



# Renewables 2020

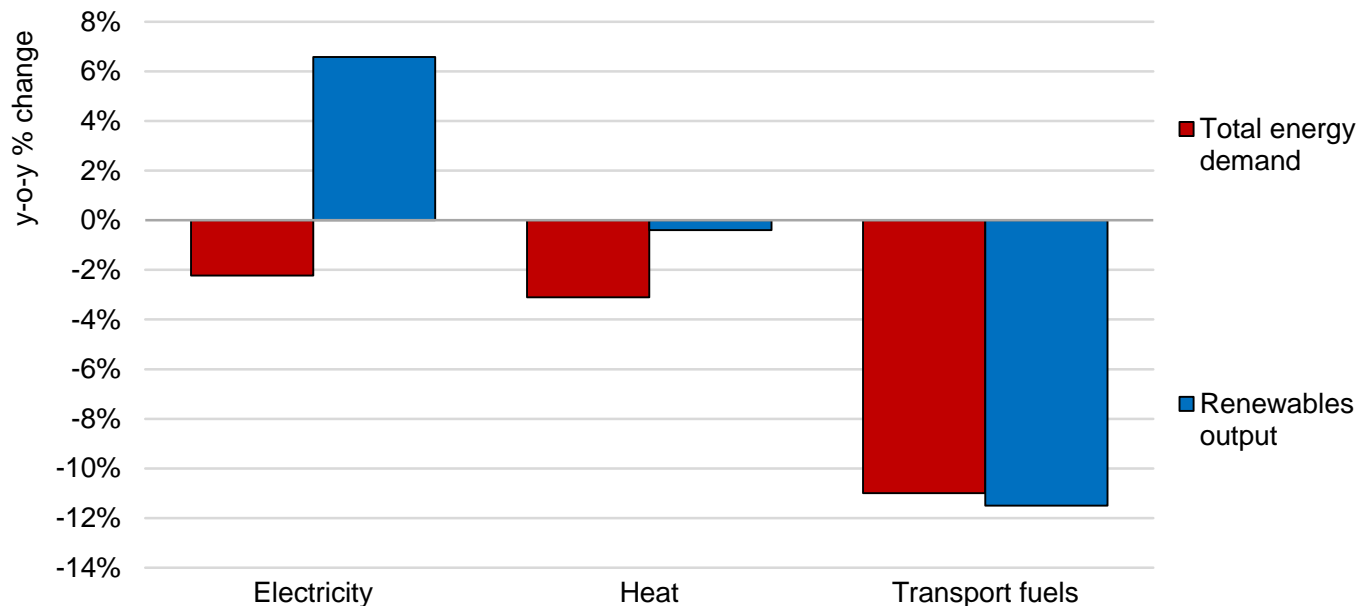
Launch Presentation

10 November 2020

- Covid-19 has caused unprecedented impacts on the world energy system. Global energy demand is set to drop by 5% in 2020, energy-related CO2 emissions by 7%, and total energy investment by 18%.
- At the same time, governments have a unique opportunity to boost economic growth, create jobs and put global emissions into decline if they put clean energy at the heart of the economic response.
- While second waves of the pandemic in many countries threaten to delay economic recovery, some grounds for optimism on clean energy transitions remain despite the present difficulties.
- Renewables are the only source increasing in 2020 but not immune to the crisis. Faster deployment would be possible if governments devoted a larger share of economic recovery support to renewables

# Renewables are resilient in electricity but demand shock hits heat & transport

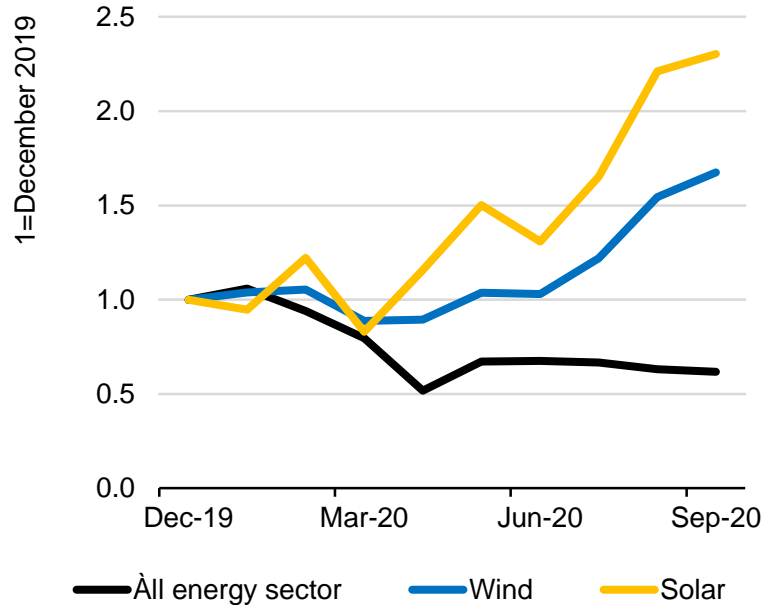
Change in energy demand and renewables output in electricity, heat and transport between 2019 to 2020



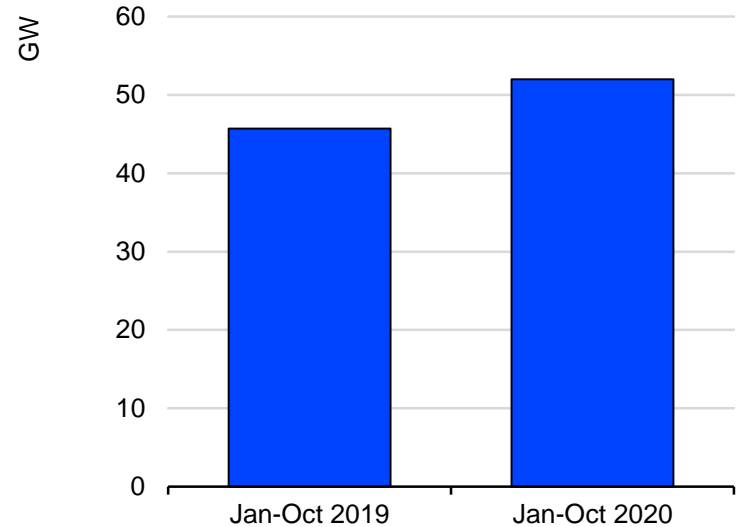
**Global energy demand is set to decline by 5% while renewables demand will increase by 1%, thanks to almost 7% growth in electricity generation. Bioenergy use in industry and transport gets the biggest hit**

# Investor appetite for renewables remains strong

### Equity performance

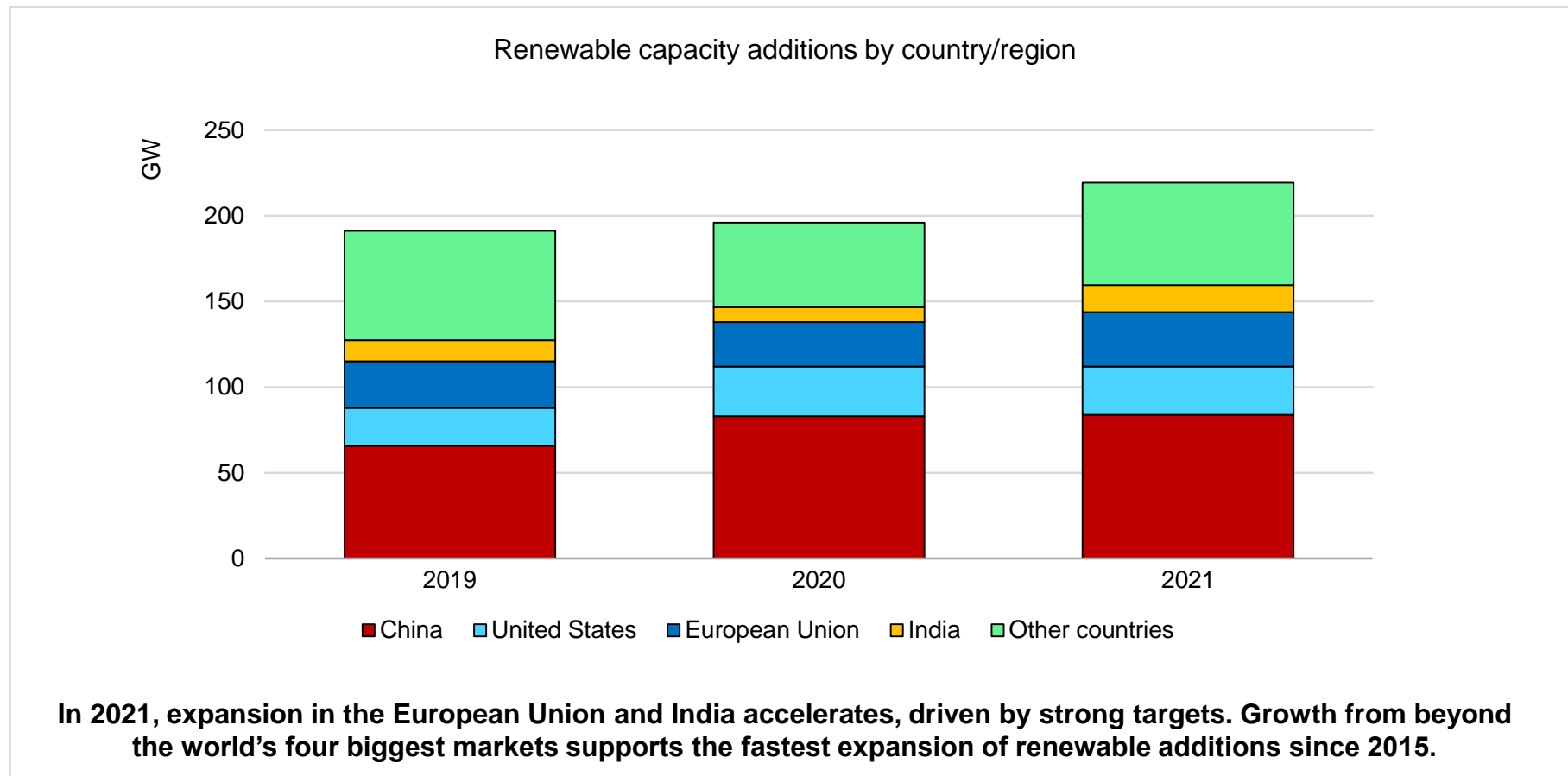


### Global auctioned renewable capacity

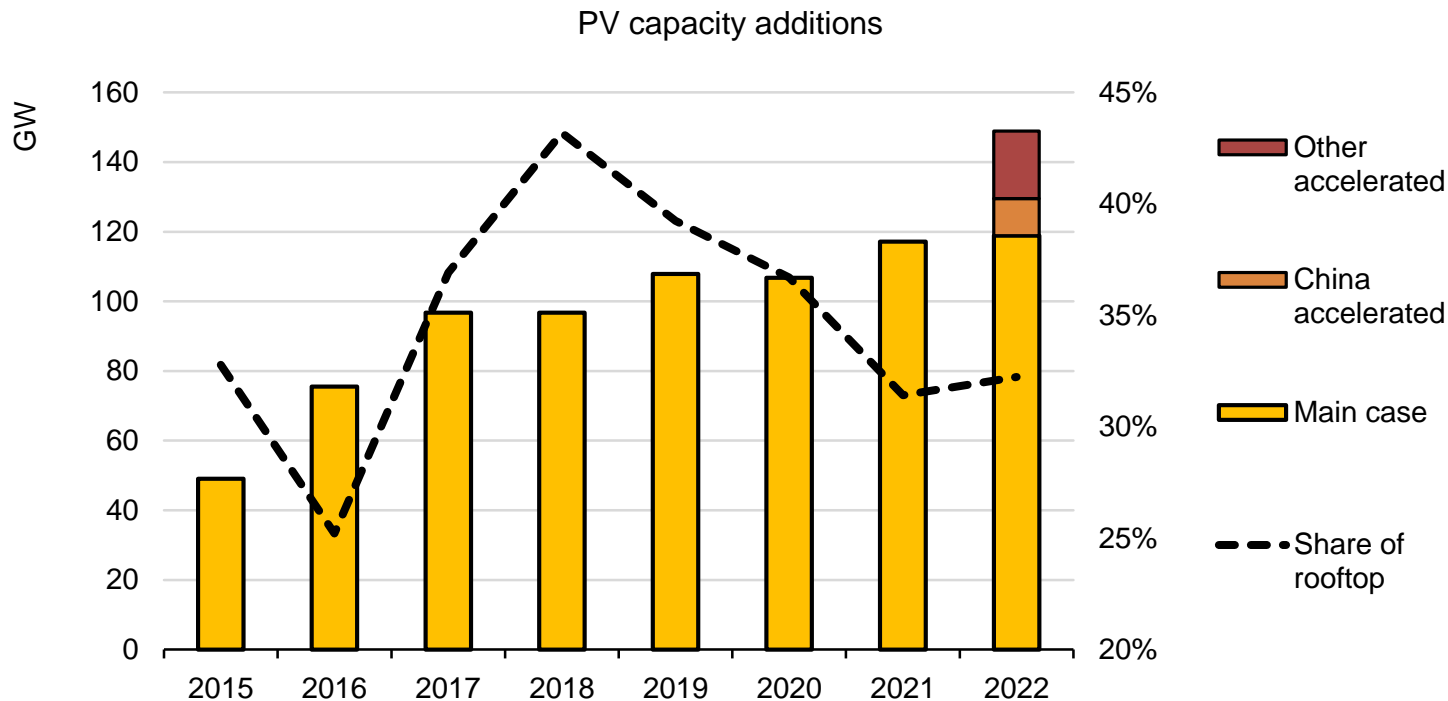


**Publicly traded wind and solar companies continued to attract investors and have outperformed the overall energy sector. Countries worldwide have auctioned record levels of capacity, led by China, India and Europe.**

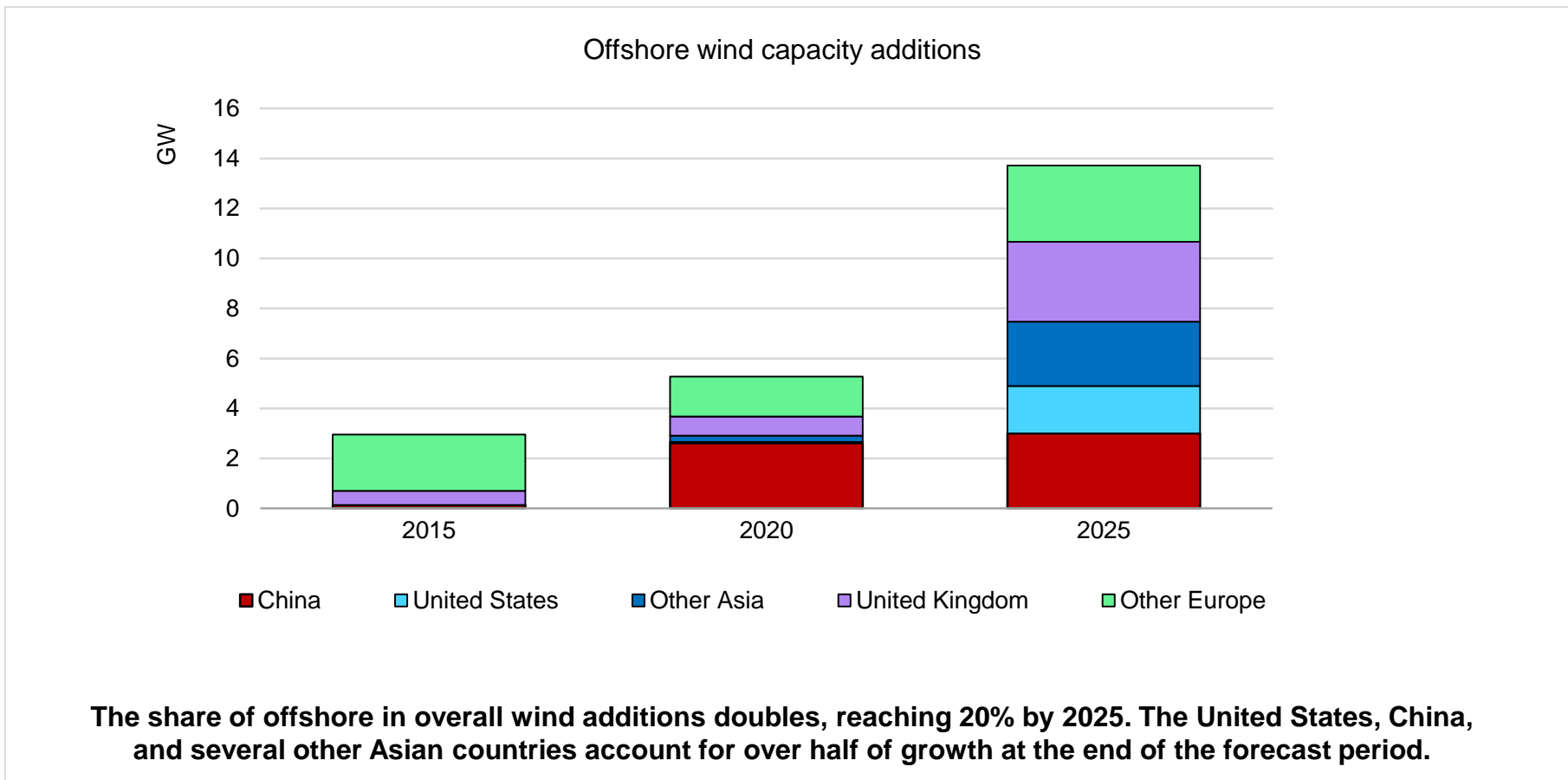
# China and United States drive renewables to record growth in 2020



# Solar PV additions reach all time high in 2022 driven by large projects

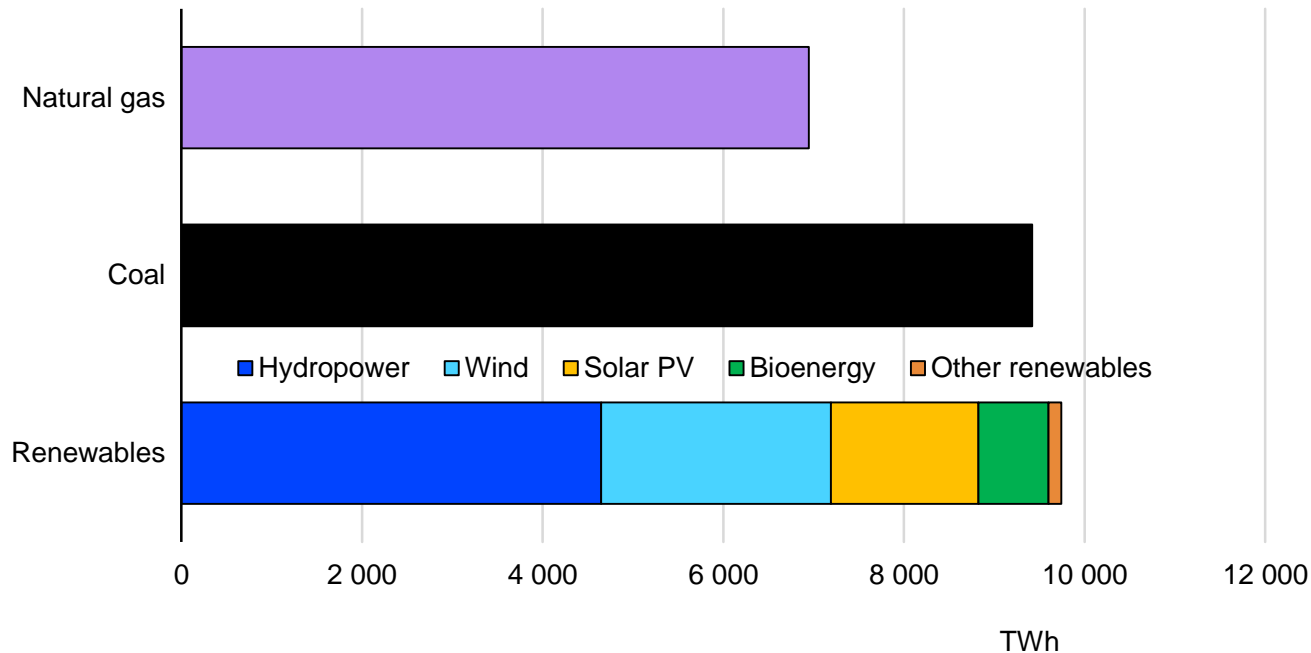


**Faster expansion of solar PV is within reach if governments tackle policy uncertainties, provide additional support to rooftop PV, reduce financing costs and address grid integration challenges.**



# A major shift in global electricity generation in 2025

Electricity generation by technology, 2025



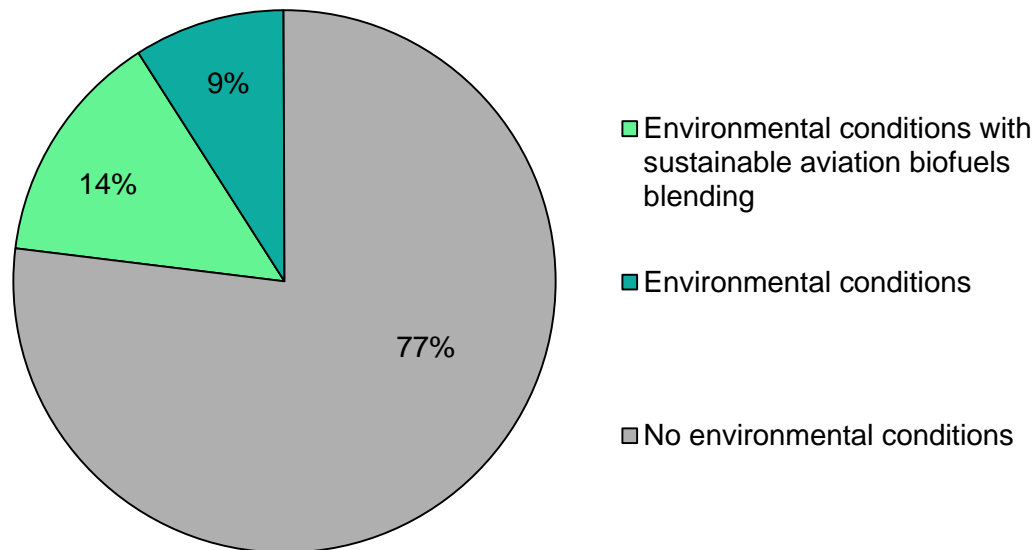
**Wind and solar PV's combined installed capacity surpasses that of natural gas in 2023 and coal in 2024. Renewables will become the largest source of electricity generation in 2025, overtaking coal.**



# Bailouts – a missed opportunity for sustainable aviation fuels?

Government financial support to the aviation industry by type of conditions attached

Total: USD 76 billion\*



\* as of August 2020

**Of 30 airlines receiving bailouts, only 4 were subject to environmental conditions. Applying a 2% sustainable aviation fuel blending requirement would increase demand by a factor of 50 from 2019 levels.**

- Unlike all other fuels, renewable electricity was very resilient in 2020, underpinned by record growth of solar and wind. Renewables are set to grow globally by almost 40% by 2025, becoming the first source of electricity.
- Despite Covid-19, investor appetite for renewables remains strong in 2020, in particular in countries with supportive policies providing transparent and predictable remuneration.
- Solar is breaking one record after another, boosted by improving competitiveness. Even faster deployment is possible from 2022 on, hinging on new policies in the US and China, and on rooftop solar developments.
- Wind generation is forecast to grow by 80%, driven by China, the US and Europe. Offshore wind additions are set to more than double thanks to rapid cost declines, with expansion shifting to Asia and the US.
- Faster deployment would be possible if countries devoted a larger share of economic recovery support to renewables, particularly in the hardest hit sectors of biofuels, renewable heat and rooftop solar.

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