World Energy Investment 2021

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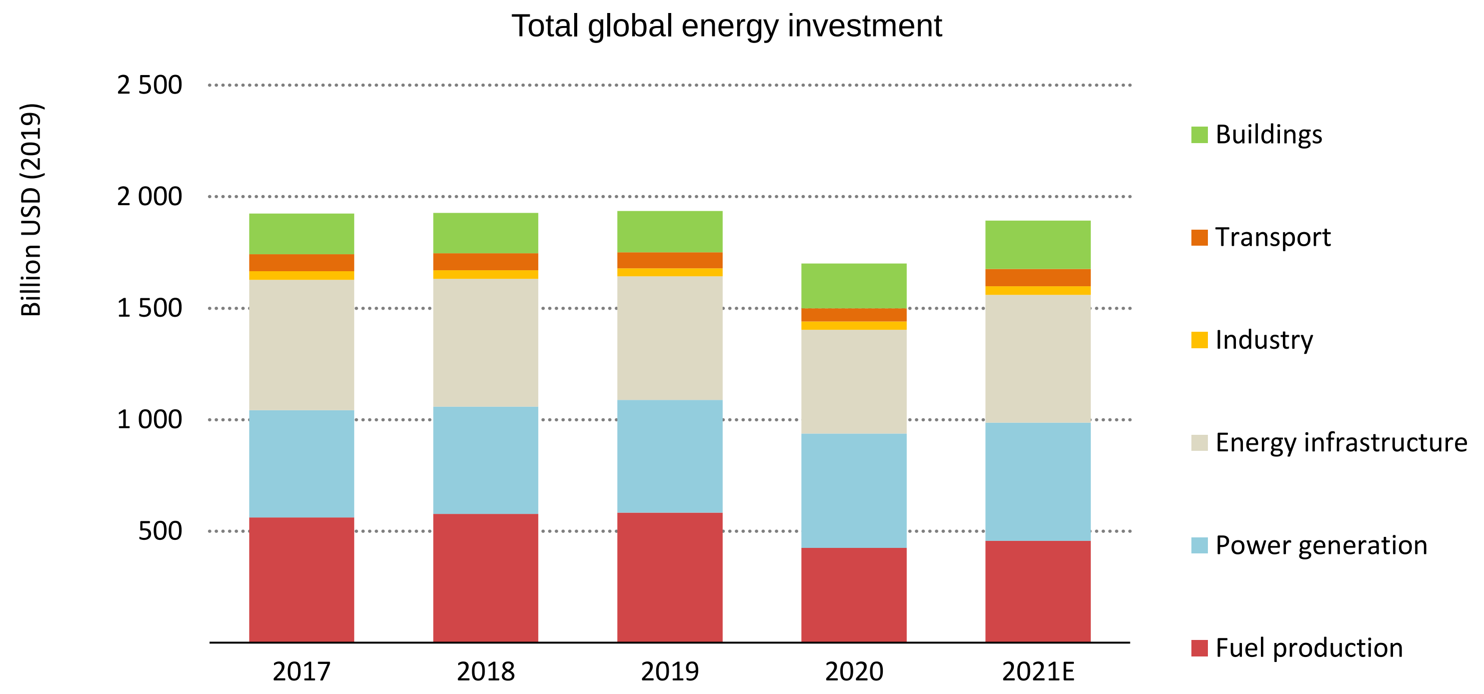
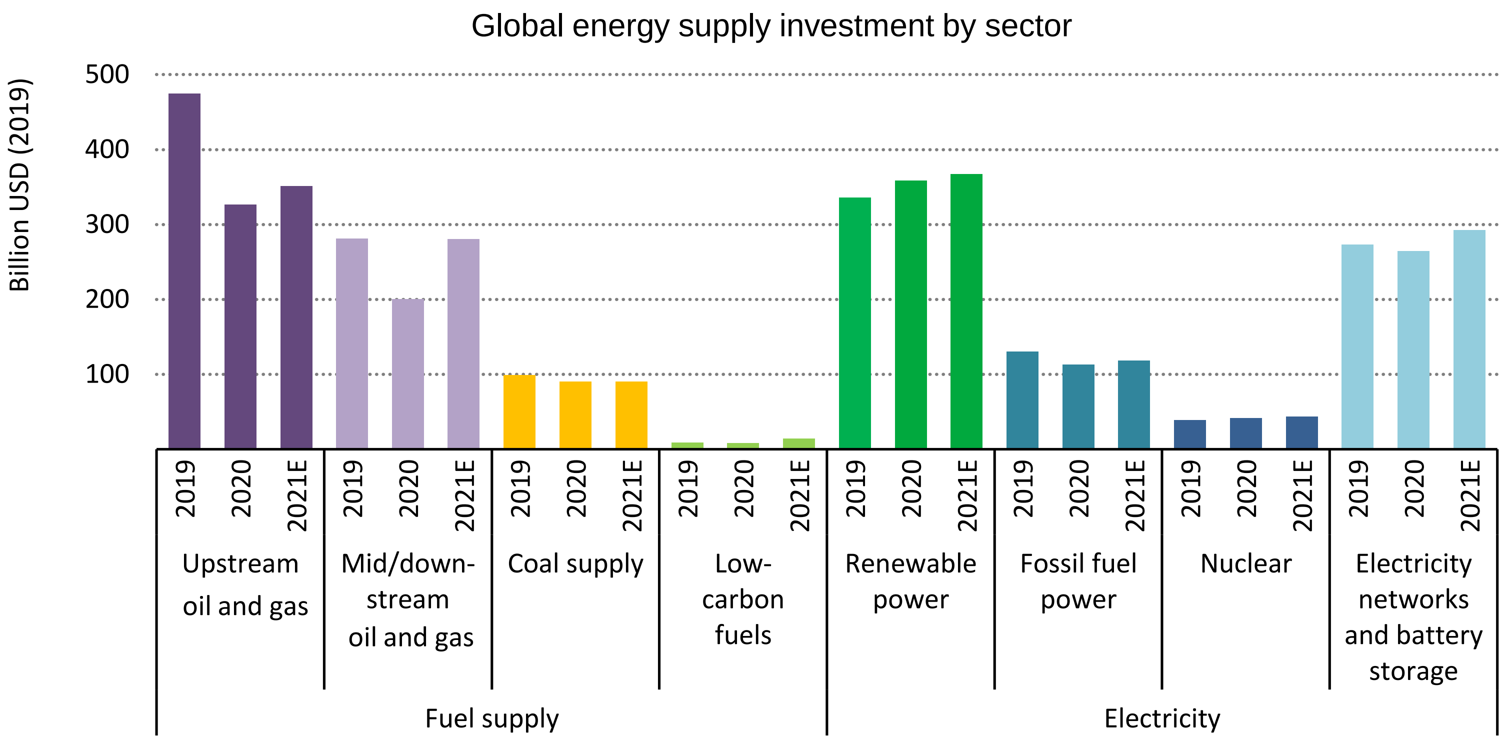
International Energy Agency

Global energy investment is set to rebound in 2021



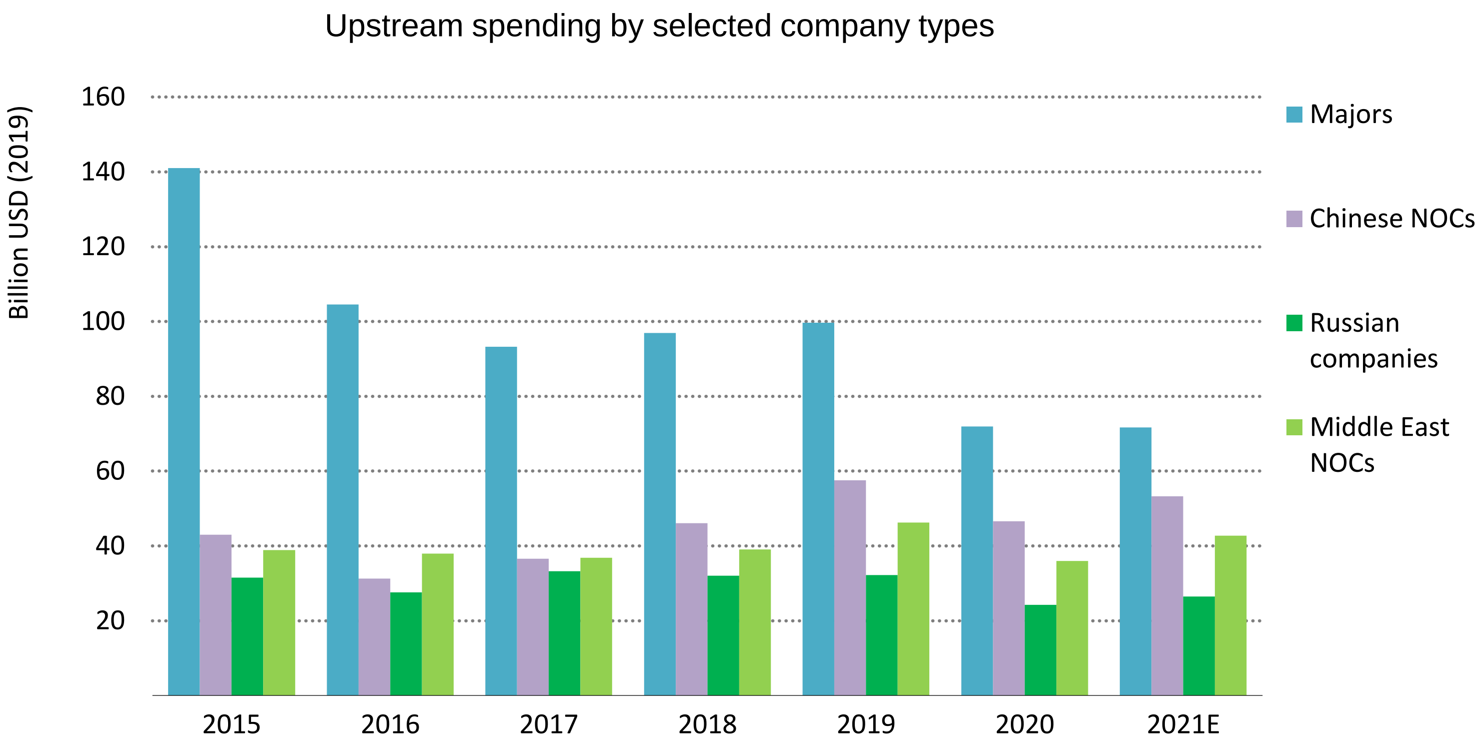
While the volume of investment is expected to return to near the pre-crisis level, the composition of energy investment has shifted towards the power and end-use sectors, and away from fuel production

Power, led by renewables, remains the largest part of supply spend



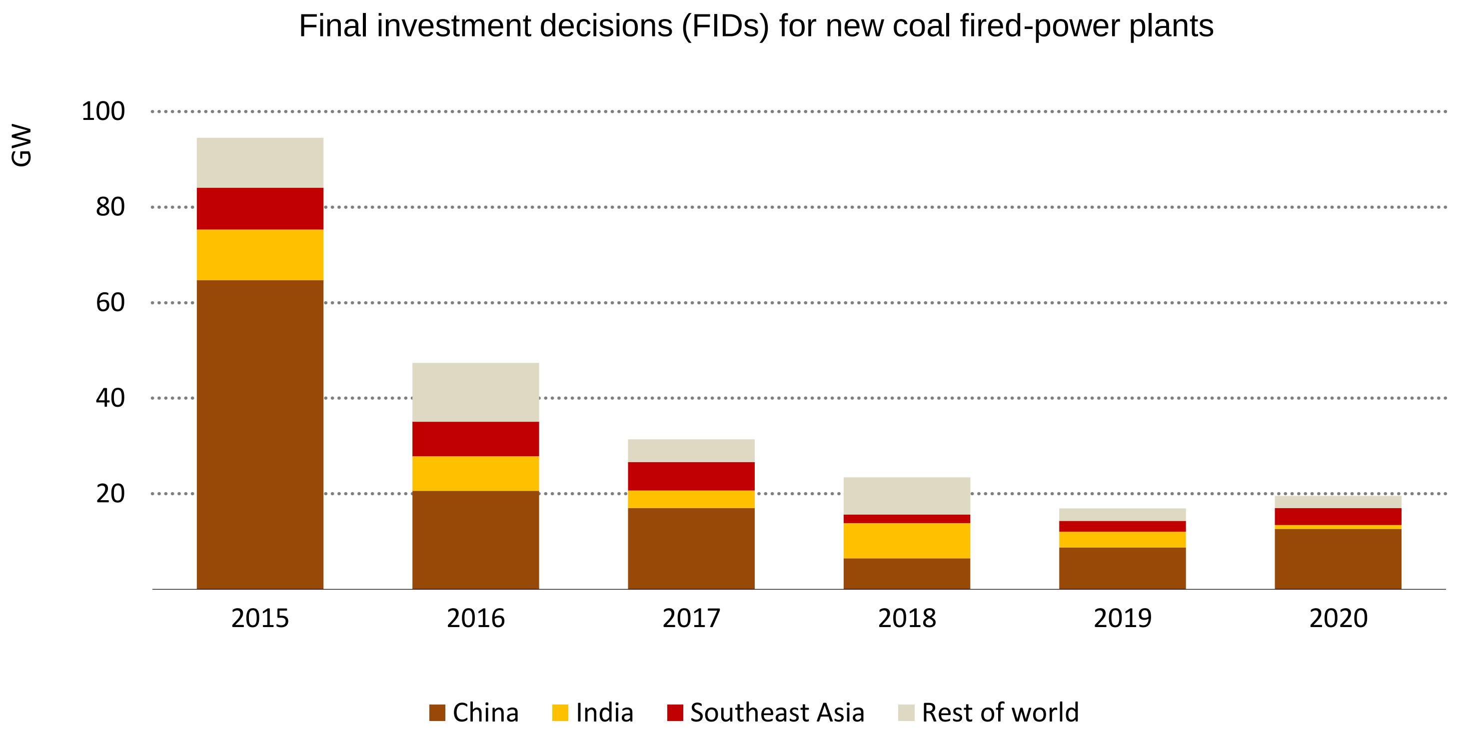
Global power investment is set to increase by around 5% in 2021, with renewables accounting for 70% of generation spending, and rising spending on grids and storage, while midstream infrastructure grows fastest in fuel supply

Upstream investment is shifting towards state-owned companies



Upstream oil and gas investment is set to rise about 10% in 2021, but spending remains well below pre-crisis levels; while cost control is pervasive, some NOCs are looking to invest counter-cyclically and gain oil and gas market share

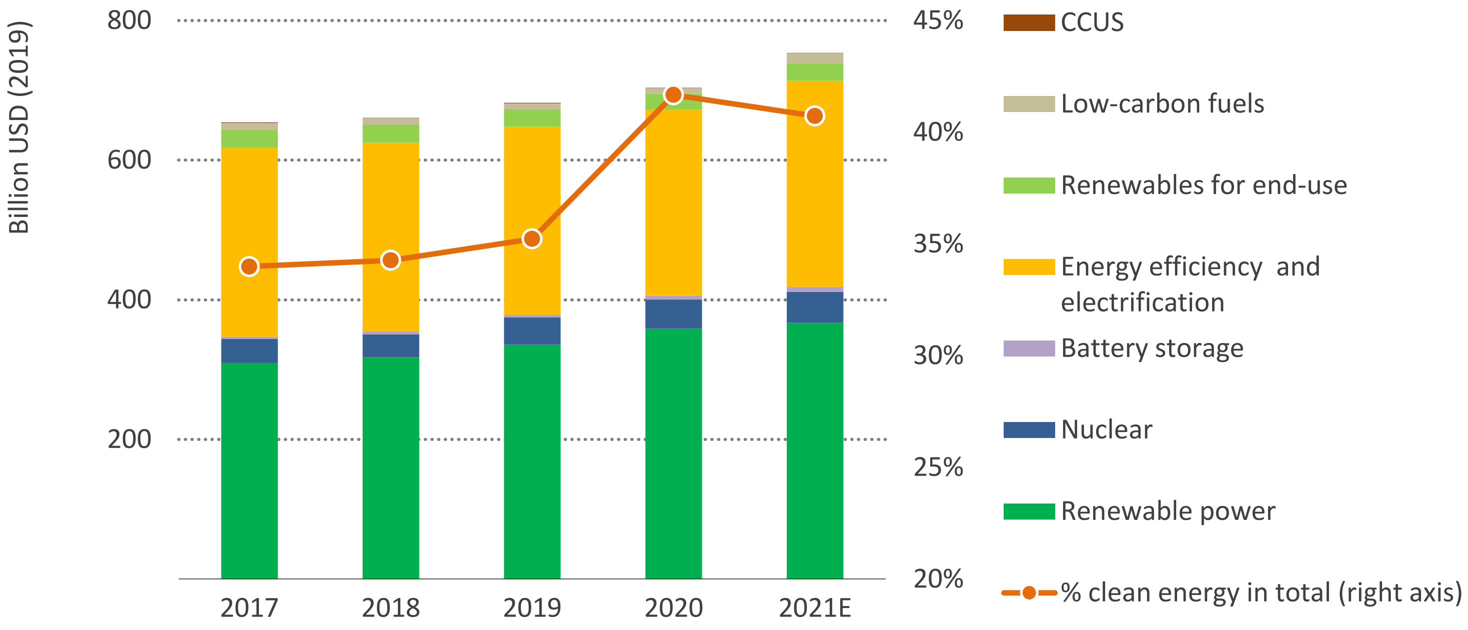
While coal is down, it is not out of the investment picture



While FIDs for coal-fired power plants are down 80% from 2015, there was an uptick in go-aheads for new plants in 2020, largely due to a lowering of restrictions in China as well as several projects elsewhere in Asia

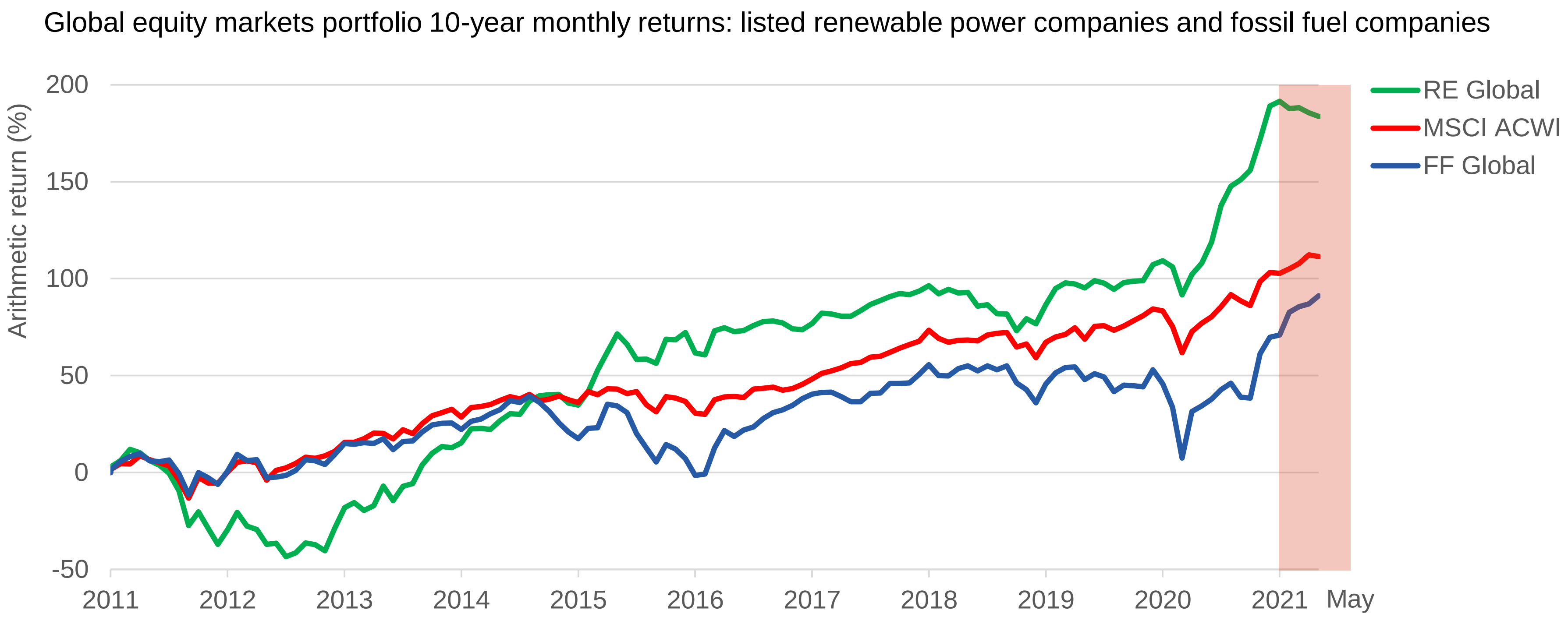
Clean energy investment is on a moderate upswing

Global investment in clean energy and energy efficiency



The impact of stimulus plans is increasingly visible in buildings efficiency, low-carbon hydrogen and CCUS, while electrification, especially EVs, remains a major driver; but, clean energy spend is well short of a sustainable recovery

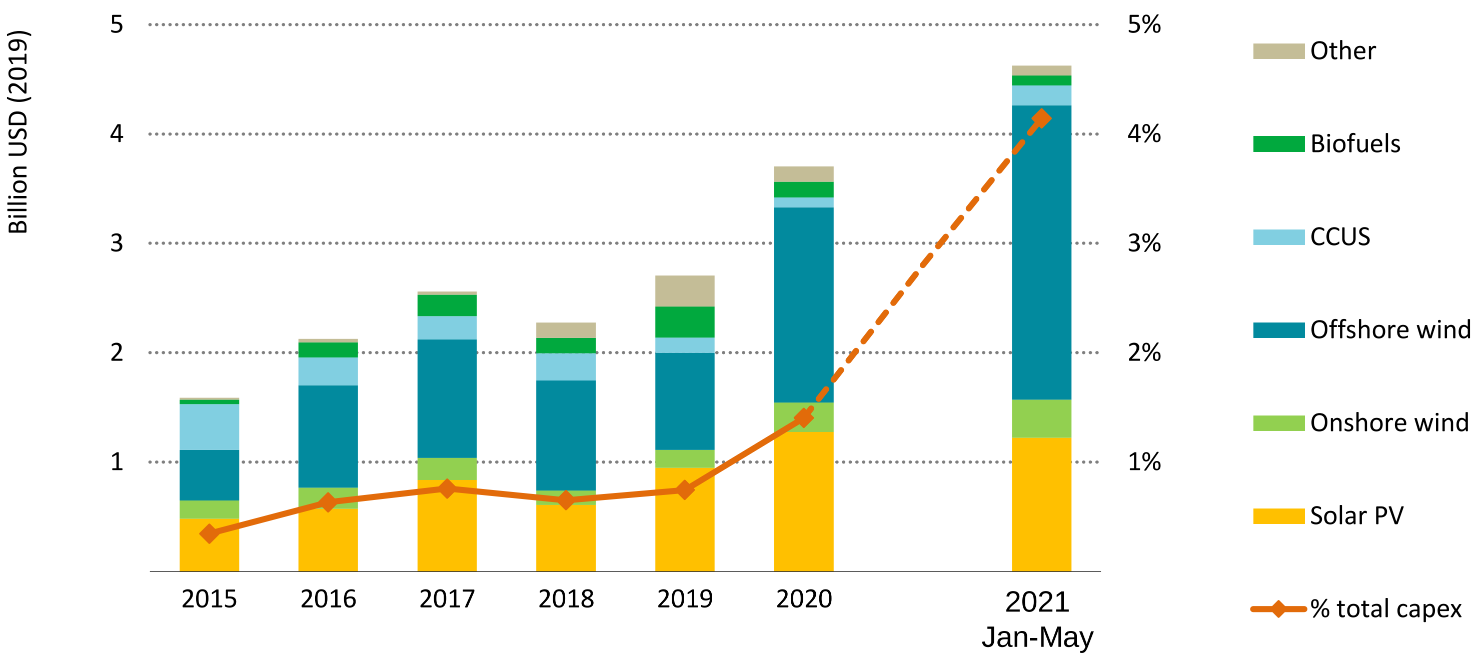
Strong performance of clean energy in financial markets



Renewable power companies have outperformed fossil companies and the wider market, and sustainable finance has boomed; but such trends have not spurred a corresponding acceleration of spending on clean energy projects

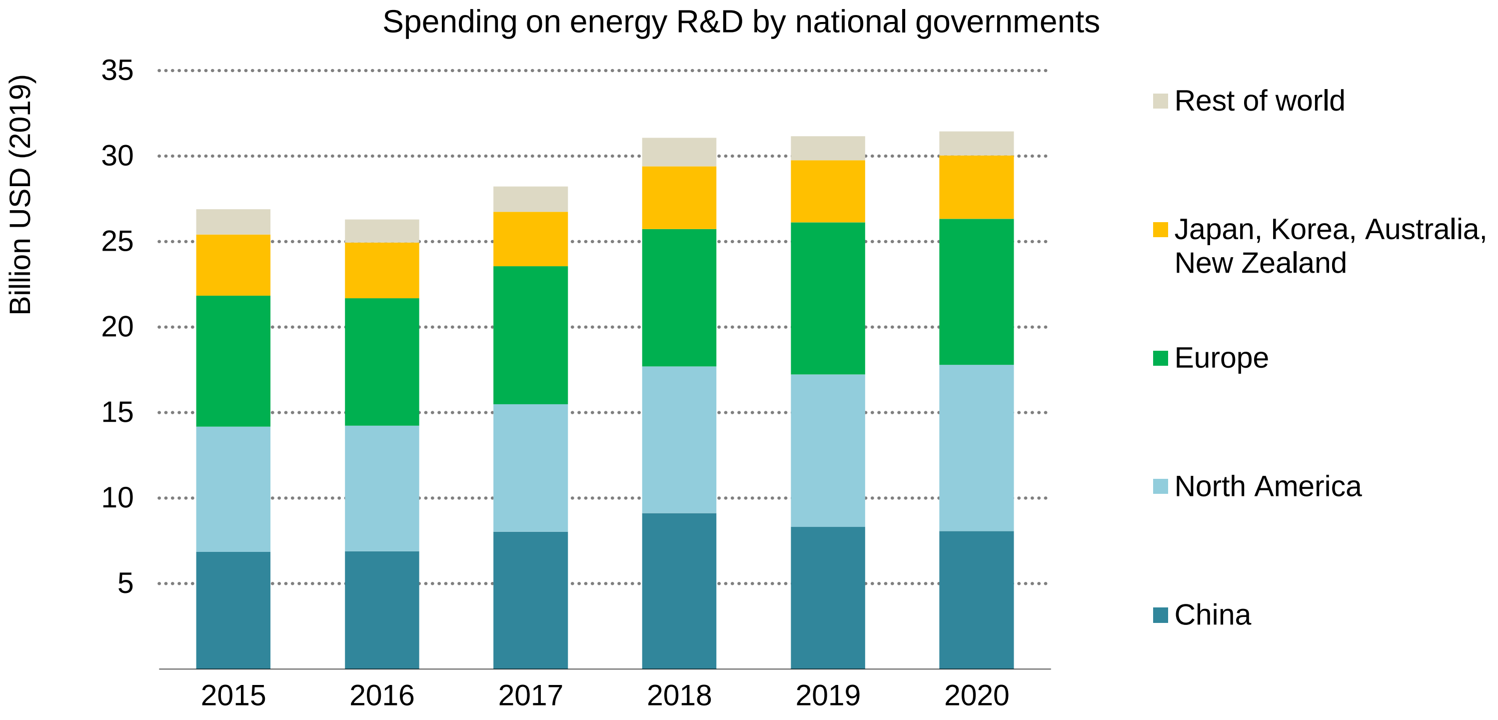
Clean energy spend by oil and gas companies is starting to pick up

Clean energy investments made by selected oil and gas companies, including data through May for 2021



Emerging oil and gas company transition strategies include a wide range of approaches; project commitments for 2021 point to a share of capital investment in clean energy rising to more than 4%, if maintained through the year

Support for innovation is a key pillar of net-zero plans



Public spending on energy R&D continued to rise in 2020, with the share of low-carbon at 80%, but corporate spending on energy R&D dropped by 2% as the pandemic weighed on budgets or led to underspending on projects

Conclusions

- Global energy investment is set to rebound by around 10% in 2021, reversing most of the shock from pandemic – but the composition of spending has shifted more towards power and end-use

- A shift in upstream oil and gas investment towards state-owned companies is raising the prospect of greater market influence, or more risky assets in the future – depending on the speed of transitions

- Clean energy investment has been more resilient during the crisis and is set for a moderate upswing in 2021, with the impacts of recovery plans becoming more visible in some markets and sectors

- Despite strong momentum, climate pledges and sustainable finance are not, for the moment, translating into an acceleration of clean energy capital spend at the scale needed to meet climate goals

- Meeting longer-term climate ambitions will depend on the evolution of corporate strategies, including in traditional oil and gas, with support for innovation a key pillar of government net zero plans

- The gap between investment trends and a sustainable pathway is largest among emerging market and developing economies – financing transitions in these areas is critical to meet climate goals

The IEA's role as an organiser of this event is facilitated through the CEM Investment and Finance Initiative (IF initiative), within the IEA's Clean Energy Transitions in Emerging Economies programme, which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952363