

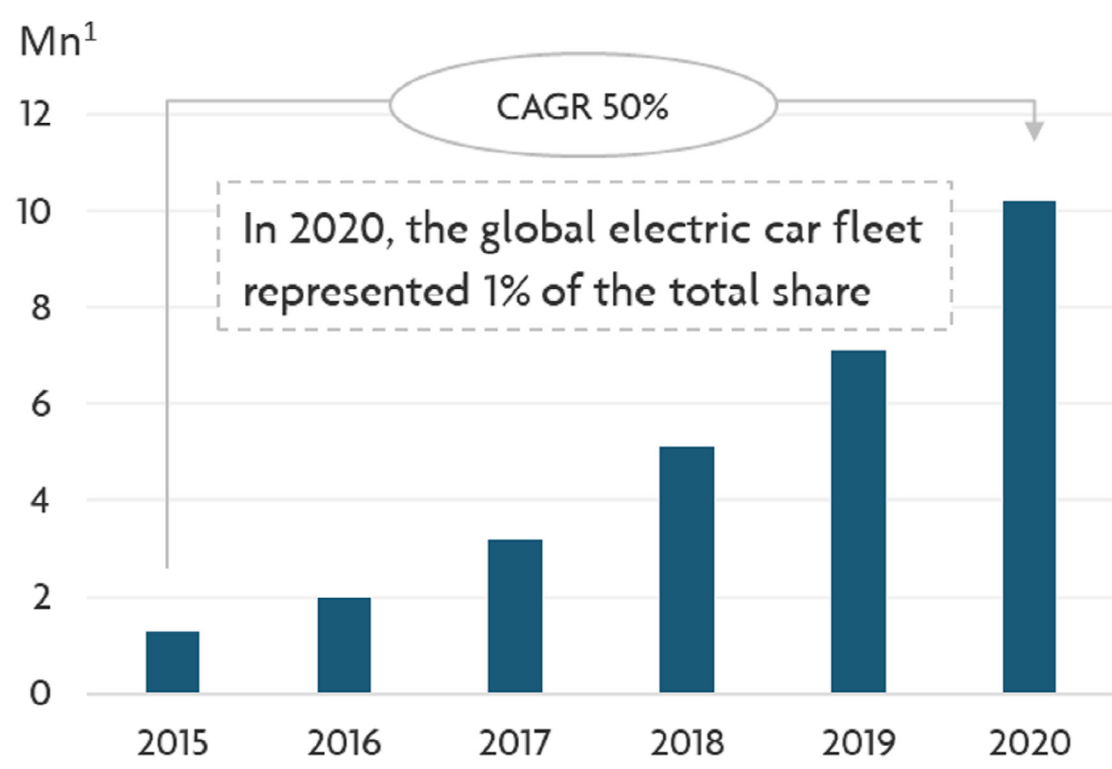
# mobility intelligence

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## KEY FACTS ABOUT ELECTRIC VEHICLES AND CRITICAL MINERALS

### More than 10 million electric cars on the roads for the first time in 2020

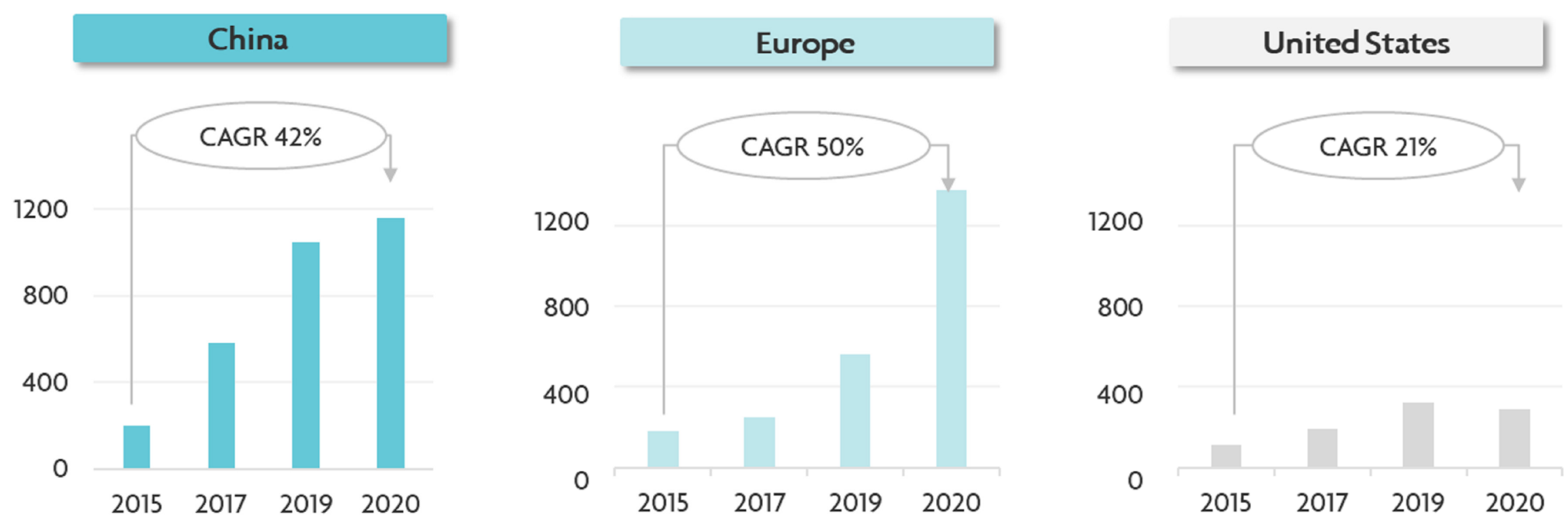


### Main drivers for electric cars<sup>1,3</sup>

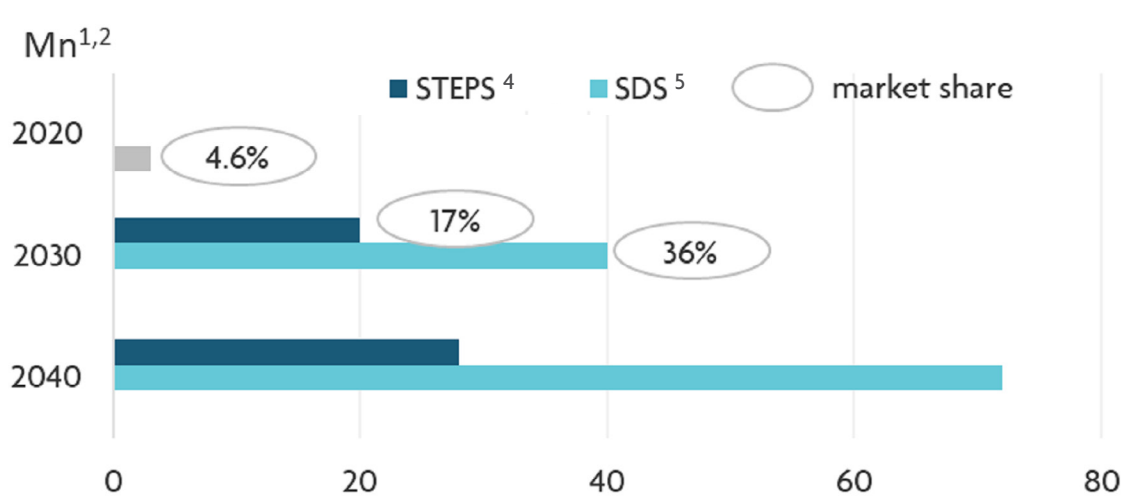
- + 40% electric car models compared to 2019 – 370 models available
- 90% battery cost over the last decade
- + 20 countries with plans to phase-out internal combustion engine car sales

### Europe overtaking China as the biggest market for electric car sales in 2020 (2015-2020)

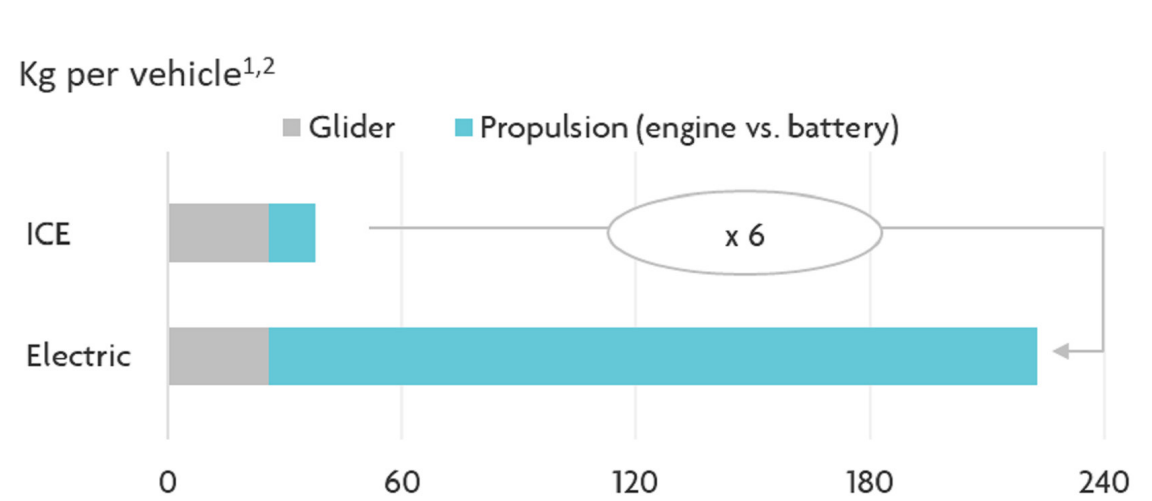
Thousand<sup>1</sup>



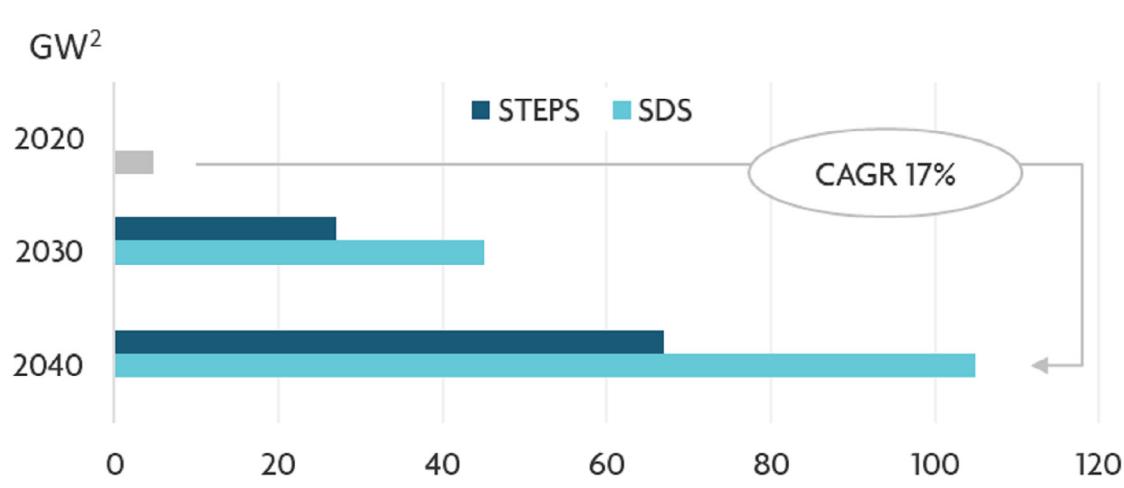
### Electric car sales are set to accelerate rapidly over the coming decades in different scenarios



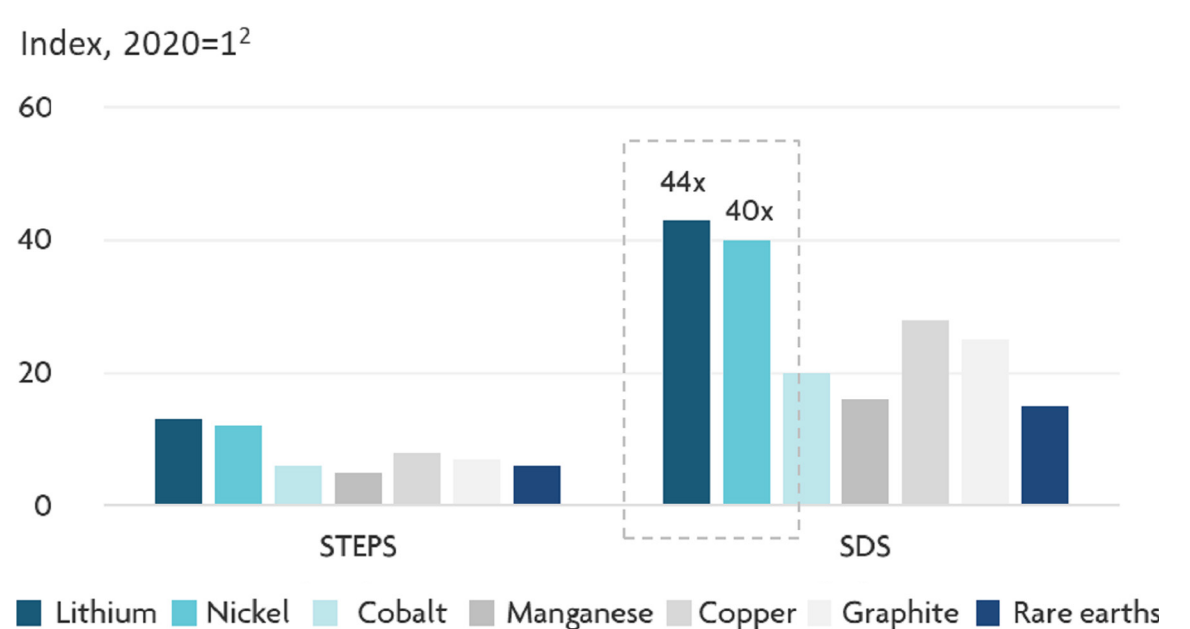
### EVs use around six times more minerals than conventional vehicles (2020)



### Battery storage capacity additions are expected to increase as well



### Mineral demand for EVs grows nearly 30 times in the SDS (2040)



### Battery development<sup>2,3</sup>

- Lithium-ion batteries were key to the electric mobility acceleration - greater energy density (90-260 Wh/kg vs. 35-40 Wh/kg in other technologies)
- The advent of solid-state batteries is considered critical to expand the energy density and promote further cost reduction – commercial viability is expected by 2030

1 / IEA – “Global EV Outlook 2021”, 2021; 2 / IEA – “The role of critical minerals in clean energy transitions”, 2021; 3 / BNEF – “Electric Vehicle Outlook 2021”, 2021; IEA – “World Energy Outlook”, 2021 STEPS – Stated Policies Scenario; SDS – Sustainable Development Scenario; 4 / Stated Policies Scenario: reflects the impact of existing policy frameworks and today’s announced policy intentions; 5 / Sustainable Development Scenario: outlines how the world can change course to deliver on the three main energy-related SDGs: to achieve universal access to energy (SDG 7), to reduce the severe health impacts of air pollution (part of SDG 3) and to tackle climate change (SDG 13)