GLOBAL FORUM

On Flaring and Venting Reduction and Natural Gas Utilisation

Clearing the air: a role for us all

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The Energy Challenge Trilemma

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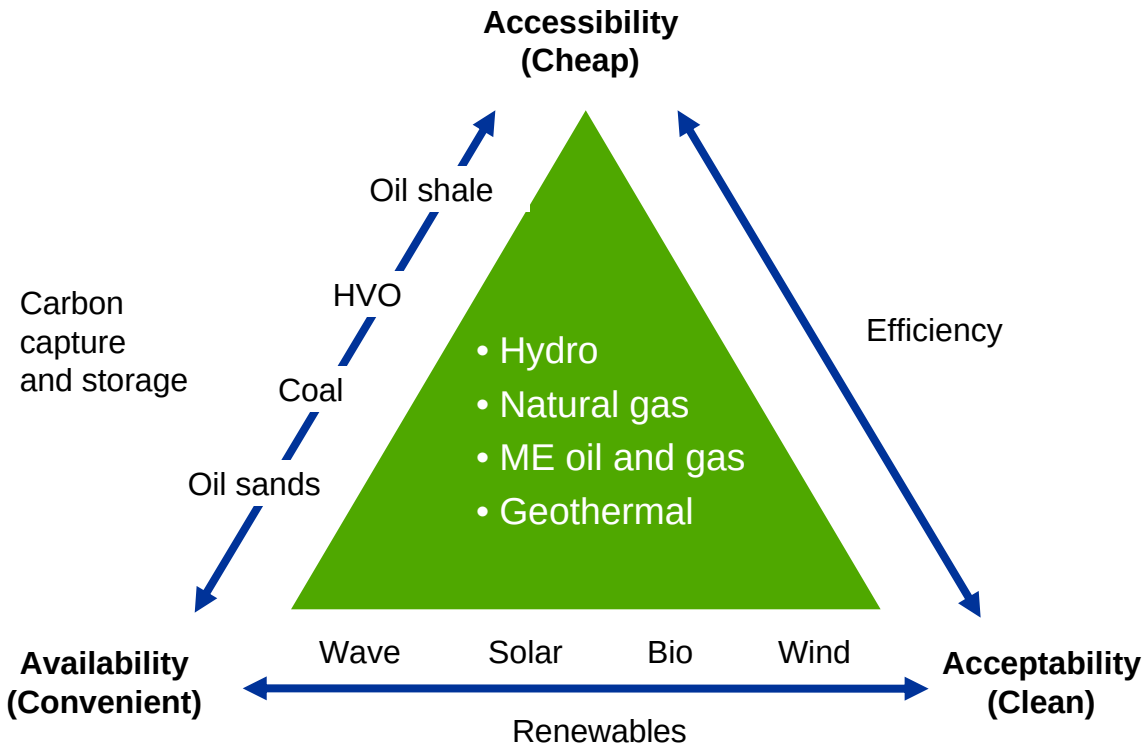
ENERGY DEMAND

- Could more than double by 2050 as population rises and developing countries expand economies
- Hydrocarbons will continue to provide the foundation of world energy supply for at least the rest of this century
- As a result, management of the CO_2 footprint is a priority



Shell Scenarios

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3 HARD TRUTHS

DEMAND

SUPPLY

CO2

2 SCENARIOS

SCRAMBLE

BLUEPRINTS

1 PREFERRED APPROACH

BLUEPRINTS

CO2 REDUCTION PATHWAYS

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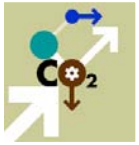
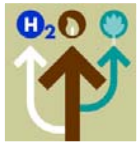
WHAT NEEDS TO BE DONE?

- Improve efficiency of operations, seeking to be first quartile.

- CO2 Capture and Storage (CCS).



- Technologies that increase efficiency and reduce emissions in production



- Low-CO2 sources of energy, including natural gas and low CO2 fuel options

- Help customers use less energy and emit less CO2.

- Working with governments and advocating the need for more effective CO2 regulation.

Flaring

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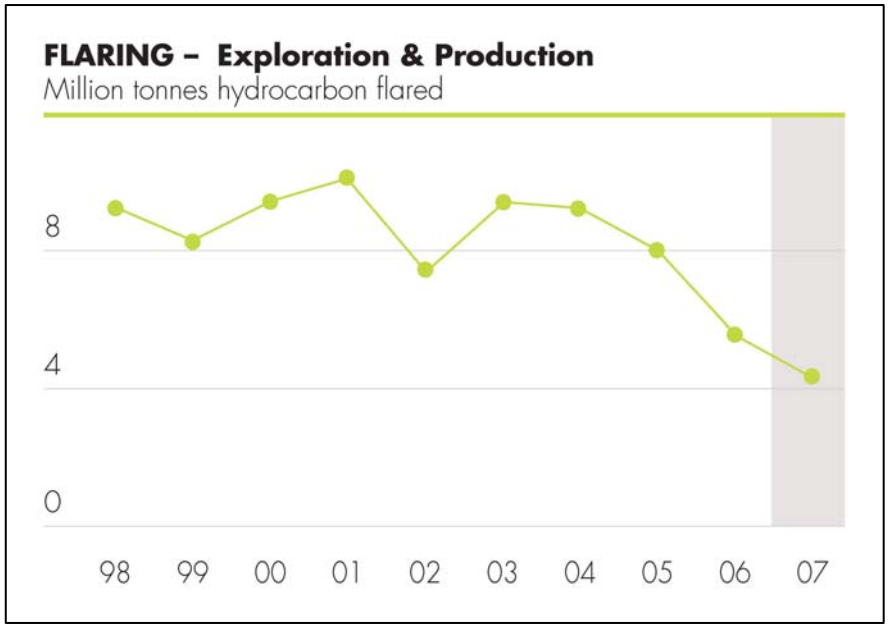
Installing 45 MW Gas Turbine in Salym



Gas Turbine Generator at integrated oil and gas project

"Flares down" in Groningen

Carbon Capture and Storage

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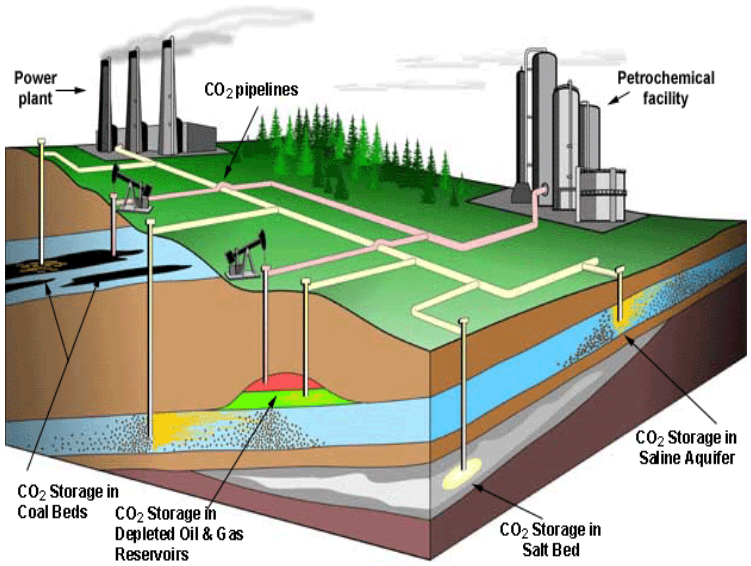
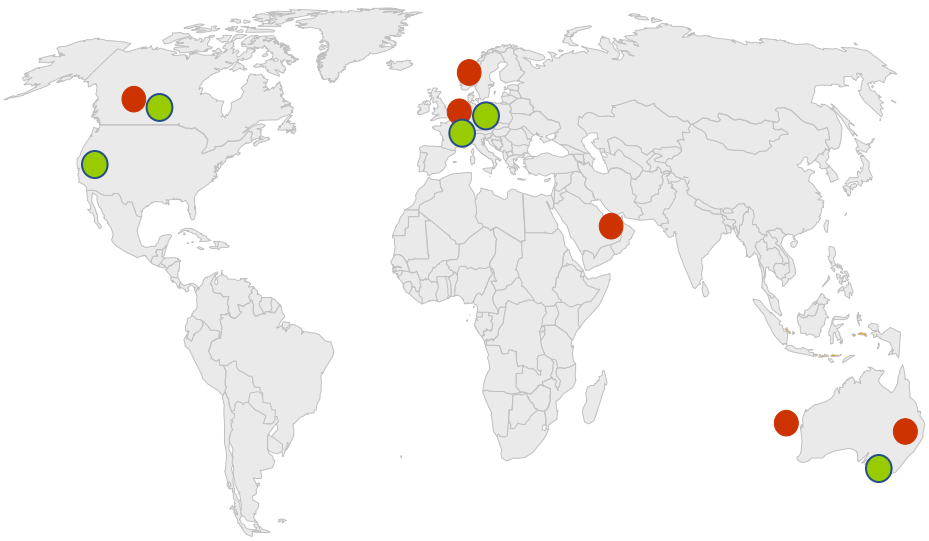
Illustrative potential CCS schemes



Participating in CCS storage demo projects and developing industrial scale CCS projects



- CO2 storage demonstration / research projects
- Industrial scale (> 100ktpa) CCS projects

Multiple research partnerships with leading academic institutes throughout the world

Core Messages to the Regulator

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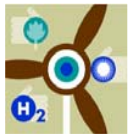
Cap & Trade

For large stationary sources, creating a global carbon dioxide market

CCS

Clear incentives



Renewables

A simple, credible target for share

Transport

Separate measures in the transport sector (e.g. vehicle efficiency standards; vehicle/road use programmes; incentivising the use of fuels based on their ability to deliver reductions in CO2 based on well-to-wheel)

Building Standards

Robust energy standards with incentives to retrofit

What Copenhagen Needs To Deliver

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Incentives for CCS

- International CCS project mechanism
- Fully convertible certificate for one tonne of CO2 stored underground.
- CDM or as a separate instrument

Clean technology funds

- For Discovery, Development and Demonstration of key energy technologies that are still some distance from deployment.
- Must go beyond R&D and include assistance for the important commercial scale **demonstration phase** of new technologies such as CCS

'We wish to pursue these through coalitions, and not as Shell alone'