



USEA CCUS Roadshow Webinar

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Oil and Gas companies have new visions for the future...

...but is it enough to bring back the investors?



Reduce net carbon footprint by 20% (2035) and 50% (2050)



Net zero target (2050), large structural reorganisation to achieve



Carbon neutral (2030), reduce net CI by at least 50% (2050)



Reduce CI by 40% (2040)



Carbon neutral for Scope 1 & 2 emissions (2030)



Carbon neutral (2030)



Reduce emissions by 52% per kWh of energy production (2030)



Target net zero on upstream operations (2030)

Parliament pension fund cuts fossil fuel investments

The Guardian, 24 Mar 2020

CITING CLIMATE CHANGE, BLACKROCK WILL START MOVING AWAY FROM FOSSIL FUELS

The New Yorker, 16 Jan 2020

Norway's Government Pension Fund Global gets go ahead to divest \$13bn of investments

The Guardian, 12 Jun 2019

World Bank to end financial support for oil and gas extraction

The Guardian, 12 Dec 2017

European Investment Bank to phase out fossil fuel financing

The Guardian, 15 Nov 2019

Global Financial Giants Swear Off Funding an Especially Dirty Fuel

The New York Times, 12 Feb 2020

Danish pension provider ATP to halt fossil fuel investments via external funds

Reuters, 04 Feb 2020

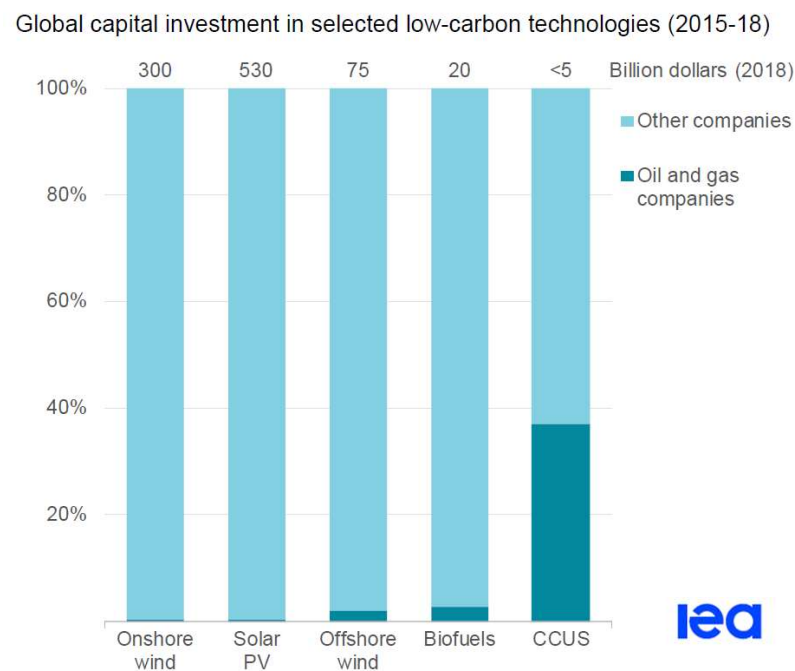
JP Morgan to withdraw support for some fossil fuels

The Guardian, 25 Feb 2020

Oil and Gas companies have been investing in low carbon technologies...

...but with a relative focus on Carbon Capture Use and Storage (CCUS)

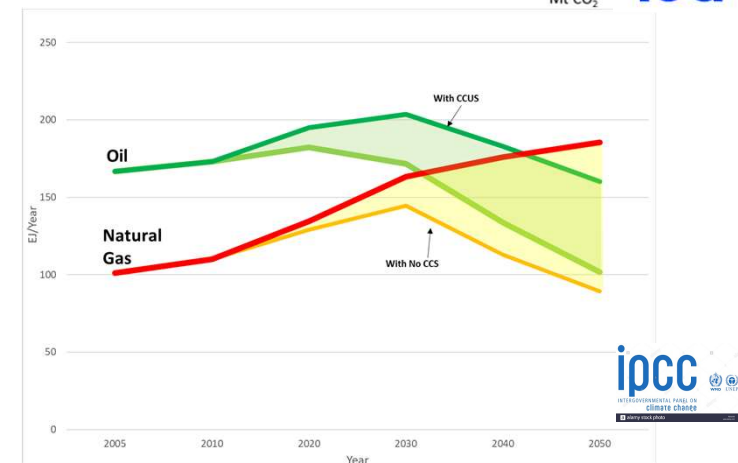
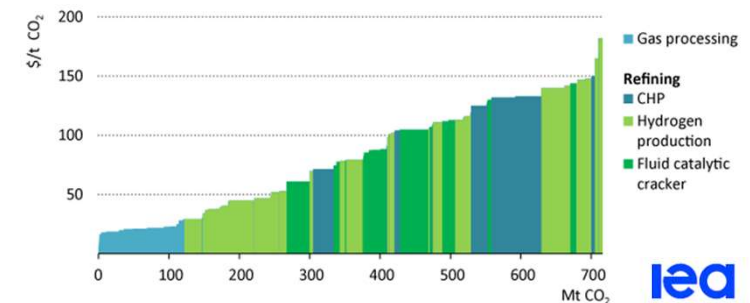
- CCUS combines a suite of technologies to reduce the level of CO₂ emitted to the atmosphere and includes capture of CO₂ from stationary sources so that it can be converted into useable products or compressed and transported to a suitable location where it can be injected deep underground for safe, secure, and permanent storage
- 19 industrial scale CCUS projects are operating worldwide, with a total capacity of ~40 Mtpa
- 10 projects, totaling ~25 Mtpa are in the United States with 4 of these requiring significant policy support to economically viable



Half of all CCUS today is Performed within Oil and Gas Operations Reducing Scope 1 and 2...

...and its strategic role to directly and indirectly address Scope 3 emissions is growing

- With a focus on power, the number of CCUS projects under development shrunk during the first half of the 2010's, resulting in limited capacity additions until a new wave of facilities emerge post 2025
- Project technical, commercial, and regulatory complexity, along with a need for durable policy support to provide a business case has yielding a low success rate for capacity additions of 17% during the last decade
- A \$50/t CO₂ price could reduce oil and gas Scope 1 & 2 emissions by around 250 Mt
- The volume of oil and gas that is enabled by CCUS in climate and energy models is significant, and secures continued use of oil and underpins the growth of natural gas



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