

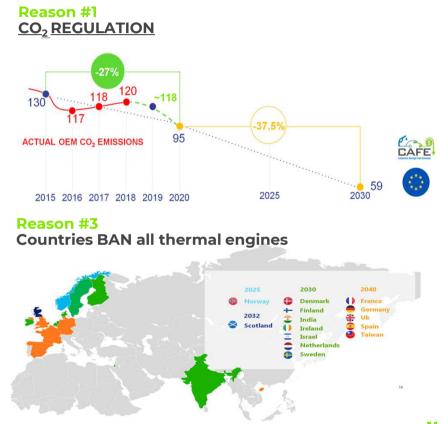
VALEO Electrification: a key pillar of our growth

HSBC MARCH 22nd, 2021

SMART TECHNOLOGY FOR SMARTER MOBILITY



ELECTRIFICATION IS NOW.. AND NO LONGER AN OPTION



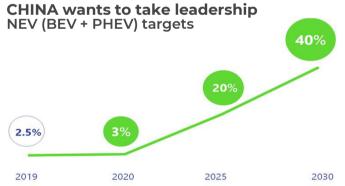
VALEO RESERVED

Reason #2

DIESEL ban in cities BIG CITY pressure to clean-up inner city air pollutions



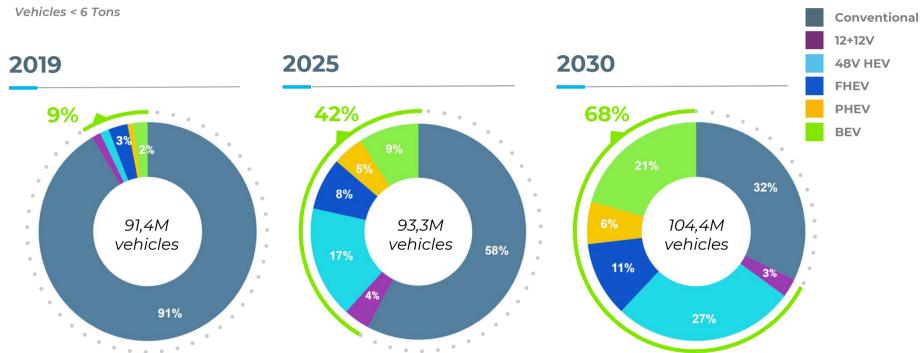




Valeo

The 2020-2030 decade will see a massive shift By 2030, 68% of WW cars produced will be electrified



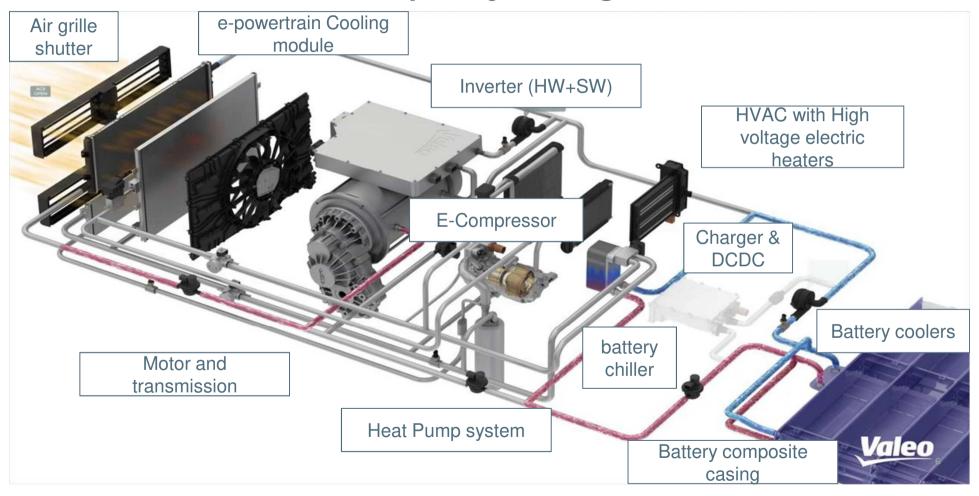


In 2030, 48V and BEV will take highest share of electrified powertrains.

Technology also will experience a fundamental shift

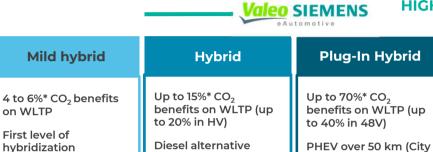
CONVENTIONAL INCREASING ELECTRIFICATION MILD HYBRID FULL HYBRID PLUG-IN HYBRID ELECTRIC On-Board 48V / HV Charger 48V /HV DCDC 48V /HV Generator eMotor 48V Engine Full e-drive Gearbox Battery cooling Battery 12V **48V Battery HV Battery** system Cabin heating ICE heater core Heat pump & & HV heaters **AC system** electrical compressor mechanical compressor VALEO RESERVED march zuzi 5

Car architectures are completely redesigned



But no "one size fits all". Different uses, different solutions

— LOW VOLTAGE (12V & 48V) **Valeo**



Affordable cost



Small Electric

Zero emission zone

Small mobility

≤ 100km

≤ 50km/h





Light Electric

Zero emission zone







Zero CO₂ emission Performance

HIGH VOLTAGE

(60V+)





We transform totally out product portfolio: 48V

Fully re-usable platforms

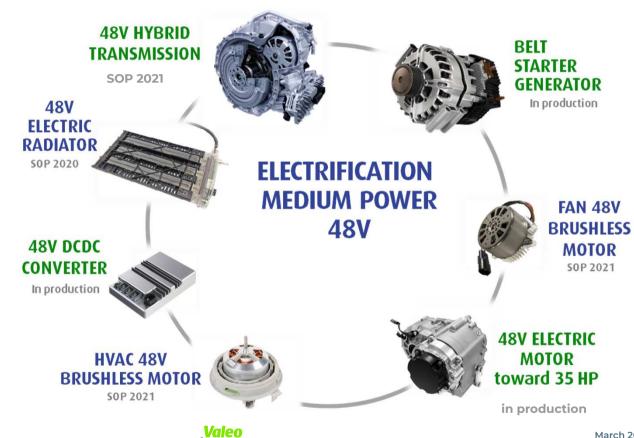
Full powertrains

All motors

All electronics

All softwares

Thermal systems



VALEO RESERVED March 2021 | 9

Our 48V customer portfolio

2020 - 2022 : VALEO 48V INTO 60 VEHICLES

40% market share = Worldwide leader















We transform totally out product portfolio: 400-800V

Fully re-usable platforms

Full powertrains

All motors

All electronics

All softwares

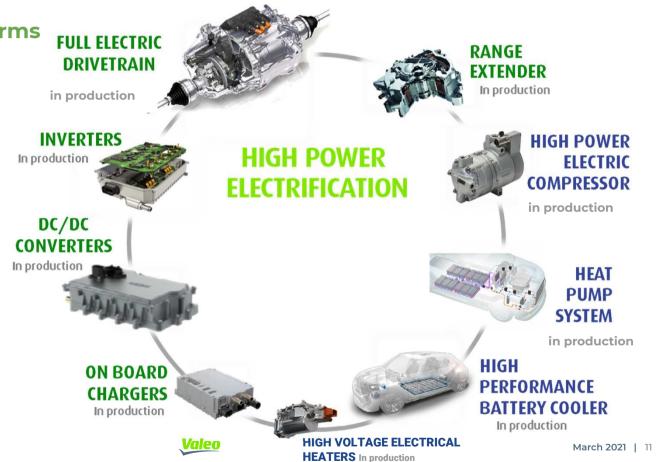
Full thermal system

A/C compressors

Battery cooler

Heat pumps

Electric Heaters



VALEO RESERVED

Our high voltage customer portfolio

2020 - 2023 : VALEO HV INTO 90 VEHICLES

40% market share = Worldwide leader



Volvo V60 BMW i3 2013 2012

VALEO RESERVED

2014

2015

Renault ZOE

Volvo XC90

Renault Megane

DS7 Crossback

But also ...

e-City cars



e-Delivery Droïds



Last Mile delivery e-City Truck











e-4 Wheeler



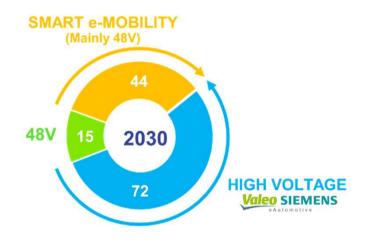
e-Rickshaw

<u>Valeo</u>

Some key figures about electrification at VALEO

2030 ELECTRIFICATION MARKET*

€131Bn



> 5000 Engineers worldwide

> 3000 Granted patents

> 2,000,000 lines of code In our softwares

> 35 sites
In 15 countries

And it's just a start !...

<u>Valeo</u>

