Global Electric Vehicle Outlook 2022

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Dr Timur Gül, Dr Leonardo Paoli
Electric car sales continue to break records

Nearly 10% of global car sales in 2021 were electric, four times the market share in 2019. China leads global electric car sales followed by Europe and the United States, but the market share remains low in many emerging economies.
EVs secure an increasing market share across modes to 2030

Electric vehicles are set to play a key role for road transport to reduce emissions in line with countries’ climate goals; yet, for reaching net-zero emissions by 2050, the market share has to rise further to around 60% by 2030.
A change in road transport fuel use benefits climate

A strong push for EVs can meaningfully reduce oil use in the medium-term, with lasting impacts. The combined effect of EV uptake & power sector decarbonisation to meet government targets can save 500 Mt CO$_2$eq by 2030.
A new automotive industry supply chain is emerging

- Mining
- Raw material processing
- Cell component production
- Battery cell/pack production
- EV production
- Recycling/Re-use
Today’s EV value chain is centred around China

China produces three-quarters of all lithium-ion batteries and is home to most of global production capacity for key battery components. Over half of lithium, cobalt and graphite processing and refining capacity is in China.
Pressure on supply chains is set to increase as EVs expand to meet net zero ambitions. Expanding critical mineral supplies is important to meet future demand for batteries, but changes in battery chemistries could alter the Outlook.
Five recommendations to governments

1. Maintain and adapt support for electric cars
2. Kickstart the heavy-duty market
3. Promote adoption in emerging and developing economies
4. Expand EV infrastructure and smart grids
5. Ensure secure, resilient and sustainable EV supply chains