

Intended for
Environment Advisory Unit
Department of the Environment, Climate and Communications

Date
July 2022

Project Number
1620009502

**STATUTORY
ENVIRONMENTAL
ASSESSMENT
EIAR TECHNICAL
REVIEW FOR KINSALE
AREA
DECOMMISSIONING
PROJECT – CONSENT
APPLICATION 3**

STATUTORY ENVIRONMENTAL ASSESSMENT EIAR TECHNICAL REVIEW FOR KINSALE AREA DECOMMISSIONING PROJECT – CONSENT APPLICATION 3

Project No. **1620009502**
Issue No. **2**
Date **22/06/2022**
Made by **Kim Moore / Elisha Hearn**
Checked by **Michael Elliott**
Approved by **Michael Elliott**

This report has been prepared by Ramboll UK Limited with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between Ramboll UK Limited and the Client. This report is confidential to the Client, and Ramboll UK Limited accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by Ramboll UK Limited beforehand. Any such party relies upon the report at their own risk. Ramboll UK Limited disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
2	27/07/2022	KM / EH	ME	ME	EIAR Technical Review – Issue to client
1	22/06/2022	KM / EH	ME	ME	EIAR Technical Review – Issue to client

CONTENTS

EXECUTIVE SUMMARY	I
1. INTRODUCTION	3
1.1 Project Background	3
1.2 Documents Reviewed	4
2. TERMS OF REFERENCE	5
2.1 Legislative Context	5
2.2 Previous Applications	5
2.3 Relevant Guidance	6
2.4 Consultation	6
3. PROJECT DETAILS	14
4. EIA REVIEW METHODOLOGY	20
4.1 Overview	20
4.2 Section 1: Description of the Project	20
4.3 Section 2: Description of Environmental Factors Likely to be Affected by the Project	27
4.4 Section 3: Description of the Likely Significant Effects of the Project	30
4.5 Section 4: Consideration of Alternatives	35
4.6 Section 5: Description of Mitigation	37
4.7 Section 6: Description of Monitoring Measures	38
4.8 Section 7: Quality	40
5. MITIGATION AND MANAGEMENT COMMITMENTS	43
6. CONCLUSIONS	51
APPENDIX A – GENERAL CONSULTATION RESPONSES	53
APPENDIX B – PROJECT SPECIFIC CONSULTATION RESPONSES (POLICY ISSUES)	60

EXECUTIVE SUMMARY

Ramboll UK Limited (herein referred to as Ramboll) has been commissioned by the Department of the Environment, Climate and Communications (herein referred to as DECC) to provide assistance with regards to the statutory assessment of applications by PSE Kinsale Energy Limited and PSE Seven Heads Limited (collectively referred to herein as the applicant), and specifically to review the Environmental Impact Assessment (EIA) documentation.

The applicant has submitted two applications for consent to carry out decommissioning of certain facilities within the Kinsale Area gas fields (referred to as the Kinsale Area Decommissioning Project (KADP)), incorporating the Kinsale Head gas field and facilities (which includes the Southwest Kinsale and Ballycotton gas fields) and the Seven Heads gas field and facilities respectively.

The applications are part of a staged application process for the KADP and are preceded by two previous consent applications. Previous applications were submitted to and approved by the then Minister for Communications, Climate Action and Environment (DCCAE). Ministerial consent was granted to an application for the plugging and abandonment of wells, removal of the two topside structures and the removal of subsea facilities on 26 April 2019 within the Kinsale Head and the Seven Heads gas fields (Consent Application No. 1), and Ministerial consent was granted for the removal of the platform jacket structures on 26 February 2020 within the Kinsale Head gas field Consent Application No. 2). Approved works under Consent Application No. 1 and Consent Application No. 2 are programmed to continue through 2022.

For the current consent applications, the application in relation to Kinsale Head gas field (Kinsale Head Consent Application No. 3) covers the following activities:

- The leaving *in situ* of all infield pipelines and umbilicals associated with the Kinsale Head gas fields;
- The leaving *in situ* of the 24" export pipeline (offshore and onshore section) and the filling of the onshore section with grout; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

With regards to the Seven Heads gas field the application (Seven Heads Consent Application No. 2) covers the following activities:

- The leaving *in situ* of all infield pipelines and umbilicals associated with the Seven Heads gas field;
- The leaving *in situ* of the 18" Seven Heads export pipeline and umbilical; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

The current consent applications are being sought for the approval of an addendum to the Plan of Development for the respective gas fields, in accordance with Sections 13 and 13A of the Petroleum and Other Minerals Development Act 1960, as amended. In addition, pursuant to Section 5(2) of the Continental Shelf Act 1968, as amended, consent is being sought to alter certain facilities in the area designated pursuant to Article 2 of the Continental Shelf (Designated Areas) Order 1993, as amended, for both applications.

The competent authority (DECC) is required to give consideration to the potential for likely significant effects of such activities on the environment, having regard to the EU Directive (2011/92/EU), as amended by Directive 2014/52/EU (herein referred to as "The EIA Directive"),

the European Union (Gas Act 1976) (Environmental Impact Assessment) Regulations 2021 and relevant jurisprudence and guidelines.

This report provides a review of the Environmental Impact Assessment Report (EIA) and its Addenda (EIA Addendum, EIA Addendum No. 2, and EIA Addendum No. 3) prepared by Hartley Anderson and Arup on behalf of the applicant and submitted with their applications. Public consultation on the information provided by the applicant has been undertaken by the DECC. This review has been informed by the EU Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017)¹, and has considered relevant legislation, relevant guidance, and consultation responses.

The EIA is clearly and consistently presented, and has been prepared on behalf of the applicant by competent experts with adequate regard to relevant legislation and the EU Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017). The EIA and EIA Addenda comprises a notable volume of material; however, across the collective of documents a comprehensive assessment has been undertaken based on a sufficient level of information enabling robust conclusions to have been reached by competent experts on behalf of the applicant.

The information presented in the applicant's EIA and its Addenda is considered to be complete and that no further information is required and provides adequate information to allow the DECC to issue an EIA determination.

This report provides a conclusion that can be used by the DECC to issue an EIA determination.

¹ https://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

1. INTRODUCTION

Ramboll UK Limited (herein referred to as Ramboll) has been commissioned by the Department of the Environment, Climate and Communications (herein referred to as DECC) to provide assistance with regards to the statutory assessment of applications from PSE Kinsale Energy Limited and PSE Seven Heads Limited (collectively referred to herein as the applicant), and specifically to review the Environmental Impact Assessment (EIA) documentation, submitted in respect of an application for consent to carry out decommissioning of certain facilities of the Kinsale Head, including Southwest Kinsale and Ballycotton gas fields (referred to as Kinsale Head gas fields) and an application for consent to carry out decommissioning of certain facilities of the Seven Heads gas field.

1.1 Project Background

The applicant has submitted two applications:

1. application for consent to carry out decommissioning of certain facilities of the Kinsale Head, including Southwest Kinsale and Ballycotton gas fields (referred to as Kinsale Head gas fields); and
2. application for consent to carry out decommissioning of certain facilities of the Seven Heads gas field. The Kinsale Head gas fields and facilities and the Seven Heads gas field and facilities form part of the greater Kinsale Area gas fields and facilities.

Together the decommissioning of the entirety of the Kinsale Area gas fields and facilities is referred to as the Kinsale Area Decommissioning Project (KADP). The applications are part of a staged application process for the KADP and are preceded by two previous consent applications.

Previous applications were submitted to and approved by the then Minister for Communications, Climate Action and Environment (DCCAE). Ministerial consent was granted to an application for the plugging and abandonment of wells, removal of the two topside structures and the removal of subsea facilities on 26 April 2019 within the Kinsale Head and the Seven Heads gas fields (Consent Application No. 1), and Ministerial consent was granted for the removal of the platform jacket structures on 26 February 2020 within the Kinsale Head gas field Consent Application No. 2). Approved works under Consent Application No. 1 and Consent Application No. 2 are programmed to continue through 2022.

For the current consent applications, the application in relation to Kinsale Head gas field (Kinsale Head Consent Application No. 3) covers the following activities:

- The leaving *in situ* of all infield pipelines and umbilicals associated with the Kinsale Head gas fields;
- The leaving in situ of the 24" export pipeline (offshore and onshore section) and the filling of the onshore section with grout; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

With regards to the Seven Heads gas field the application (Seven Heads Consent Application No. 2) includes the following activities:

- The leaving *in situ* all infield pipelines and umbilicals associated with the Seven Heads gas field;
- The leaving *in situ* of the 18" Seven Heads export pipeline and umbilical; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

This report has been prepared as a statutory assessment of the activities proposed by the applicant and provides a conclusion that can be used by the DECC to issue an Environmental Impact Assessment determination.

1.2 Documents Reviewed

The following documents have been reviewed to inform this report:

- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 1: Non-Technical Summary. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 2: Main Text: Part 1 of 3. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 2: Main Text: Part 2 of 3. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 2: Main Text: Part 3 of 3. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 3: Appendices: Part 1 of 2. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report. Volume 3: Appendices: Part 2 of 2. 30 May 2018. Ref 253993-00-REP-08;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report Addendum. 08 August 2019. Ref 253993-00-REP-24;
- Kinsale Area Decommissioning Project Environmental Impact Assessment Report Addendum No. 2. 30 September 2021. Ref 253993-00-REP-27;
- Kinsale Area Decommissioning Project - Pre/Post Rock Placement Surveys Environmental Impact Assessment Report Addendum No. 3. January 2022;
- Letter to Minister. Kinsale Head Plan of Development. Dated 13 October 2021;
- Letter to Minister. Seven Heads Plan of Development. Dated 13 October 2021;
- Letter to Minister. Kinsale Head Plan of Development. Dated 27 January 2022;
- Letter to Minister. Seven Heads Plan of Development. Dated 27 January 2022;
- Kinsale Area Decommissioning Project. Decommissioning Plan – Kinsale Head Petroleum Lease (OPL1) Consent Application No. 3. Dated 30 September 2021. Ref 253993-00-REP-28;
- Kinsale Area Decommissioning Project. Decommissioning Plan – Seven Heads Petroleum Lease Consent Application No. 2. Dated 30 September 2021. Ref 253993-00-REP-29.

This report has been prepared by competent experts with appropriate expertise in Environmental Impact Assessment.

2. TERMS OF REFERENCE

2.1 Legislative Context

Oil and gas exploration and production activities are regulated in Ireland under the Petroleum and Other Minerals Development Act 1960 (as amended) (referred to herein as the PODMA). Under the POMDA, the DECC is a designated competent national authority. There is a statutory obligation on the Minister for the DECC to confirm that all projects seeking authorisation to undertake activity under the POMDA comply with the requirements of the European Union Directive on assessment of the effects of certain public and private projects on the environment (Environmental Impact Assessment) Directive (2011/92/EU) and as amended by Directive 2014/52/EU.

The Continental Shelf Act 1968 (as amended) makes provisions in relation to the exploration and exploitation of the Continental Shelf. Under Section 2 of the Act, the Government has the power to make orders to designate areas of the seabed outside the territorial waters of the State in which the State has exploration and exploitation rights. Under Section 5 of the Act, the consent of the Minister of the DECC is required to construct, alter or improve any structure or works in a designated area. In Ireland the European Union (Gas Act 1976) (Environmental Impact Assessment) Regulations 2021 transposes the EIA Directive.

To meet the obligations of the EIA Directive and associated national regulations, project proponents are required to prepare an EIA Report (EIAR) for the project; a report summarising the project, its impacts and the likely environment to be considered including biological and socio-economic receptors.

2.2 Previous Applications

2.2.1 Consent Application No. 1

On 28 June 2018, the applicant submitted project consent applications to the Minister of State for the Department of Rural and Community Development and the then DCCAE seeking consent to undertake decommissioning of certain facilities in the Kinsale Head and Ballycotton gas fields (Kinsale Gas Area), and the Seven Heads gas field respectively. The scope of the decommissioning work covered by the application included the removal of the two platform topside structures, the plugging and abandonment of wells and the removal of subsea facilities. In line with the obligations of the EIA and Habitats Directives, the consent application was supported by a number of documents, including an EIAR (2018) and an Appropriate Assessment (AA) Screening Report (2018).

On 23 April 2019, the Minister determined that he was satisfied with the information submitted with regard to the decommissioning plan relating to the consent application and consented the decommissioning of the described facilities in the Kinsale Gas Area and Seven Heads gas field, including consent to alter and remove facilities from the area pursuant to Section 5(2) of the Continental Shelf Act 1968 (as amended) from the area pursuant to Section 2 of S.I. No 92/1993 – Continental Shelf (Designated Areas) Order 1993. The applicant was notified of the Minister's determinations and consent by letters dated 26 April 2019.

2.2.2 Consent Application No. 2

On 08 August 2019, the applicant submitted a project consent application to the Minister of State for the DCCAE for the decommissioning of facilities at the Kinsale Head gas fields. The scope of the decommissioning works covered by the application included the complete removal of jacket structures in accordance with OSPAR Decision 98/3. In line with the EIA and Habitats Directives, the consent application was supported by a number of documents, including the original EIA

Report (2018), an EIA Report Addendum (2019), an AA and Article 12 Screening Report (2018) and AA and Article 12 Screening Report Addendum (2019).

On 24 February 2020, the Minister determined that he was satisfied with the information submitted with regard to the decommissioning plan relating to the consent application and consented the decommissioning of the described facilities in the Kinsale Gas Area, including consent to alter and remove certain facilities pursuant to Section 5(2) of the Continental Shelf Act 1968 from the area designated pursuant to Section 2 of S.I. No 92/1993 Continental Shelf (Designated Areas) Order 1993. The applicant was notified of the Minister's determinations and consent by letters dated 26 February 2020.

2.3 Relevant Guidance

This report has been prepared having regard to guidance on Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Assessment Reports 2022². The structure and content of this report is based upon the guidance published by the European Commission in 2017³.

2.4 Consultation

2.4.1 Prescribed Bodies

The following prescribed bodies⁴ were notified of the application:

- Cork County Council;
- The Office of Public Works;
- Minister for Agriculture, Food and the Marine;
- Minister for Rural and Community Development;
- The Health and Safety Authority;
- Bord Iascaigh Mhara;
- The Environmental Pillar;
- The Heritage Council;
- National Parks and Wildlife Service;
- An Taisce;
- Minister for Tourism, Culture, Arts, Gaeltacht, Sports and Media;
- Minister for Transport;
- Sea Fisheries Protection Authority;
- Marine Institute;
- The Irish Whale and Dolphin Group; and
- The Environmental Protection Agency.

The Department of Transport provided a response that it had no observations to provide in respect of the application. Responses to the notification were received from the following prescribed bodies, as described below:

- The Irish Whale and Dolphin Group;
- National Parks and Wildlife Service; and

² <https://www.epa.ie/publications/monitoring--assessment/assessment/guidelines-on-the-information-to-be-contained-in-environmental-impact-assessment-reports-eiar.php>

³ https://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

⁴ Government departments, local authorities and bodies which are legally required to be consulted with before decision-making on consent applications

- Sea Fisheries Protection Authority.

2.4.2 Public Consultation

The applications were advertised by the DECC on their website⁵ following receipt of the applications on 14 October 2021. Invitations for submissions were advertised by DECC to be received by close of business on 17 November 2021 to ensure consideration by the Minister.

Five responses were received from the public in response to this consultation, and the points raised by these have been considered and responded to in the following sections of this report:

- Simply Blue Energy dated 17 November 2021;
- dCarbonX Ireland Ltd dated 15 November 2021;
- SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd dated 11 November 2021; and
- SLR Consulting Ireland on behalf of Predator Oil and Gas Holdings Plc dated 11 November 2021.

Following receipt of additional information from the applicant, the DECC advertised a further consultation period on this information from 31 January 2022 to 07 March 2022. One response was received in response to this consultation, from *Not Here Not Anywhere* dated 07 March 2022.

Following review of the application documents the DECC submitted a request for further information to the applicant. A further consultation was held on the Further Information Response from 26 April 2022 to 10 May 2022. Two responses were received in response to this consultation, one from the EPA and one from The Department of Transport. The Department of Transport provided a response that it had no observations to provide in respect of the application.

2.4.3 General Consultation Responses

A number of general consultation responses have been received in relation to the applications. The comments represent general comments in regard to climate, energy storage and environment, and general comments on policy and securing future energy supply. Appropriate regard has been given to the issues raised in these submissions, however, the observations are not considered to be relevant to the scope of the report and therefore are not considered further. The general consultation responses received are presented in Appendix A.

2.4.4 Project Specific Consultation Responses

A number of project specific responses have been received in relation to the applications. The majority of the project specific responses received have related to policy issues (for example, potential re-uses for the Kinsale Area facilities); these responses have been considered as not relevant to the EIAR assessment by the Environmental Assessment Unit (EAU) and are therefore not considered further. The general consultation responses received related to policy are presented in Appendix B.

Project specific responses considered relevant to the EIAR assessment by EAU and considered further in this report are summarised in the table below.

⁵ [gov.ie](http://www.gov.ie) - Public consultation on the application for decommissioning of certain facilities within the Kinsale Area gas fields (www.gov.ie)

Table 2.1 Project Specific Consultation Responses

Consultee	Project Specific Comments	Response
<p>SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd</p>	<p>Based on the Consent Application No. 3 submitted by PSE Kinsale Energy Ltd, Mag Mell Energy Ireland Ltd has the following requests for clarification and additional information required to integrate the reuse of the 24” gas export pipeline in the Mag Mell LNG FSRU project engineering design:</p> <ul style="list-style-type: none"> • It is indicated that the 24” pipeline has already been filled with inhibited seawater and disconnected from KA platform. Please can this be confirmed. Also, it is unclear where the 24” pipeline has been disconnected from the KA platform (e.g. at the top or bottom of the riser). Please can the point of disconnection be confirmed. • It is not indicated if the connection between the 24” pipeline and the riser/spoolpieces at the base of the KA platform are welded or flanged connections. Please can this be clarified, and if it is a flanged connection, please provide details of the flange type. • It is indicated that no subsea intervention is required if/when the grout plug is pumped in at the onshore end of the 24” pipeline. This infers that there is some type of end fitting already installed on the subsea end of the 24” pipeline. Please can details of this end fitting be provided (e.g. flanged or welded, flange type, valving details, etc). • Please provide details of the chemicals used to inhibit the seawater prior to filling the 24” pipeline (i.e. type, specification/datasheet, dosage, period of time the protection provides, when inhibiting chemicals were introduced, etc). • Is it assumed that the operator has carried out periodic internal in-line inspections (ILI) of the 24” pipeline. Please provide the latest ILI reports and date. In particular, please provide the report and data from the most recent ILI. If possible, please also provide historical ILI so that the rate of any corrosion can be assessed. • It is assumed that the operator has also carried out periodic external survey inspections of the 24” pipeline. Please provide the latest survey reports and data. In particular, please provide the latest report and data from any cathodic protection surveys performed. • The 24” pipeline is reported to have been installed in 1977 and given the timeframe it is assumed that the operator will have been obliged to gain approval of any critical changes in design details and/or operating limitations for the 24” pipeline. Please provide details of any such changes and any safety case submissions required to obtain approval to operate. • It is assumed that an integrity management system was in place by the operator. Please provide the 	<p>This information is not considered necessary to inform the determination by EAU and therefore this additional information has not been requested from the applicant.</p>

Consultee	Project Specific Comments	Response
	latest annual report/s regarding integrity assessment/s for the 24" pipeline.	
IWDG	<p>It is generally recognised from the noise levels supplied with the application that these are not sufficient to pose a serious threat or disturbance to cetaceans, except in the immediate vicinity of activities. However, on pages 187 and 188 (Kinsale Development EIAR Volume 2) the claim the Doppler Velocity logs are inaudible to marine mammals is correct because of their high frequency, but the assertion that the USBL systems are "not expected to be discernible from the broadband noise of associated vessels" is either incorrect or else these vessels produce a lot of noise in unusual frequencies which requires strict mitigation. Furthermore, while the frequencies of 20 to 40 kHz for the operating range of USBL systems is roughly correct. The widely used Kongsberg (2016) USBL systems such as HiPAP 502, HiPAP 452 and HiPAP 352 operate between 21 and 31 kHz and the SonarSyne (no date) ROVnav6, chosen as an example in the EIAR operates between 19 and 34 kHz and the Tritech MicroNav from 20 to 28 kHz. Some USBL systems intended for deepwater operation such as the HiPAP102 use frequencies from 10 to 15.5 kHz. Transponder source levels with Kongsberg depend on setup and mode of operation but vary from 190 dB to 206 dB re1µPa@1m and the Sonardyne system operates at 187 to 196 dB re1µPa@1m. The operating source levels of the Tritech system are not available. Therefore, the information on the USBL if based on the Sonardyne system alone and some 10 dB lower than systems that may be used, lacks full consideration of source level impact. 10 dB represents a trebling of sound pressure levels.</p>	<p>EIAR Addendum no. 3 Pre/post rock placement surveys (Jan 22 Rev 1), provides further detail on expected sound sources, by detailed potential equipment to be used, e.g. section 5.2.1:</p> <p><i>No low frequency survey equipment will be used (the lowest frequency source which may be used is the USBL, which typically operates at 20-40kHz); no airgun, sparker (electrostatic discharge) or boomer (accelerated water mass) will be used</i></p> <p>Table 5.1 summarises indicative source characteristics of the survey equipment (and comparable equipment) which will potentially be used in the planned surveys, drawing on results of Crocker & Fratantonio (2016) supplemented by manufacturer specifications where required.</p> <p>In addition to those sources described in Table 5.1, there</p>

Consultee	Project Specific Comments	Response
		<p><i>may be the use of an USBL system to monitor the position of towed equipment. The USBL system consists of a multi-element transducer mounted on the hull of a vessel and a transponder attached to the towed equipment (e.g. side-scan sonar).</i></p> <p>It is considered that through EIAR Addendum no. 3 the applicant has adequately considered sound sources with respect to disturbance to marine mammals.</p>
IWDG	<p>The multi-beam and sidescan sonar systems are stated as having a frequency usage of 200-400 kHz and 114 or 410 kHz respectively. It should be remembered that these are target frequencies for this equipment and such equipment will produce side lobes of energy in secondary frequencies. These frequencies have only been found below injury levels to date and therefore only represent a possible disturbance threat.</p>	<p>It is considered that through EIAR Addendum no. 3 the applicant has adequately considered sound sources with respect to disturbance to marine mammals.</p>
IWDG	<p>Such decommissioning work has never been carried out in Irish Waters previously. The equipment models to be used are assumed and the frequency range and sound source levels not necessarily completely accurate. While it seems unlikely that sound source levels will reach those high enough to cause temporary threshold shift, disturbance is entirely possible. In order to properly assess the impact of the decommissioning activities there should be acoustic monitoring of activities in the frequencies used by marine mammals up to 48 kHz as a minimum, and ideally to 200 kHz. Noise levels encountered in noise monitoring must be explained, with</p>	<p>It is considered that through EIAR Addendum no. 3 the applicant has adequately considered sound sources with respect to disturbance to marine mammals, and no likely</p>

Consultee	Project Specific Comments	Response
	<p>the source identified. The IWDG have called for German regulations for windfarm construction to be implemented, which established noise induced injury prevention thresholds that call for Sound Exposure Levels (SELs) not exceed 160 dB re1μPa²s and a peak-to-peak sound pressure level not exceeding 190 dB re 1 μPa at a distance of 750 m. Similar noise monitoring should also ensure these threshold levels are not exceeded in this operation.</p>	<p>significant effect on marine mammals from underwater noise is predicted. Therefore it is not proposed to engage a Marine Mammal Observer (MMO) or undertake noise monitoring during the works.</p>
IWDG	<p>Additionally, a Marine Mammal Observer (MMO) should record all sightings and operations, including activation of all acoustic equipment, and conduct effort watches with detailed recording of marine mammal interactions with survey operations, where these may occur. If operations are occurring in more than one location simultaneously this would require a second MMO. The MMO should be authorised to stop or delay operations where safe to do so, if there is a clear disturbance and conflict with the Habitats Directive Article 12, and report on the rationale for any such decision immediately to the regulator. PAM (Passive Acoustic Monitoring) would greatly assist the correct reporting of noise production activities and allow identification of specific activities and operations which cause disturbance. These could then be more accurately monitored and reported by mitigation monitoring personnel.</p>	<p>As no likely significant effect on marine mammals from underwater noise is predicted, it is not proposed to engage an MMO during the works, or that any specific mitigation is required in relation to underwater noise effects.</p>
Environmental Protection Agency	<p>The Agency advises that two dumping at sea permit applications have been submitted to the Agency for the Kinsale Area Decommissioning Project as follows:</p> <ul style="list-style-type: none"> • PSE Kinsale Energy Limited submitted a dumping at sea permit application (Reg. No. S0034-01) to the Agency on 21st October 2021. The permit application is for the dumping at sea (or leaving <i>in situ</i>) of redundant gas export pipelines, in-field gas pipelines, in-field control umbilicals and umbilical contents associated with the decommissioning of the Kinsale Head gas fields and facilities. The applicant is seeking to leave in place circa 92 km of subsea steel pipelines varying in size from 273–610 mm and 21km of control umbilicals varying in diameter from 82–98mm. This application is currently under assessment by the Agency. The application and associated documents, can be found at the following link: https://epawebapp.epa.ie/terminalfour/DaS/DaS-view.jsp?regno=S0034-01. 	<p>EAU have undertaken the EIAR assessment independent of the assessment by the Agency in relation to the dumping at sea permit applications</p>

Consultee	Project Specific Comments	Response
	<ul style="list-style-type: none"> PSE Seven Heads Limited submitted a dumping at sea permit application (Reg. No. S0035-01) to the Agency on 22nd October 2021. The permit application is for the dumping at sea (or leaving <i>in situ</i>) of redundant in-field gas pipelines, in-field umbilicals and umbilical contents associated with the decommissioning of the Seven Heads gas fields and facilities. The applicant is seeking to leave in place circa 61km of subsea steel pipelines, varying in size from 203–457 mm and 61 km of control umbilicals, varying in diameter from 93.2–123.5mm. The application is currently under assessment by the Agency. The application and associated documents can be found at the following link: https://epawebapp.epa.ie/terminalfour/DaS/DaS-view.jsp?regno=S0035-01. 	
Environmental Protection Agency	The Agency would further advise that in considering and deciding on the application that the proposed activity should not result in a contravention of the Water Framework Directive 2000/60/EC, Habitats Directive 92/43/EEC, Birds Directive 2009/147/EC, Marine Strategy Framework Directive 2008/56/EC, Bathing Water Directive 73/160/EEC or Environmental Liabilities Directive 2004/35/EC.	The EIAR assessment by EAU has considered compliance with all Directives relevant to the applications.
National Parks and Wildlife Service (NPWS)	The Department has been engaged in assessing previous iterations of this development, notably in 2018. All previous comments made by the Department remain relevant and should be taken into consideration and enacted as mitigation as previously recommended.	The EIAR assessment by EAU has considered all comments received in relation to the works proposed under this consent application and previous consent applications (Consent Application No. 1 and Consent Application No. 2).
	The submitted Cultural Heritage chapters (underwater and terrestrial) and 2018 Cultural Heritage Assessment cite a number of wrecks that are located in close proximity to either well heads or pipelines: 'The closest of these wrecks is UC42 which is designated by UHO and located within 200m of the export pipeline to the Inch Terminal and 5.5km south east of Roches Point. The shipwreck of the Elizabeth Jane, sunk in 1916, is also noted to be located approximately 560m from the export pipeline. Additionally, a number of other	The EIAR assessment by EAU has considered the observations made in relation to wrecks.

Consultee	Project Specific Comments	Response
	<p>charted shipwrecks are located throughout the wider Celtic Sea area, as are a number of other wrecks, the positions of which are approximate. No prehistoric or archaeological remains are known in the immediate vicinity of the Kinsale Area infrastructure’ (EIAR p. 125). It should be noted that the wreck of the UC-42 (W5519) is not designated by UHO but is afforded statutory protection under the National Monuments Acts (Amended) 1987, as are all wrecks over 100-years old. This wreck, according to the 2018 Cultural Heritage Assessment, is situated only 30m east of the export pipeline and not 200m from it as stated in the EIAR: ‘Wreck W5519 lies only 30m east of the pipeline and is the site of a German submarine, UC-42, which was lost in September 1917 while attempting to lay mines across the mouth of Cork harbour. The submarine measures 5m wide, 45m long, 3.7m in maximum height and lies on its port side, orientated NW-SE, at a depth of 27m. All decommissioning works must avoid all impacts with the charted position’ (p. 6). The 2018 Cultural Heritage Assessment (ADCO Ltd.) notes in relation to the Seven Heads well: ‘There is a small series of four known wrecksites in the wider vicinity, the closest of which, Wreck W11050, lies 2.7km north of the wells. The name and details of the wreck are not known, as are those of the other wrecks that lie at a further remove’ (p. 5).</p>	
	<p>In light of the above there are no objections to the decommissioning works proceeding once the following are included as conditions in any Permit granted for this:</p> <ul style="list-style-type: none"> • The services of a suitably qualified and suitably experienced maritime archaeologist are engaged to monitor all decommissioning works for wreck sites that are less than 300m to proposed decommissioning infrastructure. • The applicant shall engage with the archaeologist by providing specifications in advance of the proposed decommissioning works, to allow the archaeologist to determine any mitigation strategies that may need to be put in place to protect identified shipwreck remains. In particular the wrecks, including the UC-42, that are in closest proximity to the decommissioning works (including any impacts from plant and machinery), shall have an adequate exclusion zone imposed to ensure there is no impact on the known location of the wreck and its immediate environs. The applicant shall be prepared to be advised by the consultant archaeologist and this Department in this regard. • Provision shall be made to accommodate the monitoring archaeologist on board the decommissioning 	<p>The EIAR assessment by EAU has considered all proposed conditions related to archaeological monitoring. Mitigation and management commitments for adherence by the applicant are captured in Section 5 of this report.</p>

Consultee	Project Specific Comments	Response
	<p>vessels to enable them to successfully carry out their work.</p> <ul style="list-style-type: none"> • The monitoring archaeologist shall have the power to have works suspended in a particular or for a particular element of the decommissioning programme, should known or previously unknown underwater cultural heritage be identified or impacted. The Underwater Archaeology Unit shall be contacted immediately in this event. • The archaeological monitoring shall be licensed by the Department of Housing, Local Government and Heritage and a detailed method statement containing the monitoring strategy shall accompany the licence application. • As with previous requirements, the nature and extent of the foreshore decommissioning works are not clear. If there is to be impact along the nearshore and foreshore, then this should be subject to archaeological monitoring, and the methodology shall include details of this. The level and scale of archaeological monitoring for this element of the works can be determined once the scope of the works is clarified. The consultant archaeologist can address this in their method statement. <p>Upon completion of the archaeological monitoring, a detailed monitoring report shall be forwarded to the National Monuments Services' Underwater Archaeology Unit.</p>	
<p>Sea Fisheries Protection Authority</p>	<p>SFPA believe that there are no recognisable possible impacts on existing wild fisheries around or adjacent to the proposed area specified in application number FW.8.98 / S0035-01.</p> <p>Kinsale Energy has received consent to decommission the Kinsale Head gas fields and facilities, which are at the end of their productive life.</p> <p>There is no actual material being dumped, instead, the proposed 'dumping at sea' activity as described in application number FW.8.98 / S0035-01 is to retain in place the redundant gas export pipeline, the in-field gas pipelines, the in-field umbilicals and umbilical contents at the locations in which they were installed. The gas wells are being plugged, the pipelines filled with seawater and the platforms and subsea structures are being removed.</p> <p>One of the final decommissioning activities will be the placement of rock protection (rock berms) on the ends</p>	<p>The EIAR assessment by EAU has considered effects on fisheries.</p>

Consultee	Project Specific Comments	Response
	of the pipelines and umbilicals which might form a hazard to fishing activities.	
	There are no shellfish growing areas within the proposed area or adjacent to the area. SFPA believe that there are no recognisable possible impacts on shellfish growing areas around or adjacent to the proposed area specified in application number FW.8.98 / S0035-01	The EIAR assessment by EAU has considered effects on fisheries.
	SFPA believe that there are no recognisable possible impacts on seafood safety due to the activities involved in the process of decommissioning the Kinsale Head Gas fields and facilities described by Kinsale Energy in application number FW.8.98 / S0035-01	The EIAR assessment by EAU has considered effects on fisheries.

3. PROJECT DETAILS

Table 3.1 provides a template for summarising information relating to the proposed project.

Table 3.1: Application Details

Project Title:	Application for the decommissioning of certain facilities within the Kinsale Area gas fields (incorporating the Kinsale Head gas fields and facilities and the Seven Heads gas field and facilities).
Applicant:	PSE Kinsale Energy and PSE Seven Heads Limited (collectively referred to herein as the applicant).
Exploration Licence Reference:	Petroleum Lease No 1 (OPL 1 - 1970): Kinsale Head, Southwest Kinsale and Ballycotton Gas Fields. Seven Heads Petroleum Lease (2002): Seven Heads Gas Field.
Date Application Received:	14 October 2021
<p>Brief Project Description: <u>Kinsale Head Petroleum Lease application</u> The current application seeks consent to decommission the following facilities under the Kinsale Head Petroleum Lease:</p> <ul style="list-style-type: none"> To leave <i>in situ</i> all infield pipelines and umbilicals associated with the Kinsale Head gas fields. To leave <i>in situ</i> the 24" export pipeline (offshore and onshore section) and to fill the onshore section with grout. To use engineering materials (rock placement) to protect the pipelines and umbilicals <i>in situ</i>. <p>The applicant for the Kinsale Head gas field application is making applications under the relevant legislation with respect to pipeline and umbilical decommissioning as follows:</p> <ul style="list-style-type: none"> Application for approval of an addendum to Kinsale Head Plan of Development under Sections 13 and 13A of the 1960 Act. As noted previously, the Kinsale Head gas fields have come to the end of their productive life. Gas production from the wells ceased on 05 July 2020. The applicant is applying to the Minister for approval of an addendum to the Kinsale Head Plan of Development for the decommissioning of certain facilities (platform topsides, platform and subsea wells and subsea infrastructure) as set out in the application documents. Application for consent under Section 5 of the Continental Shelf Act 1968 (as amended). Pursuant to Section 5(2) of the Continental Shelf Act 1968 (as amended), the consent of the Minister is also sought to alter certain facilities within the area designated pursuant to Article 2 of the Continental Shelf Designated Areas Order 1993 SI 92 of 1993. The application relates to the construction, alteration or improvement of the existing pipeline and umbilical structures from the outer limit of the State’s territorial seas, generally 12 nautical miles, to the wells. The application applies to the undertaking of pre/post rock placement surveys and use of engineering materials to protect the pipelines and umbilicals <i>in situ</i>. The application does not apply, however, to leaving the offshore pipelines, umbilicals and any content within to remain <i>in situ</i>. <p><i>Pipelines and Umbilicals</i> The decommissioning activities involves rock cover remediation of pipe ends and rock cover of freespans only. Additionally, mattresses or grout bags will be retained in place, where they are associated with sections of pipeline ends beyond the tie-in spools which are proposed to be recovered as part of the subsea structures removal. These will also be subject to rock placement. Rock cover is assumed to be placed such that at least 0.2 m cover would be provided at all points. The rock berm is calculated with a 1 m wide berm over the pipe and mattresses (where present) and 1:2.5 slopes on either side. Actual rock berm design will be subject to engineering assessment to ensure the volume of rock deployed is minimised subject</p>	

to achieving the required technical function.

The rock placement vessel will have an approximate rock carrying capacity of 9,260 m³ (25,000 Te), with the capability of placing approximately 1,666 m³ (4,500 Te) of rock per day. Graded rock will be used similar to existing rock material specification (1" to 5") with all rock being placed in a controlled manner using a dedicated dynamically positioned fall pipe vessel and monitored by an ROV during placement. The rock will be sourced onshore, most likely from a UK or Norwegian quarry because currently there are no Irish quarries with high-capacity facilities for loading ships. The estimated rock placement requirements are shown below:

Pipelines and Umbilicals	Pipe ends & freespans	
	Length of rock placement (approx.)	Quantity (approx.)
Inch Beach landfall to Kinsale Alpha 24" pipeline	2,300 m	3,800 m ³ / 10,300 Te
24" Kinsale Alpha to Kinsale Beta Pipeline & 12" Kinsale Alpha to Kinsale Bravo Pipeline	600 m	950 m ³ / 2,500 Te
12" SW Kinsale Pipeline & 12" western drill centre & 10" Greensand & 10" Ballycotton & all associated umbilicals	650 m	750 m ³ / 2,000 Te
Total	3,550 m	14,800 Te

The estimated vessel times for the pipeline, umbilical and protective material decommissioning is 8 days for mobilisation, demobilisation and transit, 4 days for rock placement and 3 days for contingency.

Decommissioning Surveys

The pipelines and umbilicals decommissioned *in situ* will be surveyed prior to rock placement to accurately record their location and status and to confirm the locations of freespans. Rock berm locations will be surveyed as part of the rock placement operations. This information will be included in navigational charts and also passed onto representatives of the fishing community.

Close-out Reports

A close-out report will be submitted within 6 months following the completion of the offshore decommissioning scope covered by the consent application. Pursuant to Condition 8 of consent No. 1, the close-out report will include:

- Confirmation of completion of decommissioning works included in the Decommissioning Plan.
- Details of the decommissioning works undertaken including equipment & vessels used, materials used, cost, construction drawings, and an explanation of any variations (approved during the works) to the original approved decommissioning plan.
- Survey reports to confirm everything completed in accordance with the Decommissioning Plan.

Post decommissioning surveys will be carried out at intervals within a period of 10 years from the completion of initial post decommissioning survey, using a risk-based assessment approach. Each survey will entail acoustic surveys of the entire length of the pipelines and umbilicals. A survey report will be submitted following each survey.

Decommissioning Schedule

The works are expected to be undertaken in the following periods:

- Pipeline pre-placement survey – Q2/3 2022
- Grouting of onshore section of 24" pipeline – Q2/3 2022
- Rock placement on pipelines/umbilicals – Q3/4 2022.

The timings above may be affected by marine vessel availability and weather. Furthermore, the grouting of the onshore pipeline section will be undertaken during the decommissioning of the Inch terminal site.

Waste Management

No waste will be generated by the decommissioned facilities and therefore no specific waste

management strategy is proposed. Normal vessel waste is covered under normal maritime legislation (i.e. Marpol) and the required plans will be put in place. The decommissioning contractor will be responsible for developing and implementing appropriate procedures, securing the relevant authorisations and agreements to ensure the appropriate management and disposal of waste and resources throughout decommissioning. The contractor will also be required to employ staff with skills, qualifications and experience appropriate to the needs of the works to be carried out. The contractor will also be responsible for managing environmental issues through appropriate risk management, mitigation, auditing, licensing and monitoring and will be required to ensure compliance with legislative and commercial standards.

Seven Heads Petroleum Lease application

The current application seeks consent to decommission the following facilities under the Seven Heads Petroleum Lease:

- To leave *in situ* all infield pipelines and umbilicals associated with the Seven Heads gas field.
- To leave *in situ* the 18” Seven Heads export pipeline and umbilical.
- To use engineering materials (rock placement) to protect the pipelines and umbilicals.

The applicant for the Seven Heads gas field application is making applications under the relevant legislation with respect to pipeline and umbilical decommissioning as follows:

- Application for approval of an addendum to Seven Heads Field Plan of Development under Section 13 of the 1960 Act. As noted previously, the Seven Heads gas field has come to the end of its productive life. Gas production from the wells ceased on 05 July 2020. The applicant is applying to the Minister for approval of an addendum to the Seven Heads Plan of Development for the decommissioning of certain facilities as set out in the application documents.

Application for consent under Section 5 of the Continental Shelf Act 1968 (as amended). Pursuant to Section 5(2) of the Continental Shelf Act 1968 (as amended), the consent of the Minister is also sought to alter certain facilities within the area designated pursuant to Article 2 of the Continental Shelf Designated Areas Order 1993 SI 92 of 1993. The application relates to the construction, alteration or improvement of the existing pipeline and umbilical structures from the outer limit of the State’s territorial seas, generally 12 nautical miles, to the wells. The application applies to the undertaking of pre/post rock placement surveys and use of engineering materials to protect the pipelines and umbilicals *in situ*. The application to the Agency does not apply, however, to leaving the offshore pipelines, umbilicals and any content within to remain *in situ*.

Pipelines and Umbilicals

The decommissioning activities involves rock cover remediation of pipe ends and rock cover of freespans only. Additionally, mattresses or grout bags will be retained in place, where they are associated with sections of pipeline ends beyond the tie in spools which are proposed to be recovered as part of the subsea structures removal. These will also be subject to rock placement. Rock cover is assumed to be placed such that at least 0.2 m cover would be provided at all points. The rock berm is calculated with a 1 m wide berm over the pipe and mattresses (where present) and 1:2.5 slopes on either side. Actual rock berm design will be subject to engineering assessment to ensure the volume of rock deployed is minimised subject to achieving the required technical function.

The rock placement vessel will have an approximate rock carrying capacity of 9,260 m³ (25,000 Te), with the capability of placing approximately 1,666 m³ (4,500 Te) of rock per day. Graded rock will be used similar to existing rock material specification (1” to 5”) with all rock being placed in a controlled manner using a dedicated dynamically positioned fall pipe vessel and monitored by an ROV during placement. The rock will be sourced onshore, most likely from a UK or Norwegian quarry because currently there are no Irish quarries with high-capacity facilities for loading ships. The estimated rock placement requirements are shown below:

Pipelines and Umbilicals	Pipe ends & freespans	
	Length of rock placement (approx.)	Quantity (approx.)

Seven Heads 18" export pipeline and main control umbilical	350 m	626 m ³ / 1,691 Te
Seven Heads 8" flowline & umbilicals to wells	1,360 m	1,247 m ³ / 3,368 Te
Total	1,710 m	5,059 Te

The estimated vessel times for the pipeline, umbilical and protective material decommissioning is 8 days for mobilisation, demobilisation and transit, 2 days for rock placement and 2 days for contingency.

Decommissioning Surveys

The pipelines and umbilicals decommissioning *in situ* will be surveyed prior to rock placement to accurately record their location and status and to confirm the locations of freespans. Rock berm locations will be surveyed as part of the rock placement operations. This information will be included in navigational charts and also passed onto representatives of the fishing community.

Close-out Reports

A close-out report will be submitted within 6 months following the completion of the offshore decommissioning scope covered by the consent application. Pursuant to Condition 8 of consent No. 1, the close-out report will include:

- Confirmation of completion of decommissioning works included in the Decommissioning Plan.
- Details of the decommissioning works undertaken including equipment & vessels used, materials used, cost, construction drawings, and an explanation of any variations (approved during the works) to the original approved decommissioning plan.
- Survey reports to confirm everything completed in accordance with the Decommissioning Plan.

Post decommissioning surveys will be carried out at intervals within a period of 10 years from the completion of initial post decommissioning survey, using a risk-based assessment approach. Each survey will entail acoustic surveys of the entire length of the pipelines and umbilicals. A survey report will be submitted following each survey.

Decommissioning Schedule

The works are expected to be undertaken in the following periods:

- Pipeline pre-placement survey – Q2/3 2022
- Rock placement on pipelines/umbilicals – Q3/4 2022.

The timings above may be affected by marine vessel availability and weather

Waste Management

No waste will be generated by the works and therefore no specific waste management strategy is proposed. Normal vessel waste is covered under normal maritime legislation (i.e. Marpol) and the required plans will be put in place. The decommissioning contractor will be responsible for developing and implementing appropriate procedures, securing the relevant authorisations and agreements to ensure the appropriate management and disposal of waste and resources throughout decommissioning. The contractor will also be required to employ staff with skills, qualifications and experience appropriate to the needs of the works to be carried out. The contractor will also be responsible for managing environmental issues through appropriate risk management, mitigation, auditing, licensing and monitoring and will be required to ensure compliance with legislative and commercial standards.

4. EIA REVIEW METHODOLOGY

4.1 Overview

The EU Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017)⁶ provides guidance to project applicants on the information to be included in EIA Reports and acts as a guide to Competent Authorities in the review and evaluation of EIA Reports. The EU Guidance includes a checklist that may be used by the Competent Authorities when reviewing EIA Reports to assess their adequacy of the report to meet the requirements of the EIA Directive.

The checklist is organised into seven sections that follow the order of presentation of an EIA Report as described in the EU Guidance:

1. Description of the project.
2. Description of environmental factors likely to be affected by the project.
3. Description of the likely significant effects of the project.
4. Consideration of alternatives.
5. Description of mitigation.
6. Description of monitoring measures.
7. Quality (presentation, non-technical summary and expertise).

4.2 Section 1: Description of the Project

The following section provides a Technical Review of the EIAR and its supporting Addenda produced for the Kinsale Area Decommissioning Project, which comprises two separate consent applications for two leased fields - the Kinsale Head gas fields and Seven Heads gas field. Regard has been taken in this Technical Review to the EPA Guidelines on the information to be contained in Environmental Assessment Reports 2022.

Table 4.1 sets out the first step in determining whether the EIAR and subsequent Addenda prepared to support the project are considered adequate.

Table 4.1 Checklist – Description of the project

No.	Review Question	Adequately Addressed?	Further Information Required?
1.1	Are the Project's objectives and the need for the project explained?	Yes (EIAR Section 1.2 and 3.1.2, EIAR Addendum No. 3 Section 2.1)	No
1.2	Is the programme for the Project's implementation described, detailing the estimated length of time (e.g. expected start and	Yes (EIAR Section 3.5 for the number of days required for decommissioning, EIAR Figure 1.2 for estimated start and end	No

⁶ https://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

No.	Review Question	Adequately Addressed?	Further Information Required?
	finish dates) for construction, operation and decommissioning?	date, EIAR Addendum No. 3 Section 1.1)	
1.3	Have all the Project's main characteristics been described?	Yes (EIAR Section 3)	No
1.4	Has the location of each Project component been identified, using maps, plans and diagrams as necessary?	Yes (the broad locations of key types of infrastructure have been shown in the EIAR (Figure 1.1), otherwise schematic diagrams have been used for illustrative purposes. More detailed diagrams are shown for each area in Figures 3.2, 3.5, 3.6, and 3.7 (and onshore in Figure 3.10). EIAR Addendum No. 3 – Figure 1.1, Figure 2.1)	No
1.5	Is the layout of the site (or sites) occupied by the Project described?	Yes (in relation to the figures listed in comment above)	No
1.6	For linear Projects, have the route corridor, the vertical, and horizontal alignment and any tunnelling and earthworks been described?	Not relevant	
1.7	Have the activities involved in the construction of the Project (including land-use requirements) all been described?	Not relevant	
1.8	Have the activities involved in the Project's operation (including land-use requirements and demolition works) all been described?	Yes (The EIAR and EIAR Addenda include the decommissioning of the Inch onshore gas terminal (which includes land-use requirements and demolition works), which is covered by planning permission granted by Cork County Council (planning reference no. 2929/76, in order to assess the environmental impact of the entirety of the proposed Kinsale Area facilities decommissioning)	
1.9	Have the activities involved in decommissioning the Project all been described?	Not applicable – the project in itself is decommissioning, therefore consideration of the decommissioning phase and associated impacts is not applicable	
1.10	Have any additional services, required for the Project, been described?	No, but assumed that no additional services are required for the Project	No
1.11	Are any developments likely to occur as a consequence of the Project identified?	Possibly – see EIAR Section 3.3	No
1.12	Have any existing activities that will alter or cease as a consequence of the Project been identified?	Yes (operations associated with the gas fields and facilities of the Kinsale Area will cease as a result of the decommissioning Project)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
1.13	Have any other existing or planned developments, with which the Project could have cumulative effects, been identified?	Yes (EIAR Section 7.11, EIAR Addendum No. 1 Section 4.4, EIAR Addendum No. 2 Section 4.2 and EIAR Addendum No. 3 Section 5.4)	No
1.14	Has the 'whole Project' been described, e.g. including all associated/ancillary works?	Yes (EIAR Section 3, EIAR Addendum No. 3 Section 2)	No
1.15	Are the activities described as part of the 'whole Project' excluded from the assessment? Are such exclusions justified? (e.g., associated/ancillary activities can be included either because they fall under the scope of the Directive (Annex I or II) or because they can be considered an integral part of the main infrastructure works using the 'centre of gravity test'. Guidance on associated and ancillary works has been published by the European Commission in an Interpretation Line ⁷ .	Not applicable	No
<i>The Size of the Project</i>			
1.16	Is the area of land occupied by each of the permanent Project components quantified and shown on a scaled map? (including any associated access arrangements, landscaping and ancillary facilities).	Yes (EIAR Figure 1.1, Figure 3.2, Figure 3.5, Figure 3.6, Figure 3.7, EIAR Addendum No. 3 Figure 1.1, Figure 2.1)	No
1.17	Has the area of land required temporarily for construction been quantified and mapped?	Not relevant	
1.18	Is the reinstatement and after-use of the land occupied temporarily for the operation of the Project described? (e.g., land used for mining or quarrying).	Yes (It is identified that parts of the facilities could be suitable for re-use, depending on the service, post-decommissioning - see EIAR Section 3.3).	No
1.19	Has the size of any structures or other works developed as part of the Project been identified? (e.g., the floor area and height of buildings, the size of excavations, the area or height of planting, the height of structures such as embankments, bridges or chimneys, the flow or depth of water).	Yes (e.g. rock cover, see EIAR Section 3.5.4.1)	No

⁷ <https://ec.europa.eu/environment/eia/pdf/Note%20-%20Interpretation%20of%20Directive%2085-337-EEC.pdf>

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
1.20	Has the form and appearance of any structures or other works developed as part of the Project been described? (e.g., the type, finish, and colour of materials, the architectural design of buildings and structures, plant species, ground surfaces, etc.)	Yes (e.g. rock cover, see EIAR Section 3.5.4.1)	No
1.21	For urban or similar development Projects, have the numbers and other characteristics of new populations or business communities been described?	Not relevant	
1.22	For Projects involving the displacement of people or businesses, have the numbers and other characteristics of those displaced been described?	Not relevant	
1.23	For new transport infrastructure or Projects that generate substantial traffic flows, has the type, volume, temporal pattern, and geographical distribution of new traffic generated or diverted as a consequence of the Project been described?	Not relevant	
<i>Production Processes and Resources Used</i>			
1.24	Have all of the processes involved in operating the Project been described?	Yes (Summary of methodologies provided in EIAR Table 3.10 and EIAR Section 3.5 presents scope of work required for decommissioning of each type of infrastructure within the Kinsale Area).	No
1.25	Have all the types and quantities of outputs produced by the Project been described?	Yes (EIAR Section 3.2.7 outlines all facilities to be decommissioned for the Project and Section 3.5 the scope of works for decommissioning itself (e.g. the number/size of facilities to be decommissioned), and Table 3.28 lists material generated from the Project to be either recycled or disposed of)	No
1.26	Have the types and quantities of resources, e.g. natural resources, raw materials, and energy needed for construction and operation been discussed?	Yes (EIAR Section 3.5, for each facility, describes the methods required for decommissioning e.g. includes statements on power voltage, fuel type, estimates of rock placement required.)	No
1.27	Have the environmental implications of the sourcing of resources,	Yes (e.g. EIAR Section 3.5.4.1 origins of rocks for the rock	No

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
	e.g. natural resources, raw materials and energy been discussed?	placement, and Table 3.9 for total CO2 emissions)	
1.28	Have the efficiency and sustainability in use of resources, e.g. natural resources, raw materials and energy been discussed?	Yes (as part of the comparative assessment (EIAR Section 3.4.6.1 and Appendix E Comparative Assessment Report))	No
1.29	Have any hazardous materials used, stored, handled or produced by the Project been identified and quantified? During construction, operation and decommissioning?	Yes (EIAR Table 3.15 and Table 3.28)	No - A number of items noted as being generated in 'small' quantities but not quantified in units. However, the information presented is considered to be sufficient to inform a decision
1.30	Has the transportation of resources, including natural resources and raw materials to the Project site and the number of traffic movements been discussed? During construction, operation and decommissioning?	Yes (e.g. number of days listed for vessel transits for various decommissioning operations) and onshore transport by road has been referenced).	No
1.31	Have the Project's environmentally relevant social and socio-economic implications been discussed? Will employment be created or lost as a result of the Project, for instance? During construction, operation and decommissioning?	Yes (e.g. EIAR Appendix D references loss of permanent jobs).	No
1.32	Have the access arrangements and the number of traffic movements involved in bringing workers and visitors to the Project been estimated? During construction, operation and decommissioning?	Yes (e.g. EIAR Table 3.13 outlines a breakdown of vessel requirements for different decommissioning options that covers mob/demob, transit and operational time.)	No
1.33	Has the housing and provision of services for any temporary or permanent employees for the Project been discussed?	Not relevant	
<i>Residues and Emissions</i>			
1.34	Have the types and quantities of solid waste generated by the Project been identified? During construction, operation and decommissioning?	Yes (EIAR Table 3.15 and Table 3.28 outlines composition of waste)	No
1.35	Have the composition and toxicity, or other hazards from all solid wastes produced by the Project, been discussed?	Yes (EIAR Table 3.15 and Table 3.28 outlines composition of waste)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
1.36	Have the methods for collecting, storing, treating, transporting and finally disposing of these solid wastes been described?	Yes (reference made within EIAR to adherence to existing waste management procedures and overview provided of disposal strategies)	No
1.37	Have the locations for the final disposal of all solid wastes been discussed, in consideration with the Waste Management Plan(s) concerned?	Yes (e.g. EIAR Table 3.15 outlines the 'Disposal Route' which includes final disposal location, Section 3.5.7)	No
1.38	Have the types and quantities of liquid waste generated by the Project been identified? During construction, operation and decommissioning?	Yes (EIAR Table 3.28)	No - A number of items noted as being generated in 'small' quantities but not quantified in units. However, the information presented is considered to be sufficient to inform a decision
1.39	Have the composition and toxicity, or other hazards from all liquid effluents produced by the Project, been discussed?	Yes (EIAR Table 3.15 and Table 3.28 outlines composition of waste)	No
1.40	Have the methods for collecting, storing, treating, transporting and finally disposing of these liquid effluents been described?	Yes (reference is made within EIAR to adherence to existing waste management procedures and overview provided of disposal strategies)	No
1.41	Have the locations for the final disposal of all liquid effluents been discussed?	Yes (EIAR Table 3.15)	No
1.42	Have the types and quantities of gaseous and particulate emissions generated by the Project been identified? During construction, operation and decommissioning?	Yes (e.g. EIAR Section 7.8, Table 7.7)	No
1.43	Have the composition and toxicity, or other hazards of all emissions to the air, produced by the Project been discussed?	Yes (EIAR Section 7.8)	No
1.44	Have the methods for collecting, treating and finally discharging these emissions to the air been described?	Not relevant	
1.45	Have the locations for discharge of all emissions to the air been identified and have the characteristics of the discharges been identified?	Yes (EIAR Section 7.8, primarily emissions from vessels)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
1.46	Have the methods for capturing, treating and storing these emissions been described?	Not relevant	
1.47	Have the locations for the storage of all emissions been identified and the characteristics of the storage unit been identified?	Not relevant	
1.48	Has the potential for resource recovery from wastes and residues been discussed?	Yes (EIAR Sections 7.7.1 and 7.8.3, a waste-hierarchy approach will be applied)	No
1.49	Have any sources of noise, heat, light or electromagnetic radiation from the Project been identified and quantified?	Yes (for noise and light. Not detailed for heat electromagnetic sources but this is not considered relevant to the works)	No
1.50	Have the methods for estimating the quantities and composition of all residues and the emissions identified and any difficulties been discussed?	Yes (EIAR Table 3.28 is described as estimations of material generated (e.g. waste) to be recycled or disposed of. In Table 3.28 it is described what assumptions are based on for some types of material waste and the sources of values cited below table for calculations and values. Table 7.6 presents emission factors, with sources of values cited below table).	No
1.51	Have the uncertainty attached to estimates of residues and emissions been discussed?	No. However, worst case scenarios have been presented.	No
<i>Risks of Accidents and Hazards</i>			
1.52	Have any of the risks associated with the Project been discussed? Risks from handling of hazardous materials? Risks from spills, fire or explosion? Risks of traffic accidents? Risks from breakdown or failure of processes or facilities? Risks from exposure of the Project to natural disasters?	Yes (a relative risk and impact matrix has been presented in EIAR Table 3.9 (Comparative Assessment Report presented as Appendix E) for decommissioning options that cover safety, environment, technical, societal, and economic criteria. Vulnerability of the project to risks of major accidents and/or disasters of relevance has also been considered.)	No
1.53	Have the measures to prevent and respond to the accidents and abnormal events been described?	Yes (through the standard environmental management commitments)	No
1.54	Is there a plan in place detailing the preparedness for an emergency?	Yes (EIAR Section 2.4 makes reference to the Kinsale Energy's Health, Safety and Environmental Management System regarding emergency planning)	No
1.55	Is there a plan in line with other EU legislation requirements, in	Not relevant. The Kinsale Area facilities are not listed in the upper or lower tier notified Seveso	

No.	Review Question	Adequately Addressed?	Further Information Required?
	particular Article 12 of the Seveso Directive which refers to emergency plans?	establishments.	

4.3 Section 2: Description of Environmental Factors Likely to be Affected by the Project

Table 4.2 sets out the second step in determining whether a EIA Report prepared to support the project is considered adequate.

Table 4.2 Checklist – Description of Environmental Factors Likely to be Affected by the Project

No.	Review Question	Adequately Addressed?	Further Information Required?
<i>Baseline: Aspects of the Environment</i>			
2.1	Have the existing land uses on the land to be occupied by the Project and the surrounding area been described and are any people living on or using the land been identified?	Yes (EIAR Section 4.5 and Section 5, EIAR Addendum No 2. Section 3.3, EIAR Addendum No. 3 Section 3.3)	No
2.2	Have the topography, geology and soils of the land to be occupied by the Project and the surrounding area been described?	Yes (EIAR Section 4.1 and Appendix B)	No
2.3	Have any significant features of the topography or geology of the area described and are the conditions and use of soils been described?	Yes (EIAR Section 4.1, including Table 4.1 which lists sediment and contaminant concentrations, and Appendix B)	No
2.4	Has the biodiversity of the land/sea to be affected by the Project and the surrounding area been described and illustrated on appropriate maps?	Yes (EIAR Section 4.4 e.g. Fish spawning and nursery sites (Figures 4.7-4.8); cetacean sightings (Figures 4.9-4.10), EIAR Addendum No. 1 Sections 3.4 and 3.5, EIAR Addendum No. 2 Sections 3.1 and 3.2, and EIAR Addendum No. 3 Section 3.2)	No
2.5	Have the species (including their populations and habitats), and the habitat types that may be affected by the Project been described (Particular attention should be paid to any species and habitats protected under the Habitats and Birds Directives (Directives 92/43/EEC and 2009/147/EC)).	Yes (EIAR Section 4.4 discusses separately, by receptor group, the relevant species and habitats that may be affected by the works and any Annex II or IV species present are also outlined. Section 4.4.8 <i>Conservation Sites and Species</i> tabulates designated sites and their features in the surrounding areas of the Project in Table 4.5 which are mapped in Figures 4.11-4.12. EIAR Addendum No. 1 Sections 3.4 and 3.5, EIAR Addendum No. 2 Sections 3.1 and 3.2, and EIAR Addendum No. 3 Section 3.2)	No

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
2.6	Have the Natura 2000 sites that may be affected by the Project been described?	Yes (see comment above)	No
2.7	Has the water environment of the area been described?	Yes (EIAR Sections 4.3 and 5.4)	No
2.8	Have the hydrology, water quality and the use of any water resources that may be affected by the Project been described?	Yes (EIAR Section 4.3, and Section 5.4.2 describes the water quality and Section 5.4.3 the hydrogeology (latter two regarding the onshore Inch Terminal))	No
2.9	Have local climatic and meteorological conditions in the area been described?	Yes (EIAR Section 4.2, EIAR Addendum No. 3 Section 3.1.2)	No
2.10	Has existing air quality in the area been described, including, where relevant, limit values set out by Directives 2008/50/EC and 2004/107/EC as well as relevant Programmes adopted under legislation?	Yes (EIAR Section 5.5)	No
2.11	Has the existing noise climate been described, including, where relevant reference to noise maps and action plans set out by the Environmental Noise Directive (2002/49/EU)?	Yes (No noise maps have been presented. Ambient underwater noise has been described in EIAR Section 4.3.1. Terrestrial onshore ambient noise presented in EIAR Section 5.6. EIAR Addendum No. 3 Section 5.2.1 presents the noise sources and propagation from survey equipment)	No
2.12	Has the existing situation regarding light, heat and electromagnetic radiation been described?	Yes - Ambient light, heat and electromagnetic radiation not presented as part of the baseline (for either the onshore or offshore environment). Reasoning for exclusions not provided. In response to Request for Further Information dated 22 April 2022, the applicant provided details of consideration of effects of light within the EIAR. The applicant confirmed that there are no sources of heat or electromagnetic radiation resulting from the proposed activities which are considered to result in a potential source of significant effect for relevant receptors in the Kinsale area (hence these not being considered in the EIAR or subsequent addenda)	No
2.13	Have any material assets in the area that may be affected by the Project been described?	Yes (EIAR Section 5.2 describes material assets at the onshore Inch Terminal)	No
2.14	Have any locations or features of archaeological, historic or architectural or other community or cultural importance in the	Yes (Marine cultural heritage has been described for the offshore project area in EIAR Section 4.6 and in Appendix C and wrecks mapped in Figure 4.18, and	No

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
	area that may be affected by the Project been described, including any designated or protected sites?	onshore cultural heritage at the Inch Terminal site described in Section 5.8. EIAR Addendum Section 3.3 and Appendix C present the findings of a desk-top Cultural Heritage Assessment undertaken to augment the baseline information presented in the EIAR. (EIAR Addendum No. 3 Section 3.3.8)	
2.15	Has the landscape or townscape of the area that may be affected by the Project been described including any designated or protected landscapes and any important views or viewpoints?	Yes (EIAR Section 4.7 describes the marine landscape (and seascape) and Section 5.9 describes the onshore landscape.)	No
2.16	Have the demographic, social and socio-economic conditions (e.g. employment) in the area been described?	Yes (Human population has been described for the marine aspects in EIAR Section 4.8 and onshore aspects of the Project in Section 5.10)	No
2.17	Have any future changes in any of the above aspects of the environment, that may occur in the absence of the Project, been described?	Not relevant. The Kinsale Area facilities were constructed in accordance with two petroleum leases. Under the terms of the leases, under the terms of which it is a requirement that the facilities are decommissioned at the end of their operational life. Therefore, the 'do-nothing' scenario is not available for this project.	
<i>Data Collection and Methods</i>			
2.18	Has the study area been defined widely enough to include all the areas likely to be significantly affected by the Project?	No – study area not explicitly defined, however baseline conditions appear to be covered for a sufficient study area in relation to the proposed works	No
2.19	Have all relevant national and local authorities been contacted to collect information on the Baseline environment?	Yes (EIAR Section 1.8 and Appendix F list those statutory and non-statutory bodies that had been consulted with. EIAR Addendum No. 1 Appendix A provides a Summary of Consultations)	No
2.20	Have all the sources of data and information from existing databases, free services and other relevant environmental assessments been investigated?	Yes (A satisfactory and relevant range of sources have been used to support the baseline sections)	No
2.21	Have sources of data and information on the existing environment been adequately referenced?	Yes	No
2.22	Is justification provided about which particular existing datasets was (were) relied upon as opposed to others?	Yes (e.g. different cetacean databases)	No
2.23	Where data collection has been undertaken to characterise the Baseline environment, have the methods used, any difficulties	Yes. See comment above as an example.	No

No.	Review Question	Adequately Addressed?	Further Information Required?
	encountered, and any uncertainties in the data described?		
2.24	Were the methods used appropriate for the purpose?	Yes	No
2.25	Have the methods used to predict the impact of the Project on climate change been described?	Yes (EIAR Section 7.8.1 - For example emissions associated with decommissioning activities have been identified and a '100 year time-horizon, in line with.....the Kyoto protocol', and with assumptions applied also described (Section 7.8.1.1))	No
2.26	Have the methods used to predict climate change's impact on the Project been described?	Yes. (EIAR Section 5.5.2 presents climate projections for onshore decommissioning but not for the marine environment, but this can be applied where required for the project area as a whole)	No
2.27	Is the uncertainty attached to the climate change evolution predictions discussed?	Yes (Climate projections have included future ranges to encompass any uncertainty)	No
2.28	Did you consider life cycle assessment of the Project to describe the Project's impact on climate change?	Yes (EIAR Section 7.8.1)	No
2.29	Have any important gaps in the data on the existing environment / evolution prediction identified (e.g. climate change) and the means used to deal with these gaps during the assessment been explained?	Yes. Noted limitations of cetacean databases may produce data gaps (data can be temporally and spatially biased). This has been discussed and data has been synthesised to cover seasonal abundances.	No
2.30	Where data collection would be required to adequately characterise the Baseline environment, but they have not been practicable for any reason, are the reasons explained and have proposals been set out for the surveys to be undertaken at a later stage?	Yes. Further data provided in EIAR Addenda to support the latest consent application.	No

4.4 Section 3: Description of the Likely Significant Effects of the Project

Table 4.3 sets out the second step in determining whether a EIA Report prepared to support the project is considered adequate.

Table 4.3 Checklist – Description of the Likely Significant Effects of the Project

No.	Review Question	Adequately Addressed?	Further Information Required?
<i>Scoping of Effects</i>			
3.1	Has the process by which the scope of the information for the EIA Report been described?	Yes (e.g. EIAR Section 6.2, EIAR Addendum No. 3 Section 4.2)	No
3.2	Is it evident that a systematic approach to Scoping has been adopted?	Yes (EIAR Section 2.3 makes reference to EIA of Project Guidance on Scoping)	No
3.3	Was consultation carried out during Scoping?	Yes (EIAR Section 1.8 identifies statutory and non-statutory bodies and other interested parties consulted with in the preparation of the EIAR. A full list of consultees is provided in EIAR Appendix F. Those listed included the Irish Whale and Dolphin Group, a consultee that provided specific consultation responses (dated 17 November 2021) which in relevant to this latest proposed application. The EIAR Addenda do not make reference to any further consultation on the scoping of the assessment having been undertaken post EIAR)	No
3.4	Have the comments and views of consultees been presented?	Yes (EIAR Section 1.8 presents a summary of key consultation responses. EIAR Addendum No. 1 presents a Summary of Consultations as Appendix A)	No
<i>Prediction of Direct Effects</i>			
3.5	Have the direct, primary effects on land uses, people and property been described and where appropriate quantified?	Yes (Effects on land uses such as fisheries / aquaculture, other users/resources and shipping has been considered in EIAR and in EIAR Addendum No. 2 e.g. risk of snagging of fishing gears or anchors)	No
3.6	Have the direct, primary effects on geological features and characteristics of soils been described and where appropriate been quantified?	Yes (Potential effects on Soils and Seabed outlined in EIAR Table 6.2. Direct physical disturbance (in area) from decommissioning operations has been quantified in EIAR Table 7.3. In EIAR Addendum No. 2 for both rock placement and pipeline and umbilical degradation potential effects on 'Soils and Seabed' has been highlighted for consideration.)	No
3.7	Have the direct, primary effects on biodiversity been described and where appropriate, quantified? (if relevant are references made to Natura 2000 sites?)	Yes (EIAR Sections 7.2.2, 7.4.2, 7.5.2, 7.6.1, 7.9.1, and 7.10.1 consider direct impacts on biodiversity including sensitive species (e.g. birds, fish and marine mammals) and Natura 2000 sites. For post-decommissioning EIAR and EIAR Addendum No. 3 also consider impacts of underwater noise (on marine mammals, fish and fisheries, diving birds, and marine turtles)	No

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
3.8	Have the direct, primary effects on the hydrology and water quality of water features been described and, where appropriate, quantified?	Yes (Effects on water quality considered in EIAR and EIAR Addenda. Effects on hydrology not relevant)	No
3.9	Have the direct, primary effects on uses of the water environment been described and, where appropriate, quantified?	Yes (As above for water quality)	No
3.10	Have the direct, primary effects on air quality been described and, where appropriate, quantified?	Yes (Effects on air quality considered in EIAR and EIAR Addendum No. 1. Effects on air quality not considered in EIAR Addendum No. 2 and No. 3)	No
3.11	Have the direct, primary effects on climate change been described and, where appropriate, quantified?	Yes (EIAR Sections 7.8.1-7.8.2).	No
3.12	Have the direct, primary effects on the acoustic environment (noise or vibration) been described and, where appropriate, quantified?	Yes (EIAR Addendum No. 2 highlights consideration in relation to rock placement and post-commissioning surveys (such as potential effects on marine mammals). This is assessed in more detail in EIAR; noise levels and sources are presented in Section 7.5.1.)	No
3.13	Have the direct, primary effects on heat, light or electromagnetic radiation been described and, where appropriate, quantified?	Yes (Effects associated with light considered in EIAR and EIAR Addendum No. 1. Effects associated with light not considered in EIAR Addendum No. 2 and No. 3. Effects on heat or electromagnetic radiation not considered in EIAR or EIAR Addenda)	No
3.14	Have the direct, primary effects on material assets and depletion of natural resources (e.g. fossil fuels, minerals) been described?	Yes	No
3.15	Have the direct, primary effects on locations or features of cultural importance been described?	Yes (Cultural Heritage effects considered in EIAR and EIAR Addenda. Cultural Heritage Assessment provided in EIAR Addendum No. 1 as Appendix C)	No
3.16	Have the direct, primary effects on the quality of the landscape and on views and viewpoints been described and, where appropriate, illustrated?	Yes (Landscape/seascape effects considered in EIAR and EIAR Addenda)	No
3.17	Have the direct, primary effects on environmentally relevant demography, social and socio-economic conditions in the area	Yes (EIAR Table 6.2 identifies socio-economic effects e.g. the loss of permanent on and offshore jobs)	No

Statutory Environmental Assessment

No.	Review Question	Adequately Addressed?	Further Information Required?
	been described and, where appropriate, quantified?		
3.18	Have the secondary effects on any of the environment's aspects, above, caused by primary effects on other aspects been described and, where appropriate, quantified?	Yes	No
3.19	Have the temporary, short term effects caused only during construction or during time limited phases of Project operation or decommissioning been described? (e.g. emissions produced during the construction)	Yes (e.g. short term impacts from vessel disturbance).	No
3.20	Have the permanent effects on the environment caused by construction, operation or decommissioning of the Project been described?	Yes (Note – these appear to be described in the EIAR as <i>long-term impacts</i> following decommissioning (e.g. legacy materials left <i>in situ</i>) and not permanent effects)	No
3.21	Have the long term effects on the environment, caused over the lifetime of Project operations or caused by build-up of pollutants, in the environment been described?	Yes. See comment above.	No
3.22	Have the effects that could result from accidents, abnormal events or exposure of the Project to natural or man made disasters been described and, where appropriate, quantified?	Yes (EIAR Section 7.10, EIAR Addendum Section 5.21 The potential for effects to be generated by natural disasters is considered to be low and has not been considered within the assessment)	No
3.23	Have the effects on the environment, caused by activities ancillary to the main Project been described?	Yes (Including the decommissioning of the Inch onshore gas terminal, which is covered by planning permission granted by Cork County Council)	No
3.24	Have the indirect effects on the environment caused by consequential development been described?	Yes. E.g. indirect effects on prey species (e.g. marine mammals, fish, birds).	No
3.25	Have the cumulative effects on the environment of the Project, together with other existing or planned developments in the locality, been described?	Yes (EIAR Section 7.11, EIAR Addendum No. 1 Section 4.4, EIAR Addendum No. 1 Section 4.4 EIAR Addendum No. 3, and EIAR Addendum No. 1 Section 5.4)	No
3.26	Have the transboundary effects on the environment of the Project, either during construction or operation, been described?	Yes (EIAR Section 7.12 and EIAR Addendum No. 1 Section 4.2)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
3.27	Have the geographic extent, duration, frequency, reversibility and probability of occurrence of each effect been identified as being appropriate?	Yes (Considered in EIAR and EIAR Addenda)	No
<i>Prediction of Effects on Human Health and Sustainable Development Issues</i>			
3.28	Have the primary and secondary effects on human health and welfare been described and, where appropriate, been quantified?	Yes (In EIAR and EIAR Addenda)	No
3.29	Have the impacts on issues such as biodiversity, marine environment, global climate change, use of natural resources and disaster risk been discussed and, where appropriate, been quantified?	Yes (In EIAR and EIAR Addenda)	No
<i>Evaluation of the Significance of Effects</i>			
3.30	Is the significance or importance of each predicted effect clearly explained with reference to legal or policy requirements, other standards, and the number, importance, and sensitivity of people, resources or other receptors affected?	Yes (In EIAR (including Table 6.1) and EIAR Addenda (including EIAR addendum No. 1 Table 7, EIAR Addendum No. 2 Table 4.2, and EIAR Addendum No. 3 Table 4.2))	No
3.31	Have the impacts on issues such as biodiversity, marine environment, global climate change, use of natural resources and disaster risk been discussed, where appropriate.	Yes (In EIAR and EIAR Addenda)	No
3.32	Have the positive effects on the environment been described, as well as the negative effects?	Yes (EIAR Section 7.7.1 identifies positive effects from material reuse and recycling)	No
<i>Impact Assessment Methods</i>			
3.33	Have the methods used to predict the effects described and the reasons for their choice, any difficulties encountered, and uncertainties in the results been discussed?	Yes (Reference to documents providing guidance which has informed the EIAR is provided in EIAR Section 2.3. EIAR Table 6.1 presents the criteria for the identification of potential effects, including potentially significant effects requiring assessment. Uncertainties within the assessment are identified e.g. EIAR highlights that project plans for additional exploration are not known or are uncertain)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
3.34	Where there is uncertainty about the precise details of the Project, and its impact on the environment/climate change, have worst case predictions been described?	Yes (Worst case estimates, scenarios, and predictions have been incorporated within the assessment as appropriate)	No
3.35	Where there have been difficulties in compiling the data needed to predict or evaluate effects, have these difficulties been acknowledged and their implications for the results been discussed?	N/A (No difficulties encountered in the assessment identified)	No
3.36	Has the basis for evaluating the significance or importance of impacts been described clearly?	Yes (EIAR Table 6.1 presents the criteria for the identification of potential effects, including potentially significant effects requiring assessment)	No
3.37	Have the impacts been described on the basis that all mitigation measures proposed have been implemented, i.e. have the residual impacts been described?	Yes (Residual impacts have been presented EIAR Table 8.2 and considered in each of the EIAR Addenda)	No
3.38	Is the level of treatment of each effect appropriate to its importance for the Development Consent decision? Does the discussion focus on the key issues and avoid irrelevant or unnecessary information?	Yes	No
3.39	Is appropriate emphasis given to the most severe, adverse effects of the Project with lesser emphasis given to less significant effects?	Yes (Assessment also reflects the significance of each impact e.g. if it is potentially significant or conversely a potential positive, minor or negligible effect)	No
3.40	Have, with a view to avoiding duplication of assessments, the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report been taken into account? If so, how was this done?	N/A (No relevant assessments under Union or national legislation taken into account within the assessment)	No

4.5 Section 4: Consideration of Alternatives

Table 4.4 sets out the second step in determining whether a EIA Report prepared to support the project is considered adequate.

Table 4.4 Checklist – Consideration of Alternatives

No.	Review Question	Adequately Addressed?	Further Information Required?
4.1	Have the different Alternatives suggested during Scoping been considered and assessed, and if not has justification been provided?	Yes (EIAR Section 3.4)	No
4.2	Have the Developer and practitioners, who are preparing the EIA Report, identified and assessed additional Alternatives (to the one suggested during Scoping)?	Yes (No additional alternatives have been presented beyond what has been taken forward into full assessment (see EIAR Section 3.4.8) i.e. the Comparative Assessment)	No
4.3	Have the process by which the Project was developed been described and are the Alternatives to the design of the Project considered during this process been described?	Yes (EIAR Section 3.1.2 and Section 3.4)	No
4.4	Have the Alternatives to the design considered during this process been described?	Yes (EIAR Section 3.4)	No
4.5	Have the Alternatives to suggested during Scoping been considered and assessed, and if not has justification been provided?	Yes (As part of the Comparative Assessment. See EIAR Section 3.4.6 and EIAR Appendix E)	No
4.6	Have the Alternatives to the location considered during this process been described?	Not relevant	
4.7	Have the Alternatives to the size considered during this process been described?	Not relevant	
4.8	Have the Alternatives to the scale considered during this process been described?	Not relevant	
4.9	Has the Baseline situation in the 'do-nothing' scenario been described?	Not relevant. The Kinsale Area facilities were constructed in accordance with two petroleum leases. Under the terms of the leases, under the terms of which it is a requirement that the facilities are decommissioned at the end of their operational life. Therefore, the 'do-nothing' scenario is not available for this project.	
4.10	Are the Alternatives realistic and genuine Alternatives to the Project?	Yes	No
4.11	Have the main reasons for choosing the proposed Project been provided, including an indication of the main reasons for	Yes (As part of the Comparative Assessment. See EIAR Section 3.4.6 and EIAR Appendix E – Appendix A)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
	selecting the chosen option, including a comparison of the environmental effects?		
4.12	Are the main environmental effects of the Alternatives compared to those of the proposed Project?	Yes (As part of the Comparative Assessment. See EIAR Appendix E – Appendix A)	No
4.13	Are Mitigation measures considered in the assessment of Alternatives?	No - Mitigation measures are not considered in the assessment of Alternatives	No

4.6 Section 5: Description of Mitigation

Table 4.5 sets out the second step in determining whether a EIA Report prepared to support the project is considered adequate.

Table 4.5 Checklist – Description of Mitigation

No.	Review Question	Adequately Addressed?	Further Information Required?
5.1	Where there are significant adverse effects on any aspect of the environment, has the potential for the mitigation of these effects been discussed?	Not applicable (No likely significant adverse effects were determined in EIAR (including Appendix D) or EIAR Addenda. However, mitigation and management measures have been proposed (additional and standard), where appropriate)	No
5.2	Have the measures that the Developer has proposed to implement, in order to mitigate effects, been clearly described and is their effects on the magnitude and significance of impacts clearly explained?	Yes (EIAR Section 8.2, EIAR Addendum No. 1 Section 5.2, EIAR Addendum No. 2 Section 5.2 present Environmental Management Commitments and Mitigation Measures. See EIAR Appendix D for outline table)	No
5.3	Have any proposed mitigation strategy's negative effects been described?	No negative effects from any mitigation strategy (or standard management measures) have been described.	No
5.4	If the effect of Mitigation Measures on the magnitude and significance of impacts is uncertain, has this been explained?	Not applicable (No uncertainties on the effectiveness of mitigation measures identified. Residual effects following mitigation identified in EIAR Table 8.2)	No
5.5	Is it clear if the Developer has made a binding commitment to implement the mitigation proposed or acknowledged that the	Yes (EIAR Section 8.2, EIAR Addendum No. 1 Section 5.2, EIAR Addendum No. 2 Section 5.2 present Environmental Management	No

No.	Review Question	Adequately Addressed?	Further Information Required?
	Mitigation Measures are just suggestions or recommendations?	Commitments and Mitigation Measures)	
5.6	Do the Mitigation Measures cover both the construction and operational phases of the Project?	Yes (Construction-only as relevant to decommissioning works)	No
5.7	Have the Developer’s reasons for choosing the proposed mitigation been explained?	Yes (EIAR Section 8.2, EIAR Appendix D, EIAR Addendum No. 1 Section 5.2, EIAR Addendum No. 2 Section 5.2)	No
5.8	Have the responsibilities for the implementation of mitigation including roles, responsibilities and resources been clearly defined?	Yes (EIAR Table 8.1 identifies who will be responsible for implementing and committing to each mitigation measure)	No
5.9	Where the mitigation of significant adverse effects is not practicable, or where the Developer has chosen not to propose any mitigation, have the reasons for this been clearly explained?	Not applicable (No likely significant adverse effects were determined in EIAR or EIAR Addenda)	No
5.10	Is it evident that the practitioners developing the EIA Report and the Developer have considered the full range of possible approaches to mitigation, including measures to avoid, prevent or reduce and, where possible, offset impacts by alternative strategies or locations, changes to the Project design and layout, changes to methods and processes, ‘end of pipe’ treatment, changes to implementation plans and management practices, measures to repair or remedy impacts and measures to compensate impacts?	Yes	No

4.7 Section 6: Description of Monitoring Measures

Table 4.6 sets out the second step in determining whether the submitted EIA Report prepared to support the project is considered adequate.

Table 4.6 Checklist – Description of the Monitoring Measures

No.	Review Question	Adequately Addressed?	Further Information Required?
6.1	Where adverse effects on any aspect of the environment are expected, has the potential for the monitoring of these effects been discussed?	Not applicable (No likely significant adverse effects were determined in EIAR or EIAR Addenda. However, monitoring measures have been proposed as part of the draft EMP which is presented in EIAR Addendum	No

No.	Review Question	Adequately Addressed?	Further Information Required?
		No. 1 as Appendix D)	
6.2	Are the measures, which the Developer proposes implemented to monitor effects, clearly described and has their objective been clearly explained?	Yes (EIAR Addendum No. 1 Appendix D)	No
6.3	Is it clear whether the Developer has made a binding commitment to implement the proposed monitoring programme or that the Monitoring Measures are just suggestions or recommendations?	Yes (Stated in EIAR Addendum No. 1 and EIAR Addendum No. 2 that a detailed EMP (which as per draft EMP) will include monitoring measures will be prepared by contractors based on the draft EMP, and will be provided to DECC for approval by the Minister before any works take place (Condition 1))	No
6.4	Have the Developer's reasons for choosing the monitoring programme proposed been explained?	Yes (EIAR Addendum No. 1 Appendix D Section 7.11)	No
6.5	Have the responsibilities for the implementation of monitoring, including roles, responsibilities and resources been clearly defined?	Yes (Stated in EIAR Addendum No. 1 Appendix D – Appendix B)	No
6.6	Where monitoring of adverse effects is not practicable, or the Developer has chosen not to propose any Monitoring Measures, have the reasons for this been clearly explained?	Not applicable	No
6.7	Is it evident from the practitioners developing the EIA Report and the Developer have considered the full range of possible approaches to monitoring, including Monitoring Measures covering all existing environmental legal requirements, Monitoring Measures stemming from other legislation to avoid duplication, monitoring of Mitigation Measures (ensuring expected significant effects are mitigated as planned), Monitoring Measures capable of identifying important unforeseen effects?	Yes	No
6.8	Have arrangements been proposed to monitor and manage residual impacts?	Not applicable	No

4.8 Section 7: Quality

Table 4.7 sets out the second step in determining whether an EIA Report prepared to support the project is considered adequate.

Table 4.7 Checklist – Quality

No.	Review Question	Adequately Addressed?	Further Information Required?
<i>Quality of Presentation</i>			
7.1	Is the EIA Report available in one of more clearly defined documents?	Yes (EIAR divided into three Volumes – Vol 1 Non-Technical Summary, Vol 2 Main Text, and Vol 3 Appendices. EIAR Addenda are presented as single documents respectively).	No
7.2	Is the document(s) logically organised and clearly structured, so that the reader can locate information easily?	Yes (A contents page is provided for EIAR Vol 2 and Vol 3, and for each of the EIAR Addenda. EIAR Section 1.7 presents overall structure and a summary of contents)	No
7.3	Is there a table of contents at the beginning of the document(s)?	Yes (See comment above)	No
7.4	Is there a clear description of the process that has been followed?	Yes (EIAR Section 1)	No
7.5	Is the presentation comprehensive but concise, avoiding irrelevant data and information?	Yes (Additional but relevant information has been provided in the appendices)	No
7.6	Does the presentation make effective use of tables, figures, maps, photographs and other graphics?	Yes (Across the EIAR and EIAR Addenda)	No
7.7	Does the presentation make effective use of annexes or appendices to present detailed data that is not essential to understanding the main text?	Yes (Additional but relevant information has been provided in the appendices)	No
7.8	Are all analyses and conclusions adequately supported with data and evidence?	Yes	No
7.9	Have all sources of data been properly referenced?	Yes (A full reference list is provided in EIAR and each of the EIAR addenda. Sources of data are appropriately referenced where relevant within the main text)	No
7.10	Has terminology been used consistently throughout the document(s)?	Yes (Glossary has also been provided in EIAR and EIAR Addendum No. 3 to aid comprehension)	No

No.	Review Question	Adequately Addressed?	Further Information Required?
7.11	Does it read as a single document, with cross referencing between sections used to help the reader navigate through the document(s)?	Yes (Cross referencing made within the EIAR and EIAR Addenda to other relevant sections and appendices. EIAR Addenda also make appropriate cross referencing to EIAR and preceding Addenda)	No
7.12	Is the presentation demonstrably fair and, as far as possible, impartial and objective?	Yes	No
<i>Non-Technical Summary</i>			
7.13	Does the EIA Report include a Non-Technical Summary?	Yes (Non-Technical Summary (NTS) provided as EIAR Vol 1, and NTS provided at the front end of EIAR Addendum No. 1 and No. 2. No NTS provided for EIAR Addendum No. 3 – in response to Request for Further Information applicant provided an NTS for EIAR Addendum No. 3)	No
7.14	Does the Summary provide a concise but comprehensive description of the Project, its environment, the effect of the Project on the environment, the proposed Mitigation Measures and proposed monitoring arrangements?	Yes (Reflective of the main report)	No
7.15	Does the Summary highlight any significant uncertainties about the Project and its environmental effects?	Yes (No uncertainties identified)	No
7.16	Does the Summary explain the Development Consent process for the Project and the EIA's role in this process?	Yes (EIAR Vol 1 Section 1 and EIAR Addendum No. 1 and No. 2 Introduction and background)	No
7.17	Does the Summary provide an overview of the approach to the assessment?	Yes (EIAR Vol 1 Section 6)	No
7.18	Has the Summary been written in non-technical language, avoiding technical terms, detailed data and scientific discussion?	Yes	No
7.19	Would it be comprehensible to a lay-member of the public?	Yes (Suitable use of tables, maps and photos that aid comprehension for reader and an avoidance of scientific latin names in the baseline summary, which overall is written descriptively)	No
<i>Expertise</i>			
7.20	Is the competency of experts, who are responsible for the preparation	Yes (EIAR Section 1.9, EIAR Addendum No.1 Section 1.6, EIAR	Yes

No.	Review Question	Adequately Addressed?	Further Information Required?
	of the EIA Report, indicated or otherwise explained in the EIA Report?	Addendum No. 2 Section 1.7. No list of competent experts provided in EIAR Addendum No. 3 – in response to Request for Further Information (dated 22 April 2022), the applicant provided details of competent experts involved in the preparation of EIAR Addendum No. 3)	
7.21	Has the Developer complied with national and local legal requirements and practices for the selection of experts responsible for the preparation of the EIA Report?	Yes (This has not been specifically detailed in EIAR Section 1.9 <i>List of Contributors</i> but it is stated in EIAR Section 1.5 that <i>This Environmental Impact Assessment Report (EIAR) has been prepared in compliance with the requirements of the EIA Directive and implementing legislation. This EIAR has also been prepared in accordance with the guidelines published by the Environmental Protection Agency (EPA) entitled Guidelines on the information to be contained in Environmental Impact Assessment Reports DRAFT published August 2017.</i>)	No

5. MITIGATION AND MANAGEMENT COMMITMENTS

The following table 5.1 summarises the mitigation and management commitments made by the applicant in the documentation reviewed, along with additional measures required to address the issues raised in observations received from notified bodies following the consultation with notified bodies and the general public. Furthermore Table 5.1 documents the commitments made and whether these would be considered industry standard practice or whether a condition is recommended to be included should permission be granted.

Table 5.1: Checklist to identify Mitigation Measures to be undertaken by the applicant.

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
Compliance assurance	Ensure management of the applications for and monitoring of compliance with the requirements of project environmental permits and consents	X	
	A detailed Environmental Management Plan (EMP) specific to the requirements of the works the subject of this application will be prepared by the contractors based on the draft EMP, and will be provided to the DECC for approval by the Minister before any works take place (Condition 1).	X	
	As part of the EMP, all sources of natural materials to be used be used in undertaking the KADP (e.g. topsoil subsoil, rock armour/cover) will be sourced from suitably licenced facilities, and evidence of this will be provided to the Minister (Condition 2).		
	The applicant must seek prior Department approval for the vessel(s) to be used prior to commencement of the proposed activities. In this event confirmation will be required that the survey equipment and methodology on the vessel(s) are equivalent to that described in the EIA/AA Screening Reports and that the description of the development used to inform the Environmental Risk Assessment is still valid.	X	
Procurement	Ensure requirement to meet MARPOL standards are included in procurement of vessels and rigs to be used in decommissioning operations.	X	
Contractor Management	All vessels and the rig to be used during decommissioning will be subject to audit.	X	
	Contractor performance will be monitored throughout the decommissioning operations		X
Activity Planning	Wherever possible, seek to minimise vessel days by making use of vessel synergies and careful activity phasing.		X
Physical Presence: Interaction with other users: decommissioning activities /operations	Notices to Mariners (NtM) will be issued to cover all phases of decommissioning work associated with each consent application to communicate the nature and timing of the activities to relevant other users of the sea. Before decommissioning work commences, Kinsale Energy will provide a draft Marine Notices to the Minister for Transport Tourism and Sport, highlighting the nature of the	X	

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	work involved and the approximate length of time the works will last (Condition 13, or Condition 11 for Consent Application no. 2).		
	All vessels used in the decommissioning operations will meet applicable national and international standards (e.g. in terms of signals and lighting) and would follow established routes to ports	X	
	Lighting and marking of the jackets if left in "lighthouse mode" for a period will be agreed with the Commissioner for Irish Lights to establish new Aids to Navigation (AtoN) to be installed until their removal. An up to date Navigational Risk Assessment (NRA) with traffic analysis will be undertaken to inform the Commissioners of Irish Lights to set the AtoN requirements. Lighting and marking will comply with IALA (International Association of Marine aids to Navigation and Lighthouse Authority) Recommendations 0-139, on the Marking of Man-Made Offshore Structures (2013), and NtM will communicate the new lighting and marking arrangements.		X
	Consultation will take place with fisheries organisations and relevant marine authorities in accordance with legislation	X	
	Guard vessels or standby vessels will be used during well abandonment to monitor statutory 500m zones and to minimise the potential for interaction between decommissioning vessels and other users.	X	X
Physical Presence: Interaction with other users: legacy materials left <i>in situ</i>	Rock cover remediation will be used to reduce the potential snagging risk associated with decommissioning pipelines and umbilicals left <i>in situ</i> , or with any potential protruding jacket leg stumps. The rock will be designed to be overtrawable.		X
	The following measures will be implemented as part of the rock placement programme: <ul style="list-style-type: none"> • The remediation of all pipeline/umbilical end sections and freespans using overtrawable rock berms, with the option to rock cover all exposed pipeline sections to further reduce risks to third parties; • Accurate rock-placement will be assured by the use of a Remotely Operated Vehicle (ROV) guided fall pipe system on the rock-placement vessel; • On-going consultation with fisheries representatives and maritime authorities; • All infrastructure decommissioned <i>in situ</i> 		X

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>will be surveyed post-decommissioning to accurately record their location and status. This information will be included on navigational charts and also passed to representatives of the fishing community; and</p> <p>Standard overtrawling surveys will also be undertaken where wellheads, spoolpieces etc. are removed to confirm the area is clear of debris and snagging hazards.</p>		
	<p>An additional survey will be carried out after the completion of the abandonment operations to confirm the integrity of the abandoned wells. The survey will be undertaken no earlier than 6 months, and no later than 24 months, after the completion of well abandonment operations, and the results shall be provided to the Minister (Condition 11).</p>		X
Discharges to sea	<p>To minimise potential effects from discharges to sea associated with the decommissioning works, all activities will be undertaken in accordance with regulatory and policy controls, including:</p> <ul style="list-style-type: none"> • Existing operational controls for the management of routine marine discharges from the decommissioning activities (e.g. adherence to MARPOL standards); and • Ensure that a chemical risk assessment is undertaken as part of final well decommissioning chemical selection and apply for relevant chemical permits. Chemicals selected for use and discharge for well abandonment will be subject to a Permit to Use or Discharge Added Chemicals PUDAC). <p>All potential discharges associated with decommissioning the Kinsale Area facilities (e.g. from pipelines and well abandonment) are considered to be minor. Discharges from well abandonment will be minimal, subject to treatment/filtration, with chemicals being selected on the basis of the lowest hazard quotient for the required technical function.</p>	X	
Waste: Materials Recycling, Reuse and Disposal	<p>The decommissioning works shall be undertaken in a manner which maximises the potential for reuse and recycling, including source segregating waste where appropriate. Management of all waste will be undertaken in accordance with the relevant waste legislation and only permitted and licensed waste facilities will be used.</p> <p>A draft Resource and Waste Management Plan has been developed to establish the minimum standards that the contractor(s) must apply during the decommissioning works and accompanies Consent Application No. 2.</p>	X	

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>A detailed Resource and Waste Plan will be prepared by the contractor(s) based on the draft RWMP, and will be provided to DECC for approval by the Minister prior to commencement of the decommissioning works (Condition 4).</p> <p>The draft Resource and Waste Management Plan indicates that:</p> <ul style="list-style-type: none"> • All relevant obligations governing storage, transfer, treatment and disposal of all wastes arising from the Kinsale Area Decommissioning Project will be complied with and the contractor(s) will implement approved method statements and procedures for transporting and managing waste as part of their detailed Resource and Waste Management Plan; • Resource and waste management objectives to be applied to the Kinsale Area Decommissioning Project to maximise the potential for reuse and recycling are: <ul style="list-style-type: none"> - Target 90% recycling rate by weight; - Minimise disposal of waste to landfill; and - Minimise environmental impacts of waste management. <p>A fully detailed description of solid waste generation associated with each of the key elements of the Kinsale Area Decommissioning Project will be provided in the detailed Resource and Waste Management Plan.</p> <p>The contractor(s) will put in place all relevant waste authorisations (detailing the name, address and authorisation details of proposed recovery and disposal facilities which will be used for all wastes generated from the decommissioning project) in advance of the removal of any waste and will maintain a register of resource and waste management information throughout the Kinsale Area Decommissioning Project</p>		
	<p>On completion of well abandonment and removal of subsea structures, an ROV survey of each relevant location will be undertaken to ensure that no debris remains in place. The results of these surveys shall be submitted to the Minister in the form of Seabed Clearance Certificates, prior to the relevant rig/vessel leaving the location (Condition 12).</p>	X	
<p>Energy Use and Atmospheric emissions</p>	<p>There is limited scope for mitigation measures to reduce the residual effect on atmospheric Greenhouse Gas (GHG) loading, or any local effects on air quality. There is the potential to minimise time in the field and associated vessel days and related emissions by making use of vessel synergies and careful activity phasing</p>	X	

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>which would form part of standard programme management, and there is the potential to make further emissions reductions during contractor selection (e.g. those using modern efficient vessels); however neither of these are considered to significantly alter the predicted effect.</p>		
	<p>Emissions from material flows will be minimised by using a waste hierarchy approach consistent with the Waste Framework Directive 2008/98/EC; establishing where there is scope for equipment and material re-use and recycling, with disposal only taking place where no feasible alternative is available.</p>	X	
Accidental events	<p>To minimise potential effects from accidental events associated with the offshore decommissioning works, all activities will be undertaken in accordance with regulatory and policy controls, including:</p> <ul style="list-style-type: none"> • Other users of the Kinsale Area, which include fisheries, shipping and other sea users such as recreational sailing and those involved in maritime activities such as surveys, will be alerted to the survey and decommissioning activities via publication of Notices to Mariners detailing rig and vessel positions, activities and timing and by full navigation lighting on the rig and vessels; and <p>A standby vessel will minimise the potential for interaction between the rig and other users, and much of the decommissioning activity will be within existing exclusion zones thereby further reducing the potential for interaction.</p>	X	
	<p>Adherence to Kinsale Energy risk management measures and legislative compliance will minimise the risk that an accidental event could occur (noting the already very low frequencies of such incidents relating to oil and gas activities), and therefore minimise the likelihood of any resultant significant effect. This includes measures which will be in place to avoid, as far as possible, spills from bunkering and supply operations, and general rig operations, including processes and procedures (e.g. bunkering procedures with reference to sea-state and daylight hours where practicable; procedure to be agreed with the Department of Transport, Tourism and Sport (DTTAS)), colour coding of hoses, storage of hoses in a safe area away from risk of physical damage, inspection of hose couplings, critical valves to be locked and controlled by permit, and general good housekeeping).</p>		X
	<p>Accidental events/environmental emergencies at the onshore Inch Terminal site requiring</p>	X	

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>intervention may include uncontained spillage, leak or loss of containment incident (contractor inventory only as Inch Terminal will be hydrocarbon free), fire, etc.</p> <p>A list of site emergency contact numbers and the general emergency response actions will be compiled by the contractor(s) and posted at strategic locations throughout the site, such as the site entrance, safety stop-boards and contractor cabins. The emergency contact number list will be updated by each contractor to include their Safety Representative contact name and telephone number.</p>		
Accidental events: dropped objects	All lifting operations will be risk assessed.	X	
	During the removal of topsides, jackets, wellheads, spool pieces and other associated infrastructure, every care will be taken to minimise dropped objects and the generation of debris. Any dropped objects will be recovered during decommissioning operations and an independent seabed debris clearance survey conducted once decommissioning operations have been completed to verify that debris clearance has been completed.		X
Accidental events: loss of diesel inventories	Undertake audit of vessel bunkering procedures	X	
	With regard to oil discharges (e.g. from machinery space drainage), the vessels will operate to MARPOL requirements for a Special Area, requiring oily water separation and monitoring prior to discharge. Discharges must be 15ppm or less, recorded in the Oil Record Book and only be made when underway.	X	
	All vessels and the rig to be used during decommissioning will be subject to audit and expected to adhere to Kinsale Energy Health, Environment and Safety policy. They will have in place the relevant, current Shipboard Oil Pollution Emergency Plans (SOPEP) in accordance with MARPOL and/or an oil spill contingency plan, which would be implemented in the event of an accidental event.	X	
	Bunkering to be conducted in favourable sea states and during daylight hours so far as practicable. Procedure to be agreed with Department of Transport, Tourism and Sport (DTTAS).	X	
Physical disturbance: sensitive seabed features.	The minimisation of rig and vessel movements which require anchoring, and the use of dynamic positioning (DP) on most vessels, where practicable to reduce anchor deployment and for each option / activity involving rock placement, efforts will be made to minimise the volume of rock deployed, subject to achieving the required technical function. (Note that sensitive features		X

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>(e.g. wrecks, Annex I habitats) have not been recorded in previous surveys within the working area).</p> <p>Pipeline decommissioning options (rock placement) which minimise physical disturbance will be selected subject to wider environmental, safety, technical and economic considerations. For each option involving rock placement, efforts will be made to minimise the volume of rock deployed.</p> <p>The services of a suitably qualified and suitably experienced maritime archaeologist shall be engaged to monitor subsea works for identified wreck sites that are less than 300m to proposed decommissioning works. The archaeologist and archaeological monitoring shall be licensed by the Department of Housing, Local Government and Heritage. A detailed method statement containing the monitoring strategy shall accompany the licence application.</p> <p>Kinsale Energy will provide specifications in advance of the proposed work to allow the archaeologist to determine any mitigation strategies that may need to be put in place to protect identified shipwreck remains. In particular the wrecks, including the UC-42, that are in closest proximity to the decommissioning works (including any impacts from plant and machinery), shall have an adequate exclusion zone imposed to ensure there is no impact on the known location of the wreck and its immediate environs.</p> <p>Kinsale Energy will follow the advice of the archaeologist, including suspension of activities should known or previously unknown underwater cultural heritage be identified or impacted. The Underwater Archaeology Unit shall be contacted immediately in this event. . Provision shall be made to accommodate the monitoring archaeologist on board decommissioning vessels to enable them to successfully carry out their work).</p> <p>Upon completion of the archaeological monitoring, a detailed monitoring report shall be forwarded to the National Monuments Services’ Underwater Archaeology Unit.</p>		<p>X</p> <p>X</p>
<p>Under Water noise</p>	<p>As no likely significant effect on marine mammals from underwater noise is predicted, it is not proposed to engage a Marine Mammal Observer (MMO) during the works, or that any specific mitigation is required in relation to underwater noise effects.</p> <p>Planned pre-and post- rock placement surveys will not include any seismic sources (e.g. airguns), and the location of the offshore surveys</p>		<p>X</p>

Statutory Environmental Assessment

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific
	<p>means there is not necessary to adhere to the DAHG Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Water (2014). Within the inshore areas, (e.g. within a bay or within 1,500m of the entrance of an enclosed bay), the measures outlined in DAHG (2014) will be adhered to, including the engagement of an MMO.</p> <p>Furthermore, wherever possible, through careful activity phasing, vessel synergies will be sought to minimise vessel days and associated noise emissions which may impact marine mammals and other receptor groups.</p> <p>Any post-decommissioning survey works will require appropriate consent applications which will detail the proposed survey methods and mitigation measures.</p>		

6. CONCLUSIONS

Ramboll UK Limited (herein referred to as Ramboll) has been commissioned by the DECC to provide assistance with regards to the statutory assessment of applications by PSE Kinsale Energy Limited and PSE Seven Heads Limited (collectively referred to herein as the applicant) as part of the Kinsale Area Decommissioning Project (KADP). This report summarises Ramboll's review of the applications' EIA documentation, and provides a conclusion that can be used by the DECC to issue an EIAR determination.

The applicant has submitted two applications for consent to carry out decommissioning of certain facilities within the Kinsale Area gas fields, incorporating the Kinsale Head gas field and facilities (which includes the Southwest Kinsale and Ballycotton gas fields) and the Seven Heads gas field and facilities respectively. The applications are part of a staged application process for the KADP and are preceded by two previous consent applications.

Previous applications were submitted to and approved by the then Minister for Communications, Climate Action and Environment (DCCA). Ministerial consent was granted to an application for the plugging and abandonment of wells, removal of the two topside structures and the removal of subsea facilities on 26 April 2019 within the Kinsale Head and the Seven Heads gas fields (Consent Application No. 1), and Ministerial consent was granted for the removal of the platform jacket structures on 26 February 2020 within the Kinsale Head gas field Consent Application No. 2). Approved works under Consent Application No. 1 and Consent Application No. 2 are programmed to continue through 2022.

For the current consent applications, the application in relation to Kinsale Head gas field (Kinsale Head Consent Application No. 3) covers the following activities:

- The leaving *in situ* of all infield pipelines and umbilicals associated with the Kinsale Head gas fields;
- The leaving *in situ* of the 24" export pipeline (offshore and onshore section) and the filling of the onshore section with grout; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

With regards to the Seven Heads gas field the application (Seven Heads Consent Application No. 2) covers the following activities:

- The leaving *in situ* of all infield pipelines and umbilicals associated with the Seven Heads gas field;
- The leaving *in situ* of the 18" Seven Heads export pipeline and umbilical; and
- The use of engineering materials (rock placement) to protect the pipelines and umbilicals *in situ*, and associated surveys.

It is estimated that the decommissioning works will take between 12 and 18 months to complete, with post decommissioning surveys carried out at intervals within a period of 10 years from the completion of initial post decommissioning survey.

This report provides a review of the Environmental Impact Assessment Report (EIAR) and its Addenda (EIAR Addendum (2019), EIAR Addendum No. 2 (2021), and EIAR Addendum No. 3(2022)) prepared by Hartley Anderson and Arup on behalf of the applicant and submitted with their applications. Following an initial review of the EIAR and the EIAR Addenda by Ramboll a Request for Further Information was submitted by the DECC on 11 April 2022, and was responded to by the applicant on 22 April 2022.

Statutory Environmental Assessment

The information presented in the applicant's EIAR and the EIAR Addenda, and the applicant's response to the Request for Further Information was considered to be complete and no further information has been required to inform this report and a determination by the DECC.

Public consultation on the information provided by the applicant has been undertaken by the DECC. The consultation responses received by the DECC (see Section **Error! Reference source not found.**, Appendix A and Appendix B) have been taken into consideration in the preparation of this report.

The overall conclusions of the EIAR and the EIAR Addenda are that the KADP will not result, directly or indirectly, in likely significant adverse effects on the environment, alone or cumulatively with other existing or approved projects. This conclusion has been determined in view of the predicted scale, intensity and duration of the activities, with the implementation of the proposed mitigation, risk reduction measures and commitments (see Section **Error! Reference source not found.**), along with adherence to statutory requirements and guidance.

The EIA is clearly and consistently presented, and has been prepared on behalf of the applicant by competent experts with adequate regard to relevant legislation and the EU Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017).

It should be acknowledged that, reflective of a progressive consenting process, the EIAR comprises several documents and notable volumes of material across the EIAR and EIAR Addenda. Therefore specific information is presented, and may need to be sought, across the respective documents. The presentation of the EIA across the EIAR and EIAR Addenda has resulted in an impact on the ease of obtaining specific information. However, it is considered following review of all of the EIA documentation that, across the collective of documents, a comprehensive assessment has been undertaken based on a sufficient level of information enabling robust conclusions to have been reached by competent experts on behalf of the applicant.

Based on the proposed activities, information presented, and the mitigation and management measures proposed, it is considered that the conclusion that the works proposed under this application will not result in likely significant adverse effects on the environment either from the KADP alone or in combination with other projects and the proposed mitigation, risk reduction measures and commitments is appropriate. The Environmental Management Commitments and Mitigation Measures presented within the EIAR and EIAR Addenda are considered to be appropriate and adequate for managing the anticipated effects associated with the decommissioning activities; no further measures are recommended.

APPENDIX A – GENERAL CONSULTATION RESPONSES

General comments on climate, energy storage and environmental impacts

- It is considered that the Kinsale Area gas field pipelines to be potential national strategic assets essential to Ireland’s security of energy supply, net zero commitments and future offshore wind resource development.
 - Ireland currently imports ~60% of its natural gas and 100% of its oil consumption. The only Irish indigenous gas production is from the Corrib gas field which is expected to cease production by the end of the decade.
 - Ireland has no large-scale natural gas storage capacity since the closure of the SW Kinsale gas storage facility in 2017. Imported natural gas enters Ireland via a single entry point at Moffat, Scotland, which post-Brexit now lies outside the EU in a ‘third country’ jurisdiction. Natural gas power production is currently the cleanest baseload support for balancing Ireland’s increasing intermittent renewable energy generation capacity.
 - In order for Ireland to decarbonise its non-power generation sectors such as heavy transportation, industry, shipping and heating, it is clear that molecules such as green hydrogen and hydrogen carriers will be required in the national energy mix. These molecules can be generated using renewable sources such as wind and solar during times of peak generation when the grid is over-supplied. Large-scale storage of these molecules will be required to balance the energy load and manage Ireland’s renewable energy resources.
 - Ireland possesses the highest average sustained wind speeds in the European Union. The Sustainable Energy Authority of Ireland (SEAI) estimates that €100-200 billion of investment in Irish offshore wind will occur by 2050 supporting the development of over 40 GW of generation capacity. Wind Energy Ireland, the industry advocacy group, recently reported that c. 22 GW of capacity is already in development. Such significant, albeit intermittent, energy generation capacity would exceed Irish domestic market consumption and drive the requirement for large scale energy storage capacity development.
- As Ireland moves forward with its ambitious plan to achieve its climate and de-carbonisation objectives by 2050, unprecedented changes will be required within the energy industry in Ireland over what is a relatively short period of time (30 years).
- As the DECC is only too aware, Ireland has an acute short-term and longer-term issue to ensure that it can deliver on its core objectives of:
 - Energy Security & System Resilience
 - Net Zero
 - Affordable Energy
 - Energy Independence
 - Wind Energy Resource Development
- To achieve these objectives, a host of solutions are required including but not limited to increased renewables penetration, energy system upgrades, more interconnectivity, consumer behaviour changes and integrated energy management, whilst ensuring that Ireland also has in place vital energy security of supply.
- dCarbonX see large-scale energy storage as a key requirement as Ireland moves forward. With indigenous gas production falling, and with the Kinsale gas storage facility now decommissioned, Ireland has no large-scale indigenous gas storage capacity. Whilst it is acknowledged that batteries may help provide some measures of storage capacity for the

General comments on climate, energy storage and environmental impacts

electricity grid, Ireland has no large-scale energy storage capacity.

- As part of the Energy Transition, dCarbonX see a significant future role for green hydrogen / hydrogen carriers produced from Ireland’s exceptional wind energy resources. The joint venture with the ESB for green hydrogen storage provides a staged pathway to achieve this, including the recently announced Green Hydrogen @ Kinsale project. dCarbonX have completed a new proprietary study of the energy storage potential using hydrogen / hydrogen carriers in the reservoirs of the Kinsale Area gas fields. This study indicated that the area has the potential to host c. 3 TWh of energy storage capacity with significant further upside potential.
- It is clear that hydrogen / hydrogen carriers and their safe storage will play a pivotal role in delivering Ireland’s decarbonisation plans whilst providing indigenous energy security of supply. Long-term hydrogen / hydrogen carriers will provide affordable resilient energy and represents a transformational export opportunity in the decades ahead.

General comments on policy and securing future energy supply

- Kinsale Head Petroleum Lease (OPL1) Consent Application No 3 is made on the basis that it is the position of DECC “that arrangements are not to be made to provide for the future use of the pipelines”.
- The refusal by DECC, on 30th October 2020, of Predator Oil and Gas Holdings PLC’s request of 20th October 2020 for a virtual meeting to discuss the ownership and access to the Kinsale pipeline and the decision by DECC to inform KEL that arrangements are not to be made to provide for the future use of the pipeline, potentially represents, in legal terms, an attempt at constructive termination of parts of Predator Oil and Gas Holdings PLC’s long-established business in Ireland.
- DECC should consider adopting a Defferral and Phased Decommissioning approach as practiced in the UK. This approach recognises that disused facilities including pipelines may represent important infrastructure. Where a specific opportunity has been identified deferral of decommissioning can be considered.
- Alternatively, DECC might consider adopting an Interim Pipeline Regime as practised in the UK. The Interim Pipeline Regime is intended to ensure out of use lines do not pose a risk to other users of the sea or the environment and that they are covered by an appropriate surveying and maintenance regime from the point where they are taken out of use by one operator until approval of the final decommissioning programme of another operator.
- The PSE KEL Consent Letter states that following discussions with DECC regarding potential future use of the facilities, it was the position of the Department that Consent Application No. 3 should be submitted on the basis that arrangements are not to be made to provide for the future use of the pipelines. Did the Department consider the Mag Mell FSRU Project in reaching this position, given that Mr Paul Griffiths on 20th October 2020 requested by letter a meeting with DECC to discuss the ownership and access to the Kinsale pipeline? DECC’s letter of 30th October 2020 clearly states that “the Department is conducting a review of the security of energy supply of Ireland’s electricity and natural gas systems... The review will consider a wide range of options including energy storage, additional gas import capacity (including LNG terminals)... The outcome of the review will inform future policy considerations including the future use of the Kinsale Head gas field and such decisions will not be made in advance of the outcome of the review of energy security”. The contract to undertake a Technical Analysis to inform a Review of the Security of Energy Supply of Ireland’s Electricity and Natural Gas Systems was awarded to CEPA on 24th March 2021. The RFT timelines said that the draft version of the supplementary report (the

General comments on climate, energy storage and environmental impacts

third report) would be issued within 11 months of commencing the project and the final version within 12 months of commencing the project. The final report is expected Q2 2022. It is therefore clearly premature for DECC to approve consent to fill the onshore section of the 24" export pipeline with grout. Indeed the current Licensing Terms for Offshore Oil and Gas Exploration, Development & Production 2007 empowers the Minister to require the owner of facilities to enter into discussions ...on the utilisation of facilities with persons in addition to the owner.

KEL's Consent Application 2 of August 2019 states that a leave *in situ* option, particularly with regard to the main 24" export pipeline and landfall, could facilitate the re-use of the pipeline infrastructure in the future.

Preliminary studies into the use of the Kinsale Head reservoir and facilities for CCS have been undertaken by Ervia and these indicate that re-use of the platform jackets as part of a CCS project is not viable, although the 24" export pipeline could possibly be re-used.

- It should be noted that GNIs and Eirgrids' 'Long Term Resilience Study 2018' concluded that the most economically advantageous option for Ireland to enhance its security of supply is a floating LNG terminal, along with bio-methane integration. These measures would significantly improve Ireland's security of supply position.
- It is submitted that the proposed FSRUP should be considered a key project that would enable Ireland to ensure energy security of supply by providing an alternative source of gas, through the use of existing infrastructure. In support of this it should be noted that diversification of supply sources is considered paramount both to energy security as well as for competitiveness. Ensuring that all Member States have access to liquid gas markets is a key objective of the EU's Energy Union.
- The Department of the Environment, Climate Actions and Communications has commissioned a study on the security of Energy Supply of Ireland's Electricity and Natural Gas Systems. This newly commissioned study is expected to be published in Q2 2022 and will include extensive stakeholder consultation and the preparation of a technical analysis to inform a full strategic review.

It is hoped that the Mag Mell FRSU will be included in the consultation process of this review during 2021. In this regard, and with respect to the above points it is submitted that the proposed KEL Consent Application No. 3 should acknowledge the Mag Mell FSRUP Project that would make use of the existing 24" pipeline and associated AGI connected to the GNI entry point at the onshore Inch Terminal.

- Mag Mell Energy Ireland Ltd contends that the 24" export pipeline could be left in a state of interim decommissioning (i.e. as is, filled with inhibited seawater) until such time as access to the pipeline and Inch Onshore Terminal is established by the MAG Mell LNG FSRU project. Mag Mell Energy Ireland Ltd further contends that the filling of the onshore section of 24" export pipeline with grout and the decommissioning of the associated Inch Onshore Terminal is premature and a decision to grant consent by DECC can be deferred without adversely affecting the overall decommissioning cost or schedule.

UK Government guidance on decommissioning pipelines is outlined in Offshore Oil and Gas Decommissioning Guidance Notes November 2018, published by the Department for Business, Energy and Industrial Strategy. These Guidance Notes include the following provisions:

- Sections 5.18 to 5.23 recognise that decommissioning can be deferred stating that "disused facilities including pipelines may represent important UKCS infrastructure and provide the means for the further development of hydrocarbon reserves, or the storage of carbon dioxide or hydrocarbon gas. Where a specific opportunity has been identified

General comments on climate, energy storage and environmental impacts

deferral of decommissioning can be considered”.

- Sections 10.23 to 10.27 address the situation where a pipeline reaches the end of its operational life substantially in advance of the other facilities in the field. In this case decommissioning of the pipeline is deferred, and the pipeline is considered to form part of an “Interim Pipeline Regime”.

Mag Mell Energy Ltd understands that decommissioning of the Kinsale Field is taking place because of the cessation of production, but the 24” gas export pipeline has not necessarily reached the end of its operational life. Industry best practice makes provision for the deferral of decommissioning if reuse is an option, and furthermore the concept of “interim decommissioning” is acknowledged and allowed for in international decommissioning guidance documents.

KEL advise in their Consent Application that these activities will be completed from onshore and do not require any specialised offshore vessels or equipment. These activities therefore could be deferred to some later date, and at no apparent additional cost. It should be noted that KEL indicate in their submission that other decommissioning activities may be deferred to 2023 (e.g. jacket removal).

- DECC has commissioned a study into the security of energy supply to the island of Ireland, and this study has not yet been completed. The contract for this work was awarded in May 2021 (OJS contract award notice 2021/S 093-244025), and the expected timeframe for the report was 12 months (Reference: DECC Request for Tender RFT100519 for the provision of Consultancy Services to undertake a Technical Analysis to inform a Review of the Security of Energy Supply or Ireland’s Electricity and Natural Gas System). It is assumed that LNG projects such as Mag Mell will be considered an integral part of this study. Mag Mell therefore contend that the above listed decommissioning activities should not be carried out until such time as this study is completed and the importance of LNG projects to the security of supply to the country, is established and understood.
- Further to the security of supply issue as outlined, EirGrid the national TSO, have advised that energy shortages are likely in the winter of 21/22 leading to black outs. Further electricity outages are considered likely in the coming years. This highlights the need to keep gas storage options open and adds further weight to the deferral of the 24” gas export pipeline decommissioning.
- Ireland is entering a period of major transition of its energy systems as part of the national Climate Action Plan 2019 objective to double electricity generated from renewable sources to 70% of the nation’s consumption with the majority of the remaining 30% of electricity generated from natural gas. Maintenance of energy security for Ireland within this transition period depends on the provision of a strategic natural gas storage facility such as Ram Head to provide security of supply for the national network.
- The PSE KEL Consent letter states that following discussions with DECC regarding potential future use of the facilities, it was the position of the Department that Consent Application No. 3 should be submitted on the basis that arrangements are not to be made to provide for the future use of the pipelines. Did the Department take into account the ongoing discussions with Predator Oil and Gas Holdings Plc on the Ram Head Licence Option 16/30 Extension in reaching this position?

KEL’s Consent Application 2 of August 2019 states that a leave *in situ* option, particularly in regard to the main 24” export pipeline and landfall, could facilitate the re-use of the pipeline infrastructure in the future.

Preliminary studies into the use of the Kinsale Head reservoir and facilities for CCS have been undertaken by Ervia and these indicate that re-use of the platform jackets as part of

General comments on climate, energy storage and environmental impacts

a CCS project is not viable, although the 24" export pipeline could possibly be re-used.

In his report to DECC on 28th November 2019 on KEL's Consent Application No. 2 Stephen Jewell of Selgovia Limited (retained by DECC as petroleum engineering advisor) stated that KEL remains open to the possibility that some of the pipelines might be preserved for reuse pending more detailed study of such options. Has a more detailed study of those options been carried out by KEL?

- It should be noted that the 'Long Term Resilience Study' concluded that the development of permanent gas storage is one of the options to improve Ireland's security of supply position.
- It is submitted that the proposed Ram Head Gas Storage Project should be considered a key project, as it would enable Ireland to ensure energy security of supply by providing an alternative source of gas, through the use of existing infrastructure. In support of this it should be noted that the use of existing infrastructure. In support of this it should be noted that diversification of supply sources is considered paramount both for energy security as well as for competitiveness.
- Natural gas storage as proposed by the RAM Head Gas Storage Project is well established as an issue of 'public interest'. By virtue of targets and actions set within the Government's Climate Action Plan Ireland is entering a period of major transition of its energy systems, including increasing the proportion of the electricity generated from renewable sources to 80% of the country's final consumption. This target was set in the Climate Action Plan in October 2021, with the majority of the remaining 20% of electricity anticipated to be generated from natural gas. The maintenance of energy security with this transition period is critical to the Plan's success, and the provision of natural gas storage is acknowledged as having the potential to make a major contribution to our energy security.
- In terms of wider energy security considerations, the following factors are important:
 - Ireland's demand for electricity is expected to increase in the coming years due to increased electrification in the heat and transport sectors and growth in demand from large energy users such as data centres.
 - Following the phasing out of peat and coal use for electricity generation, Ireland's security of electricity supply is expected to become much more dependent on natural gas which is likely to be the principal source of non-variable generation supporting variable renewable sources such as wind and solar.
 - There will be a significant reduction in indigenous supplies of natural gas due to production at Kinsale fields having ceased in July 2020, and the planned tapering decline in production from Corrib over the next decade.
 - Ireland's gas import dependency is predicted to increase from over 50% in 2019 to circa 80% by the middle of the decade and to over 90% import dependency by 2030.
 - All of Ireland's natural gas imports are sourced (via the two pipelines) from a single supply point at Moffat in Scotland with no alternative import routes.
 - There is no natural gas storage in Ireland at present.
 - The UK has left the European Union which will lead, at the end of the withdrawal period, to difficulties for Ireland in meeting the requirements of EU law in relation to gas security of supply including potential challenges for future compliance with EU law including the "N-1" infrastructure standard and supply standard.
 - In July 2018, the Irish Academy of Engineering published a report on the role of natural gas in Ireland's energy security. The report highlighted the following key conclusions:
 1. Natural Gas is critical to Ireland's Energy Supply

General comments on climate, energy storage and environmental impacts

Gas plays a critical role in Ireland’s energy mix. Gas supplies around 30% of Ireland’s total primary energy and is used to generate about 50% of Ireland’s electricity. Many indigenous and multinational companies in Ireland rely on gas. Approximately 650,000 households in Ireland depend on natural gas for home heating.

2. Natural gas will be essential for Ireland’s transition to a low-carbon future

Electricity generation in Ireland in the future will be a combination of renewables and natural gas. Ireland’s dependence on natural gas for electricity generation will increase further when coal and peat use in generation end. Gas would then account for over 90% of Ireland’s electricity generation at times of very low renewables generation. Natural gas has the lowest carbon emissions of all fossil fuels and is the ideal complement to renewables. Gas will also be needed for many industries in Ireland where there is no low-carbon alternative. Gas will be critical for Ireland’s transition to a low-carbon future.

3. Ireland will have no indigenous gas supply after 2030

Corrib will only supply around 20% of Ireland’s annual gas demand in 2025. Corrib production will cease around 2030. This will leave Ireland in the vulnerable position of having no indigenous gas supply and being totally dependent on gas imports from Britain.

4. Ireland needs to develop alternative gas sources

Ireland needs to develop diverse sources and routes of gas supply to ensure its energy security in the longer term. By 2030, Britain will need to import 75% of its gas due to the decline in North Sea production. The gas supply route to Ireland will be longer than at present with a greater risk of supply disruption. Ireland should have at least two separate supply sources and supply routes. Developing a gas storage project at Ram Head would enhance Ireland’s security of supply and provide access to the competitive global gas market. Exploration for offshore gas should be promoted in parallel. Options of gas storage in Ireland also need to be assessed.

5. A Strategic plan for gas supply security is needed.

A strategic government plan is needed to diversify Ireland’s gas supply. This strategic plan should include appropriate fiscal, licensing and legislative frameworks to facilitate the development of new sources of gas supply and encourage investment. The plan needs to factor in a lead-time of five to ten years for large energy infrastructure developments in Ireland.

- It should be noted that there have been a number of important developments since both of these studies were published. These include:
 - A new target of 70% for the level of electricity generated from renewable sources by 2030 has been set.
 - Clarity that the UK will leave the internal energy market and the full spectrum of EU energy law will no longer apply to the UK.
 - The planned closure of two of the three peat-fired power stations and the significant reduction in generation of electricity from coal increasing the reliance on electricity supply in Ireland on natural gas in the near term.
 - A reduction in the number of active petroleum exploration licences and the commitment in the Programme for Government to end the issuing of new licences for exploration and extraction of gas, which in turn means a significant reduction in

General comments on climate, energy storage and environmental impacts

the likelihood of additional indigenous production of natural gas.

- In light of the above, it is considered that these previous studies are no longer considered fully representative of the key risks to security of supply in natural gas and electricity systems. In response, the DECC has therefore commissioned a further study on the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems. This newly commissioned study is expected to be published in Q2 2022 and will include extensive stakeholder consultation and the preparation of technical analysis to inform a full strategic review.

It is hoped that the Ram Head Gas Storage Project will be included in the consultation process of the review during 2021.

- It is crucial that Ireland does not further lock-in its dependence on fossil fuels if we are to meet our climate targets under the Paris Agreement and the Climate Action and Low Carbon Development (Amendment) Bill 2021 - which legally obliges us to achieve a 51% reduction of our 2018 emissions levels by 2030 and net-zero by no later than 2050.
- Global and national climate targets mean that LNG terminals and other large fossil fuel infrastructure projects are at a high risk of becoming stranded assets, which must be retired well before the end of their useful life.
- Any investment in new fossil fuel infrastructure, or providing a market for such infrastructure, will displace investment in clean energy. It is also directly contrary to market signals; renewable energy portfolios consistently outperform fossil fuel investments, with a new study showing that renewable power 4 portfolios generate triple the returns of fossil fuel portfolios and have proven more resilient to the pandemic.

APPENDIX B – PROJECT SPECIFIC CONSULTATION RESPONSES (POLICY ISSUES)

Consultee	Project Specific Comments	Response
<p>Simply Blue Energy Ltd</p>	<p>We note the application for consent to decommission the Kinsale gas export pipeline and would like to make a proposal that the pipeline is not decommissioned as planned but rather kept in a preservation state for further use. Specifically, we would suggest that the landfall is not grouted, and the presentation state is left full of inhibited seawater or some other preservation medium. There are potential reuse options that have not been fully assessed yet.</p> <p>Section 3.3 of the consent application notes that the <i>Kinsale Area facilities (including pipelines and umbilicals) were designed for dry gas production and processing, and the majority of the facilities are now close to or beyond their original design lives. Nevertheless, parts of the facilities may have been suitable for re-use, depending on the service, particularly the main Kinsale and Seven Heads export pipelines. Three potential re-uses have been considered at a high level. These are hydrocarbon production, carbon capture and storage (CCS) and offshore wind energy production. An assessment of the alternatives and other uses are outlined in full at Sections 3.3 and 3.4 of the EIAR. Following discussions with DECC regarding potential future use of the pipelines, it was the position of the Department that Consent Application 3 should be submitted on the basis that arrangements are not to be made to provide for the future use of the pipelines. Kinsale Energy is proceeding with decommissioning on the basis that none of the pipelines or umbilicals will be re-used.</i></p> <p>Section 3.3 of the EIAR considers hydrocarbon production, CCS and wind energy production. Specifically on wind energy production: <i>Offshore Wind Energy Production - The main 24" export pipeline and landfall could possibly have a use as a cable conduit, for either fibre optic or high-voltage direct current (HVDC) cables (for example as part of a windfarm). The platform jackets could be used to support HV convertor stations. Kinsale Energy is not aware of any wind farm development being considered for the vicinity of any of the Kinsale Area facilities, so no proposal currently exists at this time.</i></p> <p>We consider that the future wind energy options have not been fully considered as using the</p>	<p>As this is a policy issue it is not relevant to the EIAR assessment by the Environmental Assessment Unit (EAU)</p>

Consultee	Project Specific Comments	Response
	<p>pipeline as a conduit for HV cables could be feasible for selected sections such as the landfall area to avoid further beach trenching. This requires further assessment and is not covered directly in the current EIAR. We do have a project in development in potentially close proximity to the Kinsale Area facilities. In addition, there may be the potential to reuse the pipeline for hydrogen transportation as either part of an offshore hydrogen reservoir storage facility or as a buffer storage in itself. We believe these options should be considered fully before any permanent state of decommissioning is enacted.</p>	
<p>dCarbonX Ireland Ltd</p>	<p>dCarbonX believes a full assessment of the potential reuse of the Kinsale Area gas field pipeline infrastructure for future energy storage capacity development, considering our present and future national energy context, should be carried out before choices become further limited by ongoing abandonment activities.</p> <ul style="list-style-type: none"> • The storage of hydrogen / hydrogen carriers was not considered as a potential reuse option by the Operator during its assessment. • The availability of suitable pipelines and plant could vastly reduce both cycle times and costs for any future energy storage project in the area which would be positive in terms of Ireland’s security of supply. 	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>
<p>SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd</p>	<p>In the KEL EIAR Vol 1 of May 2018 under Consideration of Potential Alternative Uses, the use of the main 24” export pipeline and the landfall at the Inch Terminal as import infrastructure for floating LNG was not considered. In the KEL EIAR Addendum 1 of 8th August 2019 Consultation Table Predator Oil and Gas and Mag Mell were not included. Therefore, we submit that:</p> <ul style="list-style-type: none"> • The Mag Mell FSRU Project provides a viable alternative to the re-use option for the 24” pipeline and Inch Terminal. • Mag Mell Energy Ireland objects to the proposed plan under KEL’s Consent Application 3 to fill the onshore section of the 24” export pipeline with grout. • Mag Mell Energy Ltd objects to the proposed plan under KEL’s Consent Application 3 to decommission the Inch Terminal. <p>The objections are lodged now due to the fact that Mag Mell Energy Ireland Ltd was overlooked in the KEL and DECC stakeholder engagement process despite verifiable correspondence between the</p>	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>

Statutory Environmental Assessment

Consultee	Project Specific Comments	Response
	Predator Group, including Predator Oil and Gas Ventures Ltd. and Predator LNG Ireland Ltd (now Mag Mell Energy Ireland Ltd).	
SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd	Neither Predator Oil and Gas or Mag Mell Energy Ireland Ltd are included in KEL's stakeholder register referenced in KEL's Consent Application 3 of 30 th September 2021 although Paul Griffiths has been in contact with DECC, ERVIA and GNI, CRU and KEL concerning the use of the 24" export pipeline and Inch Onshore Terminal by the Mag Mell FSRU Project.	As this is a policy issue it is not relevant to the EIAR assessment by EAU
SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd	In his report to DECC on 28 th November 2019 on KEL's Consent Application No. 2 Stephen Jewell of Selgovia Limited (retained by DECC as petroleum engineering advisor) stated that KEL remains open to the possibility that some of the pipelines might be preserved for reuse pending more detailed study of such options. Has a more detailed study of those options been carried out by KEL?	As this is a policy issue it is not relevant to the EIAR assessment by EAU
SLR Consulting Ireland on behalf of Mag Mell Energy Ireland Ltd	<p>It is proposed that KEL Consent Application No. 3 should acknowledge the potential alternative use of the existing 24" pipeline and the onshore Inch Terminal by the Mag Mell LNG FSRU Project and modify the decommissioning plan accordingly.</p> <p>We request that the following should be inserted in the second paragraph of Section 3.3 of the KEL Consent Application 3:</p> <p><i>"Five potential re-uses have been considered at a high level. These are hydrocarbon production, carbon capture and storage (CCS), Floating LNG Storage and Regasification, offshore gas storage and offshore wind energy production".</i></p> <p>Section 3.3 of the EIAR should include a paragraph on Floating LNG Storage and Regasification.</p> <p>KEL EIAR Addendum No. 2 of 30th September 2021 should acknowledge that an alternative re-use and operator has been identified for the existing 24" pipeline and the onshore Inch Terminal by the Mag Mell LNG FSRU Project.</p> <p>The failure by KEL and DECC to recognise Predator Oil and Gas Ventures Ltd. and Predator LNG Ireland Ltd (now Mag Mell Energy Ireland Ltd) as stakeholders in the decommissioning consultation process potentially represents, in legal terms, an attempt at constructive termination of parts of their long-established business in Ireland. In the</p>	As this is a policy issue it is not relevant to the EIAR assessment by EAU

Statutory Environmental Assessment

Consultee	Project Specific Comments	Response
	<p>interests of absolute transparency, please indicate why Predator Oil and Gas Ventures Ltd and Predator LNG Ireland Ltd (now Mag Mell Energy Ireland Ltd) were not identified as stakeholders during the decommissioning consultation process and why the LNG FSRU option for the use of the Kinsale pipeline was not considered. Predator regards this as a very grave matter deserving your full attention as no legislation existed at the time of the decommissioning submissions that prevented re-use of the Kinsale facilities. Indeed, quite the opposite, the 2007 Offshore Licensing Terms and Conditions, which are still in force, specifically provide circumstances where the facilities could be used by third parties.</p>	
<p>SLR Consulting Ireland on behalf of Predator Oil and Gas Holdings Plc</p>	<p>In the KEL EIAR Vol 1 of May 2018 under Consideration of Potential Alternative Uses the use of the main 24" export pipeline and landfall at the Inch Terminal as import infrastructure for offshore gas storage was not considered. In the KEL EIAR Addendum 1 of 8th August 2019 Consultation Table Predator Oil and Gas Holdings Plc was not included. Therefore, we submit that:</p> <ul style="list-style-type: none"> • The Ram Head Gas Storage Project provides a viable alternative re-use option for the 24" export pipeline and the Inch Terminal. • Predator Oil and Gas Holdings Plc objects to the proposed plan under KEL's Consent Application 3 to fill the onshore section of the 24" export pipeline with grout. The intention is to ground the onshore pipeline section during decommissioning of the Inch Onshore Terminal site. • Predator Oil and Gas Holdings Plc objects to the proposed plan under KEL's Consent Application 3 to decommission the Inch Terminal. <p>Predator Oil and Gas Holdings Plc contends that the 24" export pipeline could be left in a state of interim decommissioning (i.e. as is, filled with inhibited seawater) until such time as access to the pipeline and Inch Onshore Terminal is established by the Ram Head Gas Storage Project. Predator Oil and Gas Holdings Plc further contends that the filling of the onshore section of the 24" export pipeline with grout and decommissioning of the associated Inch Onshore Terminal is premature and a decision to grant consent by DECC can be deferred without adversely affecting the overall decommissioning cost or schedule.</p>	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>

Statutory Environmental Assessment

Consultee	Project Specific Comments	Response
	These objections are lodged now due to the fact that Predator Oil and Gas Holdings Plc was overlooked in the KEL stakeholder engagement process.	
SLR Consulting Ireland on behalf of Predator Oil and Gas Holdings Plc	Predator Oil and Gas Holdings Plc is not included in KEL's stakeholder register referenced in KEL's Consent Application 3 of 30 th September 2021 although Paul Griffiths has been in contact with DECC, concerning the extension of the Licence Option 16/30 for the Ram Head Gas discovery.	As this is a policy issue it is not relevant to the EIAR assessment by EAU
SLR Consulting Ireland on behalf of Predator Oil and Gas Holdings Plc	It is submitted that the proposed KEL Consent Application No. 3 should acknowledge the Ram Head Gas Storage Project that would make use of the existing 24" pipeline and associated AGI connected to the GNI entry point at the onshore Inch Terminal.	As this is a policy issue it is not relevant to the EIAR assessment by EAU
SLR Consulting Ireland on behalf of Predator Oil and Gas Holdings Plc	<p>We request that the following be inserted in the second paragraph of Section 3.3 of the KEL Consent Application 3:</p> <p>"Five potential re-uses have been considered at a high level. These are hydrocarbon production, carbon capture and storage (CCS), Floating LNG Storage and Regasification, offshore gas storage and offshore wind energy production".</p> <p>Section 3.3 of the EIAR should include a reference to the Ram Head Gas Storage Project.</p> <p>KEL EIA Addendum No. 2 of 30th September 2021 should acknowledge that an alternative re-use and operator has been identified for the existing 24" pipeline and onshore Inch Terminal by the Ram Head Gas Storage Project.</p> <p>The failure by KEL and DECC to recognise Predator Oil and Gas Holdings Plc. as a stakeholder in the decommissioning consultation process potentially represents, in legal terms, an attempt at constructive termination of parts of its long-established business in Ireland. In the interests of absolute transparency, please indicate why Predator Oil and Gas Holdings Plc. was not identified as a stakeholder during the decommissioning consultation process and why the Ram Head Gas Storage option for the use of the Kinsale pipeline was not considered. Predator regards this as a very grave matter deserving your full attention as no legislation existed at the time of the decommissioning submissions that prevented</p>	As this is a policy issue it is not relevant to the EIAR assessment by EAU

Consultee	Project Specific Comments	Response
	<p>re-use of the Kinsale facilities. Indeed, quite the opposite, the 2007 Offshore Licensing Terms and Conditions, which are still in force, specifically provide circumstances where the facilities could be used by third parties.</p>	
<p>Not Here Not Anywhere</p>	<p>NHNA welcomes the decommissioning of certain facilities within Kinsale Area gas fields however we argue that the Kinsale Head Consent Application No. 3 – which requests consent to leave <i>in situ</i> the 24” export pipeline and all infield pipelines – along with the Seven Heads gas field application, will allow for the decommissioned pipelines to be used for future fossil fuel projects. Leaving this fossil fuel infrastructure <i>in situ</i> risks creating a “lock in” effect, guaranteeing high levels of gas consumption, obstructing investment in clean energy, and delaying the zero carbon energy transition.</p>	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>
<p>Not Here Not Anywhere</p>	<p>We urge the Department of Environment, Climate and Communications to ensure that:</p> <ul style="list-style-type: none"> • The Inch onshore terminal is decommissioned, with full removal and reinstatement to agricultural use as set out in the application. • The onshore section of the 24” export pipeline is filled with grout as set out in the application. • Any infrastructure left <i>in situ</i> is not used for future fossil fuel projects. For example, legislation such as the LNG Free Bill can be put in place to prevent the development of Liquefied Natural Gas terminals. 	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>
<p>Not Here Not Anywhere</p>	<p>We argue that the comparative assessment approach has failed to take into account future impacts on the climate and the environment – in particular those in relation to carbon dioxide and methane emissions – if this infrastructure is once again used for fossil fuels.</p>	<p>As this is a policy issue it is not relevant to the EIAR assessment by EAU</p>

Statutory Environmental Assessment

Consultee	Project Specific Comments	Response
Not Here Not Anywhere	Kinsale Energy’s own Environmental Impact Assessment Report suggests that the facilities being decommissioned could be potentially re-used for hydrocarbon production. As documented in a submission to the initial consultation on the proposed decommissioning, fossil fuel company Predator Oil and Gas Holdings Ltd are planning to build a LNG terminal located off the coast of Cork and intend to use the Inch onshore terminal and the connected offshore pipeline (the 24” export pipeline that is to be left <i>in situ</i>) as an entry point to Gas Networks Ireland. This is a prime example of how leaving this fossil fuel infrastructure <i>in situ</i> risks locking Ireland into dirty energy and threatens our climate commitments.	As this is a policy issue it is not relevant to the EIAR assessment by EAU
Not Here Not Anywhere	The Kinsale gas infrastructure is the energy infrastructure of the past, and in the context of Irish legislation and policy and the urgent decarbonization required to keep 1.5C alive, its decommissioning is wholly appropriate. We urge the Department to ensure that any infrastructure left <i>in situ</i> is not used for future fossil fuel projects and to pass legislation to ensure this is not the case.	As this is a policy issue it is not relevant to the EIAR assessment by EAU