



# The Role of Oil in the IEA's World Energy Outlook Scenarios

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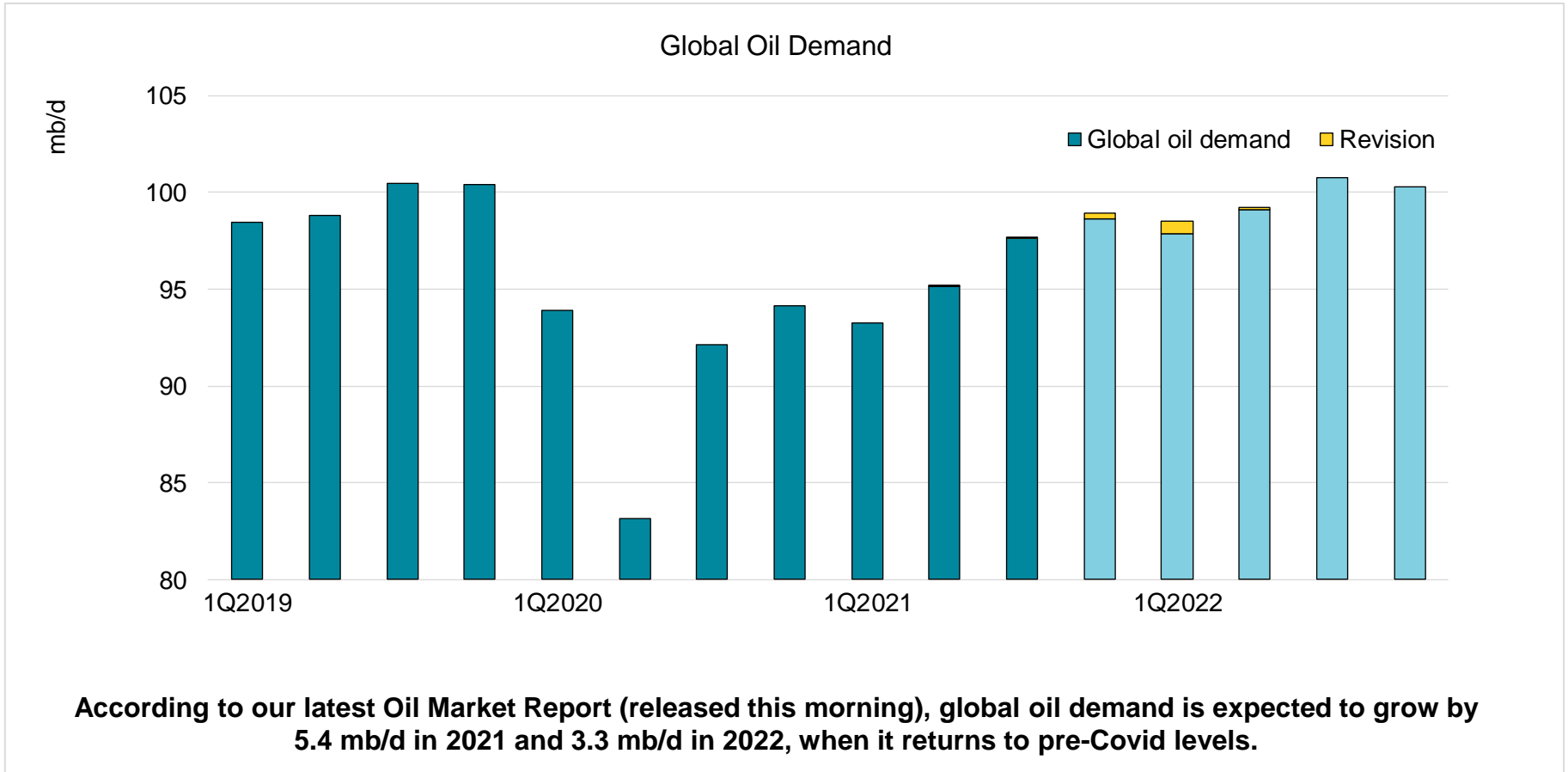
# Peak oil – this time for real?

The ends of the oil age at 80, 92 and 100 million barrels/day respectively

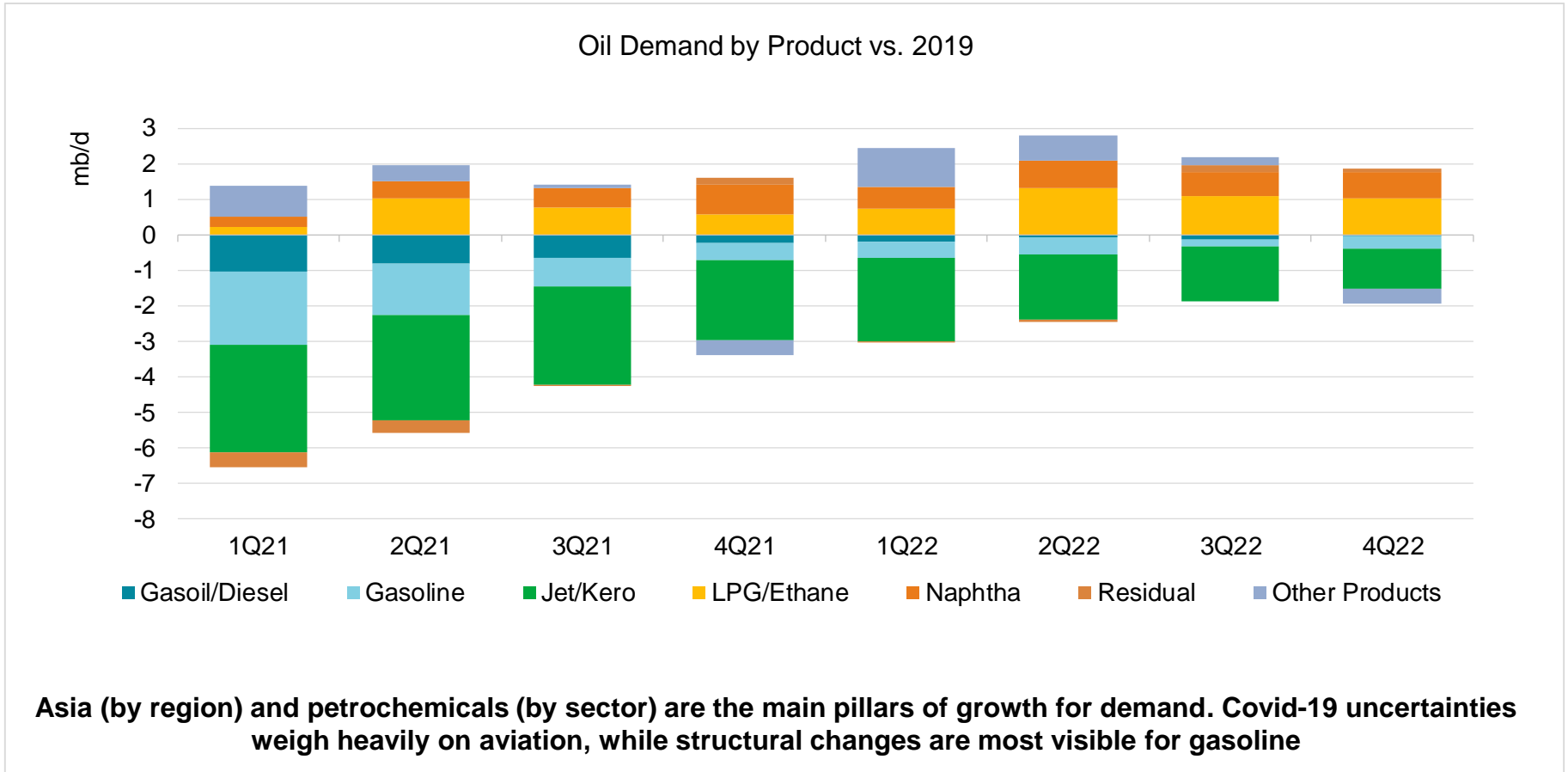


In the decade between the financial crisis and Covid-19, global oil demand growth continued to grow

# Latest Covid wave expected to slow, not derail, oil demand recovery

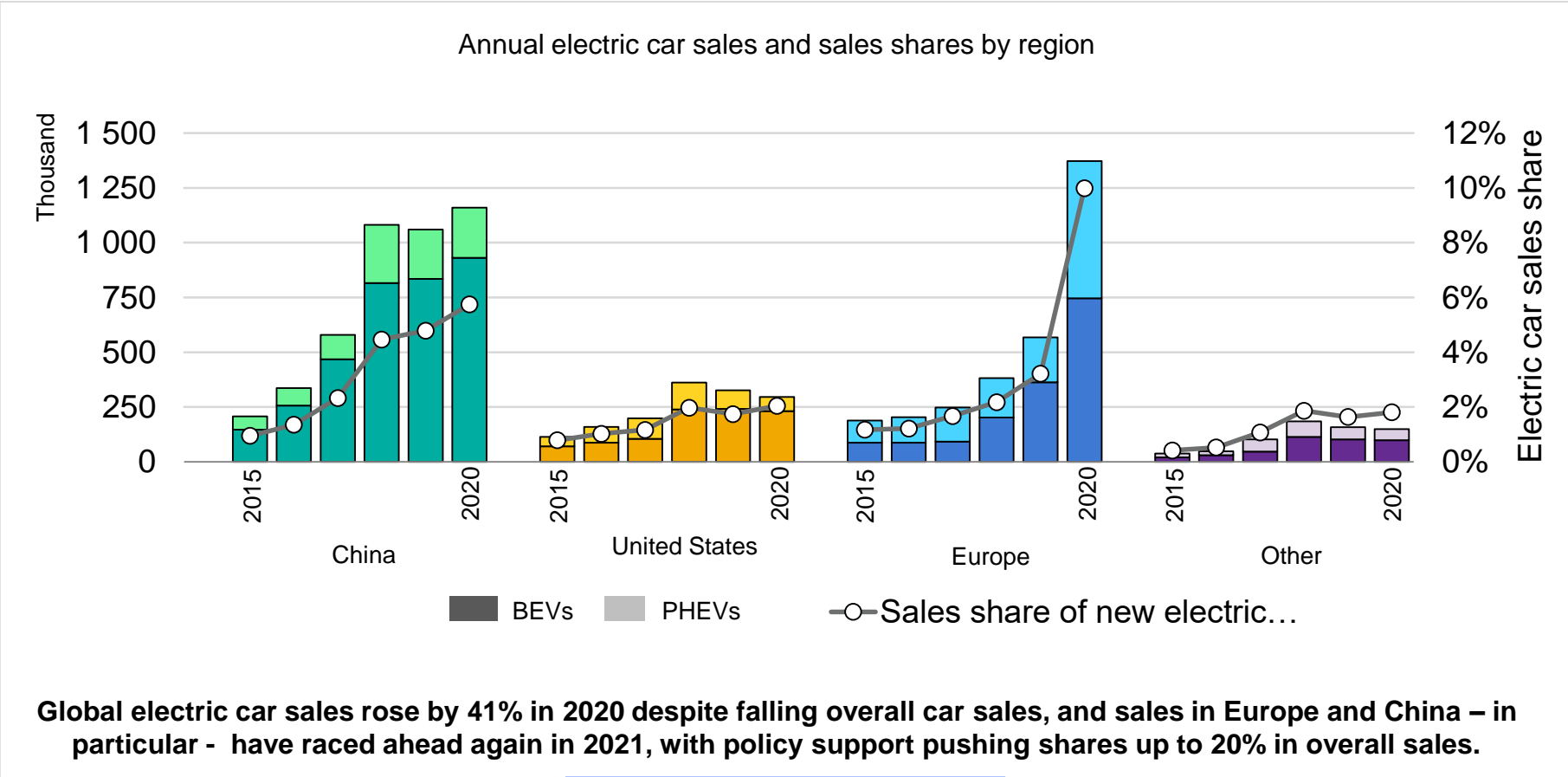


# Jetfuel, gasoline seeing the slowest recovery



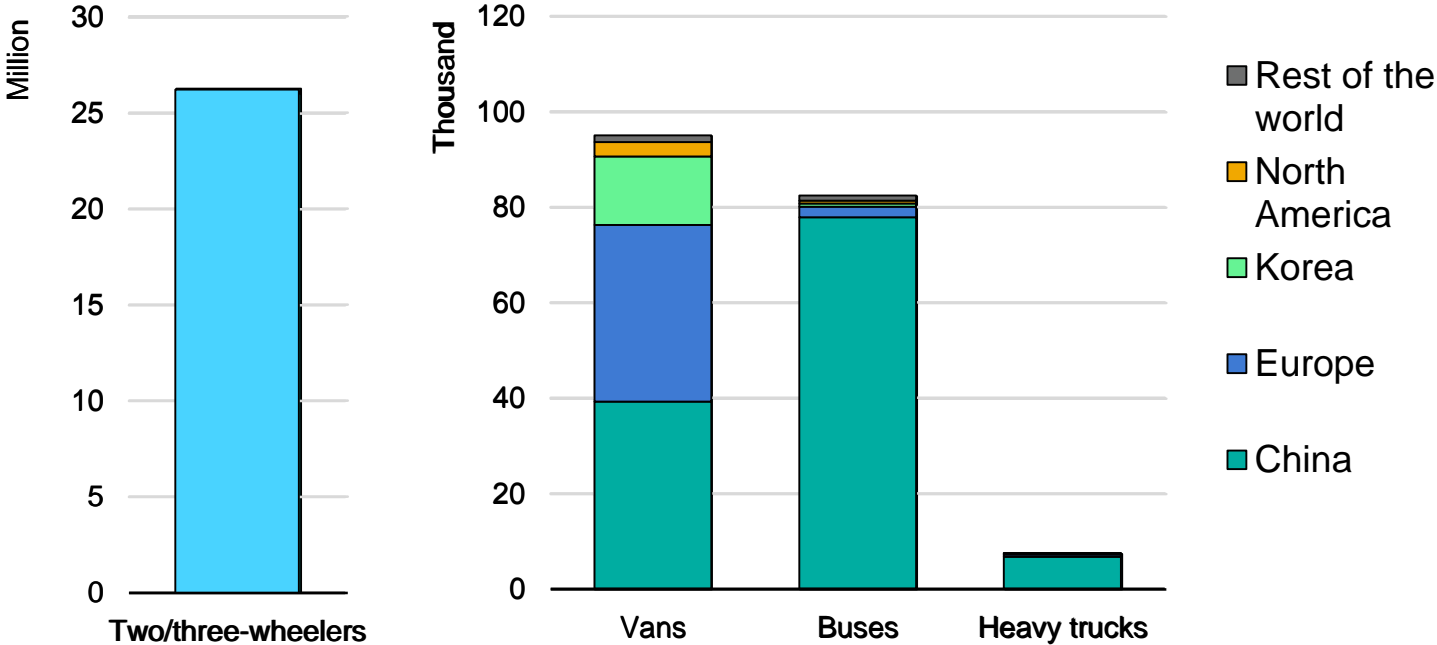
**Asia (by region) and petrochemicals (by sector) are the main pillars of growth for demand. Covid-19 uncertainties weigh heavily on aviation, while structural changes are most visible for gasoline**

# EVs provide the clearest signs of structural change



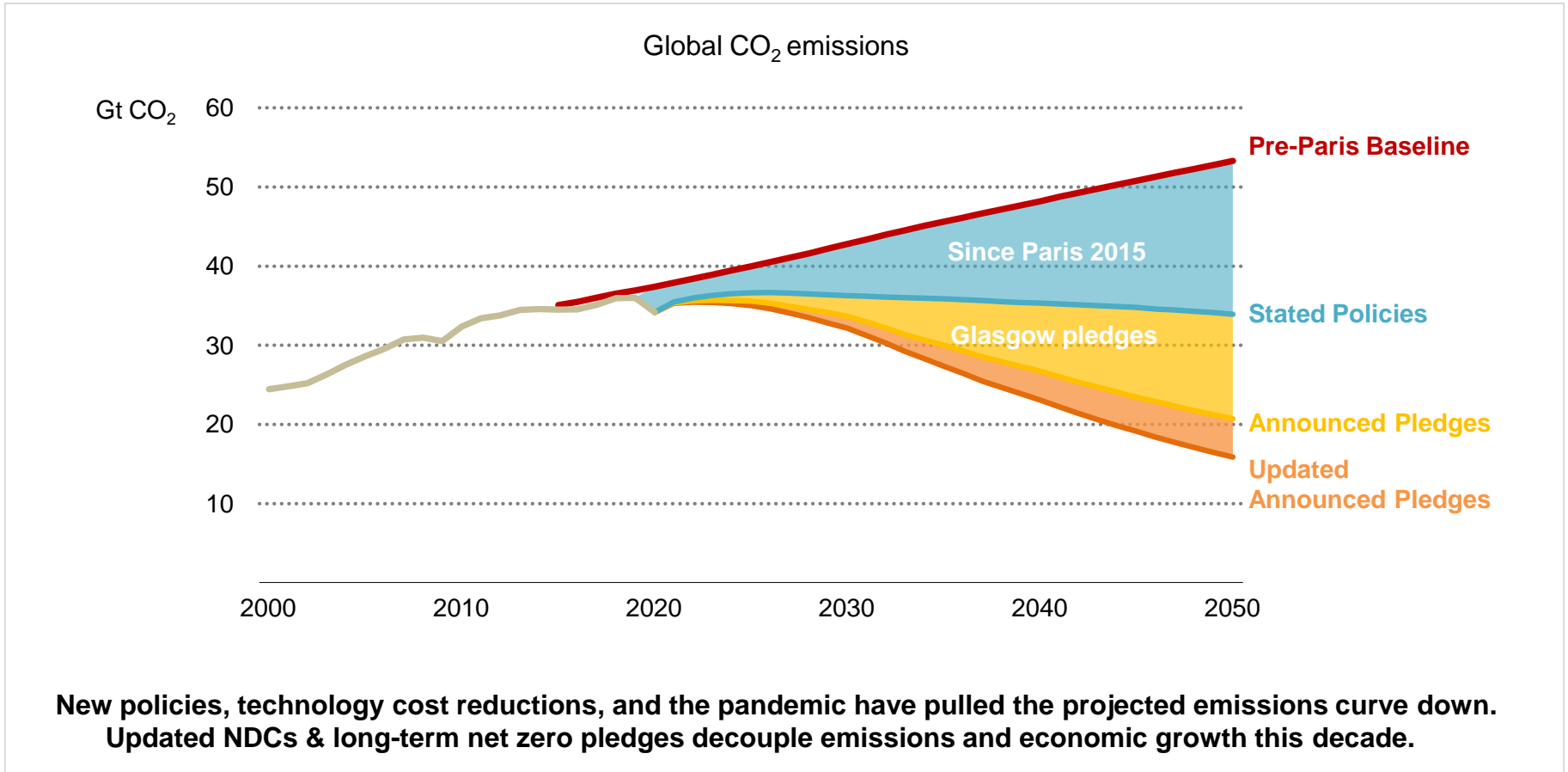
# Road transport electrification beyond cars

Electric vehicles sales by transport mode and region, 2020

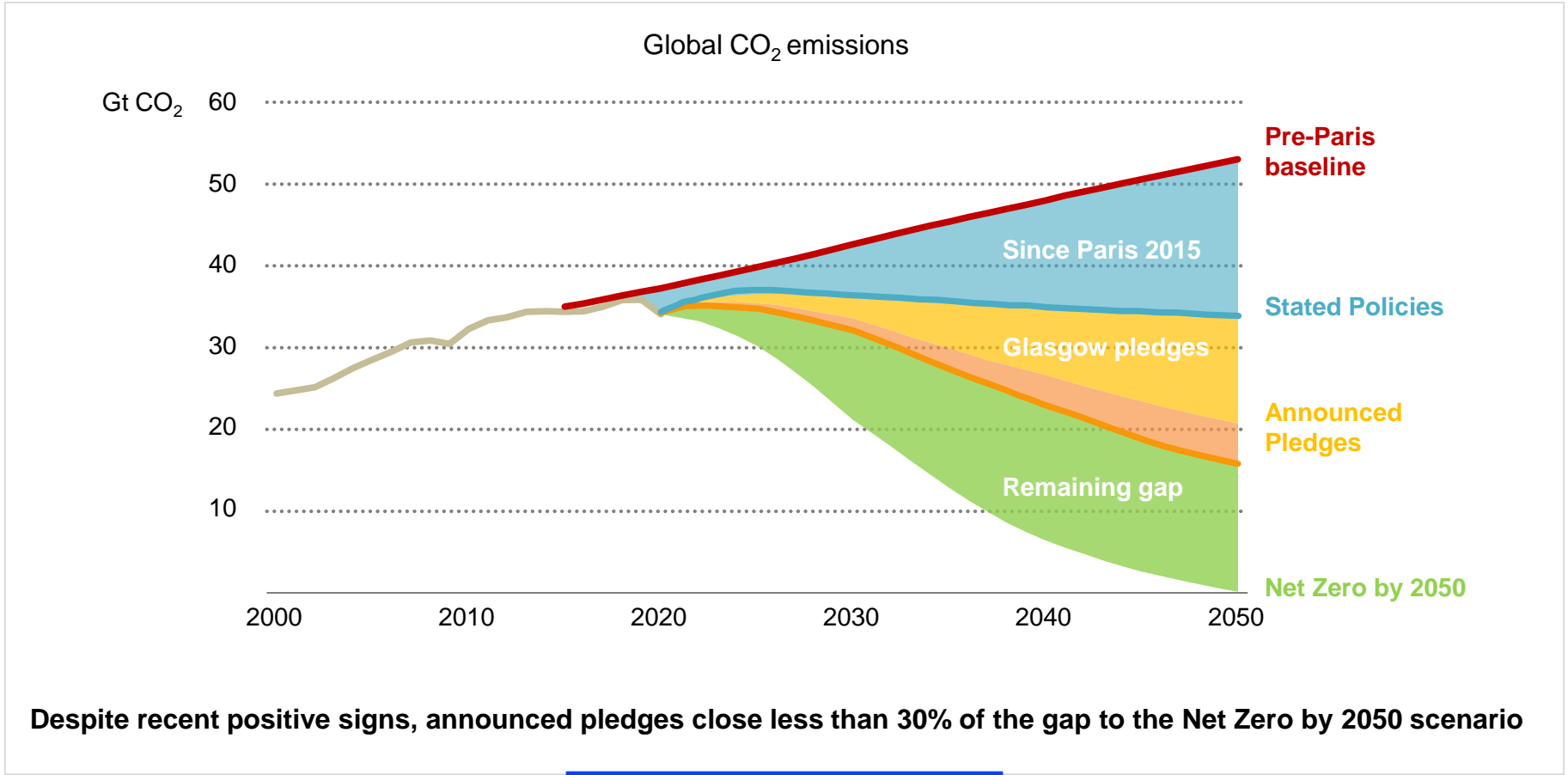


**Sales of electric two-and three-wheelers are one order of magnitude higher than sales of electric cars. The electrification of other modes is lagging behind but is rising.**

# The world is starting to bend the emissions curve

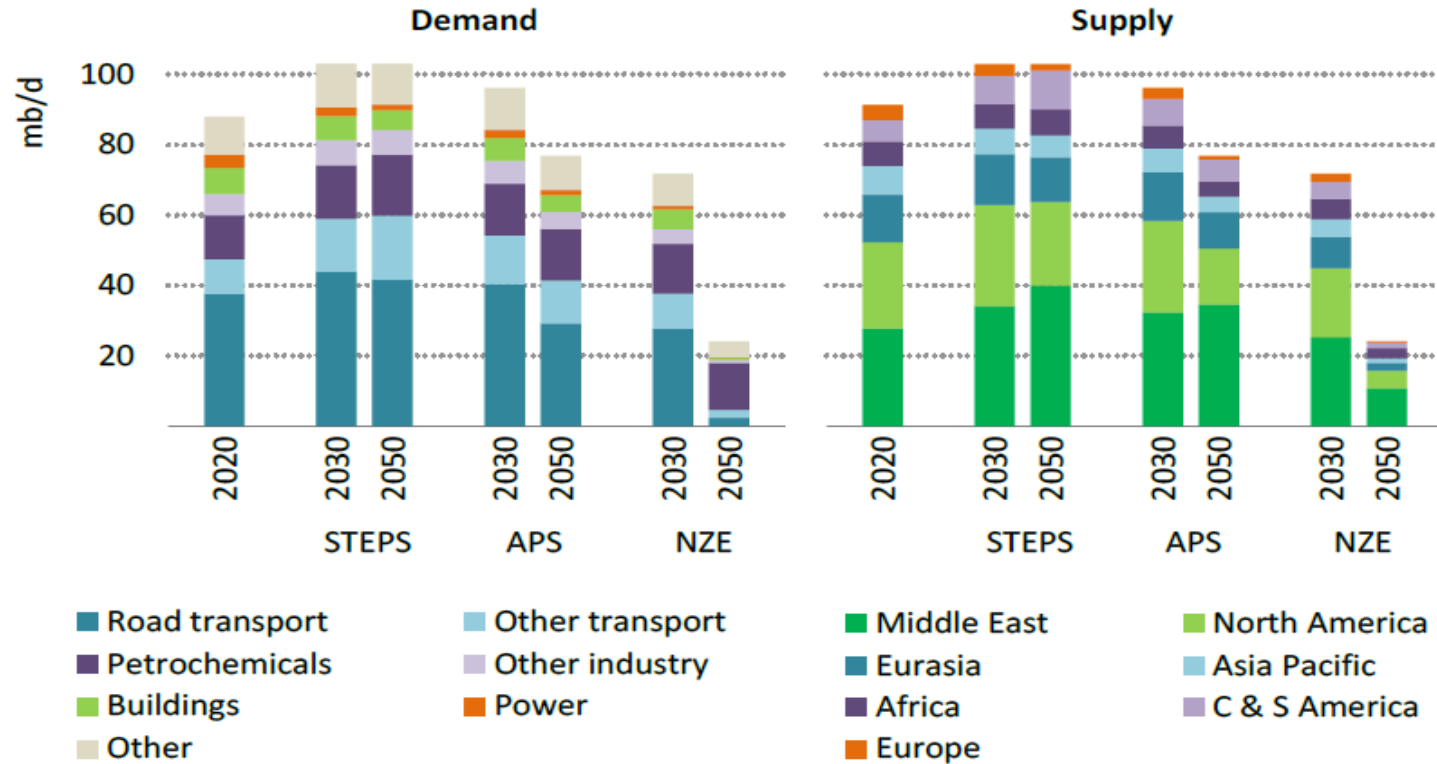


# A large ambition gap remains in 2030



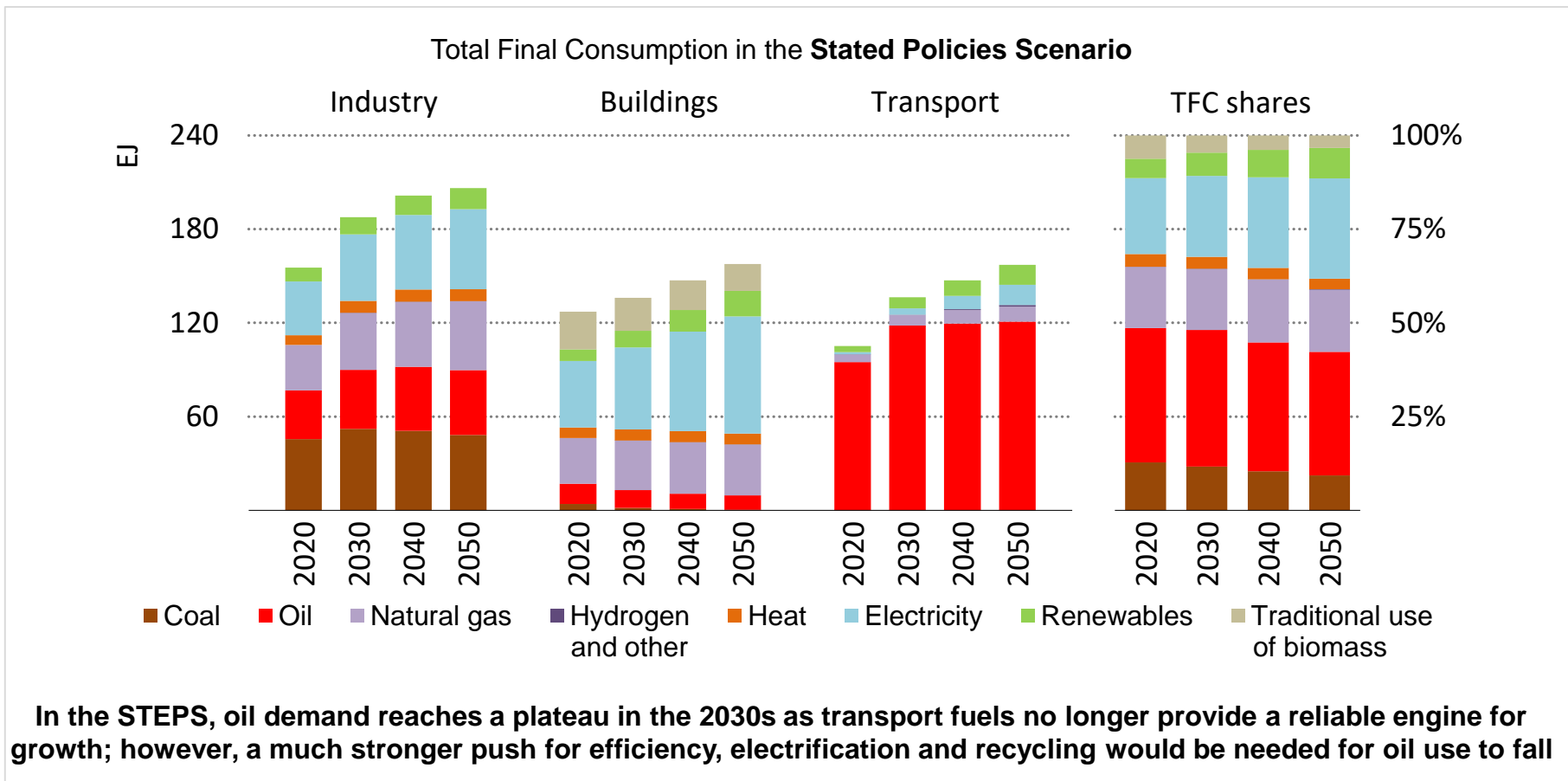


# Wide variation for oil across the scenarios

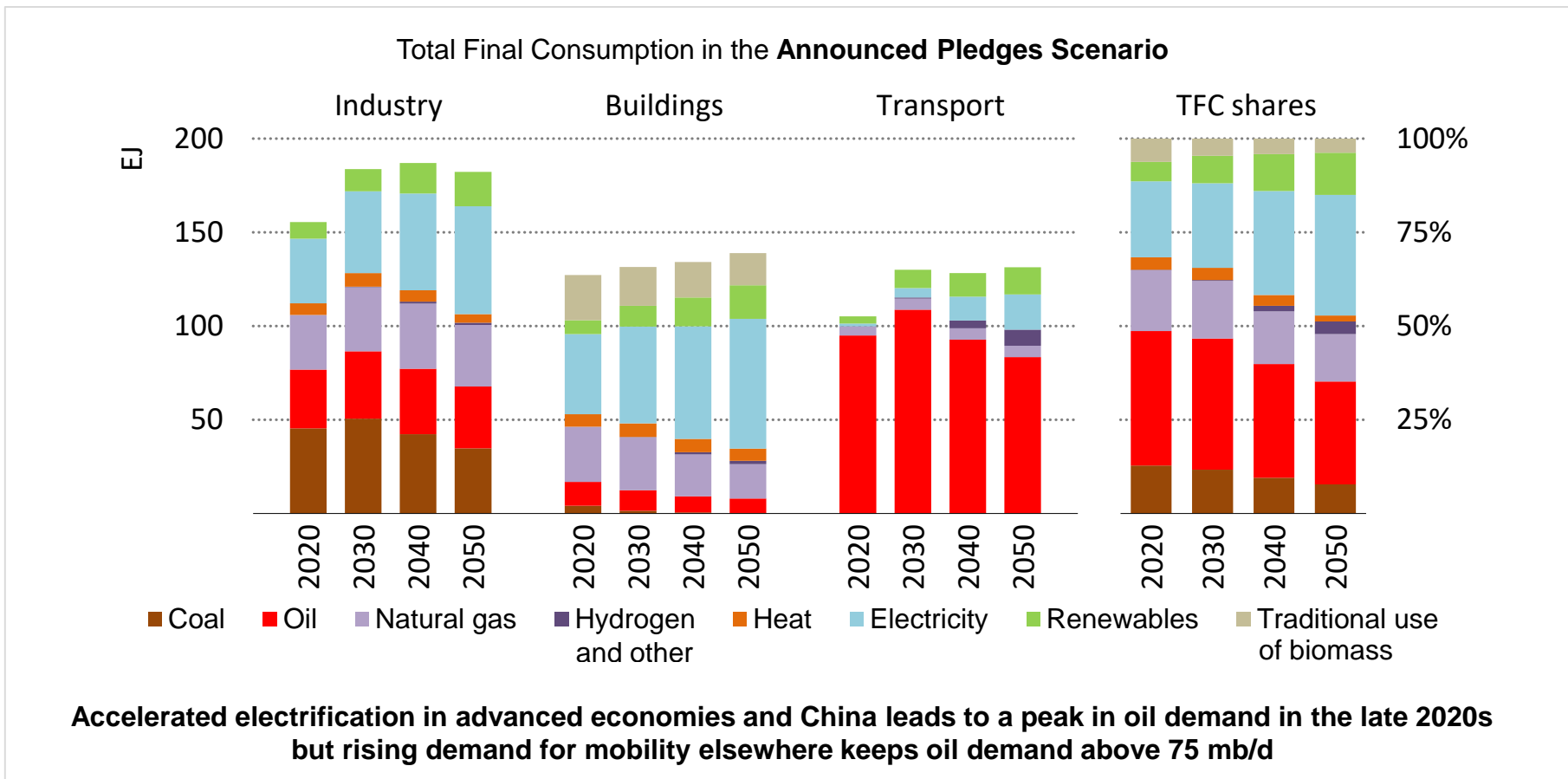


STEPS = Stated Policies Scenario; APS = Announced Pledges; NZE = Net Zero Emissions by 2050

# Stated Policies: a last decade of growth in oil consumption

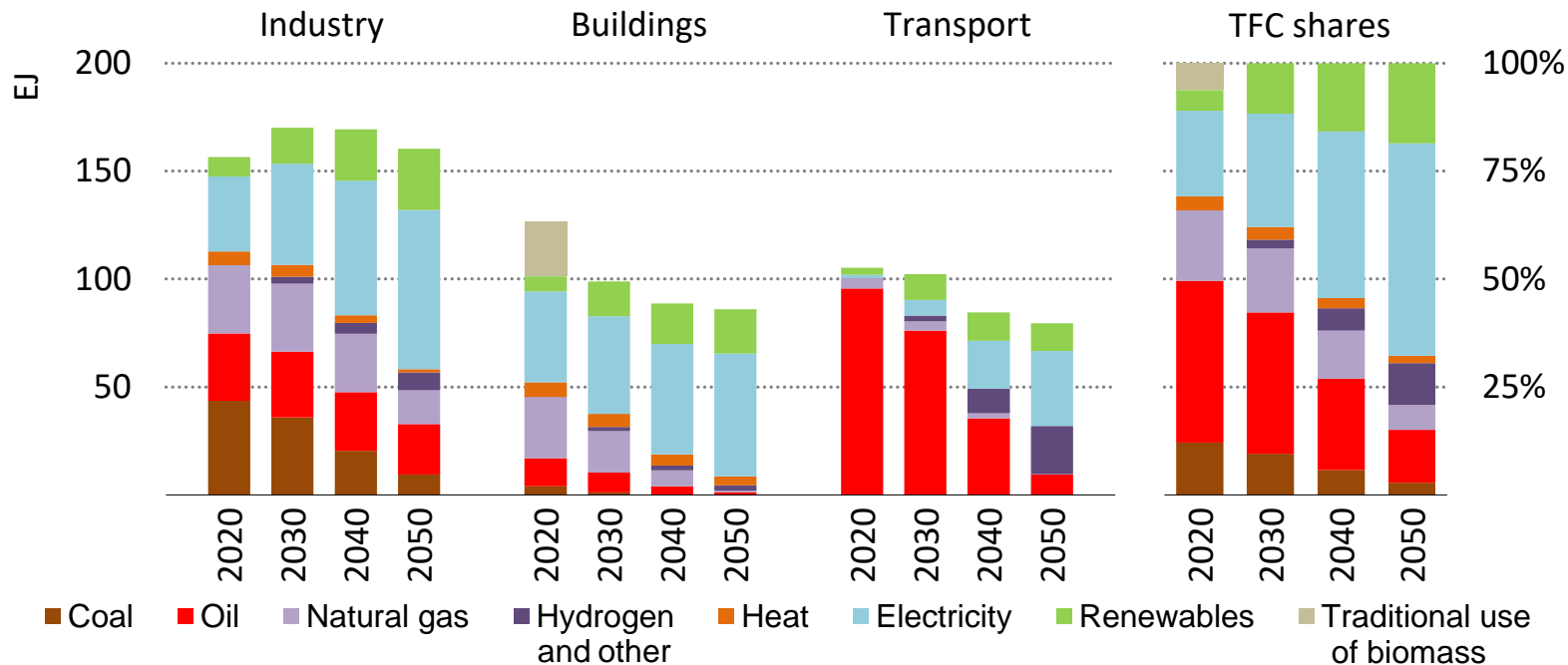


# Announced pledges: electrification starts to bite



# Net zero by 2050: end of the oil age

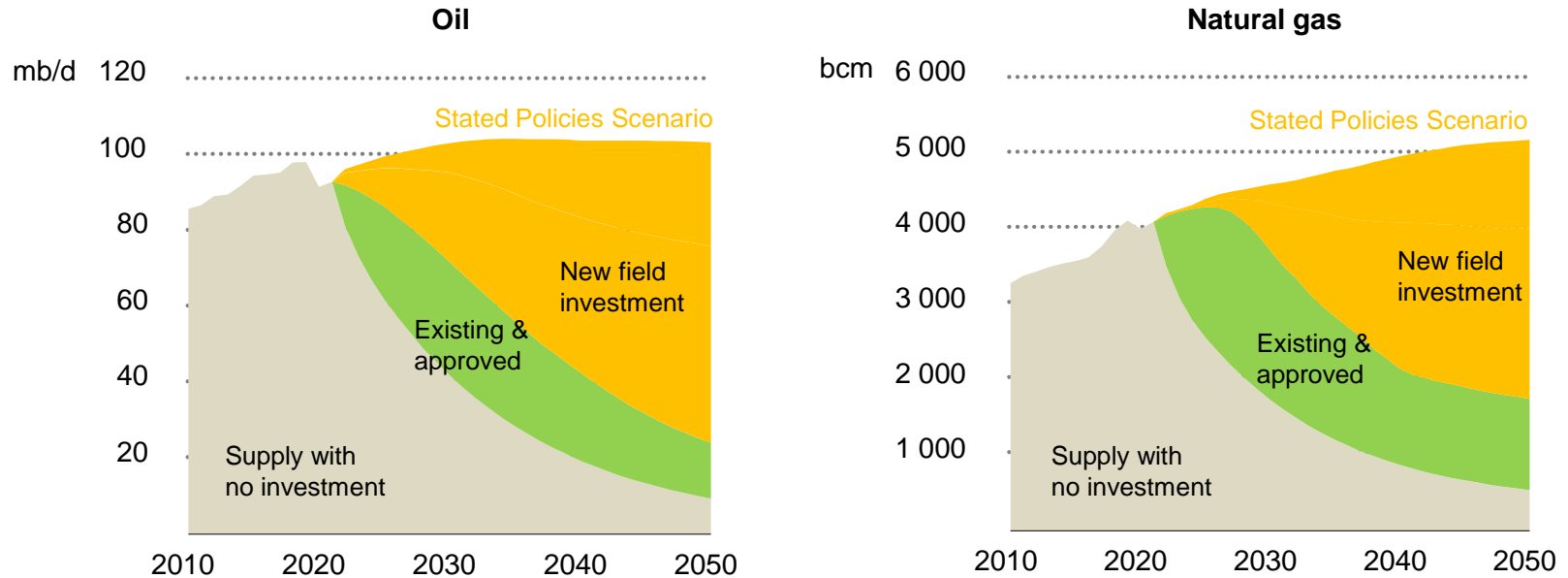
Total Final Consumption in the **Net Zero Emissions by 2050 Scenario**



**Broad-based, rapid electrification and the rise of alternative low-carbon fuels drives oil out of the energy mix – lower overall transport demand is because electric vehicles are three-times as efficient as conventional ICE vehicles**

# Uncertainties over demand means dilemmas for supply

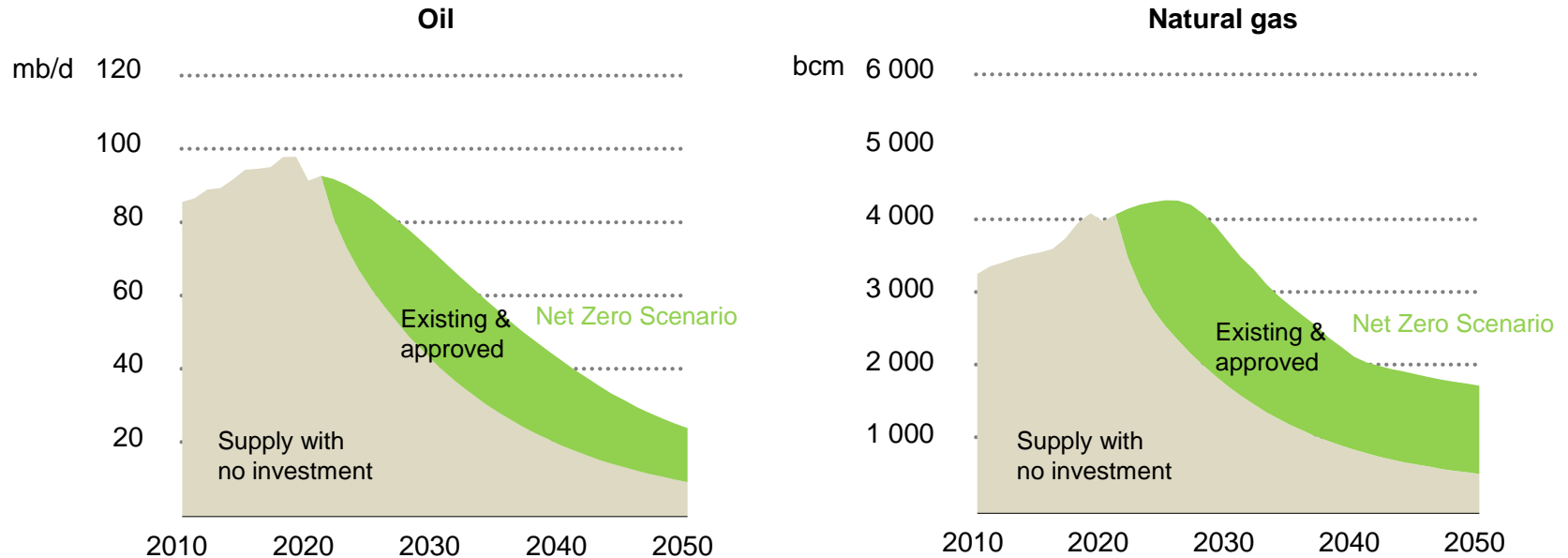
Global oil and natural gas demand and declines in supply



**The variations in demand trajectories come with dramatically different implications for investment; a strong policy push to reduce oil and gas demand is key to minimising the risk of market tightening**

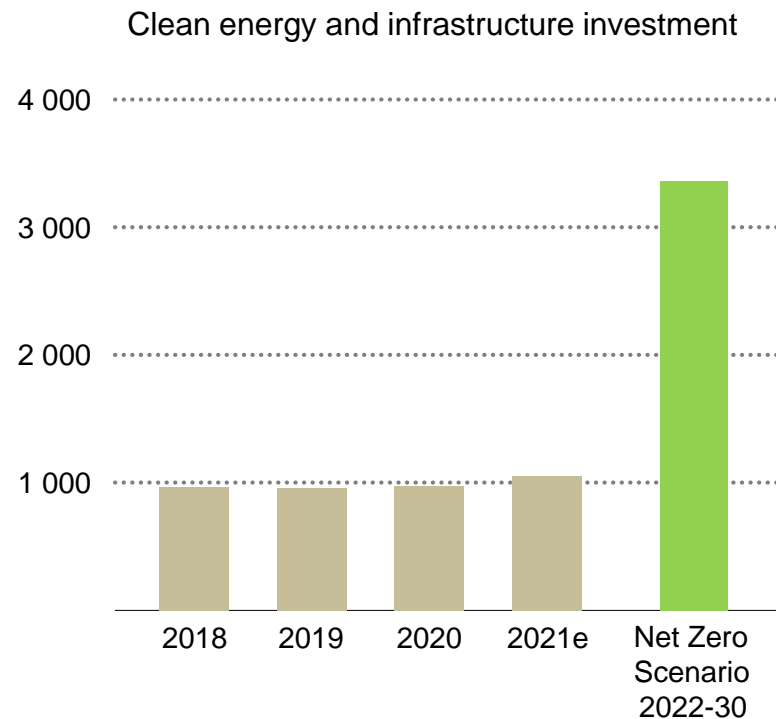
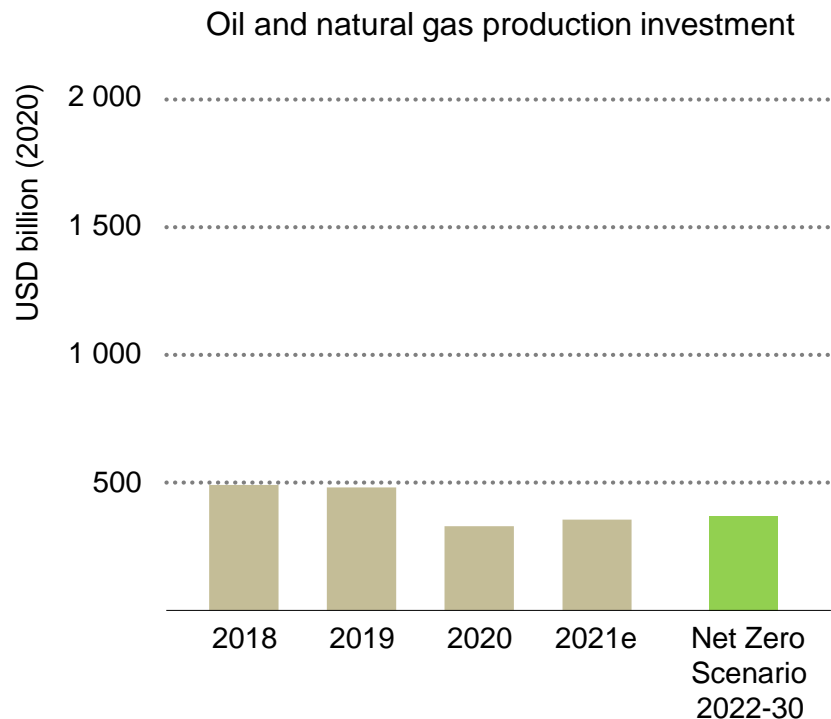
# Uncertainties over demand means dilemmas for supply

Global oil and natural gas demand and declines in supply



**The variations in demand trajectories come with dramatically different implications for investment; a strong policy push to reduce oil and gas demand is key to minimising the risk of market tightening**

# Looming risk of more turbulence ahead for energy markets



**The world is not investing enough to meet its future energy needs; oil and gas investment is geared to a world of stagnant or falling demand, while transition-related spending is not rising nearly fast enough**

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