

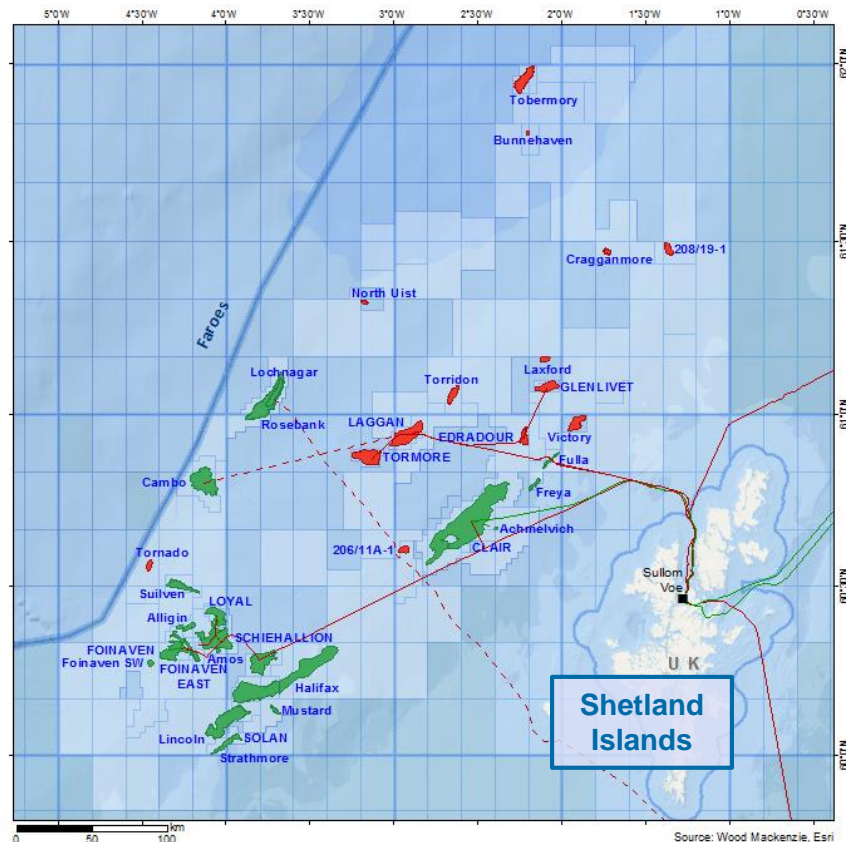
Why is West of Shetland the UK's final frontier for oil and gas growth?

Kevin Swann

SPE Aberdeen Petroleum Economics Conference, December 2018



Why are we interested in West of Shetland?



Still a core region for Majors and large caps



Giant fields: Clair (BP), Schiehallion (BP), Laggan/Tormore (Total)



Under explored:
high-impact wells planned



Big M&A deals







Substantial growth potential





Majors are divesting elsewhere in the UK, but not West of Shetland

WoS assets are competitive in a global portfolio.

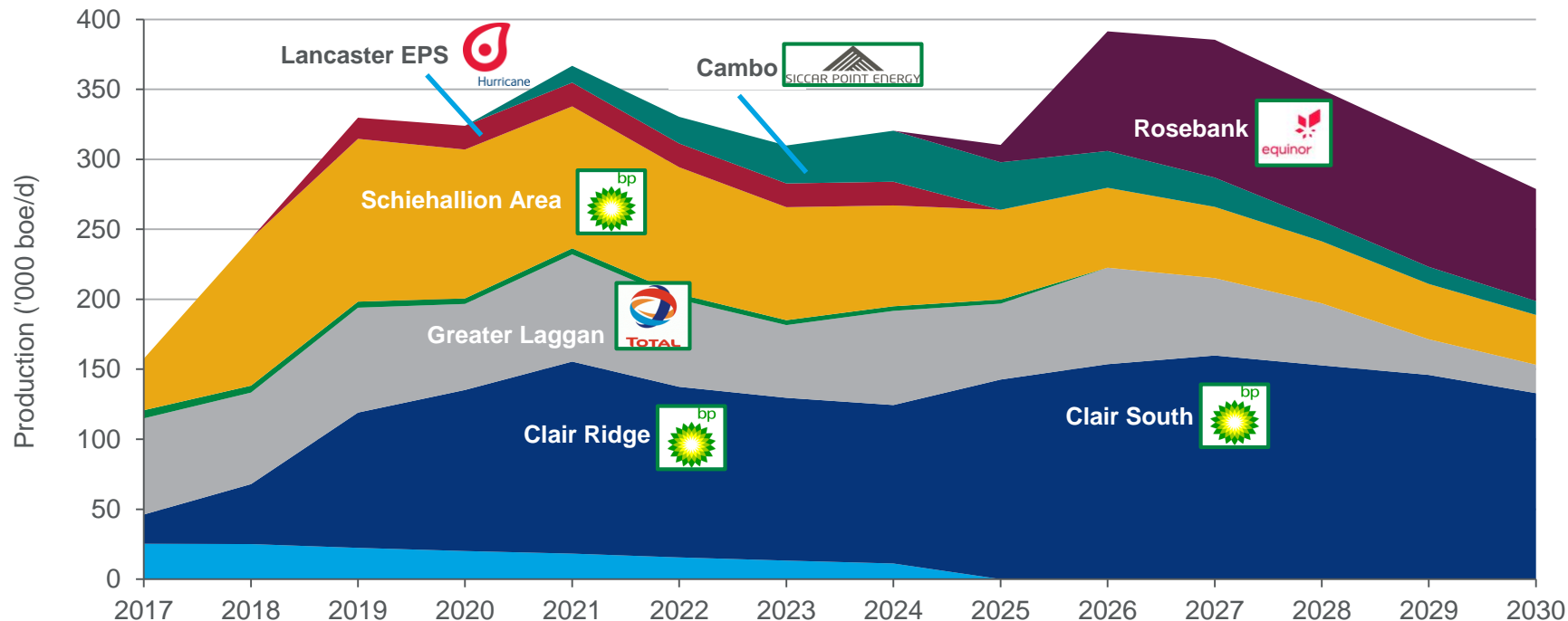
WoS proportion of UK total				
Remaining NPV	74%	79%	66%	36%
Remaining liquids	84%	74%	69%	8%
Remaining gas	16%	11%	20%	39%



West of Shetland is the only UK sector with sustained production growth as far as 2025

A small group of existing fields drives that growth. And there is risk...

West of Shetland production by field

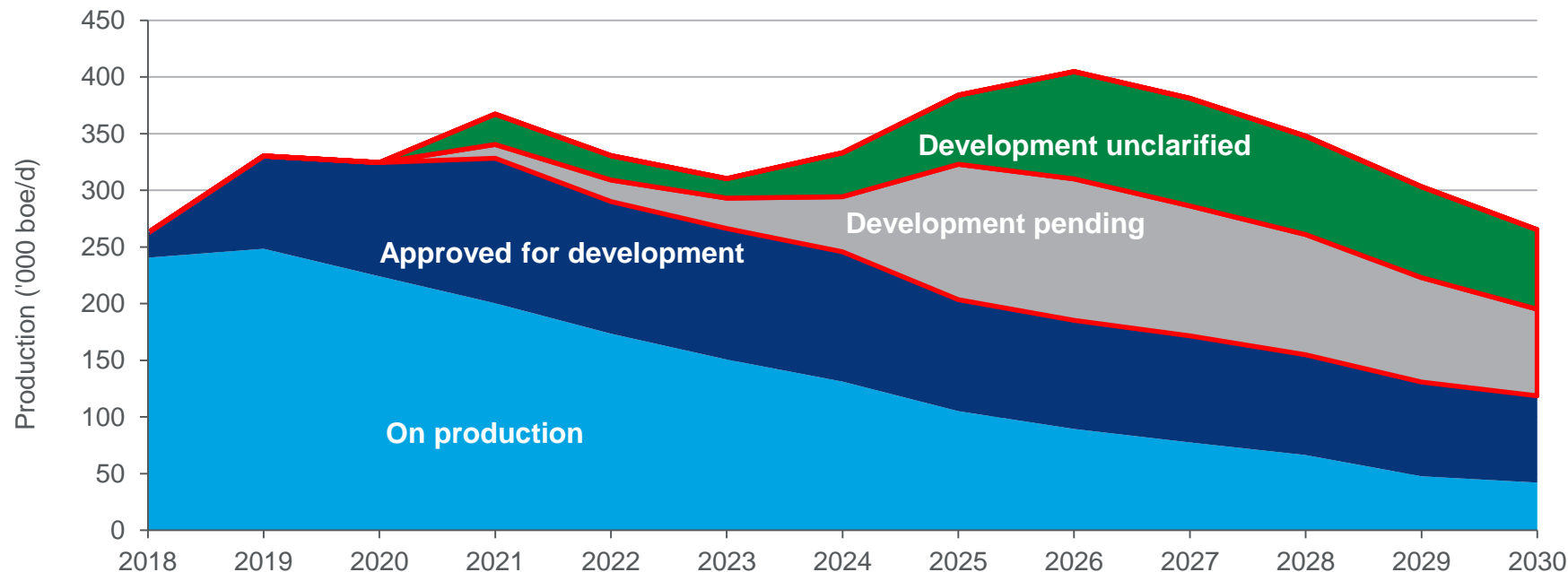




Risk to planned growth: more than half of WoS production from 2025 is yet to be sanctioned

Strict control of planning and execution needed to bring projects onstream.

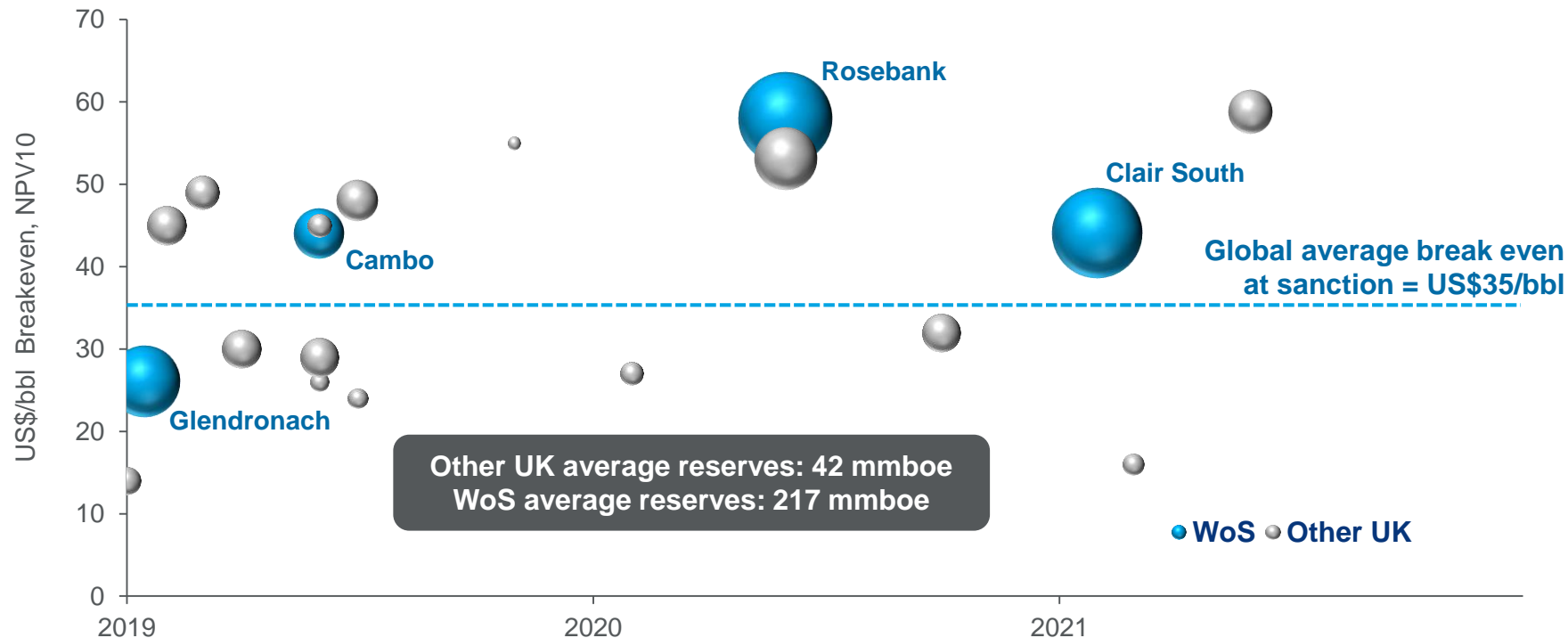
West of Shetland production by PRMS* category



* Petroleum Resource Management System is the industry approved standard for classification of resources
Source: Wood Mackenzie



Although bigger, future West of Shetland projects also have relatively high break evens



Growth through exploration: WoS is underexplored compared to the rest of the UK and high impact drilling is on the horizon

Exploration and appraisal wells to watch

Lyon could unlock more than 300 bcf of discovered gas resource by adding an export route from the north.

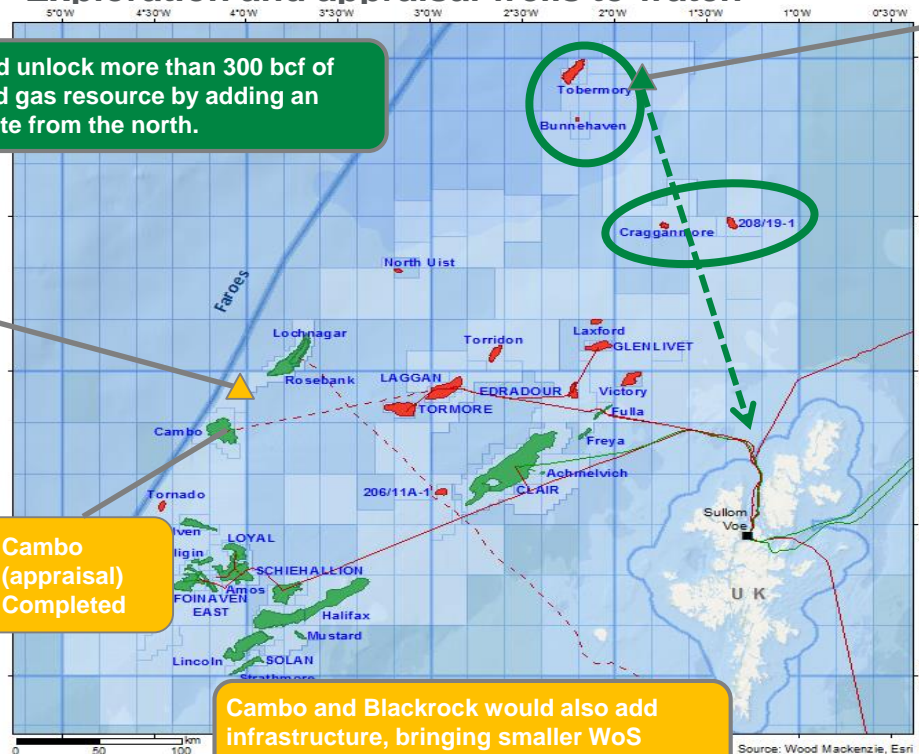
Lyon (1.4 tcf est)
2019

Blackrock
Q2 2019



Cambo
(appraisal)
Completed

Cambo and Blackrock would also add infrastructure, bringing smaller WoS prospects into play.

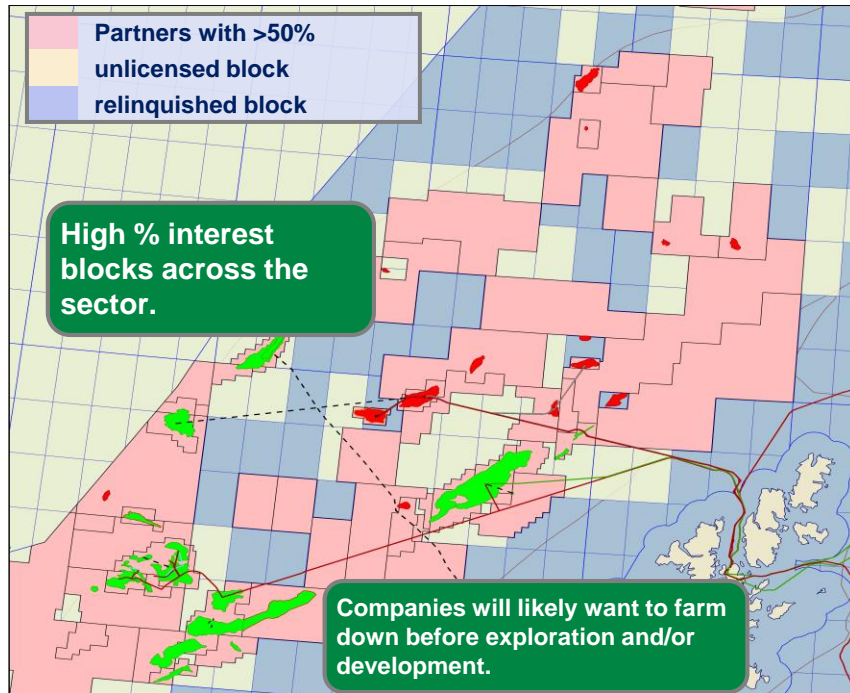




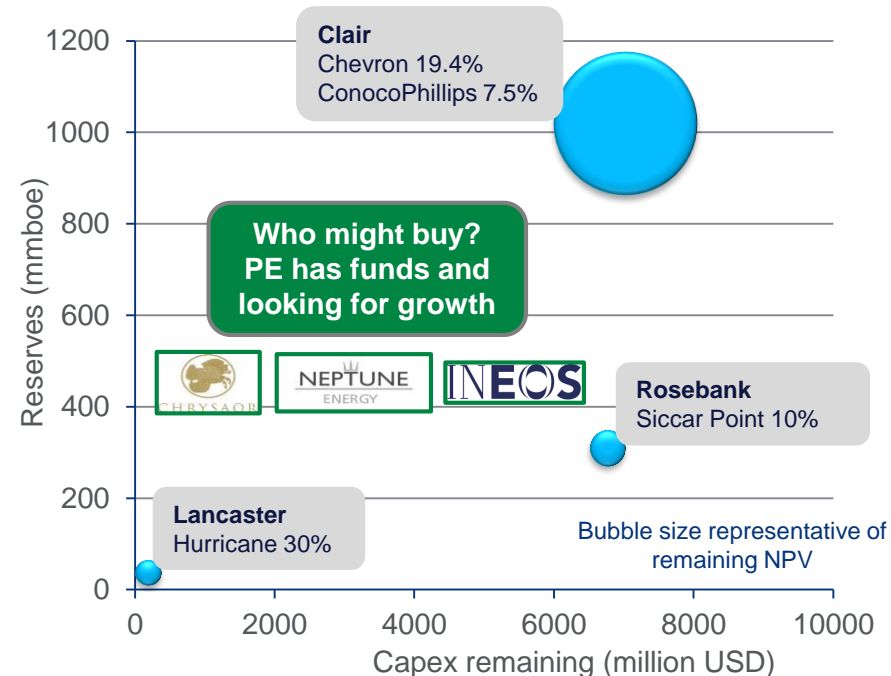
So how do you get a piece of the West of Shetland action?

Companies looking to farm down on existing assets and licences could open the door.

High interest WoS licences



Possible stakes available in key assets





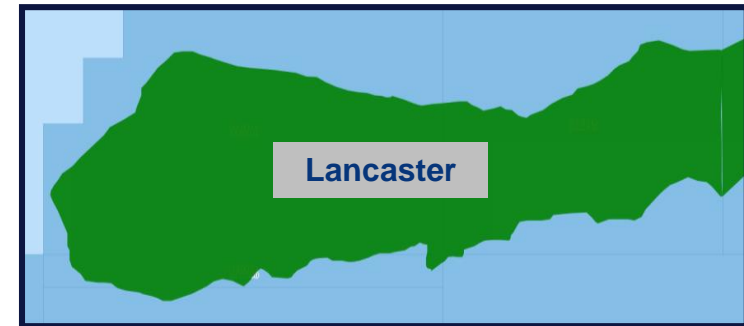
Hurricane Energy's fractured basement play could be a game changer with almost 3 bnboe of contingent resources

Lancaster EPS targeting 37-62 mmboe – but the potential prize is massive.

Lancaster	
In place volumes	2.3 bnboe
Reserves (EPS)	37-62 mmboe
Contingent resources	486 mmboe

Wider fractured basement play	
In place volumes	12.4 bnboe
Reserves (Lancaster EPS)	37-62 mmboe
Contingent resources	2.8 bnboe

Cash flow from the Lancaster EPS will be useful. But fracture flow tests are key if Hurricane is to succeed with its fractured basement play.

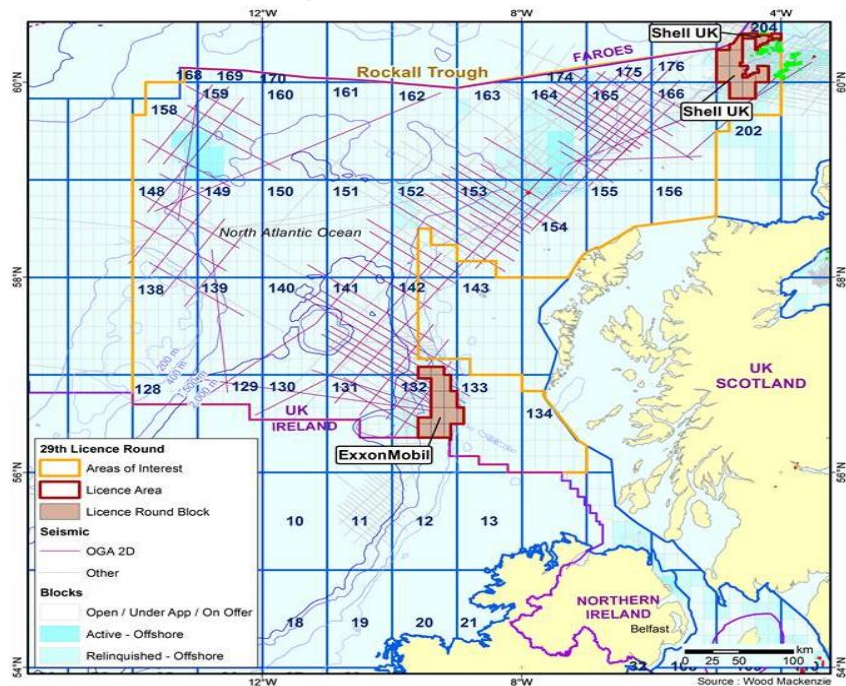


Clair and Cambo also have underlying fractured basement prospects, which could provide material upside.

But perhaps there can be growth in the UK after West of Shetland...

The WoS is helping to expand the UK “thematically” as well as geographically.

West of Scotland licences awarded in UK 29th offshore licensing round



ExxonMobil and Shell have already acquired acreage



Genuine UK frontier region. OGA estimates 500 mmbbl oil and 1.5 tcf gas



Wave heights have been recorded at more than 29 metres



Water depths >1,000 metres





Q&A



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