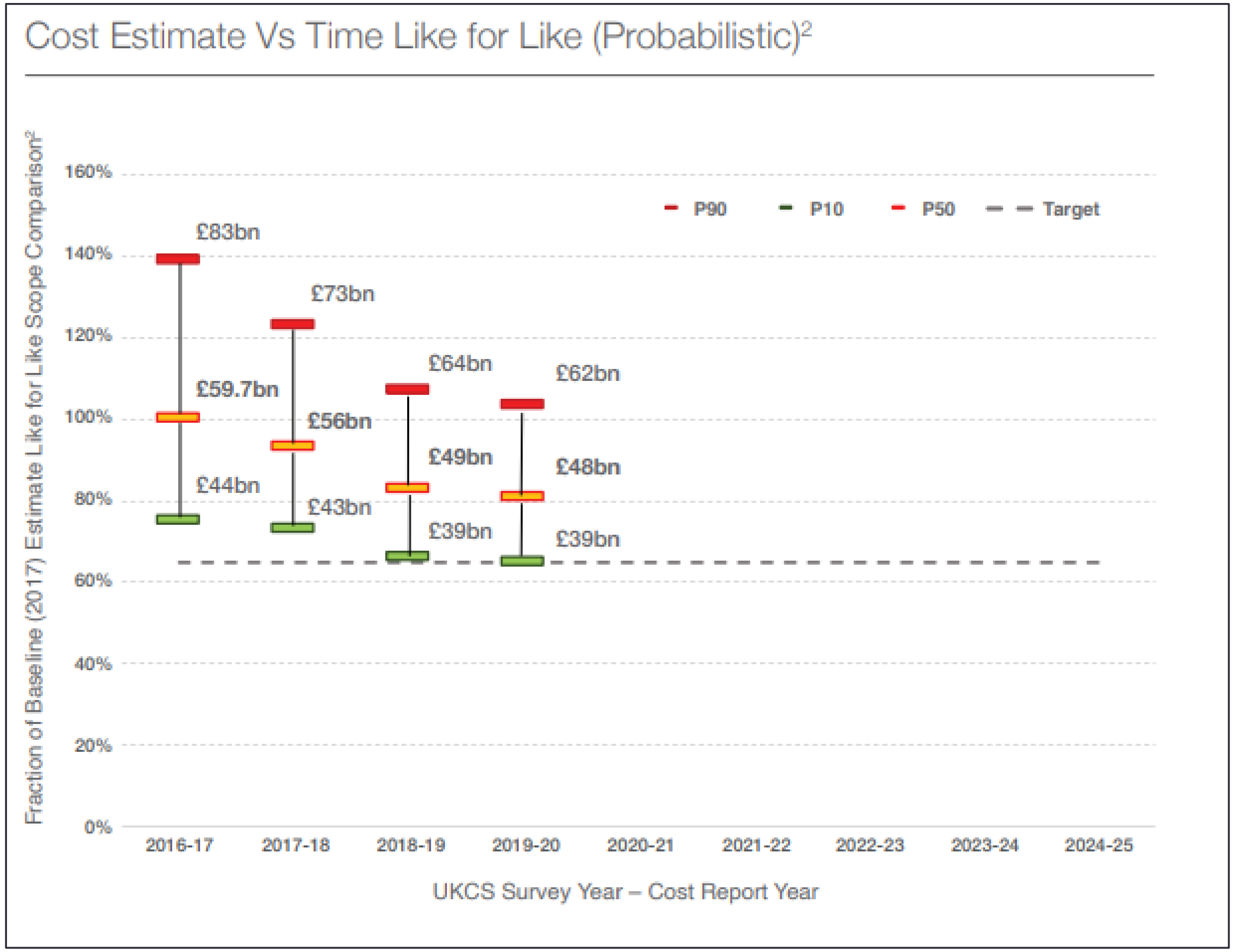
UKCS Decommissioning Perspectives

Jon Clark

January 2021

EY
Building a better working world

2020 is (hopefully) going to be a unique year, and not a particularly good basis for predicting future activity



Source – OGA Decommissioning Cost Estimate Report 2020

- While COVID impact is likely to have pushed cost estimates down, the "quick wins" on decommissioning cost are likely to have been realised
- UK decommissioning market today is a tug of war between reasons to accelerate and reasons to defer
- Neither deferral nor acceleration are necessarily good – predictability is valuable to both operators and service cos
- Industry's -35% objective is nearing its fifth anniversary and doesn't capture the breadth of opportunity in decommissioning

UK decommissioning market is tug of war between reasons to accelerate and reasons to defer

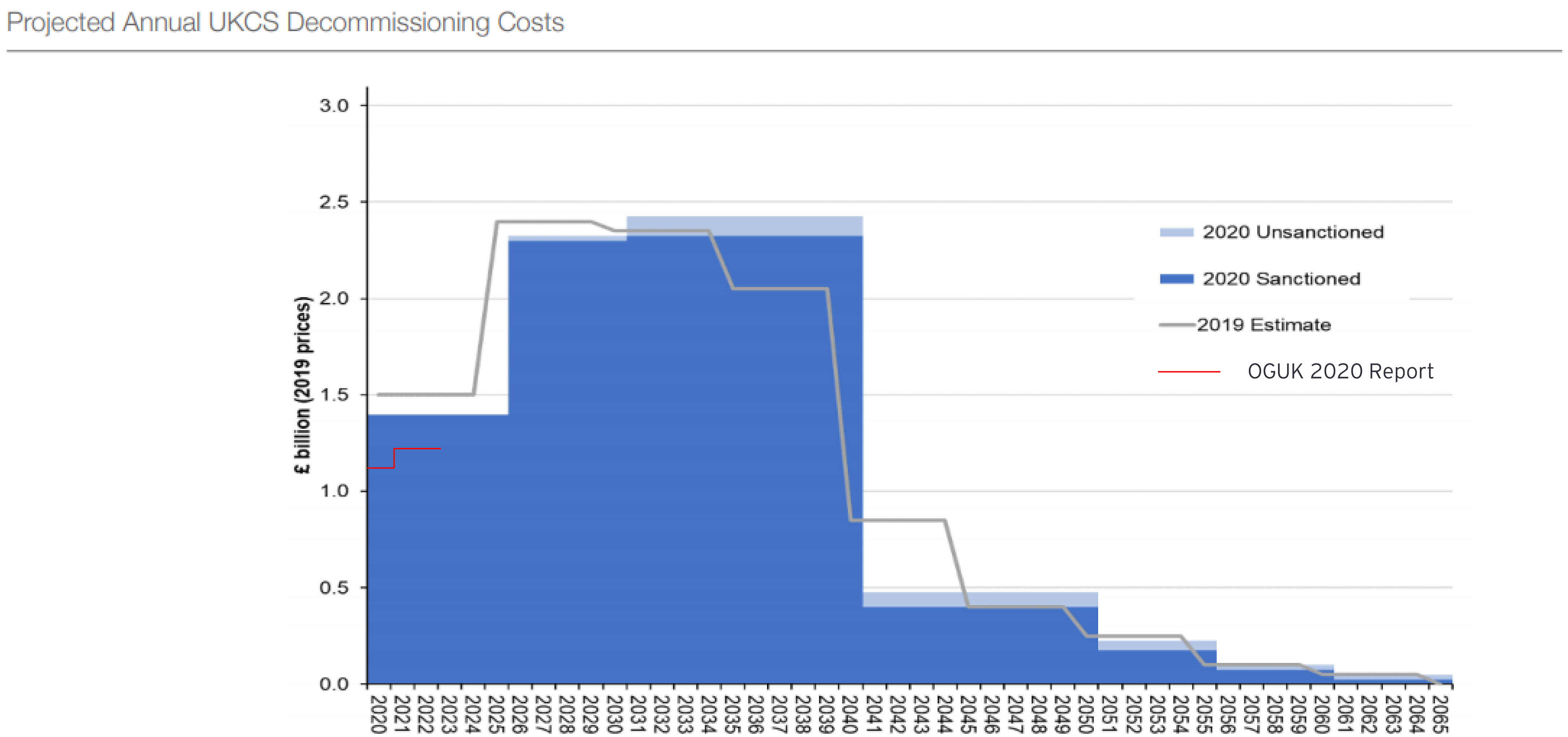
Accelerate

- Lower oil prices bring forward economic cut-off
- Services may be more available and at lower prices

Defer

- Cash flows are tight and capital is rationed
- Commodity prices may recover and deferral gives optionality on future
- M&A driven complexity has created fragmentation making alignment on timing more challenging

Latest data (largely based on pre-lockdown views) suggests 'defer' is prevailing



Source – OGA Decommissioning Cost Estimate Report 2020; OGUK Decommissioning Insight Report 2020

Industry's -35% objective is nearing its fifth anniversary and doesn't capture the breadth of opportunity in decommissioning

Why	Purpose	Achieve the maximum extension of field life and to ensure that decommissioning, when executed, is done in a safe, environmentally sound and cost effective manner.		
What	Strategic Priorities	**Decommissioning Costs** Achieve >35% cost reduction from 2015 base	**Delivery Capability** Develop demand led supply positions	**Guidance and Stakeholders** Optimise scope, guidance, and engagement

- Cost led objectives tend to overlook strategic value creation opportunities
- Lower carbon scopes and delivery models are not necessarily lower financial cost
- Alternative use potential has moved considerably up the agenda, not least as part of North Sea Transition Deal, but does not necessarily optimise economics or strategic priorities for the incumbent asset owner(s)
- The "human asset" is critical
- Addressing the UK Export theme

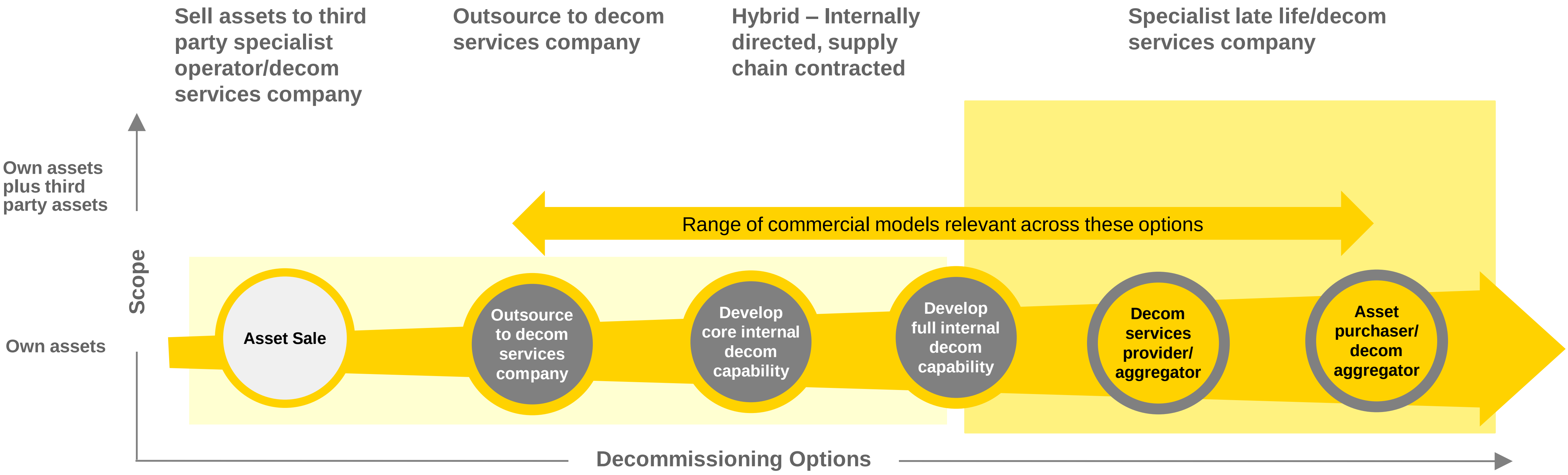
Source – OGA Decommissioning Strategy

EY

Change must start in corporate strategy, not just in project execution

Participating in a single decomm project is probably the worst outcome for an operator or service company

Illustrative decommissioning strategic options for operators



Companies may move beyond decommissioning into energy transition and re-use strategic opportunities

Acorn Project

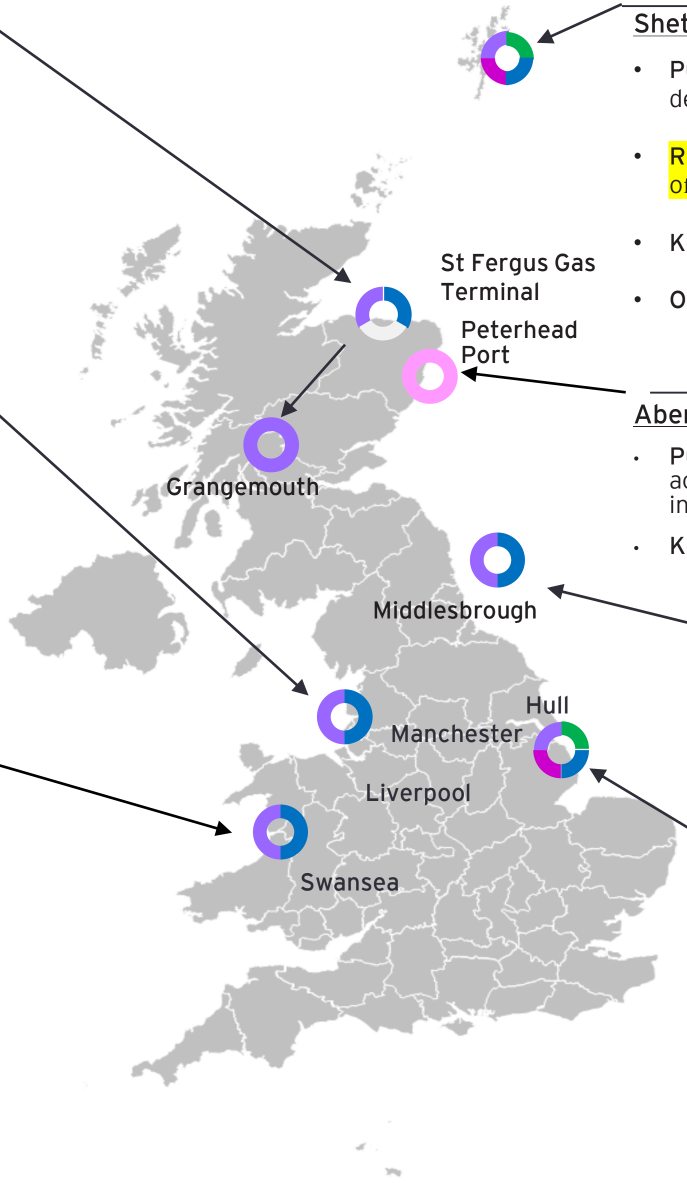
- **Purpose:** A CCS (Carbon Capture Storage) hub with hydrogen production capacity that integrates onshore with CCS in Grangemouth through onshore pipeline. International CO2 storage potential from imports.
- **Re-use:** Goldeneye pipeline, Atlantic pipeline
- **Key players:** Pale Blue Dot Energy, UK and Scottish Government, the EU, Chrysaor, Shell and Total
- Outcomes: 5.0 Mt CO2 per year, 9.2TWh H2 per year by 2030

HyNet

- **Purpose:** Bringing CCS to the Merseyside industrial cluster and supplying the wider region with hydrogen.
- **Re-use**: Liverpool Bay oil and gas fields and related infrastructure.
- **Key players:** Cadent, Essar, ENI.
- **Outcomes:** 1.0 Mt CO2 per year by 2030, 18TWh H2 by 2030

South Wales Industrial Cluster

- **Purpose:** To develop a world leading decarbonised industrial cluster with CCS and hydrogen production.
- **Re-use**: Liverpool Bay oil and gas fields and related infrastructure.
- **Key players:** Costain, RWE, Progressive Energy,USW, Celsa Manufacturing, Tata Steel, the Port of Milford Haven, and Vale Europe.
- **Outcomes:** 17.0 Mt CO2 per year by 2040



Shetland Energy Hub

- **Purpose:** Demonstrating complimentary technologies for decarbonising oil and gas production and producing clean H2.
- **Re-use: Opportunities for platforms, pipelines and other offshore infrastructure**
- **Key players:** Shetland Islands Council and the OGTC
- **Outcomes:** 8Mt CO2 abatement by 2050, 1750 local jobs

Aberdeen ETZ

- **Purpose: Creating** global integrated energy cluster that will accelerate the delivery of net zero solutions and secure an inclusive, strong economic future for the community
- **Key Players:** Opportunity North East, Aberdeen City Council

Net-Zero Teesside

- **Purpose:** Decarbonising a cluster of carbon-intensive businesses by 2030 and deliver a zero-carbon industrial cluster.
- **Key Players:** BP, Eni, Equinor, Shell and Total.
- **Outcomes:** 6.0 Mt CO2 per year by 2030, 6.4TWh of H2 capacity by 2030

Zero Carbon Humber

- **Purpose:** A partnership to build a zero- carbon industrial cluster to decarbonise the North of England.
- **Key players:** Drax, Equinor, National Grid, Catch, Humber LEP
- **Outcomes:** 8.0 Mt CO2 per year by 2035, Gigagstack H2 project: 24TWh of H2 by 2030, Saltend: 13TWh of H2 by 2030

Key:
- CCS Project
- Blue Hydrogen
- Offshore wind
- Potential ETZ region
- CO2 Imports
- Green Hydrogen

 Source: EY, OGUK

EY

Contact details

Jon Clark

EMEIA Leader Oil & Gas Transaction Advisory Services

Tel: + 44 20 7951 7352

Email: jclark5@uk.ey.com

Disclaimer

The information in this pack is intended to provide only a general outline of the subjects covered. It should not be regarded as comprehensive or sufficient for making decisions, nor should it be used in place of professional advice.

Accordingly, EY accepts no responsibility for loss arising from any action taken or not taken by anyone using this pack.

The information in this pack will have been supplemented by matters arising from any oral presentation by us, and should be considered in the light of this additional information.

If you require any further information or explanations, or specific advice, please contact us and we will be happy to discuss matters further.

EY | Assurance | Tax | Transactions | Advisory

The oil and gas sector is constantly changing. Increasingly uncertain energy policies, geopolitical complexities, cost management and climate change all present significant challenges. EY's Global Oil & Gas Sector supports a global network of more than 10,000 oil and gas professionals with extensive experience in providing assurance, tax, transaction and advisory services across the upstream, midstream, downstream and oil field subsectors. The Sector team works to anticipate market trends, execute the mobility of our global resources and articulate points of view on relevant sector issues. With our deep sector focus, we can help your organization drive down costs and compete more effectively.

EYG No.

19ED None

ey.com/oilandgas