

Renewable Energy in Asia after Covid-19

SIEW Energy Insights Webinar

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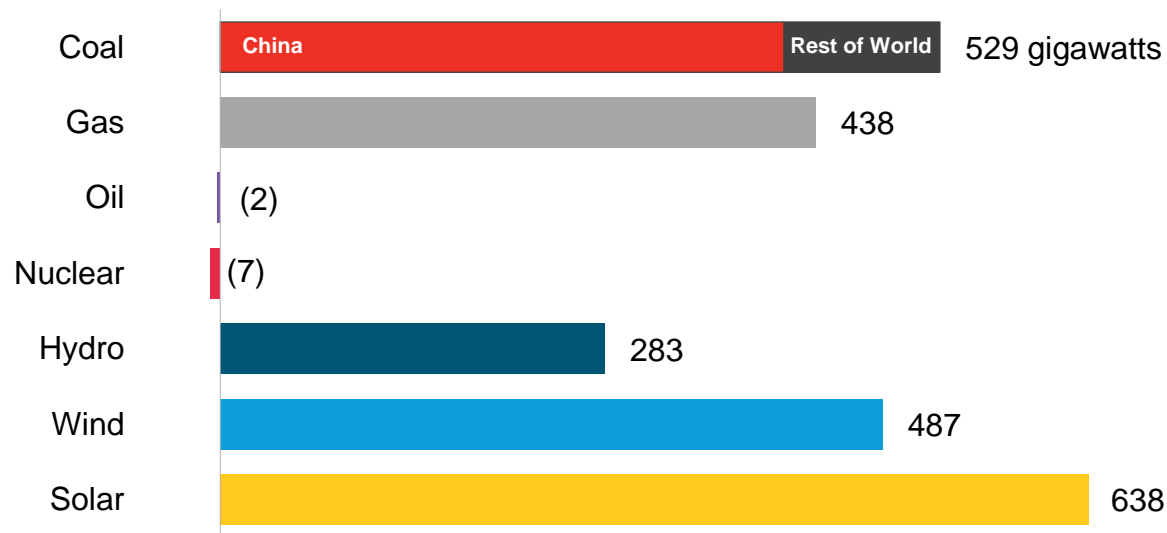
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BloombergNEF

More solar generation capacity was installed in the past decade than any other technology

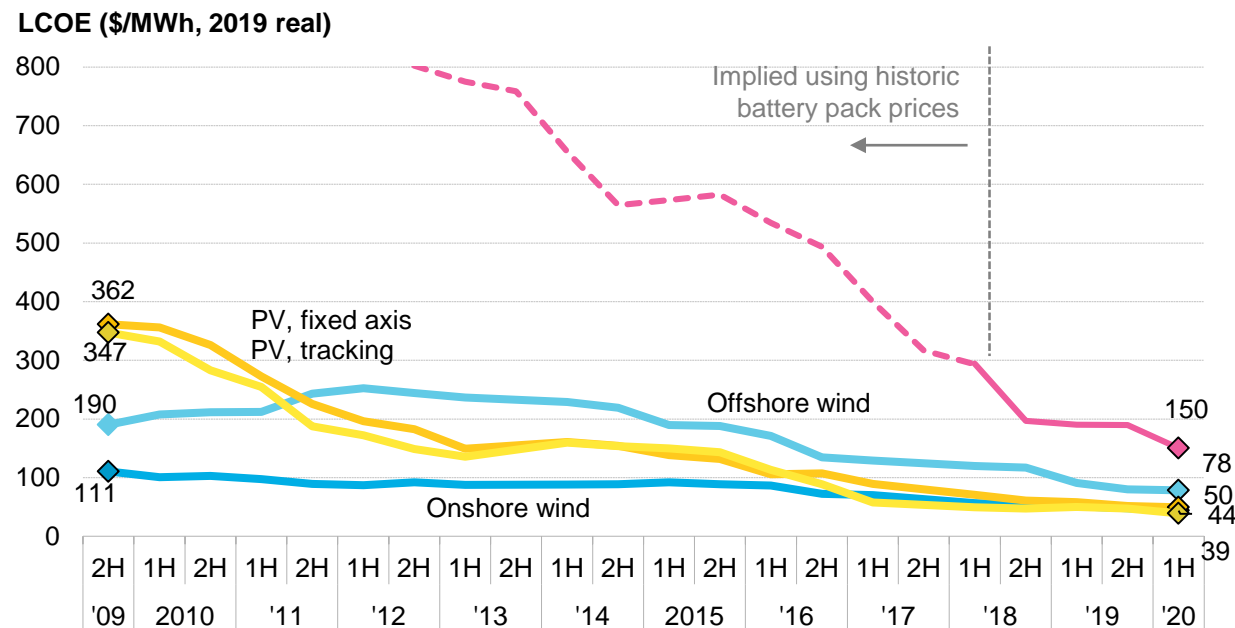
Power generation capacity additions, 2009 – 19



Source: BloombergNEF

Clean energy technology costs have dropped dramatically in the past decade

Global levelized cost of energy benchmarks (\$/MWh, 2019 real)



Source: BloombergNEF

Learning rates

28%

PV

18%

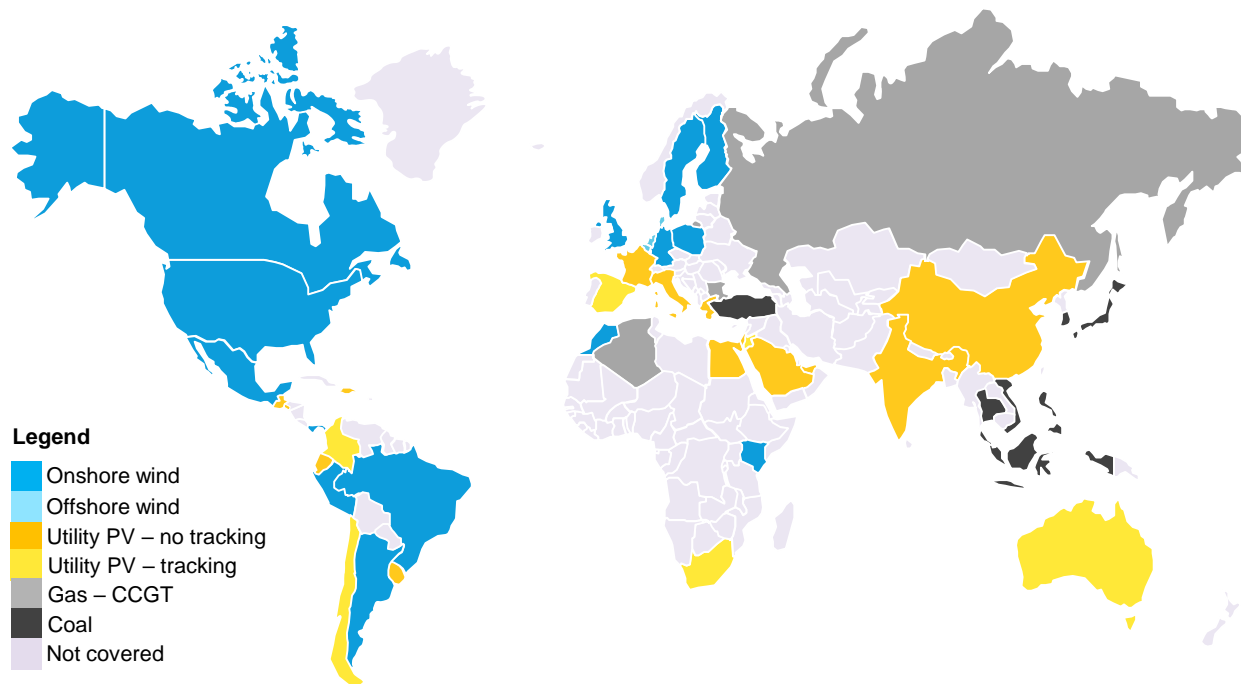
Li-ion battery packs

11%

Onshore wind

Wind and solar are the cheapest new generation for 2/3 of global population, 72% of GDP, and 85% of electricity demand

Lowest-cost source of new bulk power generation by technology, 2019

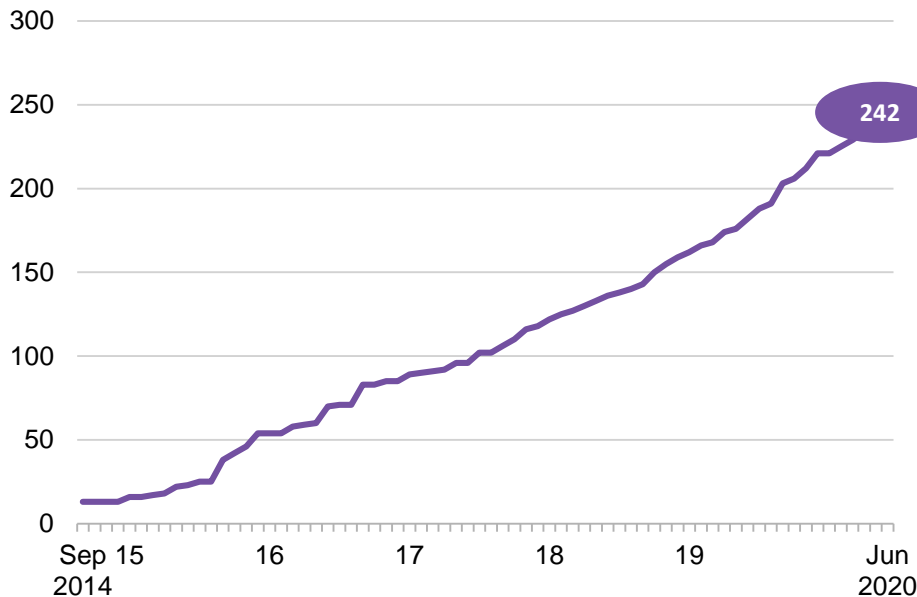


Source: BloombergNEF

Corporations are pledging to purchase more renewable energy for themselves and their supply chain

RE 100

Member companies



TSMC Becomes the World's First Semiconductor Company to Join RE100, Committed to 100% Renewable Energy Usage

Expanding Green Power Usage with Power Purchasing Agreements for Renewable Energy Totalling 1.2 GW

2020/07/27



Philos Lin

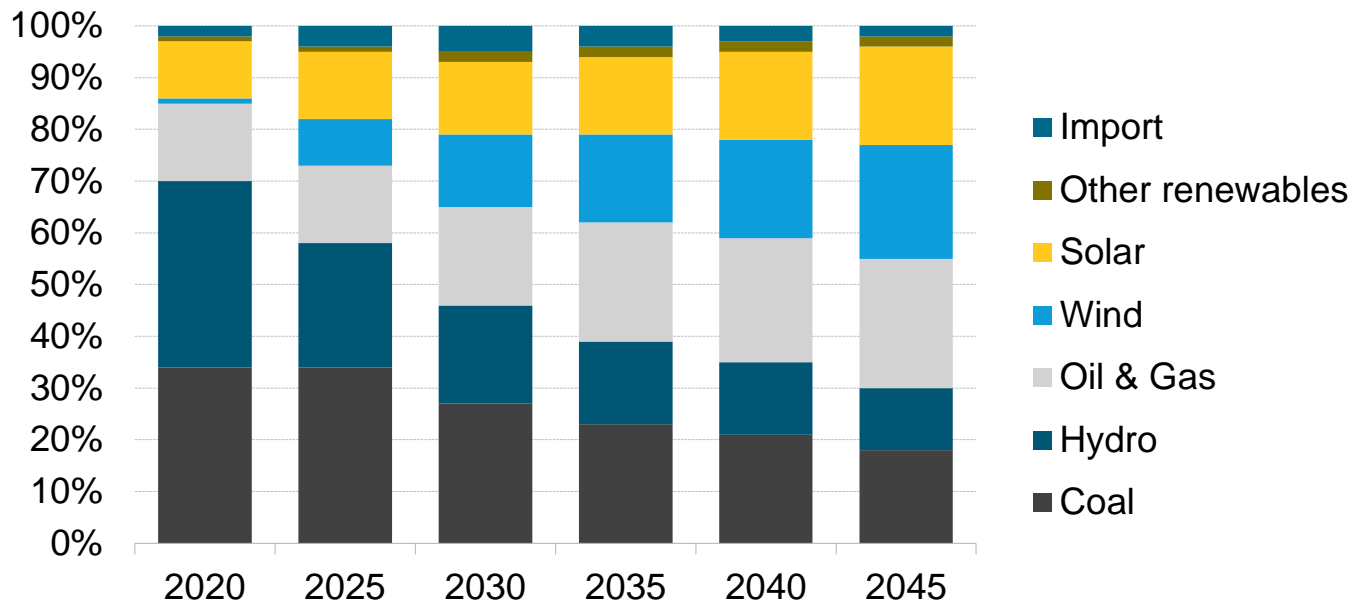


Larry Sun

Source: BloombergNEF, RE100

Vietnam's renewable energy goals have become more ambitious

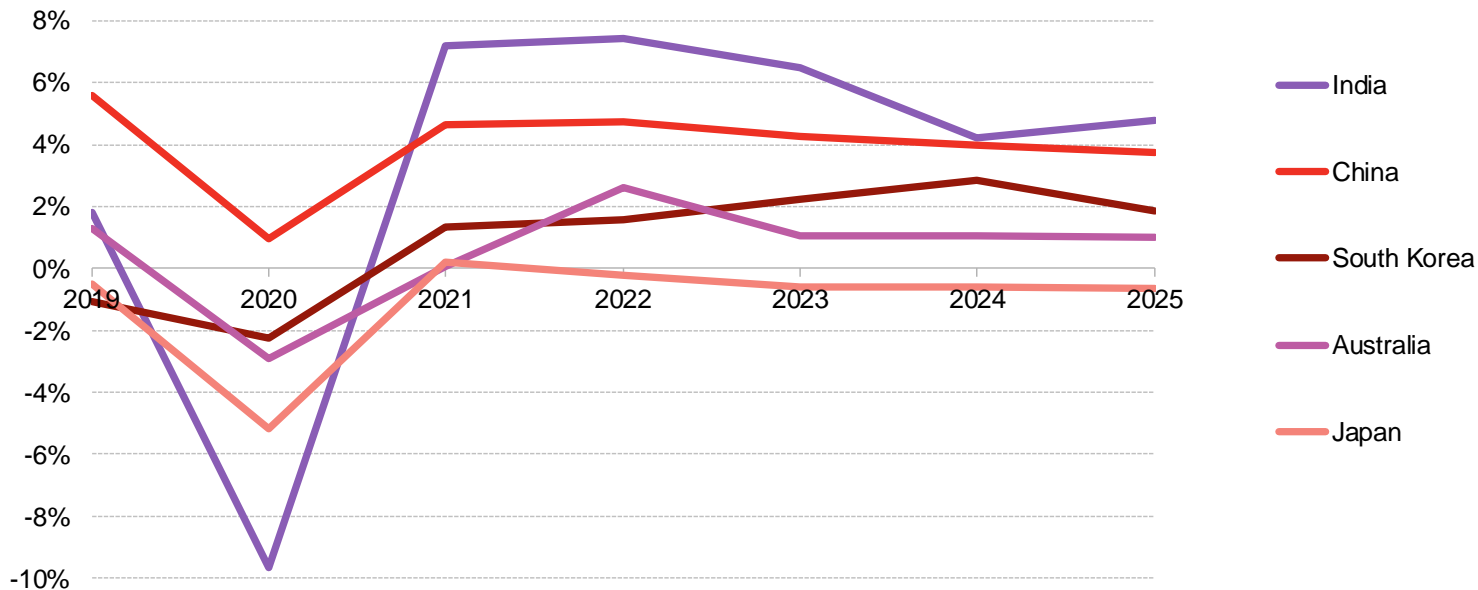
Vietnam's draft plan for electricity generation capacity mix



Source: Institute of Energy's draft Power Development Plan VIII

The pandemic has impacted electricity demand across Asian countries in different ways

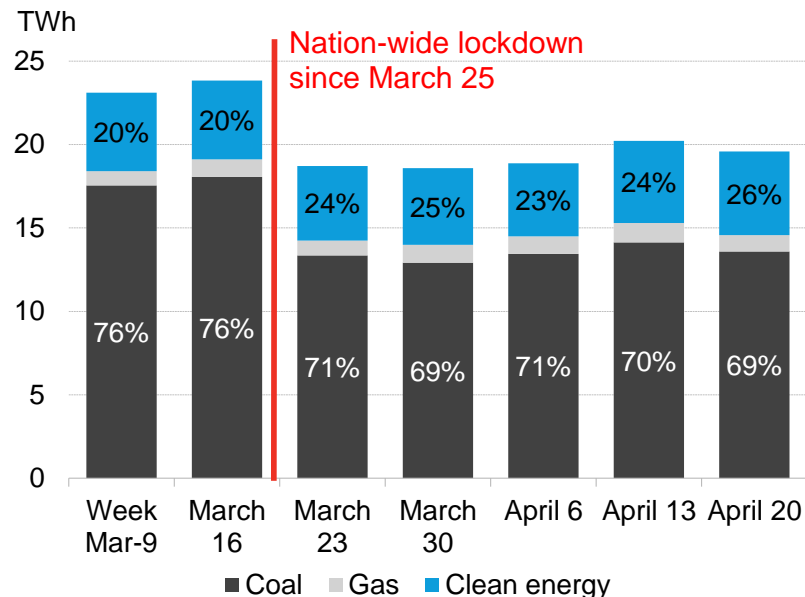
Annual electricity consumption growth across APAC countries in a multi-wave pandemic scenario



Source: BloombergNEF

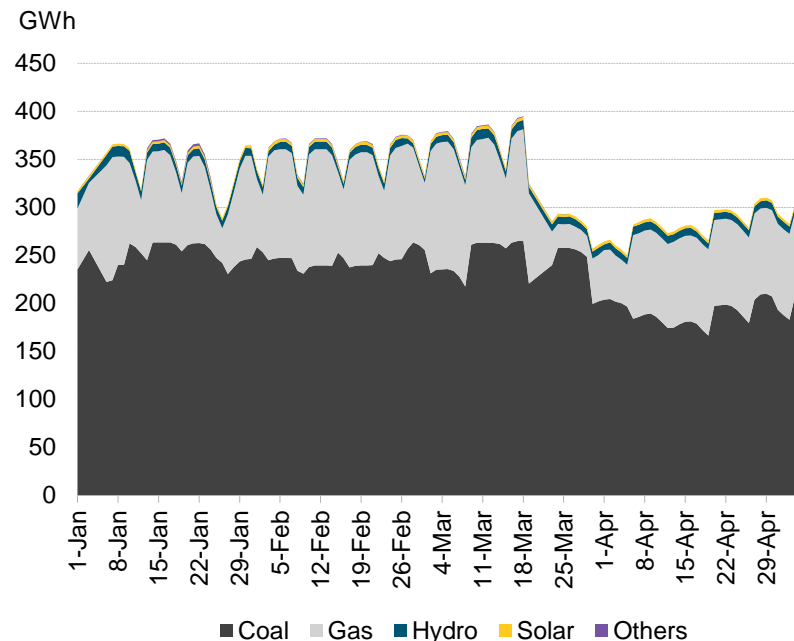
Coal generation has fared poorly in India and Malaysia as power demand drops following a lockdown

India's generation fuel mix (Mar-May 2020)



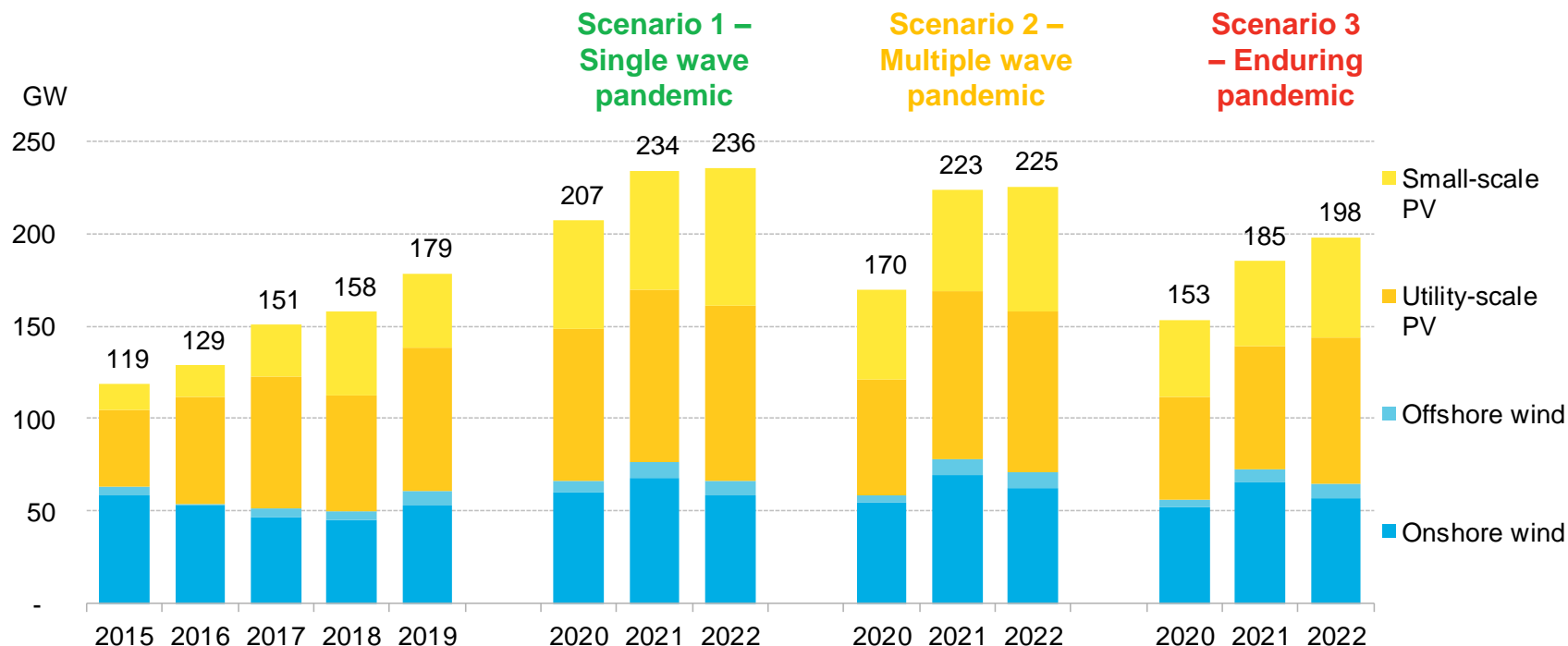
Source: BloombergNEF, Ministry of Power. Note: Clean energy includes hydro, biomass, solar and onshore wind. Findings are based on provisional data.

Malaysia's generation mix (Jan-May 2020)



Source: Malaysia Grid System Operator

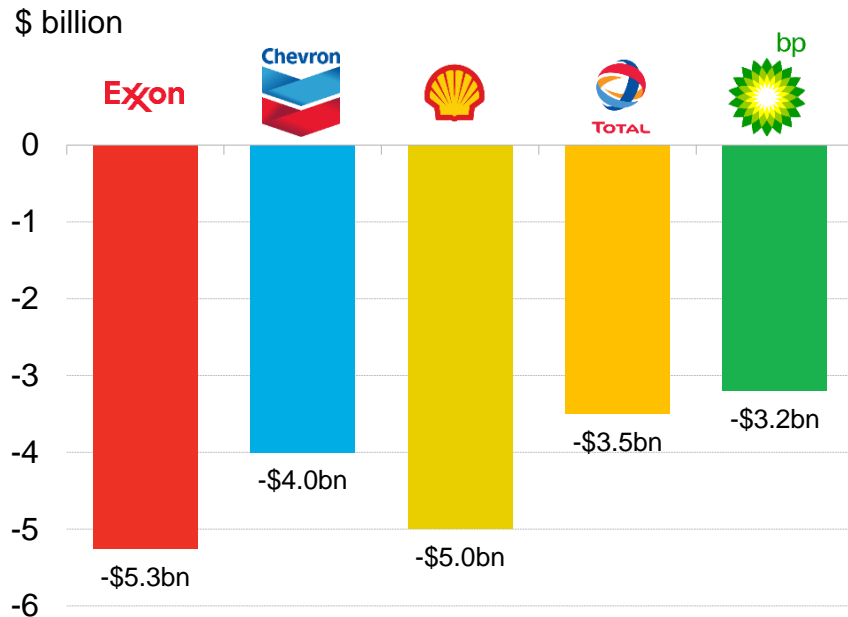
Wind and solar installations could stall due to Covid-19, but will recover quickly from 2021



Source: BloombergNEF

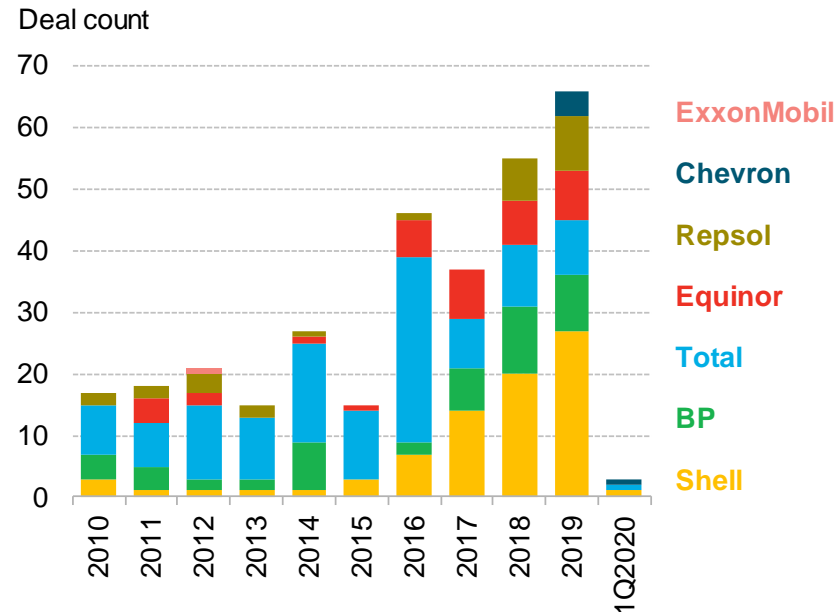
The Covid-19 pandemic is depressing oil company appetites for clean energy

Announced cuts in 2020 capital expenditures



Source: BloombergNEF, companies. Notes: investments include downstream and chemicals

Completed clean energy deals by oil majors

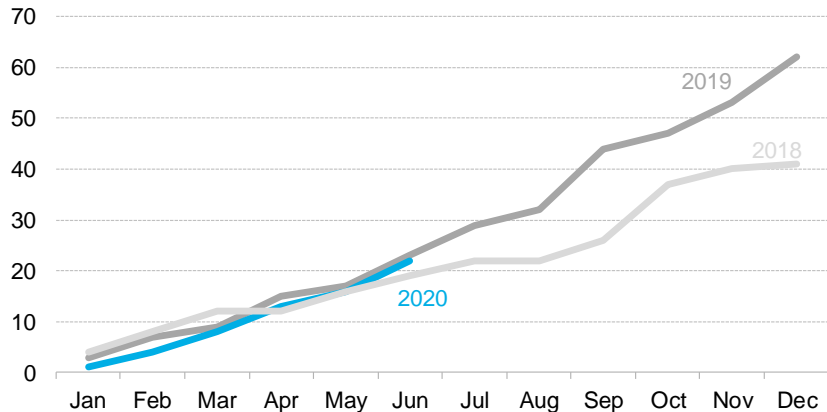


Source: BloombergNEF, Bloomberg, CBInsights, corporate announcements

Corporate sustainability pledges remain strong as companies think about long-term goals

Annual RE100 commitments

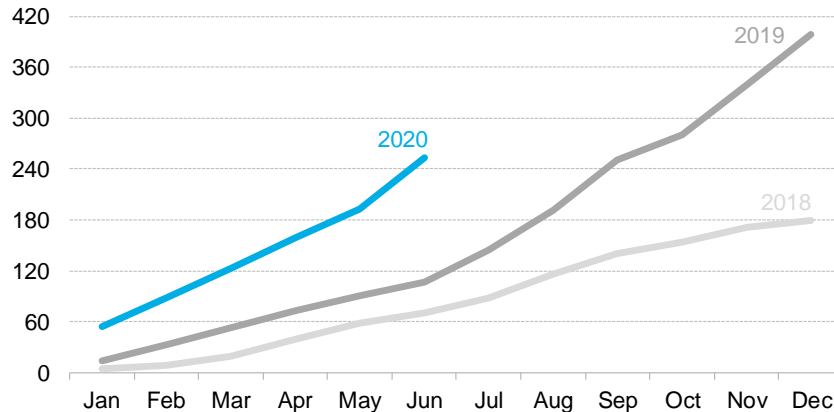
Cumulative commitments



Source: BloombergNEF, RE100

Annual science-based targets commitments

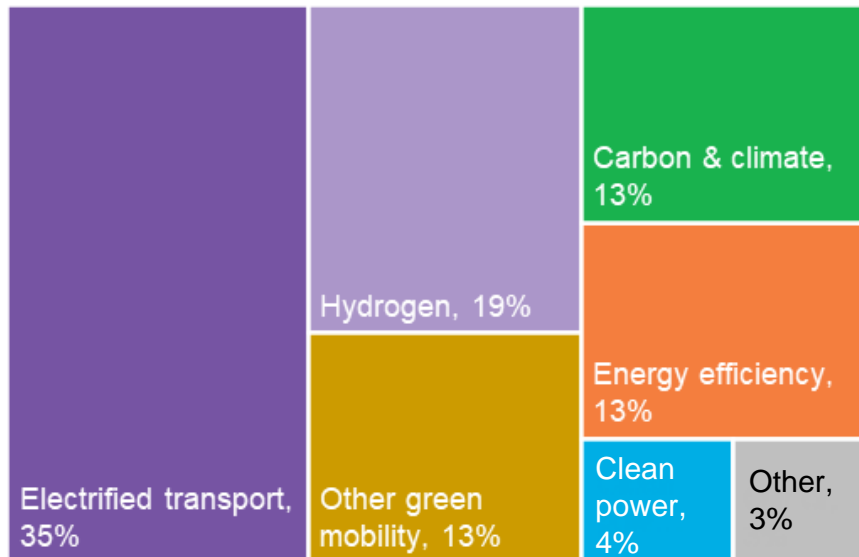
Annual commitments



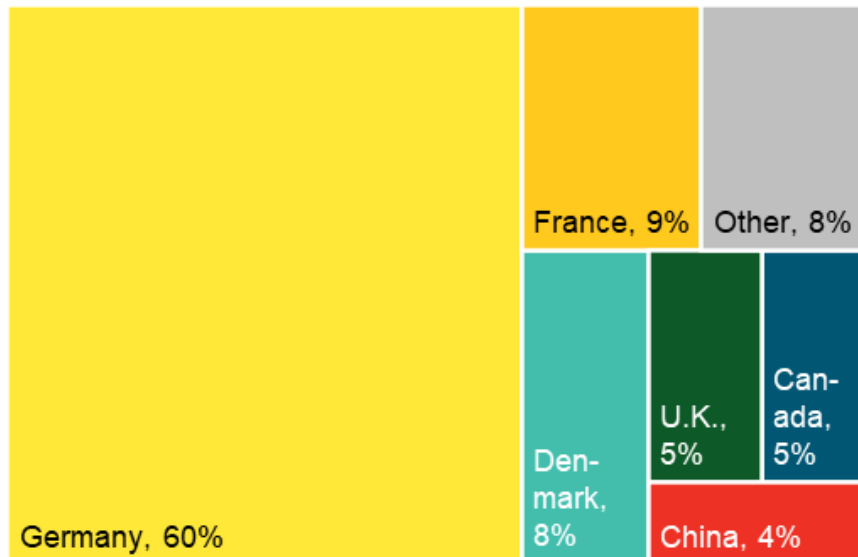
Source: BloombergNEF, SBT

\$54 billion in green stimulus announced to date, but most have focused on the auto sector

By target sector



By country



Source: BloombergNEF. Note: Figures exclude potential EU green stimulus as it has yet to be officially approved. Where support for a green sector is announced in a pot with a few other areas, figure assumes that whole sum is split evenly among the targeted sectors

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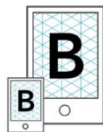
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