

World Energy Outlook 2021

16 February 2022

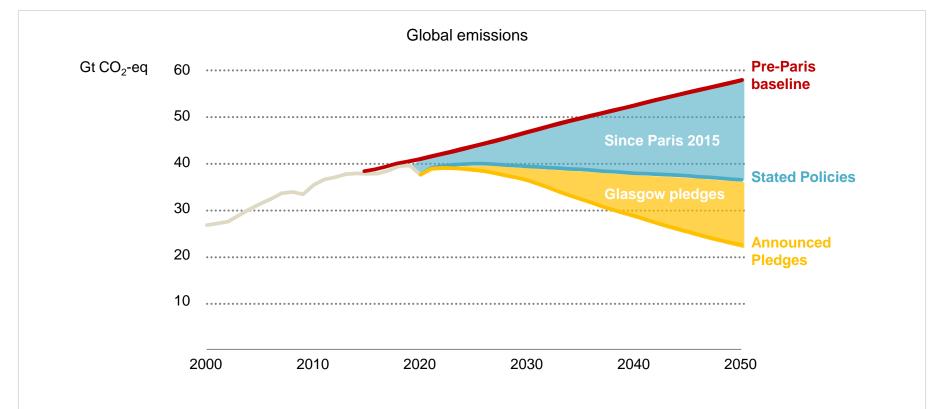
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12th IEA-IEE-OPEC Symposium on Energy Outlook

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The world is starting to bend the emissions curve

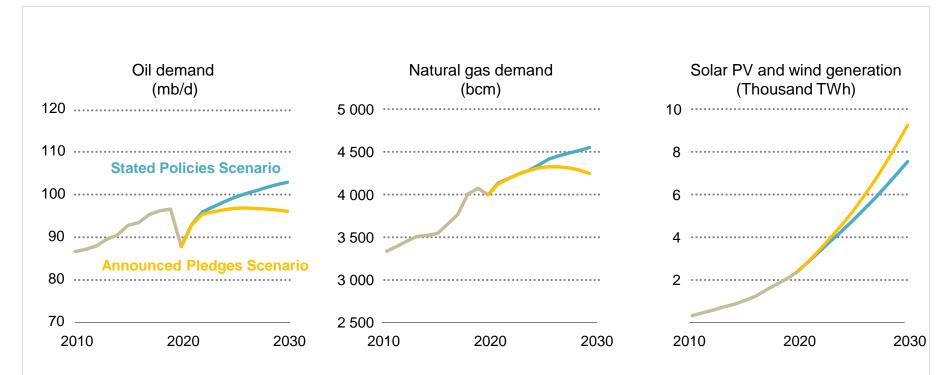




New policies, technology cost reductions, and the pandemic have pulled the projected emissions curve down. Updated NDCs & long-term net zero pledges decouple emissions and economic growth this decade.

And announced pledges re-shape global energy markets

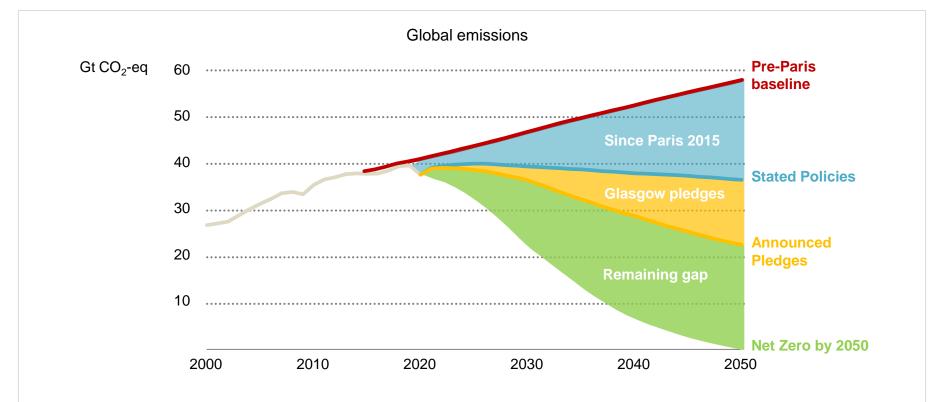




Full realisation of all announced pledges sees peak oil and natural gas demand occurring in the current decade, while annual solar PV and wind capacity additions reach 470 GW in 2030

A large ambition gap remains in 2030





Despite some positive signs, today's pledges close less than 20% of the gap to the Net Zero by 2050 scenario: countries with net zero pledges and countries without each account for about half the remaining ambition gap

The rise of new energy-related commodities





USD 1.5 Trillion

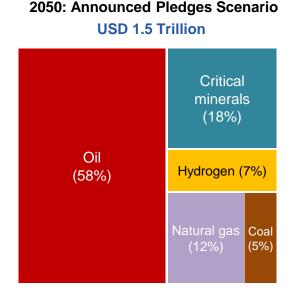
Natural gas (14%)

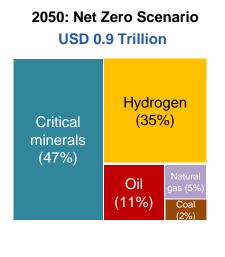
Oil (66%)

Coal (9%)

Critical minerals (11%)

2019

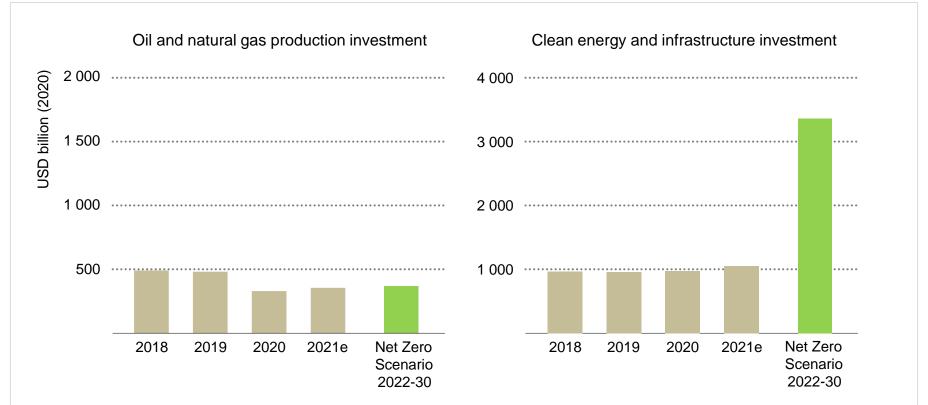




Under announced pledges, a growing share of oil and gas trade flows towards developing economies in Asia. In all scenarios, but especially in the net zero pathway, critical minerals and hydrogen-based fuels are on the rise

Looming risk of more turbulence ahead for energy markets

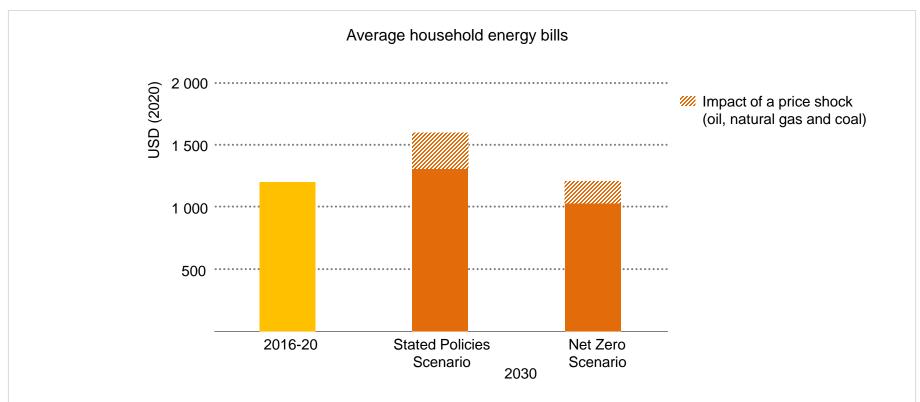




The world is not investing enough to meet its future energy needs; oil and gas investment is geared to a world of stagnant or falling demand, while transition-related spending is not rising nearly fast enough

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

