

PRESS RELEASE

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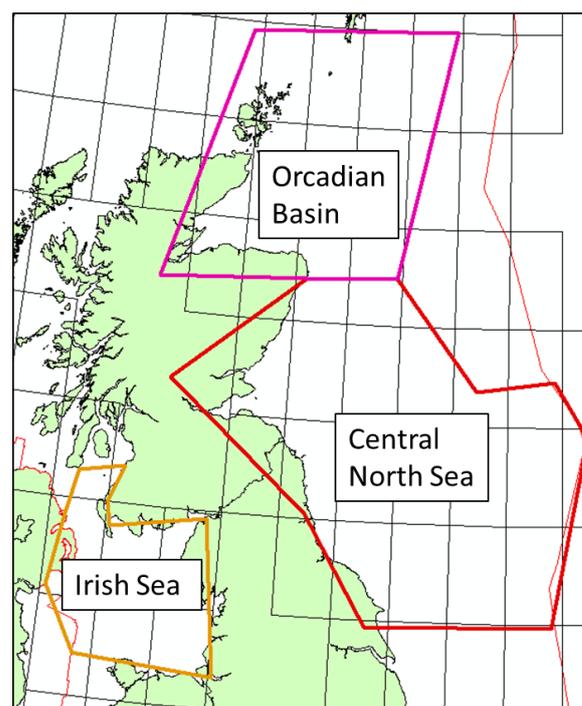
21st Century Exploration Roadmap Palaeozoic Project released for underexplored petroleum systems

The British Geological Survey (BGS) and the UK Oil and Gas Authority (OGA) are pleased to announce the release of the 21st Century Exploration Roadmap (21CXRM) Palaeozoic Project, aiming to improve the knowledge and data from the underexplored Palaeozoic petroleum systems of the North Sea and Greater Irish Sea.

The Project is part of the UK Government's endeavour to maximise the economic recovery of hydrocarbons on the UK Continental Shelf (UKCS), in response to the Wood Review. The work was undertaken as a joint-industry project by BGS with the then Department of Energy and Climate Change (DECC) then OGA, Oil and Gas UK and 49 oil company sponsors between November 2014 and May 2016.

Some key highlights include:

- *On and surrounding the Mid North Sea High:* A clearer mapping of widespread Carboniferous source rock intervals, calibration of the stratigraphy and depositional environment with the onshore sequence, and the potential for similar petroleum systems to that of the Breagh Field.
- *In the Orcadian study area:* Recognition of the widespread possibilities of Devonian and Carboniferous reservoir intervals to host Jurassic-sourced oil, as well as a more extensive and detailed mapping of potential Devonian and Carboniferous source rocks, with a large variety of possible traps.
- *In the Irish Sea:* Detailed tectono-stratigraphic development of Carboniferous source and reservoir intervals with strong links to onshore knowledge.



Location of the three study areas.

The project was undertaken with the aim of improving regional knowledge and digital data from the underexplored Palaeozoic petroleum systems of the North Sea and Greater Irish Sea. Peer-reviewed outputs include 25 reports, images, GIS information and 21 gridded surfaces describing the Palaeozoic geology and conventional petroleum systems of parts of the UK offshore. The petroleum systems analysis was based on new interpretations of extensive well data, 125,000 line km of seismic interpretation, gravity-magnetic and source rock datasets, integrated with petrophysical studies, basin modelling and UK onshore knowledge.



Example of an onshore analogue reservoir sandbody at Marshalls Meadow Bay, Berwick-upon-Tweed.

The study has further defined the Carboniferous and Devonian petroleum systems over and around the Mid North Sea High and northwards to the Orcadian Basin/East Shetland Platform, whilst in the wider Irish Sea area, the focus was the Carboniferous play.

Jo Bagguley, Principal Regional Geologist at the OGA said "The 21CXRM initiative is a pivotal part of the OGA's role in promoting regional exploration opportunities on the UKCS. The outputs of this particular project complement the data acquired from the UK Government seismic acquisition programme and this wouldn't have been possible without the collaborative approach taken by operators, Oil & Gas UK, the OGA and the BGS working together to improve our collective understanding of the UKCS' Palaeozoic petroleum systems."

David Schofield, BGS Science Director for Energy Systems and Basin Analysis said "BGS is pleased to make publically available a large set of regional digital data and reports to underpin geological knowledge, as recommended in The Wood Review"

The products have now been released following the closure of the 29th Offshore Licensing Round and are applicable for use at scales between 1:750,000 to 1:3,000,000.

Ends



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Notes for Editors:

The following are available for interview:

- Alison Monaghan, British Geological Survey

For additional information go to: www.bgs.ac.uk

For further information on 21CXRMPalaeozoic Project then please see the project web pages at <http://www.bgs.ac.uk/research/energy/petroleumGeoscience/explorationRoadmap.html>

To view available offshore data please see the Offshore Geoindex at http://mapapps2.bgs.ac.uk/geoindex_offshore/home.html

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.

The Natural Environment Research Council

The Natural Environment Research Council (NERC) is the UK's main agency for funding and managing world-class research, training and knowledge exchange in the environmental sciences. It coordinates some of the world's most exciting research projects, tackling major issues such as climate change, food security, environmental influences on human health, the genetic make-up of life on earth, and much more. NERC receives around £300 million a year from the government's science budget, which it uses to fund research and training in universities and its own research centres. www.nerc.ac.uk

The UK Oil and Gas Authority

The Oil and Gas Authority's role is to regulate, influence and promote the UK oil and gas industry in order to maximise the economic recovery of the UK's oil and gas resources. Created as one of the key recommendations of Sir Ian Wood's 2014 Review of the UKCS, the OGA became an Executive Agency on 1 April 2015, which created operational independence from DECC (now the Department for Business, Energy and Industrial Strategy) giving direct accountability for exploration and development decisions and approvals. The OGA is largely funded by an industry levy introduced on 1 October 2015. <https://www.ogauthority.co.uk/>