Six Valeo innovations for cleaner and safer mobility
to be revealed at the 2021 Shanghai Auto Show

At the 19th edition of the Shanghai Auto Show, Valeo is unveiling six innovations in response to the today’s major mobility challenges, of which China is now leading the way.

CO₂ emissions reduction and environmental responsibility are part of Valeo’s DNA. As a pioneer in vehicle electrification, Valeo has invested more than 10 billion euros in this field over the past 10 years, to become the world no. 1. The Group offers the broadest portfolio of technologies, covering all segments and uses, from affordable solutions to the most powerful systems.

As mobility is undergoing a revolution in terms of how vehicles are powered, attention is often focused on electric systems, but we should bear in mind that the revolution would simply not be possible without innovative thermal systems. Valeo is also a world leader in this field, offering all the right technologies, from battery thermal management to smart air conditioning systems.

At the 2021 Shanghai Auto Show, Valeo is therefore presenting two innovative technologies that eliminate the dilemma of having to choose between travel range and in-vehicle thermal comfort:

- **New Valeo heat pump**: procures two-thirds of its energy demand from the ambient air, thereby limiting the need to draw energy from the onboard batteries, and using a natural refrigerant. Electric cars equipped with the device can travel up to 30% further at -15°C than those fitted with more conventional heating systems. In 2021, a major European automaker will be the first in the world to integrate into its new electric vehicle platform a HVAC option that uses Valeo’s technology based on a heat pump and a natural refrigerant.

- **Valeo FlexHeater**: a new smart heating technology. It consists of radiant panels hidden under the cabin linings and consumes 25% less electricity (with four passengers on board) – and 50% less when the driver is alone – than traditional heating systems that deliver air flows through ventilation.

For ever cleaner mobility, at the 2021 Shanghai Auto Show Valeo is also presenting its first end-to-end all-electric powertrain system from its joint venture Valeo Siemens eAutomotive based in China. The technology offers 100 kW of power and includes the electric motor, the inverter (the brain of the system) and the reducer (the equivalent of the gearbox). It is suitable for the small and medium-sized city cars that make up the majority of vehicles in China and is also ideal for small sedans found on roads worldwide. The solution provides vehicles with the performance they need at a reasonable cost.
Valeo is taking a holistic approach to the challenge of safer mobility. Not only is it developing driving assistance solutions that give drivers a better vision and understanding of their surroundings – enabling them to make the right decisions at the right time – its solutions also offer drivers and passengers a clean and healthy cabin environment. Valeo is therefore presenting a series of technologies that transform vehicles into a sort of "health shield". Valeo’s innovations detect pollutants and protect people from germs, allergens and viruses thanks to a highly efficient filter.

At the 2021 Shanghai Auto Show, Valeo is announcing the development of the first 360° lighting solution. The technology surrounds the vehicle with a band of light, which projects clear, simple and instantaneous indications that can be seen by nearby road users, especially vulnerable road users such as cyclists and people on scooters and motor scooters.

At a time when mobility is taking on new forms and new vehicles are appearing, such as droids and other small delivery robots, Valeo is rolling out its ready-to-use technologies that can be integrated into the new driverless vehicles. The Valeo Mobility Kit, presented at the 2021 Shanghai Auto Show, consists of sensors – “the vehicle's eyes and ears” – electronic control units and algorithms.

This is how driverless logistics solutions, benefiting from Valeo’s “Plug & Play” perception systems (operational as soon as they are installed), can take shape. With these solutions, new business that are based on proven technologies with automotive quality and reliability can be created, and at affordable costs thanks to large-scale production.

All of Valeo’s innovations, including those presented at the 2021 Shanghai Auto Show, aim to achieve mobility that is smarter – by reducing its impact on global warming – less energy-intensive, safer, capable of taking care of people and their health, and more easily shared with as many people as possible thanks to its affordability.

All of this comes as a result of Valeo’s innovation-driven strategy. In 2020, 94% of the Group’s original equipment sales were generated by technologies that reduce CO2 emissions and increase road safety and 56% of the orders received by the Group, including Valeo Siemens eAutomotive, were for technologies that did not exist three years ago.