

Kinsale Area Gas Fields
Decommissioning Project
Information Leaflet

PSE Kinsale Energy Limited has been operating a number of gas fields in the Celtic Sea, off the County Cork coast, since 1978.

Kinsale Energy is a subsidiary of the Malaysian oil and gas company, PETRONAS, which acquired the company in April 2009, from its previous owners, Marathon Oil. Kinsale Energy employs 60 people at its onshore and offshore facilities and has a long history of safe and reliable operations. Kinsale Energy has been awarded a number of prestigious safety awards by NISO, the National Irish Safety Organisation.

## **History of Kinsale Area Gas Fields**

The Kinsale Head, Ballycotton, Seven Heads and South-West Kinsale gas fields lie approximately 50 km off the south coast of County Cork. The gas fields were developed in the period 1978 to 2003. The fields supplied all of Ireland's natural gas from 1978 to 1995 and remained Ireland's only indigenous source of natural gas until 2015.

The offshore infrastructure consists of two steel platforms installed as part of the initial field development – Kinsale Alpha and Kinsale Bravo. These were commissioned in 1978. There are also a number of underwater (subsea) wells which were drilled to produce smaller gas discoveries. These wells are connected to the platforms by means of underwater pipelines and control cables. The facilities have only been used to process natural gas, as no oil has been produced in the area.

Gas from the offshore fields is transported by a 24" pipeline to a terminal at Inch in East Cork, where the gas is transferred to the Gas Networks Ireland (GNI) onshore gas grid.

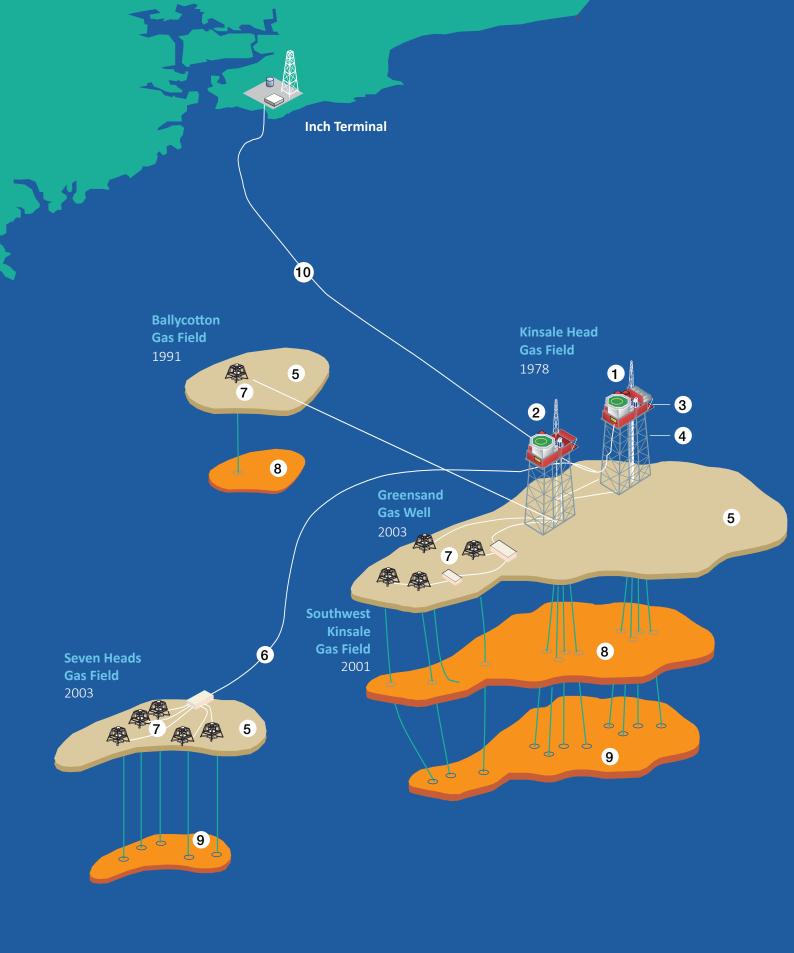
## Why Decommission?

It is anticipated that the gas wells will have come to the end of their productive life by 2020/2021, at which time the gas reserves will have been depleted. When this point is reached, the wells will be permanently plugged and the associated facilities (platforms, pipelines, cables, subsea structures and onshore terminal) will be decommissioned.

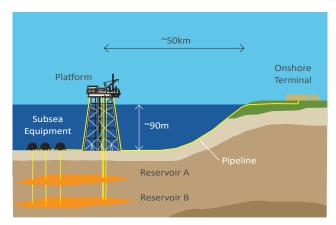
Although there has been a lot of exploration for additional gas reserves carried out in this area over the years, no other commercial gas discoveries have been made, either by Kinsale Energy or other companies.

#### Location Map





- 1. Alpha Platform
- 2. Bravo Platform
- 3. Topside above water
- 4. Jackets below water
- 5. Seabed
- 6. Pipelines and cables (on seabed)
- 7. Subsea equipment (on seabed)
- 8. Reservoir A deep below seabed
- 9. Reservoir B deep below seabed
- 10. Pipeline exporting gas to the onshore terminal at Inch







Removal of topside by heavy lift vessel

(Picture courtesy of Saipem)

# Are there possibilities for re-use of the facilities?

There is a possibility that some of the facilities, for example, the platform support structures (jackets) or some of the pipelines could be used as part of a gas development project, a renewable energy project or to support carbon dioxide storage in the depleted gas field. Studies are being undertaken by third parties in this regard. In the meantime, however, Kinsale Energy has no plans for any future use and planning for decommissioning is ongoing.

## What is the Decommissioning Project?

Kinsale Energy is currently working on a plan to decommission the Kinsale Area gas fields as summarised below. The offshore decommissioning activities are expected to occur intermittently over a number of years, commencing in 2020/2021 after field production ceases. The Inch Terminal works will occur over a much shorter period (less than 6 months). The actual scheduling of the works will depend on the availability of specialist marine construction and support vessels. Some facilities that will ultimately be removed, e.g. platform support structures (jackets), may be left for a longer period, subject to regulatory approval. This will also facilitate any third parties investigating possible re-use.

The facilities which have to be decommissioned are:-

Facilities to be Decommissioned	Proposed Decommissioning Method (subject to regulatory approval)
Platform topsides	Remove by heavy lift vessel in a single piece or number of pieces
Platform jackets	Remove by heavy lift vessel in a single piece or number of pieces
Pipelines & cables	Leave in-situ and install rock protection where required
Subsea equipment such as wellheads & manifolds	Remove with a construction support vessel
Wells	Permanently seal and plug with cement
The onshore terminal at Inch	Remove equipment and reinstate to agricultural use

#### **Environmental Assessment**



Marine life on Kinsale Alpha jacket



Marine life on subsea equipment

#### **Environmental Studies**

Kinsale Energy has engaged specialist consultants to prepare an Environmental Impact Assessment Report (EIAR) and an Appropriate Assessment Screening Report. These reports are being prepared in accordance with the relevant EU Directives and will identify any potential impacts likely to arise from the decommissioning process. Information has been collected relating to the natural environment and other users of the sea relevant to the Kinsale Area, using both desk-based and field-based techniques.

A number of decommissioning options were identified through a series of engineering and environmental studies and any potential impacts which could arise from activities associated with the decommissioning project were identified.

Based on the significant work done to date it is anticipated that in view of the predicted scale, intensity and duration of the activities, decommissioning of the Kinsale Area gas fields will not result in any significant effects on the environment.

# Impact on the Marine Environment, Fishermen & Onshore Communities

Subject to regulatory approval it is planned to remove the offshore structures and to leave subsea pipelines and cables in-situ, with protective rock cover. This will be less disruptive than removal of the pipelines and cables which would have a larger impact on the seabed and associated marine life, especially as they have been in place for many years. The EIAR is considering both short-term impacts associated with the platform removal activities (for example, the presence of a large crane vessel) and longer-term impacts from leaving pipelines in-situ. The report will demonstrate that the long-term risk to the environment and to fishing activities is very low. An appropriate inspection programme will be put in place to monitor the status of the pipelines and cables.

The onshore terminal site will have all equipment removed and the land will be restored for agricultural use, in accordance with the planning permission for the site. A suitable plan will be developed to manage the short term impact of the activities associated with the removal of the equipment.

#### **Consent Process**



Onshore Inch Terminal



Subsea manifold

#### **Consent Process**

In accordance with the EU Environmental Impact Assessment Directive and the Habitats Directive, the project will be assessed for potential significant environmental impacts. The competent state authority is the Department of Communications, Climate Action and Environment (DCCAE- Petroleum Affairs Division (PAD)). The EIAR and the Appropriate Assessment Screening Report will provide the necessary information to enable the PAD to undertake an Environmental Impact Assessment (EIA) of the project. Kinsale Energy intends carrying out a two stage consent application process to reflect project schedule requirements and to allow time for the completion of studies for the possible reuse of certain facilities. It is anticipated that the entire decommissioning consent process will be completed prior to cessation of gas production in 2020/2021.

Consultations with statutory bodies, together with public consultation, will be undertaken as part of the relevant application for consent. This will ensure that any questions are recorded, communicated to the project team and any concerns addressed.

In accordance with the Petroleum Safety Framework, which regulates the safety of offshore activities in Ireland, the well plugging programme will be subject to a separate approval by the Commission for Regulation of Utilities (CRU).

# What will happen to the decommissioned equipment?

The equipment to be removed consists of industrial materials, primarily steel from the structures. All of the equipment will be transported to licensed dismantling yards where the material will be segregated and sorted. It is expected that a very high proportion of the material recovered will be recycled (~90%), with any non-recyclable items being disposed of in a controlled manner in approved waste facilities.



For any questions you may have about this project please contact Email info@kinsale-energy.ie

For additional information on this project please visit our website Website www.kinsaleenergy.ie