World Energy Outlook 2021

WEO Week Day 1 - Hopes for COP26 and beyond

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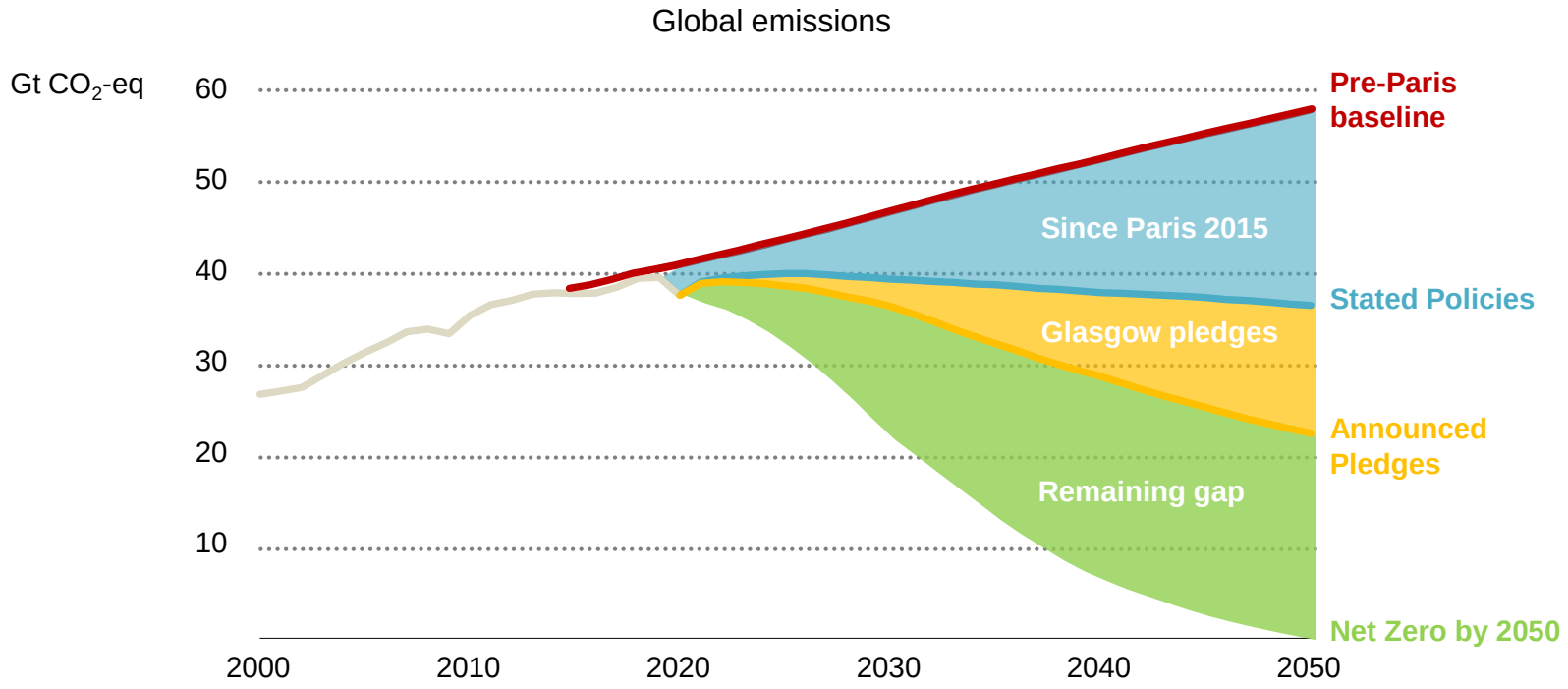
International Energy Agency

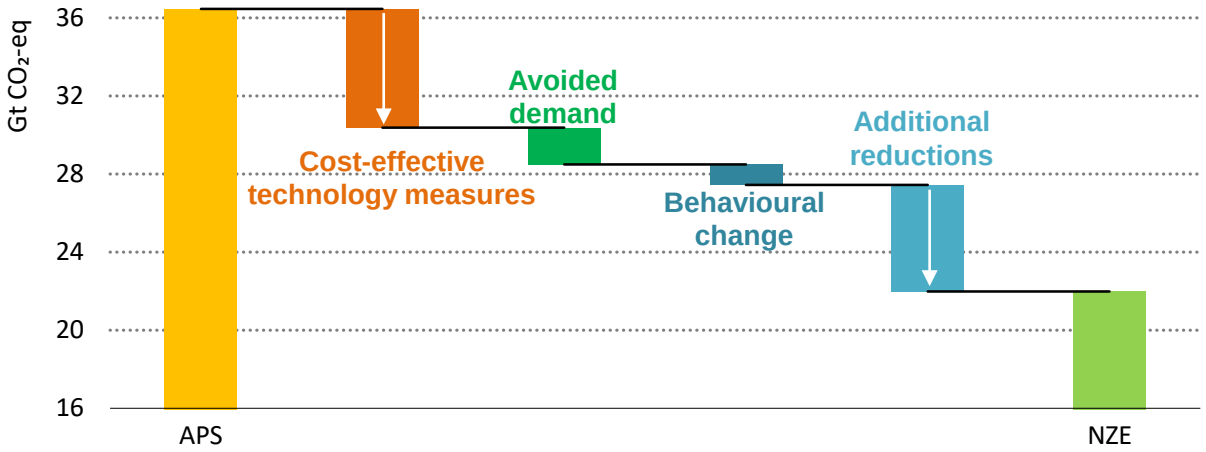
A large ambition gap remains in 2030



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

But we have cost-effective ways to close the gap

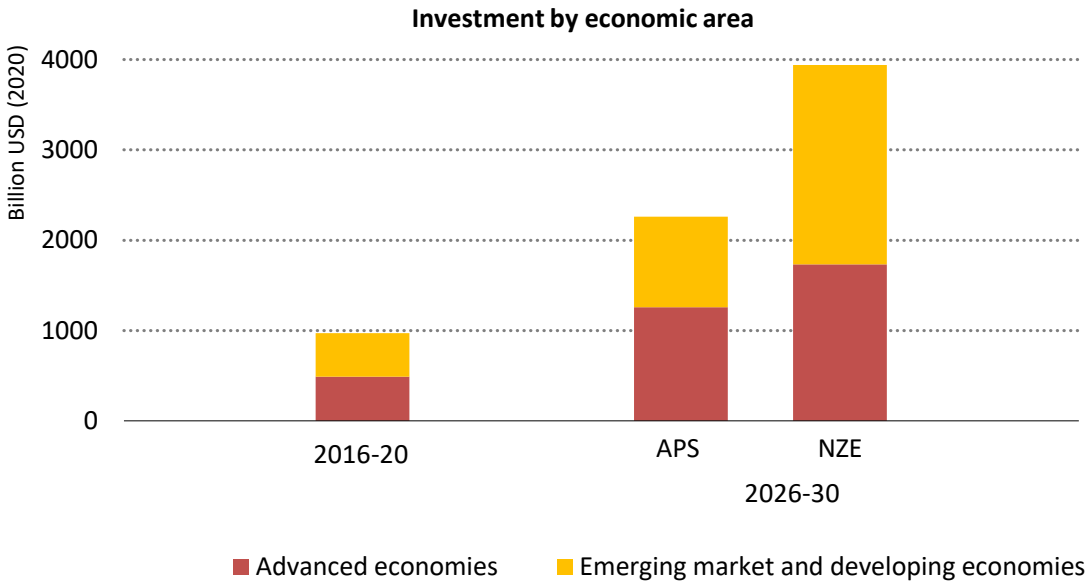
Breakdown of measures to close the ambition gap by 2030



Technologies and policies are available to close the emissions gap to 2030. More than 40% of the actions required are cost-effective – bringing more low-cost renewables into power, reducing methane leaks, and improving efficiency

Net zero requires a huge scale up of clean energy investment

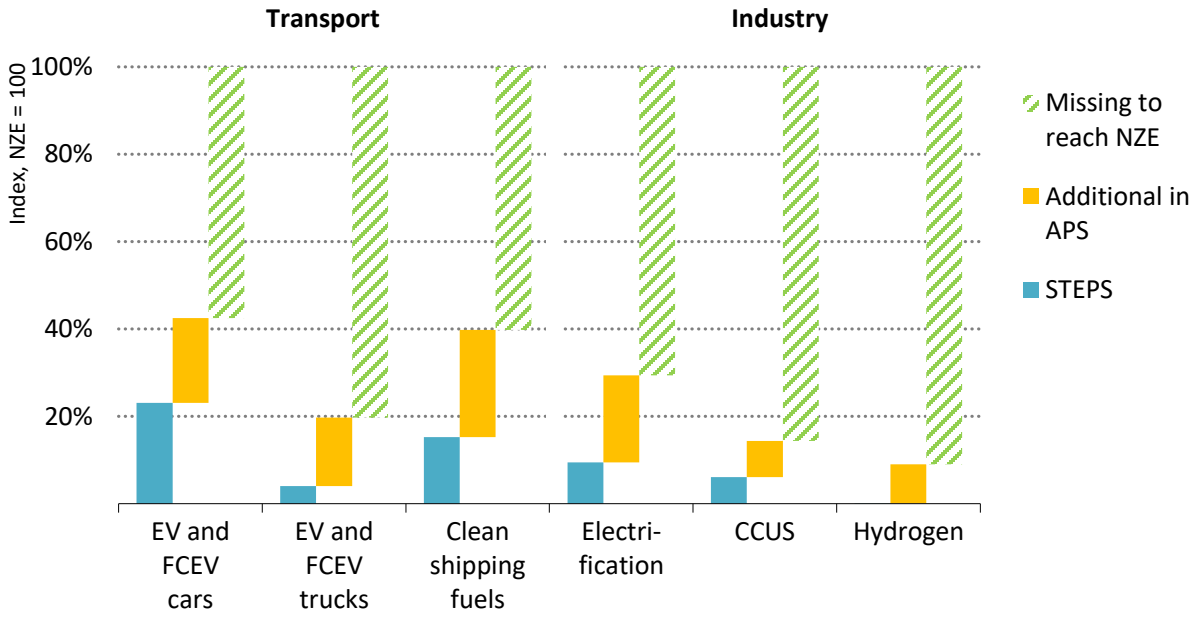
Clean energy investment by economic area, APS and NZE



Shifting to the net zero emissions path requires scaling clean energy investment by USD 1.7 trillion more than the APS; around 70% of this additional investment needs to take place in emerging market and developing economies

Key milestones lag behind the net zero pathway

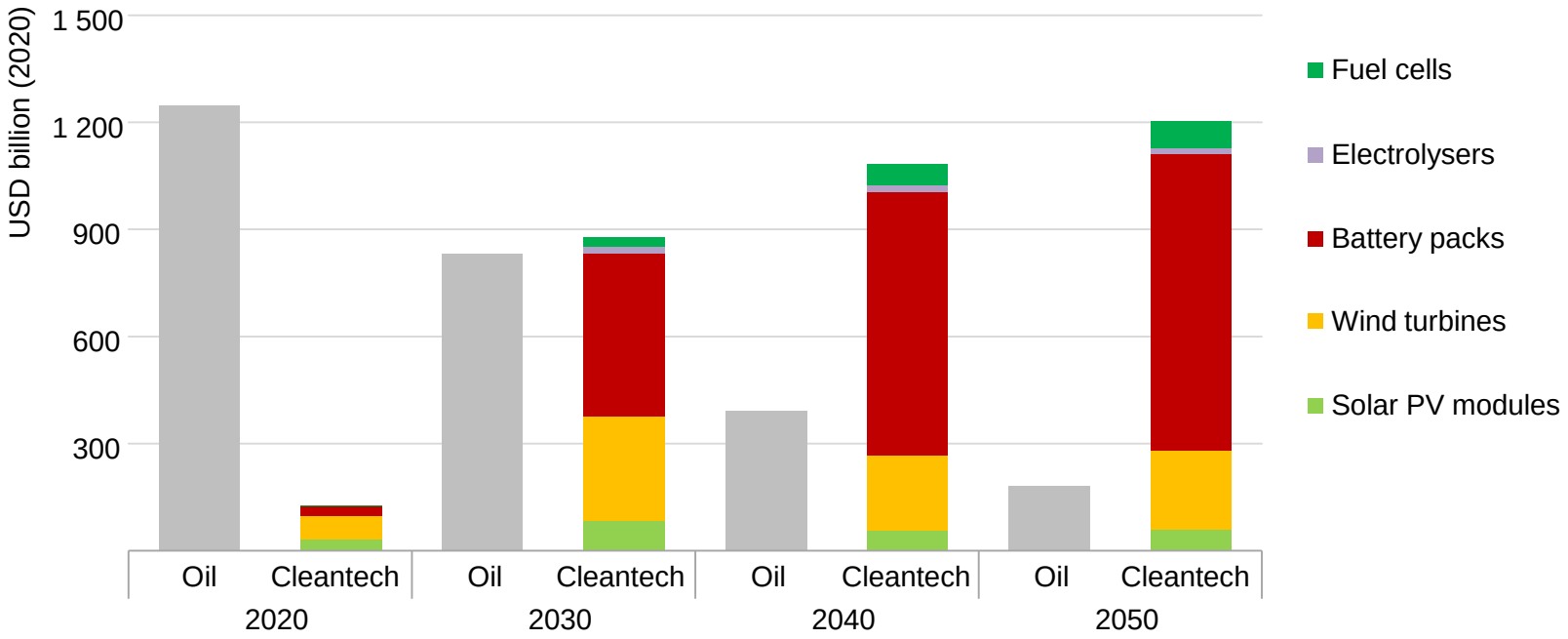
Percent achievement of key milestones in 2030 relative to the NZE



Key milestones related to CCUS, hydrogen-based fuels and electrification lag behind in the APS, and while this has relatively little impact on 2030 emissions, it risks the long-term feasibility of the NZE pathway

A new global energy economy is emerging

Estimated market sizes of oil and selected clean energy technology equipment in the Net Zero Scenario



Explosive growth in clean energy deployment over the next decades could create a market opportunity for manufacturers of key equipment worth a cumulative USD 27 trillion through to 2050

Conclusions

- Countries accounting for up to 70% of global emissions have announced net zero targets. Full and on time achievement of these pledges would see an unprecedented peak and decline in global emissions
- Despite this progress, by 2030 announced pledges would close only 20% of the gap between stated policies and the net zero emissions scenario
- Cost-effective technology solutions can close more than 40% of the ambition gap, with clean electrification, energy efficiency, methane abatement and innovation as clear priorities
- Shifting from announced pledges to the net zero emissions scenario would require an additional USD 1.7 trillion of clean energy investment in 2030, 70% of which would need to be deployed in emerging market and developing economies
- Deployment and commercialisation of of technologies like hydrogen-based fuels, CCUS and electrification need to be accelerated – if we fall behind it will be very hard to catch up