



# World Energy Outlook 2021

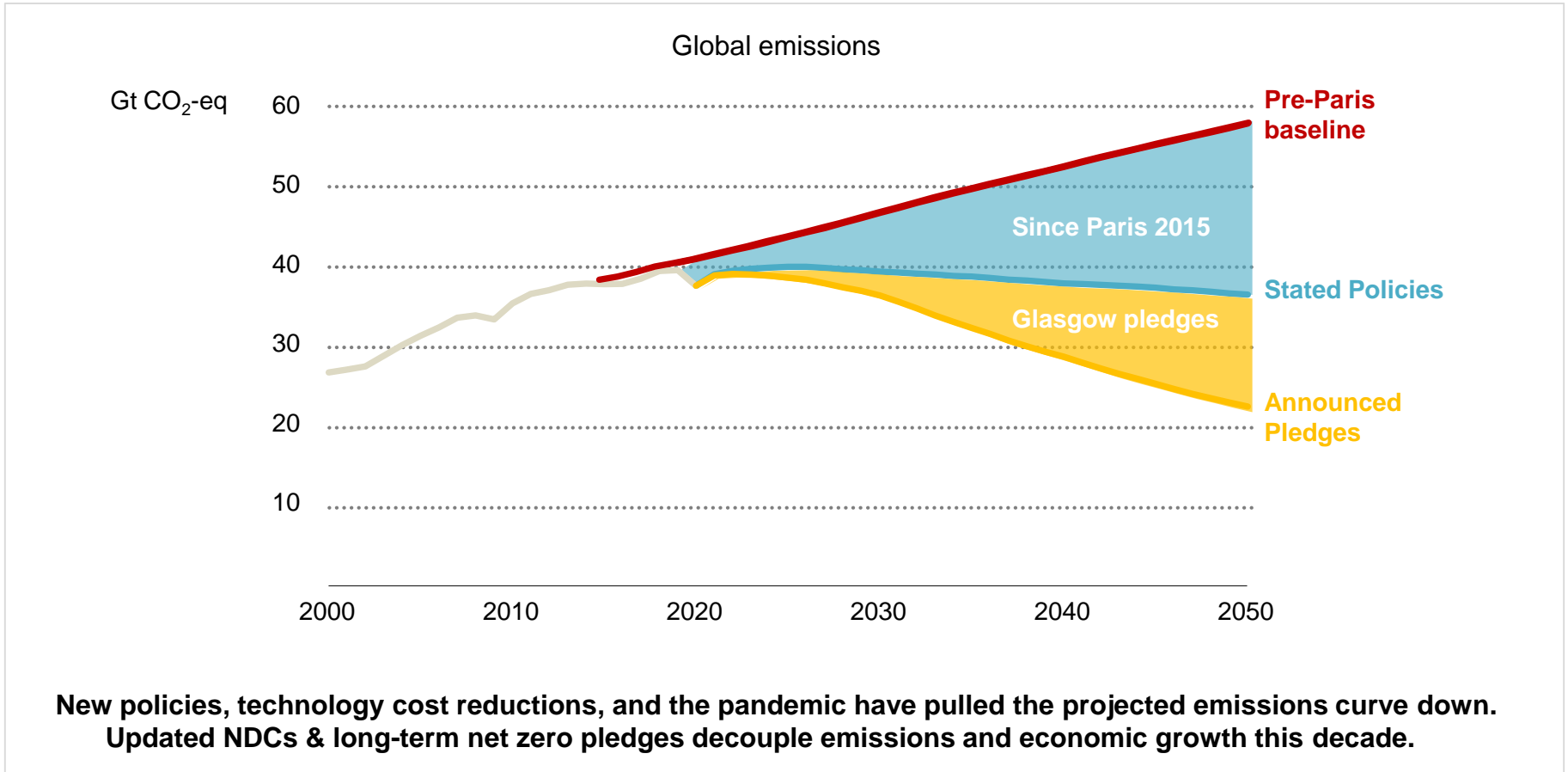
*16 February 2022*

Keisuke Sadamori

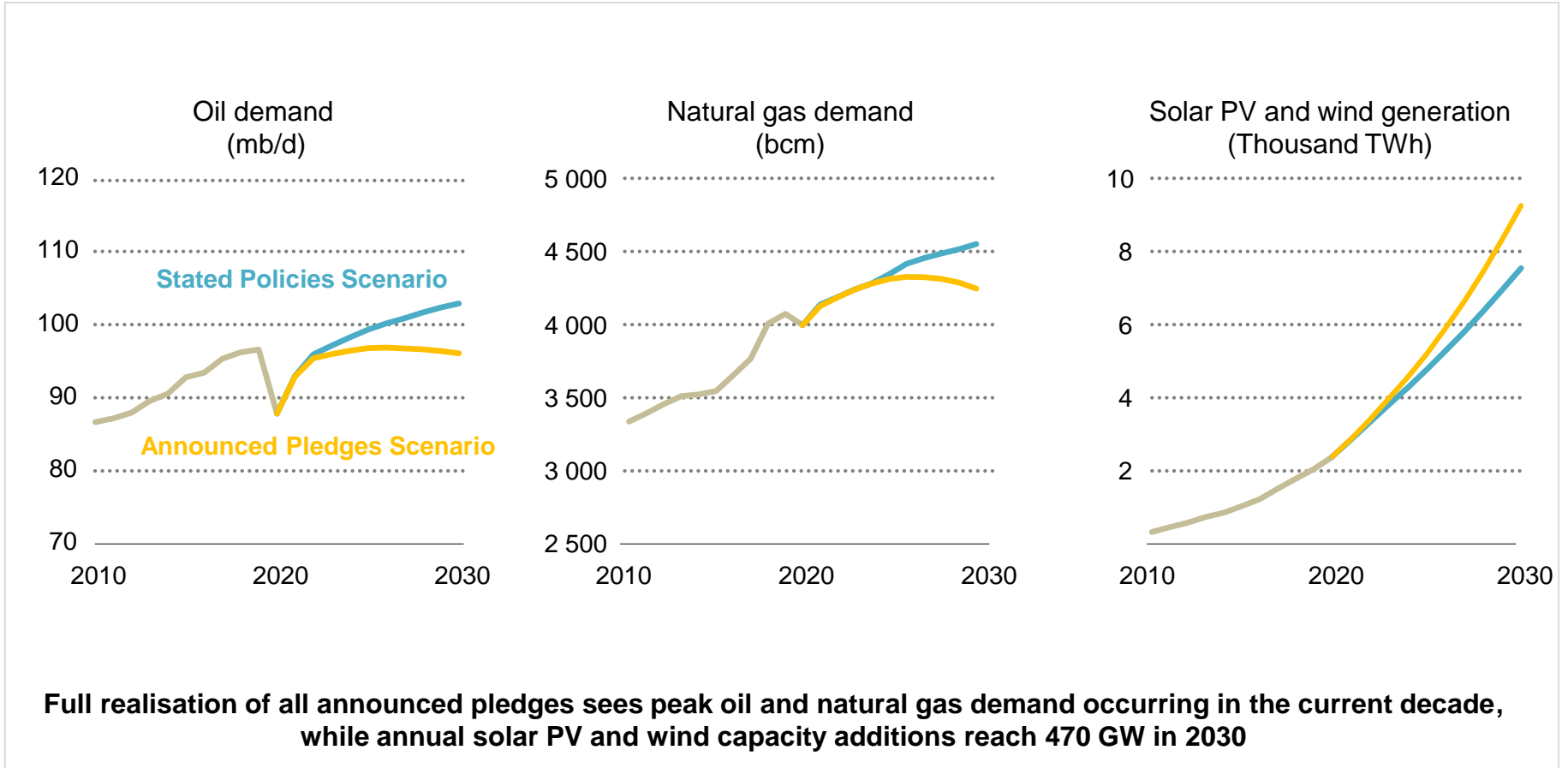
12<sup>th</sup> IEA-IEF-OPEC Symposium on Energy Outlooks

International  
Energy Agency

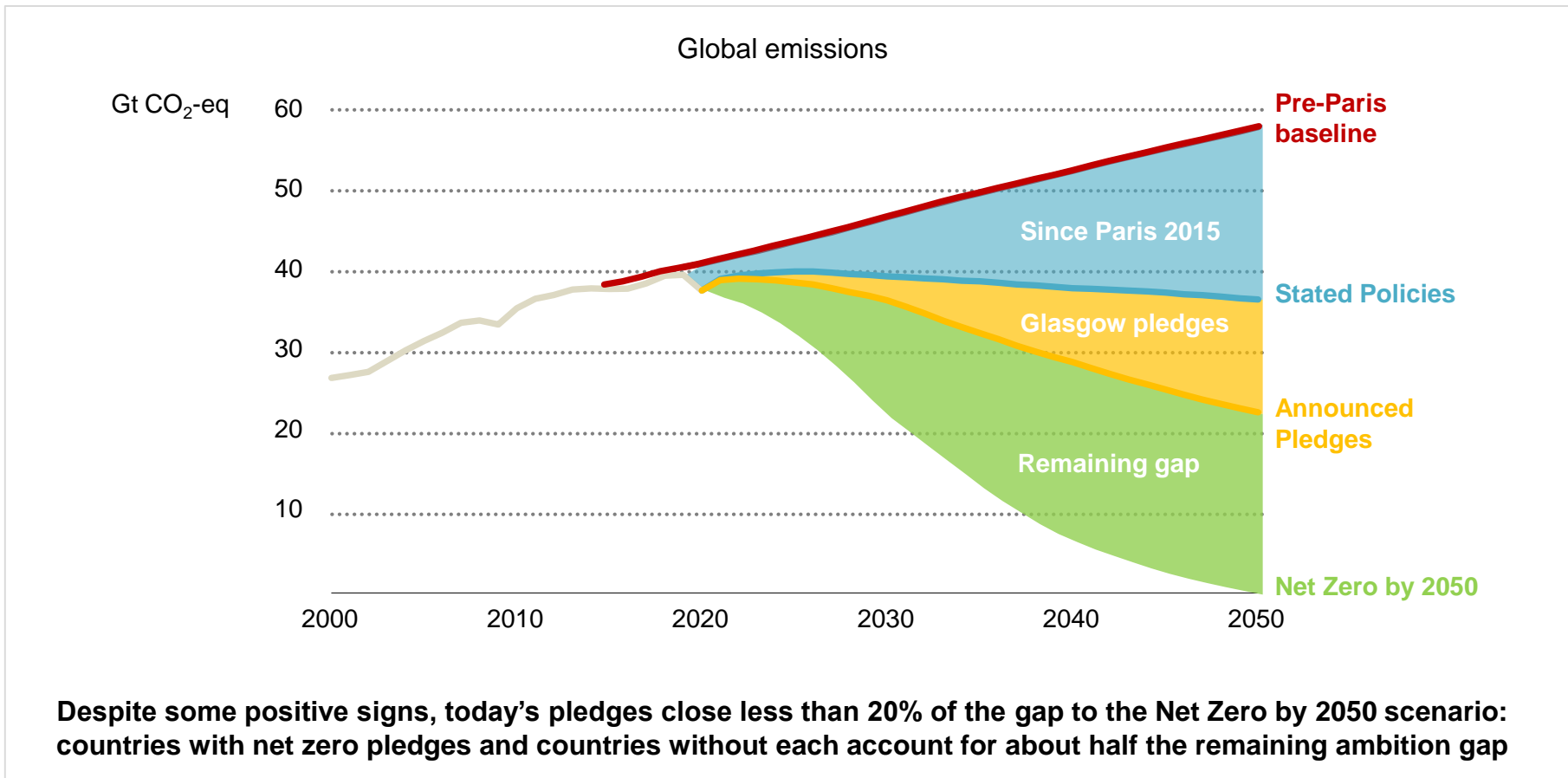
# The world is starting to bend the emissions curve



# And announced pledges re-shape global energy markets

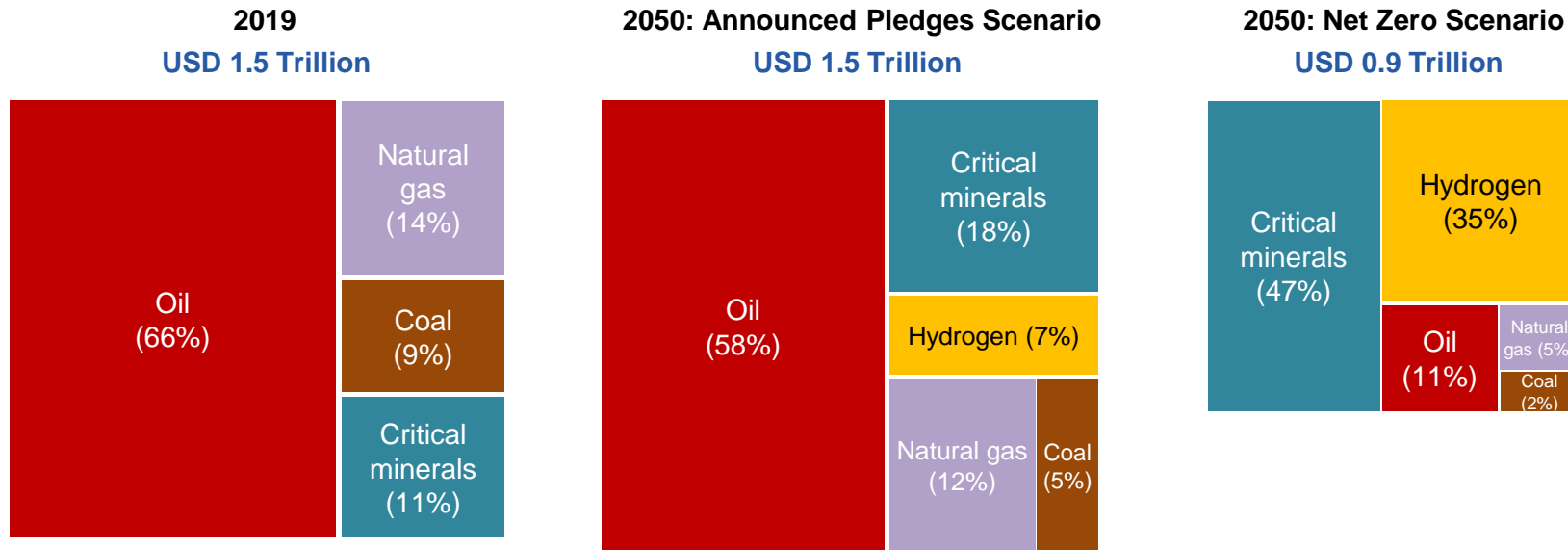


# A large ambition gap remains in 2030



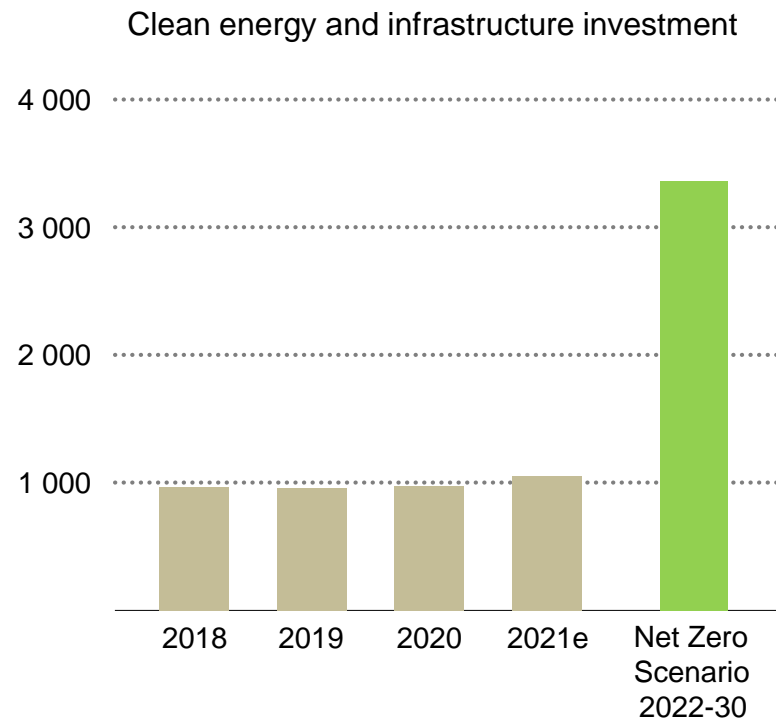
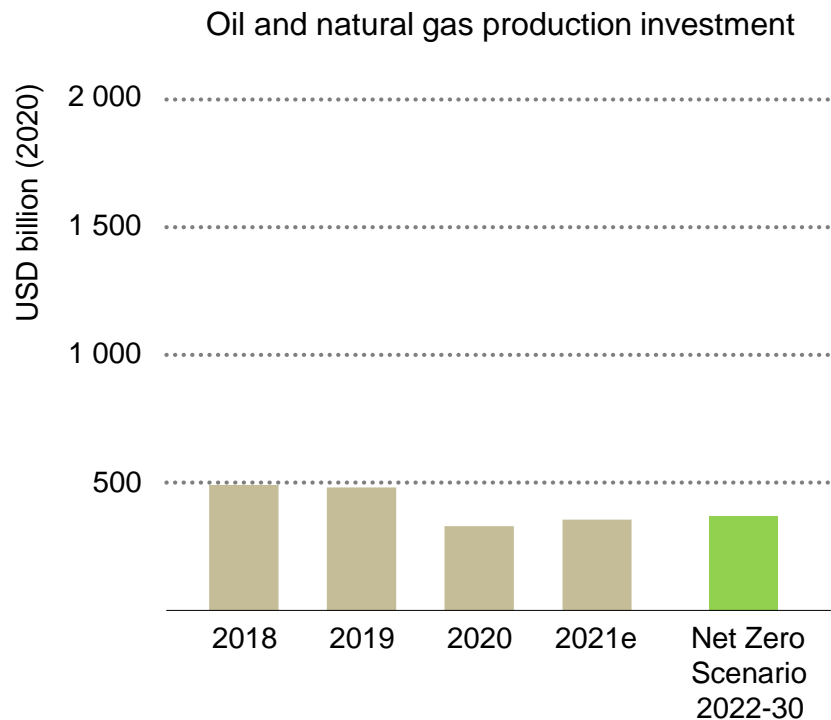
# The rise of new energy-related commodities

Value of international energy-related resource trade



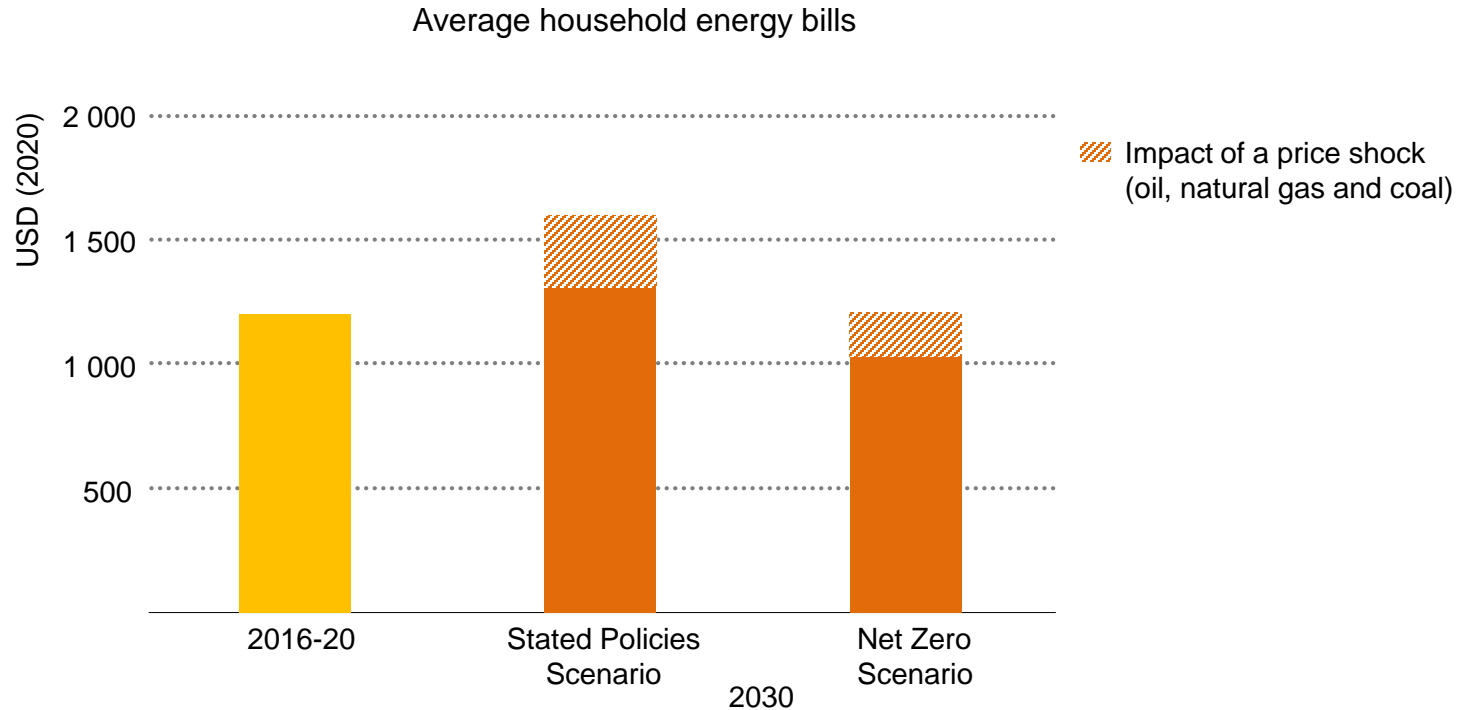
**Under announced pledges, a growing share of oil and gas trade flows towards developing economies in Asia. In all scenarios, but especially in the net zero pathway, critical minerals and hydrogen-based fuels are on the rise**

# 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**

# Well-managed transitions offer shelter from price volatility



**Clean energy transitions can cushion consumers from the shock of price spikes for oil and gas, if households can get help to manage the upfront costs of energy efficiency improvements & electrification**

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