

Impact of coronavirus crisis on electrification of mobility

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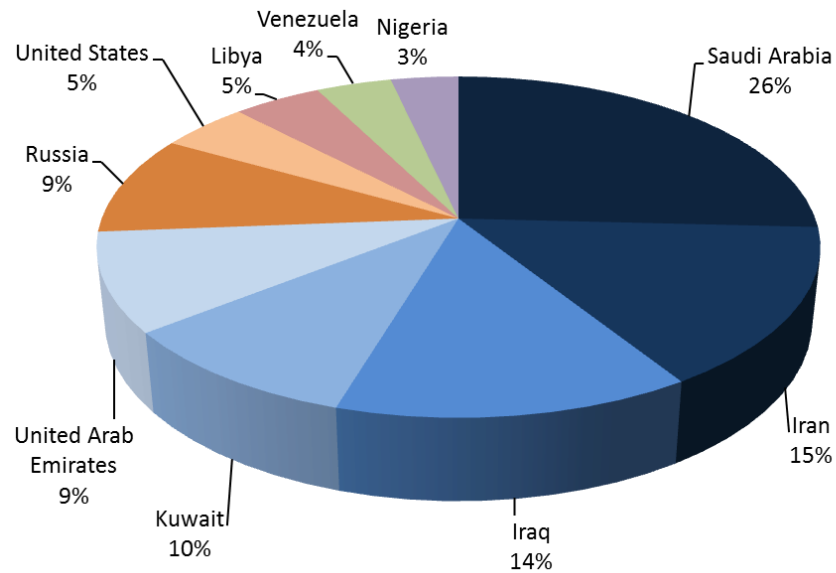


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Transport sector

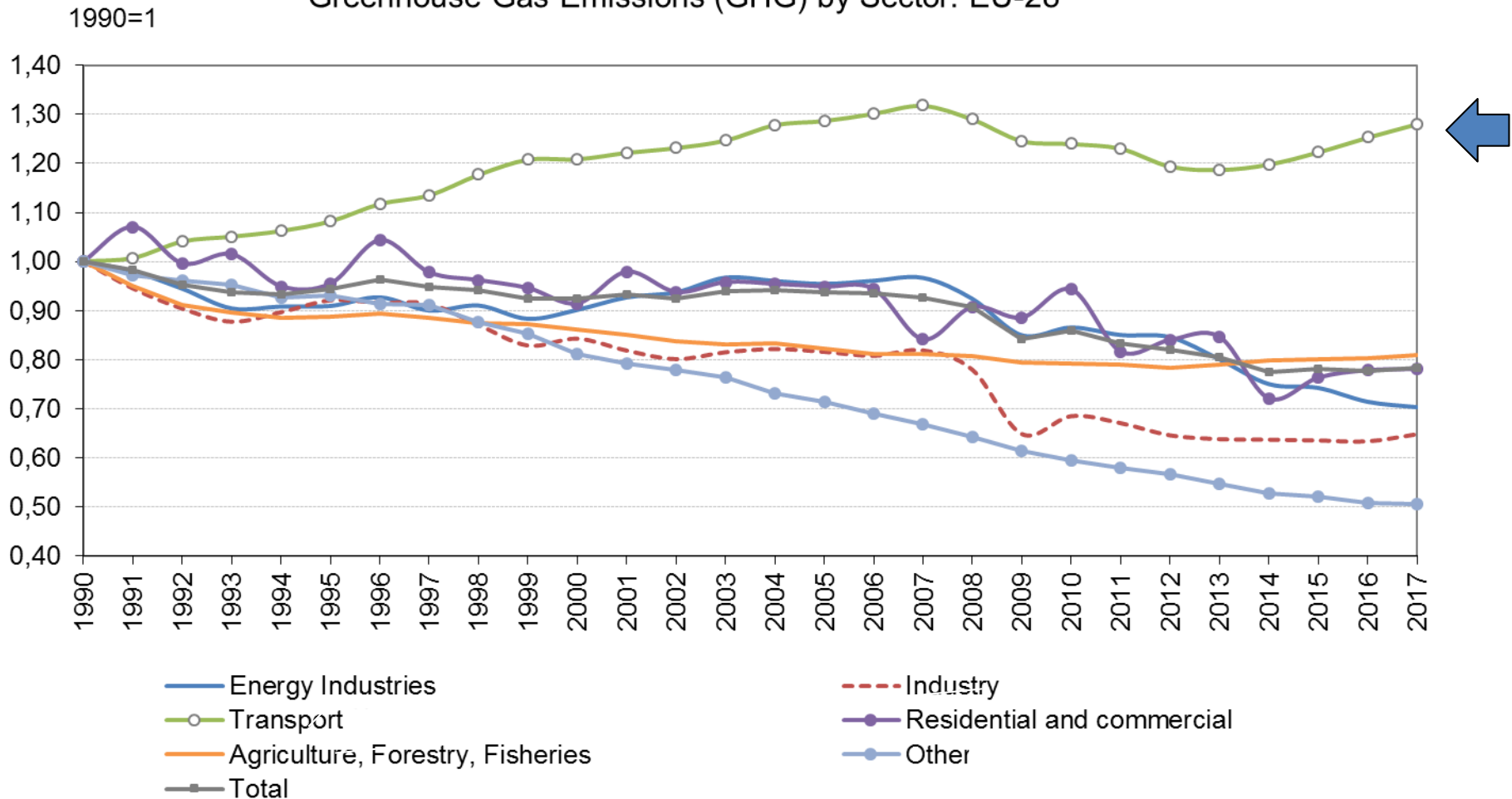
- oil products
- least-diversified
- energy import dependency



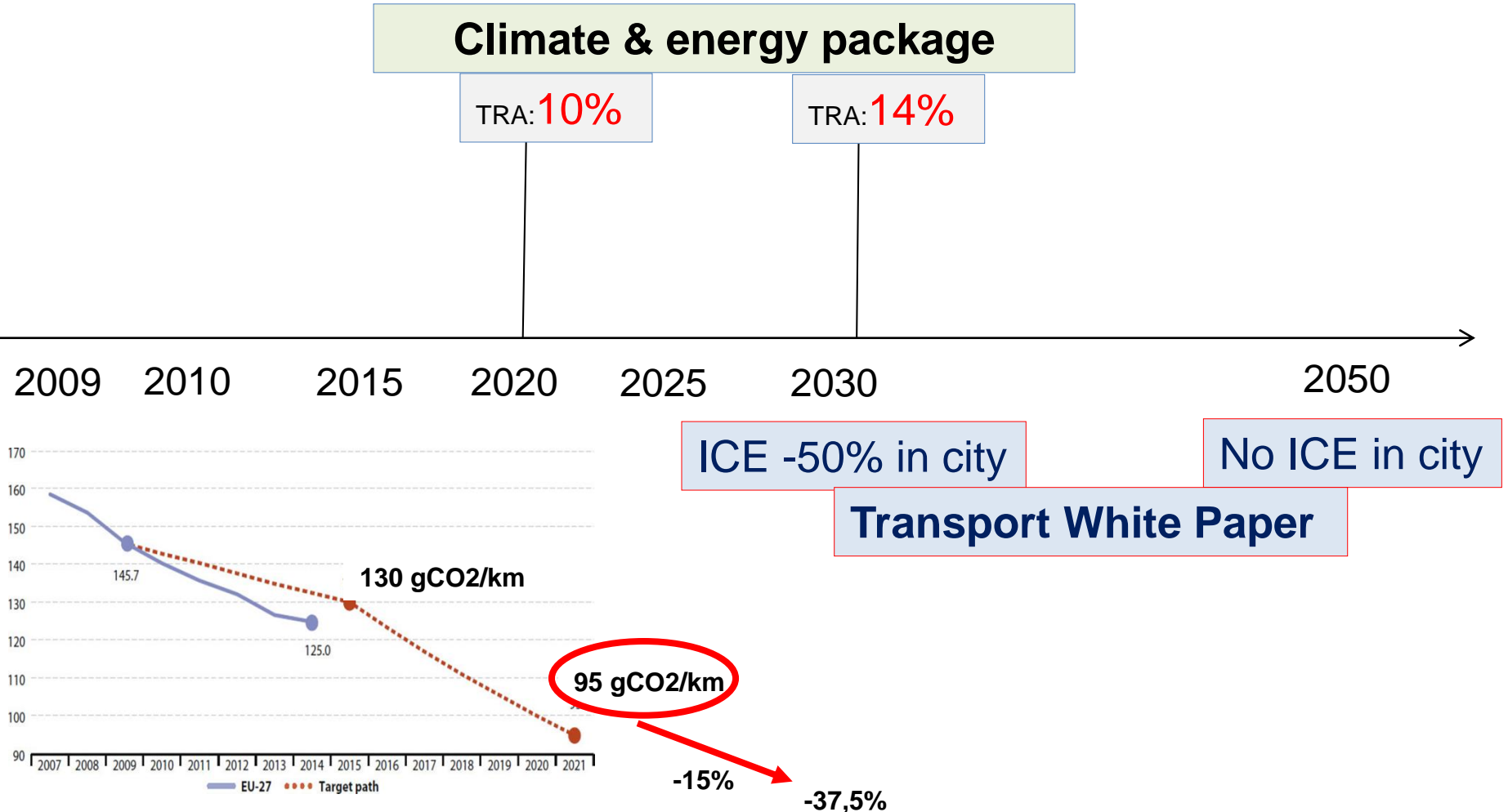
Countries with largest conventional oil reserves

GHG

Greenhouse Gas Emissions (GHG) by Sector: EU-28



EU targets



Targets and average CO₂ emissions from new passenger cars in EU countries

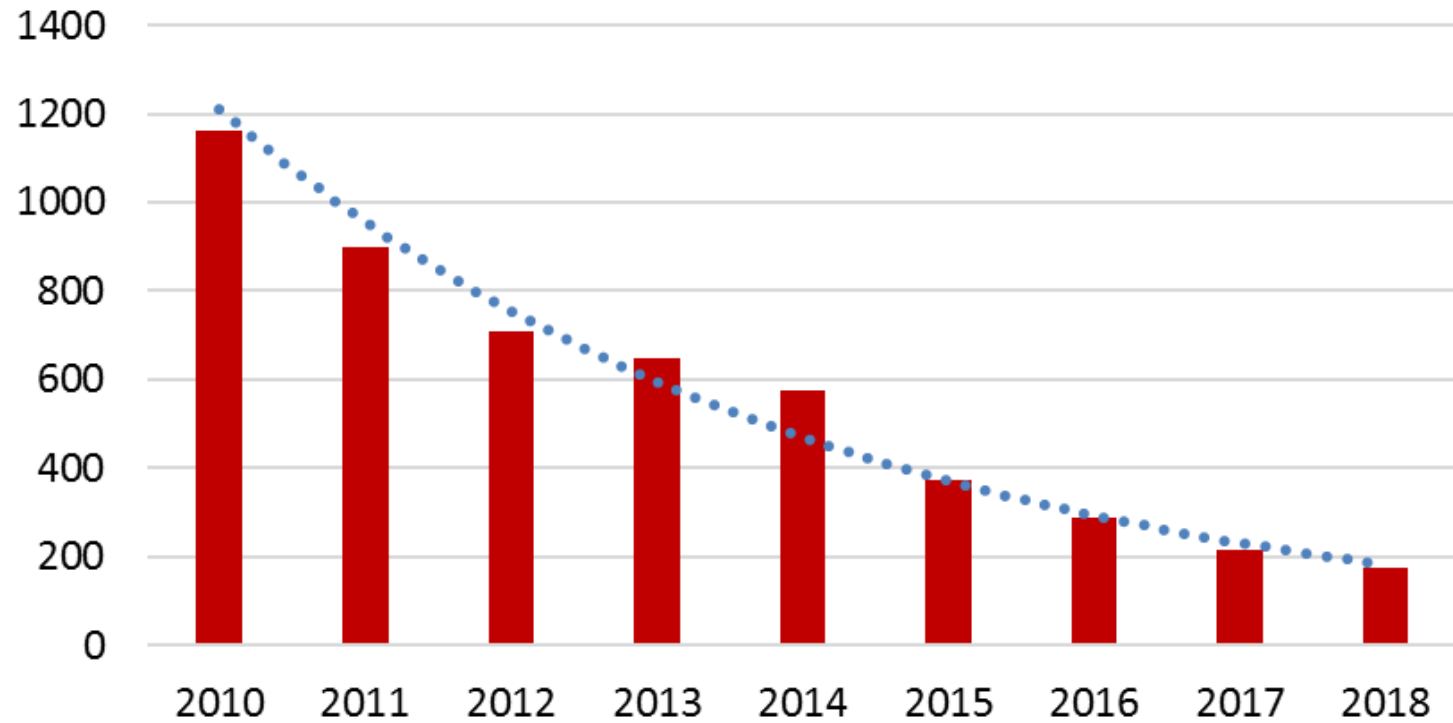
Electric vehicles

Paris Declaration on Electro-Mobility and Climate Change & Call to Action:

- ✓ more than 100 million EVs
- ✓ 400 million two and three-wheelers

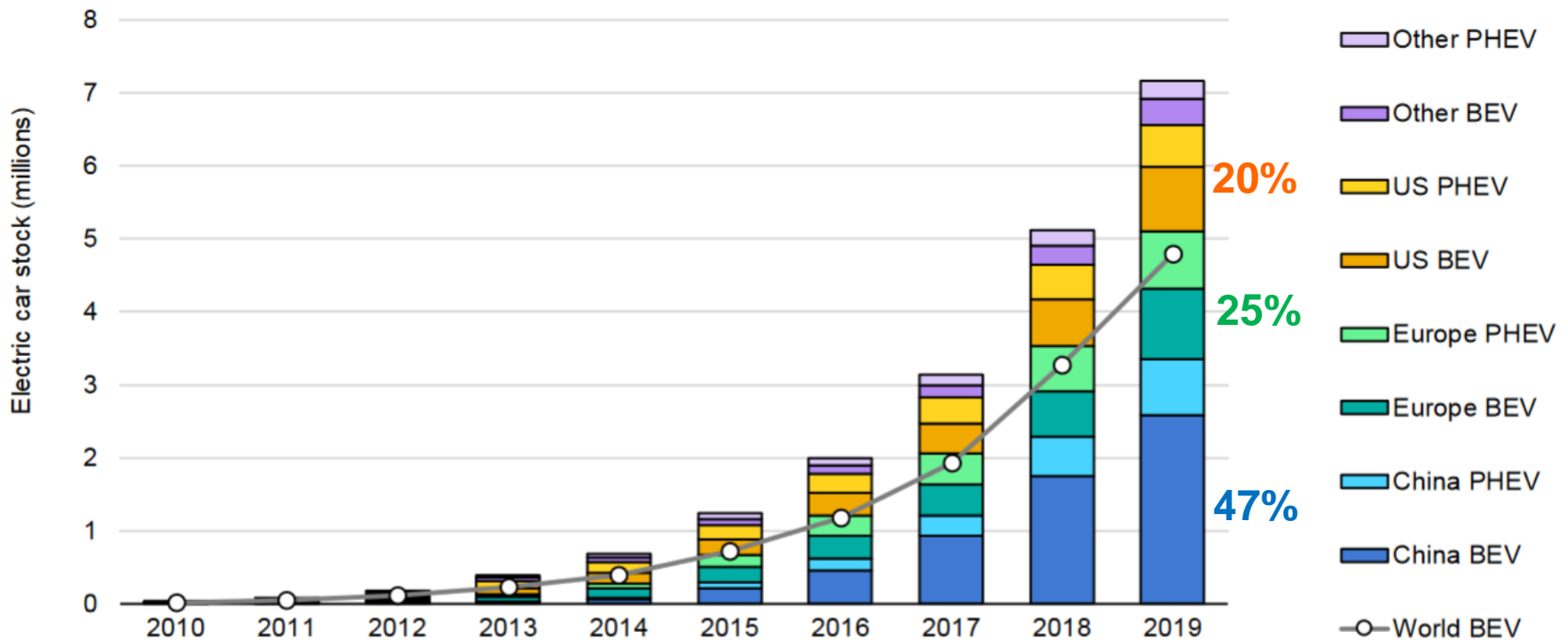
Battery

Battery pack price (\$/kWh)



Electric vehicles

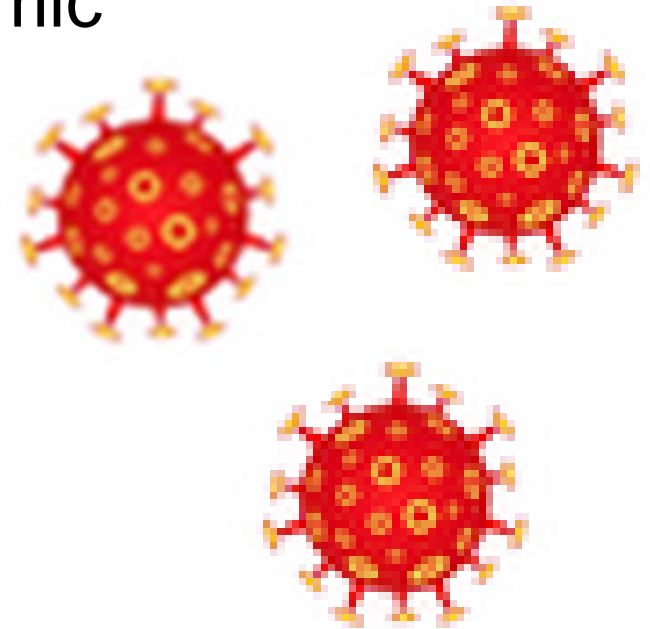
Development of the global stock of rechargeable EVs



COVID 19

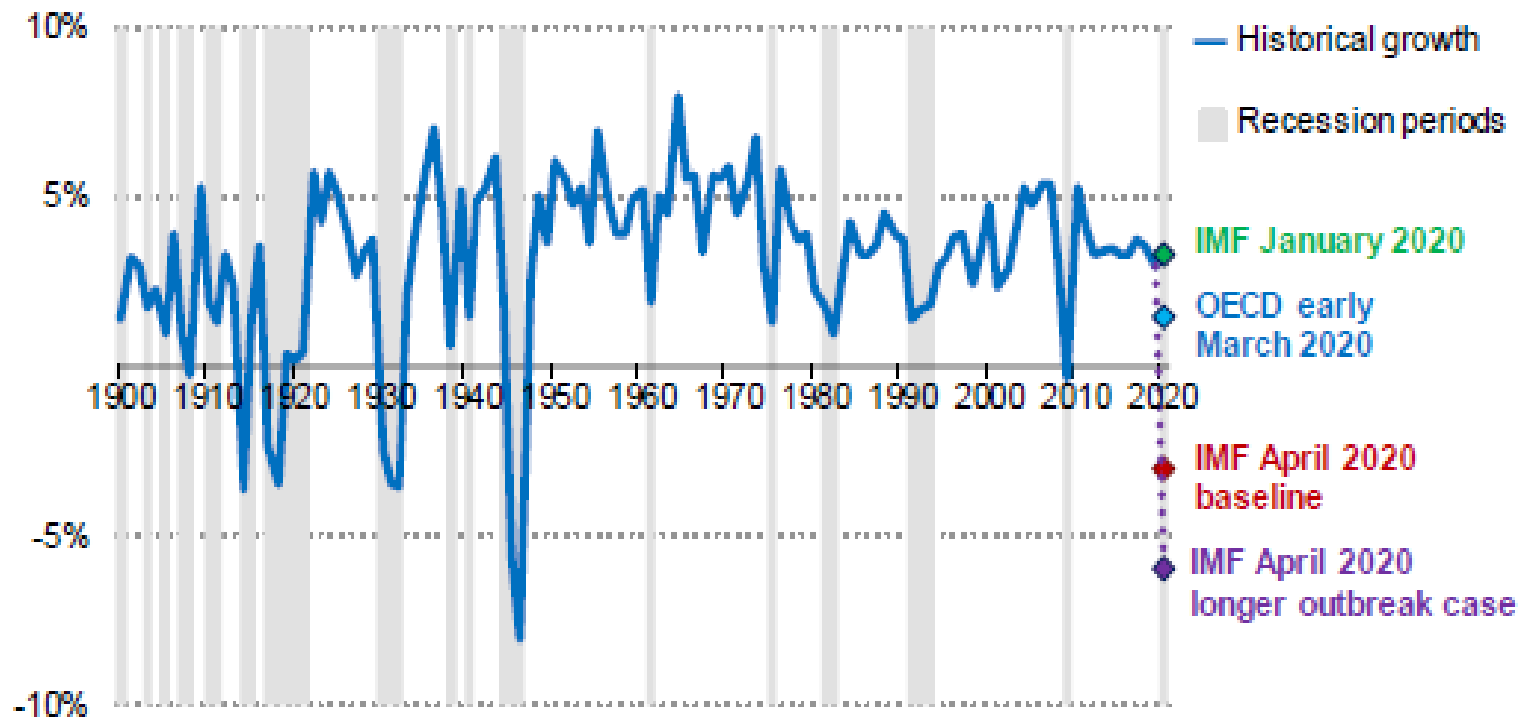
✓ 11 March 2020 – global pandemic

✓ Partial or total
lockdowns....55% of the
global population....60% of
global GDP



GDP

Global annual change in real gross domestic product (GDP), 1900-2020

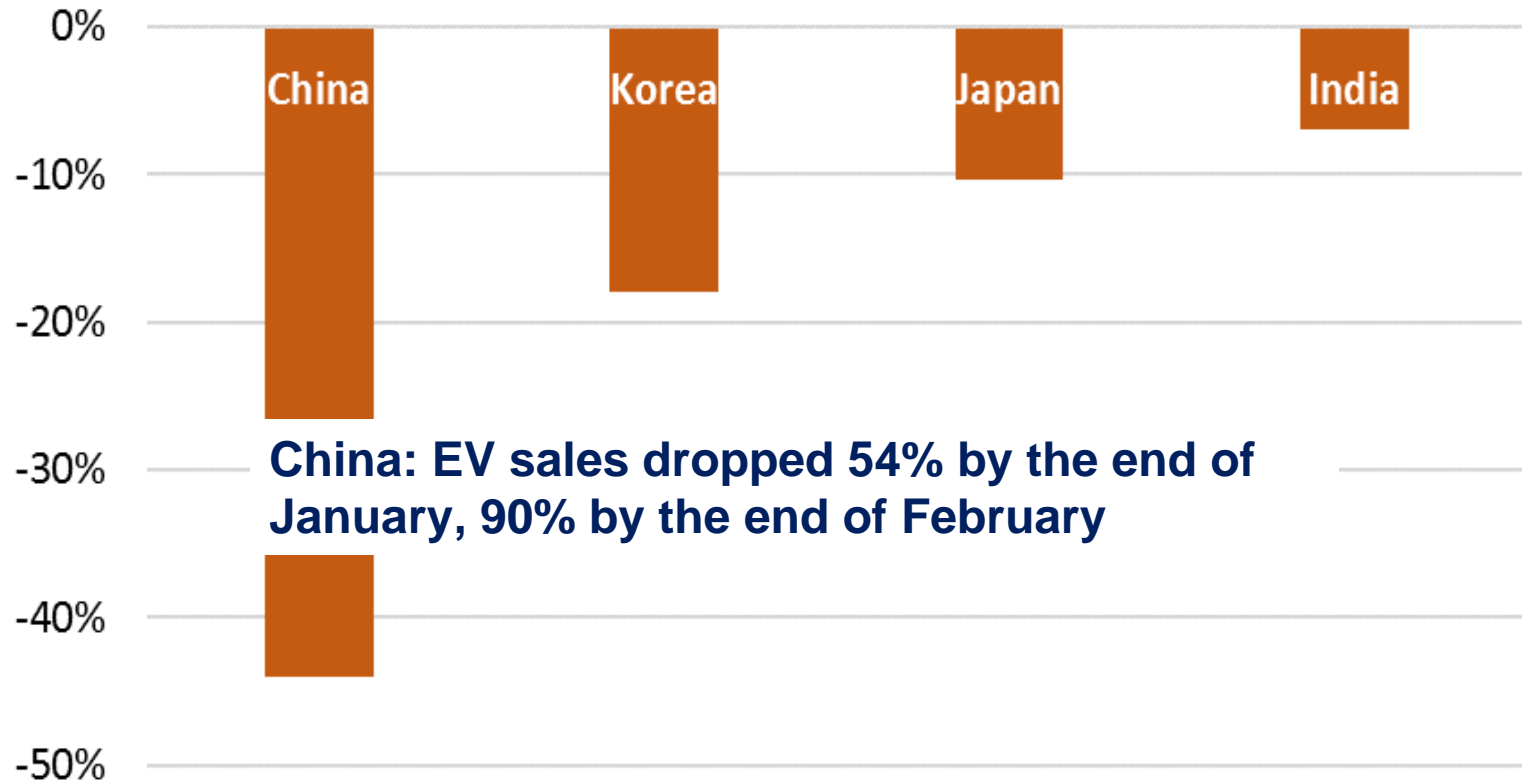


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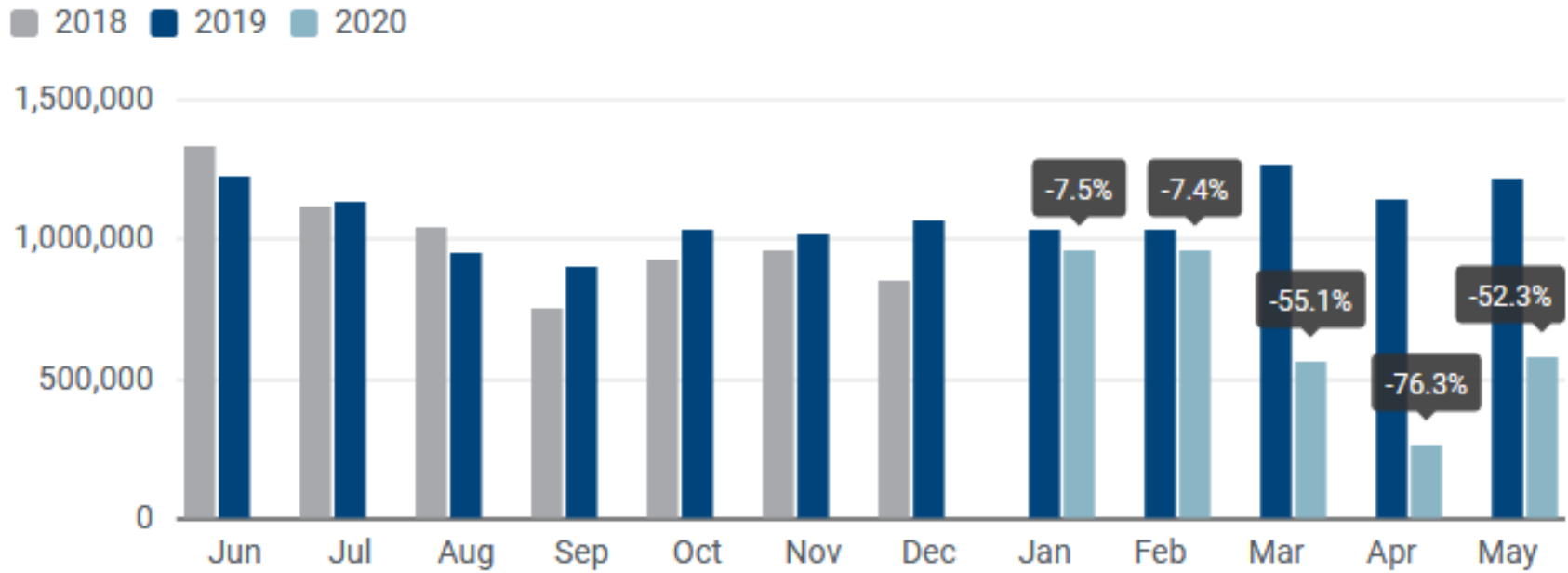
Sources: IEA based on IMF World Economic Outlook (January and April 2020), OECD Interim Economic Outlook Forecasts (March 2020) and Maddison Project Database (2018).

Auto industry

Car sales decline in selected countries
(January and February 2020)



Passenger car registrations, EU



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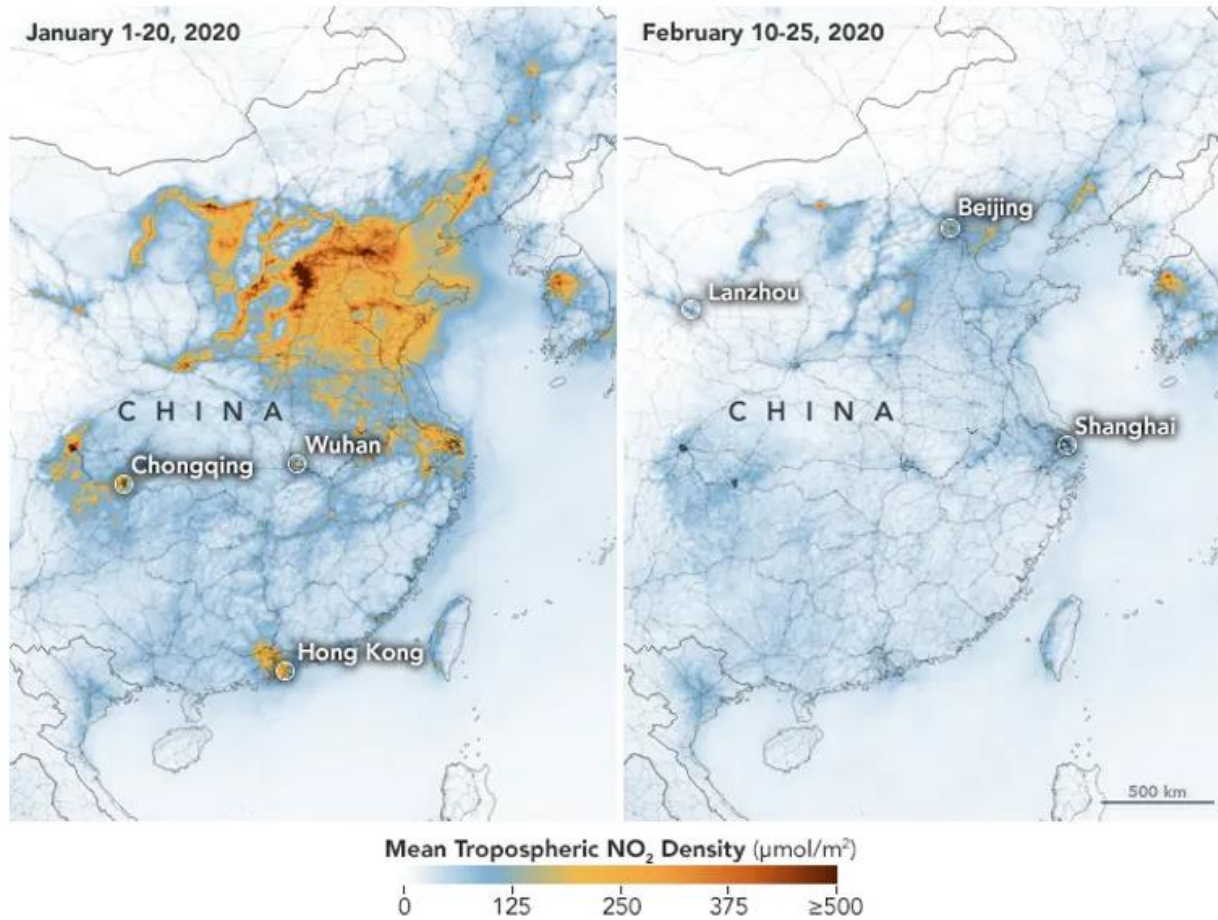
Source: ACEA

From January to May 2020, EU demand for new passenger cars contracted by 41.5%.

Electric vehicles

- ✓ Oil price drop
- ✓ China...leader in battery manufacturing...globalized EV supply chain
- ✓ Driving range

Short-term environmental benefits



As new daily cases of COVID-19 reached their peak in China, air pollution plummeted. ESA/NASA, Author provided

Conclusions

- ✓ High uncertainties regarding the long-term impacts of COVID-19... unclear how long and deep the crisis will be, and how the recovery path will look like
- ✓ ...transport demand will be reduced...increasing role of home-working, decrease of international travel
- ✓ Investment in electric vehicles
- ✓ ...unique opportunity to rethink the transport system

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