

# The oil and gas industry and the energy transition

Economics and Investment Office



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Improved energy efficiency and accelerated renewable deployment are the most important steps in the transition.

Fossil fuels divestment: a rising tide?

## New York City plans to divest \$5bn from fossil fuels and sue oil companies Growing number of global insurance firms divesting from fossil fuels

Report shows around £15bn of assets worldwide have been shifted away from coal companies in the past two years as concern over climate risk rises

Edinburgh University divests from all fossil fuels

# Growing number of pension funds divest from fossil fuels

Schemes move away from companies that generate revenues from oil, gas and coal

Catholic church to make record divestment from fossil fuels

By Bill McKibben December 21, 2017

THE MOVEMENT TO DIVEST FROM FOSSIL FUELS GAINS MOMENTUM



### In SDS by 2030s global oil demand decline exceeds 1 million B/day annually

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But even in SDS, oil serves the majority of transport energy needs till 2040.

# Gas benefits from switching from coal and growth in chemicals but increasingly squeezed by renewables



Due to the current dominance of coal, Asia represents a higher share of global gas demand in SDS than in NPS maintaining a need for LNG investment.

# Oil and gas investment remains substantial in SDS



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Even the robust policy assumptions of SDS lead to a lower demand decline than the natural depletion of production.

# US shale: the largest single component of supply growth

#### Oil and gas production in the United States

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With a short investment cycle and widespread hedging climate related stranded asset risk is practically zero with US shale.



Average size of conventional resources sanctioned and time-to-market

A shift in company strategies and technology developments leads to shorter project cycles across all the oil and gas industry.

#### Low carbon investment by the oil industry: Leveraging key skills and assets of oil companies



#### Offshore skills



Consumer relations and retail networks

#### Excellence in project engineering



Expertise in chemistry

Renewable investments still represent a small minority of oil company capex but start the positioning for a low carbon business model.



# Carbon capture and storage: coming back to the game



USA: 45Q creates a new, viable business model for CCUS

China: the first CCS/coal conversion project started construction

EU/Japan: increasing interest and venture capital funding into innovative utilisation pathways through H2

CCUS investment is indispensable for a well below 2 degrees stabilization

