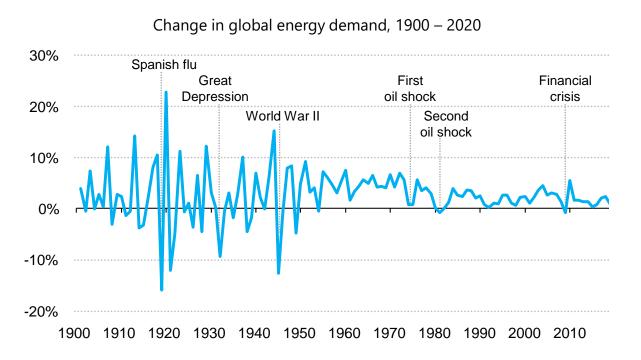


# Covid-19 Impacts on Energy

Keisuke SADAMORI, IEA 14 August 2020

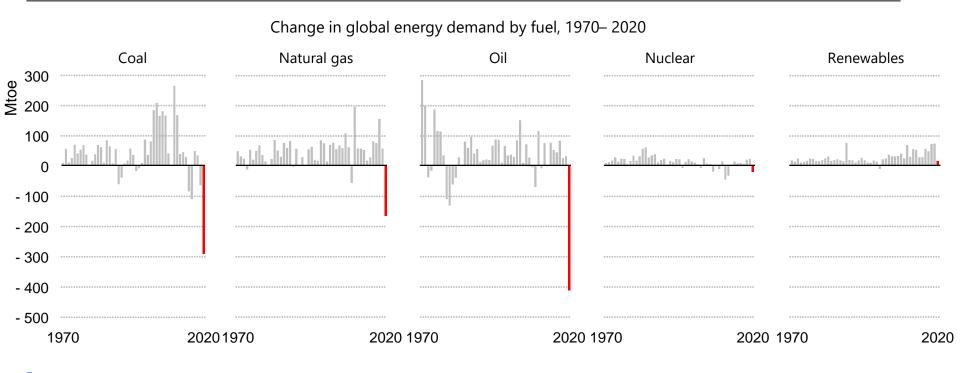
# Coronavirus: a once in century event for energy demand



The shock to energy demand in 2020 is set to be the largest in 70 years. In our estimate, global energy demand declines by 6%, a fall seven times greater than the 2009 financial crisis.



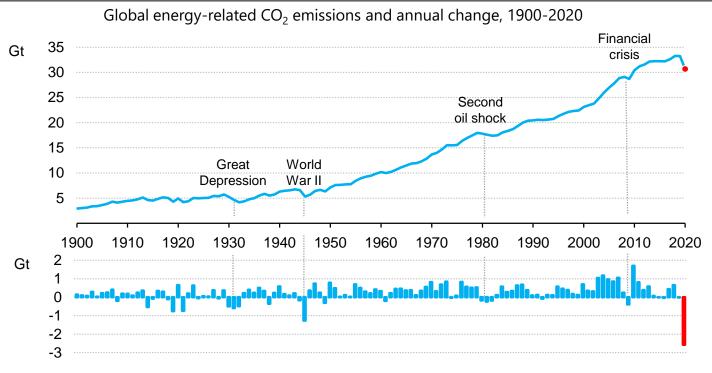
#### Fossil fuels are set for a dismal 2020



Coal is set for the largest decline since World War II, alongside sharp reductions for gas and oil. Nuclear power is less affected by lockdown measures, while renewables are the only energy source on the rise in 2020.



# CO<sub>2</sub> emissions drop the most ever due to the COVID-19 crisis

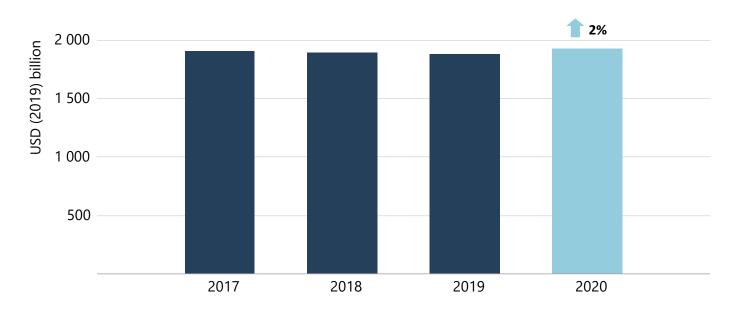


Global energy-related CO<sub>2</sub> emissions are set to fall nearly 8% in 2020 to their lowest level in a decade. Reduced coal use contributes the most. Experience suggests that a large rebound is likely post crisis.



## Pre-crisis expectations of a return to growth...

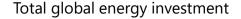
Total global energy investment based on pre-Covid-19 expectations

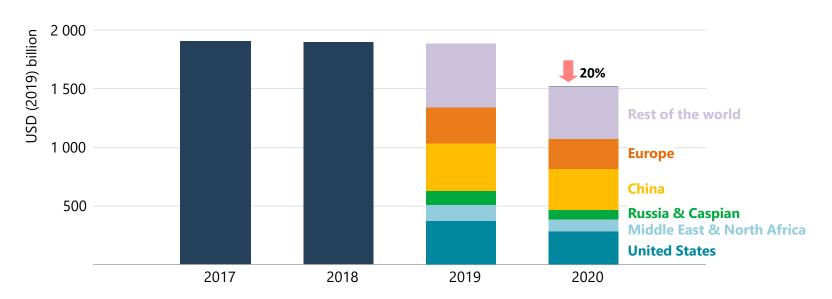


At the start of the year, expectations for 2020 pointed towards modest growth in renewables, upstream oil & gas and efficiency, pushing global energy investment up for the first time in recent years



### ...have turned into an unparalleled decline in energy investment

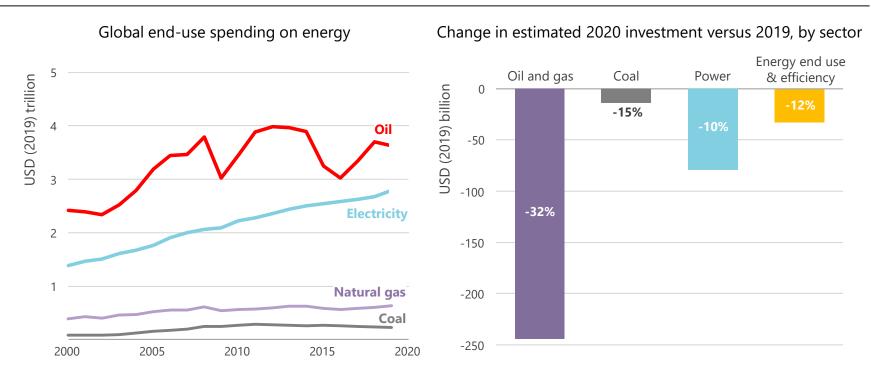




Disruption from Covid-19 is expected to push 2020 energy investment down by almost \$400 billion. All parts of the world are affected, but major producers of oil & gas have seen the largest falls



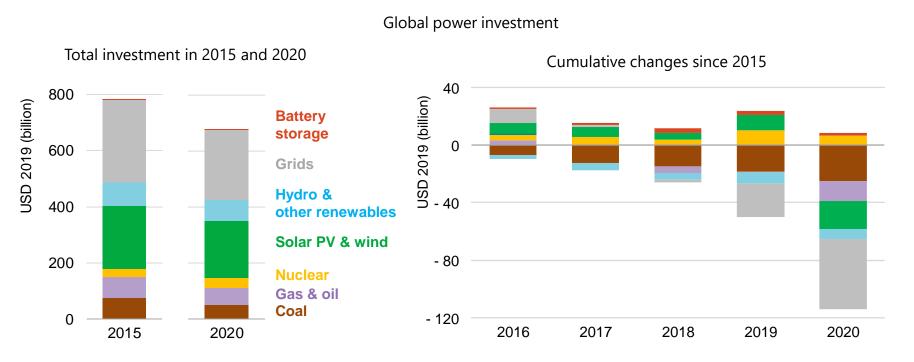
# Investment is hit by lockdowns & by demand & revenue uncertainties



Global consumer spending on electricity is set to be higher than oil for the first time in 2020. Lower demand & prices are squeezing the funds available for investment in new projects, especially in fuel supply



#### Investment in power is faltering when it needs to pick up



Investment in solar PV and wind has held up, even as costs have come down, but spending on other aspects of a secure & sustainable system – grids, storage, flexibility – are lagging behind



#### Clean energy investment has been resilient, and insufficient

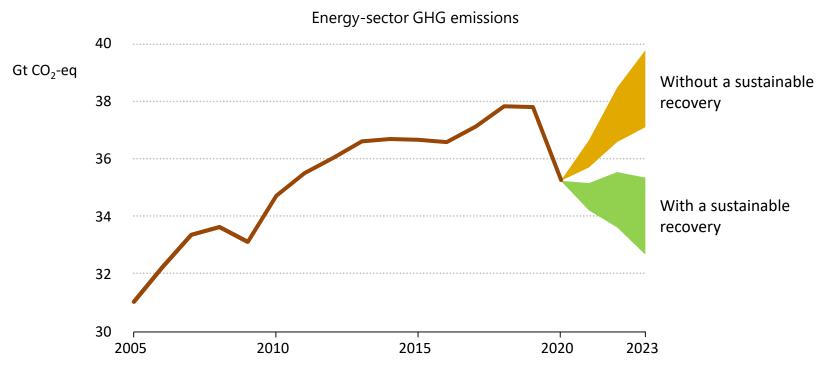
Global investment in clean energy and efficiency, and share in total investment



The uptick in the 'clean' share of total investment is not a breakthrough: absolute investment in energy transitions remain far short of what would be required for a more sustainable pathway



# Energy systems would shift towards structurally cleaner ones



The plan would make 2019 the definitive peak in global emissions, reducing GHG emissions by 4.5 billion tonnes and putting them on a path towards achieving long-term climate goals, including the Paris Agreement.



