

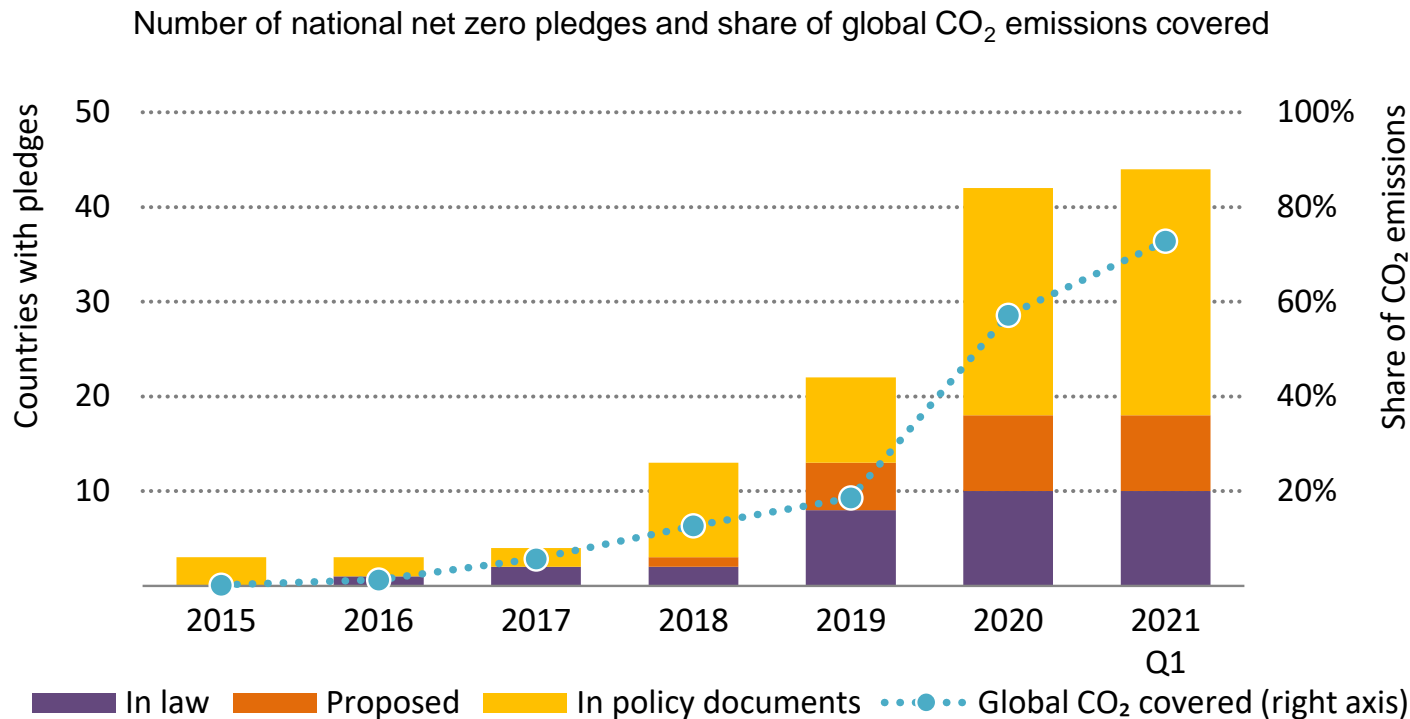


Transportation in a Net Zero by 2050 Scenario

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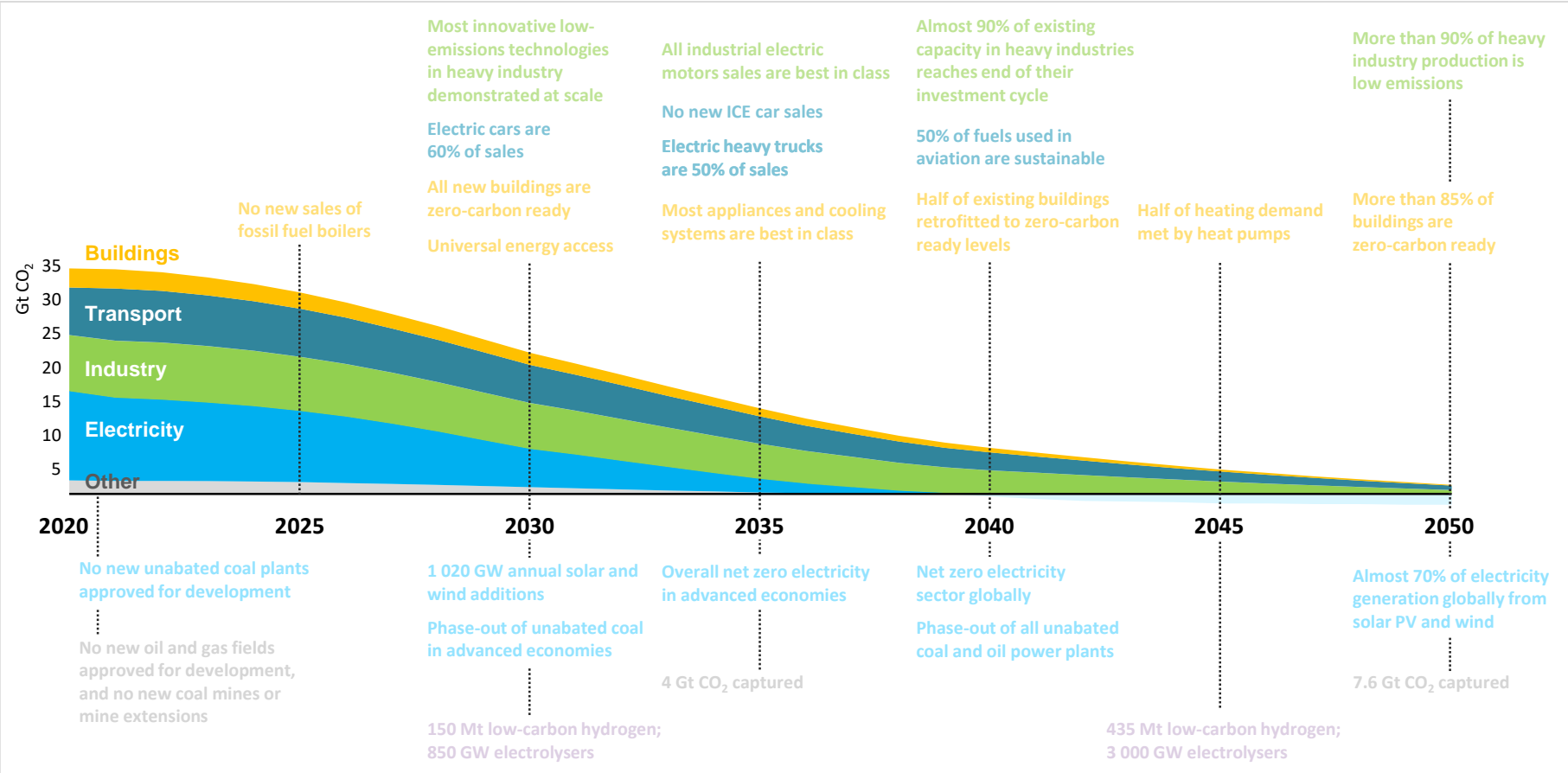
30 September 2021

Acceleration of national net-zero emissions pledges



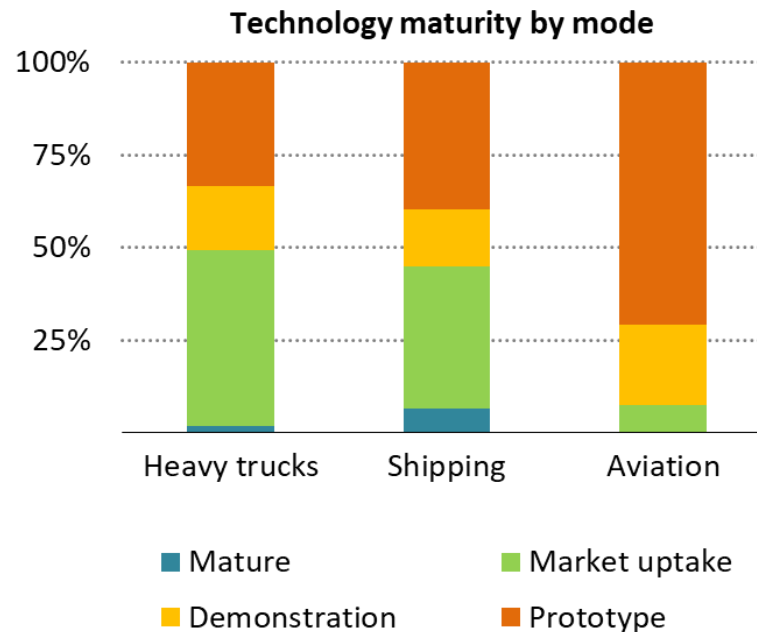
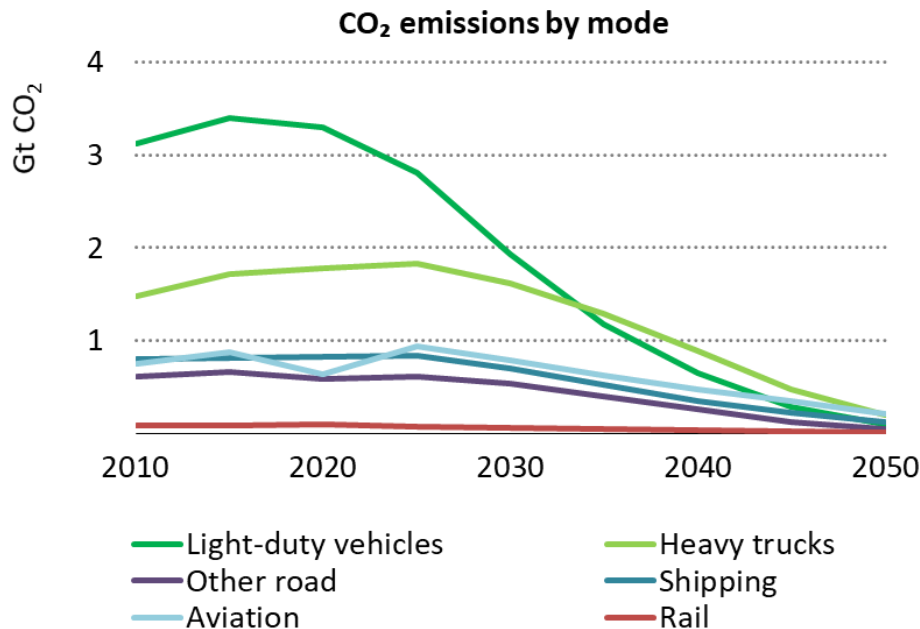
As of April 2021, 44 countries and the European Union have pledges to meet a net-zero emissions target: in total accounting for around 70% of global CO₂ emissions

Establish milestones to get on track for long-term targets



Addressing CO₂ emissions from transport

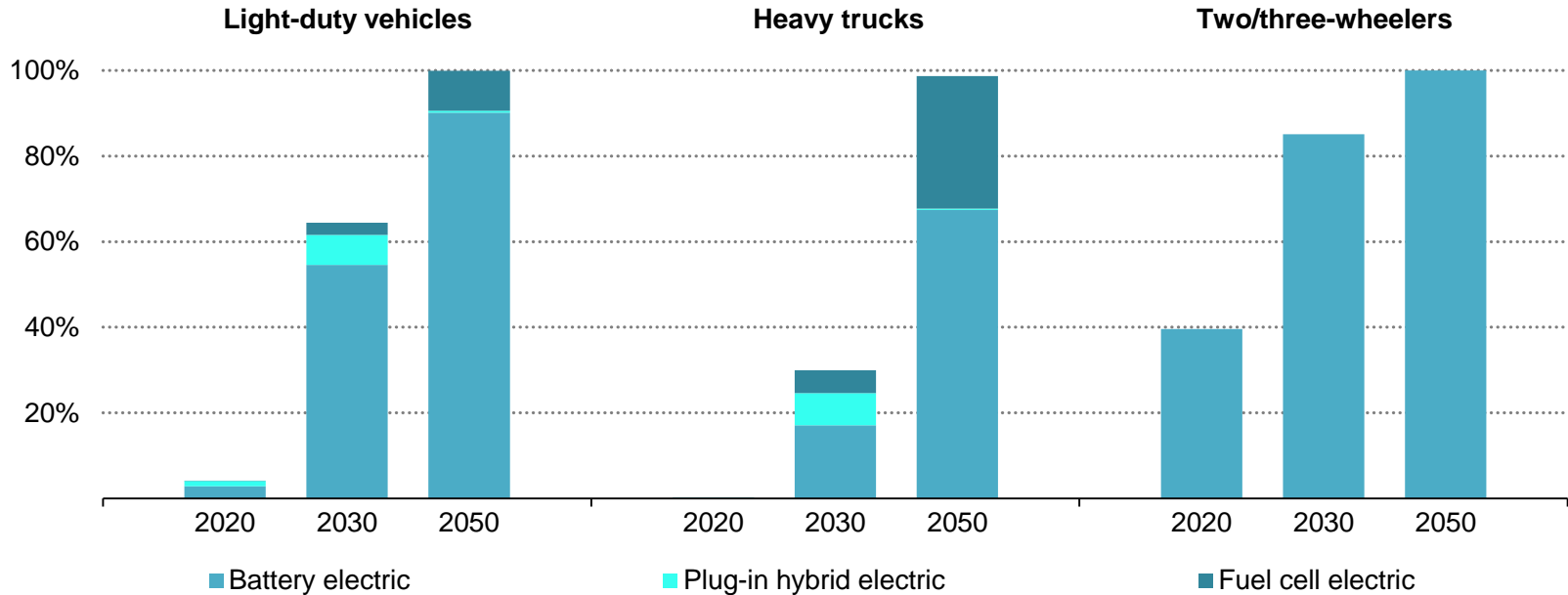
Global CO₂ transport emissions by mode and share of emissions reductions to 2050 by technology maturity in the NZE



Passenger cars can make use of low-emissions technologies in the market, but major advances are needed for heavy trucks, shipping and aviation to reduce their emissions

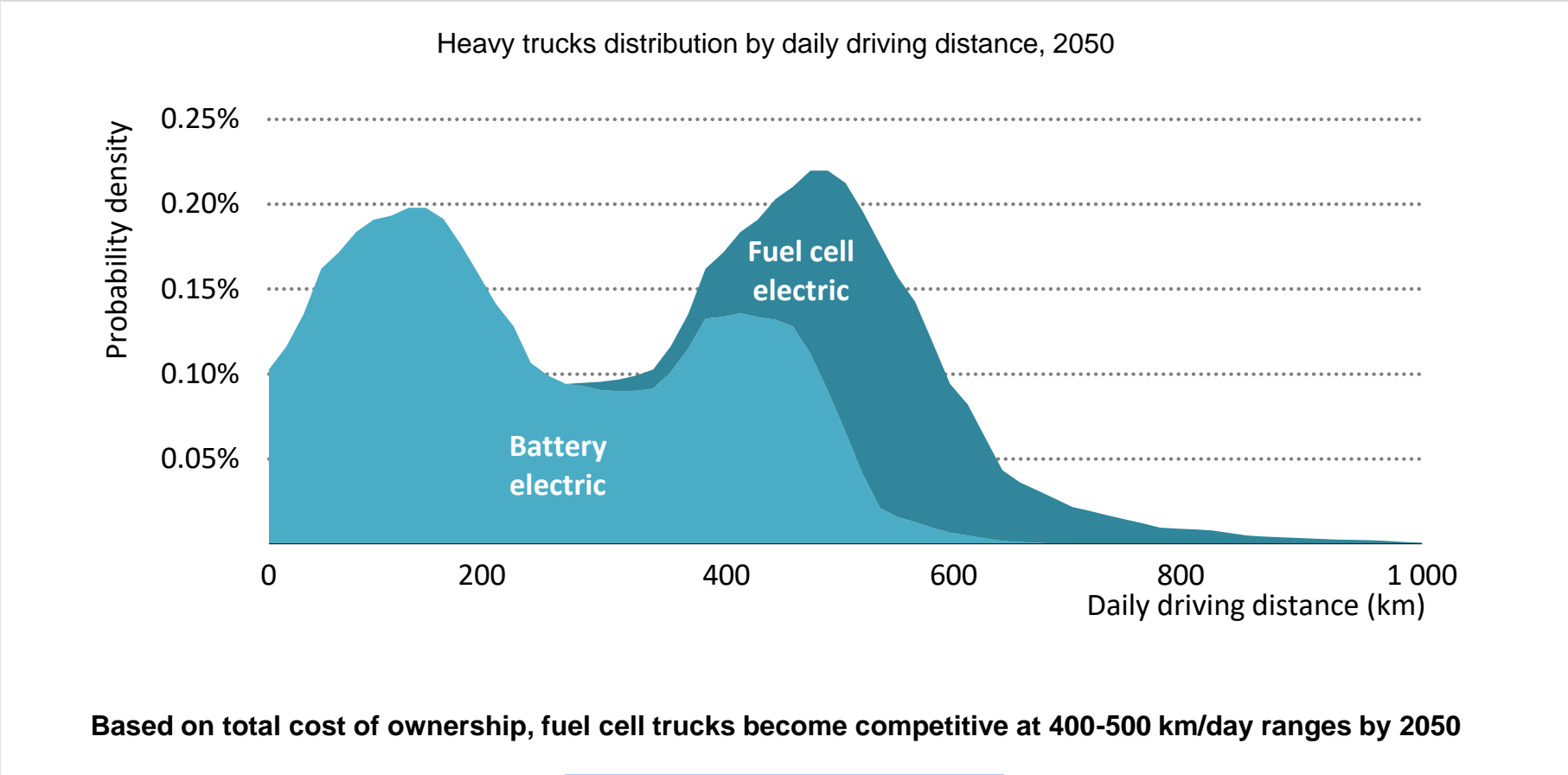
Almost all vehicle sales must be electrified by 2050

Global share of battery electric, plug-in hybrid and fuel cell electric vehicles in total sales by vehicle type in the NZE



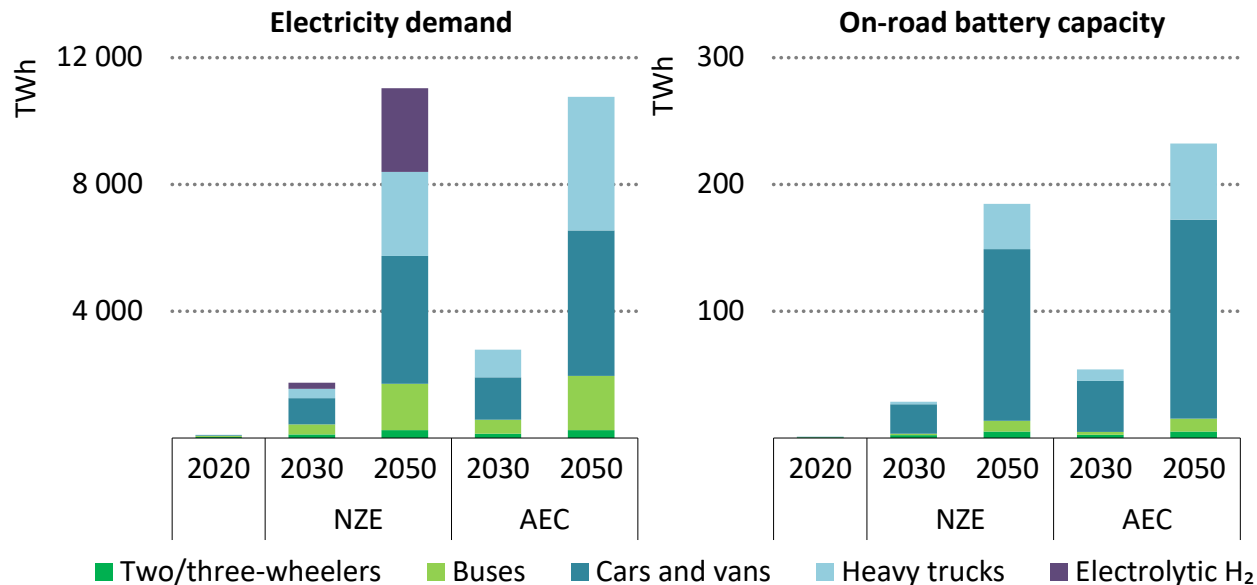
Sales of battery electric, plug-in hybrid and fuel cell electric vehicles soar globally across all modes of road transport

Driving distance is a key factor in truck powertrain choice



All-electric approach to decarbonising road transport

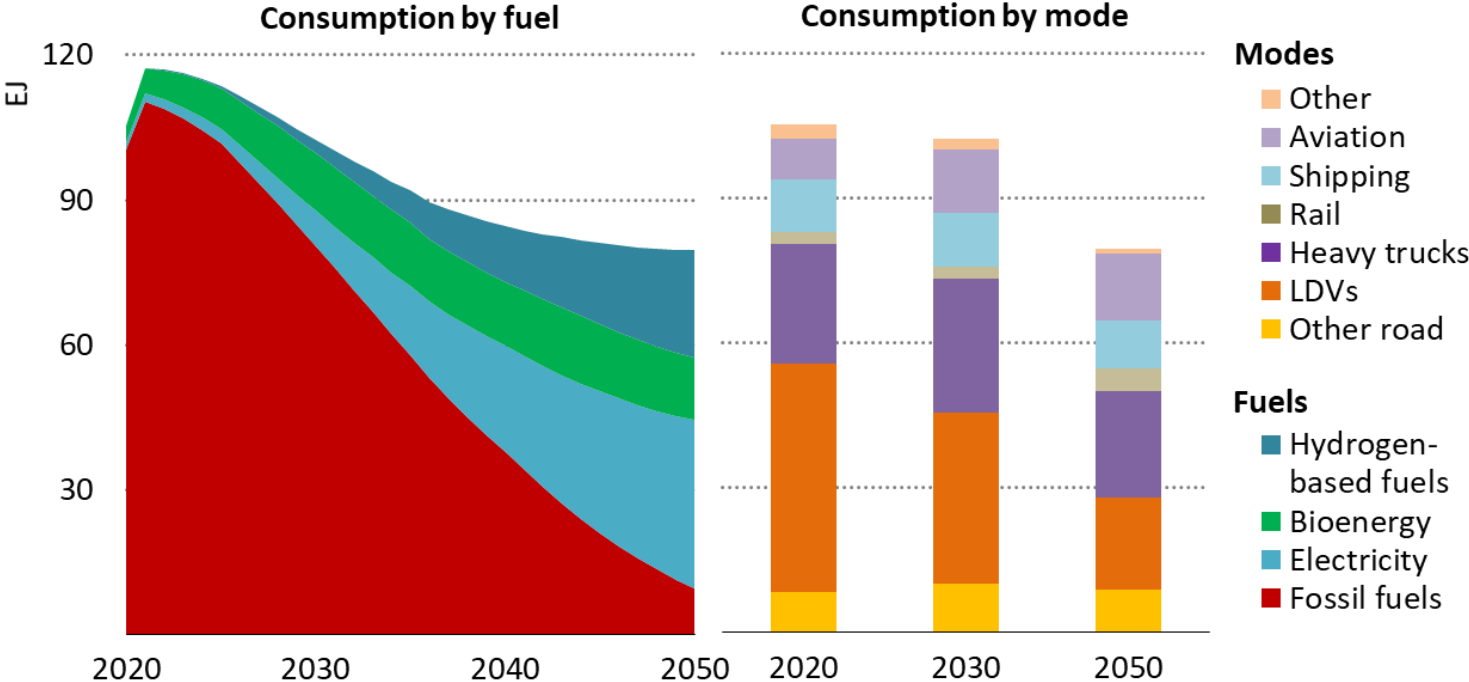
Global electricity demand and battery capacity for road transport in the NZE and All-Electric Case



In the All-Electric Case, annual battery capacity additions in 2030 would be almost 9 TWh, requiring an additional 80 giga-factories compared to the NZE

Fossil fuels represent 10% of transport energy in 2050

Global transport final consumption by fuel type and mode in the NZE



Electricity and hydrogen-based fuels account for more than 70% of transport energy demand by 2050

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