WORKING TOGETHER TO INVENT THE CAR OF TOMORROW

2018 ACTIVITY AND SUSTAINABLE DEVELOPMENT REPORT
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WORKING TOGETHER TO INVENT THE CAR OF TOMORROW

Partner to all the world’s major automakers, Valeo is at the epicenter of the three revolutions that are redefining the automotive industry like never before – vehicle electrification, the advent of the autonomous and connected vehicle, and digital mobility. Valeo’s strategy is based on two priorities: innovation, particularly in the areas of CO₂ emissions reduction and autonomous and connected driving, and expansion in high-growth regions, particularly Asia. The four Business Groups work in synergy to shape tomorrow’s mobility.
Electric
As a pioneer of clean powertrain systems, from the micro-hybrid system to all-electric motors, Valeo offers a comprehensive range of low-and high-voltage electrification solutions. They can power any vehicle, from small urban cars to SUVs and premium sedans, for example using Valeo 48V technology that adapts to all types of mobility. Promoting cleaner, more fuel-efficient mobility accessible to more people is the overriding aim.
AUTONOMOUS & CONNECTED
Leader in autonomous cars
Equipped with artificial intelligence and fitted with a full range of Valeo driving assistance sensors, autonomous cars make the right decisions by interpreting information provided by sensors in real time and anticipating the behavior of other road users. Safely. And it works! Valeo has tested autonomous cars in real driving situations in Paris and Las Vegas.
Pioneer in new digital uses
Valeo and its partners (including Capgemini, CloudMade and Kuantic) have developed an extensive range of connectivity solutions. They include the virtual key, hands-free access and start, long-range connectivity, dynamic air quality mapping, facial recognition and onboard entertainment.
The car adapts to new uses and becomes an enjoyable place to be.
INTERVIEW WITH
JACQUES ASCHENBROICH
CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF VALEO

“Valeo is very well positioned in the hybrid and electric car and autonomous vehicle markets.”
How would you describe 2018?
2018 was an opportunity for Valeo to show its ability to bring the technology of the future to the market, as evidenced above all by two striking commercial successes, one in artificial intelligence, and the other with products developed for robotaxis.

“Innovation is clearly the driving force behind the Group’s growth. In 2018, 53% of our order intake was for products that didn’t exist three years ago, and for the third year in a row Valeo was France’s leading patent filer, all sectors combined, and topped the list of French companies filing the most patents in Europe.”

Our consolidated sales rose 6% at constant exchange rates to 19.1 billion euros. And more than 1 billion euros of our 24.2 billion euro order intake in 2018 was for technologies integrating artificial intelligence. We are emerging as one of the major players in artificial intelligence in the automotive sector. We also recorded 1 billion euros in orders relating to robotaxis, thanks to our unrivaled expertise in sensors. These two successes symbolize the extent to which change has moved up a gear in the automotive sector, and show how Valeo has been able to capitalize on this change to drive forward growth and become a key player in the car of tomorrow.

Innovation will always be the cornerstone of Valeo’s strategy.
Innovation is clearly the driving force behind the Group’s growth. In 2018, 53% of our order intake was for products that didn’t exist three years ago, and for the third year in a row Valeo was France’s leading patent filer, all sectors combined, and topped the list of French companies filing the most patents in Europe. We crossed the threshold of 2 billion euros of investment in R&D for the first time in 2018, with one third dedicated to the development of autonomous vehicles and half to technologies designed to reduce CO2 emissions. 2018 was undeniably a peak in the development of technology platforms that will give us traction in the years to come. We made these efforts in a long-term approach to cement our leadership in the autonomous vehicle and electric vehicle segments, which are enjoying sharp growth.

What was the most striking example of this capacity for innovation in 2018?
We pulled off a compelling world first at the Paris Motor Show in the fall of 2018 by successfully putting an autonomous car fitted exclusively with series-produced sensors on the streets of Paris. It was an immense challenge considering the complexity of traffic...
conditions in such a dense urban environment. And we did it thanks to our expertise in sensors, data fusion and embedded artificial intelligence. The test run generated a lot of interest because it was a highly symbolic step in the development of a truly autonomous car.

**What is the Group’s outlook for 2019 and beyond?**

2019 will be marked by the launch of new automaker platforms in which the value of technologies contributed by Valeo will increase by an average of 75%. We also plan to launch series production of new technologies in driving assistance, with the latest generation cameras, and in electric vehicles, where our new products include 48V systems that reduce the cost of vehicle electrification. Our order intake now represents 1.6 times our sales, guaranteeing sustained growth in the next few years. We have a unique model, a clear strategy and an unmatched technology portfolio. In short, we have everything it takes to create value over the long term, despite an automotive market that, like in second-half 2018, will not be without challenges in 2019, requiring us to strike the right balance between growth and innovation on the one hand, and profitability and cash generation on the other.

“We have a unique model, a clear strategy and an unmatched technology portfolio. In short, we have everything it takes to create value over the long term.”

**“Strike the right balance between growth and innovation on the one hand, and profitability and cash generation on the other.”**
INTERVIEW WITH
GEORGES PAUGET
LEAD DIRECTOR, INDEPENDENT DIRECTOR, CHAIRMAN OF THE COMPENSATION COMMITTEE AND THE GOVERNANCE, APPOINTMENTS & CORPORATE SOCIAL RESPONSIBILITY COMMITTEE, AND MEMBER OF THE STRATEGY COMMITTEE

How does the Board of Directors set out the Group’s main strategic objectives?
Determining the Group’s strategy is one of the Board of Directors’ main tasks. In its work, the Board of Directors relies on the Strategy Committee, which addresses these questions thoroughly throughout the year and then shares its conclusions and recommendations with all directors. The insight offered by the Strategy Committee informs the Board of Directors’ discussions on strategy. Regular work on strategy also includes the strategy seminar, a vital event for the Board of Directors. During the dedicated three-day seminar, the Board of Directors takes a closer, more methodical, and, if necessary, critical look at the strategies in each of the Business Groups, and blends the various approaches into an overall strategy for the Group. It is also a chance for directors to gain a more practical grasp of the Group’s specific features, with site visits, meetings with operational teams and management, and presentations of the Group’s products and activities. Continuous discussion around the strategy ahead of the annual seminar is part of the process of determining and adjusting the Group’s strategy, and reworking it if necessary, so as to respond in the most appropriate way to ongoing challenges.

How does the Board of Directors operate?
We have a Board where people can air their views very freely and honestly, with real dialog between the directors, the Lead Director and the Chairman and Chief Executive Officer. Apart from Jacques Aschenbroich and Éric Chauvirey, the director representing employees, the Board is made up entirely of independent directors, which sets us apart from a great many other companies. The Board’s composition is characterized by its considerable diversity in terms of skills (particularly in the fields of industry, finance and new technologies), gender and experience, with several directors having had the experience of leading large groups. Dialog is very open, we respect each other’s views, and we actively seek to work together to achieve a cohesive approach rather than just piling up a set of individual viewpoints. This is critical to the way the Board works and a cornerstone of its efficiency.

What are the main challenges facing the Board of Directors?
As regards governance, a major challenge is the Board’s gradual renewal, with several new directors joining last year, this year and next year. We take care to maintain the stability of the governance system throughout this process, which is why new directors are selected with a view to preserving the Board’s diversity and the balance of skills and experiences. Continuity is paramount. Each new director must be able to quickly assimilate the Group’s strong identity, its culture and its history. You can’t administer a business properly if you don’t have a genuine grasp of its history. The other major challenge is of course to ensure that the Group does everything to keep pace with market developments and adapt to them in a sector experiencing major disruptions, including the emergence of electric vehicles and autonomous vehicles, in a less favorable economic climate. With that in mind, it is important to keep the right balance, taking into account the current economic slowdown, but without forgetting the need for substantial investment to remain a key player in tomorrow’s automotive market.
The principal role of the Board of Directors is to determine Valeo’s business strategies and ensure that they are implemented effectively. The Board of Directors met nine times in 2018, i.e., three times more than the minimum stipulated in the Internal Procedures, with a 97.4% average effective attendance rate. Excluding the director representing employees, who is not counted, all members of the Board except the Chairman and Chief Executive Officer are considered independent. The Board has five women members (42%).

THE BOARD OF DIRECTORS
AT DECEMBER 31, 2018

The principal role of the Board of Directors is to determine Valeo’s business strategies and ensure that they are implemented effectively. The Board of Directors met nine times in 2018, i.e., three times more than the minimum stipulated in the Internal Procedures, with a 97.4% average effective attendance rate. Excluding the director representing employees, who is not counted, all members of the Board except the Chairman and Chief Executive Officer are considered independent. The Board has five women members (42%).
THE OPERATIONS COMMITTEE
AT DECEMBER 31, 2018

Under the authority of the Chairman and Chief Executive Officer, Valeo’s Operations Committee meets once a month and comprises 15 members. Its role is to review operational management, coordinate projects and implement the Group’s strategy. The Committee is responsible for ensuring that the Group meets its objectives and adheres to the continuous improvement process through the 5 Axes methodology.
GROUP KEY FIGURES

SALES
in billions of euros

19.1
(1)

billion euros
in sales in 2018

Sales rose by 6% compared with 2017. Order intake amounted to 24.2 billion euros(2), driven by the Group’s unprecedented Research and Development expenditure, which represented close to 13% of original equipment sales in 2018.

SALES BY DISTRIBUTION NETWORK
as a % of sales

16%
Aftermarket
and other

84%
Original
equipment

ORDER INTAKE(2)
in billions of euros and share of innovative products and systems(3)

In addition to this, the Valeo Siemens eAutomotive joint venture had cumulative order intake of 10.5 billion euros at end-February 2019, of which 4.4 billion euros recorded in 2018.

OPERATING MARGIN
in millions of euros and as a % of sales

3.72
2.30

in euros

A 2018 dividend of 1.25 euros will be proposed at the Shareholders’ Meeting called to approve the financial statements for the year ended December 31, 2018.

(1) 2017 data differ from the data presented in the 2017 consolidated financial statements published in February 2018 since they have been adjusted to reflect the impact of retrospectively applying IFRS 15 and IFRS 9. (2) Valeo Group order intake, excluding Valeo Siemens eAutomotive. (3) Products and technologies in series production for less than three years, excluding Valeo Siemens eAutomotive, FTE automotive and Valeo-Kappec.
In 2018, Valeo filed a record number of new patents worldwide, up 4.43% compared with 2017.

### OTHER PROFITABILITY INDICATORS

#### ROCE (return on capital employed)

- **2017**: 13.0%
- **2018**: 13.1%

#### ROA (return on assets)

- **2017**: 12.6%
- **2018**: 12.7%

(4) 2017 data differ from the data presented in the 2017 consolidated financial statements published in February 2018 since they have been adjusted to reflect the impact of retrospectively applying IFRS 15 and IFRS 9.
NON-FINANCIAL INDICATORS

ENVIRONMENT – INNOVATION

CONTRIBUTION TO CO₂ EMISSIONS REDUCTION
Percentage of total 2018 original equipment sales, by Business Group, attributable to products that contribute to CO₂ emissions reduction

SOCIAL – LABOR-RELATED

GENDER BREAKDOWN
in %

32% Women
68% Men

AVERAGE HOURS OF TRAINING PER EMPLOYEE *

23.6
24.6

2017
2018

* This ratio corresponds to all employees trained during the year (including those no longer in the Group)/total headcount at end-December.

GOVERNANCE

93% of directors are independent(1)
42% of the Board of Directors’ members are women(1)

(1) In accordance with the AEPF-MEDEF Code, this figure does not include the director representing employees.

The Comfort & Driving Assistance Systems Business Group’s contribution is not material.
STOCK MARKET INDICATORS

OWNERSHIP STRUCTURE AT MARCH 29, 2019
In % of share capital (% of voting rights)

<table>
<thead>
<tr>
<th>% of share capital</th>
<th>% of voting rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.12% (6.24%)</td>
<td>5.12% (6.24%)</td>
</tr>
<tr>
<td>5.14% (5.02%)</td>
<td>5.02%</td>
</tr>
<tr>
<td>5.17% (5.06%)</td>
<td>5.06%</td>
</tr>
<tr>
<td>84.57% (83.68%)</td>
<td>Other (1)</td>
</tr>
</tbody>
</table>

(1) Including 2,685,442 treasury shares (1.12% of the share capital).

SHARE PRICE (in euros)

STOCK MARKET DATA

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>March 29, 2019</th>
</tr>
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<tbody>
<tr>
<td>MARKET CAPITALIZATION AT PERIOD-END (in billions of euros)</td>
<td>14.92</td>
<td>6.13</td>
<td>6.21</td>
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<tr>
<td>NUMBER OF SHARES</td>
<td>239,653,121</td>
<td>240,253,100</td>
<td>240,253,100</td>
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<td>HIGHEST SHARE PRICE (in euros)</td>
<td>67.80</td>
<td>66.48</td>
<td>29.54</td>
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<td>LOWEST SHARE PRICE (in euros)</td>
<td>54.05</td>
<td>23.20</td>
<td>23.50</td>
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<tr>
<td>AVERAGE SHARE PRICE (in euros)</td>
<td>60.28</td>
<td>45.72</td>
<td>26.56</td>
</tr>
<tr>
<td>SHARE PRICE AT PERIOD-END (in euros)</td>
<td>62.27</td>
<td>25.51</td>
<td>25.85</td>
</tr>
</tbody>
</table>
2018 HIGHLIGHTS

VALEO AWARDED THE GRAND PRIX FOR FINANCIAL TRANSPARENCY

The Group consistently endeavors to publish transparent and rigorous information for its stakeholders. This commitment earned it the CAC Large 60 Transparency Grand Prix at the ninth Regulatory Information Transparency Awards in Paris on October 3, 2018.

AWARDS

VALEO WINS TWO PACE AWARDS IN 2018

Valeo SCALA™, the only LiDAR (Light Detection And Ranging or laser scanner) in series production for the automotive industry, and Valeo R-7114, an air conditioning system using a completely natural refrigerant, both received prestigious PACE Awards in 2018.

SERVICES

VALEO TECH@SSIST ONLINE, TECHNICAL SUPPORT FOR REPAIR WORKSHOPS

After consulting 600 distributors and repair workshops in seven countries, Valeo has launched an online technical support platform for the aftermarket. It allows intuitive and fast searches for spare parts, access to all available technical information in one place and on-demand training modules.

PREVIEW

THE 48V, AN ALL-ELECTRIC CAR FOR EVERYONE

The 48V all-electric urban vehicle prototype designed by Valeo makes clean urban mobility accessible to everyone. Presented at the Paris Motor Show, the prototype can reach 100 km/h, with a range of 150 km, and does not emit any CO₂.
PARTNERSHIPS
STRONGER TOGETHER

Valeo signed three strategic partnerships in 2018. In the field of autonomous vehicles, Valeo joined Apollo, the ecosystem formed by Baidu, the leading Chinese-language internet search engine. The partnership signed with Docomo, Japan’s leading mobile operator, is designed to develop and market new vehicle connectivity solutions. In addition, the agreement with WABCO covers the marketing of the latest active safety technologies for commercial vehicles.

AWARDS
SUSTAINABLE COMPANY

Valeo ranked third in Corporate Knights’ list of the world’s 100 most sustainable companies in 2018, and first in the automotive industry.

WORLD FIRST
HANDS-FREE DRIVING IN PARIS MADE POSSIBLE

At the end of 2018, Valeo test ran a prototype of an autonomous vehicle in the streets of Paris. Equipped exclusively with series-produced sensors, including eight Valeo SCALA™ systems, the Valeo Drive4U™ demonstrator pulled off a world first in dense and complex urban traffic conditions.

VALEO, FRANCE’S LEADING PATENT FILER

Valeo filed 2,145 new patent applications in 2018. The Group was ranked the leading patent filer in France by the French National Industrial Property Institute (INPI) for the third year running. The Group was also ranked 18th worldwide and was the top French patent filer with the European Patent Office. These rankings attest to the innovative capacity of the teams and investments dedicated to R&D. It is a winning strategy since 53% of order intake in 2018 was for products that didn’t exist three years ago.
COMBINING THE TECHNOLOGIES OF THE FUTURE

1. Electric and autonomous cars
2. 4 Business Groups
3. Valeo Service, innovative solutions for the aftermarket
4. Operational excellence as the Group’s cornerstone
Valeo filed 2,145 new patents worldwide in 2018 in the fields of autonomous, electric and connected cars. The pace of innovation has never been as fast as it is today. Technologies designed by Valeo offer automakers efficient solutions to reduce their environmental impact. They also contribute to the rise of new forms of mobility for a totally new driving experience.
THE CAR OF TOMORROW IS ON ITS WAY

Around the world, the mobility of goods and people is seeing a revolution unparalleled in history. Valeo is at the heart of the new era. Its innovations are contributing to the advent of electric, autonomous and connected cars.

PLANET
EMIT LESS, MOVE BETTER

There’s no separating them – mobility and social progress go hand in hand. At a time when more and more of the world’s population is crowding into cities, with the trend set to intensify, mobility is facing three challenges. It must be cleaner, safer and more seamless. The upshot is that the automotive industry must embrace three unprecedented upheavals all over the world. Engines must be electrified to emit less CO₂. Driving assistance technology is increasingly being used for safer, more autonomous cars. Digital solutions are driving the development of new services and new modes of travel, resulting in more efficient use of vehicles and better use of public space. Having anticipated these long-term changes, Valeo is now at the heart of this revolution.

All of Valeo’s Business Groups design solutions that help make the transformation of the car a practical reality. The process has already begun, and is set to intensify in the years to come. Innovation is central to Valeo’s strategy: the Group invested a little over 2 billion euros in Research and Development in 2018, or nearly 13% of its original equipment sales. Valeo’s innovative technologies all have a part to play in the development of electrified or electric, autonomous and connected cars that are widely affordable yet tailored to individual needs.
The rise of the autonomous car is not hinged solely on the development of driving assistance systems, however advanced and intelligent. It will also harness the potential of electric powertrains, which provide great technical simplicity for a smooth ride. And to be autonomous, a vehicle needs a multitude of sensors to analyze its surroundings.

Within these three distinct revolutions, Valeo’s technologies combine, complement and interlock with each other to produce coherent, game-changing innovation.

To make sure they work 24/7, in all conditions, Valeo, the world leader in wiper systems, is also developing special cleaners for sensors. In the same vein, the vehicle electrification revolution is not confined to the powertrain. Whenever batteries are used as a vehicle power source, battery operating temperature is an important factor in optimizing driving range and service life. In addition, in-vehicle comfort is a key driver of user satisfaction and is what Valeo’s thermal systems are designed to achieve. In short, the electrification revolution is reshaping activities far beyond the limits one might imagine. Valeo’s strength is that it offers all these systems through its four Business Groups, which work together to make the car of tomorrow an affordable reality.

THE CAR OF TOMORROW BY VALEO
A UNIQUE PORTFOLIO OF TECHNOLOGIES WITHOUT LIMITS

THE GROUP BOASTS THE AUTOMOTIVE INDUSTRY’S LARGEST RANGE OF SENSORS, FROM ULTRASONIC SENSORS, CAMERAS AND RADARS TO LIDAR (LIGHT DETECTION AND RANGING) SYSTEMS. THEY ACT AS THE VEHICLE’S EYES AND EARS.

► October 2018, Paris Motor Show: Valeo Drive4U™, a prototype of an autonomous car takes to the streets in central Paris – a world first in a busy urban setting.
COMFORT AND SAFETY

A CAR THAT ADAPTS TO THE NEEDS OF ITS USERS

With the advent of the autonomous car, life on board is being re-imagined. Valeo is seizing the opportunity to address the challenge of customized well-being in the car. Using biosensors and infrared cameras that evaluate the temperature felt by each passenger, Valeo has developed a system creating a thermal comfort bubble for everyone. The system takes into account heart rate, body type and what people are wearing. The onboard ambiance can even be adapted to the extent of fatigue and to emotions: when the driver is drowsy, the car releases an energizing fragrance, intensifies the interior lighting and blows fresh air through the cabin; if the driver is feeling stressed, the car infuses a calming fragrance. The desired sensation is enhanced by the use of color in the interior lighting, with warm shades to reinforce the impression of warmth and pale shades for cool.

With its unique expertise in thermal systems, Valeo can offer tailor-made comfort, with a minimal impact on energy consumption. An energy saving of up to 30% can be made on heating in winter. This efficiency is particularly important for extending the driving range of electric vehicles. In addition, Valeo draws on artificial intelligence to develop new technologies that allow cars to recognize its users’ habits, tastes and preferences. For instance, Valeo MyMobius learns from drivers’ habits in order to anticipate their needs, customize the onboard environment and enhance safety.

The data collected serves to activate features automatically. Without requiring direction from the driver, the car can suggest personalized routes based on drivers’ habits and agenda, maintain a safe distance from the car in front, and compile playlists using driver and passenger preferences. Is the driver en route to a holiday destination a history buff? If so, the vehicle will already have caught on, and will suggest a route that takes in historical landmarks, all with the motorist’s driving style in mind.

BY 2030, HYBRID AND ELECTRIC CARS ARE EXPECTED TO ACCOUNT FOR A THIRD OF GLOBAL AUTOMOTIVE PRODUCTION.
In the future, all Valeo products—lighting, thermal, electrical systems and especially automated driving—will contain a dose of artificial intelligence.

**Data fusion.** Fitted with sensors, autonomous cars will produce large quantities of data that will have to be collected and analyzed in real time. Valeo’s expertise in integrating data from different types of sensors allows the vehicle to make sense of its environment, surrounding vehicles and obstacles. **A neural network, capable of learning.** Valeo Drive4U.ai™ is an autonomous prototype equipped with sensors that give it a panoramic view. This artificial intelligence system can identify the shape, size, direction and movement of all objects surrounding the vehicle. Information is processed in real time and decisions are made instantly, just like the human brain. **A car that knows you**

And what if artificial intelligence could also contribute to passenger comfort? The Valeo MyMobius solution is a human-machine interface that collects data to analyze drivers’ habits and anticipate their needs, by suggesting personalized routes and services, for instance.

**WHAT ABOUT TOMORROW?**

**ARTIFICIAL INTELLIGENCE IS THE KEY TO AUTONOMOUS CARS**

Artificial intelligence is completely shaking up the automotive industry, and Valeo has been anticipating the change for several years.

R&D AT VALEO

2
BILLION EUROS IN GROSS R&D EXPENDITURE

19,800
R&D EMPLOYEES

59
R&D CENTERS

VALEO.AI

**FUNDAMENTAL RESEARCH IN AI FOR AUTOMOTIVE APPLICATIONS**

In 2017, Valeo’s ambitions in artificial intelligence inspired it to create Valeo.ai, the world’s leading center for fundamental published research on artificial intelligence and deep learning for automotive applications. Based in Paris and partnering with such prestigious players as INRIA, Telecom ParisTech, École des Mines and École Normale Supérieure, Valeo.ai aims to become the world’s benchmark artificial intelligence laboratory and the bridgehead for Valeo’s research work in the field. It feeds into all of Valeo’s R&D centers around the world.
COMFORT & DRIVING ASSISTANCE SYSTEMS
Making driving safer, more autonomous and better connected through perception systems and artificial intelligence. Providing reinvented mobility solutions and human-machine interfaces. Resulting in an innovative user experience.

POWERTRAIN SYSTEMS
Developing comprehensive, integrated electric powertrain solutions for all vehicle categories, from small urban cars to premium sedans, and technologies to make internal combustion engines cleaner.

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P. 29
Experts working together in complete synergy. As world leaders in their markets and pillars of growth for the Group, the four Business Groups and the Valeo Service activity pool their expertise to offer technological innovations and services tailored to market needs.

03 THERMAL SYSTEMS
Reducing pollutant emissions from internal combustion engines, optimizing the driving range and battery life of hybrid and electric vehicles, and improving comfort and well-being for passengers in the cabin.

04 VISIBILITY SYSTEMS
Designing and producing innovative and efficient lighting and washing systems for safer, more comfortable manual driving and for an improved and enhanced travel experience in autonomous vehicles.

VALEO SERVICE
Supplying original equipment spares to dealer networks and replacement parts to the independent aftermarket.
COMFORT & DRIVING ASSISTANCE SYSTEMS

Developing a portfolio of solutions for safer, more autonomous and more connected mobility.

The Comfort & Driving Assistance Systems Business Group offers the automotive industry’s most comprehensive portfolio of series-produced sensors worldwide, including cutting-edge technologies such as LiDAR. They act as the eyes and ears of vehicles that are becoming increasingly autonomous and connected. These smart systems are designed for personal vehicles, robotaxis and autonomous shuttles. Driven by the development of new mobility trends, this market offers significant growth potential. In 2018, the Business Group generated sales of 3.6 billion euros, up 3% on a like-for-like basis. In particular, it strengthened its market share in China and recorded substantial orders for autonomous driving sensors from a major Californian new mobility player. 2018 also saw a world-first autonomous driving test in the streets of Paris with Valeo Drive4U™, a level 4 autonomous vehicle prototype. The experiment was made possible thanks to Valeo’s series-produced sensors and the onboard artificial intelligence system, which interprets the data collected to enable the vehicle to operate in its environment, including complex situations and dense traffic. New ecosystems are emerging to create disruptive solutions based around the digitalization of products and services. Valeo regularly expands its own ecosystem by teaming up with partners such as Docomo, Japan’s leading mobile operator, to offer onboard equipment for connected cars. It has also worked with Capgemini to develop Mov’InBlue™, the first industrial-scale connected mobility solution. Designed for fleet management, it draws on Valeo InBlue™ smartkey technology to share vehicles securely. With 20 customers, Mov’InBlue™ will soon be launched in new markets for direct in-vehicle delivery.

A WORLD FIRST IN THE STREETS OF PARIS
The Valeo Drive4U™ prototype drove in autonomous mode through the streets of Paris thanks to Valeo sensors already in series production.

SYNERGIES

WORKING TOGETHER FOR DETECTION
The sensors developed by the Comfort & Driving Assistance Systems Business Group act as the eyes and ears of autonomous cars. Vehicles need to be able to see and hear in all circumstances. The solutions developed by Valeo’s Visibility Systems Business Group ensure that the sensors are always clean. This combination of sensors and cleaning systems sums up Valeo’s DNA: providing mobility players with practical innovations at affordable prices.
POWERTRAIN SYSTEMS

The Powertrain Systems Business Group strives to make driving an enjoyable experience while reducing CO₂ emissions. Its innovative solutions position it at the heart of the vehicle electrification revolution.

Cars are at the forefront of the revolution that is transforming mobility behaviors to fight global warming and air pollution. Valeo is rising to the challenge through its innovations in three areas – vehicle electrification, transmission automation and optimization of internal combustion engines – to further reduce CO₂ emissions. As the inventor of Stop-Start technology, the Group is the world leader in automotive electrification for all-electric and hybrid vehicles. From the 12V starter-alternator to 347 kW engines, Valeo’s range of products powers all types of vehicles, from small urban cars to SUVs and premium sedans. In particular, it offers a 48V low-voltage powertrain solution which can be used in all-electric and hybrid vehicles and is, on average, 20% more affordable than high-voltage powertrains thanks to its more streamlined architecture. It can power cars, autonomous shuttles, motorcycles, and even the three-wheel rickshaw vehicles found on Asian markets. Automaker interest in Valeo’s 48V technology took shape in 2018, with the first order for use in urban vehicles. With the Valeo Siemens eAutomotive joint venture, the Group is also a key player in all-electric high-voltage powertrain systems for premium vehicles. In 2018, Valeo Siemens eAutomotive posted 4.4 billion euros in orders and had a cumulative order intake of 10.5 billion euros at the end of the year. The all-electric offering addresses growing demand from automakers for electric powertrain systems across their entire range. From automatic and semi-automatic transmission to dual-clutch systems and active hydraulic actuators thanks to the acquisition of FTE automotive in late 2017, Valeo offers solutions adapted to all types of transmission and supports the rise in take-up of hybrid and electric vehicles. In 2018, Valeo-Kapec, which was set up in late 2017 with the Group’s South Korean partner PHC Group, signed its first contract for a torque converter for automatic transmissions.

AN ALL-ELECTRIC PROTOTYPE
Valeo presented its two-seat 48V all-electric urban vehicle prototype. It can reach speeds of 100 km/h, with a range of 150 km.

€5.1BN
IN SALES, OR 26% OF TOTAL GROUP SALES

WORKING TOGETHER FOR VEHICLE ELECTRIFICATION
Valeo contributes to the electrification of vehicles, as well as making them more widely accessible. The Powertrain Systems Business Group develops hybrid and all-electric powertrains that are easy to implement, affordable, and that align performance with usage patterns. The Thermal Systems Business Group’s products monitor temperature in electric vehicle batteries to extend their life cycle and optimize thermal comfort for passengers without compromising driving range.
THERMAL SYSTEMS

The Thermal Systems Business Group is tasked with optimizing vehicle thermal management, comfort and well-being for all passengers in the cabin. It covers all types of powertrains: for internal combustion engine, hybrid and all-electric vehicles.

2018 was a year of growth for the Thermal Systems Business Group. It signed major contracts with German, French and Chinese automakers on battery thermal management for electrified vehicles and with German, Japanese and US automakers for front-end modules. To reduce fuel consumption and CO₂ emissions, it develops systems to optimize engine cooling management, energy efficient climate control and aerodynamic front-end modules. While it provides a wide range of cooling systems for all types of powertrain, its business is more specifically focused on electric vehicles. The Business Group works on new thermal management solutions to ensure passenger comfort without compromising on driving range and still maintaining optimal operating conditions for electric and hybrid vehicles’ battery cells. For all-electric vehicles, it develops thermodynamic heating systems based on a heat-pump concept, which can extend an electric vehicle’s driving range by nearly 30% in winter compared with conventional systems. The Business Group is helping to broaden the reach of electric and autonomous vehicles by adapting conditions on board according to outside pollution levels and passenger well-being. It harnesses the potential of artificial intelligence to create an optimal environment while minimizing energy consumed. In 2018, Valeo worked with start-ups to conduct studies on artificial intelligence applied to passenger comfort and well-being.

VALEO SMART COCOON

Biosensors and infrared cameras detect the physiological parameters and thermal profile of each passenger to regulate the cabin temperature accordingly.

€5.0BN
IN SALES, OR 26% OF TOTAL GROUP SALES

WORKING TOGETHER FOR COMFORT

The Valeo Smart Cocoon uses an algorithm to offer localized pods of thermal comfort adapted to each passenger according to their body type. The Comfort & Driving Assistance Systems Business Group designs infrared cameras that detect thermal data for the vehicle cabin and each passenger, based on their heart rate, body type, age and the way they are dressed. Cabin thermal management, and therefore passenger comfort, is led by the Thermal Systems Business Group.
**VISIBILITY SYSTEMS**

Designing and producing efficient, innovative lighting and wiper systems to improve safety and comfort for everyone on the road.

Being able to see and be seen clearly, day and night, whatever the weather, is a decisive factor in road safety. Visibility of drivers and their vehicles for other road users is vital for all vehicle uses, whether in manual or – in the near future – autonomous mode.

As a design feature, lighting is also part of how the vehicle looks. It fosters a sense of well-being and comfort in the cabin and enhances the travel experience. The world leader in automotive lighting following the takeover of Ichikoh, the Visibility Systems Business Group designs and develops high-performing lighting systems tailored to manual and autonomous driving. Valeo aims to make these innovations more economical and accessible to as many drivers as possible, including its Valeo BiLED™ Access Matrix module, which features the most recent, highly pixelated LED technologies and combines high- and low-beam functions with MatrixBeam glare-free capability to ensure other road users are not inconvenienced by high beams. The Business Group develops windshield wiper systems to give drivers and passengers excellent visibility. It also offers sensor washing functions for autonomous vehicles and advanced driving assistance systems to ensure an uninterrupted video stream. Sales were brisk in 2018, with high order intake in sensor cleaning and for the Valeo AquaBlade™ integrated washing system.

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**VALEO PICTUREBEAM™ MONOLITHIC**

First high-definition LED solution for automotive lighting systems. Valeo PictureBeam™ Monolithic generates a glare-free beam, projects light signals onto the road and includes high-performance low- and high-beam functions.

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**WORKING TOGETHER FOR SAFETY**

Drowsiness, distraction and inappropriate behavior will no longer be a problem when driving in autonomous mode with the robust, safe systems developed by the Comfort & Driving Assistance Systems Business Group. But for the times when drivers need to take back control of the vehicle, and since visual stimuli guarantee a rapid reaction, the Visibility Systems Business Group develops interior lighting solutions adapted to different driving situations.
VALEO SERVICE

Along with the revolutions transforming mobility, Valeo is also changing the face of the automotive aftermarket. For Valeo, innovation is the key to its businesses dedicated to aftermarket professionals all over the world.

As a global automotive aftermarket specialist, Valeo Service is committed to supporting replacement and repair professionals on a daily basis, whether they are members of dealer networks or the independent aftermarket. Its 19 sales divisions cover 150 countries. In 2018 alone, Valeo Service added 13,000 new products to its aftermarket catalog, which comprises 320 product families. The goal is to provide first-rate coverage for vehicles on the road worldwide, including passenger cars, commercial vehicles and trucks.

In response to increasingly high-tech spare parts and products – mostly original equipment – maintenance professionals need more advanced technical support. This is why Valeo Service ensures digital innovation is ever-present in the workshops, where operators can benefit most. The solutions it offers have been developed with direct input from 600 professionals in three continents (Europe, Asia and South America). As a result, Groupauto France awarded Valeo Service with its Best Innovation 2018 prize in the Truck Parts and Consumables category for its Connected Assistance service for mechanics, accessible via a free smartphone app. In 2018, Valeo Service stepped up its rollout of e-services for workshops and automotive fleets. For example, Valeo Tech@ssist, the new online assistance platform, has a fast, intuitive product search function for users to find all useful technical information in one place. And since training for mechanics, which is often neglected, is now becoming crucial in light of new waves of innovation, Valeo Tech@ssist also offers 360 training modules, both online and on-demand. In this highly competitive industry, professionals can also turn to Valeo Specialist Club, a unique, 100% digital program designed to reward mechanics for their loyalty. It is easy for users to sign up and start accumulating points.

THE VALEO SPECIALIST CLUB LOYALTY PROGRAM

This program, designed for mechanics, is 100% digital. It takes just two minutes to create and activate an account, following which users can scan Valeo products using their smartphone and accumulate points in their loyalty account. The program recognizes spare parts for passenger cars as well as industrial vehicle parts, which is unique on the market.

Aftermarket Innovation

Valeo Service works with the Business Groups to jointly develop original equipment innovations for the aftermarket.
OPERATIONAL EXCELLENCE

To support its growth and ensure faultless quality, Valeo takes a rigorous approach in its operations all over the world.

As the cornerstone of the Group’s culture, operational excellence and continuous improvement are a guarantee of quality for Valeo’s products and services. Each of the Group’s 113,600 employees worldwide is committed to achieving “zero defect” deliveries. This culture of operational excellence can be found in all of Valeo’s 186 plants, 59 Research and Development centers and 15 distribution platforms across 33 countries. To roll out and lastingly maintain the same high level of quality, cost and delivery everywhere it operates, the Group’s 5 Axes methodology is rigorously applied in each of its sites worldwide. The methodology forms a shared language, which all employees learn through specialized training given by certified regional instructors. It is also a way to introduce new employees every year to the Group’s culture, whether they are new hires or have come on board via Valeo’s acquisition of companies such as FTE automotive (Germany), Ichikoh (Japan) and Valeo-Kapec (South Korea) in 2018. Successful integration of new employees is essential for the Group to maintain this level of excellence. Their induction is based not only on the 5 Axes methodology, but also on the Group’s values and its commitment to labor-related, social and environmental issues.

(1) Ethics, transparency, empowerment, professionalism and teamwork.

2.9 DEFECTIVE PARTS PER MILLION PRODUCTS DELIVERED IN 2018

101 CUSTOMER QUALITY AWARDS WON BY VALEO IN 2018, UP 20% ON 2017
CAPTURING GROWTH, WORLDWIDE

1. Close to our customers around the globe

2. Partner to the world’s automakers
In 2018, Valeo outperformed the global automotive market by 1.5 percentage points on a like-for-like basis, despite a complex environment. In a fast-changing automotive industry, Valeo is strongly positioned in the electric, autonomous and connected vehicle segments and in digital mobility.
CLOSE TO OUR CUSTOMERS AROUND THE GLOBE

Thanks to a varied and extensive customer portfolio and a good geographic balance, Valeo is very well positioned in all of the markets in which it operates.

Supported by its dynamic innovation strategy, Valeo’s order intake reached a significant 24.6 billion euros in 2018 (or 28.6 billion euros including Valeo Siemens eAutomotive). It was also well balanced geographically, with 41% of orders generated in Asia and 43% in Europe. In most regions of the world, the Group demonstrated its ability to grow faster than automotive production. Many challenges remain, but the outlook is favorable. Led by China and India thanks to their rising middle classes, low penetration rates and appetite for technological innovation, global registrations of new vehicles are expected to reach nearly 100 million in 2019. Positioned at the epicenter of the three revolutions shaping the automotive industry, Valeo is ideally positioned to capture this growth and to support vehicle electrification and automation worldwide.
Europe, one of Valeo’s key markets, is driving innovation in the areas of environmental protection and vehicle automation. 2018 was a milestone year in this regard, as new standards on carbon emission reduction (WLTP(1)) and safety (Euro NCAP(2)) came into effect. These regulatory requirements represent opportunities for the Group to develop innovations that meet the needs of European automakers and can later be rolled out to other regions of the world.

New hybrid and electric vehicles are set to represent two-thirds of vehicles produced in Europe by 2030. In a region where Valeo generates 46% of its original equipment sales, the European authorities have introduced a new system for measuring vehicle fuel consumption and emissions, which has impacted the operations of several automaker customers, particularly in Germany. To comply with the new WLTP(1) standard, which targets both fuel consumption and CO₂, NOx and fine particle emissions, automakers must submit their new vehicles to a testing procedure that more accurately reflects real driving conditions. Cities like Paris, Madrid and Athens, for example, have committed to a full ban on diesel vehicles by 2025.

VALEO SUPPORTS ITS CUSTOMERS THROUGH THE TECHNOLOGY TRANSITION NECESSARY TO MEET SOCIETY’S MAJOR MOBILITY CHALLENGES.

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(1) Worldwide harmonized Light vehicles Test Procedures.
(2) European New Car Assessment Programme.

© CO₂ emissions reduction target of 95 g/km in Europe by 2020.
Capturing growth, worldwide

REGULATIONS AND THE ENERGY TRANSITION
TURNING OBLIGATIONS INTO OPPORTUNITIES

Valeo has made CO₂ emissions reduction a strategic priority for many years. The Group is now supporting its customers through the technology transition, notably by developing solutions that make internal combustion engines cleaner and more efficient. In the area of vehicle electrification, Valeo’s wide range of products can power all types of vehicles, from small urban cars with 48V systems to premium sedans, for which its Valeo Siemens eAutomotive joint venture offers high-power (above 60V) electrical systems. Today, Valeo fits one in every three cars worldwide with electrical systems that reduce CO₂ emissions.

In terms of safety, the European New Car Assessment Programme (Euro NCAP) and the UNECE(1) regulations are stepping up requirements in the area of active safety. In Europe, most vehicles across all segments will have to be fitted with front cameras starting from 2022, and this brings additional opportunities for Valeo. For example, the Group has developed the Valeo 360AEB Nearshield, a new autonomous emergency braking system that eliminates blind spots, alerts drivers to any potential obstacles and brings the vehicle to an automatic halt to prevent impact if necessary.

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KEY FIGURES – EUROPE

54,672
EMPLOYEES

74
PLANTS

33
R&D CENTERS

46%
OF VALEO’S ORIGINAL EQUIPMENT SALES

(1) United Nations Economic Commission for Europe.
As the country with the largest passenger car market in the world and accounting for 28% of global automotive production in 2018, China will continue to lead the automotive industry in coming years. Expected to remain the fastest growing region for production until 2023, China has become Valeo’s largest country in terms of order intake and headcount. China’s cities are rising to the challenges of tomorrow’s urban mobility, which must be more environmentally responsible and increasingly autonomous and connected. With a projected urban population of more than 1 billion in 2030, the country must address the health and environmental issues generated by the high concentration of vehicles in its urban areas. That’s why the Chinese government intends to further increase the portion of new-energy vehicles on the road by 2020. In 2018, 6% of the vehicles sold in China were electric, representing 50% of the electric vehicles sold worldwide.

India is the world’s sixth biggest producer of passenger cars and aims to rise to third place by 2026. In early 2019, the Indian government announced a 1.3 billion euro support program to encourage the shift to cleaner vehicles. With just 32 vehicles per 1,000 inhabitants, versus 600 for 1,000 in Western Europe, the Indian market offers significant potential. India is also a strategic market, where Valeo is supported by a solid industrial and commercial presence. In India, the Group is focusing its efforts on developing competitively priced technological solutions that foster cleaner mobility and enhanced safety.

RoboTaxis and autonomous shuttles that run on a predetermined route are leading the way to a new era in transportation. Fully autonomous and all-electric, these vehicles are making mobility easier, cleaner and safer. Cities worldwide are looking to develop these new methods of transportation, and headway has already been made. In late 2018, Singapore city state inaugurated its first autonomous shuttles as a prelude to the wider deployment of other driverless vehicles. As a partner to Navya, Valeo is developing these technologies within the Autonom Cab, the world’s first robotaxi. This vehicle is fitted with seven Valeo SCALA™ laser scanners. The SCALA™ is the first and only mass-produced LiDAR scanner on the market designed specifically for cars, and is a key component of the autonomous vehicle. Drawing on its expertise in automotive specifications and its global leadership in sensors, and with 1 billion euros in order intake related to robotoaxis in 2018, Valeo has all of the resources necessary to take full advantage of the rise in autonomous and shared vehicles.
PARTNER TO THE WORLD’S AUTOMAKERS

NORTH AMERICA
- 24 plants
- 6 R&D centers
- 2 distribution platforms
- 18,061 employees

SOUTH AMERICA
- 6 plants
- 3 R&D centers
- 2 distribution platforms
- 2,924 employees

Countries where Valeo operates.

Valeo Service has a footprint through resellers in 150 countries worldwide and delivers spare parts directly in 117 countries.
EUROPE (including Africa)
- 74 plants
- 33 R&D centers
- 8 distribution platforms
- **54,672 employees**

ASIA (including the Middle East and Oceania)
- 82 plants
- 17 R&D centers
- 3 distribution platforms
- **37,943 employees**

Our international markets
TARGETING ZERO IMPACT

1
Pollution and fuel consumption – the automotive industry in the front line

2
Open innovation

3
The city of tomorrow
As a tech company, the Group creates innovative products and systems that help protect the environment by reducing CO₂ emissions and other greenhouse gases, and promote the development of a more fuel-efficient, intuitive, connected and autonomous driving experience.
POLLUTION AND FUEL CONSUMPTION – THE AUTOMOTIVE INDUSTRY IN THE FRONT LINE

Today, the economic impact of urban and peri-urban traffic jams represents billions of dollars in losses for local authorities and businesses around the world. The proliferation of package deliveries due to the explosion of e-commerce is making last-mile logistics a prime challenge. As far as the impact of air pollution on communities is concerned, the warnings are becoming more frequent.

TARGETING ZERO IMPACT

Governments around the world are aiming to reduce CO₂ emissions. As the second-biggest consumer of energy, the automotive sector is at the epicenter of this emissions-cutting policy. Valeo puts clean mobility at the core of its strategy, offering innovative solutions to meet the challenges and new behaviors relating to mobility.

A new mobility ecosystem

At a time when urban mobility is changing shape every day (electric scooters, robotaxis, autonomous shuttles, new mobility objects, etc.), a whole complex ecosystem is taking root through partnerships with a host of players. Automakers, automotive suppliers, transportation providers, local authorities, energy suppliers and the like are pulling together to create a transportation ecosystem that aims to have zero impact on the environment.

LESS CARBON-INTENSIVE PRODUCTION

Targeting zero impact also involves moving toward less carbon-intensive production. This can be achieved by improving processes and production techniques, by consuming less energy and fewer materials, and by regenerating and recycling them. Renewably-sourced heat and power networks, connected devices, energy transfers between buildings.... the possibilities for smarter and lower consumption are endless. As are the different ways of reducing CO₂ emissions. At the center of the revolution disrupting the automotive industry, Valeo is a major player in future mobility.

CITIES, THE NEW REGULATORS

Cities are stepping up today to become the number one regulators and are seeking to support the various mobility and transportation operators in the transition towards sustainable cities. This transition will rely on their willingness to experiment with new mobility usages. Valeo delivers new technologies for the city of tomorrow.
CLOSE-UP

OPEN INNOVATION TO INVENT TOMORROW’S MOBILITY

The rapid and far-reaching change currently taking place in the automotive industry and the industry’s place in tomorrow’s mobility lends weight to Valeo’s “open innovation” strategy, enabling it to offer innovative solutions and stand at the epicenter of new mobility usages. The Group is currently working with universities, laboratories, industrial groups and start-ups to jointly develop innovative solutions.

Leveraging its 59 R&D centers worldwide, Valeo is developing its open innovation strategy based on collaborative research programs, academic and industrial partnerships, and links with start-ups. One of the Group’s initiatives is an incubator in Silicon Valley dedicated to researching cooperative opportunities with tech start-ups. Valeo is also stepping up the pace of investments in venture capital funds based in the United States, France, Germany, Israel and China and is acquiring direct stakes in innovative companies. As part of these partnerships, Valeo signed an agreement with Télécom Paris Tech engineering school in early 2019 involving a chair focusing on artificial intelligence and data science, which provides extra impetus to the valeo.ai center created two years ago.

A GLOBAL OPEN INNOVATION ECOSYSTEM THAT SHOWCASES VALEO’S ADAPTIVE CAPABILITIES IN A CHANGING ENVIRONMENT.

(1) See page 25.
VALEO’S RESPONSE
THE CIRCULAR ECONOMY

For nearly 30 years, Valeo has pursued an eco-design approach that aims to limit its products’ environmental impact throughout their life cycle.

**Design:** the product eco-design approach is used from the design stage to reduce the raw materials needed to manufacture new products and to make recycling easier.

**Production:** the Group pays close attention not only to energy and the carbon efficiency of its production resources, but also to emissions and waste reduction, and water resource management. In 2018, the Group optimized its environmental performance in each of these areas. On this score, its consumption of water and packaging materials decreased by 48% and 24%, respectively, between 2008 and 2018.

**Transportation/distribution:** the Group’s optimized logistics organization helps it to keep the carbon footprint of its transportation to a minimum. For example, where possible the Group opts for maritime and rail transportation and has remodeled its logistics platforms to lessen the carbon impact of each item transported.

**Use:** products designed by Valeo help to reduce the carbon impact of mobility. In 2018, products that contributed to reducing CO₂ emissions accounted for more than 50% of Valeo’s original equipment sales. Valeo offers key technologies for the development of electric mobility and as a general principle is pursuing this approach from one generation of products to another to reduce the weight and energy consumption of its products, which is a crucial factor in cutting CO₂ emissions.

Valeo works hand in hand with different operators to ensure that the management of products in the end-of-life phase is environmentally friendly.

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**LEADING BY EXAMPLE**

- Valeo uses more and more composite materials to reduce the weight of its products that directly impact emissions.
- Valeo offers its products a second life(1) through its remanufacturing activity, providing high-quality, environmentally friendly used parts, (alternators, starters, clutches and air conditioning compressors).

(1) Valeo disassembles and inspects, cleans and tests the electric and electronic components, and eliminates all traces of hazardous substances.

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**KEY FIGURES – ENVIRONMENT**

€6m
**IN ENVIRONMENTAL INVESTMENTS**

92%
**OF SITES CERTIFIED ISO 14001**

91%
**OF PRODUCED WASTE RECOVERED**
WHAT ABOUT TOMORROW?

THE CITY OF TOMORROW WILL BE GREENER, MORE FLUID AND MORE INTELLIGENT

Smart cities are no longer just a pipe dream; the revolution is already under way. Homes, services and transportation will be interconnected. In 2050, 70% of the world’s population will live in urban areas and cities will lead the way in the challenges of the ecological and energy transition.

The major challenge will be to shift user habits towards autonomous and connected electric urban mobility. Shared autonomous cars, robotaxis and autonomous shuttles and buses, depending on choice and need, with each person combining mobility solutions for fluid and low-carbon door-to-door journeys. Digital platforms will make on-demand mobility easier. Valeo is already developing these technologies for tomorrow’s mobility and offers vehicle manufacturers a comprehensive range of electric powertrain solutions, from micro-hybrid to all-electric systems. The Group leverages the biggest portfolio of detection and driving assistance sensors on the market to offer greater connectivity, and is a prime mover in the rise of new types of mobility. Solutions already exist, such as the Cyber Valet Parking Service which Valeo developed with Cisco. This smart underground parking solution offers a way of rethinking available space and how it is used in the city of tomorrow.

Last-mile logistics
Continued growth in e-commerce is a major issue for cities, which are restricting vehicle access to city centers, particularly for delivery. With this in mind, Valeo joined up in early 2019 with China’s Meituan, an on-demand food delivery platform using autonomous vehicles, to supply electric powertrain systems, lighting, thermal management and sensors.

MOBILITY AS A SERVICE(1)

WELCOME TO THE MAAS ERA

With self-service kick scooters, bikes and electric scooters, autonomous vehicles, car-sharing and robotaxis, city dwellers will have a host of solutions for getting from A to B. A new urban mobility ecosystem is unfolding in successive stages. This all-electric mobility will initially involve services. New platforms combining artificial intelligence and dynamic pricing are being created to spearhead service-centered mobility. At the core of the ecosystem, Valeo provides innovative technological solutions to accommodate these new autonomous, connected, low-carbon, shared and on-demand mobility concepts.

(1) MaaS: Mobility as a Service is a multi-modal urban mobility concept.
GROWING SUSTAINABLY

1. Attracting talent
2. New or yet-to-be invented skills
3. 2018 sustainable development indicators
Attracting talent is a key challenge for the Group amid a competitive environment undergoing profound transformation. Its future growth also relies on its ability to attract and retain talent.
ATTRACTING TALENT TO BUILD THE CAR OF TOMORROW

The triple revolution sweeping the automotive sector is heavily impacting the skills landscape.

Intelligence. The Group draws on its strong employer brand and leverages its presence on social media to communicate about its businesses and present recruitment opportunities. The Group also has a specific organization – the Talent Acquisition Center – tasked with aligning its recruitment needs with local skills.

Sustaining the innovation culture
Valeo’s power of attraction as an employer is crucial to the Group, which is growing at a very fast rate. In the space of 10 years, Valeo has more than doubled its headcount, which now stands at 113,600 and includes almost 20,000 R&D experts. This ability to attract research experts is vital to Valeo’s future growth and technological leadership. For these reasons, the Group has developed and is sustaining a strong innovation culture throughout its 59 R&D centers and at Valeo.ai, the first global research center specializing in artificial intelligence and deep learning for automotive applications.

Promoting diversity
For several years now, Valeo has been promoting diversity with regard to disability, age, gender and culture at all levels and in all countries. The Group sees diversity as a key performance lever, as well as a social challenge. Planning and actions on diversity are coordinated by a committee chaired by the Group Senior Vice-President, Human Resources.
HEALTH AND SAFETY

ENSURING EMPLOYEE SAFETY AND WELL-BEING

Valeo has a HR strategy that makes employee safety and well-being at work a priority, making sure workplaces are free of accident risks and by ensuring that each employee has a good work-life balance.

As part of its employee health and safety policy, the Group regularly performs risk management audits, conducts a certification program for its sites and organizes continuous employee training. At the end of 2018, nearly 65,000 employees had received training, representing 63% of the target population. The Group launched the “Safety Dojo”, a new Group standard designed to develop the knowledge and skills of every employee in the field of safety and ergonomics. The Dojo is a training room where employees can learn and share best practices, and broaden their knowledge of safety rules related to Valeo tools and trades. The Dojo trains not only Valeo employees and newcomers, but also Valeo’s suppliers.

VALEO’S GOAL IS TO HALVE THE RATE OF LOST-TIME ACCIDENTS (FR1)(1) BY 2020.

191% of sites certified OHSAS 18001.
Growing sustainably

**COMMITTED PLAYER**

**COMMITTED IN ALL ITS HOST COUNTRIES**

Contributing to local economies
With 186 plants worldwide, Valeo makes a major contribution to the strength of the economic and social fabric of the local communities. Each site builds local ecosystems in education, training and research to promote initiatives in favor of local populations. In 2018, employees in 30% of Valeo’s sites gave time to run training sessions at seminars, schools and universities.

Ensuring compliance
The Ethics and Compliance Office has created a detailed program designed to combat corruption and anti-competitive practices that has been relayed worldwide throughout the sites. Drawing on an internal network of “Compliance Champions” and a compulsory training program taken annually by all the Group’s management-level employees, the program was extended in 2018 to cover personal data protection. In addition, the whistleblower system introduced in 2017 was extended to partners and external service providers in 2018.

Assessing suppliers
The Group applies a rigorous sustainable development policy when selecting supplies and awarding contracts. Each year, a significant portion of its production suppliers (representing 77% of its production purchases) are also assessed on their practices, and a number of them are assessed via dedicated audits according to the results and risks identified by the Group. In 2018, Valeo carried out specific audits on suppliers of electronic components.

**KEY HR FIGURES**

- **TARGET EMPLOYEES TRAINED ON THE GENERAL DATA PROTECTION REGULATION**
  - 3,500

- **99% OF EMPLOYEES WHO JOINED THE GROUP IN 2018 RECEIVED A COPY OF THE CODE OF ETHICS, ALONG WITH COMPULSORY TRAINING**

- **20% SHARE OF SUSTAINABLE DEVELOPMENT CRITERIA IN THE SUPPLIER SELECTION RATING**

100% OF SITES ORGANIZED AT LEAST ONE CORPORATE CITIZENSHIP INITIATIVE FOR THE THIRD YEAR RUNNING IN 2018.

**SCOPE OF VALEO’S COMMITMENT TO CORPORATE CITIZENSHIP**
- Initiatives in favor of boosting regional economies.
- The fight against fraudulent and anti-competitive practice.
- Bringing suppliers on board with sustainable development actions.
In Valeo’s production and logistics centers, the new technologies underpinning industrial performance are leading to changing professions. The implementation of the plant of the future is transforming the day-to-day working lives of many employees, whose duties are evolving in step with digitalization. Logistics and production management processes are further advancing the application of just-in-time principles. This represents an extra step toward the zero paper target at the Group’s plants.

Innovations that are integrated into vehicles require new talent and a high-standard of training. The majority of Valeo’s hires are from new professions and include data scientists, cybersecurity experts and software specialists. In order to develop new skills and attract the experts who will build the car of tomorrow, the Group has formed local partnerships with universities to work together to create training programs tailored to new professions.

WHAT ABOUT TOMORROW?

NEW OR YET-TO-BE-INVENTED SKILLS

At Valeo, the number and range of skills is expanding. The diversity and complementary nature of the different profiles are springboards to invent the mobility of the future. Training is therefore a major priority at Valeo.

In Valeo’s production and logistics centers, the new technologies underpinning industrial performance are leading to changing professions. The implementation of the plant of the future is transforming the day-to-day working lives of many employees, whose duties are evolving in step with digitalization. Logistics and production management processes are further advancing the application of just-in-time principles. This represents an extra step toward the zero paper target at the Group’s plants.

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TRAINING

82% OF SITES HAVE FORMED HIGHER EDUCATION PARTNERSHIPS

25h OF TRAINING RECEIVED ON AVERAGE BY EACH EMPLOYEE

98.5% OF EMPLOYEES ATTENDED AT LEAST ONE TRAINING COURSE IN 2018

THE INNOVATION CHAIR

HEALTH AND WELL-BEING IN TRANSPORTATION

Valeo and the University of Liège (Belgium) created a chair to develop skills in the area of health and well-being applied to the automotive industry, foster open innovation and share knowledge obtained from scientific studies. Valeo’s international reputation in engineering in the fields of transportation and mobility will rank the Group among the leaders for research in this area.
THE ENVIRONMENT, DRIVER OF GROWTH AND WELL-BEING

As a tech company, Valeo addresses global environmental challenges at its level by developing innovations that are shaping the mobility of tomorrow and reducing pollutant emissions. Valeo’s commitment to sustainable development is at the heart of its DNA. It is a pillar of its business model and a driver of the Group’s growth. Valeo’s sustainable growth has a positive impact on its entire ecosystem, its employees, partners, host regions and society.

VALEO AND ITS STAKEHOLDERS

Research and Development partners
Over the past few years, Valeo has established cooperative and industry-oriented Research and Development, enabling it to organize exchanges of expertise, techniques and know-how. The Group pursues a proactive strategy with regard to start-ups through various channels, from simple cooperation to investments and acquisitions. This strategy is backed by Valeo’s presence in the leading global innovation ecosystems and interests in venture capital funds.

Employees
Valeo maintains ongoing dialog with its employees and with representatives from the various trade unions and other professional associations. In 2018, Valeo launched its global engagement and satisfaction survey of all employees, enabling each country to improve its performance in this area in 2019.

Partners and suppliers
Together with its suppliers, the Group cooperates and builds solutions with them in compliance with competition law and fundamental rights. Since 2013, Valeo has regularly surveyed its suppliers to gain a better understanding of their sustainable development approach, based on economic (plant optimization), environmental (certification) and labor-related (labor law) criteria.

Institutions
Keen to be involved in different consultation bodies in the automotive industry, Valeo actively participates in French, European and international working groups.

Financial community and individual shareholders
The Chairman and Chief Executive Officer, the Chief Financial Officer and the Group’s Investor Relations Department interact closely and consistently with the financial community. Great importance is placed on holding meetings throughout the year with all shareholders, investors and financial analysts, whether at the Group’s headquarters or at major global financial centers (Europe, North America and Asia) during roadshows or conferences. In all, the Investor Relations team met more than 1,600 institutional investors and analysts at these events during 2018, with the Group’s General Management present at a large number of these meetings.

Regions
Valeo’s sites contribute to the economic and social fabric of the regions where they operate. Its sites have multiple impacts: they are consumers, employers, local economic agents and actors in the development of human capital, and contribute to creating and enhancing the appeal of businesses through transfers of skills.

Non-financial rating agencies
Valeo saw its non-financial performance acknowledged by various rating agencies in 2018, reflecting the successful cross-functional deployment of sustainable development.
and communication that respects the principles of transparency, discipline and relevance. The Group featured in CDP’s (Carbon Disclosure Project) A List of best performers.

**Automaker customers and distributors**

Committed to its customers, Valeo undertakes to design, develop, manufacture and market innovative products and systems for sustainable mobility. Customers continued to recognize the high standard of the Group’s performance, particularly in the area of quality, awarding it 101 distinctions in 2018.

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### Performance chart showing the key objectives and performance indicators of the Group’s sustainable development policy

<table>
<thead>
<tr>
<th>AXES</th>
<th>CHALLENGES</th>
<th>KEY INDICATORS</th>
<th>2015 RESULTS</th>
<th>2016 RESULTS</th>
<th>2017 RESULTS</th>
<th>2018 RESULTS</th>
<th>TARGETS (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INNOVATION</strong></td>
<td>Low-carbon mobility solutions/ Autonomous and connected vehicle</td>
<td>• Share of innovative products in order intake(&lt;sup&gt;1&lt;/sup&gt;) (% of order intake)</td>
<td>37%</td>
<td>50%</td>
<td>50%</td>
<td>53%</td>
<td>&gt;40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Share of products contributing to the reduction of CO₂ emissions (as a % of sales)</td>
<td>N/A</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Energy and carbon efficiency of production</td>
<td>• Energy consumption as a proportion of sales (MWh/€m)</td>
<td>143</td>
<td>137</td>
<td>134</td>
<td>140</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-4%&lt;sup&gt;11&lt;/sup&gt;)</td>
<td>(-6%&lt;sup&gt;11&lt;/sup&gt;)</td>
<td>(-2%&lt;sup&gt;11&lt;/sup&gt;)</td>
<td>(-8%&lt;sup&gt;11&lt;/sup&gt;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct (scope 1) and indirect (scope 2) emissions as a proportion of sales (tCO₂/€m)</td>
<td>56.3</td>
<td>56.6</td>
<td>55.6</td>
<td>59.2</td>
<td>51.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(+0.5%&lt;sup&gt;10&lt;/sup&gt;)</td>
<td>(-1%&lt;sup&gt;10&lt;/sup&gt;)</td>
<td>(+5%&lt;sup&gt;10&lt;/sup&gt;)</td>
<td>(-8%&lt;sup&gt;10&lt;/sup&gt;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ISO 50001 energy management certification (% of sites)</td>
<td>8%</td>
<td>12%</td>
<td>13%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Discharges and waste</td>
<td>• Production of hazardous and non-hazardous waste as a percentage of sales (t/€m)</td>
<td>16.4</td>
<td>17.0</td>
<td>16.5</td>
<td>16.2</td>
<td>15.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(+4%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(+1%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(-1%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(-5%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water</td>
<td>• Water consumption as a proportion of sales (cu.m/€m)</td>
<td>198</td>
<td>184</td>
<td>175</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-7%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(-12%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(+6%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td>(+6%&lt;sup&gt;12&lt;/sup&gt;)</td>
<td></td>
</tr>
<tr>
<td><strong>EMPLOYEES</strong></td>
<td>Safety and working conditions</td>
<td>• FR1: frequency rate of occupational accidents with lost time (accidents with lost time/million hours worked)</td>
<td>2.4</td>
<td>2.3</td>
<td>2.0</td>
<td>2.1</td>
<td>≤2</td>
</tr>
<tr>
<td></td>
<td>Attracting and retaining talent</td>
<td>• Voluntary turnover of Managers and Professionals (% of M&amp;P workforce)</td>
<td>6.7%</td>
<td>7.0%</td>
<td>7.3%</td>
<td>8.5%</td>
<td>≤7%</td>
</tr>
<tr>
<td></td>
<td>Promoting and respecting fundamental rights</td>
<td>• Share of employees who acknowledged receipt of the Code of Ethics and who were trained on its content (% of the total workforce)</td>
<td>N/A</td>
<td>95.0%</td>
<td>95.0%</td>
<td>99.0%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Promoting diversity</td>
<td>• Share of women in new hires during the year (% of hires during the year)</td>
<td>32.4%</td>
<td>31.2%</td>
<td>32.0%</td>
<td>33.0%</td>
<td>&gt;35%</td>
</tr>
<tr>
<td><strong>COMMITMENT TO CORPORATE CITIZENSHIP</strong></td>
<td>Purchasing and sustainable development</td>
<td>• Share of production purchases for which the suppliers’ sustainable development practices were assessed during the year (% of total purchases)</td>
<td>60%</td>
<td>63%</td>
<td>67%</td>
<td>77%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Local integration</td>
<td>• Organization of initiatives and events by the Valeo sites with educational and vocational training institutions (% of sites)</td>
<td>N/A</td>
<td>N/A</td>
<td>48%</td>
<td>61%</td>
<td>80%</td>
</tr>
</tbody>
</table>

<sup>1</sup> Products and technologies in series production for less than three years, excluding Valeo Siemens eAutomotive, FTE automotive and Valeo-Kapec. <sup>2</sup> Changed compared with 2015.
Growing sustainably

2018 SUSTAINABLE DEVELOPMENT INDICATORS

KEY GROUP RESEARCH AND DEVELOPMENT INDICATORS

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESEARCH AND DEVELOPMENT EXPENDITURE, NET (as a % of sales)</td>
<td>5.8%</td>
<td>6.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>RESEARCH AND DEVELOPMENT EXPENDITURE, GROSS (as a % of original equipment sales)</td>
<td>11.1%</td>
<td>11.8%</td>
<td>13.0%</td>
</tr>
<tr>
<td>RESEARCH AND DEVELOPMENT HEADCOUNT</td>
<td>13,700</td>
<td>17,900</td>
<td>19,800</td>
</tr>
<tr>
<td>NUMBER OF CUSTOMER PROJECTS MANAGED</td>
<td>2,700</td>
<td>2,800</td>
<td>3,000</td>
</tr>
<tr>
<td>NUMBER OF COLLABORATIVE PROJECTS</td>
<td>&gt;50</td>
<td>&gt;50</td>
<td>&gt;50</td>
</tr>
<tr>
<td>NUMBER OF PATENTS FILED</td>
<td>1,840</td>
<td>2,053</td>
<td>2,145</td>
</tr>
<tr>
<td>PROPORTION OF INNOVATIVE PRODUCTS(1) IN ORDER INTAKE</td>
<td>50%</td>
<td>50%</td>
<td>53%</td>
</tr>
</tbody>
</table>

(1) Products and technologies in series production for less than three years, excluding Valeo Siemens eAutomotive, FTE automotive and Valeo-Kapec.

ENVIRONMENTAL PERFORMANCE

TOTAL DIRECT AND INDIRECT ENERGY CONSUMPTION
Between 2017 and 2018, energy consumption increased by 10% in absolute terms. Most of the increase was attributable to the increase in the sites’ electricity consumption. Energy consumption as a percentage of sales was down 2% compared with the 2015 baseline.

WATER CONSUMPTION
In 2018, the increase in water consumption in relative terms, in cu.m per million euros of sales, was attributable chiefly to the acquisition of the Ichikoh sites in Asia. Excluding these sites, water consumption in relative terms would have been 175 cu.m per million euros, as in 2017.

![Energy Consumption Diagram](image)

- Indirect energy consumption/Sales (MWh/€m)
- Direct energy consumption/Sales (MWh/€m)
- Total energy consumption (GWh)

![Water Consumption Diagram](image)

- Indirect energy consumption/Sales (MWh/€m)
- Direct energy consumption/Sales (MWh/€m)
- Total energy consumption (GWh)
2018 sustainable development indicators

### PERCENTAGE OF PLANTS CERTIFIED ISO 14001 AND OHSAS 18001

<table>
<thead>
<tr>
<th>Year</th>
<th>ISO 14001</th>
<th>OHSAS 18001</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>94%</td>
<td>91%</td>
</tr>
<tr>
<td>2017</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>2018</td>
<td>92%</td>
<td>91%</td>
</tr>
</tbody>
</table>

### PACKAGING MATERIALS CONSUMPTION

The total consumption of packaging materials as a percentage of sales has been stable for three years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total packaging materials consumption/Sales (t/€m)</th>
<th>Total packaging materials consumption (kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>5.6</td>
<td>84.7</td>
</tr>
<tr>
<td>2017</td>
<td>5.5</td>
<td>92.5</td>
</tr>
<tr>
<td>2018</td>
<td>5.7</td>
<td>100.6</td>
</tr>
</tbody>
</table>

### PRODUCTION OF HAZARDOUS AND NON-HAZARDOUS WASTE

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-hazardous waste/Sales (t/€m)</th>
<th>Hazardous waste/Sales (t/€m)</th>
<th>Total waste generated (kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>15.5</td>
<td>1.5</td>
<td>17.0</td>
</tr>
<tr>
<td>2017</td>
<td>15.1</td>
<td>1.5</td>
<td>16.6</td>
</tr>
<tr>
<td>2018</td>
<td>14.7</td>
<td>1.5</td>
<td>16.2</td>
</tr>
</tbody>
</table>

### LABOR-RELATED INDICATORS

#### BREAKDOWN OF REGISTERED HEADCOUNT BY GEOGRAPHIC AREA

<table>
<thead>
<tr>
<th>Year</th>
<th>Western Europe</th>
<th>Central and Eastern Europe</th>
<th>Africa</th>
<th>North America</th>
<th>South America</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>24,198</td>
<td>29,549</td>
<td>13,854</td>
<td>15,413</td>
<td>16,264</td>
<td>3,254</td>
</tr>
<tr>
<td>2017</td>
<td>28,600</td>
<td>16,224</td>
<td>3,857</td>
<td>4,454</td>
<td>2,550</td>
<td>2,836</td>
</tr>
<tr>
<td>2018</td>
<td>33,193</td>
<td>16,499</td>
<td>3,254</td>
<td>4,454</td>
<td>2,550</td>
<td>33,650</td>
</tr>
</tbody>
</table>
Growing sustainably

PERCENTAGE OF WOMEN AMONG NEW HIRES
Women made up 32% of new hires.

FREQUENCY RATE (FR1(1)) OF OCCUPATIONAL ACCIDENTS
(1) Calculation of FR1: number of lost-time accidents x 1,000,000/number of hours worked during the year.

AVERAGE HOURS OF TRAINING PER EMPLOYEE(2)
(2) 23.6 hours of training excluding FTE automotive employees.

BREAKDOWN OF JUNIOR EMPLOYEES (UNDER 30) AMONG TOTAL HIRES(1)
(1) Including only permanent and fixed-term contracts.

Quality of life at work is an integral part of Valeo’s Human Resources strategy to attract, develop and retain talent.
CORPORATE CITIZENSHIP INDICATORS

BREAKDOWN OF DIRECT PURCHASES BY GEOGRAPHIC AREA OF ORIGIN

- Europe & Africa: 53%
- North America: 20%
- South America: 2%
- Asia: 25%

BREAKDOWN OF DIRECT PURCHASES BY GEOGRAPHIC AREA OF CONSUMPTION

- Europe & Africa: 49%
- North America: 15%
- South America: 1%
- Asia: 35%

SHARE OF SITES PARTNERING WITH LOCAL UNIVERSITIES/ENGINEERING SCHOOLS IN 2018

- Western Europe: 82%
- Central and Eastern Europe: 84%
- Africa: 75%
- North America: 81%
- South America: 75%
- Asia: 81%
- Total: 82%