

# **Decommissioning & Energy Transition**

**Decom North Sea Webinar** 

Bill Cattanach 28<sup>th</sup> May 2020

## Change in the energy sector

#### **Societal expectations**







#### **Government response**



Active debate, government response

## **UKCS** opportunity



#### CO<sub>2</sub> storage potential



#### UKCS wind power potential





Clear synergies across energy technologies

## **Pioneer Fund – Energy Integration Project**





A cross-regulator project to understand & anticipate change

## **Build out scenarios**



Reduce emissions, build on existing infrastructure, develop new solutions and capabilities

## **Blue hydrogen**







# Decarbonises UK natural gas (imports) at source

# Can be scaled up (to ~30% of current natural gas demand)

Extensive re-use of infrastructure (terminals, onshore/offshore pipelines)

## Attractive economics when combined with CCS

Critical for the transition to Net Zero

plant cost

Lost hydrogen revenu

### **Green hydrogen**



# Green hydrogen opportunity (examples)



Oil & Gas Authority کی 🔅

# Can provide storage for intermittent renewable power

# Efficient energy transport over long distance

Leverage midstream infrastructure (terminals, onshore / offshore pipelines)

# Challenged by high capital costs (electrolysers)

#### Critical 'energy vector' to support offshore renewable growth

## **Pilots and early projects**



#### Hywind Scotland (Equinor)



#### WOS Electrification



Acorn CCS & Blue Hydrogen





Hynet (Blue Hydrogen)



#### Hydrogen Flotta (RSRUK, OGTC)



Growing interest across energy sectors and the supply chain

# **UKCS decommissioning**

### 🔅 Oil & Gas Authority



#### UKCS annual decommissioning spend £1.5 – 2.5bn p.a.

# **Connecting the Supply Chain to opportunities**

il & Gas Authority

A requirement of Supply Chain Action Plans

Project and contract information including Challenge/opportunity areas

Available to all industry – subscribe process

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Mutdoch	Elite Dellag Velsko	230L0ess) versus						
Show All	DNO NORTH SEA							
	Field Type Gas	Location 44/25a		Water Depth (m) 71		First Production 1995		
DANA PETROLEUM EAP							(Bdna	
Histon	Project Summary The Schooner SNS gas held is due them, and an export pipeline taking at 54 methers, but the platforms are	Project Summary This chosen relation to the to be decommissioned along with it's start failt, kinn starting in Extender 2010. The project will have approximately 4 years to complete. The beats there also an expond specific target produces gat to the reactly kardoon pattern, which is operated by Concordings. The School pattern has 11 webs other than it, and the ketter of all memory, but here patterns are of demonstrational angus.						
alon.m	The abandonment effort will consist tonnes each) and jackets (approx.)	The abandomment effort will consist of plugging and abandoming all the platform wells plus one subsea completion (NW Schooner), cleaning and burying pipelines and the removal and do tonnes each) and packets (approx 2,000 tolnes each).						
DNO NORTH SEA	The Decommissioning Programme	s for both platforms are with DE15 for review a	and the deaf	SCAP has been su	bmitted to OGA and a fo	blow up meeting held.		
Colorest .	Gate review of well abandonment h	Gate review of well abandonment held in mid September and endorsement gained to advance into concept define.						
distances.	Decision made to restrict size of Co	impany PMT and to immediately lender for W	el Manager	ment Company to su	pport PMT and manage	targe areas of the work. SCAP to be updated a	800	
Show All	Decision made to execute offshore	Decision made to execute offshore scope sequentiary utilising a single jack up rig. Latest plan shows offshore start at Ketch in early Q4 2019, followed immediately by Schooner.						
	Discussions ongoing regarding poli	ential reuse of redundant platforms after well a	abandonme	nt as accommodatio	n support to tocal wind t	farm developments.		
ENDEAVOUR ENERGY	Contracts Awarded							
Renner / Ruble	Title	Contractor Name Co	ontractor P	rimary Contact	Date Awarded	Contract Band	tet	
Show All	Rig Hire	EnscoRowan ph	il bellis		17-APR-2019	Large (>f25m)	185@c	
	Well Abandonment Management	Well Sale Solutions Pr	ni Millon		05-JUN-2019	Medium (£10m-£25m)	iton@r 1.64646	
ENI UK LIMITED	Challenges							
Big.Dotty	Description			Contact Name		Telephone Number	13	
Lizero Hovedi Little: Dotty	BEIS has commented on the Proje bound by polypropylene rope have manner. This will add significant to schedule impacts.	Bills has commented on the Project EX that all pipeline matheases where the concrete is bound by polyotopicate rape have to be recovered and disposed of in an appropriate manner. This will be applicant technical complexity to the Project and will have cold and scheduler travers.		niail andemon		01224 650929	-garo	
Show All	Continuing to examine potential for	Continuing to examine potential "re use" options for platforms before committing to full removal		nial anderson		01224 650929	0.000	
	To evaluate potential cost benefit v opposed to 1 executing work segue	To evaluate potential cost benefit versus "manageability" of running 2 rigs in paratel as opposed to 1 executing work sequentially.				01224 650929	Glavy	
	<ul> <li>Investigating removal of Ketch pipe ongoing lability and environmental</li> </ul>	Investigating removal of Ketch pipeline as opposed to burial. Taking account of commercial, ongoing kability and environmental considerations in arriving at "best solution" for Project.		niat anderson		01224 650929	000	
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Provide visibility of up coming activity giving confidence to the service sector to invest in innovation, solutions and skills

Comprehensive One stop shop for operators and the supply chain

# **Supply Chain Recovery Projects – UKCS: Potential options**

Project	Description	Potential Support		
P&A Wells Project	Consider options to stimulate activity in well plug & abandonment	Funding support		
	<ol> <li>Engineering &amp; Preparation</li> <li>Offshore Execution</li> </ol>			
Small-scale decom work	Identify range of work including survey and preparation activity that could be undertaken before the commencement of formal decom, but would generate activity for the supply chain.	Encouragement of operators		
Development Projects	Identify potential stimulus opportunities to drive forward deferred/stranded upstream projects which would support MER- UK and generate activity for the supply chain.	Funding support		
Net Zero	Consider how to accelerate existing proposed decarbonisation projects. Understand if there is a funding gap that could specifically help unlock activity. This could include electrification of offshore oil & gas producing assets, either from shore or renewable sources.	Funding support Potentially policy/regulatory support		
	<ol> <li>Incubator projects: Pilot proof of production concept projects, small scale, not intended to be profitable at stage one, focussed on next step development that will allow supply chain to prove capabilities and cost models.</li> <li>Full scale projects: Following detailed testing/incubation, initiatives delivered at scale</li> </ol>			
Maintenance campaign	Understand the scale of maintenance work – including safety critical – that is built up across the basin, and consider how best to support safe delivery of this work whilst also generating work for the supply chain.	Covid-19 test and trace should help stimulate offshore activity		
	This could potentially be delivered early if safe environment can be maintained including in light of the COVID challenge – which would be addressed through large-scale testing			
Safeguarding jobs	The energy transition projects have the potential to generate and protect up to 100k jobs			