipment, carbon-carbon composites, flexible and rigid felt, and silicon carbide for solar applications, semiconductors and other refractory processes, electrodes for electrical discharge machining, kiln linings, etc. In 2019, Mersen strengthened its expertise in the production and processing of extruded graphite by acquiring plants in Columbia, USA and Malonno, Italy.
- Protection against corrosion: this is provided by equipment using graphite, reactive metals (tantalum, zirconium, titanium, etc.), silicon carbide and fluorinated polymers (PTFE) for the chemical, pharmaceutical and metallurgy industries.
- Electric power transfer: the Group's range provides stable and constant generation, flow and transformation of electrical current in industry (steel, mining, etc.) , energy (power plants, wind farms, etc.) and transportation (rail, aeronautics, aerospace and maritime). This function is carried out with brushes, brush holders and slip rings used in generators and motors, and with third-rail current collectors and special collection systems.

1.2. Main competitors (in alphabetic order):

- Morgan Advanced Materials – brushes, brush-holders and pantograph strips
- Schunk – isostatic graphite finishings, brushes, brush holders and pantograph strips
- SGL Carbon – isostatic graphite, anticorrosion systems, extruded graphite and rigid felt
- Tokai Carbon – isostatic graphite and extruded graphite
- Toyo Tanso – isostatic graphite

2. Electrical Power segment (EP)

- Sales of €405 million
- 43% of total sales
- World no. 1[(1)] supplier of components for the power electronics market
- World no. 2[(1)] in industrial fuses
- World no. 1[(1)] in current collection for the rail market

2.1. Product range and applications

The Electrical Power segment offers a range of solutions and products designed to perform the following principal functions across the entire electrical chain:

- Equipment and people protection: prevent the destruction of industrial and commercial electrical equipment, ensure an uninterrupted power supply and help to stabilize the electrical network. This function is performed by industrial fuses and all related accessories and by surge protection devices (to protect against damage from power surges).
- Power conversion: change the nature, voltage, intensity or frequency of the current to meet very diverse applications, such as motor speed variation, the transformation of solar and wind energy, and the management of battery-based systems (electric vehicle or stationary storage). To perform this function, Mersen designs cooling devices, laminated bus bars, capacitors and high-speed fuses that are integrated around power electronics components or lithium battery packs.

2.2. Competition

Mersen operates in cutting-edge markets where it holds leadership positions or is the joint world leader. Its competitors include several large international groups, as well as smaller regional players. None of its competitors cover all of Mersen's wide range of products. Specifically, Mersen is the only group with an offering for power electronics industry players that includes high-speed fuses, cooling devices, laminated bus bars and capacitors.

The Group's industrial fuse and surge protection device ranges stand out for their ability to offer a wide range of products that meet various regional standards (e.g., UL, IEC, BS or DIN) and are aligned with the needs of the majority of its distributor and OEM customers.

Already present in the heavy electric vehicle market (buses, trucks, etc.), Mersen is now expanding into high-end electric vehicles, primarily in the area of high-voltage battery protection.

In the rail sector, the Group complies with the International Railway Industry Standard (IRIS).

Main competitors (in alphabetic order)

- Aavid – cooling devices
- Cornell Dubilier Electronics – capacitors
- Dehn – surge protection devices
- Eaton – industrial fuses
- Littelfuse – industrial fuses
- Lytron – cooling devices
- Methode – bus bars
- Phoenix Contact – surge protection devices
- Rogers – bus bars
- TDK – capacitors

(1) Internal source: the Group operates in niche markets. It relies on competitors' public information and its own knowledge of the market to figure out Its competitive position.

Markets

The world continues to evolve, driven by major trends like urbanization, digitalization and the reduction of energy use and its impact on the climate.

Mersen meets the expectations associated with these changes by offering customized products and services to the following markets:

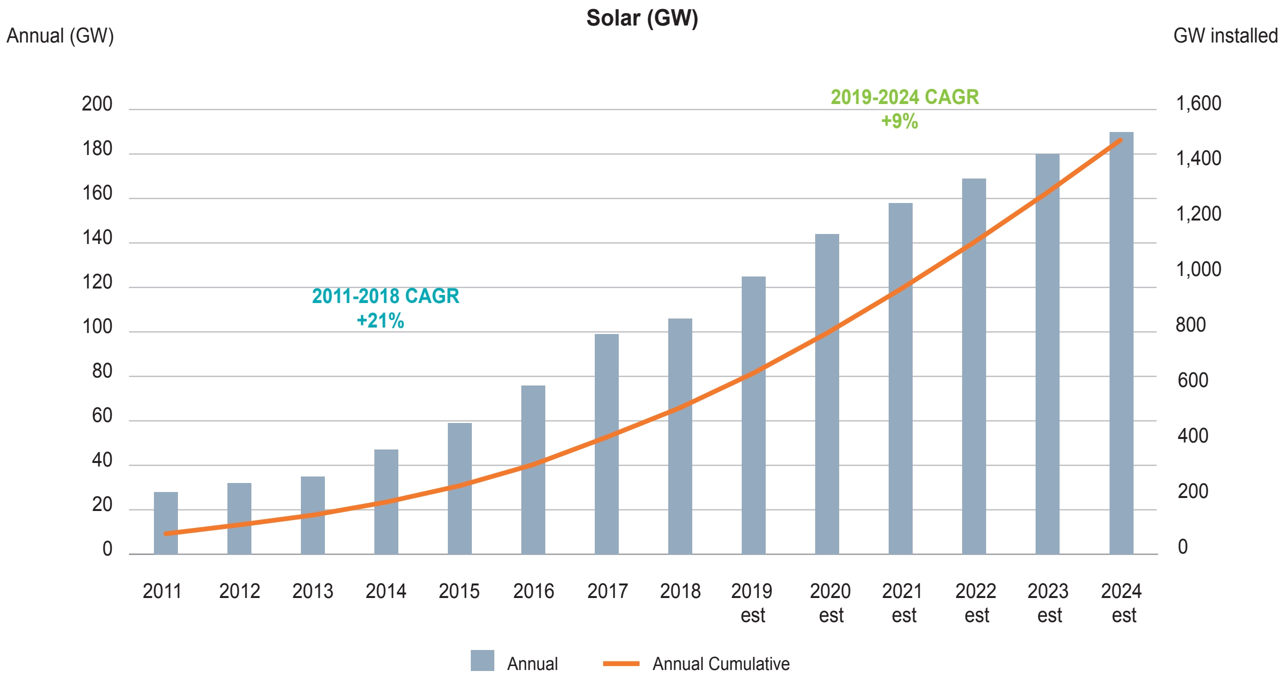
- Energy
- Electronics
- Transportation
- Corrosive chemicals
- Process industries

1. Energy

Mersen develops solutions for the world's principal energy sources and contributes to the energy transition by developing renewable energies across the globe.

1.1. Solar power

Photovoltaic technology is now a major global energy source. An estimated 125 GW(1) of solar power were installed in 2019, representing a year-on-year increase of 18% and bringing global installed capacity to around 650 GW. Growth is expected to continue in the coming years, driven in particular by ease of installation and competitive costs.



Mersen propose des solutions pour l'

Mersen offers solutions for the entire photovoltaic industry.

- It is a key partner for leading polysilicon manufacturers around the world for which it develops graphite machined components (purified and sometimes coated), such as ultra-pure graphite electrodes used in the process for transforming silicon from a gaseous state into a solid.
- It produces all the graphite components for silicon ingot pulling which are needed to guarantee the purity of solar cells and to control the temperature of hot zones during crystallization (purified graphite heater, flexible felt insulation, carbon insulation, etc.). Mersen is particularly well positioned in Cz (czochralski) ingot pulling technology, which currently delivers the highest yield.
- It offers a full range of solutions for the protection of photovoltaic installations (circuit breakers, fuses and surge protection devices).
- It delivers power electronics solutions for the conversion and distribution of solar energy (high-speed fuses, capacitors, cooling devices and laminated bus bars which can be used in an integrated architecture).

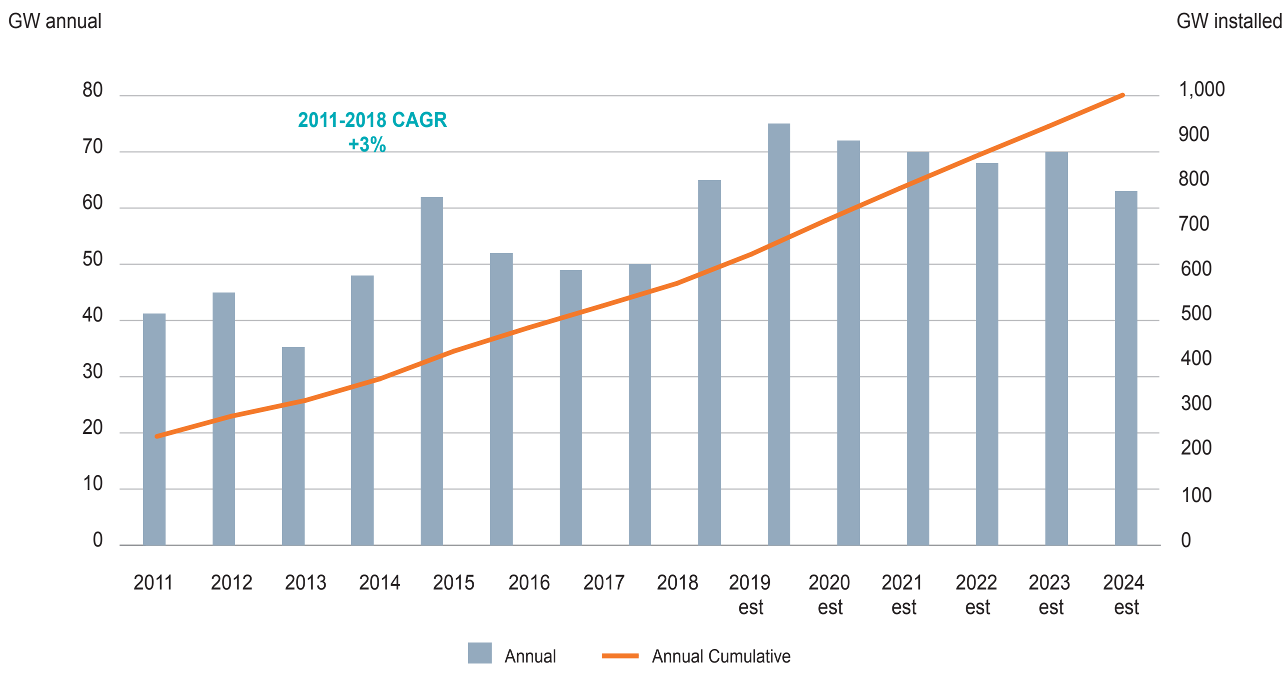
Mersen has customers across the value chain from polysilicon manufacturers such as Wacker Chemie and OCI and solar cell manufacturers such as Longi, Zhonghang or Jinko to power converter developers such as GE and TMEIC. Its range of solutions for the protection of photovoltaic installations is typically sold through electrical distributors such as Affiliated Distributors, Rexel and Sonepar.

1.2. Wind power

Installed wind power capacity was close to 650 GW worldwide at the end of 2019, making it a very attractive replacement market for Mersen. Global installed capacity is expected to reach 1,000 GW in 2024.

(1) Source: IHS Markit.

Wind power (GW)



Source: Make Consultant et Wood Mackenzie.

Mersen's range of solutions ensure safe and continuous wind power generation. They are primarily aimed at wind turbine generator manufacturers, but also at wind farm managers in the replacement market.

- The Group works with leading wind turbine generator manufacturers for which it supplies carbon brushes, brush holders and slip ring assemblies.
- It offers modular solutions which provide greater flexibility to wind turbine manufacturers and operators such as signal transmission systems, brushes and brush holders for yaw motors, and grounding systems.
- Its full range of fuses, fusegears, fuseholders and surge protection devices protect generators and controls.
- It delivers power electronics solutions for the conversion and distribution on the network of wind energy using high-speed fuses, capacitors, laminated bus bars and cooling devices for wind power electronics.

Mersen also develops maintenance services to optimize wind energy production, including technical diagnostics, equipment verification, installation and components replacement.

Its customers include wind turbine (Siemens-Gamesa, GE, Vestas, etc.) and generator (Indar and Siemens, etc.) developers, as well as wind farm managers (Nawsa) and power converter developers.

1.3. Hydroelectricity

Mersen is also present on the hydroelectric market. The Group develops a broad range of solutions for generators which meet both major manufacturer and aftermarket requirements. Its offering includes brushes, brush holders and dust collection systems, as well as on-site installation services.

1.4. Energy storage

The energy storage market includes stationary batteries used primarily in renewable energy applications, and mobile batteries used to power electric vehicles (see the section on the Transportation market).

For stationary batteries, Mersen operates at every level:

- It markets DC surge protection solutions for battery modules and laminated bus bars to connect battery modules.
- It markets a full range of DC surge protection solutions with fuse-based and hybrid devices (fuses and pyro-switches) and high-power relays for battery racks and packs.
- Its offering for battery containers includes high-speed DC protection fuses.
- It provides power conversion solutions such as high-speed fuses, capacitors, laminated bus bars and cooling devices. Mersen's solutions are needed to convert direct current (DC) to alternating current (AC).

1.5. Conventional energies

In conventional energies, Mersen supplies an entire range of products and solutions. In particular, the Group offers power transfer (brushes, slip rings and slip ring assemblies, brush holders, and monitoring solutions) and turbine sealing (carbon and graphite joints and bearings) solutions and ensures safe and continuous power management (fuses, fusegears, cooling devices and bus bars).

2. Electronics

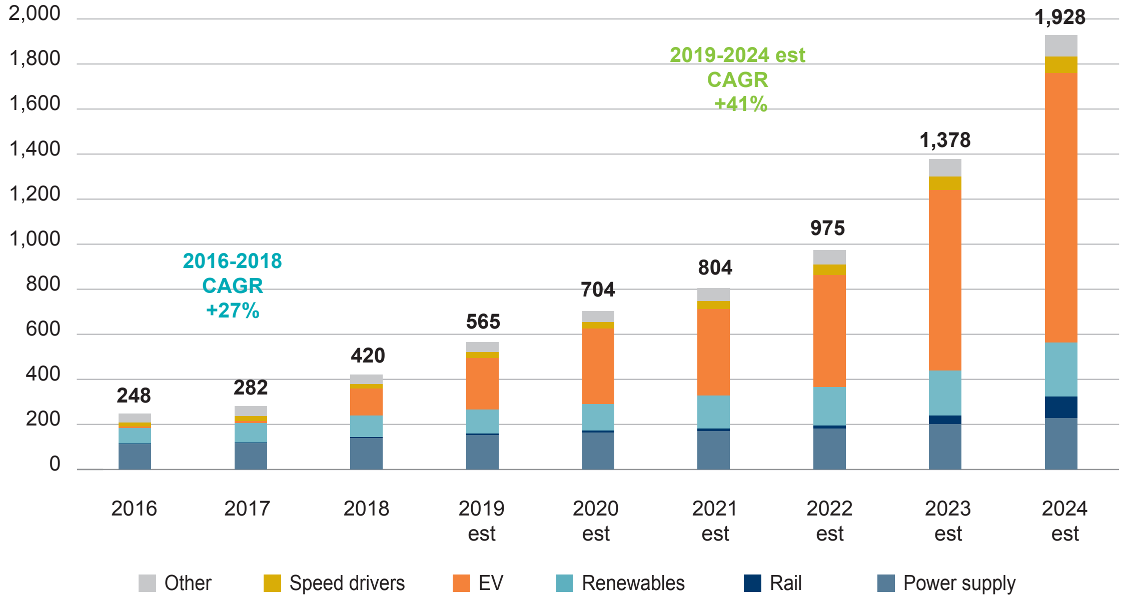
Mersen's technologies support the development of semiconductors for new digital applications. The Group also provides the power electronics needed for electric power conversion.

2.1. Semiconductor manufacturing

The semiconductor market is evolving rapidly. In addition to silicon-based semiconductors (microprocessors, chips and memory) used in data networks and computers, demand for compound semiconductors is also on the rise. Their wide range of applications include LED lighting using a gallium nitride (GaN) based active layer and opto electronic components with an indium phosphide (InP) substrate.

For power electronics components (IGBT, MOSFET, JFET, DIODE), manufacturers have traditionally used silicon-based semiconductors but are now turning increasingly to silicon carbide (SiC) semiconductors. These products are more powerful, efficient and compact. The SiC semiconductor market is on the rise and set to accelerate further after 2022, in line with development in the electric vehicle market.

Silicon carbide (SiC) semiconductor market



Source: Yole Development, Power SiC 2019.

Mersen supplies high-grade, ultra-pure graphite for the manufacture of semiconductors. The quality of the graphite combined with Mersen's high-precision machining and coatings help to maximize the yield of the power semiconductor manufacturing process and are also well-adapted to the latest generations of components, which are increasingly miniaturized but need to handle increasingly high current and voltage requirements.

The Group meets the very specific needs of the following processes:

- Metal Organic Chemical Vapor Deposition (MOCVD), which is a corrosive chemical process that deposits thin layers at high temperatures and is notably used in the production of high-performance LEDs. Mersen produces coated graphite supports for this process.
- Ion implantation, which is used to locally modify the composition and physical properties of a substrate by introducing doping agents, is a technology that operates thanks to a new generation of high-energy machines. Mersen is the preferred supplier of Applied Materials, which is the world leader in this technology.
- Compound semiconductors (high-performance LEDs, optics, radio frequencies and power electronics). Thanks to its unique expertise in providing rigid felt with guaranteed thermal homogeneity of 2,400°C, Mersen is very well positioned with the main producers of silicon carbide monocrystals. It also supplies graphite crucibles for the sublimation process used to make SiC ingots.

In addition, the Group is present in related markets such as optical fibers, where it offers tailored graphite and insulation products.

Its customers include SiC wafer developers and manufacturers such as SiCrystal and Dow Corning, and original equipment manufacturers such as Applied Materials.

2.2. Power conversion

Power electronics convert electrical power into the energy form required for its intended use, for example direct current into alternating current. Power converters provider greater flexibility in the way that energy is used and greater efficiency in the way that it is managed, transported and distributed.

Each year, the power conversion market grows by an average 4% to 5%, depending on the power range, mainly led by demand for electric vehicles, rail traction systems, renewable energies and speed drives for electric motors in industrial facilities.

Mersen's custom-made offering for high-power applications helps equipment suppliers to optimize the design of their power converters (Samsung, Siemens, GE, Schneider Electric, Rockwell, etc.).

Mersen's specialized teams and design engineers, combined with an integrated offer of components, including laminated bus bars, capacitors, high-speed fuses and cooling devices, strengthen Mersen's position as a key player on the power electronics market.

3. Transportation

Mersen supports the growing mobility of people and goods around the world. With its solutions for the rail and electric vehicle markets, the Group contributes to the reduction of CO2 emissions.

3.1. Rail

Growth and transformation in the rail industry is being driven by global trends, such as globalization, urbanization and sustainable development. For the 2018-2023 period, global rail market growth is expected to be around 2.5% per year (source: UNIFE, World Rail Market Study – Forecast 2018 to 2023), primarily driven by rolling stock and infrastructure.

Mersen offers rail manufacturers and system operators solutions to enhance the performance and reliability of their equipment. The Group is a recognized player in this market due to its ability to meet all rail standards and certifications, and to offer innovative solutions. Its market success is also the result of a unique long-standing positioning with major rail manufacturers in addition to a local commercial and industrial presence, especially now that orders are increasingly subject to the requirement that products be produced or assembled locally.

The Group's expertise also extends to rail infrastructure for urban and freight rolling stock. It develops solutions for:

- Supplying energy to motors and auxiliary systems via power conversion systems thanks to its offering of cooling devices, capacitors, bus bars and high-speed fuses.
- Distributing energy to motors thanks to current collector devices (pantograph strips or third rail shoes), brushes and brush holders.

Mersen works with all the major rail market players such as Alstom, Bombardier, Siemens, GE, CRRC, etc.

3.2. Aeronautics

In 2019, Airbus had another record year in commercial aviation, with deliveries rising to 860 aircraft, a year-on-year increase of more than 7%. Boeing, on the other hand, was impacted by the suspension of 737 MAX deliveries and therefore reported a sharp decline in deliveries versus 2018. The global commercial airplane fleet is nonetheless expected to double over the next 20 years (source: Airbus). Growth will be supported by the need for new aircraft to meet growing demand, but also by the replacement of existing airplanes that use too much fuel.

Mersen helps to enhance the reliability and efficiency of aircraft with solutions that offer reduced weight, fuel consumption and total operating costs.

Its range of products is designed to:

- Optimize aircraft, in particular via a range of carbon-carbon composite braking disks. The Group also supplies key components for auxiliary motors, air conditioning, electrical power generation and distribution systems.
- Improve flight conditions through the use of wear-resistant composite materials and brushes and brush holders designed for aircraft pressure systems.
- Reduce energy consumption thanks to optimal electronics cooling, low-inductance laminated bus bars, turbine blade positioning devices and components with lower friction rates.

The Group's materials and heat processing solutions are also used in manufacturing processes for superalloy reactor blades.

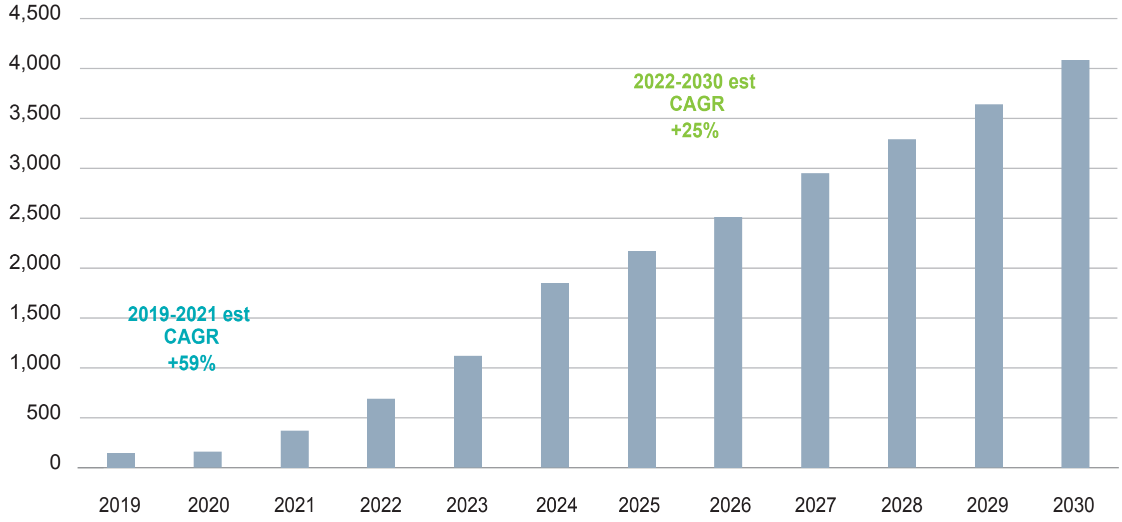
Mersen targets leading industry subcontractors for major aircraft manufacturers, such as Liebherr, Safran, Thales and Rolls Royce.

3.3. Electric vehicles

The electric vehicle (BEV, HEV or PHEV[(1)]) market is thriving, with both the passenger vehicle and industrial and commercial heavy vehicle segments enjoying robust growth. The market is expected to grow even faster in the future, particularly for vehicles with battery voltages above 800V, which is Mersen's target market. For 2022-2030, growth is estimated at 25% per year.

(1) Plug-in Electric Vehicle.

EVs and HEVs with battery voltages above 800V



Source: Various including Yole and International Energy Agency.

The Group's solutions are primarily aimed at the high-end BEV and industrial and commercial heavy vehicle markets:

- Its offering for battery modules and packs includes high-speed fuses, bus bars and cooling devices. The Group also develops semiconductor and pyro-switch based hybrid solutions to protect passengers by disconnecting high voltage batteries in the event of a shock or proven electrical faults.
- Its offering for power converters includes water cooling solutions that meet thermal management needs, laminated bus bars that provide for the safe flow of electricity between various components and capacitors that filter power conversion signals.
- In addition to all the advantages associated with its high-speed fuses, cooling devices, capacitors and laminated bus bars, Mersen's electric vehicle stations are also equipped with surge protection devices, for overall optimal protection.

Mersen's customers include automobile manufacturers, first and second tier subcontractors and battery manufacturers. The market is gradually taking shape and could still experience significant change.

3.4. Aerospace

Optical instruments for space exploration and ground-based observatories require precise and stable geometrics that can withstand drastic changes in temperature, rapid acceleration and strong vibrations. Thanks to its unique properties, including lightness and exceptional thermomechanical stability, silicon carbide is widely used in aerospace applications.

Mersen supplies silicon carbide mirrors and structures for telescopes, particularly for use by Airbus Defense and Space in its observation satellites (e.g., Herschel, Gaia and PeruSat), as well as by the French National Space Agency (CNES) in such missions as MicroCarb. Mersen was also chosen to manufacture the final mirror for the Extremely Large Telescope (ELT) project run by the European Southern Observatory (ESO).

4. Corrosive chemicals

The corrosive chemicals industry is highly demanding and requires the most advanced materials and process expertise.

Tens of thousands of chemical products are present in our day-to-day environment – in PVC construction materials, in polyurethanes used in the automotive industry, in silicones for adhesives and in high-performance plastics used in new technologies.

All these chemicals are produced according to procedures using corrosive substances in high-temperature environments.

Mersen has developed advanced materials and acquired expertise in industrial equipment to provide customized solutions suited to highly corrosive chemical processes.

The Group offers equipment designed to meet the most stringent production requirements, in particular for phosphoric acid, chlor-alkali, active pharmaceutical ingredients, isocyanates, acid and specialty chemicals.

Made from graphite, SiC or reactive metals, its customized solutions:

- Perform heat exchange and reaction functions: heat exchangers.
- Transfer highly corrosive and high-temperature fluids: columns, reactors, pressure vessels, piping, fittings and bellows.

In addition to individual items of equipment, Mersen offers turnkey systems that combine engineering, design, equipment manufacturing, project management and on-site commissioning of equipment.

Lastly, on the pharmaceutical market Mersen provides technological solutions that meet the purity requirements of processes, with a range of equipment using silicon carbide and noble metals.

Mersen's customers are the world's leading chemical manufacturers such as OCP (phosphate), Evonik, Grasim Industries (viscose), Novartis (pharmaceuticals), etc.

5. Process industries

Process industries is Mersen Group's original market. Mersen supplies process industries with a wide range of products and purpose-built solutions. It supports the changes occurring across all of these industries, in particular changes linked to energy efficiency.

Mersen brings expertise in:

- Metallurgy with electrical solutions for foundries and furnaces, hot and cold rolling mills, galvanic lines and electrolysis systems
- High temperature furnaces with graphite refractories, thermal insulation and flexible graphite composite systems.
- Sintering processes, which require the use of graphite refractory tools to withstand extreme pressure and temperature during processes.
- Glass, including glass molding and handling. The Group has developed specific graphite grades to answer to market expectations.
- Rubber and plastic with solutions designed for very specific operations (extrusion, injection, high temperatures, constant or variable speed, etc.).
- Pulp and paper with high-performance electrical solutions (for pulping machines, winders, rollers, driers, etc.) and mechanical and sealing solutions (for pumps and other systems).

Mersen's customers are the world's leading manufacturers such as Arcelor Mittal, Owens Illinois, Saint-Gobain, International Paper, LafargeHolcim, etc.

Value creation

Mersen is convinced that its medium and long-term development can only be achieved through a combination of business, financial and nonfinancial performance and through respect for all of its stakeholders – starting with customers, who have always played a central role in the Group's strategy.

Mersen therefore aims to approach its value creation model from several angles:

- Social: for the benefit of employees and their families.
- Societal: through its contribution to host communities (using local suppliers, paying local taxes, supporting community initiatives, etc.).
- Environmental: through its contribution to the development of environmentally responsible activities, such as renewable energies, electronics, energy efficiency and clean transportation.
- Economic: for the benefit of its shareholders and financial partners.

2 CORPORATE GOVERNANCE REPORT

Administrative and Management Bodies

1. Legislative and regulatory environment

1.1. Legal provisions

It should be noted that Mersen has been governed by a two-tier Board of Directors since the General Meeting of May 11, 2016.

In accordance with the provisions of Articles L.225-37 and L. 225-37-4 of the French Commercial Code *(Code de commerce),* the Board of Directors submits a report on corporate governance, which covers in particular the composition, preparation and organization of the Board's work. This report was prepared by the Board of Directors in respect of the fiscal year ended December 31, 2019.

This report was submitted for the opinion of the Governance, Appointments and Remuneration Committee and Audit and Accounts Committee on March 5, 2020, and for the approval of the Board of Directors on March 10, 2020, in accordance with the aforementioned arrangements.

1.2. AFEP-MEDEF Corporate Governance Code: Reference code for the Mersen group

Pursuant to Article L. 225-37-4 of the French Commercial Code, the Mersen group refers to the AFEP-MEDEF Corporate Governance Code for listed companies (as revised in January 2020), available (in French) on the AFEP website, www.afep.com, and the MEDEF website, www.medef.com.

2. The Board of Directors

2.1. The Internal Charter of the Board of Directors

The Internal Charter represents the governance charter for the Board of Directors and also governs the relationships between the latter's members and Mersen's Chief Executive Officer, in a spirit of cooperation notably intended to ensure fluid exchanges between the corporate bodies in the interest of shareholders. It is intended to give the Board of Directors the means to implement best practices in corporate governance.

It fits with the recommendations in the AFEP-MEDEF's Corporate Governance Code.

The Internal Charter was revised by the Board at its meeting of February 14, 2019 to take into account revisions to the AFEP-MEDEF Code and to include the review of strategic issues in the Board's role as decided at the Board meeting of January 23, 2019. It was amended again on February 4, 2020 to incorporate the new name of the Governance and Remuneration Committee, which was changed to the Governance, Appointments and Remuneration Committee (GARC) in order to better reflect the Committee's roles and responsibilities. A further amendment was made and approved by the Board at its meeting on March 10, 2020, concerning the compensation policy for members of the Board of Directors.

The Internal Charter has seven articles:

- Article 1 defines the composition of the Board of Directors, its diversity policy, training of its members, and the concept of "independent" members;
- Article 2 relates to the role and duties of the Board of Directors and indicates the lists of decisions made by the Chief Executive Officer subject to authorization or prior opinion by the Board of Directors;
- Article 3 relates to the holding and the procedures of meetings of the Board of Directors (notices of meetings, participation, majority rules, minutes, and Board secretary);
- Article 4 covers the compensation and benefits paid to members of the Board of Directors (Directors compensation, compensation and benefits paid to the Chairman, and exceptional compensation and benefits);
- Article 5 covers the obligations applicable to members of the Board of Directors;
- Article 6 covers the assessment rules for the Board of Directors; and
- Article 7 governs the operating rules for the Committees set up by the Board of Directors.

The Internal Charter of the Board of Directors can be downloaded from the Company's website at www.mersen.com, in the section on corporate governance.

2.2. Assignments and duties of the Board of Directors

The Board of Directors determines the Company's overall strategy, overseen by the Chairman of the Board in close collaboration with Executive Management. As part of this role, it examines and approves the Company's strategic plans and activities. The Chairman may delegate to another member of the Board, acting on a *primus inter pares* basis, his powers for organizing the Board's work, preparing Board meetings in advance and leading the discussions during Board meetings. The Chairman, or his delegated representative, is entitled to:

- receive from the Company any document that he deems useful for carrying out his duties;
- hold meetings with the Chief Executive Officer (if the Chairman does not also hold the position of Chief Executive Officer) and, any Deputy Chief Executive Officer(s), as well as with any other person he may consider it useful to meet with;
- request that any third parties of his choosing (specialist, advisor or statutory auditor) attend Board meetings;
- commission, at the Company's expense and subject to the budgets approved by the Board of Directors, any internal or external specialist studies or research that may help the Board in its discussions.

The Board's main duties are:

- Review of the financial position, cash position and commitments of the Company and its subsidiaries;
- Annual review and approval of the budget;
- Approval of the management report and the corporate governance report;
- Review and approval of the company and consolidated financial statements;
- Review of regulated and non-regulated related-party agreements;
- Prior authorization of related-party agreements and their annual review in order to ensure that they are in the Company's interests;
- Appointment and removal of the Chief Executive Officer and setting of his compensation;
- Review and approval of the senior executive succession plan;
- Co-optation of members of the Board of Directors;
- Allocation of compensation among the members of the Board of Directors, and setting of the Chairman's compensation;
- Prior consultation on the content of the interim financial information released to the market;
- Authorizations relating to guarantees and endorsements;
- Review of resolutions to be put to the General Meeting of shareholders;
- Setting up of stock option and bonus share plans.

The Chief Executive Officer may not make decisions, unless previously authorized to do so by the Board, in the following areas:

- Issues of securities conferring rights directly or indirectly to the Company's share capital;
- Funding operations likely to substantially alter the Company's financing structure;
- Investments or asset disposals (excluding shareholdings) in an amount of over €10 million;
- Business acquisitions or acquisitions of stakes in any form, of which the individual price, or aggregate price for multiple stakeholdings within a single entity, exceeds €3 million, inclusive of any liabilities assumed;
- Granting of guarantees and collateral of any kind that exceed an amount set by the Board, valid for the period determined by the Board in its decision;
- Strategic partnership agreements that are likely to have a substantial impact on the Company's business activities or financial results;
- Major internal restructuring operations;
- Major transactions that do not fall within the scope of the Company's announced strategy.

2.3. Promoting long-term value creation

The Board looks after the interests of the Company and its shareholders whilst taking into consideration the social and environmental impacts on all stakeholders: customers and suppliers, employees, partners and local authorities.

It believes that finding a sustainable balance between all of these interests is vital to the Group's long-term future and value creation.

The Board regularly reviews opportunities and risks in line with the strategy it has defined, such as financial, legal, operational, social and environmental risks, as well as the measures taken in response.

It ensures that effective arrangements are in place, where necessary, for preventing and detecting corruption and influence peddling.

2.4. Assessment of the Board of Directors

The Board of Directors conducts a self-assessment each year to measure its practices and procedures, the quality of preparation for Board meetings and the effective contribution of each of its members to the Board's work and discussions. This assessment also covers the Board Committees.

A formal assessment is conducted at least once every three years. It may either be conducted under the guidance of the Governance, Appointments and Remuneration Committee or of an independent member of the Board, if necessary assisted by an outside consultant.

In 2019, the assessment was conducted by an independent director at the request of the Governance, Appointments and Remuneration Committee, who reported on the outcome to the Committee and at the Board meeting in March 2020. The conclusion was that the members of the Board were broadly satisfied with its practices and procedures, its relations with the Group's Executive Management, and the expertise of each of its members. They were particularly pleased that the proposals for improvements put forward last year had been implemented, indicating a commitment to ongoing improvement. This year, the areas for improvement mentioned specifically concern: greater team cohesion; an improved understanding of the end markets that the company serves; greater sharing of the human resources challenges to be met within the Board of Directors; and more in-depth discussion on CSR matters.

2.5. Board of Directors' training

In accordance with the prevailing legal provisions, directors who deem it necessary may benefit from additional training in the Company's specific characteristics, business segments, business sector and corporate and social responsibility issues. This training may take the form of visits to the Group's sites.

Upon their appointment, Audit Committee members are given information about the Company's specific accounting, financial and operational requirements.

In addition, if any employee-representative directors are appointed, they will receive training about their role on the Board and will be given the necessary time to devote to their directorships.

2.6. Board of Directors' diversity policy

The Board of Directors pays close attention to diversity, particularly in terms of gender and expertise. It has formally described the expertise it deems necessary to fulfill its role and carry out its duties. This expertise is described in Section 2.7.2.

The Board of Directors complies with the provisions of the Copé-Zimmermann law passed in 2011 and supports management in its policy of increasing the number of women in engineering and management jobs. Following the resignation of the Ardian group's representatives, women directors make up 57% of the Board's members compared with 44% previously.

The Board also acknowledges the Group's exemplary position in terms of international diversity, as more than 90% of site managers are locals.

2.7. Composition of the Board of Directors

According to the Articles of Association, the Board of Directors comprises at least three members and at most 18 members, who are appointed by the General Meeting of the shareholders on the recommendation of the Board of Directors.

Board members are appointed for a renewable term of office of four years.

The age limit applicable to the duties performed by any individual Board member and of any permanent representative of a legal entity is set at seventy-two (72) years.

No person may be appointed director if, having exceeded the age of 70, his or her nomination would have such an effect as to bring the number of directors exceeding such age to more than one-third of the members of the Board of Directors.

On January 14, 2020, Ardian's representatives on the Board of Directors – Yann Chareton and Dominique Gaillard – resigned as directors.

At the date of publication of the Universal Registration Document, the Board of Directors was composed of eight members:

		Personal information				Experience	Position within the Board				Participation in a committee	
	Duties within the Board	Age	Gender	Nationality	Number of shares	Number of directorships in listed companies	Independence	Date of first appointment	Term ends	Length of service on the Board (years)	Audit & accounts	Gov. Nom. & Rem
Olivier Legrain	Chairman	67	M	FR	1,400	0	x	05/18/2017	2021 GM	3		x
Isabelle Azemard	Director	68	F	FR	800	1		05/15/2014	2022 GM	6		x
Pierre Creusy	Director representing employees	58	M	FR	200	0		10/12/2017	10/12/2021	2		x
Michel Crochon	Director	68	M	FR	800	0	x	05/18/2017	2021 GM	3	x	
Carolle Foissaud	Director	53	F	FR	823	1	x	05/16/2013	2021 GM	7	x	
Magali Joessel**	Director	46	F	FR	2,242,770	0		10/30/2013*	2023 GM	6	x	
Ulrike Steinhorst	Director	68	F	ALL	815	2	x	05/16/2013	2021 GM	7		x
Denis Thiery	Director	64	M	FR	800	0	x	05/17/2019	2023 GM	1	x	x

Chairman
**Co-opted*
*** Permanent representative of Bpifrance Investissement*

2.7.1. Changes in the composition of the Board and its Committees in 2019 and 2020 (at the date of publication of this Universal Registration Document)

		Resignation	Appointment	Term ends
Board of Directors	May 17, 2019			Catherine Delcroix Henri-Dominique Petit
	May 17, 2019		Denis Thiery	
	Jan. 14, 2020	Yann Chareton Dominique Gaillard		
Audit and Accounts Committee	May 17	Yann Chareton	Denis Thiery	
Governance, Appointments and Remuneration Committee	March 22		Denis Thiery	

Following the decision by Henri-Dominique Petit, Chairman of the Audit and Accounts Committee, not to stand for re-election as a director, the Board commissioned a specialist consulting firm in order to select potential candidates with the skills required to replace Mr. Petit, not only in terms of financial expertise but also international experience. The short-listed candidates were interviewed by certain members of the Board of Directors and Executive Management. Based on the outcome of these interviews, the Governance and Remuneration Committee selected the final nominee who they put forward to the Board.

Denis Thiery will bring his extensive experience as Chief Financial Officer for several companies and Chief Executive Officer of an international company of similar size to Mersen. He also worked for several years in the United States.

2.7.2. Profile, experience and expertise of Directors

The Board of Directors and the Governance, Appointments and Remuneration Committee regularly assess the composition of the Board and its Committees, as well as the skills and experience that each director brings to the Board. They also identify how to achieve the best possible balance of directors' profiles, taking into account both international expertise and diversity – in terms of nationality, gender and experience.

The following table summarizes the main areas of expertise and experience of Board members.

	O. Legrain	I. Azemard	P. Creusy	M. Crochon	C. Foissaud	M. Joëssel	U. Steinhorst	D. Thiery
Chief Executive Officer				X	X			X
Innovation						X	X	
Strategy	X	X		X		X	X	X
Experience in Mersen's business activities			X	X				
Industrial expertise	X	X			X			
International/knowledge of a strategic geographic area for Mersen		X	X	X				X
Finance/risk management/knowledge of financial markets/M&A					X	X		X
CSR/Human capital	X		X		X		X	

2.7.3. Detailed presentation of members of the Board of Directors

Olivier Legrain 67 years French nationality Term ends: 2021 Shares held: 1,400	**Chairman of Mersen's Board of Directors** Biography – Professional experience Olivier Legrain began his career with Rhône-Poulenc, where he held executive positions in several business units. He subsequently joined the Lafarge Group as a member of its Executive Committee, in charge of specialty materials and strategy. After organizing the sale of the Lafarge Group's stake in Materis, a group specializing in materials, he became Chairman of Materis until 2015. Main activities exercised outside the company Olivier Legrain is now a therapist. Current directorships Director of Kiloutou, Minafin, Astance Chairman of the Board of: Parex Member of the Governance Committee of: Balas Directorships that have expired in the past five years Director of Parot
Isabelle Azemard 68 years French nationality Term ends: 2022 Shares held: 800	**Member of Mersen's Board of Directors** Biography – Professional experience Isabelle Azemard spent her career at the Thales Group, including 20 years in sales and marketing management positions, primarily at the international level. Since 2013, she has been a consultant to business executives. Main activities exercised outside the company Since 2013, she has been a consultant to business executives. Current directorships Director of AXA mutuelle IARD, Mutuelle Vie, Latécoère Joint Legal Manager of RTDE Directorships that have expired in the past five years Director of Majencia
Pierre Creusy 58 years French nationality Term ends: 2021 Shares held: 200	**Member of Mersen's Board of Directors representing the employees** Biography – Professional experience Pierre Creusy joined Mersen in 1986. After working in Korea, he held positions in production engineering and subsequently in product management before joining Mersen's Corporate Finance team as a financial controller. In 1999, he took on business responsibilities in Asia, then was Director of Strategic Projects in the Electrical Power segment. He is now VP Project Management and Performance Improvement for this segment. Main activities exercised outside the company N/A Current directorships N/A Directorships that have expired in the past five years N/A
Michel Crochon 68 years French nationality Term ends: 2021 Shares held: 800	**Member of Mersen's Board of Directors** Biography – Professional experience Michel Crochon has spent his entire career at Schneider Electric, where he accumulated years of experience in many different roles. In addition to managing departments and production plants, he has also worked in sales and marketing, held cross-functional roles and managed large units. He was a member of the Executive Committee for 12 consecutive years. During that time, he was Head of the Customers and Markets Division, and later Head of the Industry Business and the Energy and Infrastructure Business, before becoming Head of the Group's Corporate Strategy and Technology. Michel Crochon has experience in working abroad and facing cross-cultural challenges, having traveled and managed teams in a variety of countries. He spent three years in both China and Hong Kong. Main activities exercised outside the company N/A Current directorships Director of Sphéréa Directorships that have expired in the past five years N/A

Carolle Foissaud 53 years French nationality Term ends: 2021 Shares held: 823	**Member of Mersen's Board of Directors** Biography – Professional experience Carolle Foissaud has spent the bulk of her career with the Areva Group, primarily in operational positions within the Fuel and Reactors units and in management positions as Chair and Chief Executive Officer of STMI and its subsidiaries in the field of Cleanup and as Chair and Chief Executive Officer of Areva TA, which specializes in naval propulsion reactors and research reactors. She was also a member of the Areva Group's Executive Management Board. Main activities exercised outside the company Carolle Foissaud has been Chief Executive Officer of the Industry segment at Bouygues Energies & Services since September 1, 2017. Current directorships N/A Directorships that have expired in the past five years Director of Ecole Navale Independent Director of GFI
Magali Joessel 46 years French nationality Term ends: 2024 Shares held by Bpifrance: 2,242,770	**Member of Mersen's Board of Directors** Biography – Professional experience Magali Joëssel began her career with the Inspectorate General of Finance at the French Ministry of Economic and Financial Affairs, before being named General Interest Investment Manager with Caisse des Dépôts et Consignations. She joined Bpifrance when it was created in mid-2013 and currently holds the position of Strategy Manager. Main activities exercised outside the company Since September 2014, Magali has been in charge of the Industrial Project Companies (SPI) fund, which invests in the development of innovative industrial activities and projects. Current directorships Director of Naval Energies, Yposkesi, RATP Directorships that have expired in the past five years N/A
Ulrike Steinhorst 68 years German nationality Term ends: 2021 Shares held: 815	**Member of Mersen's Board of Directors** Biography – Professional experience Ulrike Steinhorst began her career in France at the Ministry of European Affairs. She joined EDF's International Division in 1990 before returning to Germany, where she joined the Degussa Group in 1999. She held several positions there, first in Germany and later in France, where she managed Degussa's French subsidiary. She joined EADS in 2007 as Chief of Staff to the CEO before becoming Head of Strategy, Planning and Finance at Airbus Group's Research Directorate in 2012. Main activities exercised outside the company Chairman of SASU Nuria Consultancy Current directorships Member of the Board of Directors of Valeo, Albioma Member of the Board of École des Mines Paris Tech and of the Franco-German Chamber of Commerce and Industry Directorships that have expired in the past five years Director of Institut des Maladies Génétiques IMAGINE Director of the foundation F21 (UIMM)
Denis Thiery 64 years French nationality Term ends: 2023 Shares held: 800	**Member of Mersen's Board of Directors** Biography – Professional experience Denis Thiery worked at Wang France between 1984 and 1991, where he held various different posts, including Chief Financial Officer from 1989. From 1991 through 1997, he served as Chief Financial Officer and then Chief Executive Officer of Moorings, a world leader in boat charters based in the United States. He then joined the Neopost group as Group Chief Financial Officer in 1998 where he served as Group Chief Executive Officer from 2007 through 2018 and Chairman of the Board of Directors from January 2010 until July 2019. Main activities exercised outside the company N/A Current directorships N/A Directorships that have expired in the past five years Chairman of Neopost/Quadient

2.7.4. Independent Directors

To verify whether or not each member is independent, the Board, after being informed of the recommendations of the Governance, Appointments and Remuneration Committee, reviews all the criteria recommended by the AFEP-MEDEF Code and set out in the Board's Internal Charter, which state that an independent member may not:

- be, or have been in the past five years, an employee or executive corporate officer of the Company or Group, or an employee, executive corporate officer or director of a shareholder which, alone or in concert, controls the Company within the meaning of Article L. 233-3 of the French Commercial Code, or of a company within the Company's consolidation;
- be an executive corporate officer of another company in which the Company holds, directly or indirectly, a directorship, or in which an employee appointed as such or an executive corporate officer of the Company (currently in office or having been in office within the past five years) is a director;
- be (or be directly or indirectly linked to) a customer, supplier, commercial banker, financial banker or adviser that is material to the Company or its Group, or for which the Company or its Group accounts for a significant part of its business;
- have close family ties to a corporate officer of the Company or its Group;
- be, or have been in the past five years, a statutory auditor for the Group's financial statements or for the financial statements of a Group company;
- have been a corporate officer of the Company for more than 12 years.

A non-executive corporate officer may not be regarded as independent if he or she receives variable compensation in cash or in shares or any other compensation related to the performance of the Company or the Group.

Directors representing major shareholders of the Company or its parent company may be regarded as independent if those shareholders do not exercise any control over the Company. However, where the shareholder owns more than 10% of the capital or voting rights, the Board will systemically review the director's independence based on a report by the Governance, Appointments and Remuneration Committee, taking into account the Company's ownership structure and any potential conflict of interest.

A member who meets all the above criteria may be deemed not independent by the Board of Directors due to his or her individual circumstances or the Company's circumstances regarding its shareholders or for any other reason. Conversely, the Board may consider that a member who does not meet all of the above criteria is nevertheless independent. The Board must be able to justify such cases based on the Company's specific circumstances and the individual circumstances of the Board member in question.

At its March 6, 2018 meeting, based on the recommendations of the Governance and Remuneration Committee, the Board of Directors reviewed the independence of the Board members and decided that the representatives of Bpifrance Investissement could not be regarded as independent due to their level of holding in the Company's capital. The Director representing employees cannot be regarded as independent either.

	Non-independent Directors		Independent Directors					Directors representing employees
	I. Azemard	M. Joëssel	O. Legrain	M. Crochon	C. Foissaud	U. Steinhorst	D. Thiery	P. Creusy
Employee or corporate officer of the Company in the past five years	X	X	X	X	X	X	X	O
Cross-directorships	X	X	X	X	X	X	X	X
Significant business relationships	X	X	X	X	X	X	X	X
Close family ties to a senior manager	X	X	X	X	X	X	X	X
Statutory Auditor of the Company in the past 5 years	X	X	X	X	X	X	X	X
Director of the Company for more than 12 years	X	X	X	X	X	X	X	X
Non-executive corporate officer of the Company	X	X	X	X	X	X	X	X
Major shareholder	O	O	X	X	X	X	X	X

X = no; O = yes

Since the resignation on January 14, 2020 of the two directors representing Ardian, independent directors account for 71% of the Board's total membership. In accordance with the recommendations of the AFEP-MEDEF Code, the director representing employees is not included in the calculation of this percentage.

At December 31, 2019 (i.e., before the two Ardian representatives resigned), the proportion of independent directors was 55%.

2.7.5. No convictions or conflicts of interest

As of the date of this Universal Registration Document and to the Company's knowledge:

- there are no family ties between the members of the Board of Directors and Executive Management;
- no members of the Board of Directors or Executive Management have been convicted of fraud for at least the past five years;
- none of the members of the Board of Directors or the Executive Management has been involved in bankruptcy, receivership or liquidation proceedings or the placing of companies under administration as a result of having served as a member of an administrative, management or supervisory body for at least the past five years (1);
- no official complaint and/or public sanction has been issued by a statutory or regulatory authority (including designated professional bodies) against any member of the Board of Directors or Executive Management for at least five years;
- no members of the Board of Directors or Executive Management have been prevented by a court from acting as a member of an administrative, management or supervisory body or from participating in a company's management or business operations for at least the past five years;
- no conflicts of interest have been identified between the private interests and/or other duties of any of the members of the Board of Directors or Executive Management with respect to Mersen;
- no arrangements or agreements have been entered into between the main shareholders, customers or suppliers under which any member of the Board of Directors or Executive Management has been appointed as such;
- there is no restriction to which the members of the Board of Directors and Executive Management have agreed concerning the sale of their interest in the Company's share capital within a given timeframe.

As regards the prevention and management of conflicts of interest, Article 5 of the Internal Charter states that the Directors "*shall inform the Board of Directors concerning any conflict of interest in which they may be involved. In such case, they shall refrain from taking part in deliberations and any decisions relating to the matters concerned.* "

2.7.6. Procedure for assessing regulated and non-regulated related-party agreements

On December 19, 2019, in accordance with Article L. 225-39 of the French Commercial Code, the Board of Directors approved an internal procedure for identifying regulated related-party agreements and routine related-party agreements entered into on arm's length terms. This procedure – which can be viewed on the Company's website – is applied before any agreement that could qualify as a regulated related-party agreement is signed, as well as prior to any amendments, renewals or cancellations of such agreements. It is used in order to assess whether a related-party agreement is deemed to be a "regulated" agreement under French law or if it qualifies as a routine agreement entered into on arm's length terms, in which case it is not regulated. At its meeting on February 4, 2020, the Board of Directors applied this procedure to assess the related-party agreements entered into by the Company.

2.7.7. Black-out periods

The Board of Directors, the Chief Executive Officer and the Group's key senior managers have undertaken to refrain from using or disclosing any inside information they may have for the purpose of buying or selling Mersen shares or carrying out any other form of transactions related to shares of the Company. As part of the measures to prevent insider trading, the Directors have therefore undertaken to not enter into any share transactions during black-out periods.

For fiscal 2020, the black-out periods are:

- from January 16 through January 30, 2020 inclusive: owing to the announcement of fourth-quarter 2019 sales on January 30, 2020, after the close of stock-market trading.
- from February 10 through March 10, 2020 inclusive: owing to the announcement of the 2019 annual financial statements on March 11, 2020, before the start of stock-market trading.
- from April 15 through April 29, 2020 inclusive: owing to the announcement of first-quarter 2020 sales on April 29, 2020, after the close of stock-market trading.
- from July 1 through July 30, 2020 inclusive: owing to the announcement of first-half 2020 results on July 31, 2020, before the start of stock-market trading.
- from October 14 through October 28, 2020 inclusive: owing to the announcement of third-quarter 2020 sales on October 28, 2020, after the close of stock-market trading.

The black-out periods specified above are set notably in accordance with AMF recommendations (AMF Recommendation Position No. 2016-08) and the Market Abuse Regulation of July 16, 2014, which call for two black-out periods:

- a period of at least **30 calendar days** prior to the publication of the annual, interim and, where appropriate, full quarterly financial statements; and
- a period of at least **15 calendar days** prior to the publication of quarterly earnings.

As far as the Company is aware on the date this document was drawn up, there is no service agreement between members of the administrative or management bodies and Mersen or any of its subsidiaries providing for the grant of future benefits.

(1) Isabelle Azemard informed Mersen that Majencia – a company in which she held a directorship – was placed into liquidation on April 17, 2019 and has since been taken over as a going concern by Nowy Styl Group whose registered office is located at ul. Pużaka 49 in Krosno (Poland).

2.8. Work of the Board of Directors

The table below shows the rates of attendance of each Board member at Board and Committee meetings in 2019.

Board members excl. Ardian	Attendance at Board meetings	Attendance at Audit & Accounts Committee meetings	Attendance at Governance, Appointments and Remuneration Committee meetings
Isabelle Azemard	88%	*NA*	100%
BpiFrance Investissement	100%	80%	*NA*
Pierre Creuzy	100%	*NA*	100%
Michel Crochon	100%	100%	*NA*
Catherine Delcroix (2)	100%	100%	*NA*
Carolle Foissaud	75%	80%	*NA*
Olivier Legrain	88%	*NA*	100%
Henri-Dominique Petit (3)	100%	100%	100%
Ulrike Steinhorst	100%	*NA*	100%
Denis Thiery (3)	100%	100%	100%
Average (members excl. Ardian)	**94%**	**91%**	**100%**
Yann Chareton (1)	38%	100%	*NA*
Dominique Gaillard	63%	*NA*	100%
Average	**86%**	**92%**	**100%**

(1) member of the Audit and Accounts committee until May 17, 2018
(2) member of the Board until May 17, 2018, not replaced
(3) HD Petit member of the Board and chairman of the Audit and Account Committee until May 17, 2019, replaced by D. Thiery

The directors representing Ardian did not attend many Board meetings during the year, and in January 2020, Ardian informed the Company that it had reduced its interest to below 10% of the capital and that its two representatives were resigning from the Board.

The Chairman of the Board, Olivier Legrain, was unable to attend one Board meeting during the year as he was in hospital.

At least once a year, an informal meeting is held without any executive corporate officers being present. As the meetings are informal, no minutes are drawn up.

The Board of Directors met eight times in 2019, with an average attendance rate of 86%.

During these meetings, the Board reviewed and/or made decisions concerning the following issues:

- Group strategy and development.
  - Approval of strategic plans, business plan and budget.
  - Approval of acquisitions, notably Columbia, AGM Italy Srl and GAB Neumann GmbH.
  - Review of the Group's CSR roadmap and the roadmap's three-year objectives.
  - Discussions about strategic topics including headway made in the electric vehicle market, the Group's market positioning related to an EP product line, R&D strategy and talent management.
- Group results
  - Regular reviews of the Group's business.
  - Approval of interim and annual financial statements, management forecasts and draft press releases on results and guidance.
- Corporate governance
  - Approval of putting forward Denis Thiery for election as a director and Bpifrance Investissement for re-election.
  - Review of the composition of the Board Committees, following Henri-Dominique Petit's decision not to stand for re-election as a director.
  - Review of directors' independence.
  - Succession planning.
  - Approval of amendments to the Board's Internal Charter.
  - Approval of the procedure for assessing routine related-party agreements entered into on arm's length terms, and implementation of the procedure.

- Compensation
  - Approval of the Chief Executive Officer's compensation (including setting targets for the current year and validating the achievement levels for the previous year) and review of related-party agreements entered into with the Chief Executive Officer (including related to his severance payment, non-compete indemnity and supplementary pension plan).
  - Approval of the Long-Term Incentive (LTI) programs and beneficiaries, including for the Chief Executive Officer.
- Preparation of the Annual General Meeting
  - Approval of the stock repurchase program.
  - Approval of resolutions to be put to the Annual General Meeting.
- Other
  - Approval of guarantees and deposits issued by Mersen SA.
  - Approval of refinancing a private placement and bank credit facilities in China.
  - Analysis of the reports issued by the Board Committees.

2.9. Work performed by the Board of Directors' two committees

In its Internal Charter, the Board of Directors has defined the roles, responsibilities, and resources of its two committees: the Audit and Accounts Committee and the Governance, Appointments and Remuneration Committee. As far as possible and depending on the applicable circumstances, all Board decisions that fall within the remit of a Committee must not be taken without prior discussion with the relevant Committee and may be made only after that Committee has issued its recommendations and proposals. A member of the Board of Directors, acting on a *primus inter pares* basis, leads the Board's discussions about strategic issues.

For the purpose of carrying out their duties, each Committee, as well as the Board member responsible for discussions on strategic issues is entitled to:

- receive from the Company any document that they deem useful for carrying out their duties;
- hold meetings with the Chief Executive Officer (if the Chairman does not also hold the position of Chief Executive Officer) and, any Deputy Chief Executive Officer(s), as well as with any other person they may consider it useful to meet with;
- request that any third parties of their choosing (specialist, advisor or statutory auditor) attend Board meetings;
- commission, at the Company's expense and subject to the budgets approved by the Board of Directors, any internal or external specialist studies or research that would help the Board in its discussions.

The consultation of the Committees as described above may not serve to delegate the powers conferred upon the Board of Directors by law or in the Articles of Association or have the effect of reducing or restricting the Chief Executive Officer's powers.

2.9.1. Audit and Accounts Committee

The Internal Charter of the Board of Directors states that the Audit and Accounts Committee must comprise at least three and at most six members, two-thirds of them independent. The Internal Charter also stipulates that members of the Audit and Accounts Committee are selected on account of their expertise in accounting and financial matters. Given their training and professional experience, the Committee members satisfy this criterion.

The Audit and Accounts Committee meets at least three times per year and whenever it deems necessary, and in advance of meetings of the Board of Directors for which the agenda includes a review of an issue related to its area of expertise. The Committee meets approximately one week before the Board of Directors to review the annual financial statements. The Group's Financial Director is responsible for making the presentations. He reports at least once a year on the Group's risk exposure, including social and environmental risk. The Director of Risk, Compliance and Internal Audit attends these meetings at least once a year, as does the Director of Management Control and the Director of Treasury and Financing.

The role of the Audit and Accounts Committee is to:

- monitor the financial reporting process and, where applicable, make recommendations to ensure its integrity;
- monitor the effectiveness of internal control, risk management and, where applicable, internal audit systems, regarding procedures for preparing and processing financial and extra-financial accounting information;
- review the financial statements and ensure the appropriateness and ongoing consistency of the accounting methods used to prepare the Company's consolidated and annual financial statements; review the statutory auditors legal audit of the annual and consolidated financial statements;
- ensure compliance with the conditions for the Statutory Auditors' independence;
- make a recommendation on the Statutory Auditors nominated for appointment at the Annual General Meeting in accordance with Article L. 823-19 3 of the French Commercial Code. The Committee's recommendations and preferences are brought to the attention of the Annual General Meeting asked to vote on the appointment of the Statutory Auditors;
- approve the provision of non-audit services, provided they are permitted by the regulations. The Committee will make its decision after analyzing the risks related to the independence of the Statutory Auditors and the safeguard measures applied.

The Committee met five times in 2019, with an attendance rate of 92%.

During these meetings, the Committee reviewed and/or made decisions concerning the following issues:

- Review and approval of the Group's annual and interim results.
- Review of the Universal Registration Document.
- Changes to accounting standards, in particular the impact on the Group of the new lease standard (IFRS 16).
- Review of compliance work, notably in relation to France's "Sapin II" Act and the GDPR.
- Review and approval of a proposal to refinance a portion of the Group's debt through a €130 million Schuldschein issue.
- Review of the progress of the Buzit plan (upgrading the Group's IT systems).
- Risk mapping, with a progress report on cybersecurity.
- Review and approval of the internal audit plan for 2020. Report on internal control and internal audits carried out in 2019.
- Review of the Statutory Auditors' independence. Review of Statutory Auditors' fees for work other than audit services. Review of the Charter applicable for work carried out by the Statutory Auditors other than audit services.
- Other matters, such as taxation, pensions and cash management.

The Committee also met twice with the Statutory Auditors without management being present.

2.9.2. Governance, Appointments and Remuneration Committee

The Internal Charter of the Board of Directors states that the Governance and Remuneration Committee must comprise at least three and at most six members (not including the Director representing employees), the majority of them independent. The Committee meets at least twice a year and, in any event, in advance of Board of Directors' meetings for which the agenda includes the review of an issue related to its area of expertise.

In accordance with §8.4 of the AFEP-MEDEF Code, the Director representing employees is not taken into account in the calculation of the proportion of independent members. A majority of the Committee's members are independent (3/5), in line with the recommendations of the AFEP-MEDEF Code.

The role of the Governance and Remuneration Committee is to:

- **Governance and appointments**
  - Make proposals on the appointment, removal and re-appointment of the Chief Executive Officer, Chairman of the Board, Committee members and any Deputy Chief Executive Officer(s).
  - Give an opinion on proposed candidates for the above offices in terms of competency, availability, suitability and complementarity with other members of the Board, taking into account the Board's diversity policy.
  - Prepare a succession plan for the executive corporate officers and make sure a succession plan is in place for members of the Executive Committee.
  - Be informed in advance about Executive Management's proposals to appoint or remove members of the Executive Committee.
  - Determine which Board members can be regarded as independent.
  - Review and assess the Company's corporate governance practices and, in particular, review and inform the Board about changes in the corporate governance rules to which the Company refers.
  - Periodically review the structure, composition, procedures and practices of the Board of Directors and make recommendations on potential changes.
  - Prepare the assessment of the Board of Directors provided for in its Internal Charter and make recommendations to the Board of Directors on its procedures and practices based on the outcome of the assessment.
- **Compensation**
  - Propose the compensation of the Chairman and Vice-Chairman of the Board of Directors and put forward to the Board of Directors recommended changes to the aggregate amount of remuneration to be paid to the Board members and/or the allocation of such remuneration, in order for the Board to then submit the proposed changes for shareholder approval at the Annual General Meeting.
  - Make recommendations to the Board about (i) the annual and multi-annual compensation of the Chief Executive Officer and any Deputy Chief Executive Officer(s), (ii) the rules for determining their variable compensation, and (iii) other items of compensation such as supplementary pension plans and benefits in kind.
  - Make recommendations on the compensation and benefits envisaged in the event of the removal from office or the termination of the mandate of the Chairman of the Board of Directors, the Chief Executive Officer and, where applicable, the Deputy Chief Executive Officers.
  - Be informed of the termination benefits proposed by the Chief Executive Officer upon the termination of the employment contract of a member of the Executive Committee, and give an opinion thereon to the Chairman of the Board of Directors.
  - Give advice on the policy for granting stock options, performance shares or any other type of securities implemented by the Board of Directors for all categories of beneficiary and more particularly for the Chief Executive Officer and the members of the Company's Executive Committee, and make recommendations on the frequency and terms of grant.
  - Be informed in advance about conditions and changes in the compensation of Executive Committee members.

The Governance and Remuneration Committee met on three occasions during the year, with an attendance rate of 100%.

During these meetings, the Committee reviewed and/or made decisions concerning the following issues:

- **Compensation**
  - The fixed and variable compensation (annual and multi-annual) of all of the members of the Executive Committee, including the Chief Executive Officer (actual for 2018 and proposals for 2019).
  - Benchmarking survey on the compensation of the Chief Executive Officer and the Group Chief Financial Officer.
- **Governance**
  - Review of the impacts of the revised version of the AFEP-MEDEF Code and the new Pacte Act.
  - Self-assessment of the Board, review of the directors' expertise.
  - Review of the attendance rate at Board and Committee meetings.
  - Composition of the Board of Directors, re-appointments.
  - Review of information to be published in the Universal Registration Document, in particular the *ex post* and *ex ante* votes.
  - Preparation of the Annual General Meeting: review of governance information.
  - Succession planning for the Chief Executive Officer.

At its meeting on October 28, 2019, the Governance and Remuneration Committee decided to more closely align the Committee's name with the actual work it performs. Consequently, it is now called the Governance, Appointments and Remuneration Committee. The Board of Directors' Internal Charter was amended to reflect this change on February 4, 2020.

Other directorships held by members of the Board of Directors

Members of the Board of Directors	Date of first appointment	Date of re-election as director	End of term of office
Isabelle AZEMARD Born 02/27/1952 Member of the Governance, Appointments and Remuneration Committee **Business address:** 3 bd Pershing – Paris, France	05/15/2014	05/17/2018	Annual General Meeting called to vote on the 2021 financial statements
Bpifrance Investissement represented by **Magali JOESSEL** Born 10/24/1973 Member of the Audit and Accounts Committee **Business address:** 6-8 Boulevard Haussmann – Paris, France	10/30/2013 (co-opted)	17/05/2019	Annual General Meeting called to vote on the 2023 financial statements
Pierre CREUSY Born 09/27/1962 Member of the Governance, Appointments and Remuneration Committee Director representing employees **Business address:** Tour Eqho, 2 avenue Gambetta, 92066 – La Défense, France	10/12/2017		10/12/2021
Michel CROCHON Born 10/14/1951 Member of the Audit and Accounts Committee Independent director* **Business address:** Bâtiment Atlantis, 1, avenue Eugène Freyssinet F-78061 Saint Quentin en Yvelines	05/18/2017		Annual General Meeting called to vote on the 2020 financial statements
Carolle FOISSAUD Born 09/02/1966 Member of the Audit and Accounts Committee Independent director* **Business address:** Bouygues Energies & Services, Bâtiment Atlantis 1, avenue Eugène Freyssinet, 78051 Saint Quentin en Yvelines – France	05/16/2013	05/18/2017	Annual General Meeting called to vote on the 2020 financial statements
Olivier LEGRAIN Born 09/30/1952 Chairman of the Board Member of the Governance, Appointments and Remuneration Committee Independent director* **Business address:** Tour Eqho, 2 avenue Gambetta, 92066 – La Défense, France	05/18/2017		Annual General Meeting called to vote on the 2020 financial statements
Ulrike STEINHORST Born 12/02/1951 Member of the Governance, Appointments and Remuneration Committee Independent director* **Business address:** 3, Villa du Coteau – Clamart, France Nationality: German	05/16/2013	05/18/2017	Annual General Meeting called to vote on the 2020 financial statements
Denis THIERY Born 06/26/1955 Chairman of the Audit and Accounts Committee Member of the Governance, Appointments and Remuneration Committee Independent director **Business address:** 26, rue de St Germain, Fourqueux, France	05/17/2019		Annual General Meeting called to vote on the 2023 financial statements

** According to AFEP-MEDEF criteria.*
*** Listed company.*

Number of Mersen shares held	Other positions held
800	**Director of** AXA mutuelle IARD and mutuelle Vie, Latécoère**, Joint Legal Manager of RTDE
2,242,770	**Director of** Naval Energies, Yposkesi, RATP
200	N/A
800	**Director of** Sphéréa
823	**Chief Executive Officer of** Industry segment at Bouygues Energies & Services
1,400	**Director of:** Kiloutou, Minafin, Astrance **Chairman of the Board of** Parex **Member of the Governance Committee of** Balas
815	**Member of the Board of Directors and Chairman of the Strategy Committee of** Valeo** **Member of the Board of Directors and Chairman of the Remuneration, Nominations and Governance Committee of** Albiona** **Member of the Board of** École des Mines Paris Tech and of the French-German Chamber of Industry and Commerce.
800	**N/A**

In regards to "Date of re-election as director", please note that the General Meeting of May 11, 2016 appointed directors who were members of the Supervisory Board before the Company's governance changed for a term equivalent to their remaining term as members of the Supervisory Board.

Directors whose nationality is not specified in the table are of French nationality.

3. Senior Management

The Company is administered by a Chief Executive Officer, who performs his/her duties under the oversight of the Board of Directors. The Chief Executive Officer is eligible for reappointment. The Chief Executive Officer may not be more than 65 years of age. When the Chief Executive Officer reaches this age limit, s/he is deemed to have resigned as a matter of course. The Chief Executive Officer may be removed by the Board of Directors.

The Chief Executive Officer has the broadest powers to act in all circumstances in the name of the Company, within the restrictions of the corporate purpose and subject to the powers granted by law to the Board of Directors and to shareholder meetings.

In dealings with third parties, the Company is bound even by acts of the Chief Executive Officer not falling within the corporate purpose, unless it can prove that the third party knew that the act fell outside the scope of the corporate purpose or that it could not fail to know this in view of the circumstances, with mere publication of the Articles of Association not counting as evidence thereof.

The Chief Executive Officer represents the Company in its dealings with third parties. Upon the recommendation of the Chief Executive Officer, the Board of Directors may appoint one or more individuals – who need not be Board members – to assist the Chief Executive Officer. Those individuals then have the title of Deputy Chief Executive Officer.

3.1. Chief Executive Officer

At its meeting on May 11, 2016, the Board of Directors appointed Luc Themelin as Chief Executive Officer. No Deputy Chief Executive Officer was appointed.

Luc Themelin holds a Ph.D. in ceramic materials science. He began his career at Alliages Frittés Metafram, a subsidiary of the Pechiney Group, in 1988. He joined the Mersen group in 1993 as a Research and Development engineer. He was appointed Director of the Braking Division in 1998 and Director of the High Temperatures Division in 2004. He joined the Executive Committee in 2005, while continuing to manage the Braking Division and overseeing the High Temperatures Division. On July 1, 2008, Luc Themelin was appointed as Supervisor of the Electrical Applications division and a member of the Management Board in May 2009. He was appointed as Chairman of the Management Board on August 24, 2011. His term of office as Chairman was renewed on May 16, 2013 for a period of four years. He was appointed as Chief Executive Officer on May 11, 2016.

Name	Date of first appointment to the Management Board	Most recent renewal date*	Number of shares held in Mersen's share capital	Other positions held
Luc THEMELIN Born 02/23/1961 Chief Executive Officer (since May 11, 2016)	05/19/2009	05/11/2016	11,862	Chairman and/or director of various Mersen group subsidiaries

** Corresponding to the date of appointment as Chief Executive Officer once the Company's governance changed.*

3.2. Executive Committee

An Executive Committee was established by the Management Board on October 14, 2011. It was maintained following the change in governance on May 11, 2016. It is responsible for managing the Mersen group's operational affairs and meets every month to review the Group's financial performance and decide on action plans in various areas (including human resources, IT, procurement, legal affairs and development) in line with its strategic priorities. The Executive Committee ensures that the Group's organization functions properly. As such, it is closely involved in forecasting the human resources required for the continued development of its business activities.

As at the date of this Universal Registration Document, the members of the Executive Committee were:

Name	Position	Date of joining the Group Corporate Profile
Thomas Baumgartner	Group Vice President, Finance and Administration	1999
Gilles Boisseau	Group Vice President, Electrical Power	2015
Christophe Bommier	Group Vice President, Technology, Research, Innovation and Business Support	1989
Thomas Farkas	Group Vice President, Strategy and M&A	2006
Jean-Philippe Fournier	Group Vice President, Operational Excellence	2013
Eric Guajioty	Group Vice President, Advanced Materials	2016
Estelle Legrand	Group Vice President, Human Resources	2009
Didier Muller	Group Vice President, Asia & Latin America	1989
Luc Themelin	Chief Executive Officer	1993

Compensation and benefits in kind

1. Compensation policy of the executive corporate officers

The executive compensation policy is determined by the Board of Directors based on the recommendation of the Governance, Appointments and Remuneration Committee, which contributed to preparing this Chapter.

This policy form part of the Corporate Governance report provided for in Article L. 225-37-2 of the French Commercial Code, which is submitted to the shareholders for approval.

1.1. General principles for determining the compensation policy of corporate officers

The executive compensation policy is determined by the Board of Directors on the recommendation of the Governance, Appointments and Remuneration Committee, taking into account the principles set out in the AFEP-MEDEF Code of Corporate Governance, which are as follows:

- Comprehensiveness: the compensation determined through this process must be comprehensive. All the components of the compensation must be taken into account when determining the overall compensation level;
- Balance between the compensation components: each component of the compensation must be clearly substantiated and correspond to the general interest of the company;
- Comparability: the compensation must be assessed within the context of a business sector and the reference market. If the market is taken as a reference, it must not be the only one since the compensation of an executive corporate officer depends on the responsibilities assumed, the results achieved and the work performed. It may also depend on the nature of the tasks entrusted to the corporate officer or the specific situations;
- Consistency: the executive corporate officer's compensation must be determined in a manner consistent with that of the other officers and employees of the company;
- Understandability of the rules: the rules should be simple, stable and transparent. The performance criteria used must correspond to the company's objectives, and be demanding, explicit, and, to the greatest extent possible, long-lasting;
- Proportionality: the determination of the compensation components must be well balanced and simultaneously take account of the company's general interest, market practices, the performance of the senior managers, and the other stakeholders in the company.

The Board of Directors ensures that the compensation policy is in line with market practices for comparable companies, is adapted to the Company's strategy and context, and is intended to promote its medium- and long-term performance and competitiveness.

The principles underlying the executive compensation policy for 2020 are fundamentally unchanged from 2019.

1.2. Compensation policy of the Chairman of the Board of Directors

The Board of Directors is responsible for setting the compensation policy of the Chairman of the Board, based on recommendations made by the Governance, Appointments and Remuneration Committee.

The compensation of the Chairman of the Board comprises fixed compensation of €80,000, unchanged since 2010, as well as directors' remuneration based mainly on actual attendance at meetings. (see section 1.3).

The Chairman of the Board does not receive any cash-based or equity-based variable compensation or any compensation related to the performance of either the Company or the Group.

1.3. Compensation policy of members of the Board of Directors

The Board of Directors is responsible for setting the compensation of the members of the Board, based on recommendations made by the Governance, Appointments and Remuneration Committee.

At its meeting on February 14, 2020, the Board of Directors decided to maintain the maximum total annual amount of fees paid to directors at €264,000 excluding members representing the employees unchanged since 2011. However, it revised the structure of directors' remuneration, effective from 2020, in order to:

- More closely align the fees received by each director with their actual attendance at meetings, by increasing the variable portion (which will now represent approximately 60% of the fees if their attendance rate is 100%).
- Confirm the payment of additional fees to the director responsible for leading the Board's discussions on strategic issues, as this role requires significant preparation work prior to most Board meetings.

The Company's allocation rules for directors' remuneration comply with the relevant recommendations of the AFEP-MEDEF Code, particularly the recommendation that the variable portion based on actual attendance at meetings should represent the majority of the fees paid. These rules are as follows:

- The basic «fixed» amount of fees paid to each director is €12,000. On top of this basic amount, the Chairman of the Audit and Accounts Committee receives an additional €10,000 and the Chairman of the Governance, Appointments and Remuneration Committee receives an additional €8,000.
- Each director also receives a variable portion of fees based on their actual attendance at Board and Committee meetings, corresponding to €1,700 per meeting.
- The director responsible for leading the Board's work on strategic issues receives an additional fixed portion of €5,000.

If the aggregate amount of fees calculated by applying the above rules is higher than €264,000 (i.e., if more meetings are held than usual), then the fees of each director will be reduced proportionately.

This compensation policy for the members of the Board of Directors will be put to the shareholders' vote at the May 14, 2020 Annual General Meeting.

1.4. Compensation policy of the Chief Executive Officer

1.4.1. Principles

The Board of Directors is responsible for setting the compensation of the Chief Executive Officer based on recommendations made by the Governance, Appointments and Remuneration Committee. When carrying out its analyses and drawing up proposals for the Board, the Committee pays particular attention to respecting the recommendations in the AFEP-MEDEF Code.

The compensation policy for the Chief Executive Officer is in line with the Group's objective of growing its business responsibly and sustainably in order to ensure its longevity and profitable growth and futureproof the resources it needs for its expansion. The Board set this policy taking into account the Group's strategy as described in chapter 1 of this Universal Registration Document.

All of the components of the Chief Executive Officer's compensation and benefits are analyzed exhaustively every year on a component-by-component basis followed by an overall consistency review in order to achieve the best balance between fixed and variable, individual and collective, and short- and long-term compensation.

Benchmarking studies are regularly carried out with the help of specialist consultants to position the Chief Executive Officer's compensation in relation to a panel of peer companies. The criteria used for selecting the panel members are based on business sector, sales, headcount, nationality and inclusion in the SBF 120.

The Board of Directors has decided that the Chief Executive Officer's fixed compensation may only be revised at relatively long intervals, in accordance with the AFEP-MEDEF Code. However, it may be revised on an exceptional basis if there is a major change in his duties and responsibilities or if there is a significant gap between his compensation and the market benchmark. Any changes made to his fixed compensation as a result of these specific cases would be publicly disclosed along with the reasons for the changes.

If there is a major change in circumstances affecting how the Group's financial data is calculated (particularly a change in accounting standards), the Board may set the components of the Chief Executive Officer's compensation package excluding any such exceptional external factors.

Additionally, in application of Article L. 225-53, sub-section 3 of the French Commercial Code and in compliance with the compensation policy approved according to Articles L. 225-37-2 of said Code, the Board may exercise its discretionary power when setting the Chief Executive Officer's compensation if specific circumstances arise that represent reasonable grounds for exceptionally revising (either upwards or downwards) one or more of the criteria underlying his compensation components in order to ensure that the application of those criteria (as defined below) reflects the individual performance of the Chief Executive Officer and the performance of the Group as a whole. Any such adjustments would be made to the Chief Executive Officer's annual variable compensation by the Board of Directors, acting on the recommendation of the Governance, Appointments and Remuneration Committee, and based on a report by the Board presenting its reasons for the adjustments, it being specified that the adjusted amounts may not exceed the maximum amount originally approved for the Chief Executive Officer's annual variable compensation.

1.4.2. Structure of the compensation package

The compensation of the Chief Executive Officer comprises fixed compensation, annual variable compensation, multi-year compensation subject to performance conditions, and benefits.

A severance payment upon the termination of his mandate, based on length of service and performance conditions, may also be agreed in accordance with the provisions of the AFEP-MEDEF Code and with Article L. 225-42-1 of the French Commercial Code.

Fixed compensation

Fixed compensation may only be reviewed on a multi-annual basis. Any change may only be agreed after a benchmarking study carried out by a reputable consultant. (see the "Principles" paragraph above)

The fixed compensation has not been changed since January 2015.

When the Chief Executive Officer's term of office is renewed, a benchmarking survey will be performed in order to decide whether his compensation should be adjusted as from January 1, 2021. Any such adjustment would be subject to shareholder approval at the 2021 Annual General Meeting.

Annual variable compensation

As is the case for fixed compensation, the maximum amount of annual variable compensation may only be reviewed on a multi-annual basis. Any change may only be agreed after a benchmarking study carried out by a reputable consultant. The maximum amount of the annual variable compensation is set at 112% of annual fixed compensation.

The Chief Executive Officer's annual variable compensation is contingent on performance conditions aligned to the Group's strategy. There is no minimum guaranteed amount.

The Board defines the specific financial criteria and individual criteria for setting the annual variable compensation.

The financial criteria represent 70% of the total. They are based on the main financial indicators used by the Board to assess the Group's financial performance, in particular those reported in the Universal Registration Document such as recurring ROCE before tax (ratio of operating income before non-recurring items to weighted average capital employed) and net operating cash flow from continuing operations as defined in the statement of cash flows. These criteria exclude the impact of IFRS 16 in order to facilitate meaningful year-on-year comparisons.

The individual criteria are defined by the Board of Directors in line with the Group's strategy. They are reviewed independently. At least one criterion must be based on a CSR objective. The following criteria have been set for 2020:

- CSR criterion: safety indicators and waste recycling rates have to be further improved
- Overseeing the electric vehicle market, in terms of customers, technological competitive positioning, and industrial plan for the plants
- Competitiveness plans to be put in place for certain product lines
- Strategic plan : the CEO should present the Group's strategic vision on certain key markets
- Succession plans including external recruitment and internal promotions

If there is a major change in circumstances affecting how the Group's financial data is calculated (particularly a change in accounting standards), the Board may set the components of the Chief Executive Officer's compensation package excluding any such exceptional external factors.

Additionally, as mentioned in section 1.4.1, the Board may exercise its discretionary power when setting the Chief Executive Officer's compensation if specific circumstances arise that represent reasonable grounds for exceptionally revising (either upwards or downwards) one or more of the criteria underlying his compensation components in order to ensure that the application of those criteria (as defined below) reflects the individual performance of the Chief Executive Officer and the performance of the Group as a whole. Any such adjustments would be made to the Chief Executive Officer's annual variable compensation by the Board of Directors, acting on the recommendation of the Governance, Appointments and Remuneration Committee, and based on a report by the Board presenting its reasons for the adjustments, it being specified that the adjusted amounts may not exceed the maximum amount originally approved for the Chief Executive Officer's annual variable compensation.

Outperformance clause

As an incentive for the Chief Executive Officer (and all of the Group's executives, managers and sales staff) to outperform compared with the maximum target (max. target), in 2017 the Board decided to introduce an outperformance clause based on the Group's recurring operating margin. The underlying idea of this clause is that if the max. target for recurring operating margin (ROM) before IFRS 16 is exceeded in the reference year, an additional bonus will be paid to the Chief Executive Officer, which may represent up to 12% of his fixed compensation (corresponding to the 1.4 multiplier applied to the 30% maximum bonus).

The upper and lower limits will be set by the Board at the beginning of the year once the budget has been approved.

Recurring operating margin (ROM)	Multiplier	Max. bonus
ROM < target	N/A	
ROM = target max	1	100%
ROM > target max + X pts	1.4	112%

Achievement rates between the lower and upper limits are calculated on a straight-line basis.

Multi-annual variable compensation

Under the long-term compensation policy, the Chief Executive Officer may be awarded multi-year variable compensation contingent on meeting objectives related to the Group's medium/long-term strategy.

Such compensation will take the form of stock options and/or bonus shares.

The value or amount of stock options or performance shares granted to the Chief Executive Officer (measured on an IFRS basis as at the date of the Board meeting that decides on the grant) may not exceed 30% of his entire compensation in the previous calendar year (fixed, maximum annual variable and multi-year variable measured based on the method used for the consolidated financial statements). This maximum amount will be set by the Board of Directors based on market practices.

Bonus share allotments

As part of an overall strategy to motivate and retain the Chief Executive Officer over the long term, the Board of Directors may grant him ordinary or preference shares free of consideration that will vest only if certain performance objectives are met. The Chief Executive Officer must not be the only beneficiary of a performance share plan.

From 2019 onwards, the minimum performance period for these plans is three years. The performance conditions are based on a stock market criterion, a profitability criterion and a multiple CSR criterion. One of the two or three criteria must be relative to the performance of other comparable companies (SBF 120, Eurostoxx or other relevant, documented benchmarks).

The achievement of each of these criteria will be assessed separately.

Stock option grants

As part of an overall strategy to motivate and retain the Chief Executive Officer over the long term, the Board of Directors may grant him stock options that will vest only if certain performance objectives are met. The Chief Executive Officer must not be the only beneficiary of a stock option plan.

The minimum performance period for these plans is three years. The performance conditions are based on two profitability criteria and a multiple CSR criterion (as of 2019). One of the two or three criteria must be relative to the performance of other comparable companies (SBF 120 or 250 or other relevant, documented benchmarks).

The achievement of each of these criteria will be assessed separately.

The Chief Executive Officer may not receive more than 10% of all stock options and bonus shares granted each year, measured on an IFRS basis. This percentage will be set by the Board of Directors based on market practices.

Exceptional compensation

In order to facilitate the recruitment of an executive corporate officer from outside the Group, the Board of Directors may, on the recommendation of the Governance, Appointments and Remuneration Committee, grant a signing bonus. The amount of this bonus may not exceed the amount of the executive officer's compensation package in his previous job.

Apart from this specific case, no exceptional compensation may be paid.

Executive compensation

If the Chief Executive Officer is a director of the Company, he may be awarded compensation in the same way as the other Board members, based on the same allocation rules. These rules take into account the amount of time devoted to directorship work, whether the director is a member of a Board committee and his attendance rate at Board meetings.

Benefits of any kind

The Chief Executive Officer may be entitled to certain benefits in kind, such as the use of a company car, executive unemployment insurance, health and welfare insurance and a pension plan. He is also eligible for the staff incentive plans set up at Company and/or Group level.

Payment of variable compensation and any exceptional compensation awarded for 2020 is contingent on the shareholders' approval of the components of the Chief Executive Officer's compensation paid or awarded for that year (*ex post* vote).

1.4.2. Commitments given to the Chief Executive Officer

- Severance payment

  Should the Company terminate the Chief Executive Officer's mandate, he will be entitled to a severance payment provided that certain performance conditions are met.

- Non-compete covenant

  The Chief Executive Officer is bound by a non-compete and non-solicitation covenant, in return for which he may receive an indemnity.

- Retirement

  The Chief Executive Officer is a member of a defined benefit supplementary pension plan.

The Group's commitments to Luc Themelin – i.e., relating to his severance payment, non-compete/non-solicitation indemnity and supplementary pension plan – are described in section 5 of this Chapter.

1.4.3. Appointment of Deputy Chief Executive Officers

If the Board of Directors decides to appoint one or more Deputy Chief Executive Officers, the policy relating to the Chief Executive Officer's compensation package would also apply to the Deputy Chief Executive Officer(s), adapted as required.

1.4.4. Change in governance structure

If the Board of Directors decides to combine the roles of Chairman and Chief Executive Officer, the policy relating to the Chief Executive Officer's compensation package would apply to the Chairman and Chief Executive Officer, adapted as required.

2. Compensation paid to directors and corporate officers for 2019

2.1. Compensation for the Board of Directors

The rules for paying fees to members of the Board of Directors comply with the relevant recommendations of the AFEP-MEDEF Code, i.e. the majority of their fees are made up of a variable portion based on actual attendance at meetings.

Concerning the aggregate amount of shareholder-approved directors' remuneration:

- 75% are allocated based on membership on the Board of Directors it being specified that of this 75%, 45% is reserved for membership, strictly speaking, of the Board and is divided equally among the members, and 55% is reserved, on a pro rata basis, for actual participation of the members at Board meetings.
- 2% of the above amount is allocated to the board member in charge of strategy-related matters.
- 25 % is allocated based on membership of a Board Committee. Of that 25%, 45% is reserved for membership and 55% for actual attendance at Committee meetings. This amount is allocated as follows: 15% for the Audit and Accounts Committee and 10% for the Governance and Remuneration Committee
- Lastly, the compensation of each Committee Chairman is equal to 1.5 times a member's compensation, both for membership and actual attendance.

The calculation of the attendance rate is based exclusively on the meetings scheduled on the annual agenda of Board of Directors' meetings and committee meetings drawn up at the beginning of the year.

At its meeting on February 14, 2020, the Board of Directors decided to amend the rules for allocating the fees paid to directors while keeping the aggregate maximum amount at €264,000 (unchanged since 2011). The Group's new policy is described in section 1.3 of this chapter.

2.1.1. Members of the Board of Directors

Directors fees for 2019 are paid in early 2020, divided among the members of the Board of Directors, as follows:

		Granted in 2019	Paid in 2019	Granted in 2018
Isabelle Azemard		25,664	22,550	22,550
BpiFrance Investissement	(represented by Magali Joessel)	29,867	22,705	22,705
Yann Chareton		16,743	20,402	20,402
Pierre Creusy	representing employees			
Michel Crochon		34,553	30,241	30,241
Catherine Delcroix		13,814	27,500	27,500
Carolle Foissaud		26,212	21,538	21,538
Dominique Gaillard		22,329	19,549	19,549
Olivier Legrain		25,664	26,719	26,719
Nobel (fonds)			8,318	8,318
Henri-Dominique Petit	(until May 17 2019)	18,289	31,127	31,127
Sofina	(represented by Edward Koopman)		4,494	4,494
Ulrike Steinhorst		29,732	28,857	28,857
Denis Thiery	(starting May 17, 2019)	21,134		
		264,000	**264,000**	**264,000**

2.1.2. Chairman of the Board of Directors, Olivier Legrain

Upon the change of governance structure on May 18, 2016, the Board of Directors voted to award the Chairman of the Board the same fixed annual compensation of €80,000. This amount remained unchanged since 2010 (change in governance structure in May 2009).

(in euros)	2019	2018
Compensation and benefits payable in respect of the fiscal year (broken down below)	105,664	106,719
Value of options due for the fiscal year		
Value of options granted during the fiscal year		
Value of performance shares granted during the fiscal year	NA	NA
Value of other long-term incentive plans		
TOTAL	**105,664**	**106,719**

	2019		2018	
(in euros)	Amounts granted in 2019	Amounts paid in 2019	Amounts granted in 2018	Amounts paid in 2018
Directors' remuneration	25,664	26,719	26,719	15,222
Other compensation	80,000	80,000	80,000	80,000
TOTAL	**105,664**	**106,719**	**106,719**	**95,222**

The amounts stated above include all the compensation and benefits of any kind received by the corporate officers of companies controlled by Mersen within the meaning of Article L. 233-16 of the French Commercial Code.

2.2. Compensation of the Chief Executive Officer

2.2.1. Summary of the compensation and benefits, options and shares granted to the Chief Executive Officer

On February 14, 2019, the Board of Directors decided to maintain the components of Luc Themelin's fixed compensation and to define the conditions of the Chief Executive Officer's variable compensation for fiscal 2019.

(in euros)	2019	2018
Compensation and benefits payable in respect of the fiscal year (broken down below)	891,742	944,359
Value of options due for the fiscal year		
Value of options granted during the fiscal year		
Value of performance shares granted during the fiscal year	184,593	121,375
Value of other long-term incentive plans		
TOTAL	**1,076,335**	**1,065,734**

	2019		2018	
(in euros)	Amounts granted in 2019	Amounts paid in 2019	Amounts granted in 2018	Amounts paid in 2018
Fixed compensation	440,000	440,000	440,000	440,000
Annual variable compensation	395,560	466,189	466,189	466,400
Exceptional compensation	NA	NA	NA	NA
Incentives	20,262	19,705	20,262*	19,866
Directors' remuneration	NA	NA	NA	NA
Benefits in kind	35,920	35,920	17,908	17,908
TOTAL	**871,742**	**961,814**	**944,359**	**944,174**

** Estimated amount*
Nota : Benefits in kind include a company car as well as contributions toward the corporate executives' social guarantee since 2019 - explaining the difference between 2018 et 2019

The amounts stated above include all the compensation and benefits of any kind received by the corporate officers of companies controlled by Mersen within the meaning of Article L. 233-16 of the French Commercial Code.

2.2.2. Fixed compensation

Luc Themelin's fixed compensation for 2019 was €440,000, unchanged since 2015.

2.2.3. Annual variable compensation

The Board of Directors of March 10, 2020 carried out a performance assessment of Luc Themelin and set the overall performance at 89.9%, payable for 2019.

2019 variable compensation	Objectives set		Min	Max target	Actual
Financial criteria	Group ROCE[(1)]	*Indicator value (in %)*	10%	12%	11.7%
70% of annual variable		**% of fixed compensation**	0%	35%	29.4%
	Group's operating cash flow	*Indicator value (in €m)*	79.3	97.3	110.6
		% of fixed compensation	0%	35%	35.0%
	Total financial criteria		**0%**	**70%**	**64.4%**
Individual criteria	Safety and recycling waste		0%	4.5%	4.5%
30% of annual variable	Oversight of Electrical Vehicle market		0%	4.5%	4.1%
	Competitiveness plan		0%	4.5%	2.7%
	Acquisitions		0%	4.5%	4.1%
	3-year strategy		0%	6.0%	5.4%
	Succession plan		0%	6.0%	4.8%
	Total individual criteria		**0%**	**30%**	**25.5%**
Total variable as % of fixed compensation			**0%**	**100%**	**89.9%**

(1) Based on recurring operating income after tax

The achievement rate for these criteria may not exceed 100%.

The individual and financial objectives are reviewed every year by the Governance, Appointments and Remuneration Committee, based on the Group's strategic priorities. They are based on:

- for 35%, the Group's ROCE objective (calculated on the basis of current operating income after taxes) for the fiscal year;
- for 35%, the Group's operating cash flow generation target;
- for 30%, certain individual objectives set at the beginning of the year by the Board of Directors.

Financial criteria:

The 2019 financial objectives were based on the Group's annual budget, excluding the impact of the application of IFRS 16.

The achievement of the objectives in 2019 was as follows(1):

- Group ROCE: as recommended by the Chief Executive Officer, the achievement level used for the ROCE objective was changed to correspond to the ROCE in the Group's published results, i.e., taking into account the acquisitions carried out during the year that were not included in the budget and excluding the positive impact on ROCE of the impairment of assets related to the Electric Vehicle market. This change had a 6 basis-point negative impact on the variable compensation achievement rate, which only affects the Chief Executive Officer and the Chief Financial Officer. The reason for this change was to align the achievement level with that applied for the recurring operating margin objective used for the Group's other executives.
- Group operating cash flow: Reported net cash generated by continuing operating activities. The acquisitions carried out during 2019 did not affect the achievement rate for this objective.

Individual criteria:

For 2019, the individual objectives concerned:

- Safety and the waste recycling rate: in 2018 the Group drew up a CSR roadmap and set itself a number of objectives, particularly related to developing and consolidating the Group's health and safety culture and reducing the environmental impact of its industrial sites by recycling waste. The Board of Directors considered that the Chief Executive Officer had played an active role in the improvement momentum of increasing the waste recycling rate in 2019 (53% vs. 46% in 2018) and keeping safety incident rates at a very low level for an industrial group (LTIR =1.4, SR = 64).
- Overseeing the Group's entry into the electric vehicle market: a monthly review of this market – which is strategic for the Group – was carried out in 2019, with the Chief Executive Officer's participation. As part of these reviews, the Chief Executive Officer held meetings with several executives of groups with which Mersen works (both technically and commercially). The Board of Directors considered Mersen's knowledge of this market to be getting stronger.
- Competitiveness plan: The Board felt that the competitiveness plan launched did not substantially improve the Electrical Power segment's operating margin in 2019. However, it acknowledged that the beneficial effects of some of the actions undertaken will only feed through in 2020.
- External growth: the Group's external growth strategy was put into practice in 2019 with the acquisitions of (i) the Columbia site in the United States in July, and (ii) AGM Italy in December. The acquisition project for the Germany company GAB Neumann was also successfully completed in 2019, with the deal closing in February 2020 after obtaining clearance from the German anti-trust authorities. The Board of Directors therefore considered the results of the external growth strategy to be entirely satisfactory.
- 3-year strategy: in 2019, the Chief Executive Offer gave several presentations to the Board of Directors on specific important subjects for the Group. The strategic plan has been simplified and focused on the Group's medium-term challenges in these strategic markets.
- Succession plans: the Chief Executive Officer set up a review of the Group's talent and expertise as well as a 5-year plan to find the Group's new managers.

2.2.4. Long-term compensation

The Chief Executive Officer was awarded 8,850 performance shares in 2019 (see section 12 for the applicable performance criteria).

In 2018, he received 77 bonus preference shares as the Chief Executive Officer himself had stated that for that year he wished to be granted exactly the same number of shares as the other members of the Executive Committee.

It is impossible to make meaningful comparisons between the number of shares granted in 2018 and 2019 as the shares involved correspond to two different classes and the long-term compensation policy between 2018 and 2019 has changed (no longer including preference shares and extending the vesting period). The value of shares granted to the Chief Executive Officer in 2019 is also not comparable to the value of shares granted in 2018 for two reasons: first, the change in the categories of shares given above and, second, the decision by the Chief Executive Officer to limit the number of shares allocated to him in 2018 in order to benefit from the same number of shares as the other members of the Executive Committee. This resulted in a particularly low valuation in 2018 (€121,375) compared with 2017 (€161,954).

2.2.5. Pay ratio

In accordance with the legal requirements introduced by France's Pacte Act, Mersen now discloses pay ratios that show the difference between the Chief Executive Officer's compensation and (i) the average salary and (ii) the median salary of all employees who work in the Group's French entities (excluding the Chief Executive Officer).

In accordance with the AFEP's recommendations, only employees "continuously present" during a given year are included, i.e., the figures exclude the effects of hires and departures during that year.

(1) The applicable financial criteria were reviewed in 2019 in order to avoid adjustments and to use the Group's published financial information.

The compensation taken into account comprises the following components paid during the year:

- Basic salary, regular or special bonuses, overtime and any other components of gross salary
- Variable salary
- Accounting value of LTIs allocated during the year in question
- Incentives and profit-sharing
- Benefits in kind (company car)

	2019	2018	2017	2016	2015
Pay ratio (versus average salary)	22.36	21.51	20.67	15.24	20.09
Pay ratio (versus median salary)	32.96	31.44	26.39	16.89	23.04

The Group has chosen to use a representative scope, namely its French entities, since Mersen SA is a holding company.

The scope used – i.e., the Group's French entities – corresponds to companies that formed part of the Group at the year-end. In 2018 and 2019, only Idealec was not taken into account as it is not included in the Group's HRIS.

The Group has also chosen to present four criteria to best illustrate Group performance. They are calculated on a consolidated basis.

Reported figures	2019	2018	2017	2016	2015
Sales *(€m)*	950	879	809	764	772
Current operating margin *(in % of sales)*	10.8	10.4	9.2	7.8	7.5
ROCE *(in %)*	11.3	11.8	9.8	7.6	7.0
Operating Cash-Flow *(€m)*	123	92	64	83	48

ROCE : current operating margin/ weighted average capital employed
Operating Cash-Flow : Net cash generated by continuing operating activities.

3. Summary of commitments given to corporate officers

	Employment contract	Supplementary pension scheme	Compensation and benefits payable or likely to be payable owing to the termination or change in duties	Indemnity relating to a non-compete clause
Olivier Legrain Chairman of the Board of Directors since May 18, 2017	NO	NO	NO	NO
Luc Themelin Chief Executive Officer since May 11, 2016	NO	YES(1)	YES(2)	YES

(1) Luc Themelin is eligible for a supplementary pension plan pursuant to his employment contract, the terms of which are described in paragraph 5.
(2) Compensation and benefits payable or likely to be payable owing to the termination or change in duties are described in paragraph 5.

4. Shares in the Company's capital held by senior executives

The Chief Executive Officer and the Board of the Directors own 2,268,048 shares (of which 2,242,770 held by Bpifrance and 19,640 by the Chief Executive Officer), i.e., a total of 10.9% of share capital.

In accordance with Article 6 of the Internal Charter, each member of the Board of Directors must hold at least 800 shares for the entire duration of his or her term of office. These shares must be held in registered form.

5. Commitments with the executive corporate officers

5.1. Review of compensation commitments

On February 14, 2020, the Board of Directors re-examined the compensation commitments of Luc Themelin's and decided to leave them unchanged.

5.2. Severance payment for Luc Themelin

The terms and conditions of severance payment that would be granted to Luc Themelin are the following:

5.2.1. Non-compete and non-solicitation clause

Should his mandate as Chief Executive Officer end, and in return for signing a non-compete and non-solicitation undertaking for one year from the date on which his duties cease, Luc Themelin will receive a monthly payment equivalent to 50% of the gross fixed monthly compensation that he received immediately prior to termination of his term of office. The Company may decide to forgo this non-compete and non-solicitation clause and thus free itself from its obligation of making this monthly payment, by informing Luc Themelin of its decision within a notice period of two months of the termination of his term of office.

The non-compete undertaking referred to above will cover all of the Group's business activities and will be applicable in all of the countries in which Mersen is active (whether it has a physical presence there or whether it operates from a base in another country). At the Company's discretion, the non-compete and non-solicitation undertaking will be laid down and structured as a non-compete agreement, if necessary.

No payment will be made once the Chief Executive Officer has claimed his pension benefits. In any event, no payment will be made after he reaches the age of 65.

5.2.2. Termination of his term of office

Should the Mersen group terminate, in any manner and for whatever reason (barring gross or willful misconduct, retirement, enforced retirement, resignation or change of function within the Group), Luc Themelin's mandate as Chief Executive Officer (notably by dismissal, non-renewal of mandate for whatever reason or elimination of office following the conversion or merger of the Company, except for a change in corporate governance leading to his appointment as Chairman of the Management Board of a limited company with a Supervisory Board and a Management Board), a lump sum payment will be made to Luc Themelin, calculated as stated below in the applicable performance conditions (the "Severance Payment"), when his departure is forced. The Severance Payment will exclude the payment of any other indemnity of any kind, including damages, except for the non-compete and non-solicitation indemnity.

Should the responsibilities and/or remuneration of Luc Themelin be modified substantially following a take-over of the Company and if as a result, he decides to leave the Company, he would be entitled to the same Severance Payment.

The amount of the Severance Payment is calculated as follows:

I = 0.5 x R x C

where

- I is the amount of the Severance Payment;
- R is the gross total compensation (basic compensation and bonus, excluding benefits in kind and incentives) paid to Luc Themelin for the 3 calendar years prior to termination, whether this compensation and benefits have been paid to him in respect of his duties as Chief Executive Officer or as an employee; and
- C is Luc Themelin's performance condition as measured in accordance with the criteria defined below.

Payment of the Severance Payment I referred to above will be subject to the performance condition achievement under the following conditions:

- Performance rate (P):

P = the average bonus percentage of Luc Themelin in the four calendar years preceding his departure (as Chief Executive Officer).

The annual bonus percentage may vary from 0 to 112% of annual fixed compensation. The average performance rate P will be observed by the Board of Directors.

- Performance condition (C):

If **P** ≥ 100%, C = 100%

If **P** ≥ 90% and < 100%, C = 90%

If **P** ≥ 80% and < 90%, C = 80%

If **P** ≥ 60% and < 80%, C = 60%

If **P** ≥ 50% and < 60%, C = 50%

If **P** < 50%, no payment will be made.

The amount of any Severance Payment (I) that may be due upon termination of his mandate may not exceed 18 months of total gross compensation (fixed and annual variable). In addition to this Severance Payment, a non-compete indemnity may also be due and may not exceed six months of total gross compensation (fixed and annual variable), making a total of 24 months of total gross compensation (fixed and annual variable) for both payments.

5.2.3. Stock subscription options – Performance shares

The Board decided that should Luc Themelin's term of office as Chief Executive Officer be terminated in any manner and for any reason whatsoever (barring termination following the acquisition of control of the Company, retirement or enforced retirement), he will automatically lose his entitlement to all the stock options granted to him prior to the end date of his term of office where the conditions of grant (condition related to continued presence and performance conditions) have not been satisfied by the end date of his term of office. He will also automatically lose his entitlement to all the shares granted to him, irrespective of whether they are subject to a performance condition, in accordance with the provisions of Articles L. 225-197-1 to L. 225-197-5 of the French Commercial Code, prior to the end date of his term of office, where the grant of these shares had not been made definitive by the end date of his term of office.

However, the Board of Directors reserves the right to decide, where appropriate, to maintain the benefit of the stock options and performance shares, reduced on a pro rata basis, and subject to achievement of the corresponding performance conditions. The Board is required to give reasons for its decision.

The benefit of the stock options and performance shares referred to above will be maintained, after reduction on a pro rata basis, should Luc Themelin's responsibilities and/or compensation be modified substantially following a change of control of the Company or should he decide to leave the Company as a result of such change, or should his mandate be terminated following a change of control of the company or should he retire whether voluntarily or at the Company's initiative.

5.3. Pension plan for Luc Themelin

Luc Themelin receives a supplementary pension corresponding to 20% of the amount of his average fixed compensation for the past three years and 50% of his maximum variable compensation, given his length of service with the Group. The purpose of this scheme is to enable Mersen to reward its Chief Executive Officer for his loyalty.

To date, Luc Themelin has 31 years of seniority with Mersen, of which 24 as an employee. The potential future pension rights of Luc Themelin have therefore been capped for the last ten years and can no longer be increased. This pension commitment is a significant tool to reward the loyalty of the Chief Executive Officer and enable him to achieve at retirement a replacement rate close to the rate that applies to the Company's employees. It does not represent an undue financial burden on the Company. The estimated amount of the annuity under the supplementary pension scheme paid to Luc Themelin would amount to €132,000, before tax and social security contributions.

Luc Themelin is also eligible for a basic corporate officers' unemployment benefit (*Garantie Sociale des Chefs d'Entreprises* – GSC) for up to 24 months. The annual cost of this benefit depends on the previous year's net taxable income of the party concerned and the length of the period in which the benefit is paid. The Company pays 40% of the contribution and Luc Themelin pays 60%. This arrangement includes a waiting period of 30 days of continuous unemployment.

6. Employee incentive agreements

Employee incentive or profit-sharing agreements related to the Group's earnings are in place at most of its French subsidiaries, as well as in certain subsidiaries in Europe, the United States, Canada and Australia. The methods used to calculate incentives vary by company and country. They include both financial criteria (operating income and EBIT) and, in some cases, technical criteria, such as safety improvements, customer service and scrap rates, etc.

(in € thousands)	2019	2018
Amounts allocated to employees	3,348	3,209
Number of beneficiaries	1,662	1,977

Amounts paid during the year

7. Employee profit-sharing

Employee profit-sharing agreements are in place at various Group subsidiaries in France.

(in € thousands)	2019	2018
Amounts allocated to employees	2,076	1,715
Number of beneficiaries	1,535	1,094

Amounts paid during the year

8. Corporate savings plan

Since 1995, financial authorizations to develop stock ownership among employees through a Group Investment Plan, stock subscription option plans and bonus share allotment plans have been granted on a regular basis by shareholders at the Extraordinary General Meeting.

At the General Meeting on May 17, 2019, shareholders delegated authority to the Chief Executive Officer, subject to the prior approval of the Board of Directors, to issue shares or equity-related securities to employees of Mersen group companies whose headquarters are based i) in France and ii) outside France, and who are not members of a company savings plan. These increases in capital entail the waiver of shareholders' preferential subscription rights. This delegation is valid for 26 months for issues made in France and 18 months for issues made outside France.

The nominal amount of capital increases that may be made pursuant to this delegation may not exceed €400,000, i.e., approximately 1% of the Company's share capital. It replaces and supersedes the previous delegations of authority granted by the General Meeting of May 17, 2018.

To date, the Board of Directors has not made use of these delegations.

9. Stock subscription options (2009-2014)

At the Extraordinary General Meetings between1995 and 2014, shareholders have authorized the Company to grant, on one or more occasions, stock subscription options to some or all of the Company's senior managers or those of affiliated companies. The employee categories benefiting from these options are to be determined by the Board of Directors each time that it makes use of the authorization.

All stock subscription plans are subject to performance conditions.

The total number of stock subscription options still outstanding stands at 60,931, i.e., 0.3% of the share capital. Members of the management body have no options to purchase or to subscribe for shares in subsidiaries of the Group.

9.1. Stock subscription options: previous grants

	2009 Bonus Tranche 12	2014 Bonus Tranche 13	Total
Date of Board of Directors'/Management Board meeting	Jan 22, 09	May 21, 14	
Total number of shares available for subscription	366,582	150,000	516,582
- o/w corporate officer:			
Luc Themelin (not a corporate officer until May 19, 2009)	*32,345*	*30,000*	*62,345*
- o/w corporate officers at the allotment date, who have since left the Company	*53,908*	*18,000*	*71,908*
- including corporate officers at the allotment date who were no longer corporate officers on the date of publication	*35,580*	*54,000*	*89,580*
- o/w top 10 allottees	*140,163*	*150,000*	*290,163*
Subscription price	17.53	22.69	
Start of option exercise period	Feb. 13	May 16	
Expiration date	Feb. 19	May 21	
Total number of shares subscribed at Dec. 31, 2019	355,800	51,269	407,069
Options canceled at Dec. 31, 2019	10,782	37,800	48,582
- o/w canceled in 2019	*5,391*	*0*	*5,391*
OPTIONS THAT MAY STILL BE EXERCISED	**0**	**60,931**	**60,931**

9.2. Performance conditions and holding requirements attached to stock subscription plans

9.2.1. Principles underlying the performance conditions for the 2009 and 2014 plans

The Board of Directors and then the Supervisory Board decided on the following principles for setting the performance conditions for the 2009 and 2014 stock option plans:

- The performance condition is based on earnings per share ("EPS"), adjusted for certain non-recurring items of expense or income (net of tax) with a very significant impact on the Group's results. The Board decided to eliminate these non-recurring items in order to measure the Company's intrinsic performance.
- The target EPS for obtaining 100% is demanding, in keeping with the internal objectives of the Group's strategic plans in a stable or improving economic environment.
- Given the Group's dependence on the economic environment, an alternative EPS criterion has been put in place. The principle is to reward beneficiaries if the Group has not achieved its internal EPS targets due to a deterioration in the economic environment but if the Group has outperformed or comfortably outperformed a panel of French industrial companies. This relative performance is measured by reference to the change in EPS over the relevant period.
- The calculations are based on the Group's financial statements. However, in the event of abnormal positive or negative variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) occurring after the meeting of the Management Board or Board of Directors at which the stock option plans were granted, the Group's results may be adjusted after analysis by the Governance and Remuneration Committee and with the agreement of the Board of Directors (previously the Supervisory Board). In the same spirit, the Governance and Remuneration Committee may withdraw from the panel any companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period.

9.2.2. 2009 Plan

Performance conditions

The percentage of options granted to each beneficiary that may be exercised was determined by reference to the following two criteria, with the more favorable one being applied:

Achievement rate	100%	75% to 100%**	35% to 75%	0%
CRITERION 1	If 2011 EPS > or = 2x its 2007 value*	If 2011 EPS > or = 1.5x and < 2x its 2007 value*	If 2011 EPS < 1.5x and > or = 1x its 2007 value*	If EPS 2011 < 1 x its 2007 value*
Achievement rate	**100%**	**50% to 100%****	**0%**	
CRITERION 2	If Mersen's EPS growth is equal to or more than 20 percentage pts higher than the panel's average EPS growth (period 2007-2011)	If Mersen's EPS growth is equal to or more than the panel's average EPS growth but less than 20 percentage pts higher	If Mersen's EPS growth is lower than the average EPS growth of the SBF 120	

** Adjusted for the impairment recognized for EMC (business sold in May 2009). Based on comparable IFRSs.*
*** Smoothed based on EPS obtained.*

The panel of French companies chosen includes groups listed in France: Air Liquide, ArcelorMittal, Bic, Bongrain, Ciments Français, Derichebourg, Essilor, Faiveley, Gemalto, Haulotte, Imerys, Ingenico, Lafarge, LDC, Legrand, Lisi, Manitou, Nexans, Norbert Dentressangle, Renault, Rexel, Saft, Schneider, Séché, Stef, Toupargel, Valeo, Veolia, Vicat and Zodiac. The panel was drawn up by the Management Board and approved by the Appointments and Remuneration Committee. Only companies from the 2007 panel still listed in 2011 were retained for measurement.

Results

		2007	2011	% allotment in respect of criterion 1	% grant in respect of criterion 2
CRITERION 1	EPS*	2.34	2.97	56.3%	
CRITERION 2	Mersen's EPS* growth over the period	27%			100%
	Panel's average EPS* growth over the same period		-2.6%		

** The 2007 reference EPS has been adjusted (upwards by €18 million) for the impairment of EMC net of tax (automotive brushes division). 2011 EPS has been adjusted upwards for the impairment of intangibles related to the acquisition of Calcarb in 2009 (impact of 0.04 pts on EPS). Furthermore, the impact of the stock dividend paid during the period was eliminated by adjusting the number of shares and adding the financial expenses that would have been incurred had the dividends been paid in cash.*

Based on the performance recorded, 100% of the stock options were granted.

The plan expired in February 2019 and all options were subscribed or canceled.

Holding requirements

Only the Chief Operating Officer, serving at the date of the plan, was obliged to retain the options until the total number of shares held in registered form was equivalent to one year's compensation.

9.2.3. 2014 Plan

Performance conditions

The possibility of exercising the options was contingent on growth in the Group's 2013 net profit per share (adjusted for exceptional charges of €55 million, including depreciation of deferred tax assets, recognized in the second half of 2013, i.e., an "adjusted 2013 EPS" of 1.27) in relation to the average EPS for 2014 and 2015 (adjusted for costs related to the Transform Plan) (the "adjusted 2014 and 2015 EPS").

The percentage of options granted to each beneficiary that may be exercised was determined by reference to the following two criteria, with the more favorable one being applied:

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1	If average adjusted 2014/2015 EPS is more than or equal to 1.75	Calculated on a straight-line basis if average adjusted 2014/2015 EPS is between 1.27 and 1.75	If average adjusted 2014/2015 EPS is equal to 1.27	If average adjusted 2014/2015 EPS is less than 1.27
Achievement rate	**100%**	**50% to 100%**	**50%**	**0%**
CRITERION 2	If Mersen's EPS growth (between adjusted 2013 EPS and average adjusted 2014/2015 EPS) is more than 15 pts higher than the panel's average EPS growth	Percentage achievement calculated on a straight-line basis if Mersen's EPS growth (between adjusted 2013 EPS and average adjusted 2014/2015 EPS) is less than 15 pts higher than the panel's average EPS growth	Mersen's EPS growth (between adjusted 2013 EPS and average adjusted 2014/2015 EPS) is equal to the panel's average EPS growth	If Mersen's EPS growth (between adjusted 2013 EPS and average adjusted 2014/2015 EPS) is less than the panel's average EPS growth

The panel of comparable companies used to calculate criterion 2 was approved by the Supervisory Board on May 15, 2014, based on the recommendation of the Appointments and Remuneration Committee. This includes the following companies listed on Euronext Paris: Air Liquide, Alstom, ArcelorMittal, Areva, Arkema, Ciments Français, EDF Energies Nouvelles, Essilor, Faiveley, Imerys, Ingenico, Lafarge, Nexans, Rexel, Saft, Saint-Gobain, Schneider, Sechilienne, Soitec, ST Micro, Vicat and Zodiac.

Results

			% grant in respect of criterion 1	% grant in respect of criterion 2
CRITERION 1	Average adjusted 2014/2015 EPS	1.38	46%	
CRITERION 2	Growth in (a) average 2014/2015 EPS relative to (b) adjusted 2013 EPS (1.27)	8.7%		85%
	Panel's average EPS growth over the same period*	-1.8%		

** Three companies were not included in the panel as they had not published their EPS at the time of the calculation (Alstom, Lafarge and Soitec). In addition, three companies in the panel were excluded (after validation by the Governance and Remuneration Committee) due to an excessive change (positive and/or negative) in their EPS over the period (ST Micro, Manitou and Areva).*
Excluding those changes, the achievement rate would have been 100%.

Based on the performance recorded, 85% of the shares were granted.

Holding requirements

Two years, i.e., until May 21, 2016.

Pursuant to Article L. 225-185 of the French Commercial Code, the Supervisory Board also decided that each member of the Management Board must hold the equivalent of 30% of the shares acquired upon the exercise of stock subscription options after the immediate sale of the shares necessary to finance the acquisition of the shares and the payment of taxes, social security contributions and payroll charges in respect of this resale of securities. This obligation has been restricted to the Chief Executive Officer since May 11, 2016.

9.3. Stock subscription options: executive corporate officers

Options granted in 2019 to each executive corporate officer:

	Number of options granted	Exercise price	Valuation (method used in the consolidated financial statements)	Exercise period
Chairman of the Board: Olivier Legrain	N/A			
Chief Executive Officer: Luc Themelin	0	-	-	

Options exercised in 2019 by each executive corporate officer:

	Number of options exercised	No. and date of the plan	Exercise price
Chairman of the Board: Olivier Legrain	N/A		
Chief Executive Officer: Luc Themelin	15,000	2014 SO Plan	€22.69

The Management Board agreed that until the dissolution of the Management Board on May 11, 2016, its members may not participate in risk hedging transactions, either with regard to the subscription options or the shares from the exercise of the options. This obligation has been restricted to the Chief Executive Officer since May 11, 2016.

9.4. Stock subscription options: top 10 employees (non-corporate officers)

	Number of options granted/exercised	Weighted average exercise price
Options granted in 2019 to the 10 employees who received the largest number	0	
Options exercised in 2019 by the 10 employees who received the largest number	31,415	€19.10

10. Bonus shares (non-executive program)

At the General Meeting of May 17, 2019, the shareholders authorized the Board of Directors to allot existing or new shares at no cost to employees, or to certain categories of employees, of the Company and those of affiliated companies.

The total number of shares that may be thus allotted may not exceed 84,000, representing around 0.4% of the share capital on the day of the Meeting.

This authorization provides that the Board of Directors will determine the identity and categories of the beneficiaries of the share allotment referred to, as well as the performance and share allotment conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 17, 2018. This authorization is valid for 38 months.

At its meeting of May 17, 2019 the Board of Directors made use of this authorization and empowered the Chief Executive Officer to implement the performance-based bonus share plan and the allotment of said shares.

The Chief Executive Officer implemented this authorization by allotting 84,000 bonus shares to 200 employees and managers of the Mersen group. The performance conditions for each plan are described below.

Neither the Chief Executive Officer nor any member of the Executive Committee was a beneficiary of this plan.

10.1. Bonus share allotments: previous grants

	2017 Plan Tranche 11 (with performance conditions)	2018 plan Tranche 12 (with performance conditions)	2019 Bonus Tranche 13 (with performance conditions)	Total
Date of allotment decision	May 18, 17	May 17, 18	May 17, 19	
Total number of shares allotted	84,000	67,050	84,000	235,050
- o/w corporate officers:				
Luc Themelin	*0*	*0*	*0*	*0*
- o/w top 10 allottees	*10,100*	*9,300*	*10,100*	*29,500*
Share price at allotment date *(€)*	23.69	37.20	24.29	
Definitive allotment date (end of the vesting period)	May 18, 19	May 17, 21	May 17, 22	
End of lock-up period	May 19, 19	May 18, 21	May 18, 22	
Allotments canceled at Dec. 31, 2019	4,800	900	0	5,700
o/w canceled in 2019	*4,000*	*900*	*0*	*4,900*
Number of shares vested definitively, and transferable	79,200	0	0	79,200
BALANCE AT DECEMBER 31, 2019	**0**	**66,150**	**84,000**	**150,150**

10.2. Principles for setting the performance conditions

The Board of Directors decided on the following principles to set the performance conditions for the 2017, 2018 and 2019 performance share plans:

- The performance condition is based on the Group's EBITDA margin for the 2017 plans. The 2018 plan also has an additional criterion based on growth in like-for-like revenue. This additional criterion was used again in the 2019 plan.
- The target EBITDA margin and, for the 2019 plan, the target revenue for obtaining 100% are demanding and in keeping with the internal objectives of the Group's strategic plans in a stable or improving economic environment.

Given the Group's dependence on the economic environment, an alternative criterion has been put in place. The principle is to reward beneficiaries if the Group has not achieved its internal targets due to a deterioration in the economic environment but has outperformed or comfortably outperformed a panel of French industrial companies. This relative performance is measured by reference to the change in average EBITDA margin over the relevant period.

The calculations are based on the Group's financial statements. However, in the event of abnormal positive or negative variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) occurring after the meeting of the relevant body at which the bonus share plans are allotted, the Group's results or the panel may be adjusted after analysis by the Governance, Appointments and Remuneration Committee and with the agreement of the Board of Directors (or the Supervisory Board). In the same spirit, the Governance, Appointments and Remuneration Committee may withdraw from the panel any companies that have recorded manifestly wild or abnormal fluctuations in EBITDA margin over the period.

10.3. 2017 Plan

10.3.1. Performance conditions

Bonus shares may only be allotted to the beneficiary at the end of the vesting period if the performance conditions defined below are met.

The percentage of bonus shares allotted to each of the beneficiaries will thus be determined based on the most favorable amount of the following two criteria.

Achievement rate	**100%**	**30% to 100%**	**30%**	**0%**
CRITERION 1	If the 2018 EBITDA[1] margin is more than or equal to 14.5%	Allotment percentage calculated on a straight-line basis	If the 2018 EBITDA[1] margin is equal to 13%	If the 2018 EBITDA[1] margin is less than 13%
Achievement rate	**100%**	**35% to 100%**	**35%**	0%
CRITERION 2	If the change in EBITDA[1] margin between 2016 and 2018 is more than 10 pts higher than the change in the panel's average EBITDA[1] margin	Allotment percentage calculated on a straight-line basis	If the change in EBITDA[1] margin between 2016 and 2018 is equal to the change in the panel's average EBITDA[1] margin	If the change in EBITDA[1] margin between 2016 and 2018 is less than the change in the panel's average EBITDA[1] margin

(1) EBITDA = Operating income before non-recurring items + depreciation and amortization.

The panel of comparable companies comprises the following companies: Arkema, SA des ciments Vicat, STMicroelectronics NV, SEB SA, Manitou BF, Nexans SA, Rexel SA, Ingenico, Essilor International, Air Liquide SA, Imerys SA, Schneider Electric SA, ArcelorMittal, Saint-Gobain, Tarkett, Lisi, Somfy and Legrand. The panel was unchanged from the previous plan except for Zodiac Aerospace and Saft, which were withdrawn following their acquisition by other companies.

10.3.2. Results

Based on the performance recorded, 100% of the shares were allotted.

10.4. 2018 Plan

10.4.1. Performance conditions

Bonus shares may only be allotted to the beneficiary at the end of the vesting period if the performance conditions defined below are met.

The percentage of bonus shares allotted to each of the beneficiaries will thus be determined based on the most favorable amount of the following two criteria, bearing in mind that criteria 1-A and 1-B are independent and that each accounts for 50% of the achievement rate.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1-A 50%	If the average 2018-2020 EBITDA[1] margin is more than or equal to 15%	Allotment percentage calculated on a straight-line basis	If the average 2018-2020 EBITDA[1] margin is more than or equal to 14%	If the average 2018-2020 EBITDA[1] margin is less than 14%
CRITERION 1-B 50%	Change in like-for-like revenue (average over the 3 years from 2018 to 2020) is more than or equal to 4%	Allotment percentage calculated on a straight-line basis	Change in like-for-like revenue (average over the 3 years from 2018 to 2020) is more than or equal to 2%	Change in like-for-like revenue (average over the 3 years from 2018 to 2020) is less than 2%.

Achievement rate	100%	35% to 100%	35%	0%
CRITERION 2	If the change in EBITDA[1] margin between 2017 and the 2018-2020 average is more than 5 pts higher than the change in the panel's average EBITDA[1] margin	Allotment percentage calculated on a straight-line basis	If the change in EBITDA[1] margin between 2017 and the 2018-2020 average is equal to the change in the panel's average EBITDA[1] margin	If the change in EBITDA[1] margin between 2017 and the 2018-2020 average is less than the change in the panel's average EBITDA[1] margin

The calculations will be based on Mersen's published financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) or a change in the accounting standards having an impact on EBITDA or revenue occurring after May 17, 2018, the Board of Directors may, after obtaining the opinion of the Governance, Appointments and Remuneration Committee, adjust the financial statements for these effects when calculating the allotment percentages.

The panel of comparable companies used to calculate criterion 2 was approved by the Board of Directors on May 17, 2018, on the recommendation of the Governance and Remuneration Committee.

The panel of comparable companies remains unchanged compared with the 2017 plan and comprises the following companies: Arkema, SA des ciments Vicat, STMicroelectronics NV, SEB, Manitou BF, Nexans, Rexel, Ingenico, Essilor International, Air Liquide, Imerys, Schneider Electric, ArcelorMittal, Saint-Gobain, Tarkett, Lisi, Somfy and Legrand.

For the purpose of calculating the allotment percentage, the Governance, Appointments and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in their EBITDA margin over the period.

10.4.2. Results

The results will not be known until 2021.

10.5. 2019 Plan

10.5.1. Performance conditions

Bonus shares may only be allotted to the beneficiary at the end of the vesting period if the performance conditions defined below are met.

The percentage of bonus shares allotted to each of the beneficiaries will thus be determined based on the most favorable amount of the following two criteria, bearing in mind that criteria 1-A and 1-B are independent and that each accounts for 50% of the achievement rate.

The Group would like to be able to allot bonus shares to certain employees who are not senior executives if (a) criteria 1 and 2 are not achievable due to unfavorable economic conditions, but (b) the Group performs better than its peers.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1-A 50% CRITERION 1-B 50%	If the average 2019-2021 EBITDA[1] margin is more than or equal to 15.5% Change in like-for-like revenue (average over the 3 years from 2019 to 2021) is more than or equal to 4%	Allotment percentage calculated on a straight-line basis Allotment percentage calculated on a straight-line basis	If the average 2019-2021 EBITDA[1] margin is more than or equal to 14.9% Change in like-for-like revenue (average over the 3 years from 2019 to 2021) is more than or equal to 2%	If the average 2019-2021 EBITDA[1] margin is less than 14.9% Change in like-for-like revenue (average over the 3 years from 2019 to 2021) is less than 2%.
Achievement rate	**100%**	**35% to 100%**	**35%**	**0%**
CRITERION 2	If the change in EBITDA[1] margin between 2018 and the 2019-2021 average is more than 5 pts higher than the change in the panel's average EBITDA[1] margin	Allotment percentage calculated on a straight-line basis	If the change in EBITDA[1] margin between 2018 and the 2019-2021 average is equal to the change in the panel's average EBITDA[1] margin	If the change in EBITDA[1] margin between 2018 and the 2019-2021 average is less than the change in the panel's average EBITDA[1] margin

The calculations will be based on Mersen's published financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) or a change in the accounting standards having an impact on EBITDA or revenue occurring after May 17, 2019, the Board of Directors may, after obtaining the opinion of the Governance, Appointments and Remuneration Committee, adjust the financial statements for these effects when calculating the allotment percentages.

In particular, the EBITDA margins used correspond to reported figures excluding the impact of IFRS 16.

The panel of comparable companies used to calculate criterion 2 was approved by the Board of Directors on May 17, 2019, on the recommendation of the Governance, Appointments and Remuneration Committee.

The panel of comparable companies remains unchanged compared with the 2018 plan and comprises the following companies: Arkema, SA des ciments Vicat, STMicroelectronics NV, SEB, Manitou BF, Nexans, Rexel, Ingenico, Essilor International, Air Liquide, Imerys, Schneider Electric, ArcelorMittal, Saint-Gobain, Tarkett, Lisi, Somfy and Legrand.

For the purpose of calculating the allotment percentage, the Governance, Appointments and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in their EBITDA margin over the period.

10.5.2. Results

The results will not be known until 2022.

(1) EBITDA = Operating income before non-recurring items + depreciation and amortization.

11. Bonus preference shares (2015-2018)

Preference shares are shares of a specific category, allotted freely subject to performance conditions. They can be converted into a number of ordinary shares, said number depending on the increase in the share price (on average, over a predetermined period) in relation to the share price expected at the outset. Preference shares thereby incentivize certain senior managers by giving them a long-term stake in the growth of the share price and through their achievement of certain financial criteria.

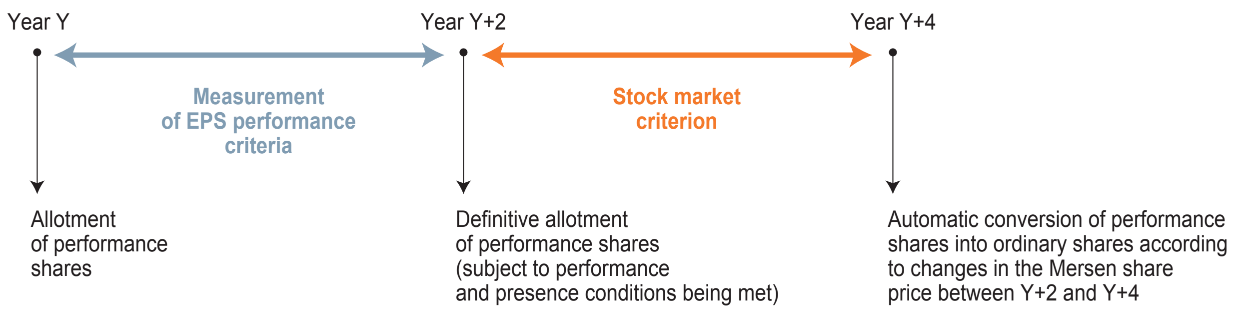
Four plans were set up between 2015 and 2018 leading to the creation of four classes of shares (B to E). The Board of Directors has decided not to renew these preference share plans as they are too complex and lack clarity for certain investors.

In 2019, the 2015 plan reached maturity (see below) and the B shares were converted into ordinary shares. Consequently, there are no longer any B shares.

The main characteristics of the bonus share allotment plans

- Beneficiaries: Executive Committee and the Vice Presidents of the five business segments
- Shares of a specific class convertible into ordinary shares four years after their allotment
- Subject to performance conditions based on:
  - (i) a target two-year EPS or (ii) two-year EPS growth relative to a panel of French industrial groups
  - improvement in average share price over two years relative to an initial share price (except for a proportion of 10%)
  - continued service within the company at the end of the vesting period

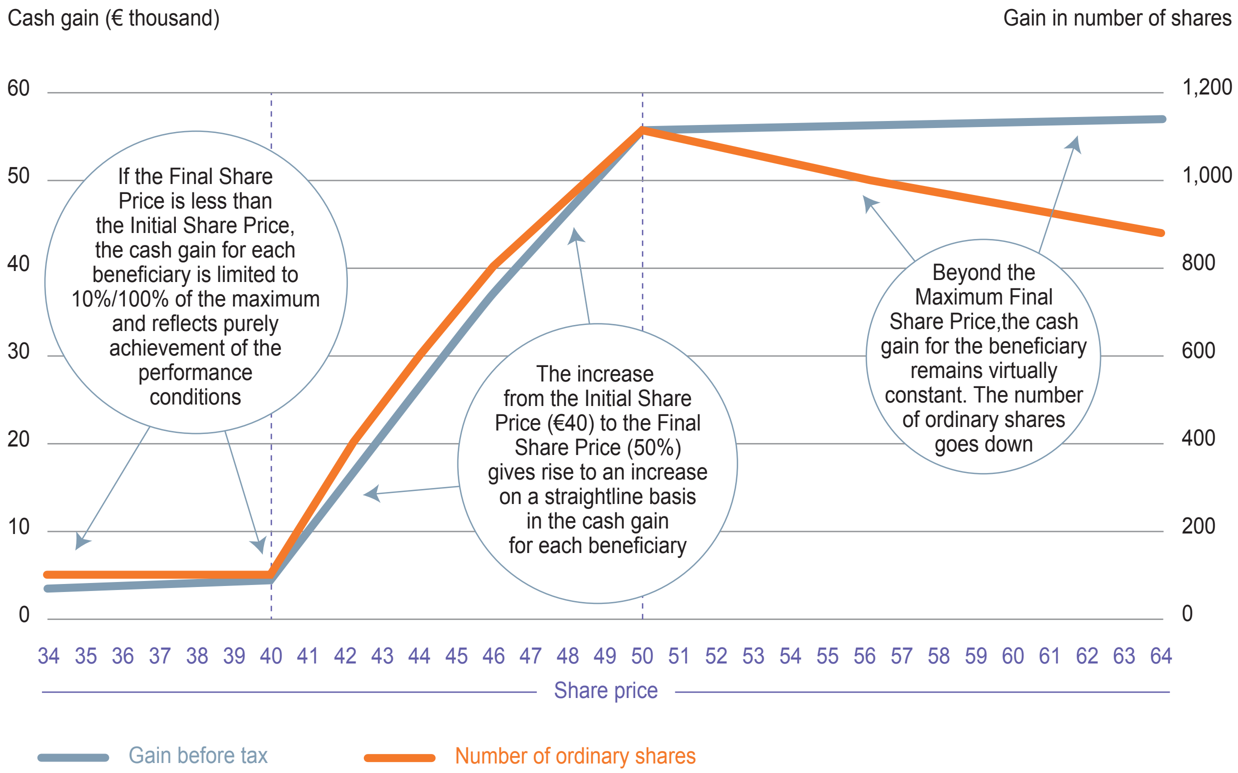
Timetable for preference shares



- The number of ordinary shares ultimately obtained depends on growth in the average share price over two years (“Final Share Price”) relative to the initial share price (“Initial Share Price” = average of the last twenty quoted prices at the time of allotment), if and only if the performance conditions are achieved, based on the following formula:
  - If the Final Share Price is less than the Initial Share Price, the number of ordinary shares obtained is equal to 10/110% of the maximum number of shares.
  - If the Final Share Price is more than the Initial Share Price, beneficiaries will receive a number of ordinary shares which, if sold, would give them a cash gain increasing on a straight-line basis with the Final Share Price, up to a maximum price (“Maximum Final Share Price”), beyond which the cash gain remains virtually constant.

Example

The graph below summarizes the potential gains (in euros and in shares) for a beneficiary receiving 10 preference shares at an initial share price of €40.



Performance conditions (principles)

The Board of Directors decided on the following principles to set the performance conditions for the 2015 to 2018 preference share plans:

- The performance condition is based on earnings per share (EPS), adjusted for certain non-recurring expense or income (net of tax) with a significant impact on the Group's results. The Board decided to eliminate these non-recurring items in order to measure the Company's intrinsic performance.
- The target EPS for obtaining 100% is demanding, in keeping with the internal objectives of the Group's strategic plans in a stable or improving economic environment.
- Given the Group's dependence on the economic environment, an alternative EPS criterion has been put in place. The principle is to reward beneficiaries if the Group has not achieved its internal EPS targets due to a deterioration in the economic environment but has outperformed or comfortably outperformed a sample of French industrial companies. This relative performance is measured by reference to the change in EPS over the relevant period.
- The calculations are based on the Group's financial statements. However, in the event of abnormal positive or negative variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) occurring after the meeting of the Management Board or Board of Directors at which the bonus shares are allotted, the Group's results may be adjusted after analysis by the Governance and Remuneration Committee and with the agreement of the Board of Directors (or the Supervisory Board). In the same spirit, the Governance and Remuneration Committee may withdraw from the sample any companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period.

Holding requirements

The holding period is set at two years for beneficiaries who are French residents, in accordance with the provisions of paragraph 7 of Article L. 2251971 of the French Commercial Code. No holding obligations and holding periods will be imposed at the end of the vesting period for beneficiaries who are not French tax residents.

The Board of Directors has decided that the Chief Executive Officer will be required to retain 30% of the ordinary shares obtained upon conversion.

No hedging

In accordance with the AFEP-MEDEF Code, the Chief Executive Officer has formally undertaken not to hedge his stock options or performance shares.

Other characteristics of the bonus share allotment plans

- Preference shares confer the same rights as ordinary shares, except that they pay a lower dividend.
- At the end of the holding period for B, C, D and E shares (the "Holding Period"), as set forth in the various bonus share plans determining their allotment, each B, C, D and E shareholder may convert some or all of the B, C, D or E shares held into ordinary shares, under the terms and conditions set forth in Section II, paragraphs 4 to 5 of Article 15 of the Articles of Association. If conversion takes place at the end of the periods set forth in Section II, paragraphs 4 to 5 of Article 15 of the Articles of Association, the B, C, D and E shares will be converted automatically into ordinary shares.
- At the end of the Holding Period, the B, C, D and E shares will be transferable without restriction by the respective B, C, D and E shareholders. B, C, D and E shares may be converted into ordinary shares during a 30-day period, according to the terms and conditions in the plan and to a parity defined by the percentage difference between the Initial Share Price and the Final Share Price. A specific rule shall be defined if the end of the conversion period falls during a period restricting the sale or purchase of Company shares. The Initial Share Price is equal to the volume-weighted average of the opening prices of the ordinary shares for the last 20 trading days prior to the allotment date. By exception to this principle, the Initial Share Price set in 2016 was €17, significantly above the volume-weighted average in order to avoid a windfall effect caused by an abnormally low share price.
- The Final Share Price is equal to the average opening prices of the ordinary shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the B, C, D and E shareholders requested the conversion to ordinary shares.
- The Maximum Final Share Price is set such that the cash gain that would be made by the beneficiaries by selling the ordinary shares obtained upon conversion of the B, C, D and E shares would be more or less constant. This Maximum Final Share Price has been set at 150% of the Initial Share Price for the B, C and D shares. Given the very strong growth in the share price from May 2016 to May 2018 (+229%), the Board of Directors considered that the Maximum Final Share Price should be limited to 120% of the Initial Share Price for the 2018 plan (E shares).
- In the event of a change of control occurring before the performance condition can be observed, the performance condition shall be deemed to have been fully satisfied, thus entitling the holder to delivery of all the C, D and E shares at the end of the acquisition period.

11.1. 2015 plan

11.1.1. Summary

	2015 plan			
	Preference shares	Minimum equivalent ordinary shares[1]	Maximum additional equivalent ordinary shares	Maximum total equivalent ordinary shares
Date of allotment decision	Jul. 9, 15			
Total number of shares available for subscription	902	9,020	90,200	99,220
- o/w corporate officer:				
Luc Themelin	*183*	*1,830*	*18,300*	*20,130*
- o/w top 10 allottees	*902*	*9,020*	*90,200*	*99,220*
Initial Share Price *(in €)*	22.09			
Maximum Final Share Price *(in €)*	33.13			
Value of preference shares[1] on the allotment date *(in €)*		17.73 (French tax residents)[2]	4.92 (French tax residents)[3]	
Definitive allotment date (end of the vesting period)	July 9, 2017 (French tax residents)[4]			
Allotments canceled at Dec. 31, 2019	585	5,850	58,500	64,350
- o/w canceled in 2019	*0*	*0*	*0*	*0*
Date of transferability (automatic conversion of preference shares into ordinary shares)	Jul. 9, 15			
Number of vested shares	317	3,170	31,700	34,870
- Number of ordinary shares following conversion [5]		*3,170*	*30,950*	*34,120*
- o/w corporate officer Luc Themelin				*7,667*
- Number of unvested ordinary shares				*750*
BALANCE AT DECEMBER 31, 2019	**0**	**0**	**0**	**0**

(1) 10% of preference shares are not linked to share price trends and are thus automatically convertible into ordinary shares, subject to the achievement of performance criteria regarding change in earnings per share.
(2) For beneficiaries who are non-French tax residents, the value is €18.53.
(3) For beneficiaries who are non-French tax residents, the value is €5.14.
(4) For non-French tax residents, there is an additional period of two additional years.
(5) The average Final Share Price used for the conversion was €32.75, just under the Maximum Final Share Price.

11.1.2. Description

At the General Meeting of May 19, 2015, the shareholders authorized the Management Board to allot bonus preference shares (B shares) convertible into a maximum of 129,872 ordinary shares (i.e., 0.6% of the share capital). At its meeting of July 9, 2015, the Management Board decided, after obtaining the approval of the Supervisory Board, to make use of this authorization to allot 902 bonus preference shares to Group corporate officers and senior managers, based on performance criteria related to growth in earnings per share between 2014 and 2016. This number corresponds to a maximum total of 99,220 ordinary shares after conversion, or 0.5% of the Company's share capital.

11.1.3. Performance conditions (targets)

The performance conditions were validated by the Supervisory Board after review by the Governance and Remuneration Committee in compliance with the principles underlying those conditions (see Performance conditions (principles) in the introduction to section 11). The percentage of B shares that will vest depends on the two criteria defined below, whichever is the more favorable.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1	If average adjusted 2015/2016 EPS is more than or equal to 1.80		If average adjusted 2015/2016 EPS is equal to 1.30	If average adjusted 2015/2016 EPS is less than 1.30
Achievement rate	**100%**	**50% to 100%**	**50%**	**0%**
CRITERION 2	If Mersen's EPS growth (between 2014 EPS and average 2015/2016 EPS) is more than 15 pts higher than the panel's average EPS growth	Percentage achievement calculated on a straight-line basis if Mersen's EPS growth (between 2014 EPS and average 2015/2016 EPS) is less than 15 pts higher than the panel's average EPS growth	If Mersen's EPS growth (between 2014 EPS and average 2015/2016 EPS) is equal to the panel's average EPS growth	If Mersen's EPS growth (between the 2014 EPS and average 2015/2016 EPS) is less than the panel's average EPS growth

The reference 2013 EPS is the EPS published by the Group, adjusted for exceptional charges of €55 million, including impairment of deferred tax assets, recognized in the second half of 2013, i.e., an "adjusted 2013 EPS" of 1.27 rounded to 1.30.

The reference 2014 EPS is the EPS published by the Group, adjusted for exceptional charges related to the Transform Plan and the costs of settling civil proceedings in Great Britain, or an adjusted 2014 EPS of 1.44.

The reference 2015 EPS is the EPS published by the Group, adjusted for non-recurring expenses related to the impairment of goodwill and assets, and deferred tax assets from operations held for sale, and expenses related to the 2015 Transform Plan, or an adjusted 2015 EPS of 1.32.

The reference 2016 EPS is the EPS published by the Group, adjusted for non-recurring expenses related to the operational excellence plan, net of tax, and for non-recurring expenses related to discontinued operations, or an adjusted 2016 EPS of 1.41.

The calculations will be based on Mersen's published consolidated financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) occurring after the meeting of the Board of Directors on May 19, 2015, the Board of Directors may, after obtaining the opinion of the Governance and Remuneration Committee, adjust the financial statements for these exceptional items when calculating the allotment percentages.

The panel of comparable companies used to calculate criterion 2 was approved by the Supervisory Board on May 19, 2015, based on the recommendation of the Governance and Remuneration Committee. It comprises the following industrial companies listed on Euronext Paris: Air Liquide, Faiveley, ArcelorMittal, Arkema, Essilor, Imerys, Ingenico, Legrand, LISI, Manitou, Nexans, Rexel, Saint-Gobain, SEB, Schneider, Somfy, ST Micro, Tarkett, Vicat and Zodiac. For the purpose of calculating the allotment percentage, the Governance and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period. The companies withdrawn from the panel above may be replaced, where necessary, by other companies chosen by the Governance and Remuneration Committee.

11.1.4. Performance conditions (results)

			% allotment in respect of criterion 1	% allotment in respect of criterion 2
CRITERION 1	Average adjusted 2015/2016 EPS	1.37	39%	
CRITERION 2	Growth in (a) average 2015/2016 EPS relative to (b) 2014 EPS (1.44)	-5.2%		0%
	Panel's average EPS growth over the same period*	15.3%		

** Three companies were excluded from the panel (Saft, Lafarge and Faiveley) following their acquisition by other companies.*

Based on the performance recorded, 39% of the shares were granted.

11.1.5. Conversion terms

The Initial Share Price is equal to the volume-weighted average of the opening prices of the A shares for the last 20 trading days prior to the allotment date.

The Final Share Price is equal to the average opening prices of the A shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the B shareholders requested the conversion to A shares (excluded).

The conversion parity will be equal to:

- If the Final Share Price is less than 150% of the Initial Share Price (the Maximum Final Share Price): N = 10 + 300 (FP-IP)/FP

Where:

- "N" is the number of A shares to which each B share is entitled, it being specified that in the case of a fraction (or decimal quotient), the number of A shares allotted to a B shareholder will be rounded down to the lower unit; "CF" is the Final Share Price; "CI" is the Initial Share Price; and "CFMax" is the Maximum Final Share Price.
- If the Final Share Price is greater than the Maximum Final Share Price: N = 10 + (CFMax x 100)/CF
- If the Final Share Price is less than the Initial Share Price: N = 10

Based on the Company's share performance between July 2017 and July 2019, 34,120 ordinary shares vested out of a maximum of 34,870 ordinary shares.

11.2. 2016 plan

11.2.1. Summary

	2016 plan			
	Preference shares	**Minimum equivalent ordinary shares[1]**	**Maximum additional equivalent ordinary shares**	**Maximum total equivalent ordinary shares**
Date of allotment decision	May 11, 16			
Total number of shares available for subscription	1,172	11,720	117,200	128,920
- o/w corporate officer:				
Luc Themelin	*188*	*1,880*	*18,800*	*20,680*
- o/w top 10 allottees	*936*	*9,360*	*93,600*	*102,960*
Initial Share Price *(in €)*		17.00		
Maximum Final Share Price *(in €)*		25.50		
Value of preference shares[1] on the allotment date *(in €)*		10.92 (French tax residents)[2]	1.52 (French tax residents)[3]	
Definitive allotment date (end of the vesting period)		May 11, 2018 (French tax residents)[4]		
Date of transferability (automatic conversion of preference shares into ordinary shares)		May 11, 20		
Allotments canceled at Dec. 31, 2019	0			
- o/w canceled in 2019	*0*			
Number of shares vested definitively, non-transferable	0			
BALANCE AT DECEMBER 31, 2019	**1,172**	**11,720**	**117,200**	**128,920**

(1) 10% of preference shares are not linked to share price trends and are thus automatically convertible into ordinary shares, subject to the achievement of performance criteria regarding change in earnings per share.
(2) For beneficiaries who are non-French tax residents, the value is €11.41.
(3) For beneficiaries who are non-French tax residents, the value is €1.59.
(4) For non-French tax residents, there is an additional period of two years.

11.2.2. Description

At the General Meeting of May 11, 2016, the shareholders authorized the Board of Directors to allot bonus preference shares (C shares) convertible into a maximum of 128,920 ordinary shares (i.e., 0.6% of the share capital). At its meeting of May 11, 2016, the Board of Directors made use of this authorization and allotted 1,172 bonus preference shares to members of the Executive Committee and senior managers of the Group. This number corresponds to a maximum number of 128,920 ordinary shares after conversion.

11.2.3. Performance conditions (targets)

The performance conditions were validated by the Board of Directors after review by the Governance and Remuneration Committee in compliance with the principles underlying those conditions (see Performance conditions (principles) in the introduction to section 11). The percentage of C shares that will vest depends on the two criteria defined below, whichever is the more favorable.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1	If average 2016/2017 EPS is more than or equal to 1.50	Percentage achievement calculated on a straight-line basis if average 2016/2017 EPS is between 1.32 and 1.50	If average 2016/2017 EPS is equal to 1.32	If average 2016/2017 EPS is less than 1.32
Achievement rate	**100%**	**50% to 100%**	**50%**	**0%**
CRITERION 2	If growth in Mersen's EPS (between 2015 EPS and average 2016/2017 EPS) is more than 15 pts higher than the panel's average EPS growth	Percentage achievement calculated on a straight-line basis if growth in Mersen's EPS (between 2015 EPS and average 2016/2017 EPS) is less than 15 pts higher than the panel's average EPS growth	If Mersen's EPS growth (between 2015 EPS and average 2016/2017 EPS) is equal to the panel's average EPS growth	If Mersen's EPS growth (between 2015 EPS and average 2016/2017 EPS) is less than the panel's average EPS growth

The reference 2015 EPS is the EPS published by the Group adjusted for exceptional charges, i.e., an adjusted 2015 EPS of 1.32.

The 2016 and 2017 EPS may be adjusted for exceptional items (see criteria calculation methods).

The calculations will be based on Mersen's published consolidated financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions (specifically, change of scope by acquisitions or disposals) occurring after the meeting of the Board of Directors on May 11, 2016, the Board of Directors may, after obtaining the opinion of the Governance and Remuneration Committee, adjust the financial statements for these exceptional items when calculating the allotment percentages.

The panel of comparable companies used to calculate criterion 2 was approved by the Board of Directors on May 11, 2016, on the recommendation of the Governance and Remuneration Committee.

The panel of comparable companies comprises the following companies: Arkema, SA Vicat STMicroelectronics NV, SEB SA, Manitou BF, Zodiac Aerospace, Nexans SA, Rexel SA, SAFT Groupe SA, Ingenico, Essilor International, Air Liquide SA, Imerys SA, Schneider Electric SA, Arcelor Mittal, Saint-Gobain, Tarkett, Lisi, Somfy, Legrand, Faiveley. Among those companies, STMicroelectronics, Nexans, Faiveley and Saft were added in order to increase the number of groups in the panel.

For the purpose of calculating the allotment percentage, the Governance and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period. The companies withdrawn from the panel above may be replaced, where necessary, by other companies chosen by the Governance and Remuneration Committee.

11.2.4. Performance conditions (results)

			% allotment in respect of criterion 1	% allotment in respect of criterion 2
CRITERION 1	Average adjusted 2016/2017 EPS achieved	1.65	100%	
CRITERION 2	Growth in (a) average 2016/2017 EPS relative to (b) 2015 EPS (1.32)	24.6%		0%
	Panel's average EPS growth over the same period	109.9%(a)		

2016 EPS (1.41) was adjusted for the competitiveness plan net of tax.

2017 EPS (1.88) was adjusted for the competitiveness plan net of tax, discontinued operations, impacts of the US tax reform and impairment of deferred tax assets.

(a) Growth in the panel's EPS was not representative due to the very significant increase (sometimes in excess of 300%) in the EPS of certain groups that had recorded high non-recurring charges in 2015. In addition, three companies were excluded from the panel: Zodiac, Saft (following their acquisition by other companies) and Somfy (financial statements not published on the date the calculations were validated).

Based on the performance recorded, 100% of the shares were granted.

11.2.5. Conversion terms

The Initial Share Price is 17 euros: it corresponds to the higher amount of either (i) 17 (seventeen) euros or (ii) the volume-weighted average of the opening prices of the ordinary shares over a period preceding the allotment date by twenty (20) trading days.

The Final Share Price is equal to the average opening prices of the ordinary shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the C shareholders requested the conversion to ordinary shares.

The conversion parity will be equal to:

- If the Final Share Price is less than 150% of the Initial Share Price (the Maximum Final Share Price): N = 10 + 300 (CF-CI)/CF

Where:

- "N" is the number of A shares to which each C share is entitled, it being specified that in the case of a fraction (or decimal quotient), the number of A shares allotted to a C shareholder will be rounded down to the lower unit; "CF" is the Final Share Price; "CI" is the Initial Share Price; and, "CFMax" is the Maximum Final Share Price.
- If the Final Share Price is greater than the Maximum Final Share Price: N = 10 + (CFMax x 100)/CF
- If the Final Share Price is less than the Initial Share Price: N = 10

The preference shares will be converted into ordinary shares in May 2020.

11.3. 2017 plan

11.3.1. Summary

	2017 plan			
	Preference shares	**Maximum equivalent ordinary shares[1]**	**Maximum additional equivalent ordinary shares**	**Maximum total equivalent ordinary shares**
Date of allotment decision	May 18, 17			
Total number of shares available for subscription	1,172	11,720	117,200	128,920
- o/w corporate officer:				
Luc Themelin	*189*	*1,890*	*18,900*	*20,790*
- o/w top 10 allottees	*936*	*9,360*	*93,600*	*102,960*
Initial Share Price *(in €)*	26.06			
Maximum Final Share Price *(in €)*	39.09			
Value of preference shares[1] on the allotment date *(in €)*		21.35 (French tax residents)[2]	6.44 (French tax residents)[3]	
Definitive allotment date (end of the vesting period)	May 18, 2019 (French tax residents)[4]			
Date of transferability (automatic conversion of preference shares into ordinary shares)	May 19, 21			
Allotments canceled at Dec. 31, 2019	0			
Number of shares vested definitively, non-transferable	0			
BALANCE AT DECEMBER 31, 2019	**1,172**	**11,720**	**117,200**	**128,920**

(1) 10% of preference shares are not linked to share price trends and are thus automatically convertible into ordinary shares, subject to the achievement of performance criteria regarding change in earnings per share.
(2) For beneficiaries who are non-French tax residents, the value is €22.31.
(3) For beneficiaries who are non-French tax residents, the value is €6.73.
(4) Non-French tax residents are subject to an additional period of two years

11.3.2. Description

At the General Meeting of May 18, 2017, the shareholders authorized the Board of Directors to allot bonus preference shares (D shares) convertible into a maximum of 128,920 ordinary shares (i.e., 0.6% of the share capital). At its meeting of May 18, 2017, the Board of Directors made use of this authorization and allotted 1,172 bonus preference shares to members of the Executive Committee and senior managers of the Group. At its meeting of May 18, 2017, the Board of Directors made use of this authorization and allotted 1,172 bonus preference shares to members of the Executive Committee and senior managers of the Group. This number corresponds to a maximum number of 128,920 ordinary shares after conversion.

11.3.3. Performance conditions

The performance conditions were validated by the Board of Directors after review by the Governance and Remuneration Committee in compliance with the principles underlying those conditions (see Performance conditions (principles) in the introduction to section 11). The percentage of D shares that will vest depends on the two criteria defined below, whichever is the more favorable.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1	If average 2017/2018 EPS is more than or equal to 1.8	Percentage achievement calculated on a straight-line basis if average 2017/2018 EPS is between 1.4 and 1.8	If average 2017/2018 EPS is equal to 1.4	If average 2017/2018 EPS is less than 1.4
Achievement rate	**100%**	**50% to 100%**	**50%**	**0%**
CRITERION 2	If Mersen's EPS growth (between 2016 EPS and average 2017/2018 EPS) is more than 15 pts higher than the panel's average EPS growth	Percentage achievement calculated on a straight-line basis if Mersen's EPS growth (between 2016 EPS and average 2017/2018 EPS) is less than 15 pts higher than the panel's average EPS growth	If Mersen's EPS growth (between 2016 EPS and average 2017/2018 EPS) is equal to the panel's average EPS growth	If Mersen's EPS growth (between 2016 EPS and average 2017/2018 EPS) is less than the panel's average EPS growth

The adjusted 2016 EPS is the EPS published by the Group, adjusted for exceptional charges, or 1.41.

The calculation of the percentages would be based on Mersen's published consolidated financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions occurring after allotment, the Board of Directors may, after obtaining the option of the Governance and Remuneration Committee adjust the financial statements for these exceptional items when calculating the allotment percentages.

The panel of comparable companies used to calculate criterion 2 was approved by the Board of Directors on May 18, 2017, on the recommendation of the Governance and Remuneration Committee. It comprises international industrial groups listed in France and its composition has not changed since the previous plan (with the exception of companies acquired or delisted). The panel comprises the following companies: Arkema, SA des Ciments Vicat, STMicroelectronics NV, SEB SA, Manitou BF, Nexans SA, Rexel SA, Ingenico, Essilor International, Air Liquide SA, Imerys SA, Schneider Electric SA, ArcelorMittal, Saint-Gobain, Tarkett, Lisi, Somfy and Legrand.

For the purpose of calculating the allotment percentage, the Governance and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period.

11.3.4. Performance conditions (results)

			% allotment in respect of criterion 1	% allotment in respect of criterion 2
CRITERION 1	Average adjusted 2017/2018 EPS achieved	2.29	100%	N/A

The achievement rates for criterion 2 were not yet available at the publication date of this Universal Registration Document.

Based on the performance recorded, 100% of the shares were granted.

11.3.5. Conversion terms

The Initial Share Price is equal to the volume-weighted average of the opening prices of the A shares for the last 20 trading days prior to the allotment date.

The Final Share Price is equal to the average opening prices of the A shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the D shareholders requested the conversion to A shares (excluded).

The conversion parity will be equal to:

- If the Final Share Price is less than 150% of the Initial Share Price (the Maximum Final Share Price): N = 10 + 300 (CF-CI)/CF

Where:

- "N" is the number of A shares to which each D share is entitled, it being specified that in the case of a fraction (or decimal quotient), the number of A shares allotted to a D shareholder will be rounded down to the lower unit; "CF" is the Final Share Price; "CI" is the Initial Share Price; and, "CFMax" is the Maximum Final Share Price.
- If the Final Share Price is greater than the Maximum Final Share Price: N = 10 + (CFMax x 100)/CF
- If the Final Share Price is less than the Initial Share Price: N = 10

The preference shares will be converted into ordinary shares in May 2021.

11.4. 2018 plan

In keeping with previous plans, at its meeting of May 17, 2018, the Board of Directors decided to set up a preference share plan for members of the Executive Committee (including the Chief Executive Officer) and the Vice Presidents of the five business segments. The principles for this plan differ from previous plans, in particular to take account of the very significant improvement in share price between 2016 and 2018:

- Given the very favorable trend in share price from May 18, 2017 to May 17, 2018 (+57%), the maximum number of ordinary shares was reduced by about 22% compared to the authorization given by the shareholders and compared to the 2017 plan.
- The Board of Directors reduced the Maximum Final Share Price to 120% of the Initial Share Price (compared with 150% for the 2016 and 2017 plans). The reason behind this decision was to take into account the very favorable trend in share price (+229% between May 17, 2016 and May 17, 2018), while maintaining an incentivizing target for the beneficiaries and in the interest of investors. Conversely, for the 2016 plan, the Board had set an initial share price of €17, well above the average of the 20 preceding trading days in order to avoid a windfall effect for the beneficiaries.
- Furthermore, at his request, the Chief Executive Officer was allotted the same maximum equivalent number of preference shares as the Executive Committee members, i.e., 77.

11.4.1. Summary

	2018 plan			
	Preference shares	**Maximum equivalent ordinary shares**(1)	**Maximum additional equivalent ordinary shares**	**Maximum total equivalent ordinary shares**
Date of allotment decision	May 17, 18			
Total number of shares available for subscription	940	9,400	94,000	103,400
- o/w corporate officer:				
Luc Themelin	*77*	*770*	*7,700*	*8,470*
- o/w top 10 allottees	*736*	*7,360*	*73,600*	*80,960*
Initial Share Price *(in €)*	39.27			
Maximum Final Share Price *(in €)*	47.12			
Value of preference shares(1) on the allotment date *(in €)*		33.53 (French tax residents)(2)	12.41 (French tax residents)(3)	
Definitive allotment date (end of the vesting period)	May 17, 2020 (French tax residents)(4)			
Date of transferability (automatic conversion of preference shares into ordinary shares)	May 17, 22			
Allotments canceled at Dec. 31, 2019	0			
Number of shares vested definitively, non-transferable	0			
BALANCE AT DECEMBER 31, 2019	**940**	**9,400**	**94,000**	**103,400**

(1) 10% of preference shares are not linked to share price trends and are thus automatically convertible into ordinary shares, subject to the achievement of performance criteria regarding change in earnings per share.
(2) For beneficiaries who are non-French tax residents, the value is €12.41.
(3) For beneficiaries who are non-French tax residents, the value is €12.97.
(4) Non-French tax residents are subject to an additional period of two years.

11.4.2. Description

At the General Meeting of May 17, 2018, the shareholders authorized the Board of Directors to allot bonus preference shares (E shares) convertible into a maximum of 129,000 ordinary shares (i.e., 0.5% of the share capital). At its meeting of May 17, 2018, the Board of Directors made use of this authorization and allotted 940 bonus preference shares to members of the Executive Committee (including the Chief Executive Officer) and senior managers of the Group. This number corresponds to a maximum number of 103,400 ordinary shares after conversion.

11.4.3. Performance conditions (targets)

The performance conditions were validated by the Board of Directors after review by the Governance and Remuneration Committee in compliance with the principles underlying those conditions. The percentage of E shares that will vest depends on the two criteria defined below, whichever is the more favorable.

Achievement rate	100%	30% to 100%	30%	0%
CRITERION 1	If average 2018/2019 EPS is more than or equal to 2.2	Percentage achievement calculated on a straight-line basis if average 2018/2019 EPS is between 1.88 and 2.2	If average 2018/2019 EPS is equal to 1.88	If average 2018/2019 EPS is less than 1.88
Achievement rate	**100%**	**50% to 100%**	**50%**	**0%**
CRITERION 2	If Mersen's EPS growth (between 2017 EPS and average 2018/2019 EPS) is more than 15 pts higher than the panel's average EPS growth	Percentage achievement calculated on a straight-line basis if Mersen's EPS growth (between 2017 EPS and average 2018/2019 EPS) is less than 15 pts higher than the panel's average EPS growth	If Mersen's EPS growth (between 2017 EPS and average 2018/2019 EPS) is equal to the panel's average EPS growth	If Mersen's EPS growth (between 2017 EPS and average 2018/2019 EPS) is less than the panel's average EPS growth

The adjusted 2017 EPS is the EPS published by the Group, adjusted for exceptional charges, or 1.88.

The calculation of the percentages would be based on Mersen's published consolidated financial statements. However, in the event of abnormal variations during the period or of significant exceptional transactions occurring after allotment, the Board of Directors may, after obtaining the option of the Governance and Remuneration Committee, adjust the financial statements for these exceptional items when calculating the allotment percentages.

The panel of comparable companies used to calculate criterion 2 was approved by the Board of Directors on May 18, 2017, on the recommendation of the Governance and Remuneration Committee. It comprises international industrial groups listed in France and its composition has not changed since the previous plan. The panel comprises the following companies: Arkema, SA des Ciments Vicat, STMicroelectronics, SEB SA, Manitou BF, Nexans SA, Rexel SA, Ingenico, Essilor International, Air Liquide SA, Imerys SA, Schneider Electric SA, ArcelorMittal, Saint-Gobain, Tarkett, Lisi, Somfy, Legrand.

For the purpose of calculating the allotment percentage, the Governance and Remuneration Committee may withdraw from the sample companies that have recorded manifestly wild or abnormal fluctuations in EPS over the period.

11.4.4. Performance conditions (results)

At the date of publication of this Universal Registration Document, the full result for all of the performance criteria were not yet available.

11.4.5. Conversion terms

The Initial Share Price is equal to the volume-weighted average of the opening prices of the A shares for the last 20 trading days prior to the allotment date.

The Final Share Price is equal to the average opening prices of the A shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the E shareholders requested the conversion to A shares (excluded).

The conversion parity will be equal to:

- If the Final Share Price is less than 120% of the Initial Share Price (the Maximum Final Share Price): N = 10 + 600 (CF-CI)/CF

Where:

- "N" is the number of A shares to which each E share is entitled, it being specified that in the case of a fraction (or decimal quotient), the number of A shares allotted to a E shareholder will be rounded down to the lower unit; "CF" is the Final Share Price; "CI" is the Initial Share Price; and, "CFMax" is the Maximum Final Share Price.
- If the Final Share Price is greater than the Maximum Final Share Price: N = 10 + (CFMax x 100)/CF
- If the Final Share Price is less than the Initial Share Price: N = 10

The preference shares will be converted into ordinary shares in May 2022.

12. 2019 bonus shares (program for senior executives)

In 2019, the Board of Directors decided to amend the long-term compensation plans in order to take into account investor comments and align the plans with the underlying principles of the Chief Executive Officer's compensation.

It therefore set up a share plan for senior executives, covering members of the Executive Committee (including the Chief Executive Officer) and the Vice Presidents of the Group's five business lines, i.e., a total of 14 people. The objective of the plan is to incentivize the senior executives by giving them a long-term stake in the growth of the share price, an increase in the Group's profitability and improvement in nonfinancial indicators.

12.1. Summary

	2019 Plan Tranche 1 (with performance conditions)	**Total**
Date of allotment decision	May 17, 19	
Total number of shares allotted	59,000	59,000
- o/w corporate officers:		
Luc Themelin	*8,850*	*8,850*
- o/w top 10 allottees	*47,200*	*47,200*
Share price at allotment date *(€)*	20.86	
Definitive allotment date (end of the vesting period)	May 17, 22	
End of lock-up period	May 18, 22	
Allotments canceled at Dec. 31, 2019	0	0
o/w canceled in 2019	*0*	*0*
Number of shares vested definitively, and transferable	0	0
BALANCE AT DECEMBER 31, 2019	**59,000**	**59,000**

12.2. Description

Changes in the 2019 bonus share plan

Duration of continued presence and performance conditions

- Extended to three years (compared with two years previously)
- Subject to achieving the performance conditions, Luc Themelin may be eligible for bonus shares on a pro rata basis should his term of office be terminated. This decision was previously at the discretion of the Board of Directors

Performance conditions

- Removal of alternative criterion that could compensate another criterion. Each criterion is now independent
- The stock market criterion is now assessed based on an external comparable (growth in the Eurostoxx 600)
- The EPS criterion is replaced by recurring operating income per share to (i) limit/eliminate the impacts of positive or negative exceptional fluctuations that could distort the performance assessment and (ii) limit any adjustments to results linked to exceptional circumstances
- Addition of a multiple CSR criterion (each sub criterion is independent) in line with the Group's CSR commitments

Total number of bonus shares and portion allotted to the Chief Executive Officer

A maximum of 68,000 bonus shares may be allotted under the plan. To date, the Board of Directors has allotted a total of 59,000 shares under the plan.

This number cannot be compared with previous years given the change to the plan structure.

The portion allotted to the Chief Executive Officer may not exceed 15% of the plan approved under this resolution, i.e., approximately 6.5% of all plans set up (senior executives and other employees). This portion has increased since 2018 as the Chief Executive Officer decided he wanted to allot the same number of shares to the Executive Committee in 2018, including himself.

12.3. Performance conditions (targets)

Subject to achieving the continued presence conditions, the shares will vest, where applicable partially, according to the following criteria:

- **Stock market criterion (33%)**

Growth in the Mersen share price ("G") will be compared to that of the Eurostoxx 600 (Industrial goods and services) or to the SBF 120 were Eurostoxx 600 no longer available ("the index"). Growth in the share price will be compared over three years, starting from the first working day of the month of the 2019 General Meeting, i.e., from May 2, 2019 to April 29, 2022.

The percentage achievement will be calculated as follows:

	Achievement
E < index growth	0%
E = index growth	50%
E = 10 percentage points above index growth	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

- **Profitability criterion (34%)**

Profitability will be measured based on recurring operating income per share (reported figures including the impact of IFRS 16). The principles applied by the Board of Directors include (i) measuring performance over a period of three years, i.e., 2019, 2020, 2021, (ii) making share allotments conditional, of a minimum, on maintaining recurring operating income per share at the level published in 2018 (€4.41) and (iii) setting tight limits “in line” with internal medium-term objectives.

	Achievement
Recurring operating income per share < €4.41	0%
Recurring operating income per share = €4.41	30%
Recurring operating income per share = €5	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

- **Quantifiable CSR objectives (33%) made up of four independent criteria with the same weighting (8.5% each).**
  - Frequency rate of lost time accidents (LTIR) in the Group at December 2021 for employees and temporary staff

The Board of Directors has decided to take into account the low level already achieved due to a policy that has been in place for several years. In 2018, Mersen had an LTIR indicator of 1.5, outperforming peer industrial groups.

The 100% achievement rate corresponds to the objectives set by the Group for 2021, i.e., LTIR less than or equal to 1.4.

	Achievement
LTIR ≥ 1.7	0%
LTIR = 1.69	30%
LTIR = 1.49	80%
LTIR ≤ 1.4	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

- Severity rate (SR) of accidents in the Group at December 2021 for employees and temporary staff.

The Board of Directors has decided to take into account the low level already achieved due to a policy that has been in place for several years. In 2018, Mersen had an SR indicator of 71, outperforming peer industrial groups.

The 100% achievement rate corresponds to the objectives set by the Group for 2021, i.e., a severity rate of equal to less than or equal to 60.

	Achievement
SR > 80	0%
SR = 80	30%
SR =70	80%
SR ≤ 60	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

- Human capital development: Percentage of women engineers and managers in the Group in December 2021

The indicator will be measured based on employees on sites included in the Group’s HRIS at December 31, 2018 (approximately 94% of Group employees). Acquisitions made after December 2018 will be excluded from the calculation of this criterion.

The Group has set itself the objective of reaching a ratio of between 25% and 30% by 2022.

As this criterion will be measured for the purpose of the bonus share plan in December 2021, i.e., a year earlier than the Group’s objective, the achievement rates have been adapted. The lower limit (0% achievement) corresponds to the percentage of women engineers and managers in December 2018.

% of women managers and professionals	Achievement
< 20%	0%
= 22.5%	70%
> 25%	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

- Environmental footprint of our sites: Percentage of waste recycled in comparison with the total amount of waste generated by the Group’s operations

This criterion will be measured in 2021 based on the environmental reporting scope. The Group has set itself the objective of increasing the percentage of waste recycled or recovered by 15 percentage points from 41% in 2018 to 56% in 2021.

The 100% achievement corresponds to the objective set for 2021. The lower limit (0% achievement) corresponds to the percentage reported in 2018.

Percentage of waste recycled	Achievement
< 42%	0%
= 50%	50%
>= 56%	100%

Achievement rates between the lower and upper limits will be calculated on a straight-line basis.

These objectives were originally set for a reduced environmental scope, i.e., only including entities that generate sales of at least €15 million. As this scope was extended in 2019, the data in chapter 4 of this Universal Registration Document cannot be meaningfully compared against this objective.

12.4. Performance conditions (results)

The results will not be known until May 17, 2022.

12.5 Holding requirements

The Chief Executive Officer is required to retain 30% of the shares vested until he holds an amount at least equivalent to one years’ fixed salary (gross).

13. Shares allotted to executive corporate officers

Beneficiary	Bonus shares granted in 2019 to each executive corporate officer					
	No. and date of plan	Number of shares granted during the fiscal year	Valuation of shares according to the method used in the consolidated financial statements	Definitive vesting date	Availability date	Performance conditions
Luc Themelin Chief Executive Officer	2019 senior share plan	8,850	€184,593	May 17, 2022	May 18, 2022	See section 12.3.

Beneficiary	Bonus shares granted that vested in 2019 for each executive corporate officer		
	No. and date of plan	Number of shares that vested during the fiscal year	Vesting conditions
Luc Themelin Chief Executive Officer	2015 preference share plan	7,667	See section 11.1

14. Components of compensation paid or granted to Luc Themelin (Chief Executive Officer) in respect of the fiscal year ended December 31, 2019 submitted to vote by the General Meeting of May 14, 2020

With regards to the 10th resolution submitted to the General Meeting of May 14, 2020, we invite you to vote on the following fixed, variable and exceptional components making up the total compensation and benefits of any kind paid or granted to Luc Themelin, Chief Executive Officer, in respect of the past fiscal year:

	Amounts paid in 2019	Amounts granted in 2019	Observations on granted amounts
Fixed compensation	€440,000	€440,000	Luc Themelin's 2019 fixed compensation is the same as in 2018.
Annual variable compensation *(amount granted in 2019, to be paid in 2020 after the approval of the General Meeting of May 14, 2020)*	€466,189	€395,560	The variable portion is between 0% and 100% of the fixed compensation. It is composed of financial objectives for 70% (35% based on the Group's ROCE, calculated on the basis of recurring operating income after taxes, and *35%* on operational cash flow) and individual objectives for 30%. The 2019 financial objectives were based on the Group's annual budget. The individual and financial objectives are reviewed every year by the Governance, Appointments and Remuneration Committee, based on the Group's strategic priorities. The individual objectives have been determined as follows: • Safety and waste recycling rates (CSR criteria). • Electric vehicle market oversight. • Competitiveness plan for a product line. • External growth • 3-year strategy • Executive succession plans. The variable salary for 2019 represents 89.8% of the fixed salary and is broken down as follows: the portion linked to financial objectives is 100% based on the Group's operational cash flow and 84% based on the Group's ROCE; the portion linked to individual objectives represents 84.9%. The breakdown in terms of the fulfillment of the individual objectives is as follows: • Security and waste recycling rates: 100% completion. • Electric vehicle market oversight: 90% completion. • Competitiveness plan for a product line: 60% completion. • External growth: 90% completion. • Strategy: 90% completion. • Executive succession plans: 80% completion.
Deferred variable compensation	N/A	N/A	There is no deferred variable compensation mechanism.
Multi-annual variable compensation	N/A	N/A	There is no multi-annual variable compensation mechanism.
Exceptional compensation	N/A	N/A	No exceptional compensation was granted for 2019.
Incentives	€19,705	€20,262	
Share options, performance shares or any other long-term element of compensation		Share grants (2019 Plan): 8,850 performance shares Accounting valuation: €184,593	On May 17, 2019, the Combined General Meeting of Mersen shareholders authorized the Board of Directors to set up bonus share grant plans for certain employees and corporate officers of the Company and of affiliated companies. Pursuant to this resolution, at its meeting on May 17, 2019, the Board of Directors set the conditions for the bonus share grants and designated the beneficiaries. Luc Themelin received 8,850 preference shares subject to performance conditions. The terms and performance criteria required are described in detail in Chapter 2 of this Universal Registration Document.

	Amounts paid in 2019	Amounts granted in 2019	Observations on granted amounts
Directors' compensation	N/A	N/A	Luc Themelin is not a director and therefore does not receive any directors' compensation.
Benefits of any kind	€35,920	€35,920	In-kind benefits include the use of a company car, an annual medical examination and contributions paid to an external organization in respect of company executives' social guarantee.
Severance payment	€0	€0	No amount is due in respect of 2019. By a decision dated March 7, 2017, the Board of Directors decided that the benefits to which Luc Themelin is entitled will be maintained should his term as Chief Executive Officer end.
Non-compete payment	€0	€0	No amount is due in respect of 2019. At its May 11, 2016 meeting, the Board of Directors decided that Luc Themelin shall be entitled to the same non-compete payment as the one granted to him during his prior term of office.
Supplementary pension scheme	€0	€0	No amount is due in respect of 2019. Luc Themelin is eligible for a defined benefit supplementary pension scheme if he is present and ends his career in the Mersen group on the date on which he may claim his French state Social Security pension. Under this scheme, Luc Themelin would receive a supplementary pension, based on length of service and calculated on the average of all basic salaries over the past three years' employment leading up to retirement, plus 50% of the maximum bonus amount. His pension shall not exceed 20% of the sum of these two items. The percentage is capped, given Luc Themelin's length of service (31 years). The theoretical calculation of the annuity paid to Luc Themelin would amount to €132,000, before tax and social charges.
Compensation, indemnities or benefits for taking up office	N/A	N/A	
Components of compensation and benefits of any kind in respect of the term as Chairman of the Board pursuant to agreements entered into with the Company, any company controlled by the Company, any company that controls the Company or any other company under the same control as the Company	N/A	N/A	
Other components of compensation granted in respect of the term as Chairman of the Board	N/A	N/A	

15. Components of compensation paid or granted to Olivier Legrain (Chairman of the Board) in respect of the fiscal year ended December 31, 2019 submitted to vote by the General Meeting of May 14, 2020

With regards to the 9th resolution submitted to the General Meeting of May 14, 2020, we invite you to vote on the following fixed, variable and exceptional components making up the total compensation and benefits of any kind paid or granted to Olivier Legrain, Chairman of the Board since May 18, 2017, in respect of the past fiscal year:

	Amounts paid in 2019	Amounts granted in 2019	Observations
Fixed compensation	€80,000	€80,000	Unchanged vs 2017 on a full-year basis
Annual variable compensation	N/A	N/A	
Deferred variable compensation	N/A	N/A	
Multi-annual variable compensation	N/A	N/A	
Exceptional compensation	N/A	N/A	
Incentives	N/A	N/A	
Share options, performance shares or any other long-term element of compensation	N/A	N/A	
Directors' compensation	€26,719	€25,664	
Benefits of any kind	0	0	
Severance payment	N/A	N/A	
Non-compete payment	N/A	N/A	
Supplementary pension scheme	N/A	N/A	
Compensation, indemnities or benefits for taking up office	N/A	N/A	
Components of compensation and benefits of any kind in respect of the term as Chairman of the Board pursuant to agreements entered into with the Company, any company controlled by the Company, any company that controls the Company or any other company under the same control as the Company	N/A	N/A	
Other components of compensation granted in respect of the term as Chairman of the Board	N/A	N/A	

Other disclosures

1. Summary of valid delegations and authorization regarding increases to share capital

Type of delegation/ authorization	Date of the General Meeting	Duration	Initial limit	Use in FY 2019
Delegation to increase share capital through the capitalization of reserves, profits and/or premiums (1)	5/17/2018 *Thirteenth resolution*	26 months	Maximum nominal amount of capital increases: €50m	None
Delegation to increase share capital with preferential subscription rights for shareholders	5/17/2018 *Fourteenth resolution*	26 months	Maximum nominal amount of capital increases: €15m Maximum nominal amount of debt securities: €300m	None
Delegation to increase share capital without preferential subscription rights for shareholders by way of a public offer with a mandatory priority period and/or as consideration for securities in the context of a public exchange offer (1)	5/17/2018 *Fifteenth resolution*	26 months	Maximum nominal amount of capital increases: €8m (3) Maximum nominal amount of debt securities: €300m (2)	None
Delegation to increase share capital without preferential subscription rights par placement privé (1)	5/17/2018 *Sixteenth resolution*	26 months	Maximum nominal amount of capital increases: €4m (3) Maximum nominal amount of debt securities: €300m (2)	None
Delegation to increase share capital to pay contributions in kind	5/17/2018 *Nineteenth resolution*	26 months	Limited to 10% of the share capital applied to the above-mentioned ceilings for the delegation with preferential subscription rights	None
Authorization to allot bonus preference shares to employees and corporate officers	5/17/2018 Twentu fourth *resolution*	38 months	129,000 shares	940 bonus preference shares that may confer the right to a maximum of 103,400 shares
Delegation to increase share capital for the benefit of employees participating in the Company Investment Plan	5/17/2019 *Thirteenth resolution*	26 months	200,000 shares	None
Delegation to increase share capital for the benefit of Group employees outside of France who are not members of a Company Investment Plan	5/17/2019 *Twelfth resolution*	18 months	200,000 shares Applied to the Company Investment Plan, 2019 GM	None
Authorization to allot bonus shares to employees	5/17/2019 *Fourteenth resolution*	38 months	84,000 shares	Allocation of 84,000 shares
Authorization to allot bonus preference shares to employees and corporate officers	5/17/2019 Fifteenth *resolution*	38 months	68,000 shares	Allocation of 59,000 shares

(1) standstill during a takeover bid period
(2) common ceiling for debt securities
(3) common ceiling on share issues
(4) common ceiling

2. Items likely to have an impact in the event of a public offer

Pursuant to Article L. 225-37-5 of the French Commercial Code, we hereby inform you of the following points which are likely to have an impact in the event of a public offer:

- the capital structure as well as any direct or indirect shareholdings of which the Company is aware and all related information are described in chapter 5 of this document;
- the Articles of Association do not provide for any restrictions to the exercise of voting rights, except for the request to strip shares of voting rights that may be made by one or more shareholders holding at least 1% of the share capital or voting rights if a shareholder fails to declare having crossed the statutory threshold of 1% (Article 11 *ter* of the Articles of Association) (see chapter 5, section 10);
- in regards to special control rights that may be attached to shares, it is specified that:
  - double voting rights are attached to fully paid-up shares that have been held in registered form for at least two years (see chapter 5, section 12);
  - specific rights are attached to preference shares, as described in particular in Article 15 of the Articles of Association as well as the paragraph on compensation of this corporate governance report in section 5.

    In particular, preference shares confer the right to a dividend equal to 10% of the dividend per share allotted to ordinary shares and, generally, to payment of 10% of the amount paid in respect of each ordinary share during the lifetime of the Company and in the event of liquidation.

    As of the end of their holding period, preference shares:

  – are fully transferable between shareholders with the same category of preference shares;

  – may be converted into ordinary shares during certain set conversion periods and according to a fixed conversion parity. If the shares are not converted during these periods, they will be converted automatically at the end of the second conversion period.
- the Articles of Association do not provide for any restrictions to the transfer of shares, except for the above-mentioned preference shares, which may only be transferred between shareholders with the same category of preference shares (Article 15 of the Articles of Association);
- as far as the Company is aware, no agreements or other commitments have been signed between shareholders;
- voting rights attached to Mersen shares held by employees via the Mersen FCPE (corporate mutual fund) shall be exercised by a representative appointed by the FCPE's supervisory board to represent the employees at the General Meeting;
- the rules for appointing and removing members of the Board of Directors shall be those provided for by the law and by the Articles of Association. The Director representing employees shall be appointed by the Group Committee (Article 17 of the Articles of Association);
- as regards the powers of the Board of Directors, current delegations are described in chapter 5 of this document relating to the share buyback program and in the table summarizing delegations regarding increases to share capital in the section above, it being understood that authorization to buy back shares and the various financial authorizations and delegations are suspended during a public offer for the Company's shares.
- amendments to the Company's Articles of Association shall be made in accordance with legal and regulatory provisions, it being understood that any amendment relating to the rights attached to preference shares must also be submitted for approval by the Special Meeting of shareholders with the category or categories of preference shares affected by the amendment (Article L. 225-99 of the French Commercial Code and Article 26 of the Articles of Association);
- financial contracts entered into by the Company may be amended or terminated in the event of a change of control of the Company. Certain business contracts may also be affected;
- certain Group activities are subject to export controls governing dual-use items and technologies as well as to the US International Traffic in Arms Regulations (ITAR);
- certain Group activities are subject to controls governing sensitive technologies in France (Security and Defense);
- Agreement providing for compensation to be paid to the Chief Executive Officer in the event of termination of its duty is described in paragraph 5 of the section relating to compensation above. There are no specific agreements in place that provide for compensation for employees or members of the Board in the event of their resignation or dismissal without fair cause or if their term of employment is ended due to a public tender or exchange offer.

3. Trading in the Company's shares by senior managers as defined in Article L. 621-18-2 of the French Monetary and Financial Code (Code monétaire et financier)

Name	Nature	Number	price
Christophe Bommier	Conversion of B shares	4,533	0
Christophe Bommier	Acquisition of B shares	42	NA
Didier Muller	Sale of shares	4,535	29.9
Didier Muller	Conversion of B shares	4,535	0
Didier Muller	Acquisition of B shares	42	NA
Eric Guajioty	Acquisition of C shares	86	NA
Estelle Legrand	Conversion of B shares	3,239	0
Estelle Legrand	Acquisition of C shares	86	NA
Gilles Boisseau	Acquisition of C shares	86	NA
Jean-Philippe Fournier	Conversion of B shares	3,239	0
Jean-Philippe Fournier	Acquisition of C shares	86	NA
Luc Themelin	Sale of shares	15,000	32.95
Luc Themelin	Exercice of stock options	15,000	22.69
Luc Themelin	Conversion of B shares	7,667	0
Luc Themelin	Acquisition of C shares	189	NA
Olivier Legrain	Sale of shares	400	34.12
Thomas Baumgartner	Sale of shares	4,500	32.66
Thomas Baumgartner	Exercice of stock options	4,500	22.69
Thomas Baumgartner	Conversion of B shares	4,535	0
Thomas Baumgartner	Acquisition of C shares	86	NA
Thomas Farkas	Sale of shares	5,100	34.85
Thomas Farkas	Exercice of stock options	5,100	22.69
Thomas Farkas	Conversion of B shares	3,239	0
Thomas Farkas	Acquisition of C shares	86	NA

4. Terms of shareholder participation in General Meetings

The terms of shareholder participation in General Meetings are governed by the applicable regulations.

The right to participate in General Meetings is therefore subject to the shares having been registered by book entry in the shareholder's name or in the name of the intermediary appointed on his or her behalf at least two banking days prior to the General Meeting by midnight, Paris time. The entry must have been made either in the registered share accounts held by the Company or in the bearer share accounts held by the authorized intermediary.

Book entry in bearer share accounts must be justified by a shareholding certificate issued by the authorized intermediary.

If shareholders are unable to personally attend the meeting, they may choose an alternative from the following three options: (i) appoint a natural or legal person of their choice as a proxy under the conditions laid out in Article L. 225-106 of the French Commercial Code; (ii) send a proxy form to the Company without appointing a specific proxy representative; or (iii) vote by correspondence.

5. Agreements entered into between (i) a corporate officer or a shareholder with more than 10% of the voting rights and (ii) a subsidiary

N/A

Statutory Auditors' special report on related-party agreements and commitments

Annual General Meeting called to approve the financial statements for the year ended December 31, 2019

To the Shareholders of Mersen SA,

In our capacity as Statutory Auditors of your Company, we hereby report to you on related-party agreements and commitments.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of agreements and commitments that have been disclosed to us or that we may have identified as part of our engagement, as well as the reasons given as to why they are beneficial for the Company, without commenting on their relevance or substance or identifying any undisclosed agreements or commitments. Under the provisions of Article R. 225-31 of the French Commercial Code (*Code de commerce*), it is the responsibility of the shareholders to determine whether the agreements and commitments are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by Article R. 225-31 of the French Commercial Code in relation to the implementation during the year of agreements and commitments already approved by the General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

Agreements and commitments to be submitted for the approval of the Annual General Meeting

Agreements and commitments authorized during the year

We were not informed of any agreement or commitment authorized and entered into during the year to be submitted for approval at the General Meeting in accordance with Article L. 225-38 of the French Commercial Code.

Agreements and commitments already approved by the general meeting

Agreements and commitments already approved in previous years which remained in force during the year

In accordance with Article R. 225-30 of the French Commercial Code, we were informed that the following agreements and commitments, approved by the General Meeting in previous years, remained in force during the year ended December 31, 2019.

With Luc Themelin, Chief Executive Officer

A. Non-compete and non-solicitation clause

Nature and purpose:

Should his mandate as Chief Executive Officer end, and in return for signing a non-compete and non-solicitation undertaking for one year from the date on which his duties cease, Luc Themelin will receive a monthly indemnity. The Company may decide to forgo this non-compete and non-solicitation clause and thus free itself from its obligation of making this monthly payment, by informing Luc Themelin of its decision within a notice period of two months of the termination of his term of office.

Specific arrangements:

The amount of the indemnity to be paid to Luc Themelin in return for the non-compete and non-solicitation undertaking will be equal to 50% of the gross fixed monthly compensation that he received immediately prior to termination of his term of office.

No payment will be made once the Chief Executive Officer has claimed his pension benefits. In any event, no payment will be made after he reaches the age of 65.

B. Share subscription options – Performance shares

Nature and purpose:

The Board decided that, should Luc Themelin's term of office as Chief Executive Officer be terminated in any manner and for any reason whatsoever (barring termination following the acquisition of control of the Company, retirement or enforced retirement), he will automatically lose his entitlement to all the share subscription options granted to him prior to the end date of his term of office, where the conditions of grant (condition related to continued presence and performance conditions) have not been satisfied by the end date of his term of office. He will also automatically lose his entitlement to all the shares granted to him, irrespective of whether they are subject to a performance condition, in accordance with the provisions of Articles L. 225-197-1 to L. 225-197-5 of the French Commercial Code, prior to the end date of his term of office, where the grant of these shares had not been made definitive by the end date of his term of office.

However, the Board of Directors reserves the right to decide, where appropriate, to maintain the benefit of the share options and bonus shares, reduced on a *pro rata temporis* basis, and subject to achievement of the corresponding performance conditions. The Board is required to give reasons for its decision. The benefit of the share options and bonus shares referred to above will be maintained, after reduction on a *pro rata temporis* basis, should Luc Themelin's responsibilities and/or compensation be modified substantially following a change of control of the Company or should he decide to leave the Company as a result of such change, or should his mandate be terminated following a change of control of the Company or should he retire, whether voluntarily or at the Company's initiative.

C. Pension plan for Luc Themelin

Nature and purpose:

Luc Themelin, Chief Executive Officer, is eligible for the supplementary pension plan set up by Mersen in the form of a defined benefit pension plan meeting the criteria provided for in Article L. 137-11 of the French Social Security Code (*Code de la sécurité sociale*).

Specific arrangements:

Under this scheme, Luc Themelin receives a supplementary pension corresponding to 20% of the amount of his average fixed compensation during the last three calendar years and 50% of his maximum variable compensation, given his length of service with the group.

To date, Luc Themelin has 31 years of seniority with Mersen, of which 24 as an employee. The potential future pension rights of Luc Themelin have therefore been capped for the last ten years and can no longer be increased.

D. Commitments related to the corporate officers' unemployment benefit payable to Luc Themelin

Nature and purpose:

Since October 2011, Luc Themelin is eligible for a basic corporate officers' unemployment benefit (*Garantie Sociale des Chefs d'Entreprises* – GSC) for up to 24 months. The annual cost of this benefit depends on the net taxable income of the party concerned and the length of the period in which the benefit is paid.

Specific arrangements:

The Company pays 40% of the contribution and Luc Themelin pays 60%.

This arrangement includes a waiting period of 30 days of continuous unemployment.

Agreements and commitments approved during the year

We were informed of the implementation during the year of the following commitment, which was already approved by the Shareholders' Meeting on May 17, 2019 and included in the Statutory Auditors' report of March 12, 2019.

Termination of the office of Luc Themelin, Group Chief Executive Officer

Nature and purpose:

Should the Mersen group terminate, in any manner and for whatever reason (barring gross or willful misconduct, retirement, enforced retirement, resignation or change of function within the Group), Luc Themelin's mandate as Chief Executive Officer (notably by dismissal, non-renewal of mandate for whatever reason or elimination of office following the conversion or merger of the Company, except for a change in corporate governance leading to his appointment as Chairman of the Management Board of a limited company with a Supervisory Board and a Management Board), a lump sum payment will be made to Luc Themelin, calculated as stated below in the applicable performance conditions (the "Severance Payment"), when his departure is forced. The Severance Payment will exclude the payment of any other indemnity of any kind, including damages, except for the non-compete and non-solicitation indemnity.

Should the responsibilities and/or remuneration of Luc Themelin be modified substantially following a take-over of the Company, and if as a result, he decides to leave the Company, he would be entitled to the same Severance Pay.

Specific arrangements:

The amount of the Severance Pay is calculated as follows: I = 0.5 x R x C

where

- I is the amount of the Severance Payment;
- R is the gross total compensation (excluding benefits in kind and incentives) paid to Luc Themelin for the 3 calendar years prior to termination, whether this compensation and benefits have been paid to him in respect of his duties as Chief Executive Officer or as an employee; and
- C is Luc Themelin's performance condition as measured in accordance with the criteria defined below.

Payment of the Severance Pay I referred to above will be subject to performance condition achievement under the following conditions:

- Performance rate (P):

P is the average bonus percentage achieved by Luc Themelin in the four calendar years preceding his departure (as Chief Executive Officer).-

The annual bonus percentage may vary from 0 to 112% of annual fixed compensation. The average performance rate P will be observed by the Board of Directors.

- Performance conditions (C):
  - If P ≥ 100%, C is equal to 100%
  - If P ≥ 90% and < 100%, C is equal to 90%
  - If P ≥ 80% and < 90%, C is equal to 80%
  - If P ≥ 60% and < 80%, C is equal to 60%
  - If P ≥ 50% and < 60%, C is equal to 50%
  - If P < 50%, no payment will be made

The amount of any Severance Payment that may be due upon termination of his mandate may not exceed 18 months of total gross compensation (fixed and annual variable). In addition to this Severance Payment, a non-compete indemnity may also be due and may not exceed six months of total gross compensation (fixed and annual variable), making a total of 24 months of total gross compensation (fixed and annual variable) for both payments.

Paris La Défense, March 10, 2020

KPMG Audit

Department of KPMG S.A.

Philippe Cherqui

Partner

Paris La Défense, March 10, 2020

Deloitte & Associés

Laurent Odobez

Partner

3 MANAGEMENT REPORT

For the definitions, please refer to the glossaries.

Introduction

Mersen Group adopted IFRS 16 “Leases” as from January 1, 2019, using the modified retrospective approach. The tables below show condensed consolidated financial statements including both reported data and data before the application of IFRS 16. In order to permit meaningful year-on-year comparisons, the comments below refer to the figures before the impact of applying IFRS 16.

Business review

Mersen generated consolidated sales of €950.2 million in 2019, up 4.1% like for like, in line with the targets announced which were raised during the year. With companies acquired or formed in 2018, primarily Mersen Galaxy and FTCap, accounting for €17 million, and boosted by a favorable currency effect of €18 million, sales grew by 8.2%.

In millions of euros	2019	2018	Like-for-like growth	Scope effect	Currency effect	Reported growth
Advanced Materials	545.4	487.1	9.4%	0.7%	1.6%	12.0%
Electrical Power	404.8	391.4	-2.4%	3.3%	2.5%	3.4%
Europe	321.2	297.1	4.0%	4.0%	-0.2%	8.1%
Asia-Pacific	262.9	250.3	2.2%	1.1%	1.7%	5.0%
North America	329.8	293.2	6.8%	0.3%	5.0%	12.5%
Rest of the World	36.3	37.9	-3.7%	0.3%	-0.8%	-4.2%
GROUP	**950.2**	**878.5**	**4.1%**	**1.8%**	**2.0%**	**8.2%**

1. Business by segment

Sales for the Advanced Materials segment totaled €545.4 million, up 12% over the period as reported or 9.4% like for like. This growth was driven by the positive momentum in electronics, in particular in the silicon carbide (SiC) semiconductor, chemicals, aeronautics and process industries markets. Solar business leapt forward in the second half of 2019 to almost match 2018 levels.

In the Electrical Power segment, sales came to €404.8 million, up 3.4% for the year thanks to the contribution of companies acquired in 2018, namely FTCap. Like-for-like growth was a negative 2.4% in this segment due to the slowdown in the electrical distribution market in the United States and the decrease in the number of power electronics projects, particularly in Europe.

2. By geographic area

The Group is established on all continents. The international positioning of the Group’s manufacturing facilities keeps it in close contact with its customers and allows them to be highly responsive on their markets.

In 2019, the Group derived 92% of its sales from outside France (i.e. sales generated by foreign companies excluding those realized in France and exports by French companies). The Group’s foreign subsidiaries contributed sales of €817 million, up 4.9% on 2018 on a like-for-like basis.

Europe reported like-for-like growth of 4% Europe, driven by brisk business levels in the majority of countries, and Italy and Spain in particular. Results were mixed in France and Germany where markets are facing a high basis of comparison and a drop in the number of power electronics and wind power projects. In Asia, Group sales increased 2.2% after accelerating at the end of the year on the back of solid business in India and Japan and the expected improvement in the solar market in China. In North America, Group sales were very brisk, up 7% like-for-like thanks primarily to the chemicals and electronics (SiC semiconductors in particular) markets. By contrast, the Group was impacted by the drop in the electricity distribution market in the United States, particularly in the fourth quarter. Lastly, the decline in Rest of the World sales is linked to the phasing of chemicals projects and the high level of invoicing in Morocco in 2018.

RESULTS

1. EBITDA and operating income before non-recurring items

(In millions of euros)	2019	2019 before IFRS 16	2018
Operating income before non-recurring items	**102.1**	**100.6**	**91.6**
as a % of sales	*10.8%*	*10.6%*	*10.4%*
Depreciation and amortization	52.5	41.4	38.7
EBITDA	**154.6**	**142.0**	**130.3**
as a % of sales	*16.3%*	*15.0%*	*14.8%*

EBITDA for Mersen group came in at €142.0 million for 2019, up more than 9% on the prior year and accounting for 15% of sales.

Strong business volumes saw operating income before non-recurring items amount to €100.6 million in 2019, resulting in an operating margin before non-recurring items of 10.6% which was 20 basis points higher than 2018. Cost inflation (wages and raw materials) and a negative product mix were offset by positive price impacts and a productivity drive.

The Electrical Power segment's operating margin amounted to 9.2% of sales, versus 10% in 2018. The acquisitions made in 2018 (FTCap, Idealec) had a dilutive impact on operating margin. Moreover, the positive price effects did not fully offset the impact of lower sales on certain very profitable product lines.

The Advanced Materials segment's operating margin before non-recurring items grew again, up 90 basis points on 2018 (15% vs. 14.1%). This improvement results from very favorable volume and price effects, which more than offset a negative client mix and the increase in raw materials prices and certain costs linked to new trade barriers.

(In millions of euros)	2019	2019 Before IFRS 16	2018	Change
Sales	950.2	950.2	878.5	+8.2%
Gross income	300.2	300.2	285.1	+5.3%
as a % of sales	*31.6%*	*31.6%*	*32.6%*	
Selling, marketing and other expenses	(82.0)	(82.0)	(82.1)	-0.2%
Administrative and research expenses	(114.8)	(116.3)	(110.2)	+5.5%
Amortization of revalued intangible assets	(1.3)	(1.3)	(1.2)	
Operating income before non-recurring items	**102.1**	**100.6**	**91.6**	**+10%**
as a % of sales	*10.8%*	*10.6%*	*10.4%*	

Mersen's gross margin was down 100 basis points, hit by the increase in amortization and negative mixes (products or clients) for both segments.

R&D expenses increased by 7% like-for-like, highlighting the Group's commitment to prepare for the future with the development of new products.

Increase in administrative and selling expenses were modest.

Payroll was up 2.2% on a like-for-like basis.

2. Net income

Group net income amounted to €58.4 million in 2019, versus €56.6 million in 2018, up by more than 3% despite higher non-recurring expenses than in 2018.

(In millions of euros)	2019	2019 before IFRS 16	2018	Change
Operating income before non-recurring items	**102.1**	**100.6**	**91.6**	**+10%**
Non-recurring income and expenses	(11.2)	(11.2)	(3.8)	
Operating income	**90.9**	**89.4**	**87.8**	**+8%**
Net finance expense	(13.2)	(10.3)	(10.3)	+1%
Current and deferred income tax	(17.9)	(18.2)	(18.3)	+8%
Net income	**59.8**	**60.9**	**59.2**	**+9%**
Owners of the parent	**57.3**	**58.4**	**56.5**	
Non-controlling interests	(2.5)	(2.5)	(2.7)	

Non-recurring income and expenses amounted to a negative €11.2 million and essentially include:

- €5.3 million in impairment of costs relating to the development of hybrid protection for the electric vehicle market. The Group no longer considers the probability of generating product sales in this market to be sufficient following the recent halt of negotiations with a major car manufacturer. Despite this, it is actively pursuing its technical and commercial developments in other product lines in this market.
- €2.3 million in expenses related to competitiveness plans.
- €1.9 million in acquisition-related expenses, mainly Columbia (including restart costs for the site), and AGM Italy.
- €1.7 million in sundry charges including litigation.

In 2018, non-recurring expenses stood at €3.8 million and were related to the competitiveness plan and acquisitions.

Mersen's net financial expense amounted to €10.3 million in 2019, unchanged on the figure for 2018. The year's average debt was up €17 million on 2018, increasing from €203 million to €220 million as a result of the Group's acquisitions and significant investment plan. The impact of this increase was offset by gains from earn-out payments relating to prior acquisitions.

Income tax expense totaled €18.2 million for the period, representing an effective tax rate of 23%, which is consistent with 2018 but a substantial decrease on 2017 (32%) with the Group benefiting from US tax reform since 2018.

Income from non-controlling interests includes Mersen Yantai and Mersen Galaxy (China), in which Mersen holds a 60% stake.

Cash flow

1. Investments

Mersen group's capital expenditure amounted to €62.7 million in 2019, 73% of which was linked to investments outside France. It covers the replacement and modernization of industrial equipment as well as investment in new capacity, notably to serve the SiC semiconductor market. In France, it relates to the increase in solid silicon carbide production capacity for the aerospace and laser markets.

Acquisition-related investments amounted to €19.4 million and covered the acquisition of AGM Italy, that of the assets of the Columbia site in the United States, and earn-out payments on acquisitions made in 2018 (FT Cap, LGI and the minority shareholders of Spanish company Cirprotec).

In 2018, capital expenditure amounted to €58 million, the largest items being silicon carbide production capacity in France and insulating felts in the United Kingdom. Financial investments of €1 million corresponded to an equity investment of 49% in Caly Technologies, a Lyon-based start-up company specializing in the design of silicon carbide (SiC) semiconductor components. Acquisition-related investments reflect the acquisition of FTCap in Germany and its subsidiary in Switzerland, the assets of LGI in the United States, and the buyout of the non-controlling interests of Cirprotec in Spain.

According to the Group's internal procedure, the Board of Directors must authorize any investment larger than €10 million and any acquisition of more than €3 million.

	2019	2018
Investment in property, plant and equipment	(65.3)	(55.2)
Change in fixed asset suppliers	2.6	(2.8)
Capital expenditure	**(62.7)**	**(58.0)**
Investment in intangible assets	(4.6)	(3.4)
Investment in financial assets	0.0	(1.0)
Other changes in investment flows (excl. fixed asset suppliers)	(0.2)	2.6
Investments linked to acquisitions	(19.4)	(30.8)
TOTAL	**(86.9)**	**(90.6)**

2. Condensed statement of cash flows

(In millions of euros)	2019	2019 Before IFRS 16	2018
Cash generated by operating activities before change in working capital requirement	149.1	136.5	123.2
Change in working capital requirement	(9.8)	(9.9)	(21.5)
Income tax paid	(16.0)	(16.0)	(10.0)
Cash used in discontinued operating activities	(0.2)	(0.2)	(0.4)
Net cash generated by operating activities	**123.1**	**110.4**	**91.3**
Capital expenditure	(62.7)	(62.7)	(58.0)
Cash generated by operating activities after capital expenditure	**60.4**	**47.7**	**33.3**
Change in scope (acquisitions)	(19.4)	(19.4)	(30.8)
Disposals of non-current assets and other	(4.8)	(4.8)	(1.8)
Net cash flow before financing operations	**36.2**	**23.5**	**0.7**

Operating activities generated more than €110 million in net cash flow in 2019, versus €91 million in 2018, an increase of more than 20%. This figure includes €5 million in restructuring (competitiveness plan), litigation and acquisition costs, and a working capital requirement of close to €10 million linked to business growth. WCR represented 22% of sales (21% at the end of 2018). Taxes paid were up due to the increase in earnings and non-recurring positive impacts in the United States.

Net debt

1. Financing policy

Mersen group has defined a financing policy, which is coordinated by the Finance and Administration Department. The Group has confirmed credit lines, which have not been drawn down in their entirety.

Most of the Group's borrowings have been arranged by Mersen. Cash pooling systems in Europe, the United States and China help to optimize use of all the credit lines.

In 2011, the Group finalized a private placement of USD 100 million ("USPP") with USD 50 million maturing in 2021 in order to extend the maturity of its debt and diversify its funding sources.

In 2016, the Group finalized a private placement of €60 million ("Schuldschein") maturing in 2023 in order to extend the maturity of its debt. In March 2016, the Group also put in place a commercial paper issuance program for up to €200 million in order to diversify its funding sources.

In 2017, the Group renegotiated its syndicated loan, improving its financial terms and extending its maturity until July 2024 following the exercise of extension options in 2018 and 2019.

In 2019, the Group finalized a private placement of €130 million ("Schuldschein") maturing in 2026 in order to extend the maturity of its debt. The Group also refinanced its syndicated loan in China, due to mature in 2021, replacing it with bilateral loans maturing in 2024.

All the details concerning borrowings are presented in Note 15 to the consolidated financial statements.

2. Statement of financial position

Net debt(1) at year-end 2019 stood at €218.2 million, close to the €215.6 million reported at December 31, 2018. The Group accordingly self-funded a major acquisition and investment program through its strong operating cash flow.

Operating cash flow in 2019 amounted to €110 million with the Group investing €63 million in capital expenditure and €19 million in acquisitions. It also paid €22 million in dividends.

The Group maintains a solid financial base with key ratios(2) close to last year: leverage (debt/EBITDA) was 1.5 and gearing (debt/equity) amounted to 37%. The Group is in compliance with all its banking covenants.

	Dec. 31, 2019	Dec. 31, 2018
Total net debt *(in millions of euros)*	218.2	215.5
Net debt/equity	0.37	0.39
Net debt/EBITDA	1.5	1.6

Subsequent events

On February 28, 2020, the Group finalized the acquisition of GAB Neumann GmbH, a specialist in the design, manufacture and sale of graphite and silicon carbide heat exchangers for the chemicals market, following the approval of the anti-trust authorities in Germany. The company will be consolidated in the Group's financial statements from March 1, 2020. It generates annual sales of approximately €10 million and its operating margin before non-recurring items is broadly in line with the Group average. The purchase price is €8.8 million and net assets are estimated at approximately €7 million. These amounts may be adjusted after the closing accounts are audited.

The epidemic context related to the coronavirus COVID-19 creates an uncertain situation. At this stage, it is difficult to measure its impact on the activity; the Group implements appropriate measures for its employees and to meet the needs of its customers. No impact is to be mentioned as of December 31, 2019.

(1) Gross debt +/- cash and cash equivalents +/- recurring financial assets.
(2) Ratio calculated using the method required by the covenants contained in Mersen's confirmed loans.

Outlook

The Group expects more mixed trends than in previous years in its main markets:

- The renewable energies market should remain dynamic in the medium term. Growth is expected to be solid in the solar market in 2020, after a stable year in 2019.
- The future growth of the electronics market is linked to digitization for silicon semiconductors and the pace of take-up of electric vehicles for SiC semiconductors. The silicon semiconductor market is expected to remain weak in the first half of 2020, and then is likely to recover in the second half. Mersen is expecting a less buoyant market for SiC semiconductors in 2020 compared to 2019.
- In the energy storage market, and in particular the electric vehicle market, Mersen remains well positioned in the premium segment, while adjusting its development on hybrid products. Growth is still expected after 2021-2022, linked to the implementation of new regulatory measures against air pollution.
- After three years of strong growth, the chemicals market is expected to be stable at best in 2020 and the process industries will likely mirror the trend in the world's largest economies and fare less well than in 2019.

Given the current global health crisis and a high comparable base, especially in chemicals and semiconductors, the Group anticipates a first-quarter performance that is significantly down on the first three months of 2019. Provided the situation does not persist, it may however potentially be able to offset the lag seen during the first quarter by the end of the year.

In China, which accounts for 12% of consolidated sales, the Group's eight plants resumed operations in late February, with production conditions nearly back to normal in Advanced Materials and slower than usual in Electrical Power. As in other countries where the Group operates, the situation in China may change, particularly with regard to customers, suppliers and supply chains.

In this context, the Group has put in place measures to minimize all employee travel. It has also decided to limit expenditure and new hires until visibility improves. Depending on how the situation develops, the Group may adapt its capital expenditure program, initially set at between €60 million and €65 million (including approximately €10 million deriving from the 2019 investment program, part of which has been deferred) plus the specific additional investments of between €20 million and €25 million for the commissioning of the Columbia site (United States).

Dividend

The Board of Directors proposed to the General Meeting of Shareholders to pay a dividend of €1 per share, an increase on last year. This would result in a total distribution of around €21 million, corresponding to 34% (excluding the impact of impairment of development costs) of net income attributable to shareholders in line with Group policy.

PRINCIPAL INTERNAL CONTROL PROCEDURES FOR THE GROUP

1. Definition of internal control

At Mersen, internal control is defined as a process implemented by all the employees, under the leadership of the Board of Directors and the Executive Committee, to run the Group rigorously and effectively.

Mersen's internal control aims to achieve the following objectives:

- compliance with the policies defined by the Group as well as with the legislation and regulations in force;
- smooth operation of internal processes and notably those helping to protect its assets;
- prevention of fraud and errors;
- accurate and complete financial information.

Mersen's definition of internal control is governed by the international standard laid down by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), whose conclusions were published in 1992 in the United States and are available at www.coso.org. The COSO standard, which was revised in 2013, advocates the extension of internal controls to non-financial functions, as well as careful monitoring of the work by the Audit and Accounts Committee. Mersen evaluated its current organization with regard to this standard. The review showed that all Mersen group internal control practices comply with the standard. However, the current control system cannot provide absolute assurance that all risks are completely eliminated. The Group also takes into account the reference framework published by the AMF governing the general principles of internal control.

2. General principles of internal control

Since it has a manufacturing base spanning approximately 35 countries on five continents, the Mersen group monitors the effectiveness of its internal control framework by means of the following:

2.1. Internal control organization

From a corporate governance perspective, Mersen has opted for an organization guaranteeing separation and balance between powers. The executive and management powers exercised by the Chief Executive Officer, supported by the Executive Committee, are kept clearly separate from the control duties exercised by the Board of Directors.

Mersen's Executive Committee oversees the Group's internal control. The composition, operation, powers and responsibilities of the Executive Committee are described in the Corporate Governance section of this document.

Within the Group's subsidiaries, each local manager is responsible for implementing the internal control policy defined by the Group.

As part of its control duties, Mersen's Board of Directors has set up an Audit and Accounts Committee; the composition, number of meetings and main duties of which are described in the Corporate Governance section. It supervises internal control and is notably responsible for:

- monitoring the process used to prepare financial information by assessing the financial documents published by the Company and ensuring that a sufficiently well-organized process exists for the preparation of this information;
- reviewing the statements and ensuring the appropriateness and ongoing consistency of the accounting methods used to prepare the Company's consolidated and annual financial statements;
- ensuring the efficiency of the internal control and risk management systems by:
  - validating the annual internal audit program and ensuring that the efficiency of internal control systems is monitored and that the recommendations made by the Statutory Auditors and internal audit teams are implemented,
  - monitoring progress on work in the field of risk management;
- overseeing the audit of the annual and consolidated financial statements by the Statutory Auditors;
- ensuring that the Statutory Auditors are independent.

Mersen's Internal Audit Department follows up on internal control and risk management initiatives. It reports to the Finance and Administration Department and informs the Audit and Accounts Committee of the Board of Directors of its work.

2.2. Risk management

Mersen updates its risk mapping (strategic, financial and operational) every year and performs a more extensive review every three years. A detailed review took place in 2017, during which the Group was assisted by an external audit firm in order to improve its methods and risk management.

Potential risks are ranked by their impact and probability of occurrence, and by the level of control provided by the systems currently in place.

A review of the action plans is presented every year to the Audit and Accounts Committee, and every six months to the Group's Executive Committee. In 2019, the action plans presented complied with the agenda noted at the start of the year. Based on the progress on implementing these plans and any shortcomings in comparison to the management criteria, the mapping survey was updated and validated by the Audit and Accounts Committee. The aim of the plans thus defined is to reduce the impact and/or occurrence of each risk. They are also intended to ensure that the measures currently in place are effective in helping to mitigate potential risk and are in line with risk management criteria. In 2019, the Group continued to monitor the progress made on the action plans implemented in response to site audits. Each risk is now assigned a sponsor on the Executive Committee who is responsible for its follow-up and management. This organization illustrates the Committee's close involvement in risk management.

The risk management policy is described in chapter 3 on Risk Factors of this document.

2.3. Control activity

Mersen has circulated an internal control handbook to all of its subsidiaries. This document is available on Mersen's Intranet site. It encompasses all the basic internal control procedures applicable to every Group unit. The manual is interactive and includes links to examples of best practices within the Group. It covers the following points:

- a description of the background, objectives and resources used in internal control; a description of the internal control organization and reference to the internal control framework adopted by the Group (COSO);
- the definition of Risk and the measurement of the "size" of a risk that the risk mapping tool describes;
- a list of all the fundamental internal controls to be implemented to ensure the efficient operation of the main business processes:
  - sales/customers,
  - purchases/suppliers,
  - logistics,
  - human resources management,
  - investments/fixed assets,
  - quality,
  - information systems,
  - tax,
  - customs risks.
- the fundamental internal controls to be implemented to ensure the reliability of the accounting and reporting systems and financial statements with regard to the following objectives:
  - safeguarding assets,
  - compiling an exhaustive record of accounting transactions,
  - making sure transactions correspond to reality,
  - complying with the dates on which transactions are recorded,
  - correctly valuing assets and liabilities,
  - confidentiality.
- In 2019, a specific follow-up process was implemented for all compliance measures. As part of its control program, the Internal Audit Department performs tests to ensure that the ethics and compliance policy is effectively implemented and respected. Careful consideration is notably given to the following matters:
  - compliance with embargoes;
  - export controls and compliance with OFAC regulations;
  - gifts, invitations and donations;
  - ethics and anti-corruption training;
  - conflicts of interest.

Aside from the corporate audits conducted by the Internal Audit Department, the Group has conducted cross-audits for several years in order to strengthen the internal control systems and culture. After adequate training, these audits are performed by the Group's operational and functional staff from each major geographical area (Asia, Europe and America).

The cross-audit program is determined by the Group's Internal Audit Department. These audits help not only to check on internal control fundamentals every year, but also to ensure that action plans drawn up in the previous year have actually been implemented. They also make it possible to more easily integrate companies that are acquired and gradually bring them to the required level of internal control.

This program provides for an exchange of best practices and helps to instill the internal control culture as widely as possible.

Aside from the action plans and tools described in this report, each year the Group requires that all plant managers provide a formal written statement affirming that the main points of internal control are applied properly at their plant.

2.4. Internal control oversight

Internal Audit Department

The Group's Internal Audit Department is responsible for overseeing proper implementation of the internal control handbook and for leading the Group's internal control program. It also coordinates the networks and organization of corporate and cross-audits right across the Group. It submits its findings to the Audit and Accounts Committee on a regular basis, as well as to the Statutory Auditors. The Executive Committee receives regular updates on the Group's Internal Control news.

The department performed 20 assignments in 2019. These assignments were designed to:

- analyze the effectiveness of internal control and verify the proper application of the action plans implemented following the audits conducted at certain production plants in previous years;
- ensure the effective implementation of action plans at two units that were audited in the previous year and at which internal control was not deemed to be satisfactory.

An external firm may be appointed by the Group to perform audits requiring specific expertise.

The Internal Audit Department always uses a specialized external firm to ensure the quality and independence of the audit program and to facilitate continuous improvement.

For over 10 years, the units audited have sent in a self-assessment of their internal control in advance of the Internal Audit Department's review. These evaluations, reviewed by the internal audit function, help to correct certain differences in assessments and to enhance the culture of internal control within the units.

Information systems security

The Risk Department is responsible for overseeing information systems security, specifically:

- ensuring the security of the IT systems and protecting data confidentiality;
- ensuring the security of IT infrastructure and applications to ensure the continuity of operations.

An Information Systems Security manager reports to the Risk and Compliance Department. Their role is to:

- verify that the information systems security policy is implemented properly;
- lead the information systems' network of correspondents on all aspects of security;
- propose analysis and improvement tools for optimum control of the existing systems;
- develop an information systems security culture.

The IT Systems Security manager performed 45 site audits in 2019, 15 on site and 30 remotely.

Information systems security risk mapping was also updated in 2019 to focus on both IT and segment processes. For the last three years, the Information Systems Security manager has reported to the Audit and Accounts Committee on the cyber risk challenges facing the Group and the corresponding policy implemented.

The Information Systems Security manager organizes at least two meetings per year with the Risk and Compliance Department, the Chief Financial Officer and the Group Chief Information Officer to review the security of the Group's information systems.

2.5. Other procedures contributing to the Group's internal control framework

The Group's management control and strategic planning, human resources management, sustainable development policy and quality procedures also contribute to ensuring compliance with the policies defined by the Group.

Management control and strategic planning

A Strategic Plan determining the priorities for coming years, a quantified business plan and production plans are prepared every year and presented to the Board of Directors.

At the start of each year, the Executive Committee decides on the key initiatives to be implemented to achieve the goals set. It receives regular status reports and analyses for these action plans.

The budgeting process is carried out once a year. The budget is submitted to the Executive Committee for approval and then ratified by the Board of Directors.

Forecasts for the Group's activity and its main financial aggregates for the current year are defined every quarter. This process allows adjustments to be made for trend reversals and helps to speed up the decision-making process for any remedial measures required.

In addition, the Board of Directors regularly examines the policies implemented by the Group on human resources-related issues, such as skills management.

Human resources procedures

Internal control of human resources management is structured around the following aspects:

- management reviews providing a regular update on all the Group's managers to enhance their career opportunities and identify the Group's key men and women;
- annual individual reviews that enable business unit managers to assess the performance of their employees and set targets for the following year together with them;
- forward planning of human resources, notably succession planning for senior managers;
- monthly updates presented by the Human Resources Department to the Executive Committee.

Lastly, individual and/or collective performance-related bonuses are calculated using clearly defined rules.

Sustainable development

Mersen has long pursued a responsible approach in environmental, economic and social affairs. Aside from the economic aspects related to the Group's business development, and in particular renewable energies, energy efficiency and rail and electric transportation, it also strives to promote new social and environmental measures.

These endeavors are described in greater detail in the "Social responsibility and sustainable development" section of this document. With the help of an external firm, the Group has established a reporting framework for sustainable development indicators. This framework was disseminated to all units and reporting is accredited by the certifying organization.

At the same time, by joining the United Nations' Global Compact, the Group has committed to supporting a precautionary approach to environmental challenges (Principle 7), to promoting greater environmental responsibility (Principle 8), and to encouraging the development and supporting the environmentally friendly technologies (Principle 9).

The Group has implemented CSR governance as described in Chapter 4 of this document.

Operational excellence procedures

The goal of the Operational Excellence Department is to improve the Group's operational performance by introducing tools for analysis and continuous improvement at the Group's sites. It also seeks to develop a "lean" culture within all of the Group's units.

It relies on certain operational indicators, such as service level, non-quality level, safety, and inventory turnover. These indicators are monitored at all Group sites. It implements and verifies the implementation of the plan in place at all sites for improving competitiveness. These projects, which are included in the budget, are reviewed at regular intervals and their financial contribution is assessed monthly.

Compliance procedures

A Compliance Department was created in 2017. It is tasked with (i) identifying and assessing any risks of non-compliance with laws or regulations which would damage the image, culture or financial stability of the Group, (ii) implementing appropriate procedures and processes to minimize such risks, (iii) informing and raising the awareness of Group employees of the main risks; and (iv) managing the "ethics hotline" (see chapter 4 on Ethics & Compliance).

The Compliance Department reports to the Chief Executive Officer and a Compliance Committee.

Other dedicated committees have also been established within the Group that focus on specific areas such as Market Abuse Regulations (MAR), etc.

3. Accounting and financial internal control

3.1. General organization

The Mersen group's Finance and Administration Department is responsible for accounting and financial internal control. Its role is to produce and ensure the quality of the financial statements and management accounts with the support of the finance department of each business unit. In turn, these departments are in contact with each business unit's finance department. This organization allows targets to be set and accounting and financial information to be collected and analyzed at different levels of the organization.

3.2. Preparation of accounting and financial information

The Finance and Administration Department has prepared and distributed a handbook of accounting and consolidation principles to all subsidiaries. This handbook contains the accounting principles applicable to every Group unit, as well as a description of the process for closing the accounts. It also contains the timetable for the various accounting closes, as well as a list of the information to be reported as part of the consolidation procedure. It lays down the rules that need to be followed by the consolidated sub-groups. This document is available on Mersen's Intranet site.

The handbook is updated in line with external changes in accounting standards in close collaboration with the Statutory Auditors, who validate the changes made with the Group's Finance and Administration Department.

Each Group business unit produces monthly accounts and a standardized consolidation package by the deadline set by the Group. When this data is reported using Group-wide consolidation software, consistency checks are applied at each stage of the data gathering and processing process. The purpose of these checks is to:

- ensure the Group's standards are correctly applied;
- ensure that intra-Group transactions are correctly validated and eliminated;
- ensure that consolidation adjustments are made.

3.3. Treasury and financing

The Treasury and Financing Department manages the Group's treasury on a centralized basis. To control risks, the Group has procedures in place specifically to manage exchange rate, raw materials and customer risks, the issuance of guarantees, and the management of cash pooling and netting processes.

The Group has pursued a major drive to develop its cash management culture, mainly at manager level.

During years in which the department is not audited by an outside firm, it must use a Group tool to carry out a self-assessment of its various procedures. This self-assessment is controlled by the Group's Internal Audit Department.

4. Approach adopted in 2019 and 2020 action plan for internal control and risk management

The following specific initiatives were initiated in 2019 to reinforce internal control:

- implementation of a specific action plan on inventory management: preparation of a list of the basic controls to be implemented periodically and reminder of the rules for calculating the associated management data;
- preparation of an audit questionnaire focusing exclusively on compliance-related controls.

In 2019, the Internal Audit Department conducted audits based on a program approved by the Audit and Accounts Committee. Twenty site audits were performed.

The conclusions of the in-depth risk mapping review were presented to the Executive Committee and then to the Audit and Accounts Committee, along with a follow-up on the action plan approved in 2018. The Audit and Accounts Committee was also informed of the organization of the internal control tasks, in line with the recommendations of the 8th European Directive.

The various audits and controls conducted during 2019 identified a major internal control shortfall at a site in North America, against which disciplinary action has been taken. An external auditor has been appointed to perform an *ex post* assessment and propose measures to reinforce the site's internal control procedures. In 2020, there will be three control audits carried out on previously evaluated units whose internal control procedures were found to have some shortcomings.

As part of the evaluation of accounting and financial internal control with respect to the AMF's framework, the Group continued to implement initiatives to raise awareness among Group managers and financial managers of the risks of fraud (including financial scams and forgery, etc.). The Internal Audit Department publishes a monthly press review on fraud. This press review is sent to the managers at all of the Group's sites. The Group experienced several fraud attempts in 2019, which were unsuccessful, thanks in particular to these awareness-raising efforts.

An information systems security audit program was put in place. The program makes it possible to conduct tests remotely or in situ to verify that the infrastructure complies with the Group's rules. The Group's action plans dealing with cyber security were presented to the Audit and Accounts Committee.

In 2020, the Internal Audit Department will focus its efforts on further developing the Group's internal control procedures, in connection with a new Core Model that will deployed in the sites' ERP systems over the coming years. Furthermore, certain senior auditors will receive training on advanced investigation methods.

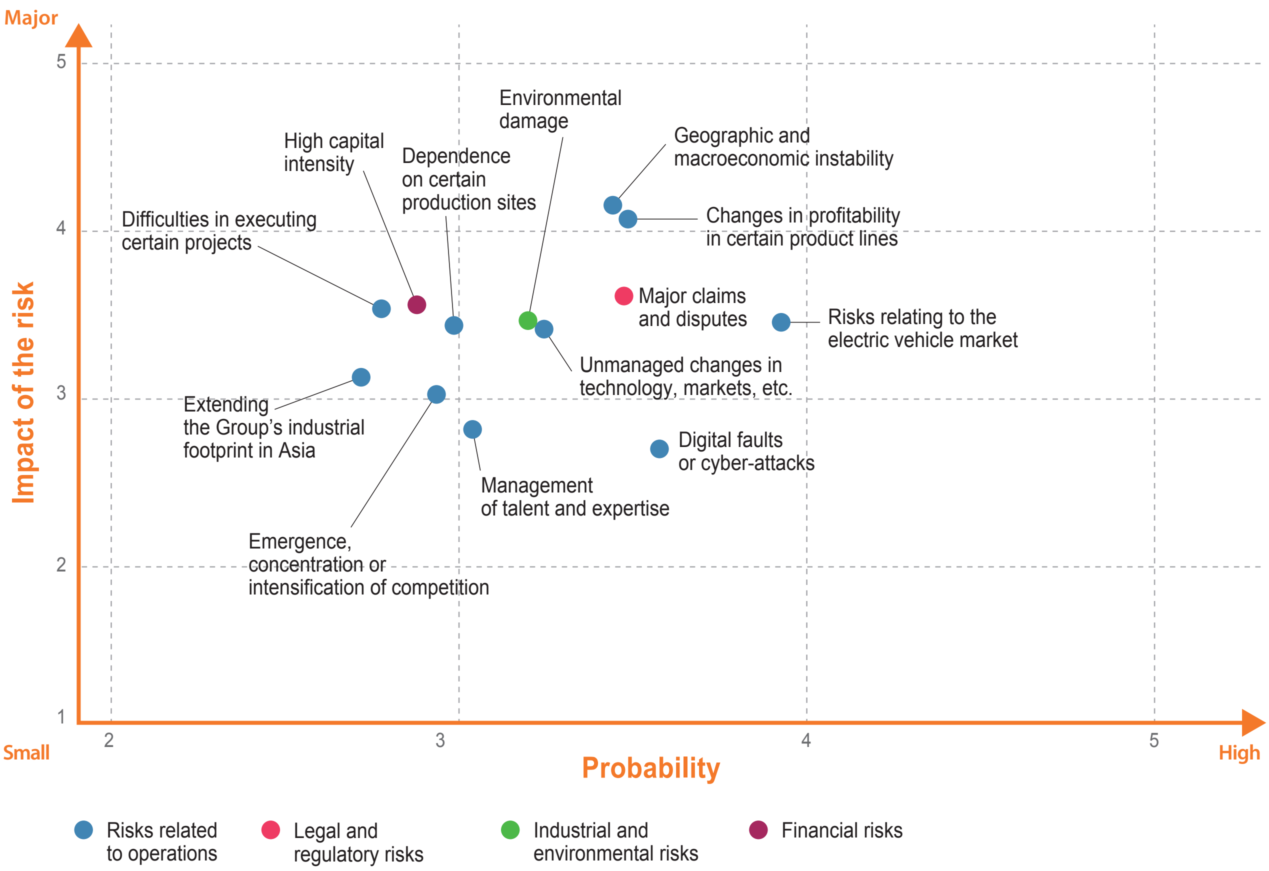
Risk factors

Since 2001, Mersen has mapped the Group's risks, summarizing them in relation to their materiality, the probability of their occurrence and the related risk management measures. Risk mapping is updated each year and presented to the Audit and Accounts Committee, which draws up a summary for the Board of Directors. It is shown below in simplified form (certain issues grouped together) to provide a clear overview of the risks.

Risks are classified in relation to their potential impact and the probability of their occurrence. For each risk, the description below includes the measures implemented to limit the probability of its occurrence and/or to mitigate its impact.

PRIORITIZATION OF RISKS

Risks related to operations	Changes in profitability in certain product lines
	Geographic and economic instability
	Risks relating to the electric vehicle market
	Unmanaged changes in technology, markets, etc.
	Dependence on certain production sites
	Digital faults or cyber-attacks
	Difficulties in executing certain projects (including acquisitions)
	Emergence, concentration or intensification of competition
	Extending the Group's industrial footprint in Asia
	Management of talent and expertise
Industrial and environmental risks	Environmental damage
Legal and regulatory risks	Major claims and disputes
Financial risks	High capital intensity Risks related to operations



1. Risks related to operations

Changes in profitability in certain product lines

Description of risk

The Group's profitability is dependent on certain product ranges. For example, in the Electrical Power segment, profitability for the fuses range is much higher in North America than in other regions. And in the Advanced Materials segment, Graphite Specialties has a much higher profitability level than the Group's other activities, but at the same time is dependent on the use of graphite production capacity, particularly due to its capital intensive nature.

The potential impacts on the Group are:

- An erosion in the Group's overall profitability, resulting from uneven supply and demand for its graphite applications and/or a sharp fall in sales for the Electrical Power segment in North America.
- Having to adapt the cost structure to lower profitability levels, which could lead to significant restructuring costs.
- Having to recognize impairment losses for certain under-used assets, especially if there is a persistent imbalance between supply and demand.

Risk management

In the past, the Group has put in place measures that would enable it to swiftly and effectively adapt its cost structure to market changes, such as productivity plans, excellence programs and restructuring plans. These measures could be replicated.

It has also developed an in-house "Sales Excellence" program to enhance its commercial efficiency and gain market share in the most profitable segments.

The Group strives to limit the cycle-volume effect of its Graphite Specialties segment by positioning itself in growth markets with strong dynamics, such as solar and electronics.

Lastly, in the Electrical Power segment, it has launched action plans aimed at improving profitability for its lower profit-contributing product lines.

Geopolitical and economic instability

Description of risk

The Group conducts business in about 35 countries on five continents and serves many different end-markets. It is therefore exposed to the geopolitical situation of certain countries – in Mexico and Tunisia, for instance, where it has large plants for the Electrical Power segment, and in China, where it has nine manufacturing sites.

The Group is also exposed to industrial GDP growth rates, particularly for process industries (which account for roughly 35% of its total revenue) and/or in some countries, including the United States, China, Germany and France, which together represent over 60% of its total sales.

Lastly, although most sites have a local production model, some produce semi-products or components used by plants located in other countries. These intra-group transactions are sensitive to trade barriers in view of today's increasingly protectionist geopolitical context.

The potential impacts on the Group are:

- A sales decline stemming from a global recession, or at least a stoppage of certain capital expenditure projects, which could significantly impact profitability as several Group activities are sensitive to volume effects.
- A sharp drop in Mersen's share price, as the Group is still perceived as cyclical and dependent on the economic environment.
- Major restructuring costs or impairment losses in the event of a prolonged economic slowdown.
- To a lesser extent, lower profitability due to higher customs duties if the economic environment prevents increases in these duties from being passed on in selling prices.

Risk management

The Group is developing in forward-looking growth markets, particularly in the sustainable development markets, which account for around 50% of consolidated revenue (see chapter 4 on corporate social responsibility). This is helping it to reduce its dependence on process industries, which are more sensitive to changes in the economic environment.

To manage the risk of a potential recession, the Group has implemented measures enabling it to swiftly and effectively adapt its cost structure to market changes. It has also developed an in-house "Sales Excellence" program to enhance its commercial efficiency and gain market share in the most profitable segments.

Lastly, it has put in place policies for debt, cash flow generation and financing that help it deal with macroeconomic downturns. For example, it has anticipated any future financial requirements by carrying out transactions to extend the maturity of its debt, such as its recent "Schuldschein" private placements.

Risks relating to the electric vehicle market

Description of risk

For Mersen, the electric vehicle market represents a growth vector in the automotive sector, which is complex and demanding in terms of both risks and opportunities. In early 2020, the Group decided to limit development costs relating to hybrid protection for high-power batteries, but is actively pursuing its technical and commercial development, notably in fuses and busbars. However, the Group has little recent experience in this market and will have to adapt quickly to its standards and procedures.

The potential impacts for the Group are:

- An inability to meet the demands and constraints of the electric vehicle market, especially in terms of price – which could considerably restrict the Group's growth potential in this market – and/or technical specifications, due to fast-changing requirements.
- Poor positioning on fuses or busbars.
- More intense price pressure in this market, which could squeeze the Group's profit margins over the long term.
- Heightened risks of customer disputes (non-compliance, delivery delays, product recalls, etc.).

Risk management

The Group has set up an Electric Vehicle Risk Committee tasked with identifying the risks associated with this market and drawing up appropriate action plans, in a constantly changing operating environment. It has invested in dedicated teams and skills sourced from the automotive industry, and has launched a process to obtain IATF certification at one of its plants. In addition, the Group regularly reviews its insurance program.

The Group's positioning in the electric vehicle market is regularly presented to the Board of Directors.

Unmanaged changes in technology, markets, etc.

Description of risk

Mersen designs bespoke products tailored to its customers' specific technical requirements, in terms of both use and performance. In a number of its strategic markets, such as electronics, solar power and electric vehicles, customer requirements change quickly and often. The Group therefore has to constantly monitor changes in technology so it can anticipate new market trends and more effectively meet its customers' future needs.

It cannot be ruled out that alternative technologies will emerge, for instance in relation to manufacturing procedures for solar panels or silicon carbide semiconductors, whose production requires a large quantity of graphite.

Developments in more traditional products and markets may be more or less favorable for Mersen. For example, the use of brushless motors could increase to the detriment of brushed motors, or a change in electrical standards could impact the market for the Electrical Power segment.

Lastly, Mersen operates in markets where product offerings are becoming increasingly comprehensive and integrated and distribution methods are becoming more varied (particularly thanks to e-commerce). Mersen has to factor in these trends and adapt its offerings accordingly, mainly in its Electrical Power segment.

The potential impacts for the Group are:

- A possible prolonged decrease in revenue if the Group is unable to respond to changes in a market or in standards, or if a new technology emerges in which Mersen does not have the required expertise.
- Loss of market share in strategic sectors, which could impact the Group's future growth rate.
- Potentially heavy investment to adapt to market requirements and/or specific customer needs.

Risk management

A technological watch has been set up to help the Group anticipate new market trends. Synergies between R&D and sales teams have been reviewed and strengthened by the Technology Department. Capital expenditure and/or R&D budgets have been increased for markets and/or applications with high technological content and/or fast-paced change. In addition, steps have been taken to forge even closer ties with strategic customers.

The strategy adopted for certain product ranges has been reviewed in order to propose a broader and more comprehensive offering, notably by developing connected products. At the same time, the Group has invested in digital in order to track market developments.

Furthermore, it is pursuing its acquisition policy focused on gaining key expertise, which is another way to prevent this risk.

Dependence on certain production sites

Description of risk

When the Advanced Materials segment manufactures graphite products, it first prepares the raw material and then makes graphite blocks which are subsequently processed and machined. The manufacture of these blocks, and some of the processing operations involved, require heavy and/or complex machines which cannot be easily installed in more than a certain number of sites. The production sites for these blocks are based in China and the United States. Complex transformation sites are also located in those countries, as well as in South Korea and France. In addition, there are unique production sites in France and the United Kingdom.

Some products manufactured by the Electrical Power segment require a large amount of labor to produce high volumes at a reasonable cost. The segment's facilities for making those products are therefore concentrated in a small number of plants in China and Mexico. This means that the Group is highly dependent on those plants for the manufacture of certain products.

On a general note, intra-group transactions account for approximately 25% of total billings.

The potential impacts for the Group are:

- Long stoppages at a major plant, which could lead to lower sales volumes, either directly or indirectly (e.g., production stoppages at other Group sites), with ensuing losses of revenue and profit.
- For some facilities in the Electrical Power segment, several days of stoppages at some plants or distribution centers could lead to a loss of customers.
- High costs if certain facilities and/or equipment have to be rebuilt or restarted following an accident or other incident at a production site.

Risk management

Business continuity plans have been drawn up for some facilities and alternative production solutions have been tested that could be used in the event of a minor incident. The Group intends to extend its business continuity plans to cover other production facilities over the coming two years.

An external solution could also be used in some cases, such as outsourcing certain processes or purchasing parts from other companies.

Digital faults or cyber-attacks

Description of risk

All of the Group's management, planning and invoicing systems are dependent on IT. The reliability and availability of the Group's IT systems are determining factors for meeting customer deadlines, and are indispensable for certain activities such as electricity distribution.

In addition, some equipment that is essential for the Group's business and/or is potentially dangerous is controlled via software.

Lastly, certain confidential data, notably relating to plans (both the Group's and its customers'), product offers and personal data are stored on servers.

The potential impacts on the Group are:

- A stoppage of important equipment, which could temporarily affect production and therefore make it impossible for the Group to deliver one or possibly many order(s), which in turn could impact its profitability and potentially its future relations with some customers.
- Theft of confidential data, which could lead to penalties and/or legal disputes, and could harm the Group's image.
- An accident due to the loss of control of dangerous equipment.

Risk management

The Group has an overall IT security policy, which is regularly presented to the Audit and Accounts Committee. This policy is regularly updated in order to have an up-to-date, efficient IT system that is synchronized Group-wide.

A specific IT risk map has been in place for several years and internal audits are performed to verify that the relevant rules and procedures are respected. Awareness-raising sessions are also organized, particularly about phishing, in order to enhance the Group's cyber-risk culture. Moreover, Mersen uses external service providers to assess the effectiveness of some of the Group's risk strategies. IT governance projects have been redefined and the IT teams have been strengthened in order to manage IT risks more effectively, especially cybersecurity risks.

Difficulties in executing certain projects (including acquisitions)

Description of risk

In recent years the Group has carried out a large number of acquisitions, mostly of family-owned companies with strong local expertise. The integration of these acquired businesses – on a technical, commercial and, above all, human relations front – is key to the success of each acquisition project.

As an example, the Group has acquired a manufacturing facility in Columbia, USA, which has given it additional modular graphite production capacity and a competitive advantage, but requires major investment to re-start operations at the facility. It is a complex, strategic project for the Group and requires large amounts of resources.

Lastly, the Group regularly carries out production and site relocation projects.

The potential impacts on the Group are:

- Not being able to retain key personnel or misjudging performance outlooks when acquiring a new business, which could affect the estimated growth and profitability of that business.
- A longer timeframe or higher-than-expected costs for the Columbia project.
- Difficulties in hiring the necessary talent for re-starting the manufacturing facility and producing extruded graphite.
- Poorly managed production transfers or site relocations, which could impact sales and/or profitability.
- The need for additional financial investments or costs in order to bring acquired companies or assets up to the required standards.

Risk management

The Group has put in place various systems and monitoring procedures in order to manage this risk, including:

- Procedures for company acquisitions and integration.
- Managing the integration of acquired companies via regular monitoring by the Executive Committee and Board of Directors, particularly for the Columbia project.
- Stepping up project management training.
- Hiring experts (Columbia project).

Emergence, concentration or intensification of competition

Description of risk

The Group operates in many different markets and geographic regions and faces competition from specialist companies (in the Advanced Materials segment) and larger players (in the Electrical Power segment). Competition can therefore be focused on the technical aspects of offerings or on prices and volumes.

The potential impacts for the Group are:

- Loss of revenue if the Group loses certain markets or product ranges to competitors.
- Proportionally fewer resources to counter competition in the event of market concentration.
- Lower prices in some geographic regions, which would affect the Group's profitability.

Risk management

The Group has a Technology & Innovation Department, formed in 2016, which supports the Executive Committee. This department's role is to monitor the competitive landscape in order to anticipate trends and developments. It also decides on how resources (capex and R&D expenditure) are allocated to the Group's key markets.

Management of talent and expertise

Description of risk

Mersen operates in highly technical and complex markets. Managing the expertise required for these markets – which can be very specific and specialized – is crucial if Mersen is to remain a global leader in its field. The Group's business model therefore draws on this expertise as well as Mersen's century-long experience. Mersen also needs to be able to manage and develop the new expertise brought into the Group through acquisitions.

To remain competitive, continue to grow over the long term and rise to future challenges, Mersen has to attract a wide range of talent. Its ability to attract this talent is key to its success and its expertise could be eroded over time if it does not have a proper talent management strategy.

The potential impacts for the Group are:

- Loss of key expertise that could affect the Group's ability to meet customers' requirements, which would impact its growth potential and/or existing revenue.
- Less control over manufacturing processes, which could lead to (i) additional costs, which would reduce the Group's competitiveness for some products, (ii) product quality problems which could affect relations with major customers, and (iii) safety or environmental problems arising from complex processes.

Risk management

The Group has created a dedicated organizational structure to manage talent and expertise risk, including:

- Setting up a "specialists" unit, with a specific policy for succession planning, retaining and sharing expertise, and enhancing talent retention measures.
- Organizing meetings between specialists in order to deepen discussions and energize the overall talent management approach.
- Putting in place a career management policy, monitored by a specific committee.
- Creating an "employer brand" working group tasked with promoting the Group's reputation and appeal among job candidates.
- Broadening the beneficiary population of long-term incentive plans to include specialist/high potential employees (currently in planning phase).

Extending the Group's industrial footprint in Asia

Description of risk

Over the past 15 years the Group has built up a strong presence in Asia, and now generates a significant proportion of its revenue in the region. Its current industrial footprint is the result of numerous acquisitions, particularly in China. The economic situation in China and other parts of Asia is fast-changing, and there may come a time when it is no longer strategically viable for the Group to have certain manufacturing facilities there.

Additionally, in China a number of plants are facing real-estate problems due to higher property prices and the conversion of industrial areas into residential neighborhoods.

In parallel, the Group needs to extend its footprint in other Asian countries that are developing fast, such as India.

The potential impacts for the Group are:

- Significant investments required to adapt its operations in Asia.
- The need to transfer certain production lines, which could lead to the loss of customers and expertise, and additional costs.
- Complex supply chains, which impact the Group's carbon footprint, as some components or semi-products are sourced from Europe or the United States.
- An insufficient presence in emerging countries, which could significantly impact market share in those regions.

Risk management

During its strategic reviews, the Group regularly assesses whether it has the right industrial footprint. In particular, it has invested heavily in India and China in recent years.

In 2016, the Executive Committee an Asia Department so that projects and challenges concerning Asia can be monitored more closely.

Forward planning of the Group's real estate, particularly for leased properties, has been stepped up, and several production transfers in Asia (mostly in China) have already begun or are being analyzed in depth. These projects are regularly reviewed by Group Management.

2. Industrial and environmental risks

Environmental damage

Description of risk

The Group was founded over 120 years ago and has a strong industrial heritage, partly built up through acquisitions. Consequently, some of the practices formerly used by the Group, particularly by acquired companies, may have had an adverse impact on the environment, primarily regarding soil pollution. Furthermore, some Group plants – particularly in the Advanced Materials segment – are subject to fast-changing and increasingly strict regulations, particularly in terms of emissions. Lastly, the manufacturing processes of the Advanced Materials segment use energy, mainly electricity, which leads to indirect CO_2 emissions.

The potential impacts of this risk – which would be particularly significant if several events were to occur simultaneously – are:

- Costs incurred for researching less energy-hungry production processes, especially if certain regulations change.
- Non-renewal or suspension of an operating license, which could lead to a partial or total production stoppage at a major plant while awaiting an alternative solution.
- Costs related to cleaning up land at a former site and/or to third-party claims or disputes.
- Compliance costs of facilities.

Risk management

The Group has implemented numerous measures to mitigate the risks described above. In particular, it:

- Has put in place a corporate monitoring of operating permits
- Has put in place a procedure whereby the Executive Committee regularly monitors changes in the main standards that apply to the Group in order to effectively anticipate any required investments.
- Has named local environmental officers.
- Has introduced a monitoring of regulatory compliance and depollution work.
- Has set up a system for regularly monitoring waste, with measures implemented to ensure better recycling at all of its industrial sites.
- Systematically carries out environmental due diligence reviews for acquisitions of industrial sites.

3. Legal and regulatory risks

Major claims and disputes

Description of risk

Mersen operates in complex and technically demanding markets. The products that the Group delivers are key elements for the operation and/or safety of our customers' products and services, notably in the chemicals and energy industries. Claims may be made against the Group for alleged quality problems and/or, to a lesser extent, for not meeting delivery deadlines (a frequent issue in the chemicals industry). These risks have a tendency to rise due to the more litigious nature of relations with certain key customers as well as the Group's international expansion into countries with differing legal systems. This international positioning, combined with the fact that Mersen sells products that can be used for both civil and military purposes, exposes it to sanctions by or disputes with government agencies, especially tax and customs authorities.

The potential impacts on the Group are:

- Government sanctions, which could cause a sharp fall in the Group's sales.
- Potentially high costs for the Group, notably in the event of class actions.
- A deterioration in commercial relations with certain customers, with an ensuing loss of revenue (although the Group's largest customer only represents 3% of its total revenue).

Risk management

Since the end of the 1990s, the Group has had a quality program in place which ensures that the quality of its products meets its customers' requirements. It also has an Operational Excellence Department, set up in 2015, to improve the monitoring and quality of its products.

Additionally, in 2018 it set up a specific claims management system, which has strengthened the Group's claims prevention procedures and enabled it to be more reactive in terms of dispute resolution. Information sessions have been held with the sales and technical teams about this new system.

The Group has also taken out an insurance policy to limit the financial consequences of customer disputes.

Lastly, since 2018, specific compliance training sessions have been regularly organized for people potentially exposed to compliance risk (notably the sales and technical teams).

4. Financial risks

High capital intensity

Description of risk

Some of the Group's activities, particularly in the Advanced Materials segment, require significant plant and equipment, not only for production purposes, but also to keep up with the fast-paced growth trajectory of certain markets. These assets represent a high proportion of fixed costs within the Group's overall production cost base.

Moreover, the machinery required for such production purposes is not usually standard, which means that it can take a long time for equipment to be delivered. During that period – which can sometimes last over a year – the economic situation may deteriorate.

Finally, the Group's long-standing acquisitions strategy means that it has recognized a significant amount of goodwill in its financial statements (€281 million at end-2019).

The potential impacts for the Group are:

- An erosion in operating margin due to an insufficient plant utilization rate for the businesses concerned.
- A prolonged adverse impact on profitability for the Advanced Materials segment if the gap between the Group's production capacity and market demand takes time to close, which could lead to impairment losses, particularly when it comes to Anticorrosion Equipment, which is more cyclical than the Group's other operations.

Risk management

The Group has implemented numerous measures to mitigate the risks described above. In particular, it:

- Ensuring it has more variable costs and rolling out cost-saving plans in order to lower the break-even point.
- Setting up indicators to have a better visibility of market developments.
- Prudently managing capex and acquisition projects, via application of strict procedures and approval of major projects by the Executive Committee and/or Board of Directors.

Proceedings in progress

1. Tax and customs proceedings

The Group regularly undergoes tax and customs audits carried out by the tax/customs authorities in the countries in which it operates. In the past, the reassessments issued after tax/customs audits have been for non-material amounts. The most material risks relate to Mersen do Brasil and Mersen India Pvt.

The following amounts include interest.

1.1. Proceedings involving Mersen do Brasil

Mersen do Brasil received notice in June 2013 of a customs audit covering the period from January 2008 to December 2012. The customs authorities issued a reassessment notice for an initial amount (principal and interest) of BRL 7.5 million, increased each year by applying the interest rate issued by the Central Bank of Brazil. At December 31, 2019, the amount of the revised adjustment was BRL 12.2 million, or approximately €2.7 million at the December 31, 2019 exchange rate. This amount is not covered by a provision in the accounts of Mersen do Brasil, as the risk of losing the dispute is deemed very weak. A first instance ruling was handed down in favor of the Group on February 8, 2018. However, it was the subject of an ex officio appeal to a second instance court by the Brazilian authorities. It is not possible to estimate when the second instance ruling will be delivered.

At the time of this report, no changes have been made to these procedures.

Mersen do Brasil is also involved in a number of disputes which are at various stages:

- Reassessment of social security contributions (relating to 2007) calculated on the basis of unverified earnings, representing a total of BRL 4.495 million (approximately €1 million). A provision of BRL108 thousand has been set aside for the risk which is considered likely to be paid. This dispute is pending before the Administrative Court;
- Late tax return filing penalties (relating to 2001, 2005, 2010, 2011, 2012 and 2016) representing a total of BRL 4.171 million (approximately €949 thousand). A provision of BRL 90,000 has been set aside in respect of the risk which is considered likely to be paid. Depending on the year in question, the disputes are pending before the local Tax Office, the Administrative Court, or subject to appeal proceedings before the Federal Court
- Penalties (relating to 1998) for errors in calculating social security contributions, representing a total of BRL 2.7 million (approximately €615 thousand). A provision for BRL 1.013 million (approximately €230 thousand) has been set aside for the risk which is considered likely to be paid. This dispute is pending before the Federal Court;
- Four disputes representing a total amount of BRL 2.509 million (approximately €570 thousand). No provision has been set aside for these disputes as the related risk of loss is considered low. These disputes concern (1) the reassessment of tax credits transferred upon relocation from the São Paulo site (relating to 2011), which is pending before the Administrative Court; (2) penalties (relating to 1995) for differences in the tax base for local tax on industrial products, currently raised on appeal before the Federal Court; (3) penalties (relating to 2007) for irregularities in social security returns, currently pending before the Administrative Court; and (4) reassessment of requests to stagger tax payments (relating to 2011), raised on appeal before the government;
- Reassessment of entitlement to benefit from a tax-free zone regime (relating to 2004) for BRL 1.738 million (approximately €395 thousand). No provision has been set aside for this, as the related risk of loss is considered low. This dispute is pending before the Administrative Court.
- Penalties (relating to 2004) for erroneous amounts reported in certain tax returns, representing a total of BRL 1.561 million (approximately €355 thousand). No provision has been set aside in this respect as the related risk of loss is considered low. The case is pending before the Administrative Court.

At the date of this document, there had been no developments in these proceedings.

1.2. Proceedings involving Mersen India Pvt

Mersen India Pvt's tax returns are subject to annual tax audits. At the date of this document, the overall risk to which the company is exposed totals €430 thousand. This risk relates to the partial reassessment of certain intragroup expenses that were deducted in fiscal years 2011, 2013, 2014 and 2016. This dispute is pending before the Appeal Court. The subsidiary is also exposed to a risk representing €56 thousand for customs duties (relating to 2012, 2014 and 2016), since certain customs import codes used by Mersen India Pvt have been reassessed by local customs authorities. This dispute is pending a second appeal hearing.

At the date of this document, there had been no developments in these proceedings.

2. Administrative proceedings and disputes

2.1. Civil proceedings in Canada

The lawsuit initiated during 2004 in Canada by certain customers against the main Canadian manufacturers of graphite brushes, including Mersen Toronto, a Canadian subsidiary of Mersen, has now been settled. By Order dated November 29, 2019, the judge declared that the plaintiffs had withdrawn from the proceeding, against all defendants.

2.2. Administrative proceedings in France

In 2013, SNCF launched two procedures against Morgan, SGL, Schunk and Mersen, in the Paris Administrative Court and the Paris Commercial Court respectively. SNCF is attempting to secure redress for losses that it allegedly suffered following practices that were sanctioned in December 2003 by the European Commission in connection with brushes for electric motors and products for mechanical applications. In 2014, the Paris Administrative Court rejected all of the claims lodged by SNCF, which appealed the decision. On June 13, 2019, the Versailles Court of Appeal overturned the 2014 Administrative Court ruling. It also decided that it will rule on the case and has issued an injunction for an expert appraisal to be carried out in order to determine the amount of the loss allegedly incurred by SNCF.

Mersen is challenging this ruling and has taken the case to the French Supreme Court (Conseil d'Etat), which on February 12, 2020 confirmed it would accept the appeal application and bring the case to trial. The Paris Commercial Court has not yet issued its ruling. The Group has set aside a provision reflecting its estimate of the risk incurred in connection with these proceedings.

2.3. Criminal proceedings in France

Criminal proceedings that were initiated after the tragic accident on April 7, 2010 at Mersen's site in Gennevilliers are still in progress. On December 22, 2019, a ruling by the examining judge partially dismissed the case and brought Mersen's subsidiary in Gennevilliers ("the Company") and its managing director at that time before the Criminal Court (Tribunal correctionnel). The Company and its managing director at the time of the accident dispute the alleged acts with which they are charged, and will present their case in their defense before the competent court.

2.4. Labor regulations in France

Criminal proceedings were initiated in May 2019 for an alleged breach of certain labor regulations by Mersen's subsidiary in Gennevilliers ("the Company") and its managing director relating to events that occurred in 2017. In a ruling on October 14, 2019, the Nanterre Criminal Court ordered the Company and its managing director to pay damages of a non-material amount. This ruling will not be appealed.

2.5. Investigation by India's competition authority

In July 2019, India's competition authority launched an investigation into the premises of Group subsidiary Mersen (India) Private Limited over allegations of anti-competitive practices in the supply of carbon brushes to Indian railways in 2010-2014. Mersen India, which contests these allegations, is fully cooperating with the competition authority and has provided all requested information. The investigation is ongoing.

The Group is not aware of any other administrative or legal proceedings, including any pending or potential proceedings, that could have or have had in the last 12 months, a material adverse effect on its business activities, financial position or results of operations.

Insurance

Mersen Group has negotiated international insurance programs in the insurance market to cover its main risks. To protect the Group's future, the levels of coverage are set based on the Group's loss record and an assessment of the risks incurred by each Group subsidiary. In a context in which claim levels have remained under control for several years, the Group's insurance programs remained stable in 2019 and the ongoing risk prevention policy has meant that coverage and premium levels are unchanged.

The Group's global insurance programs (implemented in certain countries by local policies) have been put in place with leading insurance companies to cover the main risks of operational Damage/Loss, Professional Third Party Liability, Environment, and Aviation and Transportation Professional Third Party Liability risks. These worldwide programs provide all the Group's subsidiaries with cover and restrictions tailored to their needs. No captive policies have been arranged.

1. Civil liability insurance

As part of the Professional Third Party Liability insurance program (operations, pre- and post-delivery), Environmental and Professional risks are covered in particular, subject to the usual excesses, exclusions to and limits on coverage, as are bodily harm, physical and economic loss, disassembly/reassembly costs, collection costs, damage to goods in third party storage and decontamination costs. The international program comprises a master policy in France and local policies in certain countries. The total amount of premiums paid by Mersen Group for fiscal 2019 in connection with the Third-Party Liability/Environmental and Professional Third Party Liability/Aviation Third Party Liability program was €784,650 (excluding tax).

2. Business interruption insurance

The Group's property/business interruption insurance program notably covers bodily injury and physical damage, as well as losses caused by the interruption of business at the Group's main plants as a result of any sudden and accidental events (such as fire, storm, explosion, electrical damage, theft, etc.), subject to the usual deductibles, exclusions and restrictions. The program comprises a master policy and local policies in certain countries. It provides a contractual restriction per event (property/business interruption combined) of €135 million with sub-restrictions for certain events, such as storms, natural disasters or certain specific guarantees, such as machine failures and IT and electrical risks. The total amount of premiums paid by Mersen Group for fiscal 2019 in connection with this program was €835,891 (excluding tax and premiums for GAREAT, natural disasters and compulsory local coverage).

3. Transportation Insurance

Under the Group's transportation insurance program, Mersen and its subsidiaries are protected by a worldwide policy that provides a guarantee of up to €5 million per shipment for all the Group's goods shipments, irrespective of the means of transportation used. The premium paid by Mersen group for fiscal 2019 was €85,000 (excluding tax).

Relations between the parent company and its subsidiaries

Mersen is a holding company that manages its investments in subsidiaries and affiliates and the Group's financing activities, and charges subsidiaries for services related to the intangible assets and property, plant and equipment that it owns.

Mersen SA belongs to the Mersen group, which encompasses 94 consolidated and unconsolidated companies in approximately 35 countries. The Group's largest manufacturing facilities are located in France, the United States, China and Mexico.

The Group's Executive Committee runs its operational affairs. The members of the Executive Committee sometimes act as corporate officers or directors at the companies linked to their activity.

Parent company results

1. Parent company's financial position in the preceding financial year

The parent company, Mersen SA, had sales and other income of €24.0 million in 2019. These revenues are derived from Mersen SA's activities as a holding company, namely the management of investments in subsidiaries and affiliates, Group financing and invoicing for various services, plus fees for the use of the trademark and other associated intangibles.

The parent company's net operating result, which corresponds to the holding company's operating costs and trademark fee, was €4.6 million.

Net financial income amounted to €19.0 million, compared with €17.9 million in 2018, and mainly reflects €33.5 million in dividends from subsidiaries, compared with €21.9 million in 2018, and impairment of equity interests in the amount of €15.8 million, compared with €4.7 million in 2018.

Net income before tax and non-recurring items was €23.5 million. Net non-recurring income was a loss of €0.3 million, versus an impairment of €0.8 million in 2018. This loss is notably linked to the cost of buying back company shares as part of the liquidity agreement, partially combined with the reversal of the provision of €0.5 million for pension obligations.

The tax gain of €1.0 million reflects the tax savings achieved through profit-making French subsidiaries that are part of the tax consolidation.

After taking these items into account, net income was €24.3 million, versus €16.7 million in 2018.

2. Information about payment terms for the parent company's suppliers

Invoices received and issued at fiscal year-end (table from part I of Article D. 441-4 of the French Commercial Code)

	Trade payables: invoices received not settled and overdue at the balance sheet date						**Trade receivables: invoices issued not settled and overdue at the balance sheet date**					
(In € thousands)	**At due date**	**1 - 30 days**	**31 - 60 days**	**61 - 90 days**	**91 days+**	**Total 1 day or more**	**At due date**	**1 - 30 days**	**31 - 60 days**	**61 - 90 days**	**91 days+**	**Total 1 day or more**
(A) Late payment tranches												
Number of invoices	2	20	4		4	28		19	12	23	49	103
Total amount of invoices concerned incl. VAT	116	668	4		4	676		301	20	466	392	1,179
% of total amount of purchases for the year, incl. VAT	2.93%	16.8%	N/S		N/S	17%						
as a % of sales for the year, incl. VAT								1.47%	N/S	2.27%	1.91%	5.74%
(B) Invoices excluded from (A) in respect of disputed or unrecognized debts and/or receivables												
Number of invoices excluded												
Total amount of invoices excluded, including VAT												
(C) Reference payment terms used (contractual or legal - Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Terms of payment used to calculate late payment	Legal terms: 45 days end of month, unless contractual terms are shorter						Contractual terms: 30 days end of month for French and other European customers, 60 days end of month for the rest of the world					

4 SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT

Responsible growth and development

1. An ambitious CSR approach

As a major player operating around the world in multiple industrial sectors, Mersen has chosen to conduct its business according to an ambitious responsible development approach. Aware that continually improving its **social and environmental footprint requires continuous monitoring, assessment and analysis**, the Group has established a cross-segment CSR policy for all its employees and adapted to all levels of the organization.

Mersen's CSR culture is rooted in its values and is the result of decades of commitment to ethical and responsible development at a time when CSR was neither regulated nor prized by companies. The Group has always placed its human capital at the heart of its business, demonstrating a clear desire **for each employee to make the most of their expertise and reach their full potential** and for each country where the Group is active to grow its business, while still respecting local cultures by drawing the Group's strong fundamentals in human resources, health and safety and ethics.

Mersen is also committed to **reducing its environmental footprint**. For almost 15 years, it has run a number of initiatives to this end, despite the relatively low impact of its business compared to other industries. The Group demonstrates its commitment through its **active involvement in leading sustainable markets**, such as wind and solar energy, and clean transit, by inculcating **best practice throughout all its facilities** and by working hard to reduce waste by enhancing the **performance, quality and efficiency of its products.**

Although Mersen has chosen to **set itself ambitious CSR objectives, they are always quantifiable and achievable**. The Group has made CSR part of its identity by always seeking to improve its performance across all aspects of CSR and engaging employees and business stakeholders alike. Although the Executive Committee is the driving force behind CSR initiatives, individual sites and local teams are given the latitude to implement policies as effectively, collectively and pertinently as possible. Our collaborative CSR approach forms the very foundation of an openly responsible and sustainable business.

2. The fundamentals of Mersen's CSR policy

Building on Mersen's fundamentals, and in particular its human capital, to develop and showcase its approach as a **socially responsible Group**.

Strengthening best practices already rolled out across the sites in order to continue to **reduce our environmental footprint**.

Expanding its activity in **sustainable development** markets and focusing development on **high-performance**, innovative **products**.

Transmitting a shared **CSR culture** throughout the Group and giving sites and teams the autonomy they need to implement this policy and effectively and appropriately adapt it to their region.

3. Organization

The Corporate Social Responsibility strategy has been implemented across the Group as follows:

Top management	
The Board of Directors	is dedicated to promoting the Company's long-term value creation by including social and environmental challenges in its activities. It regularly reviews its exposure to social and environmental risks as part of Group strategy. and, more specifically, ensures that measures to prevent and detect corruption and influence peddling are implemented.
The Executive Committee	proposes and implements the CSR strategy.

Group committees	
The CSR Committee,	comprising the Chief Executive Officer, the Human Resources Department, the Finance Department, the Operational Excellence Department, the Compliance Officer and the Financial Communications Department. It meets quarterly to review the Group's medium-term objectives and make sure that Group's progress on CSR issues are properly publicized outside the Group.
The HSE Committee,	comprising senior management, the Human Resources Department, the Operational Excellence Department and the heads of both the Group's segments. The Committee oversees all health, safety and environmental actions and indicators at Mersen and meets on a monthly basis.
The Compliance Committee,	comprising senior management, the Human Resources Department, the Compliance Officer and the Finance Department, meets on a quarterly basis to guide the function, ensure the proper deployment of action plans and analyze and guide actions in the event of an ethics and/or compliance alert

Working groups	
	Working groups could be created specifically to monitor progress in certain areas, such as the "Diversity" and "Open Experts" groups, whose members include people from operations teams.

4. Non-financial ratings

The Mersen Group's ESG performance has been rated "BB" by MSCI ESG Research.

It won a bronze EcoVadis medal for its Group-wide CSR performance.

In France, the Group is included in the Gaïa Index, which evaluates the non-financial performance of listed mid cap companies. Of the panel of 230 intermediate size companies and SMEs listed on the Paris stock exchange that feature in this index, Mersen ranks 38th. The Company ranked 47th in 2018.

CSR MATERIALITY MATRIX

1. Methodology

In 2018, Mersen developed its first corporate and social responsibility materiality matrix to **identify the main extra-financial risks and opportunities** to which the Group may be exposed in light of its businesses, the development of its markets and its organization. The matrix complements the risk map monitored by the Group and is based on a series of interviews with the Group's main governance bodies carried out by an external audit firm. The main non-financial risks and opportunities identified were then mapped in the form of a materiality matrix based on a questionnaire that was sent to people representing the various internal and external stakeholders around the world.

In 2018, Mersen collected questionnaires that mostly came from internal stakeholders (members of the Board of Directors and the Executive Committee, site managers, HSE managers and site HR managers). In 2019, Mersen broadened its analysis and asked external stakeholders (clients and members of the financial community) for their opinions to help it accurately identify the CSR topics that it needs to address.

2. 2019 update

Overall, and with very few exceptions, internal stakeholders (in 2018) and external stakeholders (in 2019) have a very similar understanding of the issues.

However, the Group's materiality matrix was modified in 2019 to take into account the following points:

Governance

- External stakeholders all viewed the structure and efficiency of CSR governance as a key issue.
- External stakeholders also placed a higher value on community involvement.

Economics

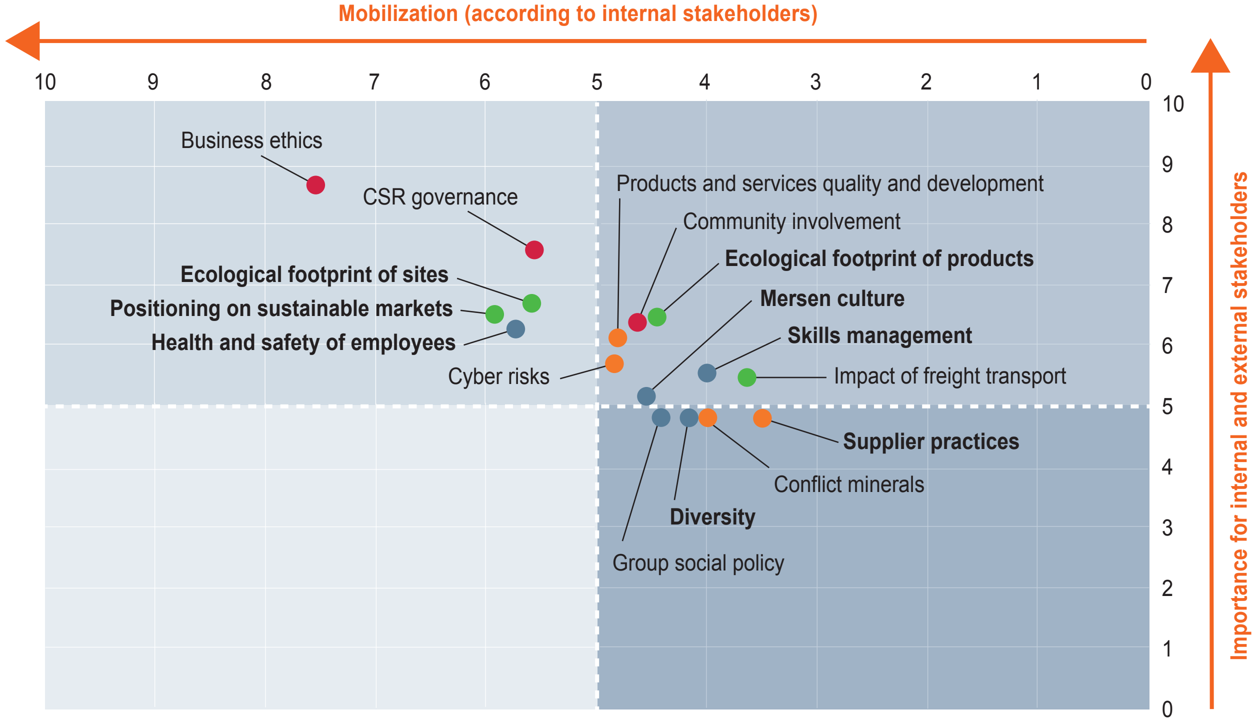
- Issues related to raw materials (controversial metals) and supplier practices are more important for external stakeholders.

Employees

- Mersen culture has greater significance for internal stakeholders than external ones.

Environment

- External stakeholders are more aware of issues related to products' carbon footprints, both upstream (product ecological footprint) and downstream (impact of transportation).



In bold: Issues for which Mersen has defined a medium-term goal.

Issues identified	Description	pages
Group social responsibility policy	Develop a social responsibility policy in line with international best practices and, if possible, above and beyond local requirements.	112
Mersen's culture	Build on and promote Mersen Group culture which draws on local leadership, trust, empowerment and collaboration.	113
Skills management	Have a forward-looking vision regarding jobs and skills, attract and manage talent, ensure the digital shift and support continuing professional development.	118
Diversity	Promote hiring women in all Group segments, ensure equal treatment in the hiring process and professional development.	114
Employee health and safety	Ensure the safety of employees and develop health-related preventative measures across all Group facilities.	122
Positioning on sustainable markets	Develop a proactive environmental policy for the Group, ensure the compliance of its operations with the environmental regulations in force.	104
Ecological footprint of facilities	Manage operations-related pollution (emissions into the air, water and soil), consumption of materials (including energy) and prevent risks to which the local communities located near Group facilities may be exposed.	106
Ecological footprint of our products	Optimize the ecological footprint of Mersen products by consuming fewer raw materials and producing less waste.	105
Impact of transportation	Optimize goods transportation (raw materials, intermediate and final goods) and employee travel.	103
Supplier practices	Pay attention to the social and environmental practices of a targeted scope of suppliers.	103
Cyber risks	Protect the Group from attacks on its information systems seeking to damage their operation, or manipulate, block or steal data.	127
Quality and development of products and services	Adapt to customer requirements and expectations, be at the cutting edge of technology and preempt technological disruption.	105
Conflict minerals	Responsibly manage our supply of metals with potentially negative social and/or environmental impacts.	103
CSR governance	Ensure the Group's governing bodies take CSR into account and include it in Group strategy. Involve the Company's senior management in developing CSR initiatives.	99
Business ethics	Promote the Group's rules on ethics and ensure they are adopted by the Group's partners (including rules regarding corruption, fraud, competition, etc.)	125
Community involvement	Interact with public authorities. Promote and leverage local initiatives for sponsorship, partnership or dialog with the communities and regions where the Group operates.	115

3. CSR roadmap

Once the priority issues were clearly identified using the materiality matrix, a CSR roadmap was drafted around five commitments based on which senior management defined a three-year action plan at the end of 2018.

Priority commitments	Ambition	2021 objective (unless other date specified in the table)
Ecological footprint of our products	Develop innovative products that contribute to the ecological transition.	• 55% of sales will be linked to sustainable development
Ecological footprint of our facilities	Reduce the environmental impact of our industrial sites by recycling and recovering waste.	• Improve the proportion of waste recycling by 15 points
CSR footprint of suppliers	Improve and secure the social and environmental performance of our supplier base.	• Evaluate our strategic suppliers
Health and safety of our employees	Develop and consolidate a culture of health and safety within the Group.	• Increase the number of safety visits by 15% • LTIR ≤1.4; SIR ≤60
Develop our human capital	Develop and retain our expertise through an organizational structure that promotes collective intelligence.	• 3-point increase in human capital achievement rate • 25% to 30% women managers and professionals by 2022 • 100% of managers completed the Open Manager program

4. 2019 Achievements

Ambition	2019 Achievements
Develop innovative products that contribute to the ecological transition.	• 51% of sales linked to sustainable development
Reduce the environmental impact of our industrial sites by recycling and recovering waste.	• Percentage of waste recycled: +7 points • Establish quarterly reporting on waste • Share best practices
Improve and secure the social and environmental performance of our supplier base.	• Write a procurement charter for a sustainable supply chain • Finalize a CSR self-assessment questionnaire for our suppliers
Develop and consolidate a culture of health and safety within the Group.	• 12.5% increase in safety visits • LTIR = 1.4 • SIR = 64
Develop and retain our expertise through an organizational structure that promotes collective intelligence.	• 23% women managers and professionals (up 3 points from 2018) • 51% of managers completed the Open Manager program

Developing innovative and sustainable products

1. Managing suppliers

Mersen's strategy and commitments

As a global expert in electrical power and advanced materials, Mersen undertakes to be **mindful of the social and environmental practices associated with the development of its products**. This applies not only to its own internal practices, but also to those of regular suppliers.

Present in 35 countries, Mersen is often required to factor in a variety of different legislation and widely varying local realities. This is why it makes every effort to make sure its policy in this area is comprehensive. The procurement charter for a sustainable supply chain, which is now available in five languages (English, German, Chinese, Spanish and French), formalizes relations and sets the standard for virtuous collaboration.

The Group takes special care to verify the source of minerals that may be used to manufacture its products and equipment, especially those that could come out of conflict zones.

Commitments:

- Determination to improve and secure social and environmental performance.
- A charter to formalize supplier relations, which would also include a self-assessment grid.
- Special attention paid to avoiding conflict minerals.

Initiatives

Procurement charter

In 2019, Mersen formalized its approach with its **procurement charter for a sustainable supply chain**, which sets out its own requirements and encourages the implementation of best practices – including social and environmental practices. The procurement charter reaffirms Mersen's commitment to preventing slavery and protecting children's rights throughout the Group's supply chain.

Our regular suppliers are given copies that they are asked to sign. The charter is available on the Group's website.

The Group concentrates its efforts on suppliers that make up 80% of its materials purchases. In 2019, it finalized a CSR questionnaire with a detailed self-assessment grid that will help to better integrate and evaluate their CSR and Compliance performance.

The Group has also established a procedure to evaluate third-party corruption risk, including suppliers, using an internal database. All new suppliers will be assessed using a risk table, with high-risk suppliers being examined more closely.

In addition, some of the Group's sites try to work with local suppliers to:

- reduce transportation costs and greenhouse gas emissions (use of recyclable materials, the widespread use of more eco-friendly packaging, etc.);
- reduce environmental impacts through the adoption of pragmatic initiatives: efforts to reduce packaging weight and purchase of eco-friendly vehicles.

The Group will begin to identify areas of progress to reduce the CO_2 impact of its freight transport.

Commitment to verifying mineral sourcing (conflict minerals)

Mersen had its suppliers confirm that they and their own suppliers comply with the EU Conflict Minerals Regulation and equivalent US legislation (Article 1502 of the Dodd-Frank Act). These regulations aim to help stem the trade in four minerals – tin, tantalum, tungsten and gold – which sometimes finance armed conflict or are mined using forced labor.

The Group's procurement charter sets out the commitments that suppliers must make regarding the sourcing of tin, tantalum, tungsten and gold (and any other substances that could someday be added to the list of conflict minerals) used in products they supply to the Group.

Summary

Objectives	2019	2021
■ By 2021, evaluate strategic suppliers, i.e., those making up at least 80% of the value of materials purchased using a CSR questionnaire ■ Update the supplier relations charter	■ Develop a CSR and Compliance selfassessment grid ■ Disseminate the procurement charter for a sustainable supply chain ■ Establish a corruption risk evaluation process	■ Evaluate our strategic suppliers using a self-assessment questionnaire

2. Developing innovative products that contribute to sustainable development

Mersen's strategy and commitments

Mersen operates in highly innovative sectors, including renewable energies, energy efficiency and clean transit, and as such, **invests in finding ways to help the green industry bloom**.

Mersen's solutions contribute to the progress made in photovoltaic solar energy, and to the manufacture of wind turbine generators. It also works with hydroelectric generator manufacturers, and helps to **improve the performance and reliability of the equipment and infrastructure** of new forms of urban mass transit and electric vehicles.

For each of the sectors in which Mersen operates, the Group endeavors to develop innovative products to help make development more sustainable. This drive is reflected in manufacturing and R&D investments, as well as an overall focus on product performance, the lifespan of consumables and production costs.

In summary:

- R&D and innovation focused on supporting the green industry and combating global warming.
- A recognized player on high-potential markets.
- Significant investment in manufacturing to strengthen a leading position on sustainable development markets.

Sustainable development markets

Renewable energies

For many years, Mersen has been working alongside the leading manufacturers in the renewable energy sector. In addition to providing highperformance and sustainable solutions, it helps get the energy produced to customers.

Solar: Mersen supports the entire solar cell production process, from polysilicon manufacturing to silicon ingot pulling, and provides electrical protection for the panels. Its solutions optimize performance in terms of photovoltaic yield and energy efficiency.

Wind power: Mersen is the leading supplier in the wind energy sector, both in generator power distribution systems and yaw motors.

Hydroelectric: Mersen is the preferred partner for customers across the hydroelectric industry, from turbine manufacturers to power plant operators.

Energy storage: Mersen offers electrical component solutions for the design of industrial lithium-ion batteries, used in solar and wind energy.

Electronics

Mersen offers electronics manufacturers comprehensive solutions to cover their insulation, heat recovery and power conversion needs.

Semiconductors: Mersen develops products that are at once increasingly compact and efficient thanks to its premium, ultra-pure graphite offering. The quality and high-precision machining of our materials and coatings actively optimize manufacturing processes.

Power electronics: Mersen's solutions help manufacturers better adapt energy generation to needs, and therefore optimize the energy efficiency of their facilities.

Energy efficiency and saving on raw materials

Mersen is positioned on markets whose growth is linked to energy efficiency and the energy transition. Its solutions address both production costs, energy consumption of certain processes, and the final performance of products.

Manufacturing processes: Mersen provides optimized solutions for the entire high-temperature process industry. We offer a range of highperformance insulation products providing significant energy savings. Other components are also used for speed drives to optimize the output of industrial equipment. For certain processes, such as in mining and chemistry, Mersen's offering includes energy-saving and water consumption reducing units thanks to heat-recovery systems.

LED: Mersen provides graphite-based solutions and high-performance materials that are critical in the manufacture of LEDs. The increasing use of these particularly long-lasting bulbs has a considerable impact on electricity consumption.

Clean transportation

Mersen actively supports the development of clean transportation through its solutions that improve the performance and reliability of equipment and infrastructure.

Rail and urban mass transit: Mersen provides equipment for rolling stock and infrastructure electrical systems to enhance the reliability and performance of these popular systems for transporting both people and goods.

Hybrid industrial vehicles and light electric vehicles: Mersen helps car manufacturers meet the challenges of this booming market. Thanks to its expertise in managing direct current in batteries, it is able to offer solutions for battery management and safety.

Objectives	2019	2021
Develop innovative products that contribute to the ecological transition	51% of sales in sustainable development markets	55% of sales in sustainable development markets by 2021 (50% in 2018)

3. Developing products with a reduced environmental footprint, from design to recycling

Mersen's strategy and commitments

The Group manufactures products and solutions that are mainly made of:

- artificial graphite, which is an inert natural material without any special impact on the environment, in the Advanced Materials segment;
- ceramic components and recyclable materials (especially copper and silver) in the Electrical Power segment.

Mersen endeavors to **limit the ecological footprint of its products at every stage of their life cycle** – from reducing raw materials consumption to reducing waste production. It is an approach that draws inspiration from the virtuous circular economy model.

In the next few years, the Group will carry out a study with its major customers to improve product end-of-life management, especially through recycling programs.

In summary:

- Products and solutions that have little or no impact on our natural environment.
- Every step of a product's life cycle is taken into account.
- An analysis of recycling programs.

Initiatives

Mersen relies on several priorities and initiatives throughout the entire product life cycle to reduce the environmental footprint of its products.

Product design

In order to provide products with a reduced environmental impact, Mersen uses the **bespoke techniques** to design its new manufacturing lines and products. From the initial design phase, this approach factors in a product's environmental impact throughout its entire life cycle.

Technology watch: trained in eco-design, the R&D teams at Mersen integrate environmental impact reduction targets into the specifications of new products.

Monitoring and measuring impacts: Mersen uses a suite of tools to monitor and measure the impact of its products in real conditions. The Electrical Power segment uses EIME (Environmental Improvement Made Easy) software for **analyzing products' environmental impact** (water and air pollution, depletion of natural resources, etc.) **at each stage of their life cycle**. When it comes to choice of raw materials, packaging weight, assembly steps, waste volumes and recycling, the software ensures the traceability of existing lines while providing a basis for comparison when developing future product lines.

Eco-sustainable redesign to cost: Mersen has been developing this approach based on the functional analysis of products. It is intended to replace or reduce the proportion of certain components or raw materials, substituting others that are more environmentally sound without affecting product functionality. This approach will be systematically applied to new products.

In keeping with this, in 2019 the Group launched the next generation of Modulostar fuse holders, a key Mersen product. The product was redesigned to reduce its environmental footprint without affecting its functionality.

Product recycling

Recycling of used products: Mersen has participated actively for several years in efforts to recycle fuse waste by reusing large amounts of the metal content of used fuses. Similar initiatives are underway for industrial brushes through a recovery program introduced to collect used brushes from customers to recycle the reusable metal content.

PROMOTING ENVIRONMENTALLY-SOUND PRACTICES AT ALL FACILITIES

Mersen is **committed to reducing the environmental impact of its products and industrial sites.**

Our environmental strategy is built on complying with local environmental regulations governing all of our industrial operations, using resources responsibly, reducing our climate impact, controlling all types of emissions and minimizing our waste [(1)].

In summary:

- Compliance with environmental regulations
- Responsible use of resources
- Emissions and waste reduction

1. Organization: a new dedicated management system

In keeping with its 2018 commitment, Mersen implemented an **environmental management system** in 2019. It is based on a written commitment made by the Executive Committee and shared with all employees, and a dedicated system that includes the following components:

- organization, objectives and steering committees;
- compliance with applicable regulations, operational control and emergency procedures;
- responsible use of resources (materials and components, water and energy);
- climate change through greenhouse gas emissions;
- other emissions polluting air, soil and water, and waste.

The environmental management system established in 2019 formalizes the structure and initiatives implemented over several years.

The HSE Committee, comprises the Chief Executive Officer, the Human Resources Department, the Operational Excellence Department and the heads of both the Group's segments. The Committee oversees all environmental and health and safety actions and indicators at Mersen and meets on a monthly basis.

The Group's **Health & Safety, Environment and Industrial Risks function** is part of the Operational Excellence Department, which is responsible for implementing the Group's environmental program across all industrial sites.

Site managers are responsible for implementing an environmental management system that is effective, compliant with regulations and adapted to the local activity. They must appoint an environmental manager to oversee initiatives and report to the Health & Safety, Environment and Industrial Risks function.

Environmental site managers are in charge of monitoring site action plans, coordinating activities and evaluating progress.

Local environmental correspondents are in charge of monitoring regulatory developments in their respective operating regions (Europe, North America and China) and report their findings to the Executive Committee twice a year.

2. Compliance with environmental regulations

Compliance with environmental laws and regulations is the foundation of the environmental program.

Compliance with environmental regulations: Mersen identifies environmental legislation at both local and national levels, including permits and authorizations, codes applicable to the Group and voluntarily measures, and then shares them across all industrial sites.

For each industrial site, Mersen ensures that site management's action plan takes these requirements into account, the potential impacts are analyzed and updated information is shared with site employees and throughout the Group.

As much as possible, Mersen identifies the impact of environmental regulations on each of its sites and is deliberate in its approach to making decisions. The Group is a member of the European Carbon and Graphite Association (ECGA), which contributes to dialog with European institutions on matters affecting the graphite industry.

(1) The 2018 data in this chapter was adjusted to include 2019's expanded reporting scope (see the Reporting Methodology section in this chapter).

Directive 2010/75/EU of November 24, 2010, the Industrial Emissions Directive (IED): four of our sites in France (Amiens, Gennevilliers and Pagny-Sur-Moselle) and the United Kingdom (Holytown) may be affected by this regulation. Adopted in 2010, it aims to prevent and reduce air, water and soil pollution caused by industrial facilities by relying on the Best Available Techniques (BAT). These sites were contacted by their respective regulatory authorities for a review of their operations on the basis of the best available techniques.

Directive 2012/18/EU of July 4, 2012, known as the Seveso 3 directive: none of our European sites are subject to this regulation.

Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of CHemicals (REACH) was strictly implemented by Mersen. The regulation makes manufacturers responsible for assessing and managing the risks associated with the chemicals they use. Since 2010, the Group has registered several products that make up graphite (primarily resins) and felt. Coal tar pitch is considered to be an intermediary product in the manufacturing processes and is excluded from the REACH registration as it is untraceable in the graphite end product. At the May 31, 2018 deadline to register chemicals with an annual total of between 1 and 100 tons, the Group did not report any chemicals meeting this criterion.

Operational control and emergency procedure: operations identified as having significant environmental impacts, legal requirements and environmental objectives were listed for each site. The most complex operations are managed using documented procedures. Employees receive regular information on environmental commitments, the related environmental management system and their role in meeting program requirements. They are trained on appropriate procedures and are also required to understand the possible consequences of failure to comply. Since 2017, Mersen has strengthened its environmental audit procedure for industrial real estate sales and acquisitions.

Despite Mersen's best efforts, the risk of accidents and other emergency situations remains. An appropriate response and the development of emergency procedures, can reduce injury rates, prevent or minimize environmental impacts, protect lives and minimize the loss of assets.

ISO 14001 certification: at the end of 2019, 39% of the sites included in the scope were ISO 14001-certified, the recognized global standard for environmental management systems, vs. 34% in 2018.

This figure rises to 59% for sites with more than 125 people.

3. Investments

The Group systematically includes sustainable development in its investment projects. When projects begin, an health, safety and environment (HSE) study is carried out to assess potential impacts and anticipate environmental risks.

Mersen makes some of the investments in areas related to the environment, such as:

- Compliance with environmental regulations;
- Reduction of water and energy consumption;
- Improvement in the rate of waste recycling and recovery;
- Renewal of operating licenses.

In 2019, the Group's HSE-related investments totaled nearly €5.3 million. Most of these were smaller individual investments of less than $50,000.

In 2019, the Gennevilliers site located in a dense urban setting completed a modernization project that began in 2017 and cost several million euros. It brought some equipment into compliance while making other equipment safer to use.

At December 31, 2019, the amount of environmental risk provisions totaled €4.8 million, up €3.9 million from December 31, 2018. This change is the result of the acquisition of the Columbia, Tennessee site in the United States, where operations were halted by the previous owner in 2015. At the time of the acquisition, an environmental audit without any soil or groundwater sampling led Mersen to set aside a €4.2 million provision as a precautionary measure in case of proven risk pollution as the site comes gradually back on line.

in €m	2019	2018
Provisions for environmental risks	4.8	0.9

Environmentally-aware employees

Training and signage campaigns are the main methods used to raise employee awareness about responsible behavior, energy efficiency, and waste reduction and recycling.
In 2019, environmental protection training increased by 48% from 2018.

Environmental training	2019	2018
Hours	6,840	4,615

4. Use of resources

Responsible energy use

The Group is committed to using energy efficiently. Every Mersen production site measures its energy usage per production unit and develops an action plan to control and improve its consumption.

Its two major sources of energy are electricity and natural gas, which are used by Advanced Materials to produce graphite and felt.

All sites are continuing to replace their lighting with LEDs and even next-generation bulbs that represent significant savings.

Some sites of the Group are ISO 50001 certified (France, India).

Energy consumption by category in 2019

in GWh	Renewable(1)	Non renewable	Total
Electricity purchased	38.3	190.7	229.0
Natural gas	0	176.9	176.9
Liquefied petroleum gas (LPG)	0	3.1	3.1
Fuel oil, propane, butane	0	3.1	3.1
TOTAL	**38.3**	**373.9**	**412.2**

The Group encourages every site to increase the percentage of renewable energy in its total energy consumption. This is now one of the criteria used to select electricity providers during the tendering process.

Consumption of energy from renewable sources (1)

		2019	2018	Difference
Energy consumption	GWh	412.2	425.1	-2%
% of renewable energy	%	9.3	8.9	
Ratio to total sales	*GWh/€m*	*0.43*	*0.48*	*-9%*

In 2019, the Group's energy consumption fell by 2% from 2018, while the consumption to sales ratio (GWh/€M) fell by 9%. This can be explained by the ongoing effort to reduce gas consumption in graphite production and a lag between sales and energy consumption, due to the long manufacturing and processing cycle of semi-finished carbon products.

Chongqing and Holytown cut down on gas consumption

The Chonqing (China) and Holytown (UK) sites are continuing initiatives begun in 2018 to check and modify some furnaces to reduce their natural gas consumption.

Water consumption

The Group uses water primarily to cool equipment used in heating processes (firing, graphitization and impregnation of graphite), ensuring water quality before disposal.

Water consumption		2019	2018	Difference
Water	m^3	683,478	693,565	-1,5%
Ratio to total sales	*m^3/€m*	*719*	*789*	-9%

Raw materials consumption

Graphite: The main raw materials used to manufacture graphite blocks, plates and tubes are coal tar pitch, coke and artificial graphite.

Some of the residue from manufacturing graphite can be reused without additional processing in other production processes within the Group or by external units. These residues are called by-products.

Consumption of raw materials used to manufacture graphite

In tons	2019	2018	Difference
Pitch	7,314	7,262	+0.7%
Coke	7,720	7,665	+0.7%
Artificial graphite	3,607	3,496	+3.2%
Other	955	952	0%
TOTAL	**19,596**	**19,375**	**+1.1%**

The numbers above correspond to annual graphite production (excluding materials for processes) and are estimated based on the Group recipe. In 2019, volumes showed no change from 2018, which is in line with the tonnage of graphite produced.

(1) To calculate the percentage of energy from renewable sources consumed, the Group uses data provided by the electricity providers and, in the absence of market-based date, information on national energy mixes, known as location-based data.

Copper is an important material used for the manufacture of brushes, fuses and switches.

Copper consumption		2019	2018	Difference
Copper	Tons	2,639	2,880	-8%
Ratio to total sales	*Tons/€m*	*2.8*	*3.3*	*-15%*

The decrease in copper consumption can be partially attributed to product mix.

Packaging and logistics

Timber and cardboard are used for outbound logistics to Mersen subsidiaries (transport between entities) and customers. The consumption of these resources is also monitored by the Group.

In tons	2019	2018	Difference
Timber	2,687	2,086	+29%
Cardboard	1,506	1,366	+10%
Total timber and cardboard	**4,193**	**3,452**	**+21%**
Ratio to total sales	*4.4*	*3.9*	*+12%*

5. Climate change

Emissions assessment

Since 2018, Mersen has abided by the **standards for quantifying greenhouse gases** as per the principles of the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI) GHG Protocol.

The selected emissions sources are as follows:

SCOPE 1: direct GHG emissions

- Emissions resulting from graphite production processes, namely the baking and graphitization of blocks, plates and tubes at the St. Marys, Chongqing, Amiens, Pagny-sur-Moselle and Bangalore sites.
- Emissions from other manufacturing processes were considered negligible.
- Emissions resulting from the combustion of natural gas, LPG, fuel oil, propane and butane multiplied by their respective emission factors.
- Emissions from company cars.

SCOPE 2: indirect GHG emissions

- Emissions resulting from the consumption of purchased electricity multiplied by their respective emission factors.

SCOPE 3: indirect GHG emissions

- Emissions related to the procurement of goods and services.
- Emissions related to industrial investments.
- Emissions related to waste.
- Emissions related to business travel and commuting.
- Emissions related to sea, air and road transportation.
- The Group has established a rule for updating this data: Scope 1 and 2 calculations will be updated every year, while Scope 3 calculations will be updated every three years.

In keeping with its commitment, the Group calculated indirect Scope 3 emissions for 2018, as defined above. Emissions related to use and end-of-life for products sold were excluded for 2018.

In 2020, the Group will refine its calculation of Scope 3 emissions.

Table of GHG emissions in tons of CO_2

In tons	2019	2018	Difference
Direct emissions from burning gas and fuel oil	37,855	40,541	-4%
Direct industrial process emissions	16,778	17,618	-5%
Direct emissions from company cars	1,358	1,358	
Scope 1 emissions subtotal	**55,991**	**59,517**	**-4%**
Indirect emissions related to electricity consumption	108,970	106,813	+1%
Scope 2 emissions subtotal	**108,970**	**106,813**	**+1%**
Indirect emissions related to the procurement of goods and services		124,948	
Indirect emissions related to sea, air and road transportation		39,013	
Other indirect emissions		42,828	
Scope 3 emissions subtotal		**206,789**	
TOTAL EMISSIONS	**371,750***	**373,119**	**0%**
Ratio to total sales (tons CO_2/€m)	*391*	*425*	*-8%*

** Includes 2018 data for Scope 3.*

For several years the Group has been involved in initiatives to reduce electricity consumption for both economic and environmental reasons. In 2019, indirect emissions related to electricity consumption represented 29% of total emissions.

In 2020, the Group committed to confirming the suitability of emissions factors, especially those used for manufacturing procedures that may not be covered by the industry's published standards.

Kyoto Protocol: Mersen does not have any fixed facilities in Europe subject to the scheme for greenhouse gas emission allowance trading under Directive 2003/87/EC implemented in the European Union as part of the ratification of the Kyoto Protocol, which entered into force in 2005.

Reducing Mersen's impact

Impact of climate change on operations: Mersen undertook to identify the main climate change-related factors near its production sites including flooding, heatwaves, freezing temperatures, hurricanes and storms, and disruptions to water supply.

The Group has committed to perform a more in-depth assessment of these risks by 2021 and draw up an appropriate response plan as necessary.

Impact of transportation

Materials and goods transportation by sea, air or road amounted to 39,013 tons of CO_2 in 2018, i.e., 10.5% of total emissions. Air transportation accounts for 81.5% of that total. For several years the Group has been involved in initiatives to reduce the volume of goods and materials transported and has chosen to use low-cost, low-emissions forms of transportation where possible.

In addition, the Group's company car policy encourages each employee to opt for an environmentally friendly company car, based on a CO_2 criterion.

Grouping shipments: a value-added best practice

The Mersen Brazil site has established a system for grouping shipments from the same geographic areas. Every year, the site fills more than 1,300 orders, which it groups into less than 200 shipments. This method of supply chain optimization has significantly reduced its CO_2 emissions related to goods transport. This has also resulted in savings of several hundred thousand euros per year.

6. Emissions, waste and noise pollution

Air, soil, and water polluting emissions and waste from our facilities have been identified as an important environmental challenge for minimizing our industrial sites' impact on the environment. Reducing them is both a regulatory requirement and an environmental performance goal.

Emissions

Air: to preserve air quality around its sites, Mersen intends to systematically measure the level of atmospheric emissions (gas and particulate) and implement the appropriate solutions to limit each type of emission.

Gas emissions are essentially due to pyrolysis of raw materials to obtain graphite. These processes include gas emission processing systems to eliminate toxic products, sulfur dioxide (SO2) and volatile organic compounds (VOCs). Such systems capture an average minimum of 95% of these pollutants.

Particulate emissions are due primarily to processes for crushing raw materials, silication used in fuse manufacturing processes and graphite product machining. Each process includes a system to filter and capture particulate.

Soil and water: in partnership with local regulatory authorities, the Group closely monitors the risks associated with soil and water pollution at its facilities. To this end, certain sites have installed piezometers to monitor groundwater. Since 2017, Mersen has also strengthened its environmental auditing procedure for acquisitions by systematically measuring existing soil and groundwater pollution levels.

Waste and recycling

Although the waste generated by the Group's activities is negligible compared to other industries, Mersen has set itself a goal of reducing its waste and increase the rate of waste recycling and recovery. Since 2019, each industrial site has categorized its waste by type and end use (by-products, recycling, recovery or landfill).

In 2018, the Group committed to a **15 points increase in its waste recycling or recovery over three years. Based on 2019's expanded environmental reporting scope, that means increasing the percentage of waste recycled or recovered from 46% to 61% between 2018 and 2021.**

In 2019, the Group carried out initiatives to reach 53%. The concept of "by-products" was clarified to include undesirable production residues introduced into external units without additional processing. This includes graphite dust, and graphite and copper scraps. By-products are included in the recycling rate.

Waste from all industrial sites		2019	2018	Difference
Waste	Tons	19,192	17,171	+12%
Ratio to total sales	*Tons/€m*	*20.2*	*19.5*	*3%*
Including hazardous waste	%	13.1	14.8	
Including waste recycled (including by-products)	%	53	46	

Recycling graphite dust

Artificial graphite is an inevitable by-product of graphite processes. It results from the dust that is produced when machining blocks and from the offcuts when machining parts from a large block. Because it is too fine to be used in a finished product, the dust is recovered and reused in the manufacturing process, thus significantly reducing purchases of this material.

Noise

Mersen has installed an extremely accurate environmental monitoring system at every one of its sites. While our industrial operations **generally do not generate noise pollution in excess of standards**, checks may be performed pursuant to applicable local regulatory requirements.

Objectives	2019	2021
■ Reduce ecological footprint of facilities	■ 7-point increase in waste recycling in relation to 2018	■ 15-point increase in waste recycling from 46% in 2018 to 61% by 2021

The Group's foundation: Human capital

1. A collaboration-oriented Group culture

Mersen's strategy and commitments

The men and women at Mersen are at the heart of the Group's culture. Mersen strives to empower employees, develop local leadership and to promote equality between men and women in all roles and across segments. The approach is adapted to each country with the utmost respect for local specificities and cultures.

In summary:

- A proactive approach to diversity and equal opportunities.
- Unifying values shared by all employees.
- A strong Group culture that respects the specificities of local cultures.

Six major "Human Capital" programs

In early 2019, Mersen presented its six major "Human Capital" programs. Each program is sponsored by one or more members of the Executive Committee and sets out to strengthen the Group's strategy to promote a culture where people are the bedrock of the Group and its business development.

The six major programs are:

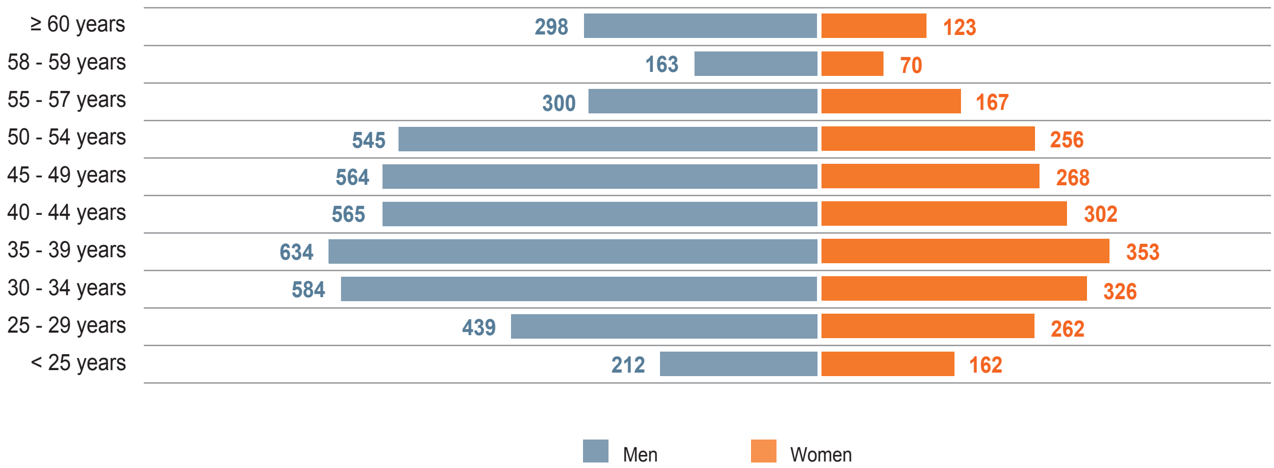
- *Strengthening our culture and our values*
- *Consolidating our expertise*
- *Transforming our management culture*
- *Developing our project culture*
- *Improving employee induction*
- *Promoting diversity and gender balance*

Workforce mapping

Workforce	2019		2018	Difference
Europe	2,411	36%	2,361	+50
Of which France	*1,364*	*20%*	*1,320*	*+44*
North America (including Mexico)	2,033	30%	2102	-69
Asia-Pacific	1,796	26%	1,782	+14
Rest of the world	564	8%	672	-108
TOTAL	**6,804**		**6,917**	**-113**

Workforce	2019		2018	Difference
Engineers and managers	1,592	23%	1,325	+267
Technicians and supervisors	1,366	20%	1,083	+283
Employees	307	5%	556	-249
Operators	3,539	52%	3,953	-414
TOTAL	**6,804**		**6,917**	**-113**

The age pyramid is well balanced with the average age of Group employees being 41.9. Senior staff over 55 years of age make up 16% of headcount, unchanged from 2018.



Workforce	2019
Permanent employment contracts*	5,210
Fixed-term employment contracts*	1,594
TOTAL	**6,804**
HRIS scope temporary contracts (average annual FTE)	672

** HRIS scope*

Movements during the year

Workforce 2018	6,917
Scope	+44
Hires*	+1,542
Terminations*	0
Other departures*	-1,619
Adjustments	-80
WORKFORCE 2019	**6,804**

** HRIS scope*

Changes in scope are related to the integration of acquisitions made over the year (AGM Italy and Columbia).

Recruitment occurred primarily at US sites and sites exposed to strong-growth markets (Holytown, Gennevilliers, Songjiang) and also included the replacement of outgoing employees and seasonal hires (notably in China).

Adjustments are for errors identified at site level that cannot be changed after the fact. They are acceptable because they represent approximately 5% of movements observed throughout the year.

The absenteeism rate was 3.3% vs. 2.8% in 2018.

Initiatives

Values shared by all

Excellence, Collaboration, People-conscious, Agility & Entrepreneurial spirit and Partnering with our customers: these five values defined in 2016 are the result of a joint effort involving managers and the human resources community. They are the cornerstones of a Group culture that is strong, recognized and attractive because of the level of trust and responsibility given to employees.

Starting in 2016, information workshops were held across Mersen sites to allow employees to take better ownership of these values. A subsequent survey conducted globally made it possible to **compare these values with those encountered by staff** on a daily basis, as well as with those they aspire to for Mersen's future. Based on this local and global vision, indicators were defined for each site (human potential success rate, pride of belonging, alignment with values, alignment with duties, rate of commitment, quality of action plans), together with actions plans. The new survey conducted in 2018 confirmed this vision and revealed a rise in the human potential success rate.

In summary:

- The human potential success rate was 83% in 2016 and 85% in 2018.
- In 2018, 89% of employees stated that they were proud to be part of the Group.

New recruit integration program

To allow every new recruit to quickly find their feet and take ownership of the Group culture, Mersen developed the mandatory integration program called "I Become Mersen". It starts on the first day on the job: the new recruit is given a **welcome booklet and kit** containing all the information he or she needs to learn about the Group. The program is then adapted to the profile of each new recruit.

While the appointment of a mentor is optional according to the site and position, all new-comers receive **internal training** – classroom and elearning – covering safety, the Group's Code of Ethics, etc.

Engineers and managers take part in a specific training course that includes project management at Mersen and an overview of the Group's management framework. They also attend a **two-day integration seminar**, the "New Comers Event", during which Group directors present the Group and its activities, and participants visit industrial sites to learn about topics like safety and operational excellence.

Mersen also implemented a specific integration program, "We Become Mersen", for **new employees joining the Group as part of an acquisition**. The adapted program focuses on human, social and cultural aspects.

In summary:

- A mandatory integration program, "I Become Mersen".
- Training on safety and the Group Code of Ethics for all.
- A seminar dedicated to engineers and managers, "New Comers Event", organized in 2019 in all the regions in which Mersen operates: America, Europe and Asia.
- Adaptation of the program for acquisitions: "We Become Mersen".

Diversity: collaboration based on the respect of local cultures

Present in 35 countries and on four continents, for many years Mersen has made the diversity of its teams' origins, training, cultures and ways of thinking **one of its quintessential strengths**. This very diversity is what drives collaboration between teams and sparks creativity so that Mersen can better understand the needs of its customers around the world.

To preserve this diversity, Mersen's corporate culture inspires **mutual respect and recognition of the intrinsic value of each individual**, whatever their origin, and **combats all forms of discrimination**. Human Resources strives to ensure equal opportunities at every level, while maintaining and strengthening the multi-disciplinary capabilities of teams.

As a member of the United Nations Global Compact, Mersen is committed to eliminating all forms of discrimination in employment and occupation around the world. It also defends this cause within various organizations and regularly discusses best practices with other companies.

Success and close relationships through local management: While Mersen enjoys strong corporate culture, it needs to adapt to local cultures to be truly effective. This is why virtually all the Group's sites are run by local managers. This balance of respecting Group principles and values and recognizing local realities is what lends substance to the Group's human dimension.

Industrial sites	2019	Sites with a workforce of above 125	2018
Europe	23	6	22
Of which France	8	4	8
North America	14	4	13
Asia-Pacific	13	3	13
Africa and South America	5	2	5
TOTAL	55	15	53
Site managers with local nationality	89%		90%

Community involvement

The Group influences local and regional development because it has facilities around the world. It promotes local initiatives implemented by local teams, while also making sure these initiatives comply with the Group's values and Code of Ethics.

Local teams take part in economic (with local partners) and charitable initiatives alike.

- **An active role in competitiveness clusters:** in France, Mersen actively participates in competitiveness clusters, which bring together groups of companies and institutions in a clearly identified geographic area and to focus on a specific topic.
  - Mersen Boostec, located in the Midi-Pyrénées region, belongs to the European ceramics cluster (*Pôle Européen De La Céramique*) and Aerospace Valley (aeronautics, space and embedded systems). The Group also works with PRIMES, a local power mechatronics and energy management innovation platform, and is a member of the European center for innovative procedures (*Maison Européenne des Procédés Innovants* – MEPI) and the Technacol platform (adhesives engineering).
  - Mersen Angers is a member of S2E2 (Smart Electricity Cluster), a competitiveness cluster specialized in renewable energies, electrical grids and energy efficiency.
- **Initiatives supporting projects that reflect Group values:** in all the countries where the Group operates, management and staff are involved in charitable work.
  - It offers merit-based scholarships to students in South Africa, South Korea and at its Toronto and Dorion locations in Canada.
  - In South Africa and Brazil, sites help provide bikes to children and young adults to make it easier for them to get to school or work.
  - In India, Mersen funds an organization that provides training to vulnerable young women and supports employees' families by providing access to training that could open up the job market.
  - The Chongqing site in China helps distribute books and materials to a school in a remote area.
  - Most of the Group's sites around the world donate to or organize collection drives for local charitable organizations (cancer or Alzheimer's research, children's homes, retirement homes, etc.). Some work together to support local charities.

In summary:

- Equal opportunities and combating all forms of discrimination are at the heart of Mersen's approach.
- Member of the United Nations Global Compact since 2009.
- Site management entrusted to local managers.
- A commitment to developing the regions where the Group operates.

Gender balance: ensuring equality in the workplace at all levels

The Group's primary objective, the **integration of an increasing number of women in all roles**, including roles in production, has over many years led to several initiatives in recruitment, professional development, communication, raising the awareness of managers, compensation, maternity/paternity leave, organizational changes, adaptation of workstations, etc.

	2019	2018
% of women in the Group's workforce	35	36
% of women in senior management*	29	27
% of women managers and executives	23 (1)	20

** Board of Directors and Executive Committee.*
(1) In 2019, this figure was restated for all movements caused by internal reclassification, which should be analyzed at the Group level.

In 2018, Mersen set the target of employing **25% to 30% women managers and executives** by 2022. To this end, the Executive Committee is therefore closely monitoring the action plans initiated at Group level and in its two segments. A Diversity Committee was created in 2019. It includes four members of the Executive Committee and is intended to strengthen the Group's approach to diversity, either through direct measures or by proposing initiatives to the Executive Committee that are aimed at promoting women. The Committee supports local initiatives, especially through the Mersen WiN women's network.

Special attention is given to bottom-up feedback in order to **better identify any problems encountered by women** that hold them back in their professional development, and to better coordinate among the different countries and segments.

Agreement in favor of professional equality: at the start of 2019, management and all union organizations renewed their commitment to gender equality in the workplace by signing a new three-year agreement. This agreement sets the rules for hiring, such as requiring that candidates of both sexes be considered for a position, and is meant to improve work-life balance.

WiN (Women in MerseN): created in 2010, the WiN network brings together male and female Group employees who want to work together to promote cooperation and mutual assistance, encouraging growth through greater diversity. WiN gives employees the opportunity to meet and reflect on these matters outside the managerial structure, and aims to become an international network within the Group that can take part in inter-company events. After the launch of a network in France several years ago, a Europe-wide network was launched in 2019 and held a meeting in Barcelona in November.

Diversity training: the Group has developed diversity training that will be given to all managers in 2020.

Integration: a workplace suited to disabled workers

Mersen's disability policy is part of an **overall policy of fostering diversity**. The Group also regularly subcontracts with sheltered work agencies in France (ESAT) and equivalent entities in other countries.

In addition, several specific initiatives were run in a number of countries:

- **France**: a partnership was formed with ARPEJEH, a non-profit organization supporting educational projects for disabled school-age and university students. It provides an opportunity to accommodate disabled people and give them an introduction to the business world. It can also help them prepare to look for an internship or write a resume. Mersen Amiens works with a sign language institute to facilitate communication with one of its hearing-impaired employees.
- At Saint Bonnet de Mure, specific training and customized follow-ups have been set up for disabled employees to help integrate them into the work force and develop their skills. Comparable initiatives are being carried out on sites in Milan, Italy, and M'Ghira, Tunisia, which works closely with one of Handicap International's local partners.
- **India**: Mersen works with EnAble India to train its staff on how to accommodate and work with disabled colleagues. The site welcomes employees suffering from serious disabilities into its production unit.
- **Canada**: Mersen Canada prepared a facilities access charter for its disabled employees and customers.
- **Turkey**: the Mersen Gebze site re-fitted its work areas to facilitate circulation in the facility, including for people with reduced mobility.

10,000 companies for inclusion and integration

In December 2019, Mersen Boostec joined the French Ministry of Labor's "10,000 companies for inclusion and integration" (10 000 entreprises pour l'inclusion et l'insertion) *plan, which aims to encourage businesses to hire vulnerable workers. In this respect, the site had already committed to organizing a factory visit for young job-seekers, hiring interns from low-income communities and carrying out specific initiatives for people with disabilities (two people were hired in 2019). In 2019, the site also participated in a locally organized initiative aimed at helping people without diplomas be recognized for their skills. This initial experiment was a success, as it introduced Mersen to a highly motivated candidate who was hired under a professional training contract in July after completing a machining internship with the Company.*

Labor relations: putting the spirit in team spirit

Labor relations is a core component of Mersen's human resources policy. It forms part of a process of **continually seeking a balance between economic and social imperatives** and is adapted to all levels of the Group and in all its countries of operations – giving the utmost respect not only to Mersen's values and ambitions, but also to the local cultures and history of each site.

- **Europe**: Dialog with employee representative bodies at French and European level takes place at meetings of the Group Committee and the European Works Council respectively. Mersen's situation and its strategic priorities are discussed at these meetings, which complement existing employee representative consultation and discussion bodies within the Group's companies. In France, yearly meetings are held with each union organization.
- **United States**: The St. Marys plant has worked with an external union for many years discussing wages, working and employment conditions, and employee benefits. The unions meet on a regular basis to address issues of common interest in order to ensure alignment with mutual interests. The last contract was signed in 2019 for a term of three years.

- **Canada**: Since its creation in the 1960s, the Mersen Dorion subsidiary has a formal union accreditation by virtue of a contract that is signed every four to five years between Mersen and the union organization, United Food and Commercial Workers (UFCW). The contract covers several areas (wages, profit sharing, working conditions, health and safety, public holidays, etc.) and was renegotiated in 2019 for a further five years, i.e., until 2024.
- **Brazil**: Mersen's staff representative bodies take part in various annual renegotiation discussions (wages, profit sharing, hours banking systems, etc.). Two committees, CIPA (health and safety) and PPR (profit sharing), also regularly oversee the Group's performance. Employees are also convened by senior management four times a year to discuss company strategy, market conditions and the performance of Mersen do Brasil.

Employment, training, learning: Mersen, partner to schools and universities

Mersen cultivates ties with the schools and universities in all its countries of operation in order to introduce young people to its sectors of activity and operations. As a strong advocate of learning, the Group is actively involved in **training the talents of tomorrow by awarding scholarships and welcoming young people at its various sites** through work-study contracts, internships or orientation visits. Several initiatives have been run locally to encourage the professional reintegration of people without access to employment.

- **France:** The Industri'Elles event held on May 10, 2019 at the Pagny-sur-Moselle site welcomed approximately 30 young women from the Louis Vincent High School in Metz in an effort to change the industry's image and attract more women for engineering or executive positions. The St. Bonnet de Mure site welcomed a class from the school of mining in cooperation with the site's WiN network.
- **United Kingdom:** the Teesside site launched a partnership with the local university that combines research projects with student internships. This has led to the Company hiring two engineers in the last two years. Two Science, Technology, Engineering and Mathematics (STEM) representatives in the Teesside and Holytown teams were also encouraged to spread the word in schools and universities.
- **India:** Mersen continued its partnership with Skill India. At this point it has welcomed 60 apprentices through the program, which helps young people acquire operational skills over three years while continuing their studies. The site runs a number of initiatives in partnership with schools and universities. These include plant tours, helping students with specific projects and career counseling for employees' children.

Mersen machining school

Created to address the difficulty in recruiting high-precision machining specialists, Mersen's in-house school at the Gennevilliers site offers a seven-month work-study certificate program in partnership with AFORP, a professional training body. Chiefly geared to job seekers, the program is also open to Mersen employees, allowing them to earn an additional qualification. Since it was established, 34 people have been trained, including 14 who were hired on permanent contracts and two on temporary contracts.

Objectives	2019	2021-2022
Develop and retain our expertise through an organization that promotes collective intelligence	23% of women managers +3 points vs. 2018	Human potential success rate of 88% (+3 points vs. 2018) by 2021 25% to 30% women managers and professionals by 2022

2. Encourage skills development

Mersen's strategy and commitments

Mersen operates in extremely complex and highly competitive sectors and owes much of its success to the **expertise of its teams and skills of its employees**. To retain its talent and attract new talent while adapting to the technical and technological developments of its markets, the Group established a human resources policy focused on continuing professional development. This is a forward-looking approach to employment that allows Mersen to make the necessary changes to maintain its reputation as a leader.

In summary:

- A proactive policy for continuing professional development.
- Supporting the professional development of employees in order to retain them and help them to continue to grow.
- A deep transformation of the management culture.
- A desire to attract new talent in order to continue to adapt to changes in the market and build on the expertise of the teams to continue to offer high-quality products.

Training (average number of hours per employee)	2019	2018
Group	13.7	12.2
Mersen Academy (E-learning platform)	*4.7*	*1.8*
France	14.8	13.3

HRIS scope

Mersen Academy objectives

- *Streamline training through e-learning.*
- *Support staff in their personal development and employability efforts.*
- *Integrate new hires into the core of Group training processes more easily.*
- *Systematically offer training programs on basic themes, such as safety, quality, ethics and management.*
- *Reduce training costs.*
- *Promote interactivity and collaborative work within the Group.*

Initiatives

Project management and cross-business coordination: a shared method

Be it acquisitions, industrial adjustments or major investments, Mersen carries out major projects throughout the year. The successful execution of these complex projects relies on the use of a **shared management method**, the Global Project Standard (GPS).

In 2015, the methodology was revised by a working group comprising operational employees from the various business lines and project management experts. Group training and deployment methods were also reviewed.

E-learning: An e-learning module on the GPS method is used to familiarize employees with the broad guidelines and methods. It has been mandatory for new engineers and managers since 2016 and can be rounded out with in-depth classroom training given by in-house experts. In 2018, this training was complemented by role playing exercises.

Ambassadors: Thirteen ambassadors in charge of providing methodological support to the project teams were certified by the business segments and the Company's principal operating regions. They ensure that the GPS culture is applied and respected across the Group, assist and train project managers and their teams, and answer any questions they may have.

Open Manager: increasing quality of management

Faced with a changing, fast-moving world, Mersen has chosen to adapt its management culture through its Open Manager framework. Open Manager sets out the **management behaviors that are expected** throughout the Group management structure for corporate executives, middle managers and supervisors. It is broken down into five areas: Working with Everyone, Communicating and Making Sense, Motivating and Developing Employees, Building the Future, and Achieving and Raising Standards.

Identification of skills: Going forward, the decision to assign an individual to a management position will be based on the new managerial skills identified. The Group has decided to combine the internal promotion approach with external hires in key roles such as expertise area executives, business managers and product line managers.

Training: Mersen launched its "Management Fundamentals" training course in 2018 aimed at the entire Group management community. The purpose is to revisit the fundamental practices that managers need to apply in order to effectively manage their teams on a daily basis. At the end of 2019, 496 managers had obtained internal certification.

Personal development: Group senior management have access to a personalized development program. It uses 360° and Hogan-type assessments to draw up a development plan with the help of an executive coach. In 2017, these personalized programs were completed with coaching for the management teams throughout the year.

Career development: opportunities for every profile

Mersen's global dimension provides employees with genuine career development opportunities. The Group has demonstrated its desire to encourage exchanges between its various segments and geographic areas **by prioritizing mobility and the international diversity of managers**. This international mobility policy is underpinned by a desire to develop local talents and recognize skills, wherever they may be. This approach allows Mersen to encourage responsiveness to customers and foster growth and innovation.

Career committees provide the opportunity to assess the career outlooks of key managers in each of the businesses and to prepare individual skills development plans on a yearly basis. These reviews are conducted at facility and segment level and help to identify key and/or high-potential employees for review by the Management Committee's Talents Committee. These committees contribute to improving succession planning in the same way as experience interviews.

Evaluations: Individual evaluations are held for senior managers or other experienced managers who are expected to be promoted to a key management position in the short term. The aim is to check the suitability of the potential promotion and draw up a personalized development plan, which will also help employees succeed in their new role. Since 2018, evaluations for emerging talent have also been organized.

Managing human resources for the future

While the Group is preparing its future by identifying the skills it will need to ensure its growth going forward, employees also need to be aware of likely changes in their jobs so that they can **actively improve their own skill set**.

To this end, each business performs an annual forecast of the skills it will need in the medium term, based on strategic workforce planning and in step with its priorities and those of the Group. This analysis is consolidated at the Group level, based on Mersen's benchmark job framework.

Group job map: Updated annually, it identifies and describes, for each of the 11 job fields (sales, marketing, business, R&D, production, production support, sourcing, information systems, human resources/safety/general services, finance and legal affairs, and business process owners), the 95 Group benchmark jobs shared by all segments. This job map, along with challenges, specificities and associated skills, is used to increase the effectiveness of the Group's HR policies (hiring, mobility, training, etc.) and narrow down the types of skills in demand during the hiring phase.

Open Expert: Mersen's community of experts

To ensure the Group's development, and in particular to strengthen its technological excellence, Mersen set up **an expertise career path called Open Expert**, in parallel with its management path. It includes experts chosen for their key expertise in the Group's strategic segments, as well as for certain behavioral skills.

These specialists are volunteers who in addition to their expertise are especially skilled in **sharing know-how** and galvanizing their colleagues to **help move the Group forward**. Three levels were defined (experts, senior experts, executive experts) and 20 Open Experts had been appointed by the end of 2019, forming the foundation of a community dedicated to spreading the Group's culture of expertise.

Knowledge transfer: preparing for retirement

Planning ahead for departures linked to demographic trends in the Group's workforce is instrumental to the Group's human resource planning policy and is closely monitored in all countries. This includes training young people and keeping more senior employees on, often by appointing them as mentors to build bridges between generations and encourage skills transfer.

Hiring, integrating and training young people: In France, despite the expiry of the *Contrat de Génération* action plan, Mersen has upheld its commitment to hire young people on fixed-term contracts while maintaining positions for senior employees. Mentors/subject matter experts are appointed to monitor young recruits and guide them through their arrival at the Company.

Retirement: All employees likely to retire within two to five years are eligible for an "experience interview" aimed at reviewing the departing employee's knowledge and key skills and arranging a transfer of these skills. The interview also serves to adapt the final phase of each employee's career to ensure it remains interesting and as useful as possible. Managers are eligible to receive training on how to prepare for these interviews, which help improve succession planning.

Mentoring: Highly motivated employees with expertise in a key area for the Group may be asked to become expert tutors. This kind of mentoring ensures the proper transmission of professional knowledge, which concerns everyone including experienced managers, engineers, technicians and operators.

Tools for better supporting and managing teams

Mersen offers its managers a **range of tools to help with managing teams and providing personalized support to every employee**.

Annual evaluation: The annual evaluation is a key element of the skill development process and is an ideal opportunity for discussion between employees and their direct manager. In addition to measuring individual performance and setting new targets, the evaluation is also an opportunity to assess current and upcoming skills development. If necessary, a mid-year evaluation can be held in addition to the annual evaluation.

To ensure the success of the annual evaluations, Mersen has developed an application in its Human Resources Information System (HRIS) that includes online forms. Managers around the world can familiarize themselves with these annual evaluations via training on the Mersen Academy platform.

SIRH objectives

- *Support managers in managing their team.*
- *Strengthen workforce monitoring with reliable, relevant indicators.*
- *Manage compensation systems.*
- *Streamline information processes and flows from the countries where the Group operates.*
- *Deploy the HR strategy throughout all Group subsidiaries.*
- *Promote Group culture and develop a strong Group identity.*

Career reviews are another tool providing a full analysis of employees' professional accomplishments, helping them to formulate their expectations and goals for the medium term. They also provide an opportunity for managers two tiers up to have direct contact with employees and to listen to their aspirations. Career reviews can also be offered during Career Committees or at the mid-point of an employee's career to see how the land lies.

Key findings report: Since 2018, at certain sites every new employee prepares a key findings report after their first three months. This is part of the Group's continuous improvement process and is an opportunity to assess employees' level of integration, and receive any questions and feedback. The information is then used by each site to further develop their own continuous improvement programs.

Continuing education: Mersen has been expanding access to its e-learning platform to its employees worldwide since 2013. In addition to general training and customized vocational training, the online training platform Mersen Academy helps develop the skills of the Group's employees and support their professional development. The Group also promotes qualifying training programs via joint qualification certificates in its business areas, such as metallurgy and chemistry, as well as training leading to certification with KEDGE business school. It also provides access to mandatory compliance, safety and ethics training.

In 2019, the Group certified 420 managers worldwide (496 since the training course was launched) as part of the "Management Fundamentals" program and opened several new training courses on Mersen Academy, including an online module on anti-trust compliance, risks and practices. A total of 14,900 hours of training were logged on Mersen Academy in 2019, a significant increase on the previous year. Over 3,000 employees worldwide have access to the e-learning platform.

Exit interviews: In 2018, Mersen introduced specific interviews for employees who choose to leave the Group in order to better understand their reasons and get an overview of their career with Mersen. These interviews aim to identify any potential issues and implement appropriate measures in order to better retain talent.

Objectives	2019	2021
Accelerate managerial transformation thanks to the Open Manager training program.	496 managers trained (51%) of which 420 in 2019	100% of managers having completed the Open Manager programs.

3. A motivating compensation policy

Employee compensation policy

The compensation policy implemented by the Group includes a multitude of measures for employee motivation and satisfaction. A distinction is made between direct compensation, which is money paid to employees, and non-monetary compensation, which comprises welfare benefits.

The components of compensation set out below may not yet all be in place in all countries and Group subsidiaries. However, efforts have been underway for several years now to gradually harmonize these components when applicable legislation and financial resources allow.

Direct compensation is composed of the following:

- Basic salary: the fixed amount of compensation that corresponds to the position occupied. A basic salary must be competitive and fair, both within the Group and in relation to market practices. Mersen ensures that salaries attract and retain as many employees as possible. Competitiveness surveys make it possible to analyze, on an annual basis, salary competitiveness in a particular market.
- Annual bonus: paid to eligible employees for group and individual performance and based on annual targets, whose composition and achievement criteria are reviewed annually.

- Profit-sharing: mandatory in France under profit-sharing legislation and supplemented by incentive agreements in each of Mersen's French subsidiaries. Profit-sharing is also offered to employees in a large number of Mersen's host countries. In 2019, 52% of Mersen employees around the world received a bonus under the profit-sharing scheme.

The welfare benefits offered by the Group, aside from legal and obligatory benefits, are as follows:

- Health care: the Group covers, either directly or by means of contributions paid to an insurer, all or part of the health care costs incurred by employees. In general, employees also contribute to the costs.
- Benefits plan: ensures the continued payment of the employee's salary in the event of a long-term illness. In the case of disability, the benefits plan provides employees with an income or lump sum to compensate their loss of income. In addition, some plans provide for the payment of a lump sum to beneficiaries in the event of an employee's death. The employer funds all or part of the plan; in the latter case the employee also contributes to the costs.
- Retirement: Mersen, with the participation of employees in some cases, contributes to retirement plans which complement compulsory schemes. These additional retirement plans are increasingly defined contribution plans. Mersen's policy aims to maintain the replacement rate (i.e., pension paid as a percentage of the last salary received before retirement). If necessary, Mersen offers to set up a supplementary retirement plan. As such, in 2020 two supplementary retirement plans will be created, to be co-financed by the employer and the employee: one for the German subsidiaries and the other for the Spanish subsidiaries.

Changes in direct compensation in 2019

Basic salaries

At Mersen, an employee's basic salary, which is a core component of their compensation, is reviewed yearly. The increases allocated take into account the needs expressed by each entity and make it possible to at least offset the annual inflation of living costs. In 2019, the average rise was 4% compared with the previous year for the Group as a whole.

Yearly bonus

The yearly bonus, which is a major component of variable compensation, consists of three schemes, each of which corresponds to a specific employee category. The first is for Group senior managers and the second for other managers. Lastly, the sales force benefits from a bonus that emphasizes the achievement of individual objectives: 70% of the total bonus corresponds to sales. If annual sales targets are exceeded, this maximum rate may be increased. The ratio for exceeding the maximum rate for individual objectives can reach 2.15, i.e., more than 150% of the total bonus.

As of 2017, Mersen has added a collective objective that is common to all bonus schemes. This objective is the Group's operating margin before non-recurring items. Its weighting is identical, irrespective of the type of bonus, i.e., 30% of the total bonus. The objective to be achieved with regard to the operating margin before non-recurring items is set yearly. If this objective is exceeded, an additional amount is paid to all employees who are eligible for a bonus scheme. This supplementary amount ranges from 1 to 1.4 times the maximum rate allocated to the operating margin before non-recurring items, i.e., at most 42% of the total bonus.

In addition to Mersen's bonus schemes, some countries implement variable compensation schemes that are open to some or all employees. These schemes correspond either to local bonus or profit-sharing schemes. It should be noted that local bonuses for employees who do not benefit from Mersen's bonus schemes are in place in some of Mersen's Chinese and Indian facilities.

Profit-sharing

Apart from France, profit-sharing is implemented in certain countries, such as the United States, Canada, Mexico, the United Kingdom, Spain and Turkey, through profit-sharing schemes, which benefit either all employees or those who do not benefit from the Mersen bonus schemes. In China, Mersen decided to gradually implement a profit-sharing system as of 2019.

Diversity of the welfare benefits offered

The welfare benefits offered to Mersen employees cover various areas, such as health care, benefits and pension plans.

In France, Mersen has offered employees in all subsidiaries standard supplementary coverage for health costs since 2012. Mersen decided to offer employees additional coverage in order to maintain the same levels of reimbursement as those prior to the implementation of the "responsible" contract, which capped reimbursements under certain circumstances. Joining this scheme is optional. The supplementary coverage is fully charged to employees.

At 69 of its subsidiaries, Mersen offers the following supplementary schemes:

- Healthcare: 45 subsidiaries
- Benefits: 30 subsidiaries
- Retirement: 43 subsidiaries

4. Health and safety: a constant priority

Mersen's strategy and commitments

Mersen **pledges to provide the best possible work environment for the well-being, health and safety of its employees.** Since the Group is convinced that all accidents can be avoided and every risk preempted, it has made the quest for health and safety excellence in the workplace a constant priority.

Its health and safety strategy is built on manager engagement, hazard and risk assessments, safety rules, training, observations and incident analysis. Mersen will continue to improve the work environment for its employees by following prevention plans and measuring health and safety performance.

In summary:

- Commitment to the health and safety of managers
- Risk assessment by employees
- Safety rules, training and observations
- Incident analysis

Initiatives

The Group's health and safety program takes a proactive approach to its work environment in order to identify and eliminate any hazards that could harm people's health or cause injury.

Organization: Updating the management system

The **health and safety management system** was updated in 2019 to simplify it, strengthen employee involvement and introduce an annual review of the health and safety program. It is based on the Executive Committee's written commitment sent to all employees and includes the following components:

- Structure, objectives and safety steering committees.
- Engagement from managers, health and safety indicators and the annual prevention plan.
- Risk assessments, compliance with regulations, sub-contractors' prevention plans and health protection.
- Golden rules on safety.
- Program awareness, training tailored to different sites and roles and an emergency evacuation procedure.
- Observations, safety visits and audits.
- Incident analysis and potentially dangerous events.

The HSE Committee, comprises the Chief Executive Officer, the Human Resources Department, the Operational Excellence Department and the heads of both the Group's segments. The Committee oversees all environmental and health and safety actions and indicators at Mersen and meets on a monthly basis.

The Group's Health & Safety, Environment and Industrial Risks function reports to the Operational Excellence Department and oversees the implementation of the Group's health and safety program at all manufacturing sites.

Mersen site managers are responsible for implementing a safety management system that is effective, compliant with regulations and adapted to the local activity. Site managers must appoint a Health & Safety manager to oversee these actions who reports functionally to the Health & Safety, Environment and Industrial Risks function.

Site Health and Safety Managers are in charge of site action plans, coordinating activities and measuring progress. In 2019, 73% of sites had a Health and Safety Manager, compared with 70% in 2018.

Regional Health and Safety Coordinators (for Northern Europe, Southern Europe, China, India, North America and South America) conduct cross-audits within their scope where a Health and Safety Manager from one site reviews how the safety management system is implemented at another manufacturing site. These coordinators also monitor regulatory developments in their respective operating regions.

The **Safety Council** is made up of the Operational Excellence Department staff, Industrial Directors from each Business Unit and the Regional Health and Safety Coordinators. Its role is to implement and maintain the health and safety management system at all sites and organize health and safety audits.

Audits: Each year, the Executive Committee draws up a program of corporate audits for the Group's different sites. These are carried out by the Health & Safety, Environment and Industrial Risks function and are in addition to the cross-audits. All audits combined covered 75% of the Group's sites in 2019, compared to 66% in 2018. **The Group continues its efforts to make sure each site undergoes an annual audit.**

Health & safety audits	2019	2018
Percentage of all Group sites subject to corporate audits and cross-audits	75%	66%

OHSAS 18001 or ISO 45001 certification: At the end of 2019, 29% of sites were certified to OHSAS 18001 or ISO 45001, the recognized global standard for environmental management systems, up from 23% in 2018.

A shared health and safety culture

Mersen's health and safety policy owes its effectiveness to the **involvement and awareness of the people working on its sites, be they employees, temporary staff or sub-contractors.** The Group has set up training on these subjects and regularly organizes on-site themed events to highlight the best practices. Strengths and wins in accident prevention are also shared within the Group.

Safety performance indicators have included temporary staff in accident rates since 2011 and sub-contractors since 2019. These two groups are monitored closely as they are less familiar with equipment and associated risks than Group employees.

The frequency rate of occupational accidents with or without lost time (Lost-Time Injury Rate, or LTIR, and Total Recordable incident Rate, or TRIR) measures the number of reported accidents per million hours worked, and the Severe Injury Rate, or SIR, measures the number of days of lost time per million hours worked.

In 2018, the Group set itself targets for 2021 of an LTIR of 1.4 and an SIR of 60. Results for 2019 are on track with meeting these targets.

Rate of accidents per million hours worked	2019	2018
Lost-Time Injury Rate (LTIR)	1.4	1.5
Total Recordable Incident Rate (TRIR)	3.4	4.1
Severity Injury Rate (SIR)	64	71

Training: Health and safety training for new and temporary staff comprises three complementary components: a mandatory presentation on health and safety in the Group, also available as an e-learning module and in many languages, a specific presentation at every site on each facility's general health and safety rules and procedures, and a specific presentation on the risks and appropriate procedures for the workstation. The number of hours of training increased by 21% between 2018 and 2019.

Health and safety training	2019	2018
Hours	52,115	43,180

Risk assessment and safety visits: At the end of 2019, 97% of manufacturing sites had carried out the risk assessment within the previous 12 months (100% in 2018), and 90% of them had completed the job hazard analysis, or JHA (88% at end-2018). Management safety visits, or MSVs, are a useful way to open up discussions with employees about workplace safety. Mersen aims to **increase the number of its sites by 15% between 2018 and 2021.** As part of that objective, the Group updated the MSV procedure and introduced training for all management committees at manufacturing sites. Quality dialogue with employees and immediate corrective action are emphasized to maintain safety culture on the ground for those affected most.

Management Safety Visits (MSVs)	2019	2018
Number of safety visits	4,639	4,124
% progress	*+12.5%*	

Awareness: A "safety week" is held every year at nearly all Mersen manufacturing sites. These awareness-raising events, which help foster a safety culture and feature themed workshops and guest speakers (emergency services, ergonomics experts and health professionals), are a great success with employees. Other than safety in the workplace, health, food hygiene and the risk of domestic accidents are also addressed.

Safety Awards: Mersen gives out awards to manufacturing sites that have logged a record number of days without lost-time accidents. At the end of 2019, the results were as follows:

- 3 sites with more than 4,000 days.
- 5 sites with more than 3,000 days and less than 4,000 days
- 7 sites with more than 2,000 days and less than 3,000 days
- 13 sites with more than 1,000 days and less than 2,000 days
- 10 sites with more than 500 days and less than 1,000 days

Understanding health risks

Identifying workers' exposure to health hazards is more complex than identifying safety risks. The risks may involve substances hard to feel, or they may not immediately affect the individual's health. In updating its health and safety management system in 2019, the Group expanded health protection measures focused on the following areas:

- Chemicals
- Noise and dust
- Workstation ergonomics

- Medical supervision of workers, in particular symptoms of stress and musculoskeletal disorders, or MSDs.
- **Preventing chemical risks:** All products and substances that come on to Mersen's manufacturing sites are authorized and monitored by the site's Health and Safety Managers. Risk assessments are requested regularly from both internal and external medical services. Periodic air quality checks are conducted in line with legal requirements. The information is then included in the risk assessment. The Group is pursuing its education and training efforts initiated several years ago about exposure to polycyclic aromatic hydrocarbons (PAHs) at facilities producing graphite products.
- **Noise and dust:** The Group has a constant concern to protect its employees and local residents from noise caused by machinery and transportation sources. First and foremost, the Group aims to comply with regulations in the countries where it operates. It consistently seeks to eliminate the source of noise. However, if the source cannot be eliminated, protective measures are taken. Noise sources are measured and analyzed to determine sound levels. Depending on local restrictions, sound levels are measured as far as the site's boundaries and surroundings if it is located near a residential neighborhood. This was the case, for example, for the Gennevilliers site near Paris, located in a dense urban area. Pumps were also replaced to reduce the level of sound emitted.
- Dust is primarily emitted during the processes to transform graphite and to fill fuses with sand. Graphite dust collection systems are monitored closely in line with regulations under a priority preventive maintenance program.
- **Workstation ergonomics:** MSD prevention and load carrying rules are two priority focuses to improve ergonomics. Multidisciplinary working groups have been formed to adapt workstations, with the help of ergonomics experts at some sites.

Occupational illnesses: The scope is limited to France due to a wide variety of definitions for occupational illness across the Group's host countries. Occupational illnesses within the Group mainly concern MSDs.

Employees suffering from an occupational illness	2019	2018
Number of employees	6	6

Objectives

- Health and safety of employees

2019

- 12.5% increase in safety visits from 2018
- LTIR = 1.4
- SR = 64

2021

- Increase the number of safety inspections by 15% from 2018 levels.
- Attain a lost-time accident frequency rate (LTIR) of less than or equal to 1.4.
- Attain a lost-time accident severe injury rate (SIR) of less than or equal to 60.

Protecting the Group and its reputation

1. Ethics & Compliance

Strategy and commitments

Mersen's development is driven by shared and mutual trust in all its stakeholders, be they employees, customers, suppliers, banks or shareholders. This is reflected **through values and ethics that are shared by all its employees** and applied responsibly on a daily basis at all levels, from site management and human resources relations to financial transparency, anticorruption and, of course, an ambitious sustainable development policy.

Organization

Set up in 2017, the Ethics and Compliance Department develops and coordinates the Group's ethics and compliance policy effectively and sustainably.

The new function is tasked with (i) identifying and assessing any risks of non-compliance with laws or regulations which would damage the image, culture or financial stability of the Group, (ii) implementing appropriate procedures and processes to minimize such risks, (iii) informing and raising the awareness of Group employees of the main risks; and (iv) managing the "ethics hotline".

It supports the development of the Group's ethics culture and dedicated tools, and ensures that decisions are properly implemented. In the event of an ethical and/or compliance related alert, the Committee is tasked with analyzing the situation and deciding on the measures to be taken. The Ethics and Compliance Department also works with:

- The Human Resources Department to prevent illicit work and harassment, protect whistleblowers, ensure compliance with labor laws and train employees.
- The Legal Department to ensure that regulations are interpreted properly.
- Internal Audit, which takes compliance issues into account in its audit program and guidelines.
- Specialized committees (CSR, MAR, HSE, etc.) that deal with compliance.

A compliance newsletter is issued every quarter to raise awareness about compliance issues throughout the Group. In 2019, the newsletter's main topics included regulations on embargoes, the General Data Protection Regulation (GDPR) and France's anti-corruption legislation (Sapin II Act).

The Group Vice President for Audit, Risk and Compliance reports on the work of the Ethics & Compliance function to the Audit and Accounts Committee at least once a year.

This work is supervised by an Ethics and Compliance Committee comprising the Chief Executive Officer, the Chief Administrative and Financial Officer, the Group Vice President for Human Resources and the Group Vice President for Audit, Risk and Compliance.

The role of this Committee is to:

- Guide the Group's Ethics and Compliance function.
- Approve the options proposed.
- Ensure that the tools chosen are correctly rolled out.
- Analyze and steer measures taken in response to ethics or compliance alerts.

The Committee meets every quarter and whenever necessary following an alert. Once a year, the Committee calls on an external firm to issue an opinion on the Group's compliance policy.

Guidelines

The Group has implemented several charters and procedures to clearly define rules. The first of these documents is the Code of Ethics, which is supplemented by more specific codes and policies.

Code of Ethics: collective and individual engagement

The Code of Ethics restates the collective and individual commitment of Mersen and its employees to establish and build on mutual trust both within the Group and with all its stakeholders. It formalizes each individual's commitment to apply the Group's values and **applies to all Mersen employees, irrespective of the country in which they work or their position, as well as to the members of the Board of Directors**.

The Code of Ethics was updated in 2017 and a mandatory online training module was established in 2018 in order to raise staff awareness.

Mersen's Code of Ethics covers the following areas:

- Relations within the Group.
- Relations with customers, suppliers and competitors.
- Relations with shareholders.
- Asset protection.
- Undertakings as a responsible business.

The full Code is available on the Mersen website:
https://www.mersen.com/group/code-ethics.

The Anti-Corruption Code of Conduct: effectively combating corruption

Mersen's development is driven by shared and mutual trust with all the stakeholders in its ecosystem. This is reflected in the values and business ethics shared by all employees and applied on a daily basis at every level of the organization, as part of a responsible business approach that extends from financial transparency to combating bribery and corruption.

Mersen has already published a Code of Ethics that covers various ethics-related topics, including corruption. The AntiCorruption Code of Conduct presents the rules to be implemented and respected in order to combat corruption at all levels and in all countries where Mersen is present. The Code is available on the Group's website.

Its rules cover the following areas:

- Public officials
- Gifts and hospitality
- Donation, patronage and sponsorship
- Facilitation payments
- Third-party due diligence
- Conflicts of interest
- Accounting records and internal controls

Mersen takes a zero-tolerance approach to corruption. Any breaches of this Anti-Corruption Code will therefore result in sanctions.

A training course first implemented in 2018 is followed by all employees directly exposed to these issues due to their department (e.g., sales, sourcing) or position (management staff).

The Group is launching an e-learning course in early 2020 on its platform aimed at all new hires in these roles.

Third-party due diligence (Sapin II Act)

Mersen brought its procedures into compliance with France's Sapin II Act for third-party due diligence.

The Group developed a tool for performing an initial analysis of new partners (suppliers, customers and agents) worldwide based on three criteria: revenue generated, country and end market. The assessment is based on data published by Transparency International.

If a potential risk is detected in the analysis, more in-depth study is conducted based on data from a recognized independent source.

Information meetings on regulations and training to use the tool will be organized in early 2020 for sales and sourcing managers worldwide.

Implementation of the General Data Protection Regulation (GDPR)

The GDPR came into effect in May 2018. It is applicable to citizens of the European Union and aims to protect people whose personal data is processed and to hold those who handle data more accountable.

In 2017, the Group formed a work group to determine the measures required to comply with the regulation. The Group officially appointed a Data Protection Officer in early 2019 to step up the action needed to implement these measures.

The Group has called on a specialized external firm since the beginning of 2019 to ensure its data protection policy is compliant with the GDPR. The firm has also assisted Mersen in developing a roadmap to better structure its actions and cover all relevant topics.

To help coordinate the implementation of this approach, the Group draws on a network of local correspondents at Group companies located in the European Union. The correspondents have received training on how to go about their new responsibilities.

The following specific documents, codes or charters set out different aspects of compliance and practices applicable in all countries:

- User charter.
- Social media charter.
- Personal data protection charter.
- Website privacy policy.
- Procedure for exercising GDPR rights.

Whistleblowing system

A whistleblowing hotline has been available since the end of 2017 to allow any individual who wants to report an issue to the Group to do so safely and anonymously.

A procedure on this hotline and for whistleblowers was completed in 2019. It describes the process for handling reports and the protection measures for whistleblowers. Mersen is committed to ensuring that no disciplinary measures are taken against whistleblowers who act in good faith.

Two channels can be used to report issues:

- for internal staff, a dedicated email address is available: ethics@mersen.com.
- for internal or external stakeholders, a contact form is available on the Group's website.

The Chief Compliance Officer and Group Vice President for Human Resources are authorized to receive and handle these reports with due care.

Nine cases were brought to Mersen's attention in 2019, including two through the website. Eight of the reports were investigated, and the cases have since been closed. The ninth case is recent and still under review. Depending on the circumstances, investigations were conducted internally or with the help of an external firm. Disciplinary action was taken for cases of proven misconduct.

Other policies implemented

To meet national and international regulatory requirements, Mersen has in recent years implemented strict procedures on sensitive issues, such as trade embargoes, export restrictions and end users of its products.

Mersen manufactures and delivers some products with sensitive and strategic applications, and must comply with specific regulations, such as dual-use items.

Mersen must also abide by national regulations on embargoes in the countries where it operates. Due to the extraterritorial application of some laws, especially US legislation, all Group companies may have to comply with certain US regulations (e.g., OFAC regulations with regard to counter terrorism sanctions).

The Group has updated its competition law training course, which is now available on Mersen Academy, the Group's e-learning platform. The course was taken by 669 people in 2019 and is mandatory for staff with the highest exposure to this issue.

Policy oversight

As described at the beginning of this section, the Ethics and Compliance Committee is mainly responsible for monitoring and implementing policies and for assessing progress on various issues on a quarterly basis. The Committee reports on compliance to the Group's Executive Committee and the Audit and Accounts Committee at least once a year.

As part of its control program, the Internal Audit Department introduced tests in 2019 to ensure that the ethics and compliance policy is effectively implemented and observed. Under the compliance monitoring process, the following points are verified:

- Compliance with embargoes.
- Export controls and compliance with OFAC regulations.
- Gifts, invitations and donations.
- Implementation of ethics and anti-corruption training.
- Conflicts of interest.

A responsible taxpayer

The Group takes great care to ensure it pays its taxes in all the countries where the Group operates. Mersen maintains good relations with the different local tax authorities and works to carry out all its business activities in a spirit of trust and transparency.

This responsible tax policy is consistent with Mersen's business and strategy, and safeguards the value generated for the Group and its shareholders. The approaches to tax risk, management and governance are monitored based on the principles of due diligence and materiality, and guarantee that the Group complies with all regulations in force in all the countries where it operates.

Tax burden: Mersen does not and will not engage in transactions of which one of the main reasons is to reduce its tax burden. The Group may benefit from incentives in some countries, such as higher or accelerated deduction rates for R&D expenses and investments. However, these incentives are applicable to all companies and are not specific to Mersen.

Transparency: No Mersen Group companies operate in an offshore financial center or in a jurisdiction that is listed in the OECD tax transparency report to be partially or non-compliant, with the exception of Tunisia (partially compliant before it joined the OECD Global Forum—the country's rating has not yet been reviewed by the OECD). However, this presence is justified due to the purely industrial and commercial nature of operations (manufacturing and sales offices).

The 2019 projects of the Ethics & Compliance function

Sapin II Act:

- Continuous monitoring of certain accounting transactions at all the Group's French and European sites.
- Selection of the third-party due diligence tool.
- Documentation and implementation of the Anti-Corruption Code of Conduct.
- Implementation of the whistleblowing procedure.
- Updated conflict of interest statements.

General Data Protection Regulation (GDPR):

- Network of GDPR correspondents formed across units affected by the regulation.
- Streamlining of the register of processing activities.
- Implementation of a procedure for handling rights requests.

Other subjects:

- Publication of a compliance newsletter to raise awareness of Group employees about various issues (embargoes, GDPR, anti-corruption).
- Work on a Group procedure on dual-use items.

2. Protection of information systems

The Group endeavors to protect its information systems from attacks intended to damage its systems or to manipulate, block or steal data by simulating cyberattacks and running awareness-building campaigns for all its employees (see internal control).

Other CSR information

Given the nature of its industrial operations, Mersen does not consider the following themes to be key CSR risks and as such do not justify further development in this report:

- Reduction of food waste.
- The fight against food insecurity, the respect for animal welfare, and responsible, fair and sustainable food.

Regarding biodiversity, Mersen does not consider this subject as a key CSR risk. As part of Reach regulation, tests on graphite were conducted and did not reveal any environmental toxicity. To its knowledge, the other components of its products have little or no impact on biodiversity.

Reporting methodology

This chapter contains the labor, social and environmental information required under Article R. 225-105-1 of the French Commercial Code, as amended by order no. 2017-1180 and implementing Decree no. 2017-1265, transposing Directive 2014/95/EU of the European Parliament and Council of October 22, 2014, relative to the publication of non-financial information. Reporting principles are described in a set of guidelines that is updated every year (v34 in 2019).

In 2019, the Group expanded its scope of environmental reporting and is therefore publishing adjusted figures for 2018.

1. Reporting scope

The CSR reporting scope encompasses the companies included in the Group based on the following principles:

- **Standard reporting:** All companies included in the consolidation scope.
- **Labor reporting:** All consolidated companies included in the HR information system (HRIS) (accounting for 97% of Group employees) (80). Only the total headcount indicator is published to include all companies covered by standard financial consolidation reporting (86).
- **Social reporting**: All Group companies (86).
- **Safety reporting**: All Group companies operating in manufacturing (59) except for accidents (LTIR, TRIR, SIR) which cover all Group companies.
- **Environmental reporting**: All Group companies operating in manufacturing (59).
- Certain exclusions from the scope of reporting have been defined for certain indicators, such as where local legislation does not permit the reporting of relevant data or where sufficient arrangements for the collection of certain types of data have not yet been made. The summary table at the end of this section sets out the scope covered by each of the indicators.

2. Reporting periods

Quantitative indicators are calculated using the following method:

- **Labor data:** for the period from January 1, 2019 to December 31, 2019 (12 months), with figures reported as at December 31, 2019.
- **Safety data:** for the period from January 1, 2019 to December 31, 2019, or for companies acquired within the last year, as of the date they were integrated into the Group.
- **Environmental data:** for the period from January 1, 2019 to December 31, 2019, or for companies acquired within the last year, as of the date they were integrated into the Group.

3. Data collection

Data is reported using the indicators described in technical sheets which notably specify the reporting frequency, the indicator's objectives, its scope of application, the definitions needed to understand the indicator and its scope, the calculation methodology and the consistency checks.

3.1 Labor information

Labor information is collected through the HR information system (HRIS) used in all the Group's consolidated companies, with the exception of a few entities (especially companies recently integrated into the scope of consolidation). For these companies (scope not covered by the HRIS), only the workforce indicator is available.

Once collected and prior to final consolidation, the data submitted by the subsidiaries is verified for consistency on various criteria. Any value or change in value considered suspect is verified with the relevant site, which will be asked to correct or explain the data. If the value cannot be corrected or if the explanation provided is deemed inconclusive, the scope concerned by that value will then be disregarded from the scope of consolidation.

3.2. Safety information

Safety indicators are collected monthly through the Calame reporting system implemented at all Group companies. Indicators on accidents cover Mersen employees as well as temporary workers and employees from outside companies working at Mersen sites.

Once collected and prior to final consolidation, the data submitted by the subsidiaries is verified for consistency on various criteria. Any value or change in value considered suspect is verified with the relevant site, which will be asked to correct or explain the data.

3.3 Environmental information

Environmental indicators are collected annually through the Calame reporting system. Data is entered by HSE managers at each site. Only data on waste is collected on a quarterly basis.

Once collected and prior to final consolidation, the data submitted by the subsidiaries is verified for consistency on various criteria. Any value or change in value considered suspect is verified with the relevant site.

3.4 Social information

Qualitative indicators are collected annually through a questionnaire sent to all subsidiaries.

4. Reporting process participants and their responsibilities

There are three levels of responsibility:

- **Corporate responsibility**

  In conjunction with the Human Resources Department (for labor information) and the Financial Communication Department (for social information), the Health & Safety, Environment Department organizes the reporting with the directors of the companies that fall within the scope. To this end, it:

  - Defines framework indicators.
  - Deploys the framework and its indicators to the companies and ensures that they are clearly understood by providing adequate information and training.
  - Coordinates data collection.
  - Ensures that the reporting schedule is adhered to.
  - Checks the completeness and consistency of the data collected.
  - Consolidates the data.
  - uses and analyzes the data.

- **Group companies' responsibility**

  Data reporting is the responsibility of the general manager of each company within the scope. Their role is to:

  - Organize data collection at company level by defining responsibilities and ensuring that the framework and its indicators are clearly understood.
  - Safeguard data traceability.
  - Ensure that the reporting schedule is adhered to.
  - check the exhaustiveness and consistency of the data provided and implement the requisite checks and verifications by persons not involved in the collection process.

- **External organization**

  Audit and verification of data were performed in 2019 by an independent third-party organization, in accordance with the implementing Decree of August 9, 2017.

5. Notes on methodology

On account of the Group's global presence and some local legislation, indicator data collection methodologies are adapted to certain constraints of the Group.

Absenteeism

Number of days of absence from work for any reason that the employer cannot anticipate: illness, workplace accidents, maternity/paternity leave, strikes and any other unforeseeable absence.

Reported accident

Bodily or psychological harm or injury that is the sudden consequence of an event that occurred due to or in the course of work-related activity, which has led to treatment by a health professional, and which must be reported to the occupational health and safety authority according to local regulations.

Lost-time accident

An accident resulting in time off work. An accident affecting several people is recognized as a single accident. Only the causative event is taken into account. The accidents taken into account are those considered to be directly work-related following investigation by the health and safety officers and against which the Group may be able to take preventive action. Certain events, such as non-work-related conditions or commuting accidents, are excluded, even if the relevant authorities have declared them to be workplace accidents. The LTIR (Lost Time Injury Rate), TRIR (Total Recordable Incident Rate) and SIR (Severe Injury Rate) indicators include Mersen employees, temporary workers and external companies.

Agreement

All arrangements made and accepted by the management of an operating company, segment or the Group and one or more employee representatives.

Total headcount and breakdown by gender, age and geographic area

Employees included in the workforce at the end of the fiscal year, under open-ended or fixed-term contracts, excluding temporary workers, interns and sub-contractors.

Employees suffering from an occupational illness (operations in France, i.e., 20% of headcount)

As the concept of occupational illness varies significantly from country to country, this information is provided only for France. An illness is recognized as "occupational" if it appears on one of the tables appended to the French Social Security Code (*Code de sécurité sociale*) or French Rural Code (*Code rural*).

Under certain conditions, illnesses that do not appear on the tables may also be included:

- Illnesses designated in a table of occupational illnesses, but for which one or more conditions have not been met (with regard to the time limit on claims, the length of exposure or the limited list of jobs), when it has been established that the victim's regular work is the direct cause of the illness.
- Illnesses not designated in a table of occupational illnesses when it has been established that they are caused, mainly and directly, by the victim's regular work and that they lead to permanent disability at a rate at least equal to 25% or are the cause of a victim's death.

Hiring

Total number of people hired during the fiscal year who meet the definition of headcount described above.

Training

Training activities recognized as such are those organized and paid for by the Group and that are designed to:

- Improve performance and help the employee adapt to changes in their jobs.
- Develop employees' talents and help them acquire new skills.

Excluded are: required training for the position, information programs, regulatory training, internships and apprenticeships (during education courses). The HRIS model used is based on monthly data collection. As training is not provided systematically on a monthly basis, it is subject to manual reprocessing at the end of the fiscal year.

Environmental protection training

This indicator recognizes the total number of training hours provided whose title and/or main topic is linked directly to environmental protection issues.

Managers

Employees are considered to be managers when they hold a managerial function, including engineer, project manager or technical expert, or a team management position, with the exception of first-level management (supervisors).

Local nationality

Local nationality is defined as the nationality of the country in which the company is located.

Corporate governance bodies

The corporate governance bodies are the Executive Committee and the Board of Directors.

Policy

A policy is an organized general framework, disseminated and deployed by the Group's top management throughout all the companies or targeted groups of companies. This framework is formalized as an official, signed document.

Environmental, health and safety (HSE) manager

An HSE manager is an employee who is responsible for managing environmental, health and safety matters.

Disabled employees

As the Group is present in a large number of countries, it is subject to various local laws. It is unable to disclose quantitative information on this subject but provides qualitative information for some countries.

Senior employees

Over 55 years of age.

6. Overview table of non-financial indicators

	Qualitative or quantitative Information	Scope*	Pages
PROMOTING ENVIRONMENTALLY–SOUND PRACTICES AT ALL FACILITIES			
Organization of the company to take environmental concerns into account	Qualitative	Standard	106
Managing suppliers	Qualitative	Standard	103
Part of Sales geared towards sustainable development markets	Quantitative	Standard	104
ISO 14001 certification rate	Quantitative	Environmental	107
Number of hours of environmental protection training	Quantitative	Environmental	107
Investments dedicated to environmental risk prevention	Qualitative	Standard	107
Amount of significant provisions for environmental risks	Quantitative	Standard	107
Energy			
Electricity consumption	Quantitative	Environmental	108
Natural gas consumption	Quantitative	Environmental	108
LPG consumption	Quantitative	Environmental	108
Fuel oil, propane, butane consumption	Quantitative	Environmental	108
Part of renewable energy in the energy consumed	Quantitative	Environmental	108
Water			
Water consumption	Quantitative	Environmental	108
Raw material			
Pitch consumption	Quantitative	Environmental	108
Coke consumption	Quantitative	Environmental	108
Artificial graphite consumption	Quantitative	Environmental	108
Copper consumption	Quantitative	Environmental	109
Packaging and logistics			
Timber consumption	Quantitative	Environmental	109
Cardboard consumption	Quantitative	Environmental	109
Greenhouse gases			
Scope 1 emissions	Quantitative	Environmental	109
Scope 2 emissions	Quantitative	Environmental	109
Scope 3 emissions	Quantitative	Environmental	109
Waste and recycling			
Total industrial waste	Quantitative	Environmental	111
Hazardous industrial waste	Quantitative	Environmental	111
Waste recycled	Quantitative	Environmental	111
HUMAN CAPITAL			
Total workforce broken down by gender	Quantitative	Standard	113
Total workforce broken down by age	Quantitative	Social	113
Total workforce broken down by geographical area	Quantitative	Standard	112
Headcount broken down by category	Quantitative	Standard	112
Number of new hires	Quantitative	Social	113
Number of dismissals	Quantitative	Social	113
Number of departures	Quantitative	Social	113
Human potential success rate	Quantitative	Standard	113
Absenteeism rate	Quantitative	Social	113
Labor relations	Qualitative	Standard	116

** Scope: refer to definitions given in paragraph 1 of the Reporting Methodology*

	Qualitative or quantitative Information	Scope*	Pages
Diversity			
Diversity and equality policy	Qualitative	Standard	114
Disabled employees	Qualitative	Standard	116
Percentage of women managers	Quantitative	Standard	115
Percentage of women on corporate governance bodies	Quantitative	Standard	115
Percentage of seniors	Quantitative	Social	113
Percentage of site managers of local nationality	Quantitative	Standard	114
Health & Safety			
Health & Safety policy	Qualitative	Standard	122
Percentage of companies with a dedicated HSE manager	Quantitative	Safety	122
Lost-time Injury Rate for employees and temporary workers (LTIR)	Quantitative	Standard	123
Total Recordable Incident Rate for employees and temporary workers (TRIR)	Quantitative	Standard	123
Severity injury rate employees and temporary workers (SIR)	Quantitative	Standard	123
Number of safety visits	Quantitative	Safety	123
Occupational diseases	Qualitative	France	124
Number of hours of safety training	Quantitative	Standard	123
Health & Safety audits	Quantitative	Standard	123
Training			
Training policies implemented	Qualitative	Social	118
Number of hours of training	Quantitative	Social	118
BUSINESS ETHICS			
Ethical policy	Qualitative	Standard	125
Measures implemented to prevent corruption	Qualitative	Standard	125

** Scope: refer to definitions given in paragraph 1 of the Reporting Methodology*

Report verifying the Non-Financial Information Statement

The Non-Financial Information Statement reviewed covers the year ended December 31, 2019.

Request, Responsibilities and Independence

At Mersen SA's request and pursuant to the provisions of Article L. 225-102-1 of the French Commercial Code, we have verified the Non-Financial Information Statement (hereinafter the "Statement") for the year ended December 31, 2019 included in Mersen SA's registration document, as an independent third party certified by COFRAC under number 3-1341 (whose list of locations and scope are available at www.cofrac.fr).

Pursuant to Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code, the Board of Directors is responsible for preparing a compliant Statement which must include a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented in light of those risks and the outcome of said policies, including key performance indicators.

The Statement has been prepared in accordance with the reporting guidelines (hereinafter the "reporting procedures" of the company (hereinafter the "entity"). The Statement will be available on the entity's website along with a summary of the reporting procedures.

It is our responsibility to verify the Statement, which enables us to provide a reasoned opinion as to:

- The Statement's consistency with the provisions of Article R. 225-105 of the French Commercial Code.
- The fairness of the information provided in accordance with Article R. 225-105 I, 3 and II of the French Commercial Code.

We verified the Statement in an impartial and independent manner in accordance with the professional practices of the independent third party and pursuant to the French Code of Ethics applied by all members of Bureau Veritas.

Nature and scope of our work

In order to provide a reasoned opinion on the Statement's compliance and the fairness of the information supplied, we carried out our work in accordance with Articles A. 225-1 to A. 225-4 of the French Commercial Code and our internal methodology for the verification of the Statement, in particular:

- We obtained an understanding of the scope of consolidation to be considered for the preparation of the Statement, as specified in Article L. 233-16 of the French Commercial Code. We also verified that the Statement covers all the entities within the scope of consolidation specified in the Statement.
- We obtained an understanding of the entity's activities, the context in which the entity operates, the social and environmental impact of its activities and the impact of these activities on compliance with human rights and anti-corruption and tax evasion legislation.
- We obtained an understanding of the content of the Statement and verified that it included the items listed in Article R. 225-105 of the French Commercial Code:
  - Presentation of the entity's business model.
  - Description of the principal risks associated with all the consolidated entities' activities for each category of information set out in Article L. 225-102-1 III, including, where relevant and proportionate, the risks associated with their business relationships and products or services, as well as the policies implemented by the entity, where applicable, and the due diligence procedures implemented to prevent, identify and reduce the occurrence of the identified risks.
  - The outcomes of these policies, including key performance indicators.
- We examined the entity's procedures for reviewing the impacts of its activities as listed in Article L. 225-102-1 III, identifying and prioritizing the associated risks.
- We identified missing information, as well as information omitted without explanation.

- We verified that the Statement includes a clear and reasoned explanation for the absence of information regarding the principle risks identified.
- We examined the data collection process implemented by the entity to ensure the completeness and consistency of the information referred to in the Statement. We assessed the reporting procedures with respect to their relevance, reliability, understandability, completeness and objectivity, with due consideration of industry best practices, where appropriate.
- We identified the people within the entity who are in charge of all or part of the reporting process and interviewed some of them.
- We asked what internal control and risk management procedures the entity has put in place.
- Through sampling, we assessed the implementation of the reporting procedures, in particular the collection, compilation, processing and verification of the information.
- For the quantitative results[1] that we considered to be the most important, we:
  - performed analytical procedures and, using sampling techniques, verified the calculations and the consolidation of the data at the level of the Group and the verified entities;
  - selected a sample of contributing entities[2] within the scope of consolidation according to their activity, their contribution to the entity's consolidated data, their presence and the outcomes of work performed in earlier years;
  - performed tests of details, using sampling techniques, in order to verify the proper application of the reporting procedures, reconcile the data with the supporting documents and verify the calculations made and the consistency of the outcomes.
  - selected a sample representing 22% of headcount and between 20% and 84% of the values reported for the environmental data tested.
- We referred to documentary sources and conducted interviews with the people responsible for drafting the documents in order to corroborate the qualitative information that we considered to be the most important; we assessed the consistency of the information referred to in the Statement.
- Our work was carried out by a team of seven auditors between October 3, 2019 and the completion of our report, and took a total of about five weeks. We conducted over 30 interviews with the people responsible for reporting at the time of this assignment.

Comments on the reporting procedures or the content of certain information

Without qualifying the conclusions below, we provide the following comments:

- The materiality matrix presented by Mersen SA in its non-financial information statement identifies and prioritizes the issues, thereby enabling the development of a roadmap. However, the non-financial information statement does not explicitly present the principle risks associated with the impacts of Mersen SA's activities, products and business relationships.
- For the audited year, the various reporting scopes were not governed by clearly established written rules regarding moving inside or outside the scope that relates to industrial sites, consolidated companies and sites where workers are based.
- The scope 3 emission calculations still contain inaccuracies and justifications to be provided for 2020.
- For a number of indicators, we are not certain that they have been reported uniformly (e.g., hours worked by subcontractors, natural gas adjustment factor), and clarifications are required for the reporting protocol.

*(1) **Human resources information:** active headcount at December 31, broken down by gender and geographic distribution; share of sites with site managers of local nationality; number of recruitments; number of departures; percentage of women managers and percentage of women in governing bodies; absenteeism; LTIR and SR (employees, temporary workers and subcontractors); number of safety visits; percentage of sites internally audited for health and safety; percentage of employees with a work-related illness; average number of training hours per employee; human potential success rate.*
***Environmental information:** electricity consumption; gas consumption; total energy consumption; water consumption; raw material consumption: coke and copper; packaging consumption: wood and cardboard; CO2 emissions, scope 1, scope 2 and scope 3; tonnage of industrial waste and share of hazardous waste; share of waste recycled or thermally recovered.*
***Qualitative information:** developing innovative products that contribute to sustainable development: electronics; developing products with a reduced environmental footprint, from their design to their recycling; promoting environmentally friendly practices throughout the sites; organization: a management system; a continuous improvement approach; health and safety: constant priorities; diversity policy, ethical policy, procurement charter and sales linked to sustainable development.*

(2) On-site audit of human resource and environmental information: Xianda (China), Songiiang (China), Juarez (Mexico), Holytown (United Kingdom), Gennevilliers (France). A remote audit was conducted on some environmental information for the St Mary's site (United States).

- Data related to three Mersen sites located in the United Kingdom are not recognized as reliable in relation to two indicators: average number of training hours per employee and absenteeism. The data from these three sites, relating to 2.8% of Group employees, has not been consolidated at the Group level.

Conclusion

In conclusion, we have not identified any significant misstatement that causes us to call into question the Statement's compliance with the provisions of Article R. 225-105 and the fairness of the information provided.

Puteaux, February 28, 2020

Bureau Veritas

Laurent Mallet

Managing Director

5 Information about the share capital and share ownership

General information about the Company

1. Corporate name, headquarters, incorporation and corporate life

Mersen
Tour EQHO
2 avenue Gambetta
CS 10077
F-92066 Paris La Défense, France

The company is a liability company *(Société Anonyme)* incorporated under French law.

The company was incorporated on January 1, 1937 and shall be dissolved on December 31, 2114 unless its life is extended or it is dissolved early by a vote of an Extraordinary General Meeting.

2. Corporate purpose (Article 3 of the Articles of Association)

The Company's purpose in France and in all other countries is to carry out all operations concerning the design, manufacture, processing, use and sale of:

- carbon-based products, articles or equipment, whether or not they are combined with other materials;
- metal powders, articles made from these powders, special alloys and articles made from these alloys;
- electro-mechanical and electronic products;
- all industrial products, namely metallurgical, mechanical, plastic and elastomer products;
- all other products, articles or equipment that may be related to the above products:
  - by using the latter to make the former,
  - by developing research activities, or
  - through manufacturing processes, industrial applications or distribution networks.

Within the scope of the corporate purpose defined above, the Company may carry out all operations related to:

- raw materials, prepared materials, components and elements, spare parts, semi-finished and finished products, equipment, combinations of equipment, assemblies of all kinds and sizes combining equipment;
- all work;
- all techniques.

The Company may also indirectly carry out operations related to technical, industrial and commercial activities. To this end, it may form any companies and groups of companies, acquire holdings in any companies and partnerships, contribute assets to the capital and subscribe to the shares of any company, and purchase or sell any shares, partnership shares or corporate rights.

In general, the Company may carry out any industrial, commercial, financial, securities or real estate operations connected principally or incidentally to these activities.

Furthermore, the Company may acquire any interest, in any form whatsoever, in any French or foreign companies or organizations.

3. Trade and Companies Register Code

RCS NANTERRE B 572 060 333 – APE CODE: 7010Z.

4. Legal Entity Identifier (LEI)

OQXDLNM5DTBULYMF5U27

5. Access to the Company's corporate documents and website

Corporate documents, particularly the Articles of Association, financial statements and reports to General Meetings by the Board of Directors and the Statutory Auditors, may be consulted at the headquarters by contacting:

Thomas Baumgartner Group Vice President, Finance and Administration

Mersen
Tour EQHO
2 avenue Gambetta
92400 Courbevoie, France
Tel: + 33 (0)1 46 91 54 19

www.mersen.com

6. Fiscal year

The fiscal year begins on January 1 and ends on December 31 of each year.

7. General Meeting of Shareholders

General meetings are convened under the conditions laid down in law, and their proceedings governed by quorum and majority voting requirements.

The procedures for convening the meeting are described in section 25 of the Articles of Association available on the Group's web site: www.mersen.com/group/governance.

8. Disclosure thresholds (Article 11 ter of the Articles of Association)

The Company's Articles of Association stipulate that any person, acting alone or in concert, that acquires in any manner whatsoever within the meaning of Article L. 233-7 *et seq.* of the French Commercial Code, either directly or indirectly through companies that they control within the meaning of Article L. 233-3 of the French Commercial Code, a stake of 1% or more in the share capital or voting rights is required, within five days of the transaction and irrespective of their delivery, to disclose to the Company by recorded delivery letter with acknowledgment of receipt the total number of shares or securities giving access to the share capital or voting rights that they hold. Should their stake drop below the 1% threshold, it must be disclosed in the same manner and within the same deadline. This obligation shall apply whenever the share capital or voting rights held increases or falls by at least 1%.

If a disclosure does not meet the terms and conditions above, the shares in excess of the threshold that should have been disclosed shall be stripped of voting rights at any General Meeting held in the two years following the date on which proper notification is made, at the request, during the Meeting, of one or more shareholders holding at least 1% of the share capital or voting rights.

In addition to the above disclosure obligation, any crossing of share ownership thresholds, as provided by law, must be disclosed.

9. Trading by the Company in its own shares

At the Combined General Meeting of May 17, 2019, the Company was authorized to trade in its own shares on the stock exchange in accordance with Article L. 225-209 *et seq.* of the French Commercial Code, in order to:

- enhance trading in the secondary market or the liquidity of the Mersen share by engaging an investment service provider under a liquidity agreement that complies with practices approved by French law. For the purposes of the program, the number of shares taken into account to calculate the above-mentioned limit corresponds to the number of shares acquired, less the number of shares re-sold;
- hold the acquired shares in treasury and subsequently remit them as part of an exchange offer or in consideration for any acquisitions;
- cover share option and/or bonus share plans (or similar plans) allotted to Group employees and/or corporate officers, share allotments under company or group investment plans (or similar plans) or company profit-sharing plans and/or any other forms of share allotments to Group employees and/or corporate officers;
- cover securities conferring rights to allotment of shares in the Company, in accordance with applicable regulations;
- cancel the acquired shares, in accordance with the authorization granted or to be granted by the Extraordinary General Meeting.

The maximum purchase price has been set at €50 per share. This price is set subject to adjustments related to any transactions affecting the Company's share capital. Based on the maximum purchase price set above and the number of shares making up the share capital at the date of the authorization, the aggregate maximum amount of the purchases may not exceed €103,840,600.

This authorization replaces the authorization granted by the General Meeting of May 17, 2018. A new authorization concerning stock repurchases will be submitted for shareholders' approval at the Combined General Meeting of May 14, 2020.

These share purchases, grants or sales may be entered into and paid for by any means, including as part of a liquidity agreement entered into by the Company with an investment services provider.

In 2019, the Company uses this authorization to repurchase 21,373 shares to cover employee bonus shares plans.

Furthermore, in March 2005, the Company signed a liquidity agreement with Exane BNP Paribas that complies with the charter of ethics drawn up by the AMAFI. This liquidity agreement was renewed each year by tacit approval. The Company signed a new agreement with Exane on January 24, 2019, in order to comply with the new AMAFI recommendations.

10. Double voting rights

To account for the entry into force of Act No. 2014-384 of March 29, 2014, the Company submitted a resolution to the May 19, 2015 Extraordinary General Meeting to eliminate double voting rights so that shareholders could discuss and decide on this issue.

The resolution was rejected. Double voting rights are now attached to all shares that fulfill both of the following conditions: i) have been held in registered form for at least two years, and ii) are fully paid up.

11. Categories of shares (Articles 6, 13 and 15 of the Articles of Association)

Given that the conversion period for category B shares had come to an end and that all category B shares had been converted into ordinary shares, the Board of Directors canceled 317 category B shares on January 29, 2020 and amended the Articles of Association accordingly. Thus, the new Article 6 of the Articles of Association provides for four categories of shares: category A shares are ordinary shares, and category C, D and E shares are preference shares issued pursuant to Article L. 228-11 *et seq.* of the French Commercial Code.

A shares are freely negotiable (Article 13). Category C, D and E shares are transferable under the terms and conditions set forth in Article 15 of the Articles of Association.

11.1. Category C shares (2016 bonus preference share plan)

At the end of the vesting period, each category C share shall confer the right, in the ownership of the Company's assets and the sharing of the profits and the liquidation surplus, to a dividend, per category C share, equal to 10% of the dividend per share allotted to category A shares. All category C shares shall confer the right, during the Company's lifetime and in the event of liquidation, with an equal par value and, taking into account, where necessary, the date of entitlement, to payment of the same net amount, equal to 10% of any amount paid to each category A share, for any allocation or redemption, pursuant to Section I (Rights attached to shares) of Article 15 of the Articles of Association.

Category C shares may be converted into ordinary shares at the end of the period set in the category C bonus share allotment plan, according to a conversion parity based on share price trends. The total maximum number of category A shares that may result from the conversion of the category C shares may not exceed 129,000; this number does not take into account any adjustments made to protect, in accordance with legal and regulatory provisions and, where necessary, contractual stipulations, the rights of category C share beneficiaries.

At the end of the Holding Period for category C shares, as set forth in the category C share bonus allotment plan determining their allotment, each category C shareholder may convert some or all of the category C shares held into category A shares, under the terms and conditions set forth in Section II, paragraphs 4 and 5 of Article 15 of the Articles of Association.

At the end of the Holding Period, category C shares are fully transferable between category C shareholders. Category C shares may be converted into category A shares during a 30-day period, according to the terms and conditions in the plan and to a parity defined by the percentage difference between the Initial Share Price and the Final Share Price. A specific rule shall be defined if the end of the conversion period falls during a period restricting the sale or purchase of Company shares.

The Initial Share Price shall indicate the higher amount of either (i) €17 or (ii) the volume-weighted average of the opening prices of the category A shares over a period preceding the Allotment Date by 20 trading days prior to the Allotment Date; the initial share price was eventually set at €17. The Allotment Date is defined as the date on which a bonus share allotment plan is adopted by the Board of Directors.

The Final Share Price is equal to the average opening prices of the A shares between the second anniversary of the allotment date (included) and the beginning of the conversion period during which the C shareholders requested the conversion to A shares (excluded). The Conversion Parity will be equal to:

- If the Final Share Price is less than 150% of the Initial Share Price (the "Maximum Final Share Price" or "maxFP"):
- N = 10 + 300 (FP-IP)/FP
- If the Final Share Price is greater than the Maximum Final Share Price: N = 10 + (maxFP x 100)/FP
- If the Final Share Price is less than the Initial Share Price: N = 10

Where:

"N" is the number of A shares to which each C share is entitled, it being specified that in the case of a fraction, the number of A shares allotted to a C shareholder will be rounded down to the lower unit; "CF" is the Final Share Price; "CI" is the Initial Share Price; and "CFMax" is the Maximum Final Share Price.

In addition, if conversion takes place at the end of the periods set forth in paragraphs 4 and 6 of Article 15 of the Articles of Association, the category C shares will be converted automatically into category A shares.

11.2. Category D shares (2017 bonus preference share plan)

Category D shares shall have the same rights and obligations as those set forth in Section II of Article 15 of the Articles of Association relating to the category C shares, which shall apply *mutatis mutandis*, subject to the following changes:

- The Initial Share Price corresponds to the volume-weighted average of the opening prices of the category A shares over a period preceding the Allotment Date by twenty (20) trading days.
- The total maximum number of category A shares that may result from the conversion of category D shares may not exceed 129,000; this number does not take into account any adjustments made to protect, in accordance with legal and regulatory provisions and, where necessary, contractual stipulations, the rights of category D share beneficiaries.

11.3. Category E shares (2018 bonus preference share plan)

Category E shares shall have the same rights and obligations as those set forth in Section II of Article 15 of the Articles of Association relating to the category C shares, which shall apply *mutatis mutandis*, subject to the following changes:

- The Conversion Periods, i.e., the periods during which category E shares may be converted into category A shares, cover the thirty (30) day period from (i) the fourth anniversary of the Allotment Date or (ii) the date falling four years and three months after the Allotment Date (the "Conversion Periods") based on a ratio (the "Conversion Ratio") determined based on the percentage difference between the Initial Share Price and the Final Share Price.

Where:

"N" is the Conversion Ratio, i.e., the number of ordinary shares obtained on conversion of each category E share, with rights to fractions of shares being forfeited such that the number of ordinary shares received by an category E shareholder will be rounded down to the nearest whole number of shares;

- If FP < IP: N = 10
- If IP < FP < maxFP: N = 10 + 600 x (FP-IP)/FP
- If FP > maxFP: N = 10 + (maxFP x 100)/FP

"IP" is the Initial Share Price, which is equal to the volume-weighted average of the opening prices quoted for the Company's ordinary shares over the 20 trading days preceding the Allotment Date.

"FP" is the Final Share Price, which is equal to the average opening prices quoted for the Company's ordinary shares between the second anniversary of the Allotment Date (included) and the beginning of the Conversion Period during which the category E shareholders apply to convert their category E shares into ordinary shares (excluded).

"maxFP" is the Maximum Final Share Price, which is equal to 120% of the Initial Share Price.

The maximum total number of category A shares resulting from the conversion of category E shares may not exceed 103,400 shares, not including any shares to be issued to protect the rights of category E shareholders in accordance with the law and any contractual adjustment clauses.

General information about the share capital

1. Conditions

Changes in the share capital and the respective rights of the various classes of shares are made in accordance with the provisions laid down in law.

2. Ownership of the share capital

At December 31, 2019, the Company's share capital was set at €41,716,454 divided into 20,858,227 shares, of which 20,855,883 category A shares, 1,172 category C shares and 1,172 category D shares, each with a par value of €2. Category E shares, which are preference shares, may be issued in application of Article L. 228-11 *et seq.* of the French Commercial Code.

At December 31, 2019, 26,599 shares representing 0.1% of the share capital were held by the Company pursuant to the liquidity agreement entered into with Exane BNP Paribas.

During 2019, the Company bought back 21,373 shares for the purpose of covering employee share plans. It used 103,470 treasury shares to cover employee share plans (2017 bonus share plan and conversion of category B shares into category A shares).

As a result, a total of 130,677 shares were held by the Company at December 31, 2019.

No public tender or exchange offer, nor any guaranteed share price offer has been made in respect of the Company's shares over the past three years. The Company has not initiated any such offers for other companies over the same period.

Following the investment by AXA Private Equity (now Ardian) in the Company's share capital in July 2008, an agreement was entered into with the Company. Under the terms of the agreement, ACF I Investment (Ardian) undertook not to sell any block of shares representing 5% or more of Mersen's share capital to an identified investor, except in connection with a public offer. Any sale by ACF I Investment of its shares on the market is to be performed in an orderly manner, wherever possible, with a view to restricting the effects of such a disposal on the Company's share price. The agreement ended on June 30, 2012. However, the requirement to sell in an orderly manner remains in effect, as long as Ardian holds more than 10% of the Company's share capital. In January 2020, Ardian reported that its shareholding had fallen below the 10% threshold, following the sale of shares on the market.

3. Voting rights

The theoretical number of voting rights stood at 25,352,291 at December 31, 2019.

Double voting rights are attached to all shares that fulfill both of the following conditions: i) being held in registered form for at least two years; and ii) being fully paid up. Double voting rights have been recorded since April 4, 2016, in accordance with legal provisions.

4. Authorizations to carry out a capital increase

4.1. Combined General Meeting of May 11, 2016

Bonus preference share allotments (resolution 18)

At the General Meeting, the shareholders authorized the Board of Directors to allot, on one or more occasions, except during a public offer for the Company's shares, Company bonus preference shares conferring the right to convert them into new or existing ordinary Company shares to certain categories of employees and Management Board members, it being specified that the rights attached to the preference shares were established by the Articles of Association of the Company. The maximum number of ordinary shares that may result from the conversion of the preference shares may not exceed 129,000 shares, or 0.63% of the Company share capital. This authorization provides that the Board of Directors will determine the criteria and conditions for allotting these preference shares, the identity of the beneficiaries, the number of preference shares allotted, and the performance conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 19, 2015 and any similar delegation. This authorization is valid for 38 months.

At its meeting of May 11, 2016 the Board of Directors made use of this authorization and empowered the Chief Executive Officer to implement the bonus preference share plan and the allotment of said shares. The Chief Executive Officer implemented this authorization by allotting 1,172 bonus preference shares to the members of the Executive Committee and the Group's managerial staff. This number corresponds to a maximum number of 128,920 ordinary shares after conversion.

The definitive allotment of preference shares is subject to performance conditions associated with the achievement of earnings per share (EPS) criteria or change in the EPS between 2016 and 2017 compared to that of comparable companies (whichever is more favorable).

Empowered by the Board of Directors to make use of the authorization granted by shareholders at the General Meeting of May 11, 2016, the Chief Executive Officer noted on May 11, 2018 the fulfillment of the following allotment conditions: (i) performance conditions have been 100% met; (ii) the number of beneficiaries present within the Company is 14; (iii) the number of bonus preference shares to be allocated, after application of the percentage to which conditions have been met, is 1,172 shares.

4.2. Combined General Meeting of May 18, 2017

4.2.1. Bonus share allotments (resolution 18)

At the General Meeting, the shareholders authorized the Board of Directors to allot existing or new shares to employees, or to certain categories of employees, of the Company and those of affiliated companies, at no cost. The total number of shares that may be thus allotted may not exceed 84,000, representing around 0.4% of the share capital on the day of the Meeting. This authorization provides that the Board of Directors will determine the identity and categories of the beneficiaries of the share allotment referred to, as well as the performance and share allotment conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 11, 2016. This authorization is valid for 38 months.

At its meeting of May 18, 2017 the Board of Directors made use of this authorization and empowered the Chief Executive Officer to implement the performance-based bonus share plan and the allotment of said shares. The Chief Executive Officer implemented this authorization by allotting, at no cost, 84,000 Company shares to 121 Mersen Group employees and managerial staff according to the related performance conditions; i.e., a 2018 EBITDAtosales ratio criterion, or one based on a change in the EBITDA-to-sales ratio between 2016 and 2018, compared to a panel of comparable French companies (whichever is more favorable).

4.2.2. Bonus preference share allotments (resolution 19)

At the General Meeting, the shareholders authorized the Board of Directors to allot, on one or more occasions, except during a public offer for the Company's shares, Company bonus preference shares conferring the right to convert them into new or existing ordinary Company shares to certain categories of employees and Management Board members, it being specified that the rights attached to the preference shares were established by the Articles of Association of the Company. The maximum number of ordinary shares that may result from the conversion of the preference shares may not exceed 129,000 shares, or 0.6% of the Company share capital. This authorization provides that the Board of Directors will determine the criteria and conditions for allotting these preference shares, the identity of the beneficiaries, the number of preference shares allotted, and the performance conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 11, 2016 and any similar delegation. This authorization is valid for 38 months.

At its meeting of May 18, 2017 the Board of Directors made use of this authorization and empowered the Chief Executive Officer to implement the bonus preference share plan and the allotment of said shares. The Chief Executive Officer implemented this authorization by allotting 1,172 bonus preference shares to the members of the Executive Committee and the Group's managerial staff. This number corresponds to a maximum number of 128,920 ordinary shares after conversion.

The definitive allotment of preference shares is subject to performance conditions associated with two criteria, with the most favorable of the two being taken into account. These criteria are based on the average of the 2017 and 2018 EPS and on the change in EPS compared to that of peer companies.

4.3. Combined General Meeting of May 17, 2018

4.3.1. Capital increase by capitalizing reserves, income and/or additional paid-in capital (resolution 13)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to carry out one or more capital increases by capitalizing reserves, income, additional paid-in capital or other capitalizable amounts, and issuing bonus shares and/or raising the nominal value of existing ordinary shares. The nominal value of the capital increases that may be carried out under this authorization may not exceed €50,000,000, i.e., approximately 121% of the Company's share capital at the Meeting date. This authorization is valid for a period of 26 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 18, 2017. The Company has not used this authorization to date.

4.3.2. Issue of ordinary shares conferring rights to ordinary shares or debt securities and/or securities conferring rights to ordinary shares, with preferential subscription rights for existing shareholders (resolution 14)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to issue, on one or more occasions, for the amounts and at the times that it deems appropriate, on the French and/or international market, in euros or, where applicable, in foreign currency or any monetary unit determined by reference to a basket of currencies, ordinary shares, and/or ordinary shares conferring rights to ordinary shares or debt securities, and/or securities conferring rights to new ordinary shares. The nominal value of ordinary shares issued under this delegation of authority shall not exceed €15,000,000 and the nominal value of debt securities shall not exceed €300,000,000. This authorization is valid for a period of 26 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 18, 2017. The Company has not used this authorization to date.

4.3.3. Issue of ordinary shares conferring rights to ordinary shares or debt securities and/or securities conferring rights to ordinary shares, through a public offer without preferential subscription rights but with a priority subscription period for existing shareholders (resolution 15)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to issue, on one or more occasions, for the amounts and at the times that it deems appropriate, on the French and/or international market, in euros or, where applicable, in foreign currency or any monetary unit determined by reference to a basket of currencies, ordinary shares, and/or ordinary shares conferring rights to ordinary shares or debt securities, and/or securities conferring rights to new ordinary shares. The nominal value of shares issued under this delegation of authority shall not exceed €8,000,000 and the nominal value of debt securities shall not exceed €300,000,000. This authorization is valid for a period of 26 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 11, 2016. The Company has not used this authorization to date.

4.3.4. Issue of ordinary shares conferring rights to ordinary shares or debt securities and/or securities conferring rights to ordinary shares, without preferential subscription rights for existing shareholders (resolution 16)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to issue, on one or more occasions, for the amounts and at the times that it deems appropriate, on the French and/or international market, in euros or, where applicable, in foreign currency or any monetary unit determined by reference to a basket of currencies, ordinary shares, and/or ordinary shares conferring rights to ordinary shares or debt securities, and/or securities conferring rights to new ordinary shares. The nominal value of ordinary shares issued under this delegation of authority shall not exceed €4,000,000 or the equivalent of 20% of the capital per year, and the nominal value of debt securities shall not exceed €300,000,000. This authorization is valid for a period of 26 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 11, 2016. The Company has not used this authorization to date.

4.3.5. Increase in the amount of any issues that are oversubscribed (greenshoe option) (resolution 18)

Having considered the Board of Directors' report, the General Meeting resolved that for each issue of ordinary shares or securities conferring rights to shares decided pursuant to the fourteenth to sixteenth resolutions, if the issue is oversubscribed, the number of securities to be issued may be increased subject to compliance with Articles L.225-135-1 and R.225-118 of the French Commercial Code and the ceilings set by the General Meeting.

4.3.6. Issue of rights in return for contributions in kind made to the Company comprising capital instruments and securities conferring rights to the Company's share capital (resolution 19)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to issue shares or securities conferring rights, immediately and/or in the future, to the Company's share capital in return for the contributions in kind made to the Company comprising capital instruments and securities conferring rights to the Company's share capital. The nominal value of ordinary shares issued under this delegation of authority shall not exceed 10% of the Company's share capital on the date of the Meeting and shall be deducted from the ceiling on ordinary share issues set in the fifteenth and sixteenth resolutions. It replaces and supersedes the previous authorization granted by the General Meeting of May 11, 2016. This authorization is valid for 26 months. The Company has not used this authorization to date.

4.3.7. Bonus preference share allotments, without preferential subscription rights for existing shareholders (resolution 24)

The General Meeting authorized the Board of Directors to allot, on one or more occasions, except during a public offer for the Company's shares, Company bonus preference shares conferring the right to convert them into new or existing ordinary Company shares to certain categories of employees and Management Board members, it being specified that the rights attached to the preference shares were established by the Articles of Association of the Company. The maximum number of ordinary shares that may result from the conversion of the preference shares may not exceed 129,000 shares, or 0.5% of the Company's share capital. This authorization provides that the Board of Directors will determine the criteria and conditions for allotting these preference shares, the identity of the beneficiaries, the number of preference shares allotted, and the performance conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 18, 2017 and any similar delegation. This authorization is valid for 38 months.

At its meeting of May 17, 2018 the Board of Directors made use of this authorization and empowered the Chief Executive Officer to implement the bonus preference share plan and the allotment of said shares. The Chief Executive Officer implemented this authorization by allotting 940 bonus preference shares to the members of the Executive Committee and the Group's managerial staff. This number corresponds to a maximum number of 103,400 ordinary shares after conversion.

The definitive allotment of preference shares is subject to performance conditions associated with two criteria, with the most favorable of the two being taken into account. These criteria are based on the average of the 2018 and 2019 EPS and on the change in EPS compared to that of peer companies.

4.4. Combined General Meeting of May 17, 2019

4.4.1. Issue of ordinary shares or securities to employees of Mersen Group companies whose headquarters are not located in France and who are not members of a company investment plan (resolution 12)

The General Meeting authorized the Board of Directors, with the option of subdelegation under the conditions provided for by the law and the Articles of Association, to carry out one or more capital increases reserved for Group employees, in the proportion and at the times that it deems appropriate (except during a public offer for the Company's shares), via the issue of ordinary shares or securities conferring rights to the Company's share capital. These capital increases entail the waiver of shareholders' preferential subscription rights. The maximum number of ordinary shares that may be issued under this authorization shall not exceed 200,000 and this ceiling shall be deducted from the ceiling set in the thirteenth resolution. This authorization is valid for a period of 18 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 17, 2018. The Company has not used this authorization to date.

4.4.2. Issue of rights reserved for employees participating in the Group Investment Plan (resolution 13)

The General Meeting delegated its authority to the Board of Directors, with the option of subdelegation, to increase the share capital on one or more occasions at its sole discretion, through the issue of shares for cash reserved for employees participating in the Group Investment Plan. These capital increases require that shareholders' preferential subscription rights be waived. The maximum number of ordinary shares that may be issued under this authorization shall not exceed 200,000 and this ceiling shall be deducted from the ceiling set in the twelfth resolution. This authorization is valid for a period of 26 months. It replaces and supersedes the previous authorization granted by the General Meeting of May 17, 2018. The Company has not used this authorization to date.

4.4.3. Allotment of bonus shares to certain employees (resolution 14)

The General Meeting authorized the Board of Directors to allot existing or new shares to employees, or to certain categories of employees, of the Company and those of affiliated companies, at no cost. The total number of shares that may be thus allotted may not exceed 84,000, representing around 0.4% of the share capital on the day of the Meeting. This authorization provides that the Board of Directors will determine the identity and categories of the beneficiaries of the share allotment referred to, as well as the performance and share allotment conditions and criteria. This authorization invalidates the previous authorization granted by the General Meeting of May 17, 2018. This authorization is valid for 38 months.

At its meeting of May 17, 2019, the Board of Directors made use of this authorization to implement the performance-based bonus share plan and allotted 84,000 free shares to 200 Mersen Group employees and managerial staff according to performance conditions based on average growth in EBITDA margin and average organic sales growth over a period of several years. As in 2018, the performance criteria include a target growth rate and a growth rate compared to a panel of comparable companies (excluding any companies with abnormal fluctuations or material exceptional transactions over the period), with the bonus determined based on the most favorable amount of the two criteria.

4.4.4. Allotment of bonus shares to certain employees and/or to certain corporate officers (resolution 15)

The General Meeting authorized the Board of Directors to allot existing or new shares at no cost to the Chief Executive Officer (corporate officer), members of the Executive Committee and business unit managers of the Group. The total number of shares that may be thus allotted may not exceed 68,000, representing around 0.3% of the share capital on the day of the Meeting. The total number of bonus shares granted to the Chief Executive Officer cannot exceed 10% of the total number of bonus shares granted under this authorization. The authorization provides for the Board of Directors to determine the performance criteria and conditions for allotting these bonus shares. This authorization is valid for 38 months.

At its meeting of May 17, 2019, the Board of Directors made use of this authorization to implement the performance-based bonus share plan and decided to allocate 59,000 bonus shares out of a potential total of 68,000 to 14 senior executives, including the Chief Executive Officer, based on a combination of three independent, cumulative criteria: a stock market criterion measured against an external comparable (change in the Eurostoxx 600), a profitability criterion based on operating income per share and a CSR criterion in line with the Group's CSR commitments.

5. Changes in share capital

Dates	Type of operation	Share capital after operation	Issue premium *(in €)*	Total number of shares after the operation
01/27/2016	Issue of 19,138 new shares, each with a par value of €2, through the exercise of subscription options in 2015	41,384,108	297,213	20,692,054
01/27/2016	Cancellation of 55,200 treasury shares, each with a par value of €2	41,273,708	827,115	20,636,854
12/21/2016	Cancellation of 165,000 treasury shares, each with a par value of €2	40,943,708	N/A	20,471,854
12/12/2017	Issue of 165,772 new shares through the exercise of subscription options in 2017	41,275,252	2,666,545	20,637,626
12/12/2017	Cancellation of 585 category B shares, each with a par value of €2	41,274,082	N/A	20,637,041
05/11/2018	Issue of 1,172 category C shares, each with a par value of €2	41,276,426	N/A	20,638,213
01/23/2019	Issue of 129,905 new shares through the exercise of subscription options in 2018	41,536,236	2,075,670	20,768,118
05/18/2019	Issue of 10,600 ordinary shares and issue of 1,172 category D shares, each with a par value of €2	41,559,780	N/A	20,779,890
01/29/2020	Issue of 78,654 new shares, each with a par value of €2, through the exercise of subscription options in 2019	41,717,088	1,348,433	20,858,544
01/29/2020	Cancellation of 317 category B shares	41,716,454	N/A	20,858,227

6. Securities conferring rights to the share capital

- Subscription options

The number of subscription options still to be exercised at December 31, 2019 (after taking cancellations into account) would make it possible to issue 60,931 new shares, each with a par value of €2.

- Bonus preference shares (executive program)

At December 31, 2015, 902 category B preference shares (corresponding to 99,220 ordinary shares after conversion) were allotted. At the end of the vesting period and taking into account performance conditions, 317 category B preference shares were allotted definitively, corresponding to 34,870 ordinary shares. The Board canceled the other 585 preference shares at its meeting of December 12, 2017. Given that all the category B shares had been converted into ordinary shares, the Board noted, on January 29, 2020, the cancellation of 317 category B shares that had become null and void.

At December 31, 2016, 1,172 category C preference shares (corresponding to a maximum of 128,920 ordinary shares after conversion) were allotted definitively.

At December 31, 2017, 1,172 category D preference shares (corresponding to a maximum of 128,920 ordinary shares after conversion) were allotted definitively.

At December 31, 2018, 940 category E preference shares (corresponding to a maximum of 103,400 ordinary shares after conversion) were allotted, subject to performance criteria.

The total number of ordinary shares that may be allotted definitively (under the 2016, 2017 and 2018 preference share plans) is 361,240 shares, of which 268,290 to members of the Executive Committee (including 49,940 to the Chief Executive Officer).

- Bonus shares (executive program)

The total number of shares that may be allotted under the 2019 executive bonus share plan is 59,000, of which 44,250 for Executive Committee members (including 8,850 for the Chief Executive Officer).

- Bonus shares (non-executive program)

The number of bonus shares that may be allotted definitively (under the 2018 and 2019 bonus share plans) is 150,150.

- Summary

The number of bonus shares that could be allotted definitively, including by converting category C, D and E shares into ordinary shares, is 570,390 new shares, each with a par value of €2, representing 2,7% of the current share capital.

Based on the number of subscription options that may be exercised by beneficiaries (60,931) and the shares that may be definitively allotted (570,390), the maximum dilution would be 3%.

There are no other instruments or securities conferring rights to the Company's share capital.

7. Voting right certificates

None.

8. Investment certificates

None.

9. Shares pledged

None.

10. Shareholders' agreement

The Company is not aware of any shareholders' agreements or other agreements concerning its share capital.

STOCK REPURCHASE PROGRAM

1. Liquidity agreement

In March 2005, the Company signed a liquidity agreement with Exane BNP Paribas in compliance with the charter of ethics drawn up by the AMAFI. This liquidity agreement was renewed each year by tacit approval. The Company signed a new agreement with Exane on January 23, 2019, in order to comply with the new AMAFI recommendations.

The funds and shares made available pursuant to this agreement and credited to the liquidity account on February 25, 2005 comprised €2,200,000 and no shares.

At December 31, 2019, the following funds and shares appeared in the liquidity account:

- 26,599 shares;
- €1,311,158

2. Trading in its own shares by the Company in 2019

Number of treasury shares held by the Company at December 31, 2018	**231,834**
Number of shares purchased by the company in January 2019	21,373
Number of shares allocated to 2017 bonus share plans	68,600
Number of share allocated to the conversion of category B shares	34,870
Number of shares purchased under the liquidity agreement	265,788
Number of shares sold under the liquidity agreement	284,848
Number of treasury shares held by the Company at December 31, 2019	**130,677**

The Company did not use any derivatives.

3. Description of the stock repurchase program submitted for shareholders' approval at the Combined General Meeting of May 14, 2020

Prepared in accordance with Articles 241-1 *et seq.* of the General Regulation of the French Financial Markets Authority (*Autorité des marchés financiers* – AMF) and Articles L. 225-209 *et seq.* of the French Commercial Code, this description is intended to present the objectives and terms and conditions of the renewal of the stock repurchase program.

3.1. Summary of the principal characteristics of the operation

- Mersen's ordinary shares, admitted for trading on Euronext Paris, Compartment B (ISIN code: FR0000039620).
- Maximum percentage of the share capital authorized for repurchase by shareholders at the General Meeting: 10%.
- Maximum acquisition price per share: €60.
- Duration of the program: the authorization is valid for 18 months as of the General Meeting of May 14, 2020, i.e., until November 13, 2021.

3.2. Objectives of the program

Shares may be acquired in order to:

- enhance trading in the secondary market or the liquidity of the Mersen share by engaging the services of an investment service provider under a liquidity agreement that complies with practices approved by French law. For the purposes of the program, the number of shares taken into account to calculate the above-mentioned limit of 10% corresponds to the number of shares acquired, less the number of shares re-sold;
- hold the acquired shares in treasury and subsequently remit them as part of an exchange offer or in consideration for any acquisitions;
- cover share option and/or bonus share plans (or similar plans) allotted to Group employees and/or corporate officers, share allotments under company or group investment plans (or similar plans) or company profit-sharing plans and/or any other forms of share allotments to Group employees and/or corporate officers;
- cover securities conferring rights to allotments of shares in the Company, in accordance with applicable regulations;
- cancel the acquired shares, in accordance with the authorization granted or to be granted by the Extraordinary General Meeting.

3.3. Legal framework

The stock repurchase program is compliant with the provisions of Article L. 225-209 *et seq.* of the French Commercial Code. It will be submitted to the approval of the shareholders at the Combined General Meeting of May 17, 2019, deliberating in accordance with quorum and majority voting requirements for Ordinary General Meetings. The corresponding resolution to be proposed by the Board of Directors is worded as follows:

3.3.1. Resolution on the share repurchase program

After having read the Board of Directors' report, the General Meeting authorizes the Board of Directors for a period of eighteen months and in accordance with Articles L. 225-209 *et seq.* of the French Commercial Code, to purchase shares in the Company on one or more occasions and at the times that it deems appropriate. The number of shares held by the Company under this authorization may not be greater than 10% of the share capital and may be adjusted as necessary to take into account any capital increases or reductions that may occur during the term of the program.

This authorization supersedes the authorization granted to the Board of Directors by the General Meeting of May 17, 2019 in its eleventh ordinary resolution.

The shares may be purchased by any means, including by way of block purchases, at the times that the Board of Directors deems appropriate.

The Company does not intend to use options or derivatives.

The Board of Directors may not use this authorization without prior authorization from the General Meeting from the date that a public offer for the Company's shares is filed by a third party until the end of the offer period.

The maximum purchase price has been set at €60 per share. In the event of a transaction affecting the Company's share capital, such as share splits or reverse splits and bonus share allotments to shareholders, the above amount will be adjusted in the same proportion (a coefficient of the ratio between the number of shares comprising the share capital before the transaction and the number of shares after the transaction).

The maximum amount of the stock purchase program has been set at €125,149,362.

The General Meeting grants full powers to the Board of Directors to carry out the stock purchase program, determine the conditions and procedures thereof, enter into any and all agreements and carry out all formalities.

3.4. Procedures

3.4.1. Maximum percentage of the share capital to be acquired and maximum amount payable by Mersen

Mersen will have the option of acquiring up to 10% of the share capital at the date of the General Meeting, i.e., 2,085,822 shares. This limit shall be assessed on the date on which shares are acquired, in order to take into account any capital increases or reductions that may occur during the term of the stock repurchase program. The number of shares taken into account to calculate the limit corresponds to the number of shares acquired, less the number of shares re-sold during the term of the program for liquidity purposes. As the Company cannot hold more than 10% of its share capital and given that it already held 130,677 shares at December 31, 2019 (i.e., 0.6% of the share capital), the maximum number of shares that it may acquire under the program is 1,955,145 (i.e., 9.4% of the share capital), unless it sells or cancels the shares that it already holds.

The Company reserves the right to use the entire authorization. Accordingly, the maximum amount that Mersen may pay, assuming that it acquires shares at the maximum price set by the General Meeting, i.e., €60 per share, would be €117,308,700.

The Company's discretionary reserves, as stated under liabilities in the most recent annual financial statements prepared and certified at December 31, 2019, amounted to €305,338,034 pursuant to the law, the amount of the stock repurchase program may not exceed this figure until the 2019 financial statements are prepared.

Mersen undertakes to stay below the direct and indirect ownership threshold of 10% of the share capital at all times.

3.4.2. Conditions governing repurchases

These shares may be purchased, allotted or transferred at any time (except during a public offer for the Company's shares) and paid by any means, on and off the market, including by acquisition or transfer of blocks of shares, and specifically pursuant to a liquidity agreement entered into by the Company with an investment service provider.

3.4.3. Duration of the program

These stock repurchases may take place only after the approval of the corresponding resolution to be presented to the Combined General Meeting of May 14, 2020 and for a period of 18 months, i.e., until November 13, 2021.

3.5. Breakdown by objectives of treasury shares held at December 31, 2019

	Number of treasury shares and percentage of share capital
Grant or transfer of shares to Group employees and/or Management Board members under the company investment plans and the allotment of shares, specifically, the allotment of bonus shares or stock purchase options	104,078 0.5%
Allotment of shares in connection with the conversion or exchange of securities (including debt securities) conferring rights to the Company's share capital	0 0%
Purchase for holding purposes and subsequent remittal as part of an exchange offer or in consideration for any acquisitions	0 0%
Cancellation of shares through a reduction in the share capital in accordance with the French Commercial Code	0 0%
Enhancement of trading via a liquidity contract	26,599 0.1%

Share ownership

1. Share ownership thresholds crossed

- **January 17, 2019:** Jousse Morillon Investissement announced that it had fallen below the statutory threshold of 1% of the share capital and now holds 190,000 shares, i.e., 0.92% of the share capital and 0.75% of voting rights.
- **January 22:** Sycomore Asset Management announced that it had exceeded the statutory threshold of 1% of voting rights and now holds 255,267 shares, i.e., 1.24% of the share capital and 1.01% of voting rights.
- **February 14:** Covéa Finance announced that it had fallen below the statutory threshold of 2% of the share capital and now holds 409,276 shares, i.e., 1.98% of the share capital.
- **February 26:** Covéa Finance announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 422,037 shares, i.e., 2.03% of the share capital.
- **April 5:** Covéa Finance announced that it had fallen below the statutory threshold of 2% of the share capital and now holds 404,297 shares, i.e., 1.95% of the share capital.
- **April 5:** Sofina announced that it had fallen below the statutory threshold of 2% of the voting rights and now holds 440,145 shares, i.e., 2.12% of the share capital and 1.73% of voting rights.
- **April 26:** Sofina announced that it had fallen below the statutory threshold of 1% of the voting rights and holds 149,836 shares, i.e., 0.72% of the share capital and 0.59% of voting rights.
- **June 12:** BlackRock announced that it had exceeded the statutory threshold of 1% of voting rights and holds 376,219 shares, i.e., 1.81% of the share capital and 1.49% of voting rights.
- **July 15:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and holds 429,662 shares, i.e., 2.07% of the share capital and 1.69% of voting rights.
- **July 19:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 410,985 shares, i.e., 1.98% of the share capital and 1.61% of voting rights.
- **December 19:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and holds 418,620 shares, i.e., 2.01% of the share capital and 1.65% of voting rights.
- **December 20:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 403,682 shares, i.e., 1.94% of the share capital and 1.60% of voting rights.
- **December 24:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and holds 424,850 shares, i.e., 2.04% of the share capital and 1.68% of voting rights.
- **December 27:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 406,072 shares, i.e., 1.95% of the share capital and 1.66% of voting rights.
- **January 14, 2020:** ACF I Investissement (Ardian) announced that it had fallen below the statutory threshold of 10% of the share capital and now holds 2,075,857 shares, i.e., 9.96% of the share capital and 16.13% of voting rights.
- **January 16:** Norges announced that it had fallen below the statutory threshold of 5% of the share capital and holds 1,028,377 shares, i.e., 4.94% of the share capital and 4.07% of voting rights.
- **January 20:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 425,110 shares, i.e., 2.04% of the share capital and 1.67% of voting rights.
- **January 22:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 410,693 shares, i.e., 1.97% of the share capital and 1.62% of voting rights.
- **January 30:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 418,027 shares, i.e., 2.01% of the share capital and 1.65% of voting rights.
- **January 31:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 410,295 shares, i.e., 1.97% of the share capital and 1.62% of voting rights.
- **February 4:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 424,870 shares, i.e., 2.04% of the share capital and 1.67% of voting rights.

1.1. Changes in ownership of the share capital

	Dec. 31, 2019			Dec. 31, 2018			Dec. 31, 2017		
Shareholders	Number of shares	% of the share capital	% of the voting rights	Number of shares	% of the share capital	% of the voting rights	Number of shares	% of the share capital	% of the voting rights
Free float, o/w									
- French institutional investors	9,651,287	46.3%	54.9%	10,442,202	50.3%	58.7%	11,154,393	54.1%	59.6%
- International institutional investors	8,285,143	39.7%	32.7%	7,322,100	35.3%	29.0%	7,465,325	36.2%	32.0%
Individual shareholders	2,476,781	11.9%	10.8%	2,580,835	12.4%	11.1%	1,784,679	8.6%	7.6%
Employee shareholders	314,339*	1.5%	1.6%	191,147	0.9%	1.2%	207,971	1.0%	0.7%
Treasury shares	130,677	0.6%		231,834	1.1%		24,673	0.1%	
TOTAL	**20,858,227**	**100%**	**100%**	**20,768,118**	**100%**	**100%**	**20,637,041**	**100%**	**100%**

** Including 73,934 shares held by employees as a result of bonus shares plans 2016 and 2017.*

The Chief Executive Officer and the Board of the Directors own 2,268,048 shares (of which 2,242,770 held by Bpifrance and 19,640 by the Chief Executive Officer), i.e., a total of 10.9% of share capital.

To the best of the Company's knowledge at the date of publication of the URD, the following shareholders hold more than 5% of the Company's share capital and voting rights:

	Shares	% of the share capital	Voting rights exercisable at GM	% Voting rights exercisable at GM
Bpifrance Participations	2,242,770	10.8%	4,485,540	17.7%
Caisse des Dépôts et Consignations	996,900	4.8%	996,900	3.9%
SUB-TOTAL (BPI + CDC)	**3,239,670**	**15.6%**	**5,482,440**	**21.6%**
ACF I Investment (Ardian)	**2,021,055**	**9.7%**	**4,042,110**	**15.9%**

No shareholders' agreement is in place.

2. Dividend

	No. of shares at year-end	Dividend per share *(in €)*	Share price *(in €)*			Overall yield based on share price at year-end
			High	Low	Last	
2015	20,692,054	0.50	25.80	16.53	17.00	2.9%
2016	20,471,854	0.50	20.38	11.25	20.32	2.5%
2017	20,637,041	0.75	39.43	20.43	37.34	2.0%
2018	20,768,118	0.95	41.90	21.95	23.50	4.0%
2019	20,858,227	1.00	35.15	22.80	34.15	2.9%

Dividend payments are time-barred as prescribed by law; namely five years after their payment. After this time, payments are made to the French State.

For fiscal 2019, the third resolution of the Combined General Meeting of May 14, 2020 provides for the payment of a dividend of €1.00 per share, subject to approval by said Meeting.

Mersen and the stock market

Mersen endeavors to meet the value creation targets of its shareholders and to promote a broader understanding of the Group by providing clear, regular and transparent information.

1. Share price performance and trading volumes

1.1. Share-related data

- Listing: Euronext Paris.
- Market: Eurolist Compartment B.
- Indices: CAC All shares, CAC Mid&Small, Next 150, Tech 40.
- Eligible for SRD (deferred settlement) and PEA (equity savings plans).
- ISIN code: FR0000039620.

1.2. Market data

Share price	Number of shares traded	Share capital traded on a monthly basis *(in € million)*	Average daily number of shares traded	Price High *(in €)*	Price Low *(in €)*	Price Average(a) *(in €)*
2018						
January	752,858	29.97	34,221	41.90	36.35	39.87
February	785,129	30.47	39,256	41.45	35.70	39.29
March	1,351,019	49.98	64,334	40.15	35.50	37.44
April	803,327	30.51	40,166	40.15	35.30	37.84
May	708,491	26.91	32,204	40.60	35.65	38.48
June	934,193	32.42	44,485	37.05	31.65	35.05
July	828,262	28.25	37,648	37.15	31.95	33.80
August	675,097	23.28	29,352	36.20	32.70	34.20
September	585,399	18.42	29,270	33.85	29.85	31.59
October	1,039,470	28.63	45,194	30.50	25.60	27.81
November	913,169	24.93	41,508	30.85	24.45	27.15
December	724,767	17.03	38,146	26.50	21.95	23.48
2019						
January	963,298	25.28	43,786	29.20	22.80	26.22
February	681,473	19.50	34,074	29.85	27.15	28.39
March	969,956	28.01	46,188	30.75	26.95	28.71
April	747,754	23.25	37,388	33.20	29.25	30.95
May	619,032	18.68	28,138	31.80	29.15	30.27
June	760,242	24.66	38,012	34.50	29.05	32.53
July	817,192	26.68	35,530	34.80	31.20	32.66
August	929,281	27.73	42,240	32.90	28.50	29.92
September	578,631	17.05	27,554	31.10	27.55	29.48
October	522,326	14.46	22,710	29.40	26.10	27.60
November	572,270	17.65	27,251	32.20	28.75	30.82
December	810,370	27.08	40,519	35.35	29.95	33.68
2020						
January	1,016,538	33.30	46,206	35,30	29,40	33,02

Source: Euronext.
(a) Average closing price.

(Share price in €)	January 2020	2019	2018
At end of period	29,60	34.15	23.50
High/Low	35.30/29.40	35.15/22.90	41.90/21.95
YoY change/SBF 120 change		+48%/+26%	-36%/-11%
Market capitalization at end of period *(in € million)*	617	712	488
Average monthly number of shares traded	1,016,538	747,652	841,765
Average daily number of shares traded	46,206	35,184	39,612

2. A confidence-based relationship with shareholders

Mersen maintains a confidence-based relationship with its shareholders built on transparency and communicates through various channels to give them a better understanding of the Group, its strategy, businesses and fundamentals.

The Group's investor relations strategy is predicated on an active program of information meetings and presentations, including:

- meetings with institutional investors in Europe and North America;
- meetings and themed conferences run for the benefit of financial analysts and journalists from the economic and financial press;
- information and discussion meetings with individual shareholders in France and a twice-yearly shareholders' newsletter.

In addition, the website provides extensive information on products and markets. All regulatory information, Focus documents on the Group's business lines, and presentations of results are available in the Finance section.

3. Timetable for the Group's financial communication

3.1. 2019 Calendar

Sales

2018 Q4 sales – January 30

2019 Q1 sales – April 24

2019 Q2 sales – July 31

2019 Q3 sales – October 29

Results

2018 annual results – March 13

2019 half-year results – July 31

Meetings for institutional investors

In Europe and North America – throughout the year

Meetings for individual shareholders

Grenoble, France – December 5

Annual General Meeting

Paris - May 17

3.2. 2020 Calendar

Sales

2019 Q4 sales – January 30

2020 Q1 sales – April 29

2020 Q2 sales – July 31

2020 Q3 sales – October 28

Results

2019 annual results – March 11

2020 half-year results – July 31

Meetings for institutional investors

In Europe and North America – throughout the year

Meetings for individual shareholders

In regional France

Annual General Meeting

Paris - May 14

4. Officer responsible for financial information

Thomas Baumgartner

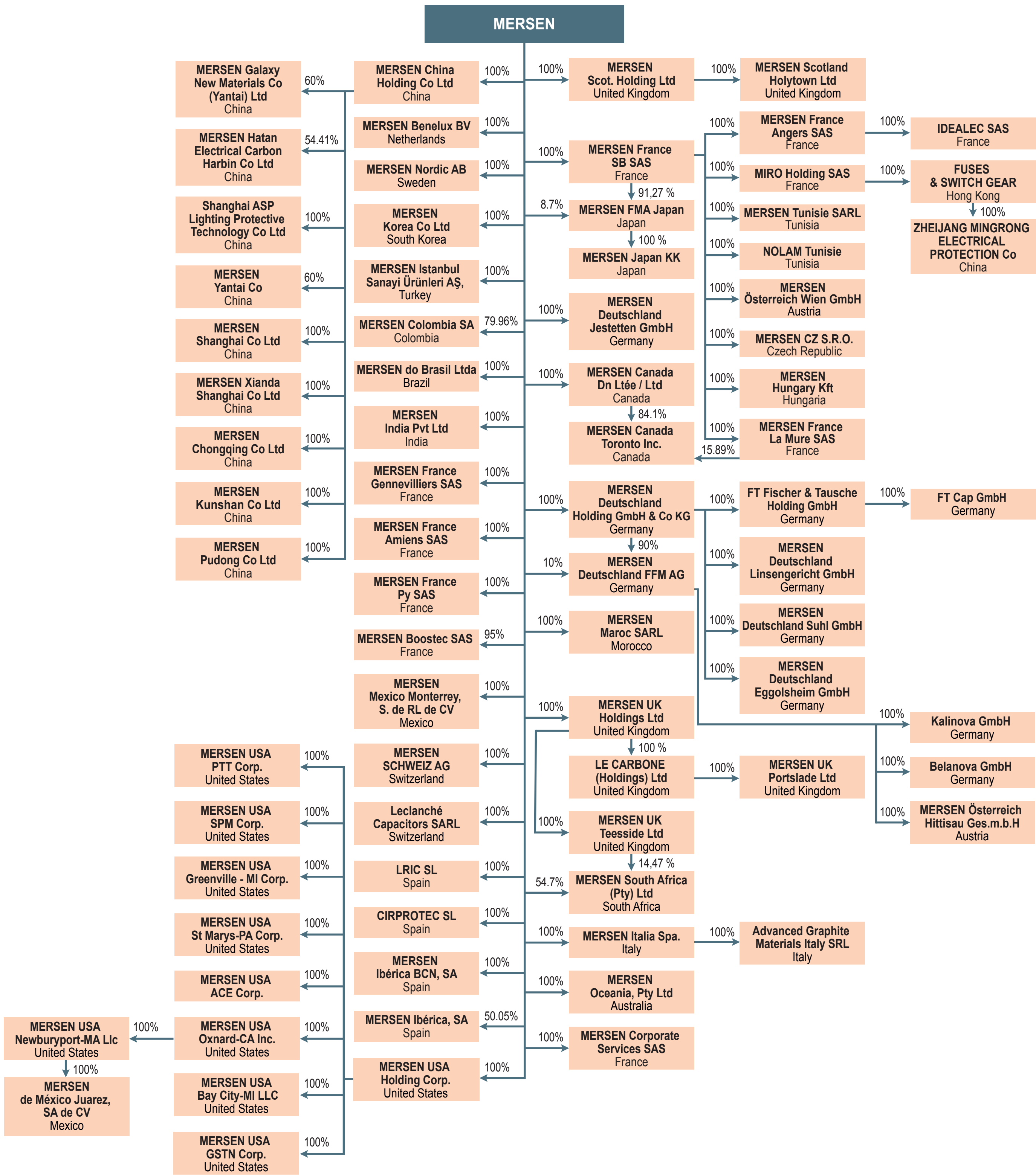
Group Vice President, Finance and Administration

Mersen
Tour Eqho
2 avenue Gambetta
CS 10077
F-92066 Paris La Défense, France
Tel.: + 33 (0)1 46 91 54 19

6 CONSOLIDATED FINANCIAL STATEMENTS

Note: the comments related to Mersen's activity, results and debt position are presented in the Management Report (Chapter 3).

CONSOLIDATION SCOPE AT DECEMBER 31, 2019



LIST OF CONSOLIDATED COMPANIES

	Consolidation method FC: Fully Consolidated	% of Group control	% of Group interests
1. **MERSEN** (France)	FC	100	100
2. **MERSEN France Amiens S.A.S** (France)	FC	100	100
3. **MERSEN France Gennevilliers S.A.S** (France)	FC	100	100
4. **MERSEN France Py S.A.S** (France)	FC	100	100
5. **MERSEN Corporate Services S.A.S** (France)	FC	100	100
6. **MERSEN France SB S.A.S** (France)	FC	100	100
- MERSEN France La Mure S.A.S (France)	FC	100	100
- MERSEN France Angers S.A.S (France)	FC	100	100
-Idéalec SAS (France)	FC	100	100
- MERSEN Österreich Wien Gmbh (Austria)	FC	100	100
- MERSEN CZ S.R.O. (Czech Republic)	FC	100	100
- MERSEN Hungaria Kft (Hungary)	FC	100	100
- MERSEN Tunisie SARL (Tunisia)	FC	100	100
- NOLAM Tunisie SARL (Tunisia)	FC	100	100
- MIRO Holding SAS (France)	FC	100	100
- FUSES & SWITCHGEAR (Hong Kong)	FC	100	100
- Zhejiang Mingrong Electrical Protection Company (China)	FC	100	100
- MERSEN FMA Japan KK (Japan)	FC	100	100
- MERSEN Japan KK (Japan)	FC	100	100
7. **MERSEN Boostec S.A.S** (France)	FC	95	95
8. **MERSEN Deutschland Holding GmbH & Co. KG** (Germany)	FC	100	100
- MERSEN Deutschland FFM AG (Germany)	FC	100	100
- Belanova-Kalbach GmbH (Germany)	FC	100	100
- Kalinova-Kalbach GmbH (Germany)	FC	100	100
- MERSEN Österreich Hittisau Ges.m.b.H. (Austria)	FC	100	100
- MERSEN Deutschland Lisengericht GmbH (Germany)	FC	100	100
- MERSEN Deutschland Suhl GmbH (Germany)	FC	100	100
- MERSEN Deutschland Eggolsheim GmbH (Germany)	FC	100	100
- FT Fischer & Tausche Holding Gmbh	FC	100	100
- FTCAP Gmbh (Germany)	FC	100	100
9. **Leclanché Capacitors** (Switzerland)	FC	100	100
10. **MERSEN Deutschland Jestetten GmbH** (Germany)	FC	100	100
11. **MERSEN Ibérica S.A** (Spain)	FC	50	50
12. **MERSEN Ibérica BCN S.A** (Spain)	FC	100	100
13. **Cirprotec S.L.** (Spain)	FC	100	100
14. **LRIC S.L.** (Spain)	FC	100	100
15. **MERSEN UK Holdings Ltd.** (Great Britain)	FC	100	100
- Le Carbone (Holdings) Ltd. (Great Britain)	FC	100	100
- MERSEN UK Portslade Ltd. (Great Britain)	FC	100	100
- MERSEN UK Teeside Ltd. (Great Britain)	FC	100	100

	Consolidation method FC: Fully Consolidated	% of Group control	% of Group interests
16. **MERSEN Scotland Holding Ltd.** (Great Britain)	FC	100	100
- MERSEN Scotland Holytown Ltd. (Great Britain)	FC	100	100
17. **MERSEN Italia Spa.** (Italy)	FC	100	100
- Advanced Graphite Materials Italy SRL (Italy)	FC	100	100
18. **MERSEN Nordic AB** (Sweden)	FC	100	100
19. **MERSEN Schweiz AG** (Switzerland)	FC	100	100
20. **MERSEN Canada Dn Ltée / Ltd.** (Canada)	FC	100	100
- MERSEN Canada Toronto Inc. (Canada)	FC	100	100
21. **MERSEN USA Holding Corp.** (United States)	FC	100	100
- MERSEN USA PTT Corp. (United States)	FC	100	100
- MERSEN USA Greenville-MI Corp. (United States)	FC	100	100
- MERSEN USA St Marys-PA Corp. (United States)	FC	100	100
- MERSEN USA Bay City-MI Llc. (United States)	FC	100	100
- MERSEN USA Oxnard-CA Inc. (United States)	FC	100	100
- MERSEN USA Newburyport-MA LLC (United States)	FC	100	100
- MERSEN de México Juarez, S.A DE. C.V (Mexico)	FC	100	100
- MERSEN USA Ace Corp (United States)	FC	100	100
- MERSEN USA SPM Corp. (United States)	FC	100	100
- MERSEN USA GSTN Corp. (United States)	FC	100	100
22. **MERSEN Mexico Monterrey, S de R.L. de C.V.** (Mexico)	FC	100	100
23. **MERSEN Oceania, Pty Ltd.** (Australia)	FC	100	100
24. **MERSEN Korea Co.** Ltd (South Korea)	FC	100	100
25. **MERSEN India Pvt. Ltd.** (India)	FC	100	100
26. **MERSEN China holding Co.** Ltd (China)	FC	100	100
- MERSEN Pudong Co. Ltd (China)	FC	100	100
- MERSEN Chongqing Co. Ltd (China)	FC	100	100
- MERSEN Kunshan Co. Ltd (China)	FC	100	100
- MERSEN Xianda Shanghai Co. Ltd (China)	FC	100	100
- MERSEN Shanghai Co. Ltd (China)	FC	100	100
- MERSEN Yantai Co. (China)	FC	60	60
- Shanghai ASP Lighting Protective Technology Co. Ltd (China)	FC	100	100
- MERSEN Hatan Electrical Carbon (Harbin) Co. Ltd (China)	FC	54	54
- MERSEN Galaxy New Materials (Yantai) Co. Ltd (China)	FC	60	60
27. **MERSEN South Africa PTY Ltd** (South Africa)	FC	69	69
28. **MERSEN do Brasil Ltda.** (Brazil)	FC	100	100
29. **MERSEN Istanbul Sanayi Ürünleri** (Turkey)	FC	100	100
30. **MERSEN Colombia S.A** (Colombia)	FC	80	80
31. **MERSEN Maroc S.A.R.L** (Morocco)	FC	100	100

All these companies have a fiscal year that corresponds to the calendar year.

Changes in consolidation scope over the past two years

The principal changes in consolidation scope that impacted the consolidated financial statements in 2018 and 2019 were as follows:

- In 2018, Mersen:
  - acquired all of the shares of Artimon SA in France and of its operating subsidiary Idéalec SAS (April),
  - acquired all of the shares of FT Fischer & Tausche Holding Gmbh & Co KG (Germany) and of its operating subsidiaries FTCAP Gmbh (Germany) and Leclanché Capacitors sarl (Switzerland) (July),
  - acquired all the service activities of Louisville Graphite Inc. (LGI) in the United States (June),
  - set up the Mersen Galaxy New Materials (Yantai) Co. Ltd. joint venture in China, in which it holds 60% of the shares (end of year);
- In 2019, Mersen acquired:
  - the assets of the former Graftech site in Columbia (Tennessee) on June 28. These assets are carried on the books of the US company USA GSTN Corp., which was set up for this purpose,
  - acquired all of the shares of Advanced Graphite Materials in Italy (November).

CONSOLIDATED STATEMENT OF INCOME*

In millions of euros	Notes	Dec. 31, 2019	Dec. 31, 2018
CONTINUING OPERATIONS			
Consolidated sales	19	950.2	878.5
Cost of sales		(650.0)	(593.4)
Total gross income		**300.2**	**285.1**
Selling and marketing expenses		(80.0)	(78.0)
Administrative and research expenses		(114.8)	(110.2)
Amortization of revalued intangible assets		(1.3)	(1.2)
Other operating expenses		(2.0)	(4.1)
OPERATING INCOME BEFORE NON-RECURRING ITEMS		**102.1**	**91.6**
Non-recurring expenses and income	18	(11.2)	(3.8)
OPERATING INCOME	**19/21**	**90.9**	**87.8**
Financial expenses		(13.2)	(10.3)
Net financial income/(expense)	**22**	**(13.2)**	**(10.3)**
Income from continuing operations before tax		**77.7**	**77.5**
Current and deferred income tax	23	(17.9)	(18.3)
Net income from continuing operations		**59.8**	**59.2**
Net income/(loss) from operations held for sale and discontinued operations	5	0.0	0.0
NET INCOME		**59.8**	**59.2**
Attributable to:			
- Owners of the parent		57.3	56.5
- Non-controlling interests		2.5	2.7
NET INCOME FOR THE PERIOD		**59.8**	**59.2**
Earnings per share	**24**		
Basic earnings per share *(€)*		2.76	2.75
Diluted earnings per share *(€)*		2.68	2.66
Earnings per share from continuing operations	**24**		
Basic earnings per share *(€)*		2.76	2.75
Diluted earnings per share *(€)*		2.68	2.66
Earnings per share from operations held for sale and discontinued operations	**24**		
Basic earnings per share *(€)*		0.00	0.00
Diluted earnings per share *(€)*		0.00	0.00

** The consolidated statement of income for the year ended December 31, 2019 reflects the impact of the Group's application of IFRS 16 «Leases» since January 1, 2019 using the modified retrospective approach (see Note 2-W).*

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

In millions of euros	Notes	Dec. 31, 2019	Dec. 31, 2018
NET INCOME FOR THE PERIOD		**59.8**	**59.2**
Items that will not be subsequently reclassified to income			
Financial assets at fair value through “Other comprehensive income”		0.2	0.0
Remeasurement of net defined benefit liabilities (assets)		(9.2)	6.3
Tax impact		2.1	(1.5)
		(6.9)	4.8
Items that may subsequently be reclassified to income			
Change in fair value of hedging instruments		1.4	(0.1)
Exchange differences on translation of assets and liabilities at the period-end rate		6.4	6.3
Tax impact		(0.2)	0.0
		7.6	6.2
INCOME AND EXPENSES RECOGNIZED DIRECTLY IN EQUITY		**0.7**	**11.0**
TOTAL COMPREHENSIVE INCOME/(LOSS)		**60.5**	**70.2**
Attributable to:			
- Owners of the parent		57.9	67.7
- Non-controlling interests		2.6	2.5
TOTAL COMPREHENSIVE INCOME/(LOSS)		**60.5**	**70.2**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION*

ASSETS

In millions of euros	Note	Dec. 31, 2019	Dec. 31, 2018
NON-CURRENT ASSETS			
Intangible assets			
- Goodwill	6	280.6	276.2
- Other intangible assets	8	34.2	35.1
Property, plant and equipment	8		
- Land		32.3	30.6
- Buildings		78.8	76.3
- Plant, equipment and other assets		196.0	171.6
- Assets in progress		31.3	22.4
- Right-of-use assets	16	50.2	
Non-current financial assets			
- Equity interests	9	3.7	4.1
- Non-current derivatives	3		0.1
- Other financial assets		4.2	3.3
Non-current tax assets			
- Deferred tax assets	23	29.3	26.9
- Long-term portion of current tax assets		7.8	5.8
TOTAL NON-CURRENT ASSETS		**748.4**	**652.4**
CURRENT ASSETS			
- Inventories	10	207.0	198.6
- Trade receivables	11	147.3	146.2
- Contract assets		9.8	10.6
- Other operating receivables		21.7	20.4
- Short-term portion of current tax assets		3.6	4.6
- Other current assets		0.0	1.9
- Current financial assets	15	16.5	13.8
- Current derivatives	3	1.4	1.2
- Cash and cash equivalents	15	45.2	34.8
- Assets held for sale and discontinued operations	5	0.0	0.0
TOTAL CURRENT ASSETS		**452.5**	**432.1**
TOTAL ASSETS		**1,200.9**	**1,084.5**

** The consolidated statement of financial position at December 31, 2019 reflects the impact of the Group's application of IFRS 16 "Leases" since January 1, 2019 using the modified retrospective approach (see Note 2-W).*

EQUITY AND LIABILITIES

In millions of euros	Note	Dec. 31, 2019	Dec. 31, 2018
EQUITY			
- Share capital	12	41.7	41.5
- Retained earnings and other reserves		452.6	417.6
- Net income for the year		57.3	56.5
- Cumulative translation adjustments		(3.0)	(9.3)
EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT		**548.6**	**506.3**
- Non-controlling interests		22.0	21.8
TOTAL EQUITY		**570.6**	**528.1**
NON-CURRENT LIABILITIES			
- Non-current provisions	13	6.2	1.5
- Employee benefit obligations	14	75.0	64.6
- Deferred tax liabilities	23	30.3	27.8
- Long- and medium-term borrowings	15	235.4	109.4
- Lease liabilities	16	48.1	
- Non-current derivatives	3	0.1	0.1
TOTAL NON-CURRENT LIABILITIES		**395.1**	**203.4**
CURRENT LIABILITIES			
- Trade payables		60.6	71.8
- Contract liabilities		29.1	28.3
- Other operating payables		88.6	84.1
- Current provisions	13	6.1	7.8
- Short-term portion of current tax liabilities		3.6	2.4
- Miscellaneous liabilities	13	1.8	1.0
- Other current financial liabilities	15	27.3	125.3
- Current derivatives	3	0.2	2.0
- Financial current accounts	15	0.7	0.5
- Bank overdrafts	15	16.5	28.9
- Liabilities related to assets held for sale and discontinued operations	5	0.7	0.9
TOTAL CURRENT LIABILITIES		**235.2**	**353.0**
TOTAL EQUITY AND LIABILITIES		**1,200.9**	**1,084.5**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to owners of the parent						
In millions of euros	Share capital	Additional paid-in capital, retained earnings and other reserves	Net income/ (expense) for the period	Cumulative translation adjust-ments	Total	Non-controlling interests	Total equity
AT JANUARY 1, 2018	**41.3**	**403.3**	**37.6**	**(15.8)**	**466.4**	**17.6**	**484.0**
Prior-period net income		37.6	(37.6)		0.0		0.0
Net income for the year			56.5		56.5	2.7	59.2
Change in fair value of derivative hedging instruments, net of tax		(0.1)			(0.1)		(0.1)
Remeasurement of net liabilities (assets) for defined benefits after tax		4.8			4.8		4.8
Translation adjustment				6.5	6.5	(0.2)	6.3
Total other comprehensive income		**4.7**		**6.5**	**11.2**	**(0.2)**	**11.0**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**0.0**	**4.7**	**56.5**	**6.5**	**67.7**	**2.5**	**70.2**
Dividends paid		(15.7)			(15.7)	(0.5)	(16.2)
Treasury shares		(8.4)			(8.4)		(8.4)
Capital increase	0.2	2.1			2.3		2.3
Share-based payment expense (IFRS 2)		2.1			2.1		2.1
Acquisition of non-controlling interests in Cirprotec		(8.0)			(8.0)	(2.9)	(10.9)
Creation of Mersen Galaxy Joint-Venture					0.0	5.1	5.1
Adjustment resulting from first-time application of IFRS 9: impairment of receivables		(0.5)			(0.5)		(0.5)
Other		0.4			0.4		0.4
AT DECEMBER 31, 2018	**41.5**	**417.6**	**56.5**	**(9.3)**	**506.3**	**21.8**	**528.1**
Prior-period net income		56.5	(56.5)		0.0		0.0
Net income for the year			57.3		57.3	2.5	59.8
Change in fair value of derivative hedging instruments, net of tax		1.2			1.2		1.2
Financial assets as at their fair value		0.2			0.2		0.2
Revaluations of the net liabilities (assets) for defined benefits after taxes		(7.1)			(7.1)		(7.1)
Translation adjustment				6.3	6.3	0.1	6.4
Total other comprehensive income	**0.0**	**(5.7)**	**0.0**	**6.3**	**0.6**	**0.1**	**0.7**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**0.0**	**(5.7)**	**57.3**	**6.3**	**57.9**	**2.6**	**60.5**
Dividends paid		(19.5)			(19.5)	(2.4)	(21.9)
Treasury shares		(0.2)			(0.2)		(0.2)
Capital increase	0.2	1.3			1.5		1.5
Share-based payment expense (IFRS 2)		2.5			2.5		2.5
Changes in non-controlling interests					0.0		0.0
Other		0.1			0.1		0.1
AT DECEMBER 31, 2019	**41.7**	**452.6**	**57.3**	**(3.0)**	**548.6**	**22.0**	**570.6**

Consolidated statement of cash flows*

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Income before tax	77.7	77.5
Depreciation and amortization	51.2	37.5
Additions to/(reversals from) provisions	(0.5)	(5.4)
Net financial income/(expense)	13.2	10.3
Capital gains/(losses) on asset disposals	0.3	0.8
Other	7.2	2.5
Cash generated by operating activities before change in WCR	**149.1**	**123.2**
Change in working capital requirement	(9.8)	(21.5)
Income tax paid	(16.0)	(10.0)
Net cash generated by continuing operating activities	**123.3**	**91.7**
Cash generated by/(used in) discontinued operations	**(0.2)**	**(0.4)**
NET CASH GENERATED BY OPERATING ACTIVITIES	**123.1**	**91.3**
Intangible assets	(4.6)	(3.4)
Property, plant and equipment	(65.3)	(55.2)
Decreases (increases) in amounts due to suppliers of noncurrent assets	2.6	(2.8)
Financial assets	0.0	(1.0)
Changes in scope of consolidation	(19.4)	(30.8)
Other cash flows from investing activities	(0.2)	2.6
Cash generated by/(used in) investing activities from continuing operations	**(86.9)**	**(90.6)**
Cash generated by/(used in) investing activities from discontinued operations	**0.0**	**0.0**
NET CASH GENERATED BY/(USED IN) INVESTING ACTIVITIES	**(86.9)**	**(90.6)**
NET CASH GENERATED BY OPERATING AND INVESTING ACTIVITIES	**36.2**	**0.7**
Amounts received/(paid) on capital increases/reductions and other changes in equity	1.4	(6.3)
Net dividends paid to shareholders and non-controlling interests	(22.1)	(15.8)
Interest payments	(7.9)	(8.1)
Lease payments	(12.7)	
Change in debt	16.5	39.3
NET CASH GENERATED BY/(USED IN) FINANCING ACTIVITIES	**(24.8)**	**9.1**
Net increase/(decrease) in cash and cash equivalents	11.4	9.8
Cash and cash equivalents at beginning of year (Note 15)	34.8	25.9
Cash and cash equivalents at year-end (Note 15)	45.2	34.8
Change in scope	0.0	0.0
Impact of currency fluctuations	1.0	0.9
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**11.4**	**9.8**

** The consolidated statement of cash flows for the year ended December 31, 2019 reflects the impact of the Group's application of IFRS 16 «Leases» since January 1, 2019 using the modified retrospective approach (see Note 2-W).*

Notes to the consolidated financial statements

Summary of the notes to the financial statements

Note 1 Compliance statement

In accordance with Regulation (EC) No. 1606/2002 of July 19, 2002, which applies to the consolidated financial statements of European companies listed on a regulated market, and as a result of its listing in an EU country, the consolidated financial statements of Mersen and its subsidiaries (the “Group”) have been prepared in accordance with IFRS (International Financial Reporting Standards).

The standards and interpretations that are mandatory at January 1, 2019 are indicated in Note 2. The new standards applied with effect from 2019 are presented in Note 2-W. The standards and interpretations yet to be applied appear in Note 2-X.

The options chosen by the Group are indicated in the chapters that follow.

The consolidated financial statements at December 31, 2019 were prepared by applying the principles for recognizing and valuing transactions set forth in the IFRS standards adopted in the European Union on this date. They were also prepared in accordance with the rules of presentation and financial information applicable to annual financial statements, as defined in the General Regulation of the French Financial Markets Authority (Autorité des Marchés Financiers -AMF).

For comparison purposes, the 2019 consolidated financial statements include data for 2018, which were prepared using the same accounting rules with the exception of IFRS 16, applied since January 1, 2019 (see Note 2-W).

The accounting principles described in Note 2 *et seq.* were used to prepare the comparative information and the 2019 annual financial statements.

Note 2 Summary of significant accounting policies and methods

A - Scope and consolidation method

The consolidated financial statements include the financial statements of the parent company as well as those of companies controlled by the parent company.

Income from subsidiaries acquired or sold during the period is included in the consolidated statement of income since the date of acquisition or up to the loss of control, respectively.

All intra-Group transactions and balances are eliminated.

The consolidated financial statements have been prepared in euros.

The Group’s business is not seasonal; both sales and purchases are spread evenly over the year.

B - Presentation of the financial statements

The Mersen group presents its financial statements in accordance with the principles contained in the revised standard IAS 1 “Presentation of Financial Statements”.

B1 - Statement of comprehensive income

In view of customary practice and the nature of its business, the Group has opted to present the statement of income using the function of expense method, which consists in classifying expenses according to their function under cost of sales, the cost of commercial activities, administrative activities and Research and Development (R&D).

The Group presents comprehensive income in two statements consisting of a statement of income and a separate statement showing income and other items of comprehensive income.

B2 - Consolidated statement of financial position

Assets and liabilities linked to the operating cycle and those having a maturity of less than 12 months at the reporting date are classified as current. Other assets and liabilities are classified as non-current.

B3 - Statement of cash flows

The Group prepares the statement of cash flows using the indirect method and as stipulated in IAS 7.

The indirect method consists in determining the cash flows relating to the operational activities, for which net income or loss is adjusted for the effects of non-cash transactions and items relating to investment and financing activities.

B4 - Activities, assets and liabilities held for sale and discontinued operations

In application of IFRS 5, assets and liabilities that are immediately available for sale in their current state, and whose sale is highly probable, are presented on the statement of financial position under assets and liabilities held for sale. Where a group of assets is held for sale as a single transaction and this group of assets represents a distinct component of the entity (business segment or principal and distinct geographical region covered by a single and coordinated disposal plan, or a subsidiary acquired exclusively with a view to resale), we consider the group of assets as a whole, together with the related liabilities. The sale must take place during the year following this presentation of the asset or group of assets.

The non-current assets or group of assets held for sale are stated at the lower of their net carrying amount and the fair value net of disposal costs. Non-current assets presented in the statement of financial position as held for sale are no longer depreciated (or amortized) once they are presented as such.

For groups of assets that meet the definition of an operation held for sale or discontinued, their net income is presented separately from the net income of continuing operations and their cash flows are presented on separate lines in the cash flow statement.

C - Foreign currency translation

The financial statements of the Group's foreign subsidiaries are prepared in their functional currency.

The statements of financial position of companies whose functional currency is not the euro are translated into euro at the closing exchange rate, with the exception of equity, which is translated at the historic exchange rate. Statements of income are translated at the average exchange rate during the period; the average exchange rate is the approximate value of the exchange rate on the date of the transaction, in the absence of significant fluctuations.

Foreign exchange adjustments resulting from translation are recognized under other items of comprehensive income, and are presented in the currency translation reserve component of equity. However, if the operation involves a subsidiary that is not wholly owned, a foreign exchange difference proportional to the percentage of the holding is assigned to the non-controlling interests. Where a foreign operation is sold and control or significant influence or joint control is lost, the aggregate amount of the corresponding foreign exchange differences is reclassified in income. Where the Group sells part of its equity interest in a subsidiary that includes a foreign operation while retaining control, a proportional share of the aggregate amount of the foreign exchange differences is reallocated to non-controlling interests. Where the Group sells only a part of its equity interest in an affiliated or proportionally consolidated company that includes a foreign operation abroad, but maintains a significant interest or joint control, the proportional share of the aggregate amount of the foreign exchange differences is reclassified under income.

With the exception of cash that is translated at the closing exchange rate, the cash flow statement is translated at the average exchange rate, unless it is not appropriate to do so.

Statement of financial position translation differences are recorded separately in equity under cumulative translation adjustments and include:

- the impact of the exchange rate movements on assets and liabilities;
- the difference between income calculated at the average exchange rate and income calculated at the year-end exchange rate.

Goodwill and fair value adjustments resulting from the acquisition of subsidiaries whose functional currency is not the euro are treated as assets and liabilities of the subsidiary. They are therefore stated in the functional currency of the subsidiary and translated at the closing exchange rate.

D - Translation of foreign currency transactions

The recognition and measurement of foreign currency transactions are defined by IAS 21 "Effects of Changes in Foreign Exchange Rates".

Foreign currency transactions are translated at the exchange rate effective at the time of the transaction. At the end of the fiscal year, monetary assets and liabilities denominated in foreign currencies are translated at the closing exchange rate. The resulting translation adjustments are recognized in operating income under foreign exchange gains and losses.

Translation adjustments on financial instruments denominated in foreign currencies corresponding to a net investment hedge at a foreign subsidiary are recognized in equity under cumulative translation adjustments.

E - Hedging

The recognition and measurement of hedging transactions are defined by IAS 32 and 39.

E1 - Currency and commodity hedging

A currency derivative is eligible for hedge accounting provided that the hedging relationship was documented from the outset and that its effectiveness over its lifetime has been demonstrated.

Hedging protects against variations in the value of assets, liabilities or firm commitments; it also guards against variations in the value of cash flows (sales generated by the company's assets, for example).

Derivatives are stated at fair value. Changes in the fair value of these instruments are recognized using the following methods:

- changes in the fair value of instruments eligible for the hedging of future cash flows are recognized directly in equity for the effective component of the hedge (intrinsic value); changes in the fair value of these instruments are then recognized in operating income and offset changes in the value of the hedged assets, liabilities, or firm commitments as and when they occur. The time value of the hedges is recognized in operating income under other operating expenses;
- changes in the fair value of instruments not eligible for hedging future cash flows are recognized directly in income.

E2 - Interest rate hedging

Interest rate derivatives are valued on the statement of financial position at fair value. Changes in fair value are recognized using the following methods:

- the ineffective component of the derivative instrument is recognized under income as the cost of debt;
- the effective component of the derivative instrument is recognized as:
  - equity in the case of a derivative recognized as a cash flow hedge (e.g. a swap to fix a debt carrying a variable interest rate),
  - income (cost of debt) in the case of a derivative recognized as a fair value hedge (e.g. a swap turning a fixed interest rate into a floating interest rate). This recognition is offset by changes in the fair value of the hedged debt.

F - Intangible assets

The applicable standards are IAS 38 "Intangible Assets", IAS 36 "Impairment of Assets" and IFRS 3 "Business Combinations".

In accordance with IAS 38 "Intangible Assets", only items whose future economic benefits are likely to benefit the Group and whose cost can be reliably determined are recognized as intangible assets.

The Group's intangible assets consist primarily of goodwill.

Other intangible assets (customer relationships, technology) with a finite lifespan are recognized at cost less accumulated amortization and impairment. Amortization is recognized as an expense on a straight-line basis over the estimated useful life.

F1 - Goodwill

For acquisitions completed between January 1, 2004 and January 1, 2010:

Goodwill represents the excess acquisition cost paid over the Group's share of the amounts recognized (usually at fair value) as assets, liabilities and contingent liabilities.

After January 1, 2010, in application of revised IFRS 3, in the case of a business combination, the Group values goodwill as the fair value of the consideration transferred (including the fair value of any equity interest previously held in the company acquired) plus the amount recognized for any non-controlling interest in the company acquired, less the net amount recognized (usually the fair value) in respect of identifiable assets acquired and liabilities assumed, with all these items being valued on the date of acquisition. When the difference is negative, the resulting gain is recognized as a bargain purchase in income.

The Group chooses, transaction by transaction, on the date of acquisition, to value any non-controlling interest at either its fair value or its share in the identifiable net assets of the acquired company recognized.

Goodwill is allocated to the Group's cash-generating units (CGU). The Group has defined the following five CGUs:

- Power Transfer Technologies;
- Graphite Specialties;
- Anticorrosion Equipment;
- Solutions for Power Management;
- Electrical Protection and Control.

In accordance with IFRS 3 "Business Combinations", goodwill is not amortized. It is subject to an impairment test as soon as indications of impairment appear, and at least once a year.

In accordance with IAS 36, the method used by the Group for testing the impairment of assets consists in:

- developing cash flows after normative taxes on the basis of the Strategic Plan of the relevant CGU;
- calculating a value in use using a method comparable to any business valuation by discounting the cash flows at the Group's Weighted Average Cost of Capital (WACC);
- comparing this value in use with the carrying amount of the assets to determine whether an impairment loss should be recorded.

The value in use is determined from discounted projections of future operating cash flows over five years, and a terminal value. The discount rate used for these calculations is the weighted average cost of capital after tax for each cash generating unit (see Note 7).

Any losses of the value of goodwill recognized are irreversible.

F2 - Patents and licenses

Patents and licenses are amortized on a straight-line basis over the legal protection period.

Computer software is amortized on a straight-line basis over its useful life.

F3 - Development costs

According to IAS 38 "Intangible Assets", development costs are capitalized as soon as it has been demonstrated:

- that the company has the intention and the financial and technical capacity to see the development project through to its term;
- that the future economic benefits that are attributable to development spending will benefit the company;
- that the cost of this asset can be measured reliably; and
- how the intangible asset will generate probable future economic benefits.

Research and Development costs that do not meet the above criteria are recognized as expenses in the period during which they are incurred. Capitalized development costs that meet the criteria laid down by the new accounting framework are recorded on the assets side of the statement of financial position. They are amortized on a straight-line basis over their useful life.

F4 - Intangible assets acquired in connection with a business combination

Intangible assets also include the technology, trademarks and customer relationships valued at the time of the acquisition of companies in application of IFRS 3 "Business Combinations".

Amortization is recognized as an expense on a straight-line basis over the estimated useful life of the intangible assets, other than goodwill, as soon as they are ready to be brought into service. The estimated useful lives for the current period and comparable period for the acquisitions made were as follows:

- trademarks whose useful life is finite — up to 30 years
- patents and technology — up to 30 years
- customer relationships — up to 30 years

To determine whether the useful life of an intangible asset is finite or indefinite, the Group examines the external and internal factors relating to the asset according to the criteria laid down in the standard.

G - Property, plant and equipment

In accordance with IAS 16 “Property, plant and equipment”, only items whose cost can be reliably determined and whose future economic benefits will probably benefit the Group are recognized as Property, plant and equipment.

Property, plant and equipment are valued at their historical acquisition cost, less accumulated depreciation and impairments observed, with the exception of land, which was revalued on the date of the IFRS transition date.

Borrowing costs directly attributable to the acquisition, construction and production of qualifying assets are included in the cost of this asset.

Depreciation is calculated on the basis of the rate of consumption of the expected economic benefits for each asset item on the basis of the acquisition cost, where appropriate less a residual value.

The various components of property, plant and equipment are recognized separately if their useful life and therefore their depreciation period are significantly different.

Accordingly, the depreciation method used by the Group is the straight-line method, depending on the projected useful life of the asset.

The periods used are:

- construction: 20 to 50 years;
- fixtures and fittings: 10 to 15 years;
- plant and equipment: 3 to 10 years;
- vehicles: 3 to 5 years.

These depreciation periods and the residual values are reviewed and adjusted at the end of each annual period; the changes are applied prospectively.

Investment subsidies are recognized at the outset as a deduction from the gross value of the asset.

H - Leases

In accordance with IFRS 16, the Group’s statement of financial position includes right-of-use assets and lease liabilities relating to leases of assets valued at less than €5,000 (USD 5,000) or leases with a term of less than one year.

Right-of-use assets are initially measured at cost and subsequently amortized on a straight-line basis over the reasonably certain term of the lease. Where necessary, right-of-use assets are adjusted for any loss in value.

One of the key assumptions is that specific discount rates should be set for each country, to be calculated according to the default risk of the country and the credit risk of the lessee entity, as well as the Group’s external financing conditions.

The Group estimates the reasonably certain term of its leases based on its past experience.

I - Impairment of property, plant and equipment and intangible assets

In accordance with IAS 36 “Impairment of Assets”, if events or changes in the market environment suggest that there is a risk of impairment, the Group’s property, plant and equipment and intangible assets are subject to a detailed review to determine whether their carrying amount is lower than their recoverable amount; this amount is defined as the higher of either their fair value less costs of disposals, or their value in use.

If the recoverable amount of the assets is lower than their carrying amounts, an impairment loss is recognized equivalent to the difference between these two amounts. Impairment losses relating to property, plant and equipment and intangible assets (excluding goodwill) with a finite useful life can be subsequently reversed if the recoverable amount becomes higher than the carrying amount (within the limit of the impairment loss originally recognized).

The recoverable amount of an asset is usually determined on the basis of its value in use. This corresponds to the value of the future economic benefits expected from their use and sale. It is calculated in particular by reference to the future discounted cash flows determined in line with economic forecasts and provisional operating conditions used by the Management of the Mersen group.

IAS 36 defines the discount rate to be used as the pre-tax rate reflecting the current market assessments of the time value of money and the risks specific to the asset. It is the rate of return that investors would require if they were to choose an investment whose amount, maturity and risks were equivalent to those of the relevant asset or Cash-Generating Unit (CGU).

J - Financial assets and liabilities

Measurement and recognition of financial assets and liabilities are defined by IFRS 9 “Financial Instruments”, IAS 32 “Financial Instruments: Presentation” and IFRS 7 “Financial Instruments: Disclosures”.

Financial assets include equity instruments at fair value through other items of comprehensive income, the fair value of hedging instrumentsderivatives held as assets, guarantee deposits paid, loans and receivables, contract assets and cash and cash equivalents at amortized cost.

Current and non-current financial assets measured at amortized cost are written down in line with the expected loss model set out in IFRS 9: impairment of trade receivables is calculated based on historical loss rates, adjusted prospectively for future events that factor in both individual credit risks and the economic outlook on the markets in question.

Financial liabilities include borrowings, other financing facilities and bank overdrafts, guarantee deposits received, contract liabilities and the fair value of hedging instruments-derivatives held as liabilities. Unless they have been hedged at fair value, borrowings and other financial liabilities are measured at the amortized cost calculated using the effective interest rate (EIR).

Equity interests

The equity interests of unconsolidated companies are non-current financial assets classified as "available for sale" and measured at their fair value.

For each investment, at initial recognition, the Group may make an irrevocable decision to present subsequent changes in the fair value of the investment in other comprehensive income.

The principal activity of the unconsolidated subsidiaries consists in the distribution of products manufactured by the consolidated companies.

Subsidiaries that are considered, individually or on an aggregate basis, to be immaterial, are not included in the consolidation scope.

K - Capital

Ordinary shares are classified as equity instruments. Incidental costs directly attributable to the issuance of ordinary shares or share options are recognized as a deduction from equity, net of tax.

Treasury shares are recorded at their acquisition cost as a reduction in equity. The proceeds of the sale of these securities are posted directly to equity and do not contribute to the income for the fiscal year.

L - Provisions

In accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", provisions are recognized if at the end of the year the Group has an obligation to a third party that is likely or certain to result in an outflow of resources corresponding to future economic benefits in favor of this third party.

This obligation may be legal, regulatory or contractual. It may also result from the Group's practices or from public commitments that have created a legitimate expectation in the minds of the third parties concerned that the Group will assume certain responsibilities.

The estimate of the amount shown as provisions corresponds to the outflow of resources that the Group will probably have to cover in order to fulfill its obligation. If this amount cannot be reliably estimated, no provision is recognized; an explanation is then added to the notes to the financial statements.

Contingent liabilities correspond to potential obligations resulting from past events whose existence will only be confirmed by the occurrence of uncertain future events that are partly beyond the control of the company, or correspond to probable obligations for which the outflow of resources is not beyond its control. An explanation is then added to the notes to the financial statements.

In the case of restructuring, an obligation is created provided that the restructuring has been announced, or has commenced and is described in a detailed plan, before the closing date.

If the Company has a reliable timetable, liabilities are discounted if the effect of discounting is significant.

M - Inventories

Inventories are valued at cost price, or at its probable net resale value if the latter is lower.

The cost price is the acquisition cost or the production cost.

The production cost takes into account the normal level of activity of the production tool.

Indirect costs taken into account when valuing work in progress and finished products include only those relating to production.

Interest expenses are not capitalized.

N - Consolidated sales

Sales include sales of finished products and services relating to these products, sales of scrap, sales of goods purchased and invoiced shipping costs.

They are recognized in accordance with IFRS 15 "Revenue from Contracts with Customers", i.e. revenue is recognized once control over a good or service passes to a customer for the amount of consideration to which a seller expects to be entitled once performance obligations have been satisfied.

Given the nature of the products and the Group's general terms and conditions of sale, Group sales are usually recognized once the performance obligation has been satisfied, on the date the products leave the Group's warehouse, or at delivery if Mersen is responsible for transporting the products. The products are recognized as revenue once (i) inherent control over performance obligations has been transferred to the customer, (ii) the consideration is expected to be recovered, and (iii) related costs, the possibility that the goods will be returned and the amount of revenue can all be reliably measured.

For the Advanced Materials segment, income from service agreements and construction contracts is recognized in the statement of income based on the contract's state of progress at the reporting date. Revenue is recognized as and when the performance obligations are satisfied. Progress in satisfying the performance obligations is measured based on work completed.

Use of the Percentage of Completion method requires compliance with two qualifying conditions set out in IFRS 15, paragraph 35(C).

Consequently, the Group recognizes revenue over time, if these two criteria are met:

- the asset created by Mersen has no other use apart from that provided for in the contract; and
- the Group has an enforceable right to payment for performance completed to date.

Moreover, the Group presents the contract in the statement of financial position as a contract asset or a contract liability depending on the relationship between the entity's performance and the customer's payment:

- contract assets mainly comprise the Group's accrued entitlements to payments for work completed but not billed at the reporting date,
- contract liabilities mainly comprise prepayments received from customers.

Income from associated activities appear in the statement of income under headings of a similar nature (other income, financial income) or as a deduction from expenses of the same type (commercial, general, administrative, research).

O - Employee benefits

Post-employment benefits granted by the Group vary, depending on each subsidiary's legal obligations and policy on the matter. They include defined contribution plans and defined benefit plans.

In the case of defined contribution plans, the Group's obligations are limited to the payment of regular contributions to external organizations that provide administrative and financial management of the plans. The charges recorded in connection with these plans correspond to the contributions paid during the reference period.

A defined benefit plan is any post-employment benefit plan other than a defined contribution plan. The Group's liability under defined benefit plans is evaluated separately for each plan by estimating the amount of future benefits acquired by the staff in exchange for services rendered during the current period and previous periods. This amount is updated to determine its present value. The fair value of the plan's assets is then deducted to determine the net liabilities (assets). The Group determines the net interest expense (income) on the net liabilities (assets) for the defined benefits for the period, by applying the discount rate used at the beginning of the fiscal year to evaluate the obligation under the net liabilities (assets).

The Group calculates the discount rate with the help of an independent expert, taking into account market practices.

The calculations are performed each year by a qualified actuary, using the projected unit credit method. If calculations of net liabilities result in an asset for the Group, the amount recognized in connection with this asset may not exceed the discounted value of any economic benefit available in the form of a future repayment by the plan or reductions in future contributions to the plan. All the minimum funding requirements that apply to the Group's plan are taken into account to calculate the current value of the economic benefits. An economic benefit is available for the Group if it is feasible during the lifetime of the plan, or on the settlement dates of the plan's liabilities.

Remeasurement of net liabilities (assets) relating to the defined benefits include actuarial differences, the return on the plan assets (other than the amounts taken into account in the calculation of the net interest on the net liabilities (assets) and the change in the impact of the asset ceiling (other than the amounts taken into account in the calculation of the net interest on the net liabilities (assets), if any). The Group recognizes them immediately as other items of comprehensive income and all the other expenses relating to defined benefit plans are recognized on the statement of income as employee benefit obligations.

If the plan benefits change, the impact associated with past services rendered by personnel is recognized immediately in the statement of income at the time of the change. If a plan is reduced, the profit or the loss resulting from the reduction is also recognized immediately on the statement of income on the date of the reduction.

The Group recognizes the profit or loss resulting from the liquidation of a defined benefit plan at the time of the liquidation. The profit or loss resulting from a liquidation is equal to the difference between the discounted value of the liquidated defined benefit liability, calculated on the liquidation date, and the consideration of the liquidation, including any plan assets transferred and any payment made directly by the Group in connection with the liquidation.

P - Non-recurring income and expense

Non-recurring income and expense correspond to expenses and income not arising during the normal course of the Company's business activities. This section is intended to recognize the impact of major events that may distort operating performance, and does not include any operating and recurring costs.

Non-recurring income and expense particularly include the following items:

- the proceeds of material and non-recurring sales: property, plant and equipment and intangible assets, equity interests, other financial fixed assets and other assets;
- impairment losses recognized on loans, goodwill, and assets;
- certain provisions;
- reorganization and restructuring expenses
- costs relating to acquisitions as part of a business combination.

Q - Operating income

Operating income is shown before net finance expenses, taxes and non-controlling interests.

Operating subsidies are presented as a deduction from costs to which the subsidy relates.

R - Deferred taxes

Accounting restatements or consolidation adjustments may affect the results of the consolidated companies. Temporal differences shown in the statement of financial position between consolidated values and the tax values of the corresponding assets and liabilities give rise to the calculation of deferred taxes.

In accordance with IAS 12, the Group presents deferred taxes in the consolidated statement of financial position separately from other assets and liabilities. Deferred tax assets are recorded on the statement of financial position provided that it is more likely than not that they will be recovered in subsequent years. Deferred tax assets and liabilities are not discounted.

The following factors are taken into account when assessing the Group's ability to recover these assets:

- projections of future taxable income;
- taxable income in previous years.

Deferred tax assets and liabilities are measured using the liability method, i.e., using the tax rate expected to be applied to the fiscal year in which the asset will be realized or the liability settled, on the basis of the tax rates (and tax regulations) that have been adopted or largely adopted at year-end, taking into account future rate rises or cuts.

The measurement of deferred tax assets and liabilities reflects the tax consequences that depend on the extent to which the company expects, at year-end, to recover or settle the carrying value of these assets and liabilities.

S - Segment Reporting

IFRS 8 on segment information defines an operating segment as a component of an entity:

- that operates businesses from which it is likely to derive income from ordinary activities, and incur costs;
- whose operating income is reviewed regularly by the entity's chief operating decision maker with a view to taking decisions concerning the resources to be allocated to the segment and to assess its performance; and
- for which separate financial information is available.

The internal report made available to the chief operating decision maker, the Executive Committee, and the Board of Directors, corresponds to the managerial structure of the Mersen group, which is based on segmentation by type of business, as follows:

- **Advanced Materials segment,** which includes the Group's three businesses related to carbon materials: graphite specialties for high-temperature applications (Graphite Specialties), anticorrosion equipment (Anticorrosion Equipment), mainly used in the chemicals sector, and power transfer technologies (Power Transfer Technologies).
- **Electrical Power segment,** which includes the Group's two businesses related to the electrical market, namely Solutions for Power Management and electrical protection and control (primarily fuses, industrial fuse holders, and surge protection solutions) (Electrical Protection & Control).

In application of IFRS 8, the Group therefore identifies and presents its operating segments based on the information forwarded internally to the Executive Committee and the Board of Directors.

T - Earnings per share

Earnings and diluted earnings per share are presented for the total income and for income from continuing operations.

Basic earnings per share are calculated by dividing the net income for the year attributable to the ordinary shares by the weighted average number of ordinary shares outstanding during the fiscal year.

To calculate diluted earnings per share, the net profit attributable to the ordinary shares and the weighted average number of shares outstanding are adjusted for the effects of all dilutive potential ordinary shares.

U - Equity-linked benefits granted to employees

In accordance with IFRS 2 "Share-based Payment", the fair value of share purchase and subscription options reserved for employees involving the Group's shares is measured at the grant date.

The value of share purchase and subscription options depends in particular on the exercise price, the probability of fulfilling the conditions for the exercise of the option, the lifetime of the option, the current price of the underlying shares, the expected volatility of the share price, the expected dividends and the risk-free interest rate over the life of the option. This value is recorded under staff expenses on a straight-line basis over the vesting period, with a corresponding adjustment to equity for share-settled and debt-settled plans vis-à-vis the personnel for

cash-settled plans.

V - Use of estimates

For the preparation of the consolidated financial statements, the calculation of certain figures shown in the financial statements requires that assumptions, estimates or appraisals be used, in particular when calculating provisions and performing impairment tests. These assumptions, estimates or appraisals are carried out on the basis of the information available or existing situations at the reporting date. These estimates and assumptions are made on the basis of past experience and various other factors. The current sharply deteriorating economic and financial environment makes it difficult to accurately assess business prospects. The actual amounts may subsequently turn out to be different from the estimates and assumptions used.

The actual occurrence of certain events after the reporting date may subsequently differ from the assumptions, estimates and appraisals used in this context.

Use of management estimates in the application of the Group's accounting standards

Mersen may be required to make estimates and to rely on assumptions that affect the carrying amount of assets and liabilities, income and expenses, and also information relating to unrealized assets and liabilities. Future earnings may differ significantly from these estimates.

The underlying estimates and assumptions are determined based on past experience and other factors considered to be reasonable in the circumstances. They thus serve as a basis for the exercise of the judgment required to determine the carrying amounts of assets and liabilities that cannot be obtained directly from other sources. Actual amounts may differ from the estimated values.

The underlying estimates and assumptions are reviewed on an ongoing basis. The impact of changes in accounting estimates is recognized during the period of the change, if this affects this period only, or during the period of the change and future periods if these are also affected by the change.

Notes 2-F1, 2-I and 7 relate to impairment testing of goodwill and other fixed assets. The Group's Management has conducted the tests on the basis of best expectations for future valuations of the businesses of the units concerned, taking into account the discount rate.

Notes 13 and 14 relating to provisions and employee benefit obligations describe the provisions introduced by Mersen. In calculating these provisions, the Group took into account the best estimate of these obligations.

Note 23 relating to the tax burden summarizes the Group's tax situation and is based, especially in France and Germany, on the best estimate that the Group has for future changes in taxable income.

All of these estimates are based on an organized process for gathering projections of future flows, with validation by the operational managers, as well as market data projections based on external indicators, used in accordance with consistent, documented methodologies.

The current climate of economic uncertainty in some countries, as well as the health crisis in China, make estimates more difficult.

W - New standards applied

The Group applied IFRS 16 «Leases» for the first time with effect from January 1, 2019. A number of other new standards were also applicable from January 1, 2019 but did not have any material impact on the Group's consolidated financial statements.

IFRS 16, "Leases"

The Group has adopted IFRS 16 using the modified retrospective approach, whereby the cumulative effect of first-time adoption is recognized as an adjustment to the opening balance of equity (retained earnings) at January 1, 2019. Consequently, the comparative information presented for 2018 has not been restated, and is therefore presented as before in accordance with IAS 17 and the related interpretations. The changes in accounting method arising due to applying IFRS 16 are described below.

The Group leases numerous assets, including real estate and production and IT equipment.

For its previous lessee accounting under IAS 17, the Group classified its lease contracts either as operating leases or finance leases. A lease was classified as a finance lease if it transferred substantially all of the risks and rewards incidental to ownership of the leased asset to the Group; otherwise it was classified as an operating lease. Since its adoption of IFRS 16, for the majority of its lease contracts, the Group has recognized right-of-use assets, representing the right to use the underlying assets, and lease liabilities, representing the obligation to make lease payments.

The Group used a specific IT system to identify all of the lease contracts in force in all of its consolidated entities as well as the financial characteristics of the leases. This system also generates the accounting entries required under IFRS 16. Cars and forklift trucks account for the highest number of leases whereas offices, plants and warehouses account for the most value. The standard does not apply to leases valued under €5,000 (or USD 5,000) or those with a term of less than one year. One of the key assumptions is that specific discount rates should be set for each country, to be calculated according to the default risk of the country and the credit risk of the lessee entity, as well as the Group's external financing conditions.

- To measure its lease liabilities, the Group calculated the present value of its lease payments using the incremental borrowing rate at January 1, 2019. The weighted average tax rate was 6%.
- The Group has applied IFRS 16 since January 1, 2019 using the modified retrospective approach, under which comparative information for prior periods is not restated. The adoption of IFRS 16 as of January 1, 2019 resulted in a €40.3 million increase in non-current assets and a corresponding €40.3 million increase in debt. This will lead to a reduction in rental expenses recorded under EBITDA* in the statement of income, as well as an increase in the amortization/depreciation of non-current assets and financial costs. The improvement in EBITDA is €12.7 million in 2019, while the increase in operating income before non-recurring items is €1.5 million.
- The impact on net attributable income is limited.
- The Group recognizes right-of-use assets and lease liabilities on separate lines of the statement of financial position.

- The table below sets out the carrying amount of right-of-use assets at January 1 and December 31, 2019.

In thousands of euros	Real estate	Production equipment and vehicles	Total
At January 1, 2019	34.0	6.3	40.3
At December 31, 2019	45.3	4.9	50.2

** * The Group's EBITDA corresponds to operating income before non-recurring items plus depreciation and amortization.*

- The table below shows a reconciliation between the lease liabilities recognized in the statement of financial position under IFRS 16 and the future minimum lease payments recognized as off-balance sheet commitments prior to the application of IFRS 16:

Off-balance sheet commitments for real estate at December 31, 2018*	**32.9**
Discounting effect	(8.9)
Effect of changes in lease terms applied to take into account termination and renewal options whose exercise is reasonably certain	8.9
Other leases**	7.4
Lease liabilities at January 1, 2019	**40.3**

** Off-balance sheet commitments related to leases reported at December 31, 2018 represented the amount of future real estate lease payments deemed certain up until the expiration of the leases and prior to any renewals. They did not include commitments related to lease payments on production equipment and vehicles.*
*** Primarily forklift trucks and other vehicles.*

- The Group's adoption of IFRS 16 had the following impacts on its statement of income:

In millions of euros	Dec. 31, 2019		Dec. 31, 2019
CONTINUING OPERATIONS	Reported	IFRS 16	Before IFRS 16
Consolidated sales	950.2		950.2
Cost of sales	(650.0)	0.0	(650.0)
Total gross income	**300.2**	**0.0**	**300.2**
Selling and marketing expenses	(80.0)	0.0	(80.0)
Administrative and research expenses	(114.8)	1.5	(116.3)
Amortization of revalued intangible assets	(1.3)		(1.3)
Other operating expenses	(2.0)		(2.0)
OPERATING INCOME BEFORE NON-RECURRING ITEMS	**102.1**	**1.5**	**100.6**
Non-recurring expenses	(11.2)		(11.2)
Non-recurring income	0.0		0.0
OPERATING INCOME	**90.9**	**1.5**	**89.4**
Financial expenses	(13.2)	(2.9)	(10.3)
Financial income	0.0		0.0
Net financial income/(expense)	**(13.2)**	**(2.9)**	**(10.3)**
Income from continuing operations before tax	**77.7**	**(1.4)**	**79.1**
Current and deferred income tax	(17.9)	0.3	(18.2)
Net income from continuing operations	**59.8**	**(1.1)**	**60.9**
Net income/(loss) from operations held for sale and discontinued operations	0.0		0.0
NET INCOME	**59.8**	**(1.1)**	**60.9**
Attributable to:			
- Owners of the parent	57.3	(1.1)	58.4
- Non-controlling interests	2.5		2.5
NET INCOME FOR THE PERIOD	**59.8**	**(1.1)**	**60.9**

- The Group's adoption of IFRS 16 had the following impacts on its statement of cash flows for the period:

In millions of euros	Dec. 31, 2019 Reported	IFRS 16	Dec. 31, 2019 Before IFRS 16
Income before tax	77.7	(1.4)	79.1
Depreciation and amortization	51.2	11.1	40.1
Additions to/(reversals from) provisions	(0.5)		(0.5)
Net financial income/(expense)	13.2	2.9	10.3
Capital gains/(losses) on asset disposals	0.3		0.3
Other	7.2		7.2
Cash generated by operating activities before change in WCR	**149.1**	**12.6**	**136.5**
Change in working capital requirement	(9.8)	0.1	(9.9)
Income tax paid	(16.0)		(16.0)
Net cash generated by continuing operating activities	**123.3**	**12.7**	**110.6**
Cash generated by/(used in) discontinued operations	**(0.2)**		**(0.2)**
NET CASH GENERATED BY OPERATING ACTIVITIES	**123.1**	**12.7**	**110.4**
Intangible assets	(4.6)		(4.6)
Property, plant and equipment	(65.3)		(65.3)
Decreases (increases) in amounts due to suppliers of noncurrent assets	2.6		2.6
Financial assets	0.0		0.0
Changes in scope of consolidation	(19.4)		(19.4)
Other cash flows from investing activities	(0.2)		(0.2)
Cash generated by/(used in) investing activities from continuing operations	**(86.9)**	**0.0**	**(86.9)**
Cash generated by/(used in) investing activities from discontinued operations	**0.0**		**0.0**
NET CASH GENERATED BY/(USED IN) INVESTING ACTIVITIES	**(86.9)**	**0.0**	**(86.9)**
NET CASH GENERATED BY OPERATING AND INVESTING ACTIVITIES	**36.2**	**12.7**	**23.5**
Amounts received/(paid) on capital increases/reductions and other changes in equity	1.4		1.4
Net dividends paid to shareholders and non-controlling interests	(22.1)		(22.1)
Interest payments	(7.9)		(7.9)
Lease payments	(12.7)	(12.7)	0.0
Change in debt	16.5		16.5
NET CASH GENERATED BY/(USED IN) FINANCING ACTIVITIES	**(24.8)**	**(12.7)**	**(12.1)**
Net increase/(decrease) in cash and cash equivalents	11.4	0.0	11.4
Cash and cash equivalents at beginning of year (Note 10)	34.8		34.8
Cash and cash equivalents at year-end (Note 10)	45.2		45.2
Change in consolidation scope	0.0		0.0
Impact of currency fluctuations	1.0		1.0
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**11.4**	**0.0**	**11.4**

X - New standards, amendments and interpretations published but not yet effective

Certain new standards, amendments and interpretations will be effective for annual reporting periods beginning after January 1, 2019. Despite being available for early adoption, the new standards, amendments and interpretations were not applied by the Group in preparing its consolidated financial statements.

They are not expected to have a material impact on those consolidated financial statements.

Note 3 Financial Risk Management

The Group is exposed to the following risks related to using financial instruments:

- Liquidity risk;
- Interest rate risk;
- Commodity risk;
- Currency risk;
- Credit risk.

This note provides information regarding the Group's exposure to each of the above risks, its objectives, its policy and its procedures for evaluating and managing risks.

Quantitative information is provided in other sections in the consolidated financial statements.

Information on capital management is presented in Note 12.

Liquidity risk

Mersen has confirmed credit lines and borrowing facilities for a total of €457.2 million, of which 52% was drawn down at December 31, 2019. Based on the amounts drawn down, the average maturity of these credit lines or borrowing facilities is just under 5.0 years.

Mersen has the following principal financing agreements:

- A multi-currency syndicated bank loan, set up in July 2012 and amended in 2014 and 2017. The amount of this facility is €200 million, repayable in full in July 2024 following the exercise of extension options in 2018 and 2019. The interest payable is at a variable rate, plus a credit margin.
- Bilateral banking loans arranged at the end of 2019 amounting to RMB 170 million, repayable until 2024 and intended to finance the Mersen Group's operations in China.
- A 10-year US private placement (USPP) negotiated in November 2011 with a US investor, on which USD 50 million remained outstanding at December 31, 2019. The investor receives a fixed rate of interest.
- A €60 million German private placement ("Schuldschein") arranged in November 2016 with a pool of European and Asian investors, repayable at maturity after seven years. Investors receive interest at a variable rate based on the Euribor plus a credit margin.
- A €130 million German private placement ("Schuldschein") arranged in April 2019 with a pool of European and Asian investors, repayable in full at maturity after seven years. Investors receive fixed-rate interest on a nominal amount of €68 million and variable-rate interest at Euribor plus a credit margin on a nominal amount of €62 million.

Furthermore, as part of its policy to diversify its funding sources, in March 2016 Mersen set up a €200 million commercial paper program with a maturity of less than one year. As at December 31, 2019, €25 million has been used. The program can be substituted by drawdowns from the Group Syndicated Loan on maturity.

Breakdown of confirmed credit lines and borrowings by maturity

				Maturity		
(In millions of euros)	Amount	Drawdown at Dec. 31, 2019	Utilization rate Dec. 31, 2019	Less than 1 year	From 1 to 5 years	More than 5 years
Group syndicated loan	200.0	0.0	0%	0.0	200.0	0.0
Confirmed credit lines – China	21.7	0.0	0%	0.0	21.7	0.0
German private placements	190.0	190.0	100%	0.0	60.0	130.0
US private placement	44.5	44.5	100%	0.0	44.5	0.0
Other	1.0	1.0	100%	0.3	0.7	0.0
TOTAL	**457.2**	**235.5**	**52%**			
AVERAGE MATURITY (YEAR)	**5.0**(1)	**5.0**(2)				

(1) Maturity calculated on the basis of authorized amounts
(2) Maturity calculated on the basis of drawdown amounts

Breakdown by maturity of cash flows on drawdowns of confirmed credit facilities and borrowings

(In millions of euros)			Maturity		
DRAWDOWNS	Drawndown at Dec. 31, 2019	Expected cash flows	1-6 months	6-12 months	More than 1 year
Group syndicated loan	0.0	0.0	0.0	0.0	0.0
Confirmed credit lines – China	0.0	0.0	0.0	0.0	0.0
German private placement	190.0	205.9	1.4	1.4	203.1
US Private Placement	44.5	48.8	1.1	1.1	46.6
Other	1.0	1.0	0.2	0.2	0.6
TOTAL	**235.5**	**255.7**	**2.7**	**2.7**	**250.3**

Interest rate risk

The interest rate risk management policy is approved by the CEO of the Group on the basis of recommendations made by Mersen's Finance Department. It consists of establishing positions from time to time taking into account variations in interest rates.

When it was acquired by Mersen, Scotland Holytown had an interest rate swap with a nominal amount of GBP 4 million that was arranged on January 15, 2008 to convert the interest on part of its confirmed medium-term debt into a fixed rate. Under this swap, the Company receives interest due to the lender and pays 5.38%. The repayment and duration profile of the swap match those of the debt. At December 31, 2019, the nominal amount stood at GBP 0.8 million.

The 2011 USPP is a fixed-rate instrument paying a 4.85% coupon.

The 2019 German private placement includes a €68 million fixed-interest tranche paying a coupon of 1.582%.

In March 2017 the Company set up an interest rate cap with a nominal value of €25 million in order to hedge part of its confirmed debt against an increase in the Euribor of over 1%.

				Maturity		
(In millions of euros)	Amount	Interest rate received	Interest rate paid	Less than 1 year	From 1 to 5 years	More than 5 years
GBP swap	1.0	1-month Libor	5.38%			

(In millions of euros)			Maturity		
SWAP	MTM(a)	Expected cash flows	Less than 1 year	From 1 to 5 years	More than 5 years
Assets	0.01	0.0	0.0	0.0	0.0
Equity and liabilities	(0.08)	(0.08)	(0.04)	(0.04)	0.0

(a) Mark-to-market = evaluated at market price.

(In millions of euros)	Amount	Variable rate	Rate for the year	MTM
Cap (EUR)	**25**	**6-month Euribor**	**1%**	**0.01**

Sensitivity analysis of the fair value of fixed-income instruments

The Group does not record any fixed-income financial assets or liabilities at fair value through the statement of income or designate any derivatives (interest rate swaps) as fair value hedges. Accordingly, a change in interest rates at the reporting date would not have any impact on the statement of income.

A change of 50 basis points in the interest rate would have triggered a change in other comprehensive income of €0.01 million (in 2018: €0.02 million). This calculation applies to the GBP 0.8 million interest rate swap and the €25 million interest rate cap.

Commodity risk

Certain Group companies purchase raw materials or components comprising commodities, such as non-ferrous metals like copper, silver and zinc. Copper and silver are the two metals accounting for a significant volume of purchases (in total, around €30 million) for the Mersen group. Different hedging techniques, such as index-linking of purchase prices, index-linking of selling prices and bank hedging may be applied.

The commodity price risk management policy is validated by the Group's Executive Committee on the basis of recommendations by Mersen's Finance and Purchasing departments, and consists of establishing positions in the form of forward purchasing contracts or zero premium collars.

Around 60% of price risk on copper and 70% of price risk on silver can be covered centrally using bank hedges.

At end-2019, out of the quantities budgeted for 2019, 80% of the copper tonnage and 50% of the silver tonnage that could be hedged was hedged.

An increase or decrease in the price of copper and silver, with relation to closing prices at December 31, 2019 as indicated below, would have resulted in an increase/(decrease) in other comprehensive income and operating income by the amounts indicated below as a result of the commodity hedges.

	Copper		Silver	
Impact *(in millions of euros)* **At December 31, 2019**	Other items of comprehensive income	Gains or losses recognized in operating income	Other items of comprehensive income	Gains or losses recognized in operating income
Increase of 5%	0.4	0.0	0.2	0.0
Decrease of 5%	(0.5)	0.0	(0.2)	0.0

Recognition at year-end 2019 of commodity hedges

MTM[a] *(stated in millions of euros)*	Impact on 2019 other comprehensive income	Impact on 2019 income
MTM of copper and silver hedges	0.5	0.0

(a) Mark-to-market = evaluated at market price.

Other metals, primarily steel and reactive metals, are essentially used on the Chemical market. They are used for specific customer requirements and their cost is generally reflected in the commercial offer. As a result, changes in prices have a limited impact on the Group's gross margin.

Prices of petroleum-derived products, especially petroleum coke and pitch, which are raw materials used in the manufacture of graphite, have little correlation with oil prices. Energy, primarily electricity and gas, is purchased at fixed rates based on forecasted annual or multi-annual volumes depending on regions.

Changes in energy prices and petroleum derivatives have had little impact on the Group's margins overall, as they are partially or fully offset by reformulation programs.

Currency risk

Fluctuations in the principal currencies used by the Group

	JPY	USD	KRW	GBP	RMB
Average exchange rate from Jan. 1, 2018 to Dec. 31, 2018[a]	130.41	1.1815	1299.25	0.88475	7.8073
Closing exchange rate at Dec. 31, 2018[b]	125.85	1.1450	1277.93	0.89453	7.8751
Average exchange rate from Jan. 1, 2019 to Dec. 31, 2019[a]	122.06	1.1196	1304.90	0.87731	7.7339
Closing exchange rate at Dec. 31, 2019[b]	121.94	1.1234	1296.28	0.85080	7.8205

(a) Exchange rate used to convert the cash flow statement and statement of income.
(b) Exchange rate used to translate the statement of financial position.

The currency risk management policy is validated by the Group's Executive Committee on the basis of proposals made by the Finance Department. It consists of contracting forward exchange rate hedges with leading banks on the basis of a complete inventory of inter- company and non-Group risks.

In its commercial activities, barring exceptional circumstances, Group policy is to hedge currency risks when an order is taken or to hedge a large portion of the annual budget. The primary currency risk concerns intra-Group flows.

In the area of borrowings, Group policy is contract loans in local currencies, except for special cases. Borrowings in foreign currencies arranged by the parent company match loans made in euros subject to hedges (foreign exchange swaps) transforming them into loans in the currencies of the subsidiaries concerned.

For consolidation purposes, the statement of income and cash flow statements of foreign subsidiaries are translated into euros at the average exchange rate for the relevant period, while statement of financial position items are translated at the rate prevailing at the end of each reporting period. The impact of this currency translation can be significant. The principal impact concerns the effect of rate changes of the US dollar on the Group's equity and debt.

The Group's operating income before non-recurring items is exposed to exchange rate variations primarily through the translation of earnings recorded by companies whose currency is not the euro. The primary exposure is with the US dollar. A 10% decline in the value of the USD compared with the average confirmed rate of January through December 2019 would have had a translation impact of a negative €3 million on the Group's current operating income. Conversely, this 10% decline in the value of the US dollar compared with the closing exchange rate for 2019 would have had a translation impact of a negative €5 million on the Group's net debt at December 31, 2019.

Apart from these special cases, hedges are centralized at the level of the parent company. They are carried out under strictly defined procedures. Hedges are valued as described below.

EUR/foreign currency risk

Risk (stated in millions of euros)[a]	JPY	USD	KRW	GBP	RMB
Sale of foreign currencies	9.2	29.3	3.0	15.2	10.6
Purchase of foreign currencies	(0.4)	(18.7)	(0.4)	(17.1)	(6.3)
Potential risks for 2020	8.8	10.6	2.6	(1.9)	4.3
Hedges at December 31, 2019	(6.6)	(10.0)	(1.7)	1.1	(2.7)
Net position	2.2	0.6	0.9	(0.8)	1.6
Impact in euros of a 5% fall in the euro[b]	0.12	0.03	0.05	(0.04)	0.09

(a) Excluding any anticorrosion equipment segment, which is hedged when an order is placed.
(b) Sensitivity calculated on the basis of currency exchange rates at December 31, 2019.

USD / Foreign currency risks

Risks (stated in millions of US dollars)[a]	JPY	KRW	GBP	RMB	CAD
Sale of foreign currencies	4.3	15.8	3.5	18.5	16.3
Purchases of foreign currencies	0.0	(1.4)	(17.1)	(23.4)	(20.8)
Potential risks for 2020	4.3	14.4	(13.6)	(4.9)	(4.5)
Hedges outstanding at December 31, 2019	(2.8)	(6.2)	12.4	3.1	3.4
Net position	1.5	8.2	(1.2)	(1.8)	(1.1)
Impact in USD of a 5% fall in the USD[b]	0.08	0.43	(0.07)	(0.09)	(0.06)

(a) Excluding any anticorrosion equipment segment, which is hedged when an order is placed.
(b) Sensitivity calculated on the basis of currency exchange rates at December 31, 2019.

Recognition at year-end 2019 of currency transactions

MTM(A) (stated in millions of euros)		Dec. 31, 2019
Mark-to-market of currency hedges value	Other items of comprehensive income	0.6
	Other financial items of operating income	0.2

(a) Mark-to-market = evaluated at market price.

An increase or decrease in the value of the euro, with relation to closing exchange rates of the USD, JPY and RMB at December 31, 2019 as indicated below, would have resulted in an increase (decrease) of other items of comprehensive income and operating income by the amounts indicated below as a result of the currency hedges.

	Increase in the euro against foreign currencies		Decrease in the euro against foreign currencies	
Impact at December 31, 2019 *(in millions of euros)*	Other items of comprehensive income	Gains or losses recognized in operating income*	Other items of comprehensive income	Gains or losses recognized in operating income*
USD (change of 5%)	0.7	0.2	(0.8)	(0.2)
JPY (change of 5%)	0.0	0.0	0.0	0.0
RMB (change of 5%)	0.1	0.0	(0.1)	0.0

** Excluding inverse impacts related to the revaluation of underlying items recorded in the statement of financial position.*

This analysis is carried on the basis of changes in exchange rates that the Group deems reasonably possible at the reporting date. For the purposes of this analysis, all other variables, especially interest rates, are assumed to have remained constant and the effect of forecasted sales and purchasing has been ignored.

Sensitivities relating to other currency pairs were not recorded due to their immaterial impacts.

Future impact on income of currency transactions recorded at end December 2019

(Stated in millions of euros) CURRENCY	Mark-to-market of currency derivatives in other comprehensive income	Impact on income	
		Under six months	Over six months
Assets	0.8	0.4	0.4
Equity and liabilities	(0.2)	(0.1)	(0.1)

Future cash flows on currency transactions recognized at December 31, 2019

CURRENCY *(in millions of euros)*	MTM	Expected cash flows
Assets	0.9	0.9
Equity and liabilities	(0.1)	(0.1)

Currency hedges are adjusted as a function of underlying assets and there is therefore no timing difference between maturities.

Credit risk

The Group set up in 2003 a Coface commercial credit insurance program to cover the principal American and French companies against the risk of non-payment for financial or political reasons. Coverage may vary, by customer, between 0 and 95% of invoiced amounts.

In 2009, this program was extended to Germany, the United Kingdom and China.

This credit insurance program does not however cover 100% of risk because the insurer excludes certain risks from the cover.

During 2018 and 2019, the Group continued its assignment of receivables programs regarding several French subsidiaries, which gave rise to assigned receivables amounting to €15.8 million at December 31, 2019 compared with €15.7 million at December 31, 2018. Delegation riders to contracts covering French company assigned receivables were signed with the factoring agent.

The guarantee deposit relating to assigned receivables programs amounts to €0.8 million (derecognized assets with continuous application).

Note 4 Business combinations recognized in 2019

In late November 2019, Mersen acquired all of the shares of Advanced Graphite Materials Italy, a benchmark European player in the finishing of customized extruded graphite parts. This acquisition will unlock synergies with the Columbia site, which will eventually supply the AGM Italy plant with blocks of extruded graphite.

AGM's contribution is estimated at approximately €17 million to annual consolidated sales (€0.7 million in December 2019), and its operating margin before non-recurring items is higher than the Group's margin (zero in December 2019).

The acquisition will give the Advanced Materials segment access to the facilities it needs to process specialty extruded graphite in Europe. It will strengthen the Group's positions in Italy, Germany and Central Europe, especially in the electronics and heat processing markets that need large parts, and will eventually be supplied by the Columbia site.

Net assets acquired in the course of these operations together with the related goodwill are presented in the following table:

TOTAL ACQUISITIONS

In millions of euros	Acquisitiondate net assets	Fair value adjustments	Purchase price allocation	Fair value of net assets
Non-current assets	4.0	(0.7)	0.0	3.3
Current assets	9.6	(0.1)	0.0	9.5
Non-current liabilities	0.0	0.0	0.0	0.0
Current liabilities	(7.1)	0.0	0.0	(7.1)
Net assets	6.5	(0.8)	0.0	5.7
Goodwill				0.8
Non-controlling interests				0.0
Consideration transferred				6.5

There was no pending allocation of goodwill at December 31, 2019.

The Group acquired Graftech's industrial site in Columbia (United States) for a total amount of USD 7 million. Since this site was dormant (zero employees/zero production), the transaction is treated as an acquisition of a group of assets and not as a business combination. Consequently, it is recognized in accordance with IAS 16 "Property, Plant and Equipment" (see Note 8).

Note 5 Assets held for sale and discontinued operations

Operations held for sale and discontinued operations recognized in prior periods had no residual material impact on the 2019 consolidated financial statements.

Note 6 Goodwill

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Carrying amount at start of period	276.2	265.2
Acquisitions	0.8	5.7
Translation adjustments	3.6	5.3
Carrying amount at end of period	**280.6**	**276.2**
Gross value at end of period	290.6	286.2
Total impairment losses at end of period	(10.0)	(10.0)

Breakdown by cash-generating unit is given in the table below:

	Dec. 31, 2018	Movements during 2019		Dec. 31, 2019
In millions of euros	Carrying amount	Acquisitions	Cumulative translation adjustments	Carrying amount
Anticorrosion Equipment	54.1		1.2	55.3
Graphite Specialties	92.5	0.8	0.6	93.9
Power Transfer Technologies	12.2		0.1	12.3
Electrical Power and Control	73.5		1.1	74.6
Solutions for Power Management	43.9		0.6	44.5
TOTAL	**276.2**	**0.8**	**3.6**	**280.6**

Acquisitions concern the goodwill of AGM Italy. No material intangible assets were identified on the allocation of this goodwill.

There was no pending allocation of goodwill at December 31, 2019.

Note 7 Asset impairment tests

Impairment tests for cash-generating units

Impairment tests for each of the cash-generating units were carried out at the close of 2019.

In application of IAS 36, the tests were carried on the basis of the value in use determined by applying the discounted cash flow method. The principal assumptions used are the following:

- Five-year cash flows based on the 2020 budget and projections for the four following years.
- The average weighted cost of capital used in discounting future cash flows include the beta calculation of the Group by analysts and that for no-risk rates on French treasury bonds with a ten-year holding period. In view of these parameters, of a market risk premium and a size-specific premium, the average cost of capital after tax used as a rate for discounting future flows was set at 6.8%, unchanged on 2018. This discount rate is applied to all of the CGUs. There are no substantive grounds for applying a different discount rate per CGU.
- The perpetual growth rate is 2% for the Power Transfer Technologies CGU, 2.5% for the Anticorrosion Equipment CGU, 3% for the Graphite Specialties CGU and 2.5% for the Solutions for Power Management and Electrical Protection & Control CGUs. The rates of growth applied to CGUs can be explained by the development of CGUs' businesses in their respective markets.
- The normative tax rate is 25%.
- No impairment loss was recognized in any of the CGUs.

A calculation of sensitivity to the discount rate was conducted such that the recoverable amount was equal to the carrying amount. Discount rates obtained are as follows:

- 12.5% for the Power Transfer Technologies CGU;
- 12.0% for the Solutions for Power Management CGU;
- 11.0% for the Electrical Protection & Control CGU;
- 11.8% for the Graphite Specialties CGU;
- 7.3% for Anticorrosion Equipment CGU.

A sensitivity test was carried out by reducing the perpetual growth rate by one point in the first case and by increasing the discount rate after taxes by one point over the assumed value in the second case. This was done in each CGU. A sensitivity test was also carried out on the basis of a drop of one point in the margin rate (EBIDTA) of the terminal value.

The decrease in values in use following these changes in assumptions does not call into question the reported amounts of net assets, except in the case of the Anticorrosion Equipment CGU, whose value in use is less than its net carrying amount. However, taking into account the acquisition of GAB announced on November 28, 2019 and closed on February 28, 2020, the sensitivity tests do not call into question the CGU's carrying amount.

Impact of IFRS 16 on the annual impairment test

The Group applies the following practical expedients available for first-time adopters of the standard:

- right-of-use assets are included as part of the value of assets tested;
- the carrying amount of lease liabilities is deducted from the value of assets tested;
- lease payments are taken into account in future cash flows.

Impairment of specific assets

The Group reviewed the recoverable amount of its non-current assets and recorded an additional impairment of €5.3 million for costs linked to the development of hybrid protection for the electric vehicle market.

Note 8 Property, plant and equipment and intangible assets

In millions of euros	Intangible assets	Land	Buildings	Plant, equipment and other assets	Assets in progress	Right-of-use	Total property, plant and equipment	TOTAL
Carrying amount at January 1, 2018	**31.8**	**30.3**	**70.0**	**149.6**	**16.3**		**266.2**	**298.0**
Non-current assets	3.4		2.7	19.9	32.6		55.2	58.6
Retirements and disposals		0.0	(0.1)	(0.8)			(0.9)	(0.9)
Depreciation and amortization	(3.9)	(0.1)	(5.1)	(29.7)			(34.9)	(38.8)
Translation adjustments	0.3	(0.1)	0.9	0.9	0.4		2.1	2.4
Impact of changes in scope of consolidation	3.6	0.5	4.0	8.7			13.2	16.8
Other movements	(0.1)	0.0	3.9	23.0	(26.9)		0.0	(0.1)
Carrying amount at December 31, 2018	**35.1**	**30.6**	**76.3**	**171.6**	**22.4**		**300.9**	**336.0**
Gross value at Dec. 31, 2018	91.4	33.3	160.5	660.6	22.4		876.8	968.2
Total depreciation and amortization at Dec. 31, 2018	(47.3)	(1.5)	(84.2)	(472.5)			(558.2)	(605.5)
Total impairment losses at Dec. 31, 2018	(9.0)	(1.2)		(16.5)			(17.7)	(26.7)
Carrying amount at January 1, 2019	**35.1**	**30.6**	**76.3**	**171.6**	**22.4**	**0.0**	**300.9**	**336.0**
Impact of the first-time application of IFRS 16		(3.4)				43.6	40.2	40.2
Acquisition of non-current assets	4.6	0.3	1.9	25.0	38.1	17.7	83.0	87.6
Retirement, disposals and impairment losses	(3.0)				(2.3)		(2.3)	(5.3)
Depreciation and amortization	(4.0)	(0.1)	(5.3)	(31.9)		(11.1)	(48.4)	(52.4)
Translation adjustments	0.2	0.1	0.7	2.5	0.2		3.5	3.7
Impact of changes in scope of consolidation	0.1	4.8	3.4	5.6	0.2		14.0	14.1
Other movements	1.2		1.8	23.2	(27.3)		(2.3)	(1.1)
Carrying amount at December 31, 2019	**34.2**	**32.3**	**78.8**	**196.0**	**31.3**	**50.2**	**388.6**	**422.8**
Gross value at Dec. 31, 2019	**97.5**	**35.1**	**168.3**	**716.9**	**33.6**	**61.3**	**1,015.2**	**1,112.7**
Total depreciation and amortization at Dec. 31, 2019	**(51.3)**	**(1.6)**	**(89.5)**	**(504.4)**	**0.0**	**(11.1)**	**(606.6)**	**(657.9)**
Total impairment losses at Dec. 31, 2019	**(12.0)**	**(1.2)**	**0.0**	**(16.5)**	**(2.3)**	**0.0**	**(20.0)**	**(32.0)**

Changes in the scope of consolidation reflect the acquisition of Graftech's industrial site in the United States for USD 7 million (see Note 4) and other investments made in the period for €6.9 million.

Research expenses, or expenses for the research phase of an internal project, are recognized as expenses as they are incurred. Regarding development costs, an intangible asset resulting from development or from the development phase of an internal project, is recognized if, and only if, the Group can demonstrate that these developments satisfy the criteria of the standard.

At December 31, 2019, development costs identified by the Group over the period that satisfy these criteria represent less than 1% of consolidated sales.

The impairment of €5.3 million recorded in 2019 pertains to costs linked to the development of hybrid protection for the electric vehicle market, since the Group no longer believes that sales will be sufficient following the recent breakdown in negotiations with a major car manufacturer.

Note 9 Equity interests

At year-end, investments in unconsolidated companies held by consolidated companies represented:

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Gross value	9.7	8.6
Fair value adjustment in other comprehensive income	(6.0)	(4.5)
TOTAL	**3.7**	**4.1**

The principal investments are the following:

Company name	% held	Gross value	Fair value of investments	Provision for contingencies
Fusetech	50%	2.3	1.5	
Mersen Argentina	98%	3.7	0.0	0.4
Caly Technologies	49%	1.0	0.1	
Mersen Russia	100%	2.3	0.0	
Mersen Chile Ltd	100%	0.2	0.6	
Other investments		0.2	1.5	
TOTAL		**9.7**	**3.7**	**0.4**

The increase in the gross value refers to Mersen Russia as a result of a loan that was capitalized in view of the company's liquidation.

Note 10 Inventories

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Raw materials and other supplies	102.0	88.6
Work in progress	61.5	66.0
Finished products	63.8	63.8
Carrying amount of inventories	**227.4**	**218.4**
Impairment losses	(20.4)	(19.8)
CARRYING AMOUNT OF INVENTORIES	**207.0**	**198.6**

Net inventories increased by €8.4 million at December 31, 2019, of which €5.6 million due to the first-time consolidation of AGM Italy and €2.0 million due to currency fluctuations. On a like-for-like scope and exchange rate basis, inventories were up by €0.8 million, or 0.4%.

Note 11 Trade receivables

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Gross trade receivables	152.0	150.1
Customer advances		
Impairment losses	(4.7)	(3.9)
Contract assets	9.8	10.6
NET TRADE RECEIVABLES	**157.1**	**156.8**

Net trade receivables increased by €0.3 million at December 31, 2019, of which €1.6 million were due to exchange rate gains and €2 million to inclusions in the scope of consolidation. On a like-for-like scope and exchange rate basis, trade receivables fell by €3.3 million (or -2.1%).

A factoring contract was established in 2009 that concerns the assignment of trade receivables of our main French subsidiaries.

This contract (see Note 3) anticipates a maximum amount of €20.0 million. At December 31, 2019 usage amounted to €15.8 million, compared with €15.7 million at end 2018.

At end 2019, late payments represented 15.0% of client accounts before advance payments, compared with 21.3% at end 2018. Payments late by over 15 days amount to around 4.9%.

Overdue trade receivables broke down as follows at December 31:

	Dec. 31, 2019		Dec. 31, 2018	
In millions of euros	Gross	Impairment	Gross	Impairment
Receivables not yet due	129.5	(0.5)	118.1	(1.0)
Receivables 0 to 30 days past due	12.0	(0.1)	17.6	(0.1)
Receivables 31 to 120 days past due	5.4	(0.7)	8.9	(0.3)
Receivables 121 days to 1 year past due	2.7	(1.1)	2.9	(0.6)
Receivables more than 1 year past due	2.4	(2.3)	2.6	(1.9)
NET TRADE RECEIVABLES	**152.0**	**(4.7)**	**150.1**	**(3.9)**

Movements related to impairment of trade receivables are as follows:

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Impairment losses at January 1	(3.9)	(5.1)
Allowance/reversal during the fiscal year	(0.8)	1.2
IMPAIRMENT LOSSES AT DECEMBER 31	**(4.7)**	**(3.9)**

Provisions for receivables are based on expected losses.

Note 12 Equity

Number of shares (unless stated otherwise)	Ordinary shares
Number of shares at January 1, 2019	20,768,118
Capital increase/reduction *(in millions of euros)*	0.2
Number of shares at December 31, 2019	20,858,227
Number of shares in issue and fully paid-up during the period	90,426
Number of canceled treasury shares	101,157
Number of shares in issue and not fully paid-up	0
Par value per share *(€)*	2
Entity's shares held by itself or by its subsidiaries and associates	130,677

At December 31, 2019, the Company's share capital stood at €41,716,454, divided into 20,858,227 shares, comprising 20,855,883 category A shares, which are ordinary shares, 1,172 category C shares and 1,172 category D shares, which are preference shares, each with a par value of €2. Category E shares, which are preference shares, may be issued in application of Article L. 228-11 et seq. of the French Commercial Code.

The theoretical number of voting rights at that date - i.e. excluding treasury shares which do not carry voting rights - was 25,352,291. Since April 3, 2016, a double voting right has been attached to all shares that meet both of the following conditions: (i) they have been held in registered form for at least two years and (ii) they are fully paid up.

To the best of the Company's knowledge, its ownership structure at December 31, 2019 was as follows:

- French institutional investors: 46.3%
- International institutional investors: 39.7%
- Private shareholders: 12.2%
- Employee shareholders: 1.2%
- Treasury shares: 0.6%

Since January 1, 2019, certain shareholders have reported crossing the following disclosure thresholds:

- **January 17:** Jousse Morillon Investissement announced that it had exceeded the statutory threshold of 1% of the share capital and holds 190,000 shares, i.e., 0.92% of the share capital and 0.75% of voting rights.
- **January 22:** Sycomore Asset Management announced that it had exceeded the statutory threshold of 1% of the voting rights and now holds 255,267 shares, i.e., 1.24% of the share capital and 1.01% of voting rights.
- **February 14:** Covéa Finance announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 409,276 shares, i.e., 1.98% of the share capital.
- **February 26:** Covéa Finance announced that it had exceeded the statutory threshold of 2% of the share capital and now holds 422,037 shares, i.e., 2.03% of the share capital.
- **April 5:** Covéa Finance announced that it had fallen below the statutory threshold of 2% of the share capital and now holds 404,297 shares, i.e., 1.95% of the share capital.
- **April 5:** Sofina announced that it had fallen below the statutory threshold of 2% of the voting rights and holds 440,145 shares, i.e., 2.12% of the share capital and 1.73% of voting rights.
- **April 26:** Sofina announced that it had fallen below the statutory threshold of 1% of the voting rights and holds 149,836 shares, i.e., 0.72% of the share capital and 0.59% of voting rights.
- **June 12:** BlackRock announced that it had exceeded the statutory threshold of 1% of the voting rights and holds 376,219 shares, i.e., 1.81% of the share capital and 1.49% of voting rights.
- **July 15:** BlackRock announced that it had exceeded the statutory threshold of 2% of the share capital and holds 429,662 shares, i.e., 2.07% of the share capital and 1.69% of voting rights.
- **July 19:** BlackRock announced that it had fallen below the statutory threshold of 2% of the share capital and holds 410,985 shares, i.e., 1.98 % of the share capital and 1.61% of voting rights.
- **Between December 19 and December 27:** BlackRock announced that it had crossed the threshold of 2% of the share capital on four occasions. On December 27, it announced that it held 406,072 shares, i.e., 1.95% of the share capital and 1.66% of voting rights.
- **January 14, 2020:** ACF I Investissement (Ardian) announced that it had fallen below the statutory threshold of 10% of the share capital and holds 2,075,857 shares, i.e., 9.96% of the share capital and 16.13% of voting rights.
- **January 16:** Norges announced that it had fallen below the statutory threshold of 5% of the share capital and holds 1,028,377 shares, i.e., 4.94% of the share capital and 4.07% of voting rights.
- **Between January 20 and February 4:** BlackRock announced that it had crossed the threshold of 2% of the share capital on five occasions. On February 4, it announced that it held 424,870 shares, i.e., 2.04% of the share capital and 1.67% of voting rights.

Treasury shares:

At December 31, 2019, 130,677 shares were held in treasury, representing 0.6 % of the share capital, including 26,599 shares held pursuant to the liquidity agreement entered into with Exane BNP Paribas.

Stock options, bonus shares and preference shares

Subscription options

- The number of subscription options still to be exercised at December 31, 2019 (after taking cancellations into account) would make it possible to issue 60,931 new shares, each with a par value of €2.

Bonus preference shares (executive plan)

- At December 31, 2015, 902 category B preference shares (corresponding to 99,220 ordinary shares after conversion) were allotted. At the end of the vesting period and taking into account performance conditions, 317 category B preference shares were allotted definitively, corresponding to 34,870 ordinary shares. The Board canceled the other 585 preference shares at its meeting of December 12, 2017. Since all of the category B preference shares were converted into ordinary shares, the Board of Directors noted the cancellation of 317 category B shares with no assigned purpose on January 29, 2020.
- At December 31, 2016, 1,172 category C preference shares (corresponding to 128,920 ordinary shares that may be converted) were allotted definitively.
- At December 31, 2017, 1,172 category D preference shares (corresponding to 128,920 ordinary shares that may be converted) were allotted definitively.
- At December 31, 2018, 940 category E preference shares (corresponding to 103,400 ordinary shares that may be converted) were allotted, subject to performance criteria.
- A total of 361,240 ordinary shares may be allotted definitely (under the 2016, 2017 and 2018 preference share plans), of which 268,290 to members of the Executive Committee (including 49,940 for the Chief Executive Officer).

Bonus shares (executive plan)

- A total of 59,000 shares may be allotted under the 2019 executive program, of which 44,250 to members of the Executive Committee (including 8,850 for the Chief Executive Officer).

Bonus shares (non-executive plan)

- The number of bonus shares that may be allotted definitively (under the 2018 and 2019 bonus share plans) is 150,150.

Summary

- The number of bonus shares that could be allotted definitively, including by converting category C, D and E shares into ordinary shares, is 570,390 new shares, each with a par value of €2, representing 2% of the current share capital.
- Based on the number of subscription options that may be exercised by beneficiaries (60,931) and the shares that may be definitively allotted (570,390), the maximum dilution would be 3%.

Neither the Company nor its subsidiaries are subject to any specific capital requirements pursuant to external rules or regulations.

With respect to share-based payments, the plans were evaluated in accordance with IFRS 2. The characteristics and assumptions used to value the plans are as follows:

Characteristics/Assumptions	2014 plan Stock subscription options	2015 plan Bonus performance shares	2016 plan Bonus performance shares	2017 plan Bonus performance shares	2017 plan Bonus performance shares	2018 plan Bonus performance shares	2018 plan Bonus performance shares	2019 plan Bonus shares (executive plan)	2019 plan Bonus performance shares
Allotment date	05/21/2014	07/09/2015	05/11/2016	05/18/2017	05/18/2017	05/17/2018	05/17/2018	05/17/2019	05/17/2019
Availability date	05/21/2016	07/09/2017/ 07/09/2019	05/11/2018/	18/05/2019/ 18/05/2021	18/05/2019/ 18/05/2021	17/05/2021	17/05/2020/ 17/05/2022	17/05/2022	17/05/2022
05/11/2021	05/18/2019/ 05/18/2021	05/18/2019/ 05/18/2021	05/17/2021	05/17/2020/ 05/17/2022	05/17/2022	05/17/2022	18/05/2022	18/05/2022	18/05/2022
Expiration date	05/21/2021	07/10/2019	05/12/2020	05/19/2021	05/19/2021	05/18/2021	05/18/2022	05/18/2022	05/18/2022
Adjusted exercise price *(€)*	€22.69	€0.00	€0.00	€0.00	€0.00	€0.00	€0.00	€0.00	€0.00
Adjusted share price at allotment date *(€)*	€21.30	€20.89	€12.87	€25.15	€25.15	€39.50	€39.50	€30.90	€30.90
Estimated life *(number of years)*	4.5	4	4	4	4	3	4	3	3
Volatility	31.00%	25.90%	25.9%	27.7%	27.7%	30.00%	30.00%	29.39%	29.39%
Dividend per share *(as a % of share price)*	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Risk-free interest rate	0.64%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exercise period *(number of years)*	5	2/4	2/4	2/4	2/4	3	2/4	3	3
Lock-up period *(number of years)*	2	2/0	2/0	2/0	2/0	3	2/0	3	3
Adjusted number of options/ share allotments	150,000	75,460/ 23,760	128,920	84,000	128,920	67,050	103,400	59,000	84,000
Estimated annual cancellation rate at the closing	5%	5%	5%	5%	5%	5%	5%	5%	5%
% of shares/options vested following satisfaction of the performance condition	85%	39%	100%	100%	100%	100%	100%	100%	100%
Estimated number of options at end of vesting period	129,375	0	128,355	81,580	127,179	61,628	99,266	52,218	74,345
Valuation of options/shares *(€)*	3.68	17.73/18.53	10.92/11.41	23.69	21.35/22.31	36.1	33.53/35.03	28.24	€28.24
Valuation as a % of the share price at grant	17.30%	84.90%/ 88.70%	84.8%/ 88.7%	94.20%	84.8%/ 88.7%	91.40%	84.9%/ 88.7%	91.40%	91.40%

A €2.5 million net share-based payment expense was recognized in 2019 for plans currently in effect.

A net expense of €2.1 million was recognized in 2018, consisting of:

- a €2.3 million expense relating to existing plans; and
- a €0.2 million gain, which was recorded because the Group expected that the vesting conditions of the bonus shares and stock options granted under the 2016 plans would not be fully met.

Note 13 Provisions, contingent liabilities and other liabilities

	Dec. 31, 2019		Dec. 31, 2018	
In millions of	Non-recurring	Recurring	Non-recurring	Recurring
- provision for restructuring	1.3	1.5	0.4	2.1
- provision for litigation and other expenses	4.9	4.6	1.1	5.7
TOTAL	**6.2**	**6.1**	**1.5**	**7.8**

Recurring and non-recurring	Dec. 31, 2018	Provisions set aside / reversals	Uses	Other movements	Translation adjustment	Dec. 31, 2019
- provision for restructuring	2.5	1.9	(1.5)	(0.2)	0.1	2.8
- provision for litigation and other gains and expenses	6.8	(0.4)	(0.8)	3.9	0.0	9.5
TOTAL	**9.3**	**1.5**	**(2.3)**	**3.7**	**0.1**	**12.3**

Provisions totaled €12.3 million at December 31, 2019 (€9.3 million at December 31, 2018). The €3 million increase relates mainly to:

- recognition of a €4.4 million provision for soil decontamination at the Columbia site in the United States acquired by the Group in June 2019, shown in "Other movements";
- payment of provisions for restructuring under the Competitiveness Plan offset by the reversal of previously recorded provisions for the same plan.

Provisions for litigation and other expenses totaling €9.5 million mainly reflect the provision for soil contamination at the Columbia site for €4.4 million and provisions for disputes and other legal proceedings for €2.8 million.

Certain accrued litigation expenses are classified within operating payables for €0.9 million and in liabilities related to assets sold for €0.5 million.

Administrative and legal proceedings

Civil proceedings in Canada

The lawsuit initiated during 2004 in Canada by certain customers against the main Canadian manufacturers of graphite brushes, including Mersen Toronto, a Canadian subsidiary of Mersen, has now been settled. In an Order dated November 29, 2019, the judge ruled that the proceedings initiated by plaintiffs against all of the defendants would be dismissed.

Administrative proceedings in France

In 2013, SNCF launched two procedures against Morgan, SGL, Schunk and Mersen, in the Paris Administrative Court and the Paris Commercial Court respectively. SNCF is attempting to secure redress for losses that it allegedly suffered following practices that were sanctioned in December 2003 by the European Commission in connection with brushes for electric motors and products for mechanical applications. In 2014, the Paris Administrative Court rejected all of the claims lodged by SNCF, which appealed the decision. On June 13, 2019, the Versailles Court of Appeal overturned the 2014 Administrative Court ruling. It also decided that it will rule on the case and has issued an injunction for an expert appraisal to be carried out in order to determine the amount of the loss allegedly incurred by SNCF.

Mersen is challenging this ruling and has taken the case to the French Supreme Court (Conseil d'Etat), which on February 12, 2020 confirmed it would accept the appeal application and bring the case to trial. The Paris Commercial Court has not yet issued its ruling. The Group has set aside a provision reflecting its estimate of the risk incurred in connection with these proceedings.

Criminal proceedings in France

Criminal proceedings that were initiated after the tragic accident on April 7, 2010 at Mersen's site in Gennevilliers are still in progress. On December 22, 2019, a ruling by the examining judge partially dismissed the case and brought Mersen's subsidiary in Gennevilliers ("the Company") and its managing director at that time before the Criminal Court *(Tribunal correctionnel)*. The Company and its managing director at the time of the accident dispute the alleged acts with which they are charged, and will present their case in their defense before the competent court.

Labor regulations In France

Criminal proceedings were initiated in May 2019 for an alleged breach of certain labor regulations by Mersen's subsidiary in Gennevilliers ("the Company") and its managing director relating to events that occurred in 2017. In a ruling on October 14, 2019, the Nanterre Criminal Court ordered the Company and its managing director to pay damages of a non-material amount. This ruling will not be appealed.

Investigation by India's competition authority

In July 2019, India's competition authority launched an investigation into the premises of Group subsidiary Mersen (India) Private Limited over allegations of anti-competitive practices in the supply of carbon brushes to Indian railways in 2010-2014. Mersen India, which contests these allegations, is fully cooperating with the competition authority and has provided all requested information. The investigation is ongoing.

The Group is not aware of any other administrative or legal proceedings, including any pending or potential proceedings, that could have or have had in the last 12 months, a material adverse effect on its business activities, financial position or results of operations.

Tax and customs proceedings

The Group regularly undergoes tax and customs audits carried out by the tax/customs authorities in the countries in which it operates. In the past, the reassessments issued after tax/customs audits have been for non-material amounts. The most material risks concern Mersen do Brasil and Mersen India Pvt.

The amounts indicated below include interest.

Proceedings involving Mersen do Brasil

Mersen do Brasil received notice in June 2013 of a customs audit covering the period from January 2008 to December 2012. The customs authorities issued a reassessment notice for an initial amount (principal and interest) of BRL 7.5 million, increased each year by applying the interest rate issued by the Central Bank of Brazil. At December 31, 2019, the amount of the revised adjustment was BRL 12.2 million, or approximately €2.7 million at the December 31, 2019 exchange rate. This amount is not covered by a provision in the accounts of Mersen do Brasil, as the risk of losing the dispute is deemed very weak. A first instance ruling was handed down in favor of the Group on February 8, 2018. However, it was the subject of an ex officio appeal to a second instance court by the Brazilian authorities. It is not possible to estimate when the second instance ruling will be delivered.

At the date of this document, there had been no developments in these proceedings.

Mersen do Brasil is also involved in a number of disputes which are at various stages:

- Reassessment of social security contributions (relating to 2007) calculated on the basis of unverified earnings, representing a total of BRL 4.495 million (approximately €1 million). A provision for BRL 108 thousand has been set aside for the risk which is considered likely to be paid. This dispute is pending before the Administrative Court;
- Late tax return filing penalties (relating to 2001, 2005, 2010, 2011, 2012 and 2016) representing a total of BRL 4.171 million (approximately €949 thousand). A provision for BRL 90 thousand has been set aside in respect of the risk which is considered likely to be paid. Depending on the year in question, the disputes are pending before the local Tax Office, the Administrative Court, or subject to appeal proceedings before the Federal Court;
- Penalties (relating to 1998) for errors in calculating social security contributions, representing a total of BRL 2.7 million (approximately €615 thousand). A provision for BRL 1.013 million (approximately €230 thousand) has been set aside for the risk which is considered likely to be paid. This dispute is pending before the Federal Court;
- Four disputes representing a total amount of BRL 2.509 million (approximately €570 thousand). No provision has been set aside for these disputes as the related risk of loss is considered low. These disputes concern (1) the reassessment of tax credits transferred upon relocation from the São Paulo site (relating to 2011), which is pending before the Administrative Court; (2) penalties (relating to 1995) for differences in the tax base for local tax on industrial products, currently raised on appeal before the Federal Court; (3) penalties (relating to 2007) for irregularities in social security returns, currently pending before the Administrative Court; and (4) reassessment of requests to stagger tax payments (relating to 2011), raised on appeal before the government;
- Reassessment of entitlement to benefit from a tax-free zone regime (relating to 2004) for BRL 1.738 million (approximately €395 thousand). No provision has been set aside for this, as the related risk of loss is considered low. This dispute is pending before the Administrative Court;
- Penalties (relating to 2004) for erroneous amounts reported in certain tax returns, representing a total of BRL 1.561 million (approximately €355 thousand). No provision has been set aside in this respect as the related risk of loss is considered low. This dispute is pending before the Administrative Court.

At the date of this document, there had been no developments in these proceedings.

Proceedings involving Mersen India Pvt

Mersen India Pvt's tax returns are subject to annual tax audits. At the date of this document, the overall risk to which the company is exposed totals €430 thousand. This risk relates to the partial reassessment of certain intragroup expenses that were deducted in fiscal years 2011, 2013, 2014 and 2016. This dispute is pending before the Appeal Court. The subsidiary is also exposed to a risk representing €56 thousand for customs duties (relating to 2012, 2014 and 2016), since certain customs import codes used by Mersen India Pvt have been reassessed by local customs authorities. This dispute is pending a second appeal hearing.

At the date of this document, there had been no developments in these proceedings.

Other liabilities in the amount of €1.8 million at December 31, 2019 chiefly comprise liabilities related to property, plant and equipment.

Note 14 Employee benefits

Under defined contribution plans, the Group is under no obligation to make additional payments on top of the contributions already paid into a fund if the latter does not have sufficient assets to pay out the benefits corresponding to the service provided by employees during the period in progress or during future periods. For these plans, contributions are expensed as incurred.

The Mersen group's principal pension plans are defined benefit plans and are located in the United States (46% of obligations), the United Kingdom (20% of obligations), France (14% of obligations) and Germany (8% of obligations).

There are two pension plans in the United States:

- the "hourly plan" for shop floor employees,
- the "salaried plan" for office employees and closed to new entrants in 2011 because it was replaced by a defined contribution plan. This plan was closed entirely in 2015. The employees are now covered by the defined contribution plan.

These two plans are funded by contributions calculated on the value of the obligation and paid based on a funding plan over seven years. The fund's coverage ratio by assets measured in accordance with local standards is 88% for the salaried plan. The hourly plan is covered by plan assets.

There is a pension plan in the United Kingdom that was closed to new entrants in 2006. Based on local rules and conservative assumptions, it is fully covered by plan assets. Contributions are paid based on a schedule established with the trustees.

These pension funds constitute entities that are legally distinct from the Group. The funds' administrative bodies are composed of employee representatives, retirees and independent directors. They are legally required to act in the best interest of the plan's participants and are responsible for certain fund policies, including the investment, contribution and indexing policies, etc.

In France, the defined benefit plans involve primarily lump-sum retirement payments and long-service awards. These plans are not funded.

There are two pension plans in Germany that are closed to new entrants and are not funded.

The Group's obligations were measured at December 31, 2019 with the assistance of independent actuaries and in accordance with IAS 19.

The rates used for the main countries are summarized below:

2019	Discount rate	Average rate of salary increases	Inflation rate
France	0.75%	Between 2.0% and 6.25% depending on age	1.8%
Germany	0.75%	2.50%	1.8%
United States	3.2%	Not applicable	Not applicable
United Kingdom	2.0%	2.95%	3.30%

2018	Discount rate	Average rate of salary increases	Inflation rate
France	1.60%	Between 2.0% and 6.25% depending on age	1.8%
Germany	1.60%	2.50%	1.8%
United States	4.25%	Not applicable	Not applicable
United Kingdom	2.75%	2.9%	3.40%

Mortality assumptions are based on published statistics and mortality tables.

Reconciliation between assets and liabilities recognized

	Dec. 31, 2019	Dec. 31, 2018
Actuarial obligation	196.9	173.5
Fair value of plan assets	(121.9)	(109.0)
PROVISION BEFORE THE LIMIT ON ASSETS	**75.0**	**64.5**
Surplus management reserve		0.1
PROVISION AFTER THE LIMIT ON ASSETS	**75.0**	**64.6**

Breakdown of the Group's obligations at December 31 by geographical area

	France	Germany	United States	United Kingdom	Rest of the world	Total at December 31, 2017
Actuarial obligation	26.6	15.9	89.9	39.5	25.0	196.9
Fair value of plan assets	(0.6)		(62.9)	(45.3)	(13.1)	(121.9)
NET AMOUNT RECOGNIZED	**26.0**	**15.9**	**27.0**	**(5.8)**	**11.9**	**75.0**

Movements in the Group's obligations

	France	Germany	United States	United Kingdom	Rest of the world	Total
Dec. 31, 2018	**23.2**	**14.8**	**78.5**	**35.3**	**21.7**	**173.5**
Payments made	(0.8)	(1.0)	(3.4)	0.0	(0.9)	(6.1)
Expenses recognized	1.8	0.4	4.8	1.1	1.8	9.9
Translation adjustment			1.5	1.9	0.8	4.2
Actuarial gains and losses	2.4	1.6	11.8	1.2	2.2	19.2
Other movements		0.1	(3.3)		(0.6)	(3.8)
DEC. 31, 2019	**26.6**	**15.9**	**89.9**	**39.5**	**25.0**	**196.9**

Change in plan assets

	France	Germany	United States	United Kingdom	Rest of the world	Total
Dec. 31, 2018	**0.3**	**0.0**	**56.0**	**40.4**	**12.2**	**108.9**
Return on plan assets			2.3	1.2	0.4	3.9
Employer contribution	0.2		1.4	0.2	0.5	2.3
Employee contribution					0.1	0.1
Payment of benefits			(3.5)	(0.2)	(0.4)	(4.1)
Actuarial gains and losses			8.0	1.5	0.4	9.9
Translation adjustment			1.1	2.2	0.8	4.1
Other movements	0.1		(2.4)		(0.9)	(3.2)
DEC. 31, 2019	**0.6**	**0.0**	**62.9**	**45.3**	**13.1**	**121.9**

The plan assets cover primarily the United States plans (52% of total plan assets, with 59% invested in equities and 41% in bonds) and the United Kingdom plans (37% of total plan assets, with 13% invested in equities, 84% in government bonds and 3% in real estate and cash).

Other movements (net commitments on plan assets) amounted to €0.6 million and mainly relate to the early payment of benefits to employees having left the Group in the United States.

Net expense recognized

The net expense recognized for these plans in 2019 was €5.2 million, compared with €4.5 million in 2018:

	France	Germany	United States	United Kingdom	Rest of the world	Dec. 31, 2019	Dec. 31, 2018
Current service cost	1.5	0.2	0.7	0.1	1.1	3.6	3.0
Interest cost	0.3	0.2	3.3	1.0	0.6	5.4	4.5
Expected return on plan assets			(2.3)	(1.2)	(0.3)	(3.8)	(3.2)
Administrative costs			0.8		0.1	0.9	0.9
Plan amendment			(0.9)			(0.9)	(0.6)
Other movements						0.0	(0.1)
NET EXPENSE FOR THE PERIOD	**1.8**	**0.4**	**1.6**	**(0.1)**	**1.5**	**5.2**	**4.5**

The change in actuarial gains and losses arising on the measurement of obligations and plan assets breaks down as follows:

	France	Germany	United States	United Kingdom	Rest of the world	Dec. 31, 2019	Dec. 31, 2018
Adjustments linked to changes in demographic assumptions			(0.9)	(0.4)	(0.1)	(1.4)	(0.8)
Adjustments linked to changes in financial assumptions	2.4	1.5	12.5	4.0	2.3	22.7	(9.1)
Experience adjustments to obligations		0.1	0.7	(1.4)	0.1	(0.53)	(1.5)
Experience adjustments to plan assets			(8.5)	(2.5)	(0.5)	(11.5)	5.1
ACTUARIAL GAINS AND LOSSES	**2.4**	**1.6**	**3.8**	**(0.3)**	**1.8**	**9.3**	**(6.3)**

Sensitivity analysis

An increase of 0.5 points in discount rates would lead to a reduction of €13.1 million in the estimated actuarial obligation.

An increase of 0.5 points in inflation rates would lead to an increase of €2.8 million in the estimated actuarial obligation.

This reflects the sensitivity of the gross obligation without taking into account a potential offsetting impact on plan assets.

The breakdown of sensitivities by country is presented in the table below.

Impact on the obligation in the case of	0.5 % increase in the discount rate	0.5% increase in the inflation rate
France	(1.5)	
Germany	(1.0)	0.9
United Kingdom	(2.9)	1.4
United States	(6.1)	0.0
Rest of the world	(1.6)	0.5
TOTAL	**(13.1)**	**2.8**

Note 15 Net debt

In accordance with IFRS 16, lease liabilities are not included in the calculation of financial debt.

Analysis of total net debt at Dec. 31, 2019

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Long- and medium-term borrowings	235.4	109.4
Current financial liabilities[(a)]	27.3	125.3
Financial current accounts	0.7	0.5
Bank overdrafts	16.5	28.9
TOTAL GROSS DEBT	**279.9**	**264.1**
Current financial assets[(b)]	**(16.5)**	**(13.8)**
Cash and cash equivalents	(45.2)	(34.8)
Cash	**(45.2)**	**(34.8)**
TOTAL NET DEBT	**218.2**	**215.5**

(a) Including €25 million from drawdowns of the commercial paper program, which may be substituted at maturity by drawdowns of the Group Syndicated Loan
(b) Including €15.6 million of good quality Chinese bank drafts. Poor quality bank drafts are classified under Other operating receivables.

Total consolidated net debt at December 31, 2019 amounted to €218.2 million compared with €215.5 million at year-end 2018.

Out of the €279.9 million in total gross debt at December 31, 2019, €235.5 million stems from the use of confirmed credit lines and borrowings, €25.0 million from use of the commercial paper program and the remainder chiefly from the use of non-confirmed lines (bank overdrafts and other lines).

The €98 million decrease in current financial liabilities between end-2018 and end-2019 primarily reflects the decline in the use of commercial paper (replaceable at maturity by drawdowns under the Group Syndicated Loan) and the repayment of a €37.2 million tranche of the US private placement.

Net debt/equity

(In millions of euros)	Dec. 31, 2019	Dec. 31, 2018
Total net debt	218.2	215.5
Net debt/equity[(a)]	0.37	0.39

(a) Calculated using the covenant method.

Net debt amounted to 37% of equity at December 31, 2019, compared with 39% at December 31, 2018.

Reconciliation between changes in net debt shown in the statement of financial position and the cash flow statement

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Prior year debt	**215.5**	**178.1**
Cash generated/(used) by operating and investing activities after tax	(61.3)	(39.2)
Non-recurring items (restructuring, litigation, etc.)	5.5	7.3
Net cash inflows/(outflows) attributable to changes in the scope of consolidation	19.4	30.8
Cash generated by the operating and investing activities of continuing operations	**(36.4)**	**(1.1)**
Cash generated by the operating and investing activities of divested and discontinued operations	0.2	0.4
Increase/decrease in capital	(1.4)	6.3
Dividends paid	22.1	15.8
Interest payments	**7.9**	**8.1**
Lease payments	12.7	0.0
Translation adjustments and other	2.2	1.0
Change in scope with no cash impact in the period*	(4.6)	6.6
Other changes	0.0	0.3
DEBT AT YEAR-END	**218.2**	**215.5**

** Including earnout payments recognized in the period or the offsetting entry for earnout payments made in the period but recorded in debt in a previous period.*

Financial covenants at December 31, 2019

In connection with its various confirmed borrowings at Group level and in China, Mersen is required to comply with a number of obligations typically included in these types of contract, including the ratio of net financial debt to EBITDA(a) before the application of IFRS 16. Should it fail to comply with some of these obligations, the banks or investors (for the private placements) may require Mersen to repay the relevant borrowings ahead of schedule. Under the cross-default clauses, early repayment of one significant loan may trigger an obligation for the Group to repay other loans and borrowings.

Mersen must comply with the following financial covenants at June 30 and December 31 each year:

Financial covenants[(a)] (consolidated financial statements)

	Net debt/EBITDA[(b)]			Net debt/equity			EBITDA/net interest		
Confirmed credit lines and borrowings	Ratio	Dec. 31, 2019	Dec. 31, 2018	Ratio	Dec. 31, 2019	Dec. 31, 2018	Ratio	Dec. 31, 2019	Dec. 31, 2018
US Private Placement	< 3.5	1.50	1.59	< 1.3	0.37	0.39	> 3	14.95	13.93
German private placement							n.a		
Group syndicated loan									
Confirmed credit lines – China									

(a) Method for calculating the covenants: in line with the applicable accounting rules, when calculating the net debt for the purpose of the financial statements, closing exchange rates are used to determine the euro-equivalent value of debt denominated in foreign currencies. Net debt has to be recalculated at the average EUR/USD exchange rate for the period if there is a difference of more than 5% between the average exchange rate and the closing rate. To calculate the covenants at June 30, the convention is for EBITDA or gross operating income to be deemed to be EBITDA reported for the first six months of the year multiplied by two.
(b) EBITDA before the application of IFRS 16.

The Group complies with all of its financial covenants.

At December 31, 2019, there were no material borrowings or liabilities secured by assets or guaranteed by third parties.

Breakdown by currency of total net debt at December 31, 2019

Total gross debt at December 31, 2019 stood at €279.8 million and is broken down by currency as follows:

(By currency)	%
EUR	63.6
USD	20.9
GBP	8.0
RMB	1.8
Other	5.7

25.7% of net debt is denominated in US dollars.

Breakdown by currency of the drawdowns on credit lines and confirmed long- and medium term borrowings including the short-term portion at December 31, 2019

Operating receivables and payables all mature in less than one year. A breakdown of borrowings by maturity is shown below.

(In millions of euros)	Total	1 year	1 to 5 years	> 5 years
Borrowings in USD	44.5	0.0	44.5	0.0
Borrowings in EUR	190	0	60.0	130
Borrowings in GBP	1	0.3	0.7	
Borrowings in RMB	0	0	0	0
TOTAL	**235.5**	**0.3**	**105.2**	**130**
Amortization of issuance costs at the EIR[a]	(0.9)			
Fair value of interest-rate derivatives	0.0			
TOTAL	**234.6**			

(a) Effective interest rate

Of the €105.2 million in debt due to mature in between one and five years' time, €44.8 million had a maturity of less than two years at December 31, 2019. This primarily relates to the USD tranche of the US private placement, which can be financed by available undrawn credit lines upon its maturity in November 2021.

(In millions of euros)	Total	O/w maturity < 5 years	O/w maturity > 5 years
Debt	279.9	149.9	130.0
Financial assets	(61.7)	(61.7)	0.0
Net position before hedging	**218.2**	**88.2**	**130.0**
Fixed-rate debt*	138.5	70.5	68.0
Net position after hedging	**79.7**	**17.7**	**62.0**

** Including an interest rate cap for a nominal amount of €25 million.*

Total net debt at December 31, 2019 breaks down as follows by type of interest rate:

(By interest rate)	%
Fixed	63.5
Variable	36.5

Assuming Mersen's debt and exchange rates remain unchanged at their December 31, 2019 level and taking into account the swaps held in the portfolio, an increase of 100 basis points in variable interest rates would increase the Group's annual interest costs by around €0.8 million.

This impact is chiefly related to debt in EUR, as debt in USD is primarily fixed-rate debt.

Note 16 Right-of-use assets and lease liabilities

At December 31, 2019, right-of-use assets for leased assets recognized in the statement of financial position totaled €50.2 million.

Right-of-use assets	Land and buildings	Other	Total
At January 1, 2019	0	0	0
Impact of the first-time application of IFRS 16	37.3	6.3	43.6
Amortization for the period	(7.9)	(3.2)	(11.1)
Additions or modifications to right-of-use assets	15.9	1.8	17.7
AT DECEMBER 31, 2019	**45.3**	**4.9**	**50.2**

At December 31, 2019, lease liabilities recognized in the statement of financial position totaled €48.1 million.

The impact of first-time application of IFRS 16 was €40.2 million. In 2019, lease payments totaled €12.7 million and the financing component recognized in net financial income/(expense) amounted to €2.9 million.

Lease liabilities	
At January 1, 2019	0
Impact of the first-time application of IFRS 16	40.2
Commitments generated by additions or modifications to right-of-use assets	17.7
Lease payments made in the period	(12.7)
Financing component of lease commitments	2.9
AT DECEMBER 31, 2019	**48.1**

Following the first-time application of IFRS 16, the €3.4 million difference between assets and liabilities results from land in China that falls within the scope of IFRS 16 but was already recognized on the "Land" line within property, plant and equipment in previous periods.

Amount included in net income	
Reversal of the rental expense for the period	12.6
Depreciation and amortization	(11.1)
Financing component of lease commitments	(2.9)
Income before tax	(1.4)
Income tax (expense)/benefit	0.3
NET INCOME	**(1.1)**

At December 31, 2019, the Group has short-term leases and particularly leases of low value that meet the exemption criteria under IFRS 16. Future minimum lease payment obligations under these leases were not material at December 31, 2019.

Note 17 Fair value of financial instruments

The following tables show the fair value of the Group's financial assets and liabilities and their carrying amount in the statement of financial position, as well as their ranking in the fair value hierarchy for instruments measured at fair value: they do not provide information about the impairment of financial assets and liabilities that are not measured at fair value, insofar as their carrying amount corresponds to a reasonable approximation of the impairment loss.

12/31/2019		Carrying amount					Fair value			
Statement of financial position sections and category of instrument	**Note**	**Fair value of hedging instruments**	**Fair value through "Other items of comprehensive income"**	**Financial assets at amortized cost**	**Other financial liabilities**	**Total carrying amount**	**Level 1**	**Level 2**	**Level 3**	**TOTAL**
Financial assets measured at their fair value										
Unlisted equity interests	9		3.7			3.7			3.7	3.7
Derivatives held as current and non-current assets	3	1.4				1.4		1.3		1.3
		1.4	**3.7**	**0.0**	**0.0**	**5.1**	**0.0**	**1.3**	**3.7**	**5.0**
Financial assets not measured at their fair value										
Current and non-current financial assets	15			20.7		20.7				
Trade receivables	11			147.3		147.3				
Cash and cash equivalents	15			45.2		45.2				
		0.0	**0.0**	**213.2**	**0.0**	**213.2**				
Financial liabilities measured at fair value										
Derivatives held as current and non-current liabilities	3	(0.3)				(0.3)		(0.3)		(0.3)
		(0.3)	**0.0**	**0.0**	**0.0**	**(0.3)**	**0.0**	**(0.3)**	**0.0**	**(0.3)**
Financial liabilities not measured at fair value										
Bank borrowings	15				(235.4)	(235.4)		(235.4)		
Financial current accounts	15				(0.7)	(0.7)				
Bank overdrafts	15				(16.5)	(16.5)				
Current financial liabilities	15				(27.3)	(27.3)				
Trade payables					(60.6)	(60.6)				
		0.0	**0.0**	**0.0**	**(340.5)**	**(340.5)**				
Carrying amount by category		**1.1**	**3.7**	**213.2**	**(340.5)**	**(122.5)**				

Dec. 31, 2018		Carrying amount					Fair value			
Statement of financial position sections and category of instrument	Note	Fair value of hedging instruments	Fair value through "Other items of comprehensive income"	Financial assets at amortized cost	Other financial liabilities	Total carrying amount	Level 1	Level 2	Level 3	TOTAL
Financial assets measured at their fair value										
Unlisted equity interests	9		4.1			4.1			4.1	4.1
Derivatives held as current and non-current assets	3	1.3				1.3		1.3		1.3
		1.3	**4.1**	**0.0**	**0.0**	**5.4**	**0.0**	**1.3**	**4.1**	**5.4**
Financial assets not measured at their fair value										
Current and non-current financial assets	15			17.1		17.1				
Trade receivables	11			146.2		146.2				
Cash and cash equivalents	15			34.8		34.8				
		0.0	**0.0**	**198.1**	**0.0**	**198.1**				
Financial liabilities measured at their fair value										
Derivatives held as current and noncurrent liabilities	3	(2.1)				(2.1)		(2.1)		(2.1)
		(2.1)	**0.0**	**0.0**	**0.0**	**(2.1)**	**0.0**	**(2.1)**	**0.0**	**(2.1)**
Financial liabilities not measured at fair value										
Bank borrowings	15				(109.4)	(109.4)		(109.5)		
Financial current accounts	15				(0.5)	(0.5)				
Bank overdrafts	15				(28.9)	(28.9)				
Current financial liabilities	15				(125.3)	(125.3)				
Trade payables					(71.8)	(71.8)				
		0.0	**0.0**	**0.0**	**(335.9)**	**(335.9)**				
Carrying amount by category		**(0.8)**	**4.1**	**198.1**	**(335.9)**	**(134.5)**				

Regarding financial derivative instruments (including foreign exchange forward contracts and interest rate swaps), the market comparable measurement technique is used. Fair value is based on brokers' quoted prices. Similar contracts are negotiated on an active market and their price reflects transactions that include similar instruments.

Note 18 Other non-recurring income and expenses

Other non-recurring income and expenses break down as follows:

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Impairment losses linked to development costs	(5.3)	
Competitiveness plan	(2.3)	(0.4)
Acquisition-related costs	(1.9)	(1.6)
Litigation and other gains and expenses	(1.7)	(1.8)
TOTAL	**(11.3)**	**(3.8)**

At December 31, 2019, non-recurring income and expenses amounted to €11.3 million and mainly included:

- The impairment of €5.3 million recorded in 2019 pertains to costs linked to the development of hybrid protection for the electric vehicle market, since the Group no longer believes that sales will be sufficient following the recent breakdown in negotiations with a major car manufacturer,
- expenses related to the competitiveness plan for €2.3 million,
- acquisition-related costs for €1.9 million relating mainly to AGM Italy, GAB Neumann and the Columbia site in the US (including site start-up costs of €0.8 million),
- costs related to litigation and other expenses representing €1.7 million, mainly relating to trade disputes and other material and non-recurring expenses, including a provision for the dispute with SNCF.

At end 2018, non-recurring income and expenses stood at €3.8 million and included primarily:

- acquisition costs, in particular for FTCAP and Idéalec, for €1.6 million,
- cost related to disputes and other non-recurring expenses representing a material amount of €1.8 million, mainly involving trade disputes and other material and non-recurring expenses,
- expenses (net of reversals) relating to the competitiveness plan amounting to €0.4 million.

The costs of the competitiveness plan were measured according to a process formulated and supervised by the Management Board of the group.

Note 19 Segment reporting

Operating income

In millions of euros	Advanced Materials (AM)		Electrical Power (EP)		Total for continuing operations	
	Dec. 31, 2019	**Dec. 31, 2018**	**Dec. 31, 2019**	**Dec. 31, 2018**	**Dec. 31, 2019**	**Dec. 31, 2018**
Sales to third parties	545.4	487.1	404.8	391.4	950.2	878.5
Sales breakdown	57.4%	55.4%	42.6%	44.6%	100.0%	100.0%
Segment operating income before non-recurring items	**82.3**	**68.9**	**38.0**	**39.0**	**120.3**	**107.9**
Recurring unallocated costs					**(18.2)**	**(16.3)**
Segment operating margin before non-recurring items*	**15.1%**	**14.1%**	**9.4%**	**10.0%**		
Operating income from continuing operations					102.1	91.6
Operating margin from continuing operations before non-recurring items					10.8%	10.4%
Segment non-recurring income and expenses	(6.1)	0.5	(5.1)	(4.3)	(11.2)	(3.8)
Segment operating income	**76.2**	**69.4**	**32.9**	**34.7**	**109.1**	**104.1**
Segment operating margin*	14.0%	14.2%	8.1%	8.9%		
EBITDA margin (1)	21.8%	20.1%	13.0%	12.5%		
Non-recurring unallocated costs					0.0	0.0
Operating income from continuing operations					**90.9**	**87.8**
Operating margin from continuing operations					9.6%	10.0%
Net financial income/(expense)					(17.9)	(10.3)
Current and deferred income tax					(19.3)	(18.3)
Net income from continuing operations					**59.8**	**59.2**

** Segment operating margin = Operating income/Segment sales to third parties.*
(1) The Group's EBITDA represents combined segment operating income before non-recurring items plus segment depreciation and amortization.

Breakdown of sales and sales trends by geographical area

In millions of euros	Dec. 31, 2019	%	Dec. 31, 2018	%
France	77.3	8%	79.4	9%
Rest of Europe	243.9	26%	217.7	25%
North America	329.8	35%	293.2	33%
Asia-Pacific	262.9	28%	250.3	29%
Rest of the world	36.3	3%	37.9	4%
TOTAL	**950.2**	**100%**	**878.5**	**100%**

No single customer accounts for over 10% of the Group's sales. The number one customer accounted for less than 3% of the Group's sales.

The Group's activities are not subject to any significant seasonal variation.

Segment assets

In millions of euros	AM	EP	Dec. 31, 2019
Net non-current assets	488.9	222.4	711.3
Inventories	146.2	60.8	207.0
Trade receivables	86.2	61.1	147.3
Contract assets	9.8		9.8
Other operating receivables	15	6.7	21.7
TOTAL SEGMENT ASSETS	**746.1**	**351.0**	**1,097.1**
Deferred tax assets			29.3
Non-current portion of current tax assets			7.8
Current portion of current tax liabilities			3.6
Current financial assets			16.5
Current derivatives			1.4
Cash and cash equivalents			45.2
TOTAL UNALLOCATED ASSETS			**103.8**
TOTAL			**1,200.9**

Segment liabilities

In millions of euros	AM	EP	Dec. 31, 2019
Trade payables	32.3	28.3	60.6
Contract liabilities	28.2	0.9	29.1
Other payables and other liabilities	57.4	33.0	90.4
Non-current and current provisions	10.4	1.9	12.3
Employee benefits	54.4	20.6	75.0
TOTAL SEGMENT LIABILITIES	**182.7**	**84.7**	**267.4**
Deferred tax liabilities			30.3
Long and medium-term borrowings			235.4
Lease liabilities			48.1
Non-current derivatives			0.1
Current portion of current tax liabilities			3.6
Other current financial liabilities			27.3
Current derivatives			0.2
Financial current accounts			0.7
Bank overdrafts			16.5
Liabilities related to assets held for sale and disc. op.			0.7
TOTAL UNALLOCATED LIABILITIES			**362.9**
TOTAL			**630.3**

Note 20 Payroll costs and headcount

Group payroll costs (including social security contributions, provisions for pension obligations and retirement compensation) came to €285.1 million in 2019 compared with €269 million in 2018.

Based on a constant scope of consolidation and constant exchange rates, payroll costs (including for temporary staff) were 2.2% higher than in 2018.

Headcount of consolidated companies at end of period by geographical area

Geographical area	Dec. 31, 2019	%	Dec. 31, 2018	%
France	1,364	20%	1,353	19%
Rest of Europe	1,047	15%	1,010	15%
North America (+ Mexico)	2,033	30%	2,102	30%
Asia	1,796	27%	1,780	26%
Rest of the world	564	8%	672	10%
TOTAL	**6,804**	**100%**	**6,917**	**100%**

Headcount decreased by 113 people, reflecting

- a decrease of 157 people mainly in Tunisia (79 people) and North America/Mexico (77 people),
- an increase of 44 people as a result of the AGM Italy acquisition and new hires for the recently acquired Columbia site in the United States.

Headcount of consolidated companies at period-end broken down by category

Categories	Dec. 31, 2019	%	Dec. 31, 2018	%
Engineers and managers	1,592	23%	1,325	19%
Technicians and supervisors	1,366	20%	1,083	16%
Employees	307	5%	556	8%
Blue-collar workers	3,539	52%	3,953	57%
TOTAL	**6,804**	**100%**	**6,917**	**100%**

Note 21 Operating income

An analysis of operating income by category of income and expense is shown in the following table:

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Product sales	916.0	846.9
Trading sales	34.2	31.6
TOTAL SALES	**950.2**	**878.5**
Other operating revenues	5.7	5.9
Cost of trading sales	(23.9)	(22.1)
Raw material costs	(261.7)	(232.7)
Costs on other operating revenues	(2.7)	(2.2)
Manufacturing costs	(162.3)	(152.4)
Salaries, incentives and profit-sharing	(285.1)	(269.0)
Other expenses	(67.5)	(73.8)
Financial components of operating income	(3.6)	(4.3)
Depreciation and amortization*	(51.3)	(37.5)
Impairment losses and provisions	(6.6)	(1.8)
Gains/(losses) on asset disposals	(0.3)	(0.8)
OPERATING INCOME	**90.9**	**87.8**

At December 31, 2019, depreciation and amortization include amortization of right-of-use assets recognized in accordance with IFRS 16 for €11.1 million. Since IFRS 16 was not applicable in 2018, no such amortization was recognized in that year.

The impairment of €5.3 million recorded in 2019 pertains to costs linked to the development of hybrid protection for the electric vehicle market.

Provisions are specified in Note 13

Note 22 Financial income and expense

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Amortization of bond issuance expenses	(0.3)	(0.3)
Interest paid on debt	(6.6)	(6.1)
Short-term financial expense	(1.2)	(2.0)
Commission on debt	(0.5)	(0.7)
Ineffective portion of interest-rate hedges	(0.1)	0.1
Financing component of lease commitments	(2.9)	
Net interest income from employee benefits	(1.6)	(1.3)
Interest income from bank deposits		
NET FINANCE EXPENSE	**(13.2)**	**(10.3)**

The net finance expense above includes the following items from assets and liabilities that are not stated at fair value on the statement of income:

Total interest income from financial assets		0.0
Total interest income from financial liabilities	(13.2)	(10.3)
Net Finance Expense	**(13.2)**	**(10.3)**

Recognized directly in equity

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Change in fair value of currency hedges	1.1	0.0
Change in fair value of interest rate hedges	0.0	(0.1)
Change in fair value of commodity hedges	0.3	0.0
Impact on changes recognized in equity	(0.2)	0.0
Net finance costs recognized directly in equity, net of tax	**1.2**	**(0.1)**

Note 23 Income tax

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Current income tax	(15.7)	(11.1)
Deferred income tax	(1.8)	(6.9)
Withholding tax	(0.4)	(0.3)
Total tax expense	**(17.9)**	**(18.3)**

The Group has:

- one consolidated tax group in France;
- one consolidated tax group in the United States;
- two consolidated tax groups in Germany;
- one consolidated tax group in the United Kingdom (group relief)

The tax rate on the Group's continuing operations was 23% in 2019 (2018: 24%).

The slight decrease in 2019 is mainly attributable to the higher-than-expected rise in earnings in China, where deferred tax assets relating to tax losses carried forward from previous years had been written down out of prudence.

Analysis of income tax expense

In millions of euros	Dec. 31, 2019
Net income	**59.8**
Net income from assets held for sale/discontinued operations	0.0
Net income from continuing operations	**59.8**
Income tax expense/(benefit) on continuing operations	(17.9)
TOTAL INCOME TAX EXPENSE/(BENEFIT)	**(17.9)**
TAXABLE INCOME	**77.7**
Current tax rate in France	32.02%
Theoretical tax benefit/(expense) (taxable income x current income tax rate in France)	(24.9)
Difference between income tax rate in France and other jurisdictions	7.5
Transactions qualifying for a reduced rate of taxation	
Permanent timing differences	(3.1)
Impact of limiting deferred tax assets	(0.9)
Other*	3.5
ACTUAL INCOME TAX BENEFIT (EXPENSE) RECOGNIZED	**(17.9)**

** Notably including the utilization of tax losses for which no deferred tax assets had been recognized (mainly in China).*

The deferred tax assets and liabilities recognized in the statement of financial position are as follows:

In millions of euros	Dec. 31, 2019	Dec. 31, 2018
Deferred tax assets	29.3	26.9
Deferred tax liabilities	(30.3)	(27.8)
Net position	**(1.0)**	**(0.9)**

Deferred tax movements during fiscal 2019 were as follows:

(in millions of euros)	Dec. 31, 2018	Net income	Other comprehensive income	Other	Translation adjustment	Dec. 31, 2019
Employee benefit obligations	11.4	0.3	2.1	0.2	0.0	14.0
Depreciation of non-current assets	(25.1)	(2.5)	0.0	(2.6)	(0.8)	(31.0)
Tax-regulated provisions	(0.1)	(0.2)	0.0	0.6	0.0	0.3
Impact of tax losses	18.8	(0.9)	0.0	0.0	0.0	17.9
Impairment losses	(0.6)	0.0	0.0	0.1	0.0	(0.5)
Other	(5.3)	1.5	(0.2)	2.2	0.1	(1.7)
DEFERRED TAX IN THE STATEMENT OF FINANCIAL POSITION - NET POSITION	**(0.9)**	**(1.8)**	**1.9**	**0.5**	**(0.7)**	**(1.0)**

** (- liabilities / + assets)*

Deferred tax assets were recognized based on their recoverability. France and Germany were the main countries affected.

Given the short-term outlook on certain markets and geographic regions and in line with local tax rules and/or market practices, certain tax losses were not capitalized as deferred taxes. The bulk of these losses derived primarily from France (€68 million), China (€22 million), Germany (€10 million) and Brazil (€5 million).

Note 24 Earnings per share

Basic and diluted earnings per share are presented below:

Continuing operations and discontinued operations	Dec. 31, 2019	Dec. 31, 2018
Numerator: net income used to calculate basic earnings per share (net income for the period in millions of euros)	57.3	56.5
Denominator: weighted average number of ordinary shares used to calculate basic earnings per share	20,727,550	20,536,284
Adjustment for dilutive potential ordinary shares: unexercised options	631,321	691,336
Weighted average number of ordinary shares used to calculate diluted earnings per share	21,358,871	21,227,620
Basic earnings per share *(€)*	2.76	2.75
Diluted earnings per share *(€)*	2.68	2.66

Net income per share from continuing operations is the same as ordinary earnings per share, income from discontinued activities is zero for the past two years.

Restated for the impairment of €3.9 million net of tax in costs linked to the development of hybrid protection for the electric vehicle market, earnings per share is as follows:

	Dec. 31, 2019	Dec. 31, 2018
Basic earnings per share *(€)*	2.95	2.75
Diluted earnings per share *(€)*	2.86	2.66

Note 25 Dividends

The General Meeting of the Shareholders of May 17, 2018 decided to distribute a dividend of €0.95 per share for 2018. In July 2019, the Group paid out dividends totaling €19.6 million.

The dividend proposed in respect of fiscal 2019 stands at €1 per share, representing an aggregate amount of about €21 million.

Note 26 Related party disclosures

Mersen SA is a holding company that manages its investments in subsidiaries and affiliates and the Group's financing activities, and charges subsidiaries for services related to the intangible assets and property, plant and equipment that it owns.

Mersen SA belongs to the Mersen group, which encompasses 94 consolidated and unconsolidated companies in 34 countries.

Transactions between the Group's consolidated companies are eliminated for consolidation purposes.

1 - Relations with unconsolidated subsidiaries

Group sales to unconsolidated subsidiaries amounted to €5.4 million in 2019 (€3.6 million in 2018).

At December 31, 2019, the management and administrative fees charged to unconsolidated subsidiaries by the Group (deducted from administrative costs) amounted to €0.3 million, the same amount as for 2018.

The amounts receivable by the Group from its unconsolidated subsidiaries came to €1.0 million at December 31, 2019, while amounts payable were less than €0.3 million.

At December 31, 2019, Mersen granted shareholders' advances to unconsolidated subsidiaries amounting to €0.1 million (€0.1 million at end 2018).

2 - Compensation and benefits paid to key management personnel

The table below includes annual compensation for the Group's Chief Executive Officer for 2019.

(In millions of euros)	Dec. 31, 2019	Dec. 31, 2018
Salaries, bonuses, benefits in kind	0.9	0.9
Top-up pension plan payments(1)	0.2	0.2
Other long-term employee benefits		
TOTAL	**1.1**	**1.1**

(1) By contract, the Chief Executive Officer is entitled to the benefit of a top-up pension plan, defined as follows: provided that the person is still employed by the Group upon his/her retirement, this regime guarantees a top-up pension income of 10-20%, depending on length of service, of the basic reference salary during the final three years prior to retirement plus a flat-rate of 50% of the maximum bonus. The actuarial obligation was assessed at December 31, 2019 at €4.6 million (€4.1 million at December 31, 2018).

Should his appointment be terminated, the Chief Executive Officer will receive a severance payment of no more than 0.5 times the total gross compensation and benefits paid to him in respect of the 36-month period preceding termination, subject to the attainment of performance criteria. He will also receive a monthly no-compete payment equal to 50% of his last gross fixed monthly compensation, payable over 12 months.

In addition, the following share-based payments were granted to the Chief Executive Officer:

- Stock options: 30,000 stock subscription options were granted to the Chief Executive Officer in 2014. The options attributed in 2007 and 2009 expired in 2017 and 2019 respectively.

	2014 Plan Tranche 13
Date of the Management Board's meeting	May 21, 2014
Total number of shares allotted	30,000
Subscription price	22.69
Start of option exercise period	May 2016
Expiration date	May 2021

- Bonus shares: table of past allotments to the Chief Executive Officer below: no bonus shares were allotted to the Chief Executive Officer in respect of the 2015, 2016, 2017 and 2018 plans.
- Bonus preference shares: table of past allotments to the Chief Executive Officer. Shares allocated in 2015 were definitively allotted in 2019.

	2016 plan
Date of Board of Directors' meeting	May 11, 2016
Total number of preference shares allotted	188
Minimum equivalent in number of ordinary shares after conversion subject to achievement of performance criteria	
Maximum equivalent in number of additional ordinary shares after conversion subject to the achievement	1,880
of performance criteria and share price trends.	18,800
Reference price at allotment date:	
Ordinary shares subject to achievement of performance criteria	10.92
Ordinary shares	1.52
Definitive allotment date (end of the vesting period)	May 11, 2018
End of lock-up period	May 11, 2020

	2017 plan
Date of Board of Directors' meeting	May 18, 2017
Total number of preference shares allotted	189
Minimum equivalent in number of ordinary shares after conversion subject to achievement of performance criteria	
Maximum equivalent in number of additional ordinary shares after conversion subject to the achievement	1,890
of performance criteria and share price trends.	18,900
Reference price at allotment date:	
Ordinary shares subject to achievement of performance criteria	21.35
Ordinary shares	6.44
Definitive allotment date (end of the vesting period)	May 18, 2019
End of lock-up period	May 18, 2021

	2018 plan
Date of Board of Directors' meeting	May 17, 2018
Total number of bonus shares allotted	77
Minimum equivalent in number of ordinary shares after conversion subject to achievement of performance criteria	
Maximum equivalent in number of additional ordinary shares after conversion subject to the achievement	770
of performance criteria and share price trends.	7,700
Reference price at allotment date:	
Ordinary shares subject to achievement of performance criteria	33.53
Ordinary shares	12.41
Definitive allotment date (end of the vesting period)	May 17, 2020
End of lock-up period	May 17, 2022

- Bonus shares granted in 2019 to each executive corporate officer

	2019 plan
Date of Board of Directors' meeting	May 17, 2019
Total number of bonus shares allotted	8,850
Reference price at allotment date:	20.86
Definitive allotment date (end of the vesting period)	May 17, 2022
End of lock-up period	May 18, 2022

3 - Other agreements

The Group has not entered into any agreements or commitments with other parties aside from the one described above concerning the non-compete clause, termination of term in office and pension plan of the Chief Executive Officer, Luc Themelin.

Note 27 Off-balance sheet commitments

A - Financial commitments and liabilities

(In millions of euros)	Dec. 31, 2019	Dec. 31, 2018
Commitments received		
Guarantees and endorsements	0.0	0.0
Other commitments received	0.0	0.0
TOTAL	**0.0**	**0.0**
Commitments given		
Collateralized debts and commitments	0.0	0.0
Market guarantees	22.4	28.9
Payment guarantee on acquisitions	0.0	0.0
Other guarantees	9.0	20.2
Other commitments given	2.8	7.7
TOTAL	**34.2**	**56.8**

The above table summarizes the Group's off-balance sheet commitments.

Nature

The decrease of around €6 million in market guarantees versus December 31, 2018 reflects the expiry of certain guarantees, particularly in China.

The "other guarantees" item, which amounted to €9.0 million, notably includes an €8 million guarantee covering the maximum daily drawings by subsidiaries under the European cash pooling arrangements.

Maturity

Off-balance sheet commitments with a maturity of over one year amounted to €14.7 million. They include the €8 million guarantee linked to the European cash pooling system, which remains in force for as long as the cash pooling agreements are in place. Market guarantees generally last for less than one year, except for a few market guarantees, the duration of which does not exceed three years.

Control

Under the Group's internal control organization, Group companies are not authorized to enter into transactions giving rise to off-balance sheet commitments without obtaining the prior approval of the Group's Finance department and, where appropriate, of the Board of Directors. Nonetheless, certain Group companies have the option of issuing market guarantees not exceeding €150,000 with a maturity of less than two years without prior authorization in the normal course of their business activities. These guarantees are listed in the documents completed by the companies as part of the account consolidation procedure.

As far as the Company is aware, no material off-balance sheet commitments under the accounting standards in force have been omitted.

B - Title retention clause

None.

Note 28 Subsequent events

On February 28, 2020, the Group finalized the acquisition of GAB Neumann GmbH, a specialist in the design, manufacture and sale of graphite and silicon carbide (SiC) heat exchangers for the chemicals market, following the approval of the antitrust authorities in Germany.

The company will be consolidated in the Group's financial statements from March 1, 2020. It generates annual sales of approximately €10 million and its operating margin before non-recurring items is broadly in line with the Group average. The purchase price is €8.8 million and net assets are estimated at approximately €7 million. These amounts may be adjusted after the closing accounts are audited.

The epidemic context related to the coronavirus COVID-19 creates an uncertain situation. At this stage, it is difficult to measure its impact on the activity; the Group implements appropriate measures for its employees and to meet the needs of its customers. No impact is to be mentioned as of December 31, 2019.

Note 29 Approval of the financial statements

The Group's consolidated financial statements for the year ended December 31, 2019 were approved by the Board of Directors at its meeting on March 10, 2020.

Note 30 Fees paid to the Statutory Auditors and members of their networks by the Group

	KPMG		Deloitte	
	Statutory Auditors and their network		Statutory Auditors and their network	
	Fees	%	Fees	%
Audit of individual company financial statements and consolidated financial statements and limited review of half-yearly financial statements				
• Entity	187	19%	201	19%
• Entities audited	703	71%	644	62%
SUB-TOTAL A	**890**	**90%**	**845**	**81%**
Other regulatory and legally required services				
• Entity	2		3	
• Entities audited	1		1	
SUB-TOTAL B	**3**		**4**	
Other services provided at the request of the entity				
• Entity				
• Entities audited	93		198	
SUB-TOTAL C	**93**	**9%**	**198**	**19%**
OTHER NON-AUDIT SERVICES (1) SUB-TOTAL D = B + C	**96**	**10%**	**202**	**19%**
TOTAL (E = A + D)	**986**	**100%**	**1,047**	**100%**

(1) Type of services other than auditing services provided by the Statutory Auditors to the consolidated entity and its controlled subsidiaries: independent third-party missions, due diligence procedures carried out as part of an acquisition, accounting consultancy missions, tax advisory services, non-legally required certification processes

Statutory Auditors' report on the consolidated financial statements For the year ended December 31, 2019

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders of Mersen SA,

Opinion

In compliance with the engagement entrusted to us by your General Meeting, we have audited the accompanying consolidated financial statements of Mersen SA for the year ended December 31, 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group at December 31, 2019 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit and Accounts Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from January 1, 2019 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by Article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (Code de déontologie) for Statutory Auditors.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Note 2-W "Summary of significant accounting policies and methods" to the consolidated financial statements, which describes the change in accounting method resulting from the first application of IFRS 16 "Leases" as from January 1, 2019.

Justification of assessments – Key audit matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgment, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Measurement of goodwill

Notes 2-F.1, 2-V, 6 and 7 to the consolidated financial statements.

Description of risk

At December 31, 2019, goodwill amounted to €280.6 million against a total balance sheet of €1,200.9 million.

As indicated in Note 2-F.1 to the consolidated financial statements, goodwill is tested for impairment whenever there is an internal or external indication of a loss of value or otherwise at least once a year by comparing the carrying amount of the relevant assets with their value in use.

Value in use is determined from discounted projections of future operating cash flows over five years, and a terminal value. The discount rate used for these calculations is the weighted average cost of capital after tax for each cash generating unit (CGU). Details of the assumptions used are provided in Note 7 to the consolidated financial statements.

We deemed the measurement of goodwill to be a key audit matter due to the materiality of these assets in the consolidated financial statements and the method of determining their value in use, which relies primarily on estimates, in turn requiring management to use assumptions and judgments, as described in Note 2-V to the consolidated financial statements.

The methods used to perform impairment tests are described in Note 2-F.1 and details about the assumptions used are given in Note 7 to the consolidated financial statements.

How our audit addressed this risk

We verified the methods used to perform the impairment tests and, in particular:

- examined the process for drawing up and approving business plans;
- analyzed the consistency of cash flow forecasts with past performance, the market outlook, and the forecasts provided to the Board of Directors;
- with the guidance of our valuation experts, assessed the reasonableness of the assumptions used by management to determine the discount rate;
- reviewed the sensitivity analyses performed for the impairment tests.

Lastly, we also verified the appropriateness of the disclosures provided in the notes to the consolidated financial statements.

Provisions for claims and disputes

Notes 2-L, 2-V and 13 to the consolidated financial statements.

Description of risk

The Group operates in multiple countries, therefore requiring it to comply with the regulations applicable in those countries. The products manufactured by the Group are subject to specifications, and non-compliance with those specifications can expose the subsidiaries to liability claims from customers pertaining to defective products, or late penalties for project-related sales. Accordingly, the Group undertakes an assessment of the risks arising out of liabilities, disputes or litigation related to its activities that are liable to have a material impact on its business and financial position.

As described in Notes 2-L, *"Provisions"*, 2-V, *"Use of estimates"*, and 13, *"Provisions, contingent liabilities and other liabilities",* to the consolidated financial statements, provisions and liabilities relating to ongoing claims and litigation amounted to around €4.2 million at December 31, 2019, and correspond to management's best estimate of the risk.

Given the degree of judgment required from management to assess the risks corresponding to the Group's legal, regulatory, contractual and constructive obligations, we deemed these provisions to be a key audit matter.

How our audit addressed this risk

We familiarized ourselves with (i) the procedures implemented by the Group to identify and catalog all claims made against it and that are liable to have a material impact on its business and financial position, (ii) the resulting risk assessment prepared by the Group, and (iii) the corresponding documentation.

Where applicable, we corroborated the Group's analyses with the written confirmation obtained from the Group's outside legal counsel.

We examined the principal risks identified and assessed the reasonableness of management's risk assessment.

Lastly, we also verified the appropriateness of the disclosures provided in the notes to the consolidated financial statements.

Specific verifications

As required by law and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the Group management report includes the consolidated non-financial information statement required under Article L. 225-102-1 of the French Commercial Code. However, in accordance with Article L. 823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of Mersen SA by the General Meetings held on June 5, 1986 for Deloitte & Associés and May 12, 2004 for KPMG.

At December 31, 2019, Deloitte & Associés and KPMG were in the thirty-fourth and the sixteenth consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Audit and Accounts Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these consolidated financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit. They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;

- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Audit and Accounts Committee

We submit a report to the Audit and Accounts Committee which includes, in particular, a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit and Accounts Committee includes the risks of material misstatement that, in our professional judgment, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report

We also provide the Audit and Accounts Committee with the declaration provided for in Article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in Articles L. 822-10 to L. 822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit and Accounts Committee.

The Statutory Auditors

Paris La Défense, March 10, 2020	Paris La Défense, March 10, 2020
KPMG Audit	Deloitte & Associés
Department of KPMG SA	
Philippe Cherqui	Laurent Odobez
Partner	*Partner*

7 Parent company financial statements

STATEMENT OF INCOME

(In thousands of euros)	2019	2018
OPERATING REVENUES (1)		
Revenues		
Other revenues	1,379	1,769
TOTAL SALES	**1,379**	**1,769**
Operating subsidies	0	0
Reversals of operating provisions	262	107
Transferred operating costs	518	
Other income	21,871	14,857
TOTAL 1	**24,030**	**16,733**
OPERATING EXPENSES (2)		
Other purchases	1	1
External charges	16,786	16,325
Taxes other than income tax	376	565
Wages and salaries	1,038	1,661
Social security charges	384	438
Depreciation, amortization and charges to provisions:		
- against fixed assets: depreciation and amortization	30	30
- for liabilities and charges: charges to provisions	505	582
Other expenses	344	344
TOTAL 2	**19,464**	**19,945**
OPERATING INCOME/(LOSS) (TOTAL 1 - 2)	**4,565**	**(3,212)**

(In thousands of euros)	**2019**	**2018**
FINANCIAL INCOME (3)		
Income from participating interests	39,998	27,573
Other income from fixed assets	8	8
Other interest and related income	2,132	1,963
Reversals of depreciation, amortization and charges to provisions	2,102	992
Foreign exchange gains	5,904	3,706
TOTAL 3	**50,144**	**34,242**
FINANCIAL EXPENSE (4)		
Depreciation, amortization and charges to provisions	16,109	6,667
Interest and related expenses	7,002	5,644
Foreign exchange losses	8,084	4,008
TOTAL 4	**31,194**	**16,319**
NET FINANCIAL INCOME (3 - 4)	**18,950**	**17,923**
INCOME BEFORE TAX AND NON-RECURRING ITEMS	**23,515**	**14,710**
NON-RECURRING INCOME		
Management transactions	465	
Capital transactions	3,124	2,482
Reversals of provisions and transferred costs	0	78
TOTAL 5	**3,589**	**2,560**
NON-RECURRING EXPENSE		
Management transactions	13	495
Capital transactions	3,823	2,850
Depreciation, amortization and charges to provisions	13	27
TOTAL 6	**3,849**	**3,372**
NET NON-RECURRING INCOME/(EXPENSE) (TOTAL 5 - 6)	**(260)**	**(811)**
INCOME TAX	**(1,021)**	**(2,792)**
NET INCOME FOR THE YEAR	**24,276**	**16,691**
TOTAL INCOME	**77,763**	**53,535**
TOTAL EXPENSE	**53,487**	**36,844**

STATEMENT OF FINANCIAL POSITION

ASSETS

(In thousands of euros)	Dec. 31, 2019 Gross	Dec. 31, 2019 Depreciation and amortization	Dec. 31, 2019 Net	Dec. 31, 2018 Net
FIXED ASSETS				
Intangible fixed assets				
Concessions, patents, licenses, brands	7,618	7,618	0	0
SUB-TOTAL	**7,618**	**7,618**	**0**	**0**
Property, plant and equipment				
Other	366	173	194	212
Property, plant and equipment in progress	0		0	0
Advances and down payments	0		0	0
SUB-TOTAL	**366**	**173**	**194**	**212**
Financial fixed assets				
Equity interests	575,462	117,794	457,668	466,240
Loans and advances to equity interests	129,092		129,092	107,948
Other fixed assets	5		5	5
Other	4,156	12	4,144	3,204
SUB-TOTAL	**708,715**	**117,806**	**590,909**	**577,397**
TOTAL A	**716,699**	**125,596**	**591,103**	**577,609**
CURRENT ASSETS				
Advances and down payments paid on orders	**4**		**4**	**30**
Trade receivables and related accounts	1,253		1,253	2,034
Other	70,169		70,169	73,820
Investment securities	1,313		1,313	4,934
Cash and cash equivalents	995		995	949
ACCRUALS				
Prepaid expenses	613		613	632
TOTAL B	**74,347**		**74,347**	**82,399**
Deferred costs D	882		882	661
Foreign currency translation losses E	7,571		7,571	7,574
TOTAL (A+B+C+D+E)	**799,500**	**125,596**	**673,903**	**668,243**

EQUITY AND LIABILITIES

(In thousands of euros)	Dec. 31, 2019	Dec. 31, 2018
SHAREHOLDERS' EQUITY		
Share capital	41,716	41,536
Issue premium	214,937	213,589
Merger premium	8,252	8,252
Revaluation reserve	3,252	3,252
Unavailable reserves	5,462	5,189
Statutory reserve	4,158	4,158
Other reserves	82,148	85,348
Retained earnings	149	133
Net income for the year	24,276	16,691
Tax-regulated provisions	236	223
TOTAL A	**384,587**	**378,372**
PROVISIONS FOR LIABILITIES AND CHARGES		
Provisions for liabilities	440	1,733
Provisions for charges	4,587	4,343
TOTAL B	**5,027**	**6,076**
FINANCIAL LIABILITIES[a]		
Bond issues	2,329	2,329
Borrowings from credit institutions[b]	482	11,366
Other borrowings	260,666	220,163
Advances and down payments received on orders in progress	299	0
Trade payables and related accounts	1,502	1,636
Tax and social security liabilities	2,039	2,467
Amounts due on fixed assets	1	1
Other financial liabilities	9,028	39,013
ACCRUALS		
Prepaid income	0	2
TOTAL C	**276,346**	**276,977**
Foreign exchange translation gains D	7,943	6,818
TOTAL (A+B+C+D)	**673,903**	**668,243**

(a) Due in over one year: 42,696; due in less than one year: 233,352
(b) Including current bank loans and overdrafts: 10,946

NOTES TO THE STATEMENT OF FINANCIAL POSITION AND STATEMENT OF INCOME

SUMMARY OF THE NOTES TO THE FINANCIAL STATEMENTS

Note 1 Accounting principles and methods

The financial statements of Mersen SA for fiscal year 2019 have been prepared in accordance with the provisions of French law, in particular Regulation No. 2014-03 of the Autorité des Normes Comptables (French accounting standards authority).

The principal accounting methods used are as follows:

A - Share issuance costs

Share issuance costs are set off in full against share issue premiums.

B - Intangible fixed assets and property, plant and equipment

Fixed assets are stated at acquisition or production cost.

They are depreciated or amortized over their estimated useful life.

Differences between depreciation/amortization for tax and accounting purposes are recognized under accelerated depreciation/amortization and recorded under non-recurring expenses, with a corresponding adjustment to tax-regulated provisions under liabilities on the statement of financial position.

Generally speaking, the following useful lives are adopted:

- software and other intangible fixed assets: 5 years
- fixtures and fittings: 10 years
- office equipment and furniture: 5 years or 10 years

Where there is evidence of impairment, an impairment test is conducted comparing the net carrying amount of the intangible fixed asset or of the item of property, plant and equipment with its current value. Where this current value has fallen below net carrying amount, an impairment loss is recognized to bring the net carrying amount into line with its current value. No such impairment losses were recognized during the fiscal year.

C - Equity interests and other fixed assets

Gross value comprises the contribution value or acquisition cost of the asset. An impairment loss may be recognized where the carrying amount of an asset exceeds its value in use, with the latter determined by reference to:

- primarily, the share of each subsidiary's equity; and
- where necessary, the economic value determined by reference to the future cash flows including the activity carried out and the outlook for developments.

Expenses related to the acquisition of equity interests and other fixed assets are included in the cost of securities.

Impairment losses and reversals of impairment in investments, as well as provisions related to participating interests, are recorded under financial items. When equity interests are sold, the reversals of impairment on them are recognized under non-recurring items so as not to unbalance net financial income and non-recurring items.

D - Current assets - receivables

Doubtful receivables are written down to reflect the probable loss.

E - Foreign currency transactions

At the statement of financial position date, foreign currency assets and liabilities are stated at the official exchange rate at December 31. A corresponding adjustment is recorded under foreign currency translation gains or losses.

Unrealized foreign currency gains or losses do not affect net income. This said, a provision is set aside to cover the risk arising from unhedged unrealized foreign currency losses related to these foreign currencies.

F - Provisions for liabilities and charges

Provisions for liabilities and charges are set aside to cover litigation, disputes, and guarantee and risk-related commitments arising during the normal course of the Company's business and likely to give rise to an outflow of resources.

Accordingly, provisions were set aside to cover all significant risks that due to the situation or events known at December 31, 2019 were likely to occur.

G - Costs deferred over several periods

Bond issuance costs are allocated over the estimated average life of the relevant borrowing.

H - Pension obligations and retirement indemnities

Top-up pension obligations under "closed" defined benefit plans covering part of the workforce are recognized in the form of a provision. Obligations to still active employees are recorded under provisions for liabilities and charges. Obligations to retired employees are transferred to a deferred cost account.

A provision for charges is set aside to cover the Company's commitment arising from top-up pension obligations specifically related to the Group's senior managers.

Retirement indemnities and long-service awards payable under collective bargaining agreements are recognized under provisions for liabilities and charges.

Retirement indemnities and long-service awards are calculated on an annual basis by independent actuaries in accordance with the provisions of the collective bargaining agreement for the French chemicals industry and the CNC recommendation issued on April 1, 2003. The projected unit credit method is used for this purpose. It takes into account – using actuarial assumptions – the employee's probable future length of service, level of salary costs, life expectancy and the rate of staff turnover. The obligation is discounted at an appropriate discount rate. The obligation is partially funded through payments to an external organization under a collective life insurance policy, the assets of which are stated at fair value.

Retirement indemnities are recognized using the corridor method.

The principal assumptions used in this calculation are as follows:

- future salary costs are calculated based on current salaries including an annual rate of salary increases of 2.00% and additional age-related increases;
- changes in actuarial assumptions are taken into account only where they fall outside the corridor and are amortized over the expected average remaining working life of plan members;
- discounting to present value at a rate of 1.55%;
- an average cost ratio of 40% to 45%;
- staff turnover calculated by age bracket;
- return on plan assets: 2.75%;
- mortality table used: TGHF05.

I - Share repurchases

The shares repurchased by Mersen under the liquidity agreement entered into with a financial institution are reported under other fixed assets, in line with French accounting regulations.

An impairment loss in these shares is recognized when the cost of acquiring the shares exceeds the average share price during the final month of the fiscal year.

Any shares repurchased in order to be canceled in the future are also recognized under fixed assets for their acquisition value.

When these repurchased shares are sold under a liquidity agreement, gains and losses are recognized under non-recurring items.

The Company may also repurchase treasury shares on the market in order to grant them to certain employees. These are recorded as investment securities at their acquisition value, in accordance with French law.

J - Non-recurring items

The Company has adopted the official French chart of accounts. Non-recurring items encompass items not arising during the normal course of the Company's business. Accordingly, non-recurring items comprise the carrying amount of and proceeds from the disposal of fixed assets, accelerated tax depreciation and non-recurring fixed asset write-downs, non-recurring indemnities, fines and penalties, as well as expenses related to these nonrecurring events.

K - Share subscription options and bonus share allotments

The Company has put in place share subscription option and bonus share allotment plans for certain employees.

When share subscription options are exercised by beneficiaries, the new shares are issued and accounted for in the same manner as a conventional issue of shares. The share premium is equal to the difference between the subscription price paid by the employee and the increase in the share capital.

When bonus shares are allotted to beneficiaries, the new shares are issued and accounted for in the same manner as an increase in capital through the capitalization of reserves. The par value of the shares is added to the share capital account, and the surplus is recorded under unavailable reserves.

The Company may also repurchase treasury shares on the market. In this case, a provision for expenses is recorded when this is likely to give rise to an outflow of resources for the Company and is equal to the loss expected upon allotment of the securities to the employees affected by the plan.

Note 2 Analysis and commentary

Statement of income

Sales and other income

Other revenues (€1,379 thousand) primarily derive from services billed in France and abroad. Other income (€21,871 thousand) relates primarily to royalties from trademarks and intangibles.

Operating income

Overall, this item represented a profit of €4,565 thousand and includes the holding company's operating costs less the income of the trademark.

In 2018, overall payroll costs for Mersen SA took into account the tax-free bonus awarded by the Mersen group to some French employees, totaling €450 thousand.

Financial income

Financial income of €18,950 thousand was significantly higher than the €17,933 thousand recorded in 2018, due primarily to a sharp increase in income from participating interests reduced by an increase in impairment in investments.

Non-recurring items

The Company recorded a non-recurring loss of €260 thousand, mainly attributed to Mersen SA's share repurchase program and the reversal of the provision for pension obligations.

Income tax

The Company recorded a 2019 income tax benefit of €1,021 thousand resulting from the consolidation of Mersen and its French subsidiaries for tax purposes.

Statement of financial position

In addition to the notes shown below, the following comments apply:

Financial fixed assets

The increase in net value of €13,512 thousand is mainly attributable to capital increases for certain subsidiaries (€5,071 thousand), offset by subsidiary loan repayments (€24,255 thousand) and additional impairment of securities held by subsidiaries (€15,814 thousand).

Debt

Total net debt at December 31, 2019 was down on 2018:

(In thousands of euros)	Dec. 31, 2019	Dec. 31, 2018
Bank overdrafts	194	10,946
Bond issue	2,329	2,329
Other borrowings	259,508	219,754
Other financial liabilities[a]	24,639	38,276
Total debt	**286,670**	**271,305**
Cash and cash equivalents	(2,308)	(5,883)
Other receivables[b]	(69,998)	(65,527)
Marketable securities, cash and cash equivalents	**(72,305)**	**(71,410)**
Loans to subsidiaries	**(128,410)**	**(107,654)**
Other financial fixed assets	**4,148**	**(3,204)**
Net debt	81,807	89,036
o/w: - due in over one year	61,090	4,486
- due in less than one year	20,717	84,550

(a) Financial advances received recognized under "Other financial liabilities".
(b) Financial advances made recognized under "Other receivables".

Out of the €286.7 million in total gross debt at December 31, 2019, €234.5 million stems from the use of confirmed credit lines and borrowings, €25 million from use of the commercial paper program and the remainder chiefly from the use of non-confirmed lines (bank overdrafts and other lines).

Note 3 Fixed assets

(In thousands of euros)	FIXED ASSETS				DEPRECIATION, AMORTIZATION AND CHARGES TO PROVISIONS			
Accounts	Gross value at beginning of period	Increases	Decreases	Gross value at end of period	Total at beginning of period	Increases	Decreases	Total at end of period
Intangible assets								
Start-up costs								
Concessions, patents, licenses, brands, processes, rights	7,618			7,618	7,618			7,618
Assets in progress								
TOTAL 1	**7,618**			**7,618**	**7,618**			**7,618**
Property, plant and equipment								
Buildings and technical installations								
Other property, plant and equipment	355	12		367	143	30		173
Assets in progress								
Advances and down payments								
TOTAL 2	**355**	**12**		**367**	**143**	**30**		**173**
Financial assets								
Participating interests	568,221	7,241		575,462	101,980	15,813		117,794
Loans and advances to participating interests	107,948	59,376	(38,232)	129,092				
Other fixed assets	5			5				
Other financial fixed assets	3,307	12,117	(11,268)	4,156	103	12	(103)	12
TOTAL 3	**679,481**	**78,734**	**(49,500)**	**708,715**	**102,083**	**15,824**	**(103)**	**117,806**
TOTAL	**687,454**	**78,746**	**(49,500)**	**716,699**	**109,844**	**15,854**	**(103)**	**125,596**

Note 4 Provisions

(In thousands of euros) Accounts	Amount at beginning of period	Charges	Reversals of provisions used	Reversals of provisions not used	Amount at end of period
Tax-regulated provisions					
Accelerated tax depreciation	223	13			236
TOTAL 1	**223**	**13**			**236**
Provisions for liabilities and charges					
Retirement indemnities	52	29			81
Long-service awards	5	1	(0)		6
Senior manager pensions	2,619	346			2,964
Professional fees	800				800
Risk related to liability guarantee	500				500
Risk related to CL PI	70		(70)		0
Risk related to Mersen RUS	94		(94)		0
Risk related to Mersen ARG	370				370
Personnel costs	367	129	(262)		235
Foreign exchange loss	1,199		(1,199)		0
TOTAL 2	**6,076**	**505**	**(1,625)**		**4,956**
Provisions for impairment					
Mersen France SB equity interest	22,590	13,200			35,790
Mersen Maroc equity interest	1,613	1,500			3,113
Other participating interests	77,767	1,113			78,880
Treasury shares	103	12	(103)		12
Mersen Rus short-term credit facility	706				706
TOTAL 3	**102,779**	**15,825**	**(103)**		**118,501**
TOTAL	**109,077**	**16,344**	**(1,729)**		**123,693**

Note 5 Maturity schedule of assets and liabilities

(In thousands of euros) **Amounts due to the Group**	**Gross statement of financial position value**	**Due in one year or less**	**Due in over one year**
Loans and advances to participating interests	129,092	268	128,824
Other financial fixed assets	4,156	3,656	500
Trade receivables	1,253	1,253	
Other receivables	70,169	69,949	220
Prepaid expenses	613	613	
TOTAL	**205,283**	**75,740**	**129,544**

(In thousands of euros) **Amounts payable by the Group**	**Gross statement of financial position value**	**Due in one year or less**	**Due in over one year**	**Due in over five years**
Bond issue	2,329	2,329		
Borrowings from credit institutions	482	482		
Other borrowings	260,666	26,158	104,508	130,000
Trade payables and related accounts	1,502	1,502		
Tax and social security liabilities	2,039	883		1,156
Amounts due on fixed assets	1	1		
Other financial liabilities	9,028	9,028		
Prepaid income				
TOTAL	**276,048**	**40,384**	**104,508**	**131,156**

Note 6 Revaluation reserve

(In thousands of euros)	
Revaluation reserves	
At beginning of period	3,252
Reversed during period	0
At end of period	3,252

Note 7 Accrued income and expenses

(In thousands of euros)

1. Amount of accrued income included in the statement of financial position items below		
Loans and advances to participating interests		263
Other financial fixed assets		
Other receivables		204
Cash and cash equivalents		314
TOTAL		**781**
2. Amount of accrued expenses included in the statement of financial position items below		
Borrowings from credit institutions		1,158
Other borrowings		288
Operating trade payables and related accounts		701
Tax and social security liabilities		1,740
Investment trade payables and related accounts		1
Other financial liabilities		344
TOTAL		**4,232**
3. Amount of prepaid income and expenses	**Expenses**	**Income**
Operating items	613	0
Financial items	0	0
TOTAL	**613**	**0**
4. Costs deferred over several periods		
Bond issuance expenses at Jan. 1, 2019	661	
2019 bond issuance expenses	50	
201 amortization of bond issuance costs	(240)	
TOTAL	**471**	

Note 8 Share capital

Share Capital

The share capital is made up of 20,858,227 fully paid-up shares each with a par value of €2.

Share subscription options and bonus share allotments

Mersen managers are regularly offered the opportunity to subscribe to share options or bonus shares, provided that they remain with the Group for a certain period of time and subject to achieving internal or external targets.

Two share option plans were set up on February 11, 2009 and May 21, 2014.

Four bonus share allotment plans were set up on May 18, 2017, May 17, 2018, and two more on May 17, 2019.

Four bonus preference share allotment plans were set up on July 9, 2015, May 11, 2016, May 18, 2017 and May 17, 2018.

The employee categories benefiting from these options shares were approved by the Executive Committee of the Group.

The bonus share allotment plans and the exercise of the share options plans can be carried out through the issuance of new shares. As a result, no expenses or liabilities were recognized during the fiscal year in respect of these plans.

When the shares are repurchased on the market, a provision for expenses is recorded when this is likely to give rise to an outflow of resources to the employee, in the amount corresponding to the loss expected for the Company.

The characteristics of the stock options or bonus share plans are as follows:

Characteristics/Assumptions	2009 Share option plan	2014 Share option plan
Allotment date	02/11/2009	21/05/2014
Availability date	02/11//2013	21/05/2016
Expiration date	02/11/2019	21/05/2021
Adjusted exercise price *(€)*	17.53	22.69
Adjusted share price at allotment date *(€)*	17.95	21.30
Estimated life *(number of years)*	8	4.5
Volatility	38.1%	31.0%
Dividend per share *(as a % of share price)*	2.5	3.0
Risk-free interest rate	3.26%	0.64%
Exercise period *(number of years)*	4	5
Lock-up period *(number of years)*	0	2
Adjusted number of options/share allotments	366,582	150,000
Estimated annual cancellation rate at year-end 2004		
Estimated annual cancellation rate at year-end 2005		
Estimated annual cancellation rate at year-end 2006		
Estimated annual cancellation rate at year-end 2007		
Estimated annual cancellation rate at year-end 2008		
Estimated annual cancellation rate at year-end 2009	7.0%	
Estimated annual cancellation rate at year-end 2010	7.0%	
Estimated annual cancellation rate at year-end 2011	7.0%	
Estimated annual cancellation rate at year-end 2012	7.0%	
Estimated annual cancellation rate at year-end 2013	Fin du plan	
Estimated annual cancellation rate at year-end 2014	Fin du plan	5.0%
Estimated annual cancellation rate at year-end 2015	Fin du plan	5.0%
% of shares/options vested after performance condition satisfied[a]	100	85
Estimate of the number of options/shares ultimately vested in 2005		
Estimate of the number of options/shares ultimately vested in 2006		
Estimate of the number of options/shares ultimately vested in 2007		
Estimate of the number of options/shares ultimately vested in 2008		
Estimate of the number of options/shares ultimately vested in 2009	274,222	
Estimate of the number of options/shares ultimately vested in 2010	314,391	
Estimate of the number of options/shares ultimately vested in 2011	338,055	
Estimate of the number of options/shares ultimately vested in 2012	361,191	
Estimate of the number of options/shares ultimately vested in 2013	361,191	
Estimate of the number of options/shares ultimately vested in 2014	361,191	142,505
Estimate of the number of options/shares ultimately vested in 2015	361,191	129,375
Estimate of the number of options/shares ultimately vested in 2016	361,191	112,200
Estimate of the number of options/shares ultimately vested in 2017	361,191	112,200
Estimate of the number of options/shares ultimately vested in 2018	361,191	112,200
Estimate of the number of options/shares ultimately vested in 2019	355,800	112,200
Valuation of options/shares	6.11 €	3.68 €
Valuation as a % of the share price on allotment	34.1%	17.3%

The characteristics of the bonus share allotment plans are as follows:

Characteristics/Assumptions	2017 Bonus share plan	2018 Bonus share plan
Allotment date	05/18/2017	05/17/2018
Availability date	05/18/2019	05/17/2021
Expiration date	05/19/2021	05/18/2021
Adjusted exercise price *(€)*	0.00	0.00
Share price at allotment date *(€)*	25.15	39.50
Estimated life *(number of years)*	4	3
Volatility	27.7%	30.0%
Dividend per share *(as a % of share price)*	3.0	3.0
Risk-free interest rate	N/A	n/a
Exercise period *(number of years)*	2 – 4	3
Lock-up period *(number of years)*	2 – 0	3
Number of options/shares allotted	84,000	67,050
Estimated annual cancellation rate at year-end 2017	5.0%	
Estimated annual cancellation rate at year-end 2018	5.0%	5.0%
Estimated annual cancellation rate at year-end 2019	5.0%	5.0%
% of shares/options vested after performance condition satisfied[a]	100	100
Estimate of the number of options/shares vested in 2017	78,246	
Estimate of the number of options/shares vested in 2018	81,850	59,343
Estimate of the number of options/shares vested in 2019	79,200	61,628
Valuation of options/shares	€23.69 - €23.69	36.10 € -36.10 €
Valuation as a % of the share price on allotment	94.2% - 94.2%	91.4% - 91.4%

(a) The performance conditions for the 2017 bonus share allotment plan have been met at 100%. The provisional performance condition for the 2017 bonus share allotment plan is 100%.

Characteristics/Assumptions	2019 executive plan Bonus shares	2019 plan Bonus shares
Allotment date	05/17/2019	05/17/2019
Availability date	05/17/2022	05/17/2022
Expiration date	05/18/2022	05/18/2022
Adjusted exercise price *(€)*	0.00	0.00
Share price at allotment date *(€)*	30.90	30.90
Estimated life *(number of years)*	3	3
Volatility	29.39%	29.39%
Dividend per share *(as a % of share price)*	3.0	3.0
Risk-free interest rate	N/A	N/A
Exercise period *(number of years)*	3	3
Lock-up period *(number of years)*	3	3
Number of options/shares allotted	59,000	84,000
Estimated annual cancellation rate at year-end 2019	5.0%	5.0%
% of shares/options vested after performance condition satisfied [a]	100	100
Estimate of the number of options/shares vested in 2019	52,218	74,345
Valuation of options/shares	€28.24 - €28.24	€28.24 - €28.24
Valuation as a % of the share price on allotment	91.4% - 91.4%	91.4% - 91.4%

The provisional performance condition for the 2019 bonus share allotment plan is 100%.

Characteristics/Assumptions	2015 Bonus preference share plan	2016 Bonus preference share plan
Allotment date	07/09/2015 07/09/2017	05/11/2016 05/11/2018
Availability date	07/09/2019	05/11/2020
Expiration date	07/10/2019	05/12/2020
Adjusted exercise price *(€)*	0.00	0.00
Adjusted share price at allotment date *(€)*	20.89	12.87
Estimated life *(number of years)*	4	4
Volatility	25.9%	25.9%
Dividend per share *(as a % of share price)*	3.0	3.0
Risk-free interest rate	N/A	N/A
Exercise period *(number of years)*	2 - 4	2 – 4
Lock-up period *(number of years)*	2 - 0	2 – 0
Adjusted number of preference shares allotments	902	1,172
Adjusted number of ordinary share allotments	99,220	128,920
Estimated annual cancellation rate at year-end 2015	5.0%	N/A
Estimated annual cancellation rate at year-end 2016	5.0%	5.0%
% of shares/options vested after performance condition satisfied[(a)]	98%	100
Estimate of the number of ordinary shares ultimately vested in 2015	87,933	N/A
Estimate of the number of ordinary shares ultimately vested in 2016	89,376	117,429
Estimate of the number of ordinary shares ultimately vested in 2017	34,175	123,610
Estimate of the number of ordinary shares ultimately vested in 2018	34,624	126,854
Estimate of the number of ordinary shares ultimately vested in 2019	34,120	128,355
Valuation of guaranteed ordinary shares	€17.73 - €18.53	€10.92 - €11.41
Valuation of non-guaranteed ordinary shares[(b)]	€4.92 - €5.14	€1.52 - €1.59
Valuation as a % of the guaranteed ordinary share price on allotment	84.9% - 88.7%	84.8% - 88.7%
Valuation as a % of the non-guaranteed ordinary share price on allotment	23.6% - 24.6%	11.8% - 12.3%

(a) The performance conditions for the 2017 bonus share allotment plan have been met at 98%.The provisional performance condition for the 2016 bonus preference share allotment plan is 100%.
(b) The non-guaranteed shares are subject to performance conditions.

Characteristics/Assumptions	2017 Bonus preference share plan	2018 plan preference share plan
Allotment date	05/18/2017 05/18/2019	05/17/2018 05/17/2020
Availability date	05/18/2021	05/17/2022
Expiration date	05/19/2021	05/18/2022
Adjusted exercise price *(€)*	0.00	0.00
Adjusted share price at allotment date *(€)*	25.15	39.50
Estimated life *(number of years)*	4	4
Volatility	27.7%	30.0%
Dividend per share *(as a % of share price)*	3.0	3.0
Risk-free interest rate	N/A	N/A
Exercise period *(number of years)*	2 - 4	2 - 4
Lock-up period *(number of years)*	2 - 0	2 - 0
Adjusted number of preference shares allotments	1,172	940
Adjusted number of ordinary share allotments	128,920	103,400
Estimated annual cancellation rate at year-end 2017	5.0%	N/A
Estimated annual cancellation rate at year-end 2018	5.0%	5.0%
Estimated annual cancellation rate at year-end 2019	5.0%	5.0%
% of shares/options vested after performance condition satisfied [(a)]	100	100
Estimate of the number of ordinary shares ultimately vested in 2017	117,782	N/A
Estimate of the number of ordinary shares ultimately vested in 2018	123,981	94,303
Estimate of the number of ordinary shares ultimately vested in 2019	127,179	99,266
Valuation of guaranteed ordinary shares	€21.35 - €22.31	€33.53 - €35.03
Valuation of non-guaranteed ordinary shares[(b)]	€6.44 - €6.73	€12.41 - €12.97
Valuation as a % of the guaranteed ordinary share price on allotment	84.9% - 88.7%	84.9% - 88.7%
Valuation as a % of the non-guaranteed ordinary share price on allotment	25.6% - 26.8%	31.4% - 32.8%

(a) The provisional performance condition for the 2017 and 2018 bonus preference share allotment plans is 100%.
(b) The non-guaranteed shares are subject to performance conditions.

Statement of changes in equity

(In thousands of euros)

Opening equity at January 1, 2019	**378,372**
Net income for the year	24,276
Change in tax-regulated provisions	13
Issue of new shares	1,654
Dividend payment	(19,728)
Closing equity at December 31, 2019	**384,587**

Note 9 Commitments

Commitments and contingencies

(In thousands of euros)

Commitments given	
Guarantee *for* euro cash pooling arrangement	8,000
Guarantee for the syndicated and bilateral loans to Chinese companies	21,738
Counter guarantee given to Mersen Deutschland Holding on guarantees	8,000
Counter guarantee given to Mersen USA BN on guarantees	9,000
Security deposit paid to Ganton covering the Mersen USA Newburyport subsidiary	2,225
Rental guarantee covering Mersen Hittisau building	3,542
Lease for Mersen SA building	1,461
Other guarantees and deposits	1,217
TOTAL	**56,014**
Commitments received	**0**
TOTAL	**56,014**

Other reciprocal commitments

(In thousands of euros)

Reciprocal commitments given	
Currency hedges	52,182
Commodity hedges	532
TOTAL	**52,714**
Reciprocal commitments received	
Currency hedges	84,864
Commodity hedges	532
TOTAL	**85,396**

Employee benefits

Retirement indemnities, long-service awards and defined-benefit top-up pension plans

(In thousands of euros)

Present value of plan obligations at 12/31/2019	6,229
Mathematical value of plan assets	(320)
Unrecognized actuarial gains and losses	(2,161)
TOTAL	**3,748**

Note 10 Leases

The Company did not hold any finance leases in progress at December 31, 2019.

Note 11 Executive compensation

The compensation and benefits paid to members of the Group's management and supervisory bodies for 2019, either directly by the Company or indirectly by certain subsidiaries, came to €1,420 thousand.

Net pension obligations for senior managers came to €4,726 thousand.

Note 12 Average headcount

	Salaried employees	Seconded employees
Executives	3	0
Supervisors and technicians	2	0
TOTAL	**5**	**0**

Note 13 Analysis of tax expense

(In thousands of euros)	Income before tax	Tax payable
Current	23,515	0
Non-recurring	(260)	0
Net tax benefit		1,021

Increase and decrease in future tax liability

(In thousands of euros)	Beginning of period	Change during period	End of period
Accelerated tax depreciation	(2)	0	(2)
Provision for GPC pension obligations	1,161	(556)	605
Top-up pension provision	139	(39)	100
Provision for senior manager pension obligations	2,619	346	2,964
Retirement indemnities	52	29	81
Paid vacation	16	2	18
Class action professional fees	800	0	800
Tax base or future tax credit (significant items)	4,785	(219)	4,566
Group French tax deficit	124,159	(4,854)	119,305
Total	128,943	(5,072)	123,871
Future long-term tax rate (2020)	32.02%		32.02%
Future long-term tax rate (2021)	28.92%		28.92%
Future long-term tax rate (2022)	27.37%		27.37%
Future long-term tax rate (after 2023)	25.83%		25.83%
Amount of future tax receivable	34,170		32,506

Note 14 Tax consolidation

As of January 1, 2013, Mersen forms a consolidated tax group as defined in Article 223 A et seq. of the French General Tax Code (Code général des impôts). This tax group chiefly comprises Mersen France SB, Mersen France La Mure, Mersen France Gennevilliers, Mersen France Amiens, Mersen France PY, Mersen Corporate Services, Boostec and Idealec.

Tax expense is calculated for each subsidiary every year as if the company were not a member of the tax group. This tax expense thus takes into account the losses recorded by the subsidiary during the period for which it has belonged to the tax group, which it can offset pursuant to ordinary law.

No arrangements have been made for repayment of tax to a loss-making subsidiary based on each subsidiary's current situation. In addition, no compensation is provided for should a loss-making subsidiary leave the Group.

The tax benefit recorded by the parent company primarily reflects tax payments made by subsidiaries in profit less the tax liability payable by the tax group to the tax administration.

Subsidiaries are jointly and severally liable for payment of their tax to the French treasury, should Mersen default on payment.

Note 15 Foreign currency translation

(In thousands of euros)	Amounts	O/w differences offset by hedges or by overall foreign exchange position	Other	Provisions for liabilities and charges
On financial fixed assets				
On receivables	1			1
On miscellaneous borrowings	7,449	7,449		
Other financial liabilities	122			122
TOTAL	**7,571**	**7,449**		123
On financial fixed assets	(7,738)	(7,449)		(290)
On miscellaneous borrowings	(205)		(205)	
TOTAL	**(7,943)**	**(7,449)**	**(205)**	(290)
On bank currency hedging (unrealized loss)	0			0
TOTAL	**0**			**0**

Note 16 Treasury shares

Under the liquidity agreement established with Exane BNP, the Company held 47,902 treasury shares at December 31, 2019. The Group also held 82,705 shares to be allocated to employee bonus share allotment plans.

Note 17 Information about non-recurring items

Non-recurring income

(In thousands of euros)	
Management transactions	
Personal pensions for non-active workers	461
Other	4
SUB-TOTAL	465
Capital transactions	
Gains on the sale of treasury shares	3,124
SUB-TOTAL	**3,124**
Other	
SUB-TOTAL	**0**
TOTAL	**3,589**

Non-recurring expenses

(In thousands of euros)	
Management transactions	
GPC pensions for non-active workers	13
SUB-TOTAL	**13**
Capital transactions	
Losses on the sale of treasury shares	3,823
SUB-TOTAL	**3,823**
Allowance for accelerated tax depreciation	13
SUB-TOTAL	**13**
TOTAL	**3,849**

Note 18 Information about risk factors

The financial risk management policy is approved by the Chief Executive Officer based on proposals submitted by the finance department. Currency and commodity hedging transactions are carried out subject to strictly defined procedures.

Liquidity risk

Mersen has the following principal financing agreements:

- A multi-currency syndicated bank loan, set up in July 2012 and amended in 2014 and 2017. The amount of this facility is €200 million, repayable in full in July 2024, after. The interest payable is at a variable rate, plus a credit margin.
- Bilateral banking loans arranged at the end of 2019 amounting to RMB 170 million, repayable until 2024 and intended to finance the Mersen Group's operations in China.
- A 10-year US private placement (USPP) negotiated in November 2011 with a US investor, on which USD 50 million remained outstanding at December 31, 2019. The investor receives a fixed rate of interest.
- A €60 million German private placement ("Schuldschein") arranged in November 2016 with a pool of European and Asian investors, repayable in full at maturity after seven years. Investors receive interest at a variable rate based on the Euribor plus a credit margin.
- A €130 million German private placement ("Schuldschein") arranged in April 2019 with a pool of European and Asian investors, repayable in full at maturity after seven years. Investors receive interest at a set par value of €68 million and at a variable rate based on the Euribor, plus a credit margin with a par value of €62 million.

Furthermore, as part of its policy to diversify its funding sources, in March 2016 Mersen set up a €200 million commercial paper program with a maturity of less than one year. As at December 31, 2019, €25 million had been used. The program can be substituted by drawdowns from the Group Syndicated Loan on maturity.

- A multi-currency syndicated bank loan, set up in July 2012 and amended in 2014 and 2017. The amount is €200 million and it has a five-year term, repayable in full at maturity in 2023.
- A USD 100 million US private placement (USPP) negotiated in November 2011 with a US investor, comprising one tranche of USD 50 million with a 10-year term and one tranche of USD 37.2 million with an eight-year term, both with a bullet structure. The investor receives a fixed rate of interest.
- The Company holds cash to meet the November 2019 repayment of the USD 37.2 million tranche of the USPP.
- A €60 million German private placement ("Schuldschein") arranged in November 2016 with a pool of European and Asian investors, repayable in full at maturity after seven years. Investors receive interest at a variable rate based on the Euribor plus a credit margin.

Furthermore, as part of its policy to diversify its funding sources, in March 2016 Mersen set up a €200 million commercial paper program with a maturity of less than one year. As at December 31, 2018, €78.8 million has been used. The program can be substituted by drawdowns from the Group Syndicated Loan on maturity.

Interest rate risk

The interest rate risk management policy consists in establishing positions from time to time in line with the direction of interest rates.

Commodity risk

Certain Group companies purchase raw materials or components comprising commodities, such as non-ferrous metals like copper, silver and zinc. Copper and silver are the two metals accounting for the largest purchases.

The commodity price risk management policy currently consists in arranging forward commodity purchases with prime banking institutions. These are passed on symmetrically to the subsidiaries involved in commodity purchasing.

Currency risk

The currency risk management policy consists, based on a complete inventory of inter-company and external risks, in arranging forward currency purchases with prime banking institutions.

Except in special cases, the hedges arranged with banks are centralized with the parent company and passed on symmetrically to the relevant subsidiaries to hedge trading flows based either on specific orders or on annual budgets.

Note 19 Consolidation

Mersen is fully consolidated by the Mersen group.

LIST OF SUBSIDIARIES AND SHAREHOLDINGS INVESTMENTS

(In thousands of euros) **Detailed information (gross carrying amount exceeding 1% of the share capital)**	Share capital	Shareholders' equity excluding the share capital	% of share capital owned	Carrying amount in Mersen's books		Dividends received by the company	Loans and advances, net	Guarantees and sureties given
				Gross	Net			
Mersen France SB SAS	37,780	4,811	100	69,589	33,799		40,000	
Mersen France Amiens SAS	22,477	2,561	100	25,402	2,561	3381		
Mersen France Gennevilliers SAS	10,151	455	100	28,896	28,896			
Mersen Corporate Services SAS. (France)	3,574	1,648	100	3,646	3,646	563		
Mersen France PY SAS	10,339	385	100	43,321	28,944			
Mersen Boostec (France)	3,243	10,699	95.07	11,792	11,792			
Mersen Deutschland FFM AG (Germany)	10,021	10,149	10	1,635	1,635	1070		
Mersen Deutschland Holding GmbH & Co KG (Germany) KG (Germany)	28,726	(6,190)	100	28,700	19,236			8,000
Mersen Argentina SA (Argentina) (Argentina)	18	(164)	97.99	962	0			
Mersen Oceania Pty Ltd (Australia)	688	2,475	100	702	702	493		
Mersen do Brasil Ltda (Brazil)	8,925	(4,902)	100	25,172	5,296			
Mersen Canada Dn Ltee/Ltd (Canada)	1,322	4,485	100	1,322	1,322	3,124	3,563	
Mersen China Holding Co Ltd (China)	128,077	(30,774)	100	114,723	92,507			
Mersen Korea Co. Ltd (South Korea)	3,764	8,520	100	12,060	11,540	1,806		
Cirprotec (Spain)	1,000	6,152	51	16,458	16,458	2,357		
Mersen Ibérica SA (Spain) (Spain)	2,404	5,409	50.02	682	682	439		
Mersen Ibérica Bcn SA (Spain) (Spain)	2,043	2,061	100	2,396	2,396			
Mersen USA PTT Corp. (United States)	42,921	170,373	100	68,926	68,926	19,281	53,053	9,000
Mersen UK Holdings Ltd (United Kingdom)	7,230	(574)	100	903	903			
Mersen Scot. Holding Ltd (United Kingdom)	78,221	(1,070)	100	75,409	75,409		11,636	
Mersen India Pvt Ltd (India)	650	13,339	100	11,443	11,225			
Mersen Italia Spa (Italy)	5,500	916	100	10,613	6,095		9,700	
Mersen Fma Japan KK (Japan)	411	9,479	8.70	2,977	917	120		
Mersen Maroc SARL (Morocco)	2,862	(1,681)	100	4,450	1,338			
Mersen Mexico Monterrey S. de R.L. de C.V. (Mexico)	1,350	53	100	1,149	1,149			609
Mersen South Africa Pty Ltd (RSA)	67	37	54.77	813	813			
Mersen Rus (Russia)	589	(827)	100	2,305	0			
Mersen Nordic AB (Sweden)	1,291	1,037	100	551	551	753		
Mersen Istanbul Sanayi Urunleri AS (Turkey)	1,709	1,311	100	5,016	2,907			
Mersen Leclanché Capacitors	18	1,073	100	2,171	2,171			
Aggregate information (regarding other subsidiaries and participating interests)								
Subsidiaries (at least 50%-owned)								
In France				121	121	112		
Outside France				977	710			
Shareholdings (10% to 50%-owned)								
Outside France				180	180	28		
Other shareholdings (less than 10%-owned)				0	0			
TOTAL				**575,462**	**457,668**	**33,527**	**117,952**	**17,609**

Note: Information on sales and income has been omitted intentionally because of the serious harm that could result from its release in a highly-competitive international environment.

Statutory Auditors' report on the financial statements for the year ended December 31, 2019

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.
To the Shareholders of Mersen SA,

Opinion

In compliance with the engagement entrusted to us by your General Meeting, we have audited the accompanying financial statements of Mersen SA for the year ended December 31, 2019.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at December 31, 2019 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit and Accounts Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules applicable to us, for the period from January 1, 2019 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by Article 5(1) of Regulation (EU) No 537/2014 or the French Code of Ethics (Code de déontologie) for Statutory Auditors.

Justification of assessments – Key audit matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgment, were the most significant in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Valuation of participating interests

Notes 1-C and 3 to the financial statements.

Description of risk

The balance of participating interests at December 31, 2019 amounted to €457.7 million out of a total of €673.5 million, making them one of the largest assets on the balance sheet. Participating interests are initially stated at cost and are impaired based on their value in use, corresponding to the amount the Company would be prepared to pay for the interest if it were to acquire it outright.

As indicated in Note 1-C to the financial statements, the Company estimates the value in use of each interest at the end of the reporting period to determine whether it has fallen below the carrying amount.

The analysis undertaken depends on a multi-criteria approach taking into account:

- the share of each subsidiary's equity;
- where necessary, the economic value determined by reference to the future cash flows including the activity carried out and its future prospects.

Accordingly, due to the inherent uncertainty relating to (i) the method of determining value in use, which relies primarily on estimates, in turn requiring management to use assumptions and judgments, and (ii) the achievement of these forecasts, we deemed the valuation of participating interests to be a key audit matter.

How our audit addressed this risk

In order to assess the reasonableness of the estimated value in use of participating interests and based on the information provided to us, our audit work consisted primarily in verifying that the appropriate method and underlying data were used by management to make the estimates, and, depending on the subsidiary concerned:

For valuations based on historical data:

- verifying that recorded equity can be reconciled with the financial statements of the entities concerned.

For valuations based on forecast data:

- obtaining forecast future cash flows from operations of the entities concerned, as established by local management, and assessing their consistency with the forecasts prepared by general management;
- checking the consistency of the assumptions used with the economic environment at the end of the reporting period and at the date of preparation of the financial statements;
- verifying that the values based on forecast cash flows were adjusted to account for the debts of the entity in question.

We also tested the accuracy of management's calculations of value in use.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements.

We attest to the fair presentation and the consistency with the financial statements of the information about payment terms referred to in Article D. 441-4 of the French Commercial Code.

Report on corporate governance

We attest that the Board of Directors' report on corporate governance sets out the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of Article L. 225-37-3 of the French Commercial Code relating to remuneration and benefits received by corporate officers and any other commitments made in their favor, we have verified its consistency with the financial statements or with the underlying information used to prepare these financial statements, and, where applicable, with the information obtained by the Company from companies controlling it or controlled by it. Based on this work, we attest to the accuracy and fair presentation of this information.

Concerning the information given in accordance with the requirements of Article L. 225-37-5 of the French Commercial Code relating to those items the Company has deemed liable to have an impact in the event of a takeover bid or exchange offer, we have verified its consistency with the underlying documents that were disclosed to us. Based on this work, we have no matters to report with regard to this information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Report on other legal and regulatory requirements

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of Mersen SA by the General Meetings held on June 5, 1986 for Deloitte & Associés and May 12, 2004 for KPMG.

At December 31, 2019, Deloitte & Associés and KPMG were in the thirty-fourth and the sixteenth consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements giving a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Audit and Accounts Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems, relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

Objective and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit. They also:

- identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements;

- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit and Accounts Committee

We submit a report to the Audit and Accounts Committee which includes, in particular, a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Audit and Accounts Committee includes the risks of material misstatement that, in our professional judgment, were the most significant for the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Audit and Accounts Committee with the declaration provided for in Article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in Articles L. 822-10 to L. 822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Audit and Accounts Committee.

The Statutory Auditors

Paris La Défense, March 10, 2020
KPMG Audit
Department of KPMG S.A.

Philippe Cherqui
Partner

Paris La Défense, March 10, 2020
Deloitte & Associés

Laurent Odobez
Partner

Five-year financial summary

	2019	2018	2017	2016	2015	2014
1. Share capital at year-end						
Share capital *(in € thousands)*	41,716	41,536	41,274	40,944	41,234	41,234
Number of shares outstanding	20,858,277	20,768,118	20,637,041	20,471,854	20,692,054	20,616,834
Par value of shares *(€)*	2	2	2	2	2	2
2. Overall result of operations *(in € thousands)*						
Income before tax, depreciation, amortization, charges to provisions and employee profit-sharing	37,548	20,028	23,810	45,244	32,395	29,191
Income tax	(1,021)	(2,792)	(3,441)	(2,319)	(2,168)	(1,608)
Employee profit sharing	0	0	0	0	0	0
Net income after tax, depreciation, amortization and charges to provisions	24,276	16,691	18,137	25,838	14,296	30,604
Total earnings paid out [(a)]	19,728	18,691	15,478	10,236	10,317	10,308
3. Overall result of operations per share *(€)*						
Net income after tax and employee profit-sharing, but before depreciation, amortization and charges to provisions	1.85	1.10	1.32	2.32	1.67	1.49
Net income after tax, depreciation, amortization and provisions	1.16	1.80	0.88	1.26	0.69	1.48
Dividend paid on each share	1.00 (*)	0.95	0.75	0.50	0.50	0.50
4. Employees						
Average headcount	5	5	5	5	5	5
Total payroll costs *(in € thousands)*	1,038	1,661(**)	1,098	1,289	1,077	1,078
Amount paid for welfare benefits *(in € thousands)*	384	438	431	495	358	404

(a) In January 2016, reduction in the number of securities for 55,200 shares
(*) Subject to the decision of the Annual General Meeting.
(**) Overall payroll costs for Mersen SA in 2018 were impacted by the one-off tax-free bonus awarded by the Mersen group to some French employees, totaling €450 thousand.

8 ADDITIONAL INFORMATION & GLOSSARIES

Information included by reference

The following information is included by reference in this URD:

1. Fiscal 2018

Included in reference document no. D.19-01-134 submitted to the *Autorité des Marchés Financiers* on March 12, 2019 are:

https://www.mersen.com/sites/default/files/publications-media/2019-03-drf-en-mersen-reference-document.pdf

- the consolidated financial statements for fiscal 2018 prepared in accordance with the IFRSs in force in 2018, together with the Statutory Auditors' reports on the consolidated financial statements, pages 152 to 208;
- the annual financial statements for 2018, together with the Statutory Auditors' reports on the annual financial statements, pages 210 to 236;
- the 2018 management report, pages 76 to 97.

2. Fiscal 2017

Included in reference document no. D-18-0103 submitted to the *Autorité des Marchés Financiers* on March 6, 2018 are:

https://www.mersen.com/sites/default/files/publications-media/2018-03-drf-en-mersen-reference-document.pdf

- the consolidated financial statements for fiscal 2017 prepared in accordance with the IFRSs in force in 2017, together with the Statutory Auditors' reports on the consolidated financial statements, pages 152 to 209;
- the annual financial statements for 2017, together with the Statutory Auditors' reports on the annual financial statements, pages 212 to 237;
- the 2017 management report, pages 70 to 94.

Officer responsible for the reference document

Luc Themelin, Chief Executive Officer

Mersen
Tour Eqho, 2 avenue Gambetta
F-92066 Paris La Défense
Tel.: + 33 (0)1 46 91 54 19

Statement by the officer

I certify that, having taken all reasonable care to ensure that such is the case, the information contained in this document is, to the best of my knowledge, in accordance with the facts and contains no omission likely to affect its import.

I certify that, to the best of my knowledge, these financial statements have been prepared in accordance with the relevant accounting standards and give a true and fair value of the assets and liabilities, financial position and the results of operations of the Company and of all the entities included in the consolidation, and that the management report on pages 75 to 96 presents a faithful picture of the business trends, earnings and financial position of the Company and of all the entities included in the consolidation, as well as a description of the principal risks and uncertainties they are facing.

The consolidated accounts regarding the fiscal year ending December 31, 2019, presented in this document, were addressed in a report by the auditors, which appears on pages 209 to 212.

Luc Themelin

Auditors

1. Statutory Auditors

Deloitte & Associés
6, place de la Pyramide
92908 Paris La Défense

Date of first term: 1986

Date of last renewal: 2016

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending December 31, 2021)

Represented by Laurent Odobez

KPMG Audit, Département de KPMG SA
Tour Eqho – 2 avenue Gambetta
F-92066 Paris La Défense

Date of first term: 2004

Date of last renewal: 2016

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending December 31, 2016)

Represented by Philippe Cherqui

2. Alternate Auditors

BEAS
195, avenue Charles-de-Gaulle
92200 Neuilly-sur-Seine Cedex

Date of first term: 2004

Date of last renewal: 2016

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending December 31, 2021)

Salustro Reydel
Tour Eqho – 2 avenue Gambetta
F-92066 Paris La Défense

Date of first term: 2016

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending December 31, 2021)

Independant Third Party

Bureau Veritas Exploitation
Le Guillaumet
60, avenue du Général de Gaulle
92046 Paris La Défense cedex

Represented by Jacques Matillon

Glossaries

Finance

Average capital employed	Weighted average capital employed for the past five quarters (in order to limit the effects of exchange rate fluctuations at end-of-period versus average).
Bonus preference shares	Free preference shares
Capital employed	Sum of property, plant and equipment and intangible assets, working capital requirement and receivables net of current tax and net derivatives.
EBITDA	Earnings before interest, taxes, depreciation and amortization
EPS	Dividend per share
Free cash-flow	Net cash generated by operating activities after capital expenditure.
Gearing	Net debt-to-equity ratio calculated using the method required by the covenants contained in Mersen's confirmed loans.
Gross [income/margin] rate	Ratio of dividend per share proposed for the year to Group net income per share for the year, calculated based on the average number of ordinary shares excluding treasury shares at December 31 of the current year.
Gross [income/margin] rate restated	Restated payout: ratio of dividend per share proposed for the year to Group net income per share for the year, restated for non-recurring items, calculated based on the average number of ordinary shares excluding treasury shares at December 31 of the current year.
Leverage	Net debt-to-EBITDA ratio calculated using the method required by the covenants contained in Mersen's confirmed loans.
Like-for-like growth	Determined by comparing sales for the year with sales for the previous year, restated at the current year's exchange rate, excluding acquisitions and/or disposals.
Net debt	Gross financial debt net of cash and cash equivalents and current financial assets.
Operating income before non-recurring items	As defined in recommendation 2009.R.03 of the French national accounting board (CNC).
ROCE	Return On Capital Employed: ratio of recurring operating income to average weighted capital employed.
WCR	Working capital requirement (WCR): sum of trade receivables and related accounts, inventories and other current receivables less trade payables and related accounts.
WCR rate	Working capital to sales ratio: ratio of working capital requirement to sales for the quarter, multiplied by four.
URD	Universal Registration Document

Business model

ACE	Anti-corrosion equipment
AM	Advanced Materials
BEV	Battery electric vehicle
BS (British Standard)	British Standardization organization
DACH	DACH region (Germany, Austria and Switzerland)
DIN (Deutsches Institut für Normung)	German Standardization organization
EP	Electrical power
EPC	Electrical Protection & Control
GAREAT	Insurance and Reinsurance Management of Attacks and Terrorist Acts Risks
GS	Graphite Specialties
HEV	Hybrid electric vehicle
ICPE	Installations classified as environmentally friendly
IEC	International Electrotechnical Commission
ITAR	International Traffic in Arms Regulation
Mersen Excellence Journey	Continuous improvement plan acorss all Group functions
OEM	Original Equipment Manufacturer
OFAC	Office of Foreign Assets Control
CSP	Company savings plan
pHEV	Plug-in hybrid electric vehicle
PTT	Power Transfer Technologies
PVC	Polyvinyl chloride
SiC	Silicon carbide
SPM	Solutions for Power Management
UL	US Standardization organization
UNIFE	Association for the European Rail Supply Industry
USPP	US Private placement

CSR

CFE	French corporate property tax
CGNR	Governance, Appointments and Remuneration Committee
CHSCT	Health & Safety Committee
CVAE	French companies' added value contribution
GHG	Greenhouse gases
GPEC	Forward human resources planning process
EHS	Environmental health & safety
MAR	Market Abuse Regulations
RoHS (Restriction of Hazardous Substances Directive)	European Directive seeking to limit the use of 6 hazardous substances

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