

Your Innovation Partner



The
Oil & Gas
Technology
Centre

Your Innovation Partner

Moving the dial to overcome the
Asset Integrity Challenges

May 2019

Our Goals



Unlock

Unlock the full potential of the UK Continental Shelf



Anchor

Anchor the supply chain in North East Scotland



Inspire

Inspire a culture of innovation and transformation



£180 million funding from the Aberdeen City Region Deal

Technology Vision



Fix today



Data access



Asset inspection



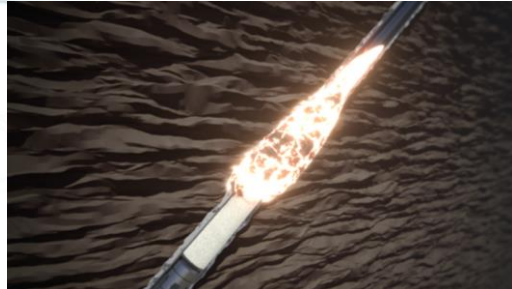
Production optimisation



Revitalise exploration

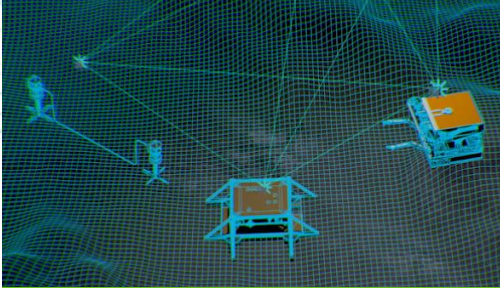


Efficient decommissioning



Alternative well barriers

Maximise recovery



Tieback of the Future



Integrated energy



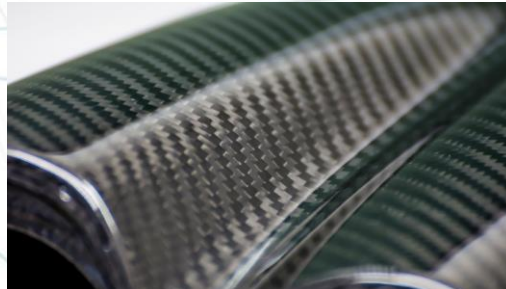
Automation



Remote operations



Artificial intelligence



New materials

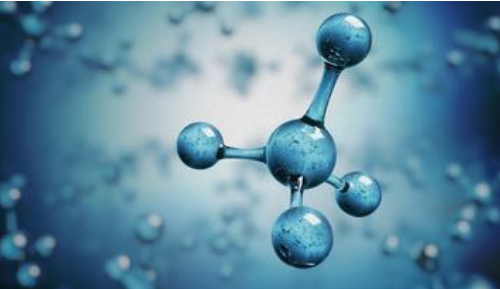
Transform tomorrow



Low carbon operations



Reusable infrastructure



Hydrogen delivery



Data driven



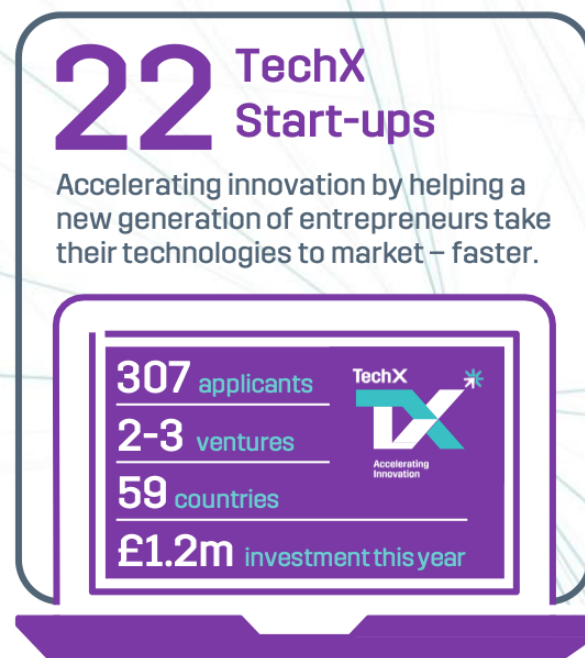
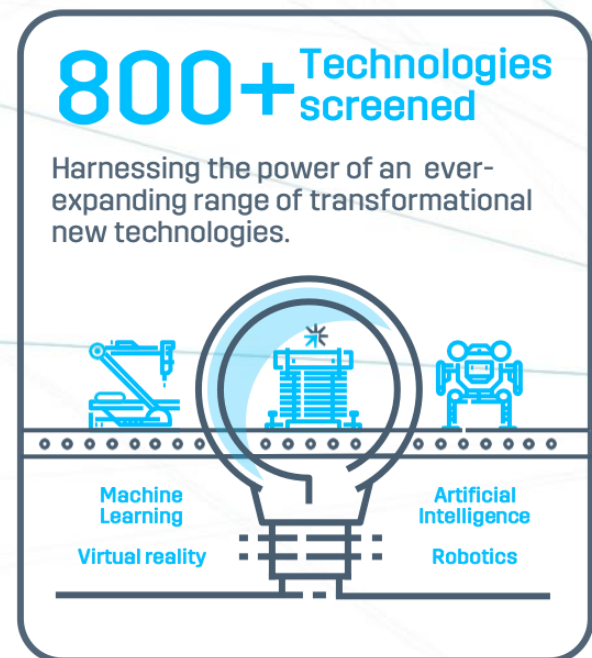
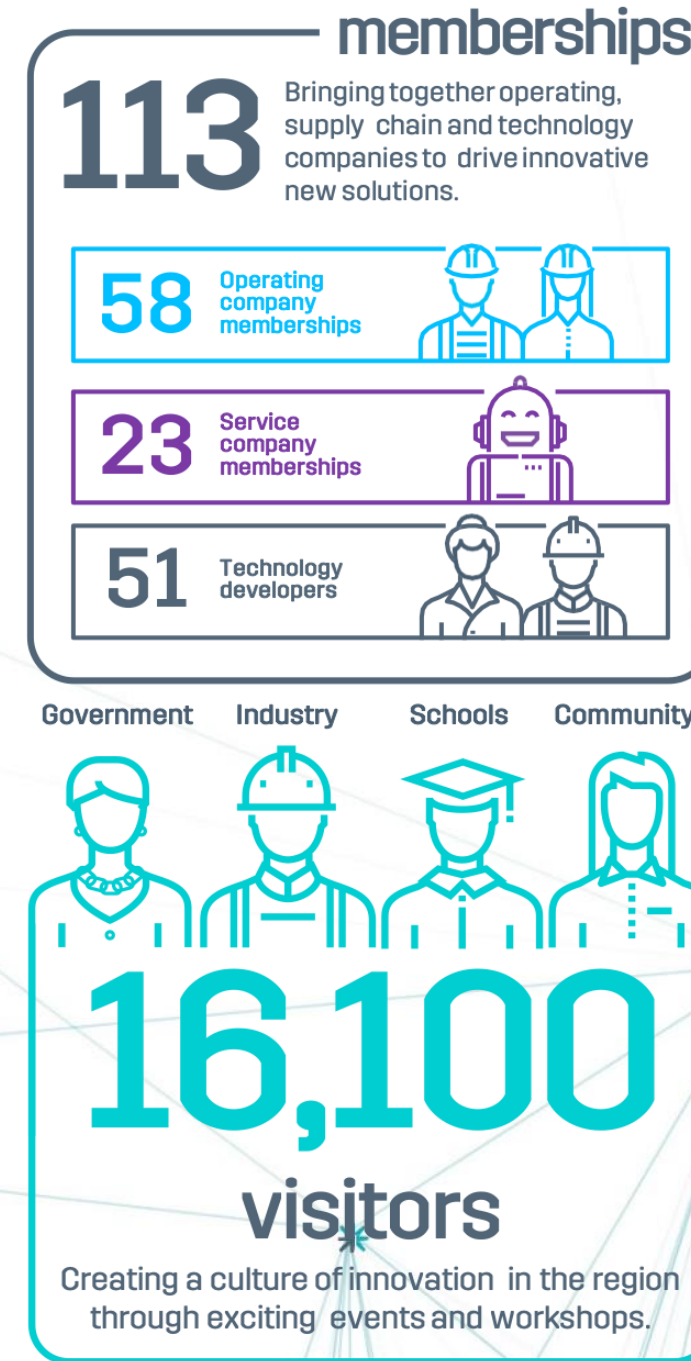
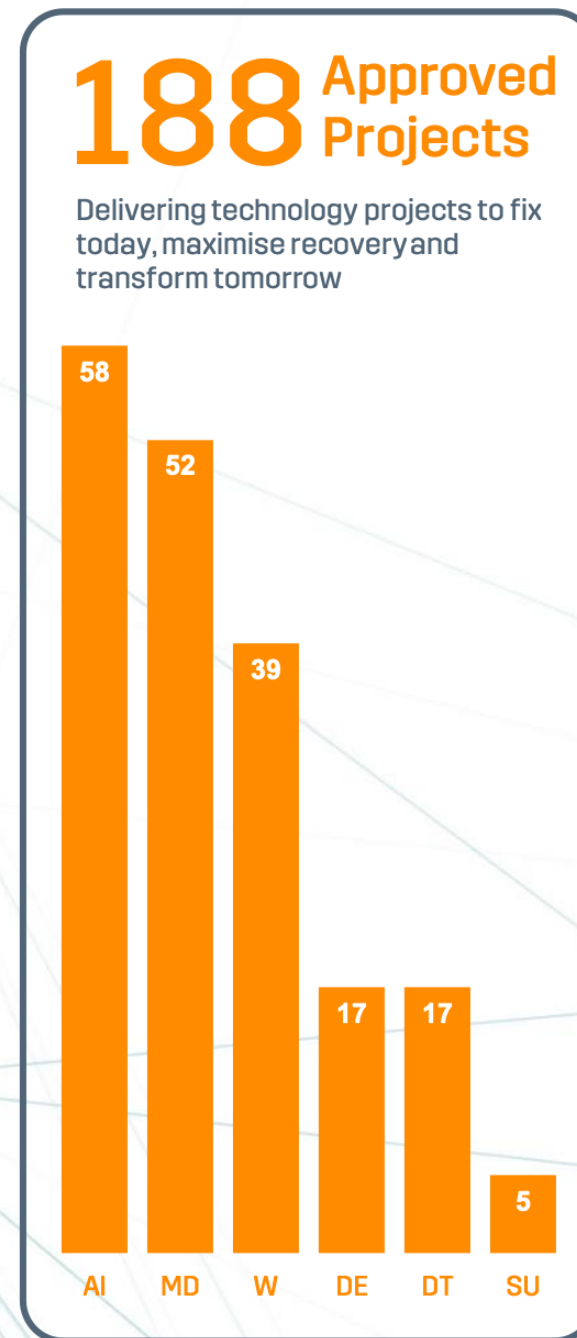
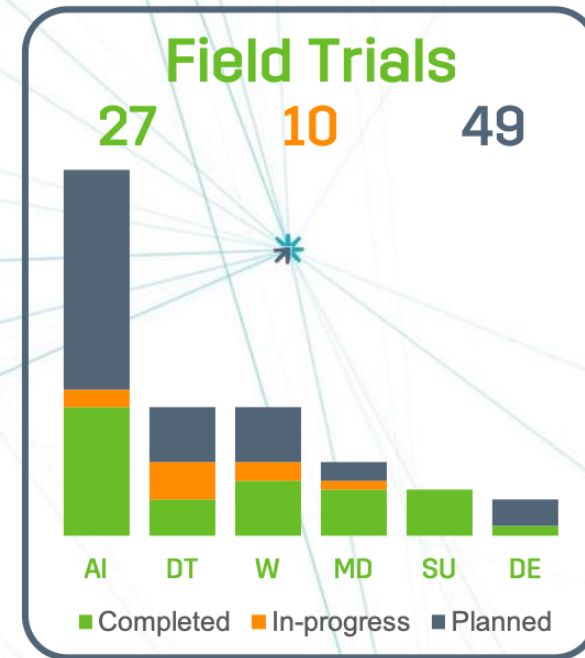
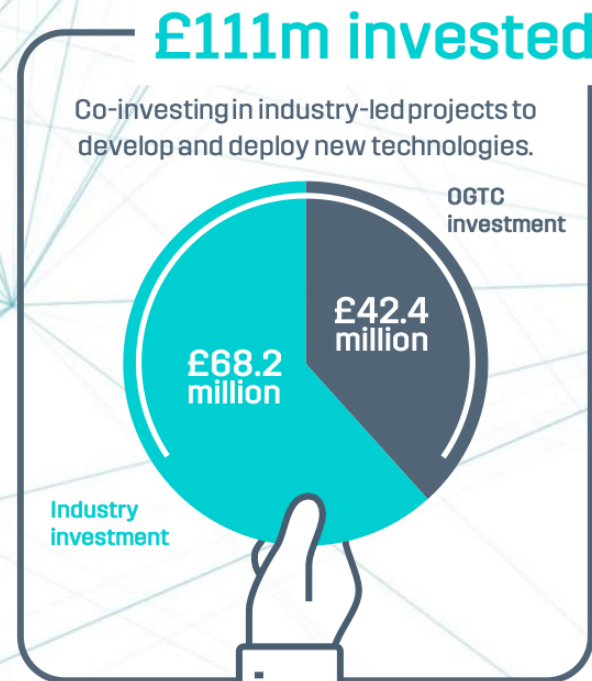
Unmanned facilities



Zero carbon developments

Transforming the industry for the low carbon future

Our Track Record

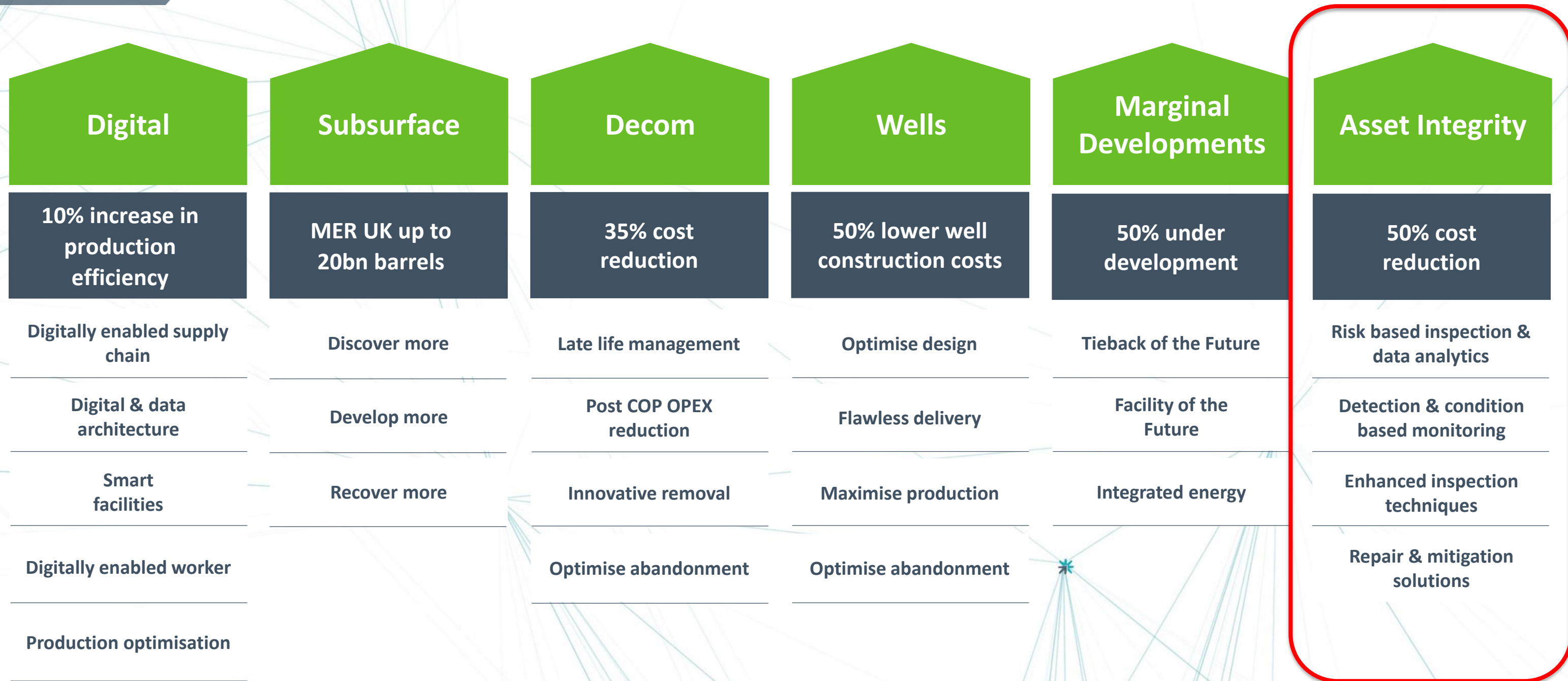


Delivering strong results

Solution Centres



Driving

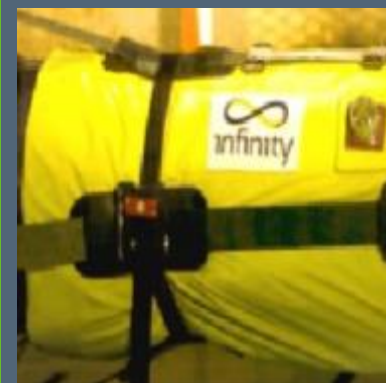


Delivering solutions to industry challenges

Fix Today



Delivering



Failforce actuator safety gauntlet

Simple, low cost protector for actuator valves

Improves safety and lowers cost by 90% or £8,000 per actuator

Potential £300 million in savings to UKCS

Increase safety



Non Invasive Inspection (NII)

Technologies delivering significant cost, safety and efficiency benefits

Reduce the need for confined space entry

Potential £242 million in savings to UKCS

Increased production



Delivering projects that move the dial

Maximise Recovery



Delivering



Electrical Impedance Spectroscopy (EIS)

Characterises electrochemical processes such as corrosion as part of a monitoring system

Reduces the risk of Corrosion Under Insulation (CUI)

**Potential £130 million
in savings to UKCS**

Eliminating CUI



GDi digital twin & inspection

3D modelling and 360 imaging of offshore installations

Improves asset integrity efficiency, including maintenance and repair

**Potential £500 million
in savings to UKCS**

Reduce inspection costs



Delivering projects that move the dial

Transform Tomorrow



Delivering



Autonomous fabric maintenance

Robotic solution, embedded with pioneering AI software

Fully autonomous capable of blasting and coating complex structures

Potential £625 million annual saving to UKCS

Increased Efficiency



Offshore Work Class Robot (OWCR)

Fully-Autonomous inspection system for remote operations

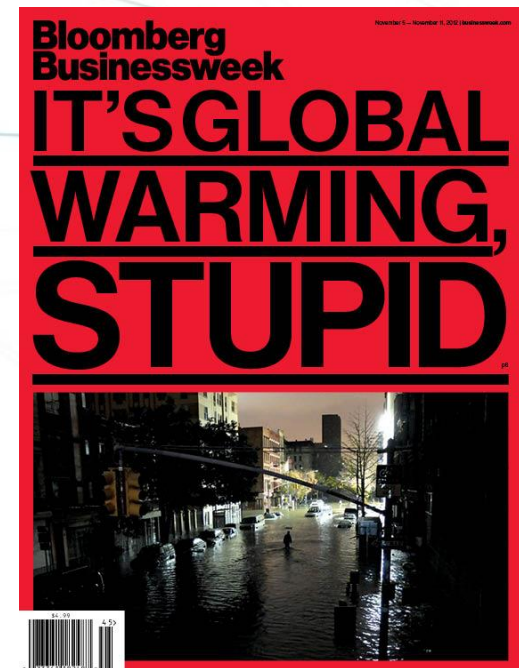
Self-driving robot, mission programmed to inspect and gather data

Potential £127 million saving to UKCS

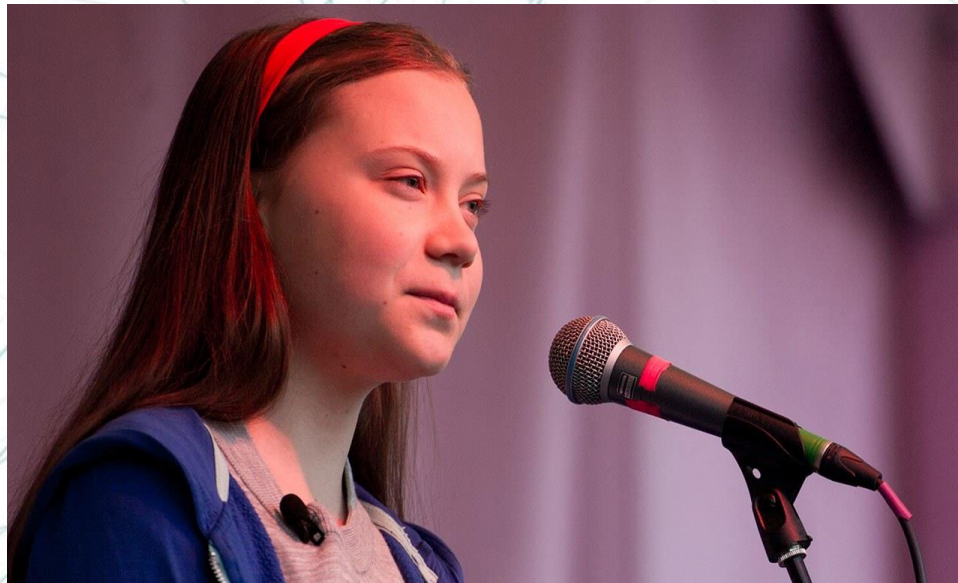
Remote operations



A Changing World



The Social Wave



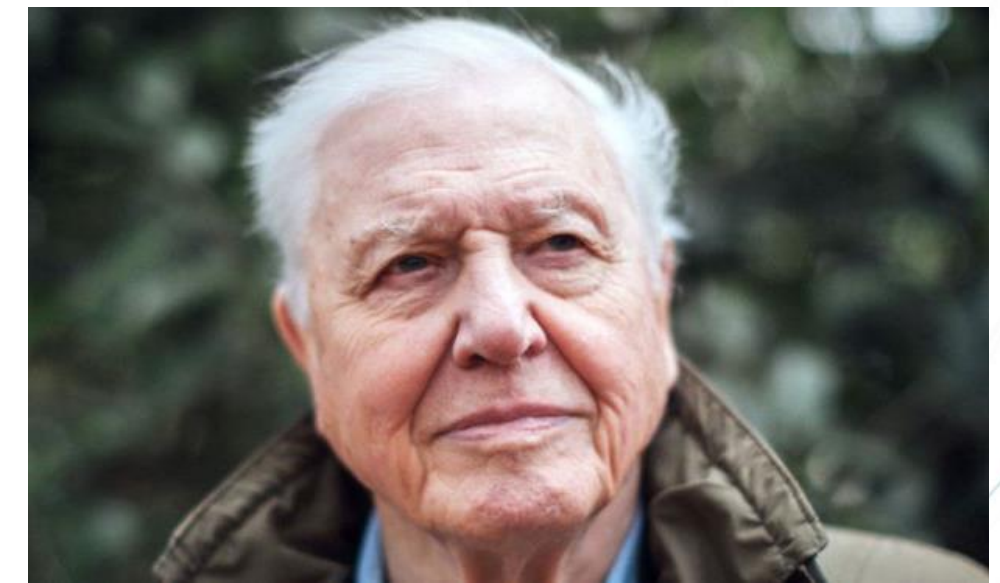
Greta Thunberg

“I don't want your hope. I don't want you to be hopeful. I want you to panic...and act as if the house was on fire. Because it is.”



Damon Gameau

“If we simply embraced the best solutions already available to us to improve our planet and shifted them rapidly into the mainstream.”

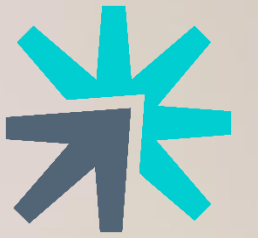


Sir David Attenborough

“If we have not taken dramatic action within the next decade, we could face irreversible damage to the natural world and the collapse of our societies.”

Driving demand for action

Industrial Transition



A cleaner industry

Decarbonise operations



Net zero carbon basin

Integrated energy



Global net zero

Our contribution



Working across the energy sector to be part of the solution

Work With us



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Together we can transform the future