

# Energy and infrastructure outlook 2014-15









#### Introduction

Cables and pipelines is a mature and well-established sector within our Energy and Infrastructure portfolio, contributing approximately one third of The Crown Estate's revenue from Energy and Infrastructure. We recognise the importance of this sector to our economy and support industry in maintaining the UK's position as an important landing for submarine cables and pipelines.

Working closely with industry, we grant permission for developers to lay and operate electricity and telecommunications cables, and oil and gas pipelines on seabed and foreshore which we manage on behalf of the UK as landlord. For most cables and pipelines this is the 12 nautical mile limit of territorial seabed. We also grant rights for submarine cables to offshore wind projects on the UK continental shelf.

Much of the infrastructure has been in place for many years and our focus is on actively managing the portfolio as part of our commitment to exemplary standards of stewardship.

For example, we have produced proximity guidelines for the cable and offshore wind industries in partnership with Subsea UK, RenewableUK and the Renewable Energy Association and are considering how similar guidance could be produced for other offshore industries, such as wave and tidal power. We are working with those industries in partnership with Subsea UK to develop these principles further.

We expect to see a significant increase in the number of submarine power cables located on the seabed, driven by the development of offshore renewables, and demand for improved interconnection between UK and Europe. The Crown Estate's Energy and Infrastructure portfolio is part of a diverse £8 billion UK property portfolio

The portfolio includes the rights for renewable energy generation on the UK Continental Shelf

Over the last ten years The Crown Estate has contributed over £2 billion to the Treasury

COURTESY OF RED PENGUIN

### Oil and gas pipelines

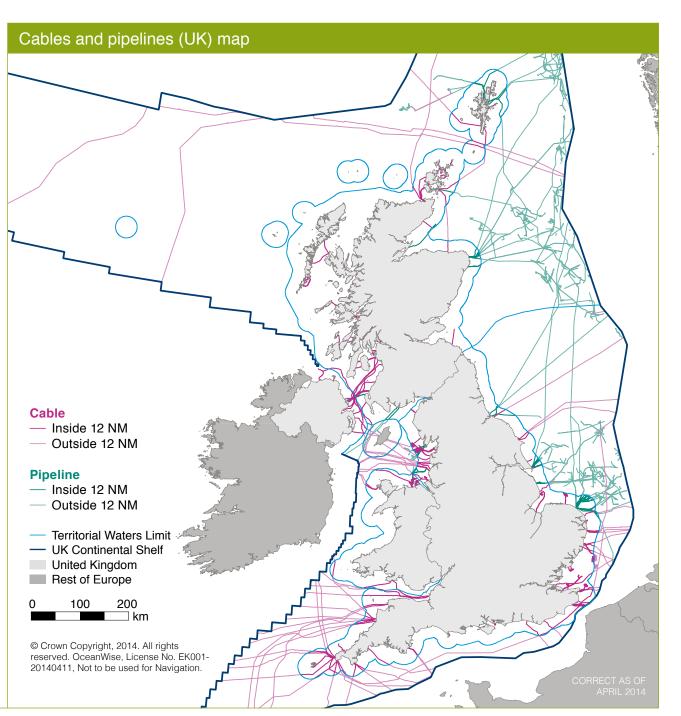
Offshore pipelines transport oil and gas from subsea reserves to the GB market. The UK has been producing hydrocarbons offshore since 1967.

Oil and gas infrastructure on the UK continental shelf is concentrated in the North Sea and this can be loosely categorised into three areas; north North Sea, central North Sea and Southern Gas Basin. The UK North Sea is a mature hydrocarbon province and many pipelines are approaching the end of their life and moving toward decommissioning, particularly in the Southern Gas Basin.

We have started discussions with National Grid on a new pipeline that will be required for the White Rose carbon capture and storage (CCS) project that is being developed in the Yorkshire and Humber area.

We've also begun discussions with Shell on how existing and new pipelines could be used for the Peterhead CCS project that is currently in development.

In the year ahead we hope to work more closely with the pipeline sector to establish how The Crown Estate can support industry.



### Import cables and interconnectors

Renewable energy import projects plan to connect overseas renewable energy to the Great British electricity market through subsea cables. If these projects are successful, the transmission cables that connect projects to the Great British electricity market will require seabed rights from The Crown Estate and we've been working to establish how our process to grant rights will happen. In this instance that applies to cable sections out to the 12 nautical mile limit of UK territorial waters.

During the last year, we have been working with Government, Ofgem and developers on renewable energy import projects and in December we invited developers interested in bringing forward renewable energy import projects to provide details of their plans. The data will help us to consider the spatial effect of possible cable infrastructure from proposed renewable energy import projects, thereby establishing a better understanding of how our licensing for this infrastructure could happen.

Alongside this, we've been developing our process to grant seabed rights for electricity interconnectors. Interconnectors allow a two-way flow of power that offers the opportunity to trade power based on the difference in prices between the two connected countries. There are a number of projects being developed with this technology that could connect the UK with Belgium, Norway and potentially Iceland.

### **Telecommunications**

We've worked closely with the industry to identify indicators for the sustainability of subsea telecoms cables. Whether it be sending an email or making bank transactions, subsea cables are an important part of many things we do on a daily basis. The UK is a key landing for subsea cables and in order to maintain this position we feel it's important to highlight the criticality of cables.

With support from external advisers and industry we identified a number of indicators that, in combination, give an impression for the sustainability of subsea telecoms cables and will be developing this work further with industry in the year ahead. Our immediate attention will concentrate on the contribution subsea cables make to the UK economy.

## Improving connectivity across the UK

In September last year, we signed an agreement with ScottishPower Transmission and National Grid for the Western HVDC (High Voltage Direct Current) Link, the first ever sub-sea electricity link between Scotland, England and Wales.

The project consists of two HVDC submarine cables and will have a capacity of approximately 2,000 MW making it one of the highest capacity subsea cables in the world.

# 4 million

Two HVDC submarine cables will have a capacity of approximately 2,000 MW, this would be enough capacity to meet the electricity demands of more than four million homes per year

SOURCE: SCOTTISH POWE

# one third

The cables and pipelines sector contributes approximately one third of The Crown Estate's revenue from Energy and Infrastructure

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Correct as of May 2014

At The Crown Estate, we are landlords of the UK's seabed, managing it effectively and sustainably, balancing different interests and delivering the best value over the long-term.

This gives us a unique role to play in developing and helping sustain the UK's energy supply and infrastructure, by working in partnership with a wide range of organisations that have interests in the seabed.

These include wind, wave and tidal power, carbon capture and storage, gas storage, marine aggregates and minerals, cables and pipelines.

We are active asset managers, applying our experience, skills and understanding to deliver optimum returns, create opportunities for ourselves and our partners, and provide a quality service to our customers.

Aware of our monopoly position and the impact of our activities, we are careful to comply with competition laws, co-exist with the wider marine community, and be open and transparent in our dealings.

Because of who we are, we are able to see the bigger picture, making best use of the seabed, and supporting and investing in sustainable development for the long-term benefit of the whole of the UK, now and in the future.

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