

Gas Networks Ireland
Network Implementation Plan
Natura Impact Report

Ref/1

Issue 1 | 22 September 2020

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1 Introduction

1.1 Introduction

Gas Networks Ireland (GNI) has prepared the draft Network Implementation Plan (referred to hereinafter as the NIP) for the period 2020 - 2023. The NIP sets out the critical infrastructure to be developed across the network over this period, and beyond, while also setting out the aims and commitments of GNI.

Arup has been appointed by GNI to prepare a Natura Impact Report (NIR) for the draft NIP.

1.1.1 Background to AA Screening (Stage 1)

Arup previously prepared an AA Screening report of the draft NIP on behalf of GNI.

All of the aims and commitments and objectives were screened out as having potential for Likely Significant Effects (LSEs) on European Sites because they were general aims and commitments and the particular aim or commitment did not identify any locations for development or detail what that development might be.

It was determined that, while the NIP does outline the capital investment proposals to be implemented over the next 3 years and beyond, it does not define the exact location, nature, size/operating conditions of all the proposals, or allocates resources to a specific area in Ireland. There are some capital investment projects within the draft NIP that were considered likely to have a significant effect on European sites.

In the absence of further information or the integration of mitigation measures, it is considered that some of the capital investment projects may have the potential for significant effects on European sites. Therefore, it is considered that the precautionary principle must be applied and that an AA of the NIP is required. The AA is presented in this Natura Impact Report (NIR).

1.1.2 AA (Stage 2)

This Natura Impact Report (NIR) deals with Stage 2 of the AA process which assesses whether the NIP (or projects therein) are likely to have adverse effects on the integrity of European sites from those LSEs identified at Stage 1 (Screening). Of the 27 projects listed in the NIP, 11 have been brought forward to Stage 2.

A number of key principles and mitigation measures as set out in **Section 7** of this report have been proposed to ensure that there will be no implications for the conservation objectives of European sites from the NIP (or projects therein). With these mitigation measures in place, there will be no adverse effects on the integrity of European sites from the NIP.

It is a requirement that a project level AA screening and subsequently an NIS (as required) will be undertaken for all 11 No. capital investment projects which will have to take this plan level NIR into account. The project level AA for each project will incorporate the findings of consultation and field surveys, environmental assessments and feasibility studies where appropriate, to inform a detailed assessment and mitigation strategy. The identified mitigation will then be incorporated into the final detailed design of the projects to ensure the integrity of European sites in the region are maintained in the long-term.

The conclusion of the NIR for the NIP is that there will be no adverse effects on the integrity of any European site(s), either alone or in-combination with other plans or projects. This conclusion is based on adherence to the key principles for protecting European sites (e.g. avoidance of impacts in the first instance). Where impacts cannot be avoided, appropriate and effective mitigation will be implemented at the project stage to ensure no adverse effects on the integrity of any European site(s).

1.2 Background to the NIP

GNI prepares an annual rolling Network Development Plan (NDP) each year, which provides a view of how the gas network may develop over a ten-year period.

The NDP outlines a number of capital projects which will be delivered over the coming years (in the short, medium and long-term), including future proposed large capital projects and proposed new technologies. The NDP is a strategic plan which is high-level in nature.

GNI is in the process of preparing a second plan, the NIP. The purpose of the NIP is to set out in more detail, the manner in which the short-term capital investment proposals identified in the NDP will be developed in the Plan area over the three-year plan period 2020 - 2023. This will include greater detail on the capital investment proposals included in the NDP, including their locations, nature, extent etc.

As the NIP is more project-specific than the higher-level NDP, it is subject to AA under the provisions of the Habitats Directive.

1.3 Purpose of the AA Process

This NIR has been prepared in support of the AA process having regard for the legislative requirements of EU and national law as outlined in Section 3.1. Plans such as the draft NIP must be prepared and examined to ensure that there will not be adverse effects on the integrity of European sites. The overall purpose of the AA process is to ensure that the NIP, when implemented, does not result in any adverse effects on the integrity of any European sites(s).

2 Assessment Methodology

2.1 Legislative Background

According to the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (79/409/EEC), Member States are required to establish a Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU.

In Ireland, the Natura 2000 network of European sites includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats.

The Annex habitats and species, for which each site is selected, are the *qualifying interests* (QI) of the site. *Conservation objectives* for the site are defined for these qualifying interests.

A key requirement of the Directives is that the effects of any plan or project, alone, or in combination with, other plans or projects, on the Natura 2000 site network, should be assessed before any decision is made to allow that plan or project to proceed. This process is known as Appropriate Assessment (AA). The obligation to undertake an Appropriate Assessment derives from Article 6(3) and 6(4) of the Habitats Directive (92/43/EEC), and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances. Article 6(3) of the Habitats Directive states:

“Any plan or project not directly connected with, or necessary to, the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

The competent authority is required to carry out AA, as required by Article 6(3) and 6(4) of the Habitats Directive, as follows:

- **Stage 1 – Screening for Appropriate Assessment** – to assess, in view of best scientific knowledge, if the plan or project individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.
- **Stage 2 – Appropriate Assessment** – This is required if it cannot be excluded, on the basis of objective information, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The appropriate assessment must include a final determination by the competent authority as to whether or not a proposed development would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.
- **Stage 3 – Assessment of alternative solutions** – The process which examines alternative ways of achieving the objectives of the project or plan that avoid significant effects on the integrity of the Natura 2000 site.
- **Stage 4 – Assessment where no alternative solutions exist and where significant effects remain** – an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

As noted previously in Section 1.1 above, Stage 1 AA Screening has been completed. In the absence of further information or the integration of mitigation measures, it is considered that some of the capital investment projects may have the potential for significant effects on European sites. Therefore, it is considered that the precautionary principle must be applied and that an AA of the NIP is required.

This Natura Impact Report (NIR) deals with Stage 2 of the AA process which assesses whether the NIP (or projects therein) are likely to have adverse effects on the integrity of European sites from those LSEs identified at Stage 1 (Screening).

2.2 Guidance

The entire AA process, including the preparation of this NIR, has taken account of guidance contained in the following documents:

- “*Guidance on Energy Transmission Infrastructure and EI Nature Legislation*” (European Commission, 2018)
- “*Managing Natura 2000 sites- The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*” (EC Environment Directorate-General, 2018);
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.* (European Commission, 2007);
- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;*
- *Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011); and
- *Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine* (Institute of Ecology and Environmental Assessment, September 2018).

2.3 Data Sources

Information relied upon for this AA, including this NIR included the following information sources, which included maps, ecological and water quality data:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;
- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on land - use zoning from the online mapping of the Department of the Environment, Community and Local Government <http://www.myplan.ie>;
- Information on water quality in the area available from www.epa.ie;

- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- Information on the status of EU protected habitats in Ireland (National Parks and Wildlife Service, 2013a and 2013b);
- Information on the conservation status of birds in Ireland (Colhoun and Cummins, 2014);
- Ecological reports and EIS reports for proposed developments within NIP plan area.

2.4 Overlap with SEA

The Strategic Environmental Assessment (SEA) of the draft NIP has been carried out concurrently with the AA. There were several areas of overlap considered in accordance with good practice in terms of the following stages:

- Sharing of baseline data gathering and sharing, data on European sites and potential sensitivities and threats;
- Settlement zoning maps were consulted for potential adverse effects on integrity of the European Sites in terms of their Conservation Objectives but also any other ecological impacts outside of the European sites were highlighted to ensure that they would be addressed in the SEA; and
- The SEA highlighted potential interactions between other environmental issues such as water quality and infrastructure and the sensitivities of European sites which fed into the AA.

2.5 Assessment Approach- Draft NIP

As outlined in the European Commission Guidance¹, potential effects are very much dependent on the design and location of the specific energy infrastructure in question and on the sensitivity of the EU protected habitats and species present. That is why it is essential to examine each plan or project on a case-by-case basis.

Energy networks are extensive across Ireland and infrastructure from all sectors interact with European sites. Prospective energy network developments are routinely screened for appropriate assessment in order to determine whether there are any potential implications for the site.

According to the European Commission Guidance¹ when assessing the potential impacts on nature and wildlife it is important to consider not just the main infrastructure itself, but also all associated installations and facilities such as temporary access roads, contractors facilities and equipment storage, construction compounds, concrete foundations, temporary cabling, spoils and areas for soil surplus etc.

¹ “Guidance on Energy Transmission Infrastructure and EI Nature Legislation” (European Commission, 2018)

The impacts may be temporary or permanent, on-site or off-site, cumulative and may come into play at different times during the project cycle (e.g. during construction, renovation, maintenance and/or decommissioning phases). All these factors must be taken into consideration.

The EU Habitats Directives' species protection provisions must to be taken into account where there is a risk that the energy infrastructure plan or project may cause the death or injury, or deliberate disturbance during breeding, rearing, hibernation and migration, or the deterioration or destruction of breeding sites or resting places of species protected under the two Directives (e.g. such as eagles and marine mammals). This strict protection regime applies across the wider countryside, i.e. both inside and outside European sites.

3 Draft Network Implementation Plan

3.1 Background

As outlined in Section 1.1, GNI prepares an annual rolling Network Development Plan (NDP) each year, which provides a view of how the gas network may develop over a ten-year period.

The publication of this NDP satisfies the requirements of Article 22 of EU Directive 2009/73/EC, Article 11 of the EC (Internal Market in Natural Gas and Electricity) (Amendment) Regulations 2015, Section 19 of the Gas (Interim) (Regulations) Act 2002, as amended, and Condition 11 of its Transmission System Operator (TSO) and Distribution System Operator (DSO) licences.

The purpose of the NDP is to assess the gas network's capacity based on existing and forecast supply and demand in order to guarantee the adequacy of the gas transmission system and security of supply. The NDP outlines a number of capital projects which will be delivered over the coming years, including future proposed large capital projects and proposed new technologies. The NDP is a strategic plan which is high-level in nature.

The purpose of the Network Implementation Plan (NIP), which is the subject of this AA, is to set out in more detail, the manner in which the short-term capital investment proposals identified in the NDP will be developed in the Plan area over the three-year plan period 2020-2023. This will include greater detail on the capital investment proposals included in the NDP, including their locations, nature, extent etc. The Network Implementation Plan (NIP), provides for short term capital investment projects including the provision of AGI (Above Ground Installation) upgrade works, new AGIs, new pipelines, CGI (Centralised Gas Injection) and CNG (Compressed Natural Gas) facilities.

Figure 3.1 provides an overview of the Plan hierarchy and key differences between the NDP and NIP, and relationship between the same.

The NIP presents the planned capital investment projects that GNI has progressed to the point where they are the preferred projects to meet the changing system requirements in the context of the long-term development of the network.

In this context therefore, it is important to understand that any NIP is a “point-in-time” understanding of gas network development. The long-term development of the network is under continuous review by GNI. The NIP is clear in acknowledging the possibility that changes will occur in the need for, scope of, project phase, and timing of gas network development.

GNI has identified some 27 capital investment projects for inclusion in the NIP, to meet the changing system requirements in the short to medium term development of the network.

A number of capital investment projects are currently in the statutory planning consents process, and thus have not been included within the scope of the AA (although they are included in the list of all capital investment projects in Section 3 of the NIP). Rather, they are all separately subject to specific environmental and other assessment, in accordance with Statutory procedure and best practice.

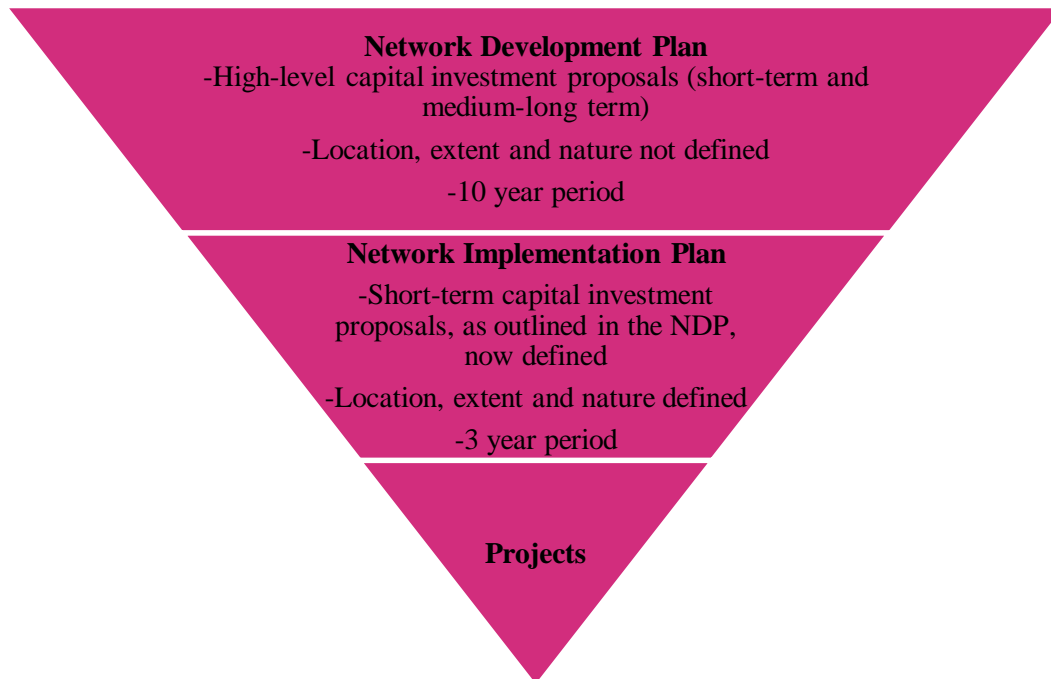


Figure 3.1: Plan Hierarchy

3.2 Extent of Area

GNI maintains over 14,390 km of gas pipelines and two sub-sea interconnectors.

The GNI transmission network includes onshore Scotland, interconnectors and the onshore ROI network. The interconnector (IC) sub-system comprises of two subsea interconnectors between ROI and Scotland; and compressor stations at Beattock and Brighthouse Bay. The interconnector system connects to Great Britain's (GB) National Transmission System (NTS) at Moffat in Scotland. It also supplies gas to the Northern Ireland (NI) market at Twynholm and the Isle of Man (IOM) market via the second subsea interconnector (IC2).

It should be noted that none of the Capital Investment Proposals listed in NIP are located in either Northern Ireland, or Scotland. Thus, the NIP plan focusses on the Republic of Ireland only.

The NIP Plan area is identified in **Figure 3.2**.



Figure 3.2: NIP Plan Area

3.3 Proposed Capital Investment Projects

GNI continuously undertakes detailed system modelling of the network in order to assess the capacity of the network and identify where upgrades or reinforcements may be required within the network.

Typical works may include:

1. Increasing or upgrading the capacity of Above Ground Installations (AGIs). AGIs are used to control and reduce pressures from the transmission high pressure tiers to the lower distribution pressure tiers on the network. The existing capacity of an AGI may be found to be undersized if there is an increase in the forecasted demand at that area. In order to ensure a safe and reliable gas supply to the customers in that area, GNI will “upgrade” that AGI to an increase technical capacity. Similarly, a more feasible option may be to add a new AGI or even install a new pipeline to reinforce the area.
2. GNI is also focused on the delivery of new Compressed Natural Gas (CNG) stations throughout Ireland. These will be located along core urban and regional road networks. These projects are included in the NIP and are classed under “Other – New CNG” projects.
3. The NIP also includes Centralised Gas Injection (CGI) facilities. GNI, in conjunction with other industry stakeholders, intends to invest in CGI facilities located on the gas transmission network where Renewable Gas quality will be verified and the grid injection process will be managed and metered. These projects are classed under “Other – New CGI” projects.
4. In addition to the projects mentioned above, GNI also coordinates minor capital works, such as distribution alteration/reinforcement projects. These projects are numerous and generally of low value or deal with the day-to-day operation and maintenance of the network. These are not included in the NIP.

The Draft NIP sets out a range of capital investment projects which GNI propose to implement over the plan period. The capital investment projects can be broken down into three categories:

Upgrade: are projects that involve the uprating of existing assets. An example of an uprate project is changing equipment to increase the flow capacity of the AGI.

New: projects that involve the construction of new AGIs or pipelines.

Other: are projects that do not fall naturally into any of the categories above such as CNG stations and CGI facilities.

GNI has identified 27 such projects required over the plan period. **Table 3.1** provides a summary of these projects. It should be noted that the precise locations, extent or scale of the proposed capital investment projects have not yet been determined. Instead, the generalised areas of the proposed projects are stated in the plan and assessed in this report. As such, this NIR represents a high-level assessment of the NIP. Each of the proposed capital investment projects will be subject to AA at project level, where required.

The GNI network is broken down into three regions across Ireland (Northern and Western/Eastern and Midlands/Southern) and further divided at a county level.

Table 3.1: Summary of Projects by Category

| Project Category | Northern & Western Region | Eastern & Midlands Region | Southern Region | Total |
|------------------|---------------------------|---------------------------|-----------------|-----------|
| Upgrade AGI | 1 | 9 | 2 | 12 |
| New AGI | 0 | 2 | 0 | 3 |
| New Pipeline | 0 | 0 | 0 | 0 |
| Other - CNG | 1 | 8 | 2 | 11 |
| Other - CGI | 0 | 0 | 1 | 1 |
| Total | 2 | 20 | 5 | 27 |

The long-term development of the network is under continuous review by GNI. The draft NIP is clear in acknowledging that it is likely, given the continuously changing nature of energy requirements, that new developments will emerge that could alter the project information as presented in any version of a NIP. These changes will be identified in future studies and updated in future NIPs.

Potential projects are listed in **Sections 3.3.1 -3.3.3** and assessed and described further in **Section 4.4**.

3.3.1 Northern and Western Region

The Northern and Western Region is made up of counties Donegal, Leitrim, Cavan, Monaghan, Roscommon, Sligo, Mayo and Galway.

There are two projects proposed for this region, both of which are located in County Cavan:

- *Capacity upgrade to existing 5501 AGI*
- *New CNG Station at NIP19CNCNG1*



Figure 3.3: Northern and Western Regional map showing location of potential projects (not to scale)

3.3.2 Eastern and Midlands Region

The Eastern and Midland Region is made up of the following counties: Longford, Westmeath, Meath, Louth, Offaly, Laois, Kildare, Wicklow and Dublin.

There are currently 20 potential projects in this region, as displayed in **Figures 2.4** and **2.5**.

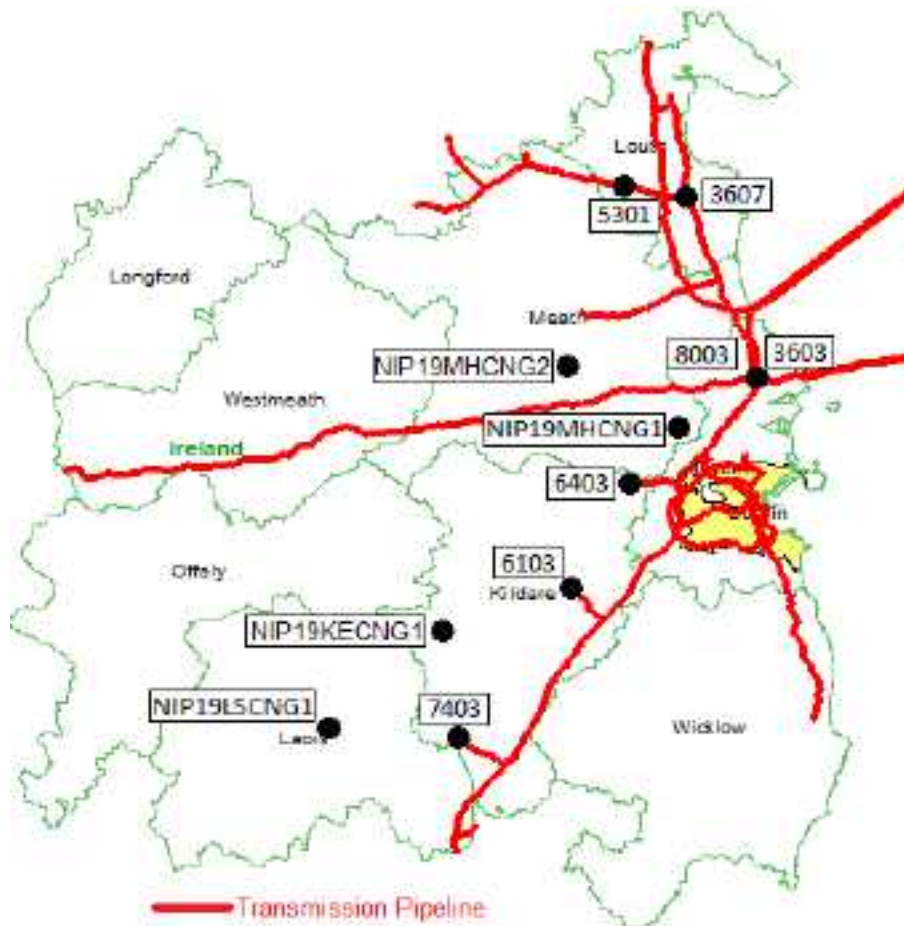


Figure 3.4: Eastern and Midlands Regional map show location of potential projects (not to scale)

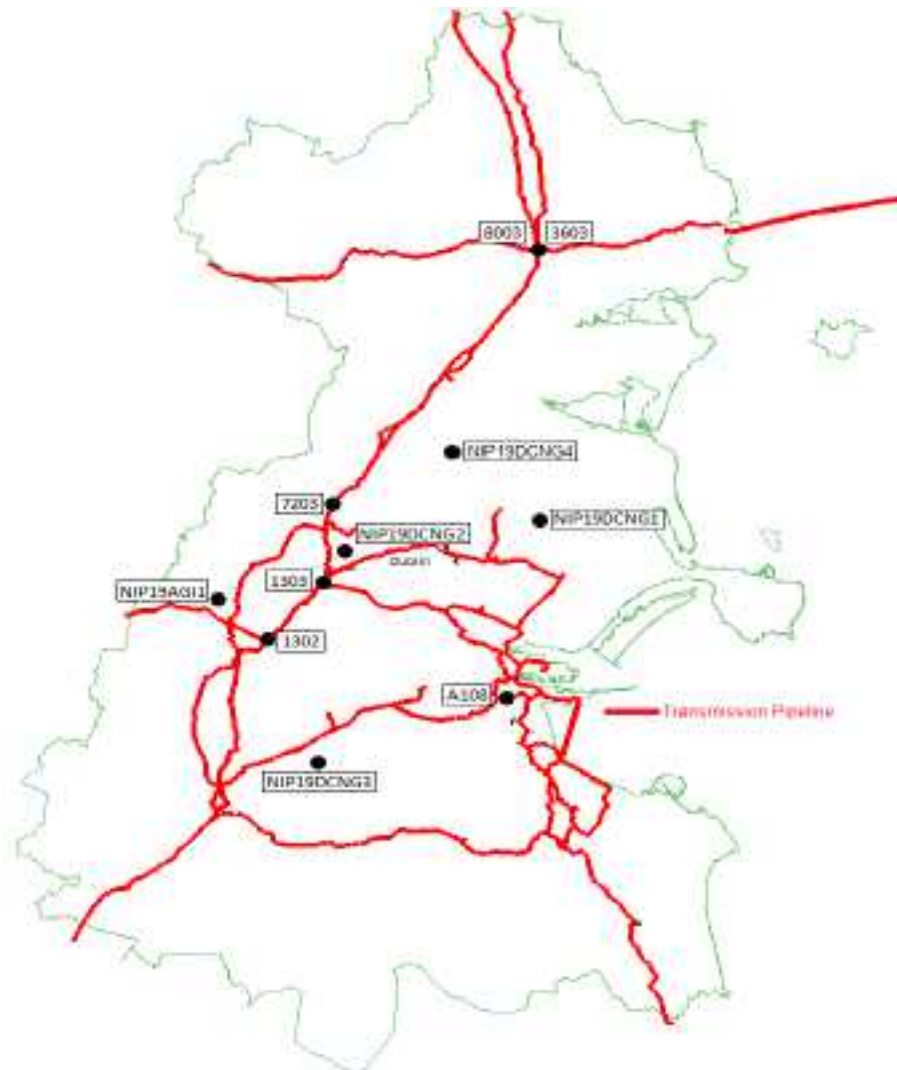


Figure 3.5: Location of potential projects in County Dublin only (not to scale)

They are divided on a county level as follows:

Louth

- Capacity Upgrade to existing 3607 AGI
- Capacity Upgrade to existing 5301 AGI

Laois

- New CNG Station at NIP19LSCNG1

Meath

- New CNG Station at NIP19MHCNG1
- New CNG Station at NIP19MHCNG2

Kildare

- Capacity Upgrade to existing 7403 AGI
- Capacity Upgrade to existing 6403 AGI

- *Capacity Upgrade to existing 6103 AGI*
- *New CNG Station at NIP19KECNG1*

Dublin

- *Capacity Upgrade to existing 1303 AGI*
- *Capacity Upgrade to existing A108 AGI*
- *Capacity Upgrade to existing 1302 AGI*
- *Capacity Upgrade to existing 7203 AGI*
- *Station Bypass Project at 3603 AGI*
- *New 85-70Bar AGI Station 8003 AGI*
- *New 70-4 bar AGI Station NIP19DAG11 AGI*
- *New CNG Station at NIP19DCNG1*
- *New CNG Station at NIP19DCNG2*
- *New CNG Station at NIP19DCNG3*
- *New CNG Station at NIP19DCNG4*

3.3.3 Southern Region

The Southern Region is made up of counties Clare, Limerick, Kerry, Cork, Waterford, Tipperary, Kilkenny, Carlow and Wexford.

There are currently 5 potential projects in this region as displayed in **Figure 2.6**.

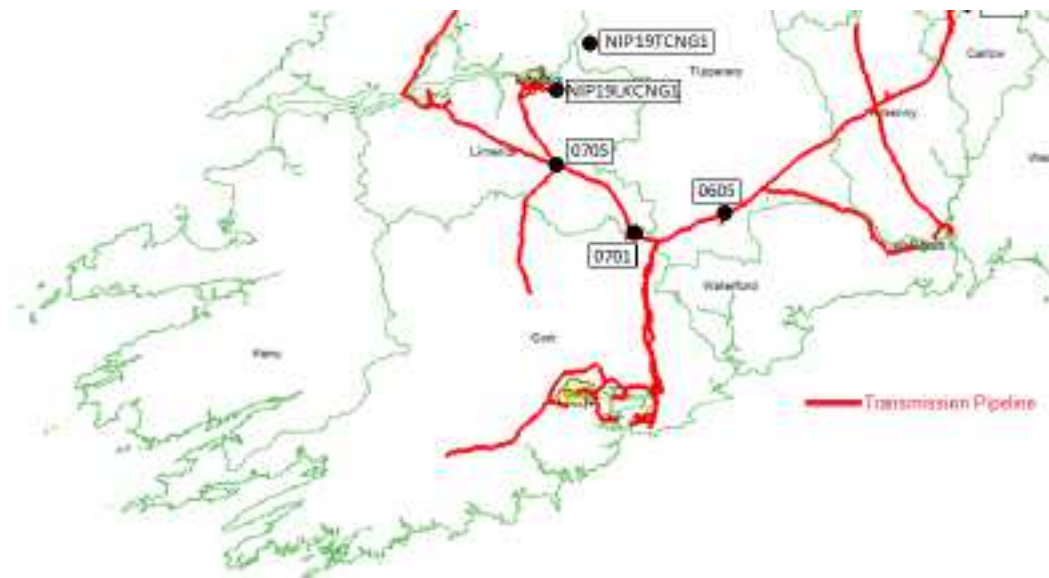


Figure 3.6: Southern Regional map showing locations of potential projects (not to scale)

Cork

- *New Renewable Gas Injection Facility at 0701 AGI*

Limerick

- *New Pressure Reduction Skid at existing 0705 AGI*
- *New CNG Station at NIP19LKCNG1*

Tipperary

- *New CNG Station at NIP19TNCNG1*
- *Capacity Upgrade to existing 0605 AGI*

4 Ecological Overview

As the Network Implementation Plan area reaches across the entire land and waters of Ireland (Republic), the subject area supports a wide range of habitat types.

Ireland has a rich diversity of ecosystems and wildlife in its terrestrial, freshwater and marine environments. Irelands natural habitats have evolved over millions of years and support globally important populations of birds, mammals, invertebrates, plants and fungi. According to the Irish Wildlife Trust, Ireland is host to over 50 species of mammals, 400 species of birds, 4,000 plant species and 12,000 insect species.

Ireland is required under the terms of the EU Birds Directive (2009/147/EC) to designate Special Protection Areas (SPAs) for the protection of endangered species of wild birds. Ireland's SPA Network encompasses 154 sites, over 5,700km² of marine and terrestrial habitats.

Ireland is also required under the terms of the EU Habitats Directive (1992/43/EEC) to designate Special Areas of Conservation (SACs) for the protection of certain habitats and species. Ireland's SAC Network encompasses an area of 13,500km² across more than 400 sites. Some 13% of Ireland's terrestrial area is included in the European network. This amounts to 9,060km², which accounts for overlapping SAC and SPA designations. 10,420km² has been encompassed by marine SACs and SPAs.

Ireland currently has a network of 439 sites selected for conservation as Special Areas of Conservation and adopted by the Commission as sites of community importance. The total area of these sites is 16,947km², including marine areas. The marine component, which includes six large offshore SACs, comprises 9,867km². As of July 2020, 276 sites have been formally designated by Statutory Instrument (S.I.) as SACs. The formal designation process for the remaining 163 candidate SACs is ongoing.

Ireland has 154 Special Protection Areas for birds covering some 5,894 km². This includes marine areas totalling 1,717km². 150 sites have been formally classified, with the remaining four expected to be formally classified in 2020.

150 sites have been formally classified with the remaining four expected to be formally classified by the end of 2020. The habitats that occur in Ireland are a good representation of Ireland's semi-natural and natural habitats covering marine, freshwater, peatland, grassland and woodland habitats. Ireland is a stronghold for many of the species listed in the Annexes. Some species suffered past exploitation, e.g. cetaceans; others, e.g. freshwater pearl mussel (*Margaritifera margaritifera*), require pristine water quality and are therefore good indicators of habitat quality. European sites that occur in the Republic of Ireland are illustrated in **Figure 4.1** below.

In 2019, the Department of Culture, Heritage and the Gaeltacht published the report *The Status of EU Protected Habitats and Species in Ireland*, which describes the most up-to-date Conservation Status in Ireland of habitats and species listed on the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC.

The report concludes that most Irish habitats listed on the Habitats Directive are in Unfavourable status and almost half are demonstrating ongoing declines. The majority of species listed on the Habitats Directive are, however, in Favourable status in Ireland, and stable, although a small number are considered to be in Bad status and continue to require concerted efforts to protect and restore them.

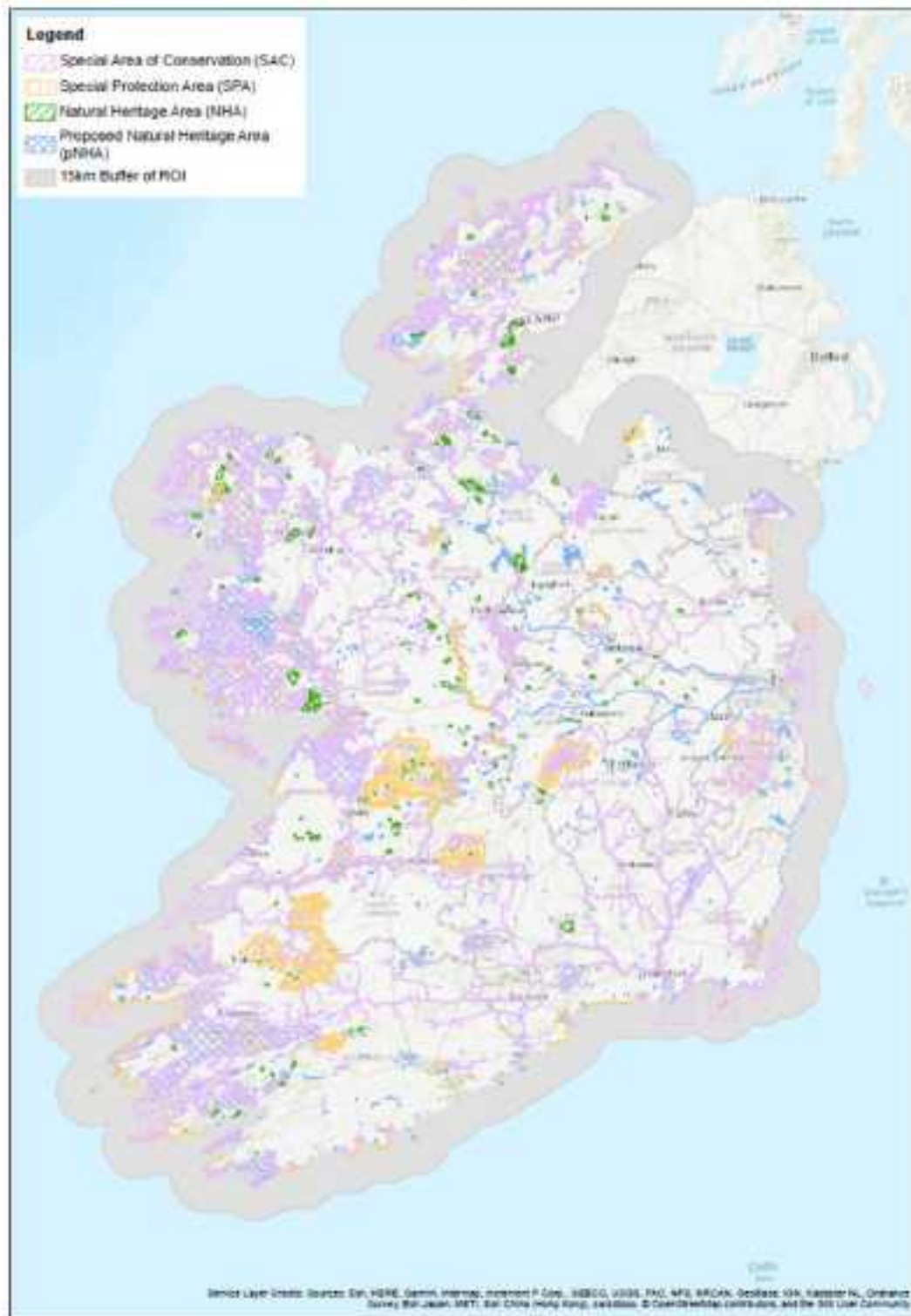


Figure 4.1: European sites in Ireland (Refer to **Appendix A** for full scale figure)

5 Stage 1 AA- Screening

5.1 Introduction

The AA process for the draft NIP commenced early in the plan making process. This was to ensure that the AA process could influence the development of the NIP and help to develop aims and commitments that would not adversely affect the integrity of any European Sites.

For the AA screening stage, the draft NIP was reviewed in order to determine if there was potential for likely significant effects on European sites.

The screening was underpinned by the precautionary principle, particularly in the assessment of potential impacts and their resolution. If it is not possible to rule out a risk of harm on the evidence available, then it is assumed that a risk may exist and it needs to be dealt with in the assessment process, and the process then moves to a Stage 2 assessment. However, if it can be concluded at this stage that there are unlikely to be significant effects on the European Sites, then a finding of no significant effects should be found.

As part of the screening, consideration was also given to the potential for ‘in combination’ effects. This included reference to other policies, plans and programmes and the effects arising from these plans/programmes being implemented together, or in combination with the NIP.

All of the aims and commitments and objectives were screened out as having potential for Likely Significant Effects (LSEs) on European Sites because they were general aims and commitments and the particular aim or commitment did not identify any locations for development or detail what that development might be (Refer to **Section 5.2.1** below).

It was determined that, while the NIP does outline the capital investment proposals to be implemented over the next 3 years and beyond, it does not define the exact location, nature, size/operating conditions of all the proposals, or allocates resources to a specific area in Ireland. There are some capital investment projects within the draft NIP that were considered likely to have a significant effect on European sites.

In the absence of further information or the integration of mitigation measures, it is considered at AA Screening stage that some of the capital investment projects may have the potential for significant effects on European sites. Therefore, it is considered that the precautionary principle must be applied and that an AA of the NIP is required (refer to **Section 5.2.2** below).

5.2 Assessment

The AA Screening assessed the potential for the draft NIP to result in likely significant effects on European sites, either alone or in combination with other plans and projects. This involved an assessment of:

- The aims and commitments of the draft NIP

- The proposed capital investment projects of the draft NIP

5.2.1 Screening the aims and commitments of the draft NIP

In addition to outlining the capital investment projects which GNI propose to implement over the plan period, the draft NIP also sets out the aims and commitments of GNI to ensure appropriate protection of the environment in the network development over the plan period. Refer to **Table 5.1** for the aims and commitments of the draft NIP.

Each of the aims and commitments outlined in **Table 5.1** were assessed at Screening stage for their potential to result in likely significant effects on European sites in Ireland. It was considered that the aims and commitments of the Draft NIP represent general statements of GNI relating to environmental protection and sustainability. As such, it was concluded that no likely significant effects on European sites are expected to occur as a result of GNI realising any of these aims and commitments.

The aims and commitments have therefore not been brought forward for further assessment in this NIR.

Table 5.1: Aims and Commitments of the NIP

| Aims and Commitments of the NIP | |
|---------------------------------|---|
| 1.1.1 | GNI aim to uphold best environmental practice in the design and appraisal of transmission development projects. |
| 4.1.2 | GNI aims to ensure that transmission development projects follow the standard approach to environmental assessment of transmission projects. |
| 4.1.3 | GNI aim to ensure that the special interest of protected structures, including their curtilages and settings, are protected to the greatest extent possible when considering site or route options for transmission infrastructure development. |
| 4.1.4 | GNI aim to continue to protect and enhance landscapes through the sustainable planning and design of transmission infrastructure development. |
| 4.1.5 | It is the aim of GNI to seek to preserve and maintain air and noise quality in accordance with good practice and relevant legislation in the construction of its transmission projects. |
| 4.1.6 | GNI aims not increase in flood risk as a result of transmission development, and to ensure any flood risk to the development is appropriately managed. |
| 4.1.7 | It is the aim of GNI to deliver our services in a sustainable manner which contributes to the protection of the environment. whilst focusing on the areas where we can make the biggest difference. |
| 4.1.8 | GNI is committed to ensuring the United Nations Sustainable Development Goals are at the core of our business decisions and key to our strategy. |
| 4.1.9 | GNI is committed to uphold transparency in our sustainability and environmental performance, and to disclose widely on our sustainability performance |
| 4.1.10 | GNI is committed to embedding sustainability and decarbonisation principles to the core of our business decisions and strategy. |
| 4.1.11 | GNI will maintain certification to the Environmental Management System ISO 14001 and the Energy Management System ISO 50001. We will continue to actively participate in the National Energy Efficiency Action Plan, aimed at |

| Aims and Commitments of the NIP | |
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| | delivering 33% energy efficiency savings in the Public Sector by 2020. We are committed to improving our energy performance of 33% by 2020 from a 2006 baseline and to date, have already achieved over 44% energy efficiency improvements. |
| 4.1.12 | GNI will carry out planning, design, construction and operation in a manner that is both environmentally acceptable and aligned to our sustainability framework as it is an essential part of this process and will continue to play a key role in driving sustainable change in our business. |
| 4.1.13 | Ireland's gas network provides a major opportunity to achieve significant and enduring emissions savings, sooner rather than later, across every sector of the economy, in a least cost and least disruptive manner; while retaining energy sector security and flexibility. Gas Networks Ireland are committed to developing the gas network so that this opportunity can be realised. |
| 4.1.14 | GNI will endeavor to adhere to the mitigation measures outlined in SEA Environmental Report and Natura Impact Report that relates to the NIP where necessary. |
| 4.2.1 | GNI will continue our multifaceted Biodiversity Enhancement Programme which aims to increase awareness about biodiversity among our staff and stakeholders. |
| 4.2.2 | GNI will continue to drive and enhance biodiversity as part of a long-term Biodiversity strategy to delivery our 2025 commitments as part of "Our seeds for Nature" commitments. |
| 4.2.3 | GNI will implement our public pledge to manage all infrastructure, asset base and offices in Ireland and Scotland in line with biodiversity best practice; |
| 4.2.4 | GNI will Strive to have a net positive impact on biodiversity in all our operations |
| 4.2.5 | GNI will Promote red clover, which is good for bees and soil, by encouraging farmers to grow this as a feedstock crop to produce biogas. |
| 4.2.6 | GNI will continue to protect biodiversity across our business and in our community and remain a key supporter of the All Ireland Pollinator Plan: |
| 4.2.7 | GNI will Implement a number of measures at our sites including reduced grass cuttings and pesticide use; installation of bird boxes, biodiversity awareness signage and planting of wildflowers. |
| 4.2.8 | GNI will continue to deliver internal biodiversity awareness talks |
| 4.2.9 | GNI will continue to hold Nature walks to educate staff about biodiversity and presenting Biodiversity talks to other Business as part of our Business in the Community initiative, and increase engagement with the community by hosting biodiversity awareness sessions in local primary schools in the local community. |
| 4.3.1 | GNI is committed to delivering a safe, affordable and clean energy future for the people of Ireland through the decarbonisation of our network and the reduction of emissions across all sectors of Irish society. |
| 4.3.2 | GNI is committed to becoming a leader in compliant, sustainable infrastructure development and service provision in Ireland. |
| 4.3.3 | GNI is committed to halving our greenhouse gas emissions by 2030 as part of low carbon pledge; an initiative developed by the 34 Business Working Responsibly Mark companies to tackle climate change. This pledge aims to practically demonstrate Irish business commitment to reducing carbon emissions and to act as a catalyst for wider, complementary initiatives and actions. |
| 4.3.4 | GNI plans to Define what Carbon Neutrality means for GNI by 2024. |

| Aims and Commitments of the NIP | |
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| 4.3.5 | GNI will Continue to drive better sustainability practices through the entire supply chain by enhancing our procurement processes, and |
| 4.3.6 | GNI will Assess initiatives identified through the Climate Action Working Group on the basis of the potential achievable emissions reduction and the associated mitigation/abatement cost. |
| 4.3.7 | GNI will Reduce the carbon footprint of the GNI fleet prioritising CNG vehicles where technically feasible. Where CNG vehicles are not feasible, examine opportunities to use alternative zero/ low carbon fuels – e.g. biodiesel: |
| 4.3.8 | GNI will Review journeys undertaken by GNI (fleet and grey-fleet) and examine ways in which journeys can be reduced, e.g. through the use of technology etc; |
| 4.3.9 | GNI will Incentivise selection, procurement and use of zero/ low carbon/ fuel efficient vehicles by delivery partners (e.g. the next NSWC contract). |
| 4.3.10 | GNI are committed to working with government and policy makers across all sectors, to ensure we maximise the contribution this asset owned by the people of Ireland can make to help reduce emissions at least cost. |
| 4.3.11 | GNI is committed to a clean energy future for Ireland. A whole energy system approach will deliver Ireland’s climate ambitions in the most practical and least cost manner. To achieve this, we will partner with key energy stakeholders, industry bodies, research institutes and communities to ensure a least cost and fair transformation to a clean energy society |
| 4.3.12 | GNI has an ambition to deliver a net zero carbon gas network which will help to ensure that Ireland plays its part in the global effort to tackle climate change, supporting a clean energy society now and for generations to come. |
| 4.4.1 | GNI is committed to reducing our waste to landfill, our target is zero waste to landfill by 2025. |

The aims and commitments detailed here have been screened out as they are general aims/commitments and do not identify any specific locations for development or detail what that each development will entail. They do not need to be considered any further in the AA process.

5.2.2 Screening the proposed capital investment projects of the NIP

As previously outlined, the Draft NIP sets out a range of capital investment projects which GNI propose to implement over the plan period. The capital investment projects can be broken down into three categories:

Upgrade: are projects that involve the uprating of existing assets. An example of an uprate project is changing equipment to increase the flow capacity of the AGI.

New: projects that involve the construction of new AGIs or pipelines.

Other: are projects that do not fall naturally into any of the categories above such as CNG stations.

GNI has identified 27 such projects required over the plan period.

Each of the proposed capital investment projects were therefore assessed as part of the Stage 1 Screening for their potential to give rise to adverse effects on the conservation integrity of European sites in Ireland. The outcomes of the assessment are included in **Table 5.2** below.

It was determined that, while the NIP does outline the capital investment proposals to be implemented over the next 3 years and beyond, it does not define the exact location, nature, size/operating conditions of all the proposals, or allocates resources to a specific area in Ireland. There are some capital investment projects within the draft NIP that were considered likely to have a significant effect on European sites.

In the absence of further information or the integration of mitigation measures, it is considered at AA Screening stage that some of the capital investment projects may have the potential for significant effects on European sites.

Therefore, it is considered that the precautionary principle must be applied and that an AA of the NIP is required. As indicated in Table 5.2, some 11 projects were considered to have the potential to give rise to likely significant effects on European sites and have therefore been taken forward for further assessment in the NIR.

Table 5.2: Outcome of Stage 1 AA Screening

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| <p><u>Capacity Upgrade to existing 5501 AGI</u> The driver of this project is security of supply. A capacity upgrade is required at the existing 5501 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 4kscmh to 5.2kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>New CNG Station at NIP19CNCNG1</u> The driver of this project is to facilitate the installation of a new CNG station at Maghera, Co. Cavan. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.562kscmh. The name of the CNG station NIP19CNCNG1 will change once Gas Networks Ireland complete the design of this CNG station.</p> | |
| AA Determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |

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| <p><u>Capacity Upgrade to existing 3607 AGI</u></p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 3607 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 13.5kscmh to 16.1kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>Capacity Upgrade to existing 5301 AGI</u></p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 5301 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 2kscmh to 2.2kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>New CNG Station at NIP19LSCNG1</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Portlaoise, Co. Laois. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19LSCNG1 will change once GNI complete the design of this CNG station.</p> | |
| AA determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>New CNG Station at NIP19MHCNG1</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Gormanston, Co. Meath. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19MHCNG1 will change once GNI complete the design of this CNG station.</p> | |
| AA determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> |

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| | <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>Capacity Upgrade to existing 7403 AGI</u></p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 7403 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 16.8kscmh to 18.7kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>Capacity Upgrade to existing 6403 AGI</u></p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 6403 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 16.44kscmh to 17.8kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>Capacity Upgrade to existing 6103 AGI</u></p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 6103 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 19kscmh to 24kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>New CNG Station at NIP19KECNG1</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Monasterevin, Co. Kildare. The new CNG station is expected to connect to the existing low-pressure distribution gas</p> | |

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| network. The CNG station is expected to have a capacity of 0.307kscmh. The name of the CNG station NIP19KECNG1 will change once GNI complete the design of this CNG station. | |
| AA Determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p>New CNG Station at NIP19MHCNG2</p> <p>The driver of this project is to facilitate the installation of a new CNG station at Trim, Co. Meath. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.307kscmh. The name of the CNG station NIP19MHCNG2 will change once GNI complete the design of this CNG station.</p> | |
| AA Determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any Natura 2000 sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any Natura 2000 sites. As this is a new development, there is potential for negative effects on any nearby Natura 2000 sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p>Capacity Upgrade to existing 1303 AGI</p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing 1303 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 270kscmh to 393kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p>Capacity Upgrade to existing A108 AGI</p> <p>The driver of this project is security of supply. A capacity upgrade is required at the existing A108 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 6.5kscmh to 7.3kscmh</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> |

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| | No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project. |
| <u>Station Bypass Project at 3603 AGI</u> The driver of this project is security of supply. 3603 AGI has been identified as being a critical installation on the gas transportation system and is supplied by the offshore pipelines (IC1 and IC2) that supply gas from Scotland to the Republic of Ireland. Therefore, the consequence of 3603 AGI being unavailable has the potential to significantly impact gas flow in Ireland. A bypass pipeline around 3603 AGI is required to reduce the importance of this AGI to the network and improve the resilience of the network as a whole. | |
| AA determination | Planning permission has been sought for this project, and the appropriate environmental assessments carried out. Refer to the findings of the same. |
| <u>New 85-70Bar AGI Station 8003 AGI</u> The driver of this project is security of supply. Following the anticipated cessation of Celtic Sea operations and the supplies from the Inch Entry Point, Gas Networks Ireland have initiated a project that will uprate a section of the ring main to 85 barg. A new AGI with a Pressure Reduction Skid is required in order to reinforce the network in the South of Ireland. This project involves installing a new AGI with a Pressure Reduction Skid with a capacity of 1300ksmch. | |
| AA determination | Planning permission has been sought for this project, and the appropriate environmental assessments carried out. Refer to the findings of the same. |
| <u>New 70 -4 bar AGI Station NIP19DAGI1 AGI</u> The driver of this project is security of supply. A new AGI is required in order to accommodate the projected future growth in demand in the local network. This project involves installing a new AGI with a capacity of 20 kscmh in the area. The name of this AGI NIP19DAGI1 will change once GNI complete the design of this AGI. | |
| AA determination | The proposed project is not directly connected with, or necessary for the conservation management of any European sites. The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment. |
| <u>Capacity Upgrade to existing 1302 AGI</u> The driver of this project is security of supply. A capacity upgrade is required at the existing 1302 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 18.1kscmh to 34.6kscmh | |
| AA determination | The proposed works are not directly connected with, or necessary to the conservation management of any European sites. For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater. No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project. |
| <u>Capacity Upgrade to existing 7203 AGI</u> The driver of this project is security of supply. A capacity upgrade is required at the existing 7203 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 20kscmh to 22.7kscmh | |

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| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
| <p><u>New CNG Station at NIP19DCNG1</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Clonsaugh Road, Co. Dublin. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19DCNG1 will change once GNI complete the design of this CNG station</p> | |
| AA determination | <p>Planning permission has been sought for this project, and the appropriate environmental assessments carried out. Refer to the findings of the same.</p> |
| <p><u>New CNG Station at NIP19DCNG2</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Cappagh, Co. Dublin.</p> <p>The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19DCNG2 will change once GNI complete the design of this CNG station</p> | |
| AA determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>New CNG Station at NIP19DCNG3</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at Ballymount, Co. Dublin. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19DCNG3 will change once GNI complete the design of this CNG station</p> | |
| AA determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>New CNG Station at NIP19DCNG4</u></p> <p>The driver of this project is to facilitate the installation of a new CNG station at St Margret's, Co. Dublin. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.307kscmh. The name of the CNG station NIP19DCNG4 will change once GNI complete the design of this CNG station.</p> | |
| AA Determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> |

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| | <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>New Renewable Gas Injection Facility at 0701 AGI</u> The driver of this project is to facilitate the installation of a new Centralised Gas Injection (CGI) Facility at 0701 AGI in order to facilitate the supply of Renewable Gas to the network. The new facility is expected to connect to the existing high-pressure 70Barg transmission gas network at the existing 0701 AGI. The Renewable Gas Injection Facility is expected to have a capacity of 20kscmh.</p> | |
| AA determination | <p>Planning permission has been sought for this project, and the appropriate environmental assessments carried out. Refer to the findings of the same.</p> |
| <p><u>New Pressure Reduction Skid at existing 0705 AGI</u> The driver of this project is security of supply. Following the anticipated cessation of Celtic Sea operations and the supplies from the Inch Entry Point, GNI have initiated a project that will uprate a section of the ring main to 85 barg. A new Pressure Reduction Skid is required at the existing 0705 AGI in order to reinforce the network in the South of Ireland. This project involves installing a new Pressure Reduction Skid with a capacity of 350kscmh at the existing AGI.</p> | |
| AA determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>The construction works involved in this project have not been described in detail and although the site is already developed, there is potential for negative impacts on nearby European Sites.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>New CNG Station at NIP19LKCNG1</u> The driver of this project is to facilitate the installation of a new CNG station at Ballysimon Road. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19LKCNG1 will change once GNI complete the design of this CNG station.</p> | |
| AA Determination | <p>Planning permission has been sought for this project, and the appropriate environmental assessments carried out. Refer to the findings of the same.</p> |
| <p><u>New CNG Station at NIP19TNCNG1</u> The driver of this project is to facilitate the installation of a new CNG station at Birdhill/Castletroy. The new CNG station is expected to connect to the existing low-pressure distribution gas network. The CNG station is expected to have a capacity of 0.56kscmh. The name of the CNG station NIP19TNCNG1 will change once GNI complete the design of this CNG station</p> | |
| AA Determination | <p>The proposed project is not directly connected with, or necessary for the conservation management of any European sites.</p> <p>The exact location of the site has not been decided and therefore it is not possible to rule out a connection or link with any European sites. As this is a new development, there is potential for negative effects on any nearby European sites and their SACs.</p> <p>Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will be assessed further at a Stage 2 Appropriate Assessment.</p> |
| <p><u>Capacity Upgrade to existing 0605 AGI</u> The driver of this project is security of supply. A capacity upgrade is required at the existing 0605 AGI station in order to accommodate the projected future growth in demand in the local network. This project involves increasing the capacity of the existing Pressure Reduction Skid from 2kscmh to 2.7kscmh</p> | |

| | |
|---------------------|---|
| AA Determination | <p>The proposed works are not directly connected with, or necessary to the conservation management of any European sites.</p> <p>For the purposes of this assessment, it is assumed that the upgrade works will take place within the development footprint of the existing AGI. Thus, this proposed project involves limited development at an already established and developed AGI site. Construction work is not anticipated to be intensive, and any proposed excavations are likely to be shallow and are therefore not expected to give rise to potential negative effects on groundwater.</p> <p>No likely significant effects on European sites are therefore predicted, as a result of the implementation of the proposed capital investment project.</p> |
|---------------------|---|

Of the 27 projects listed above 11 have been screened in due to a lack of available detail and exact locations. These are highlighted in pink throughout the table. There is potential for a number of impacts as a result of this NIP such as:

- Habitat Loss, degradation or fragmentation
- Disturbance and displacement

These are assessed further in Section 6 of this report.

6 Stage 2 AA- Natura Impact Assessment

6.1 Introduction

As discussed previously, in the absence of further information or the integration of mitigation measures, it was considered at AA Screening stage that 11 capital investment projects may have the potential for significant effects on European sites. These projects have therefore been brought forward for further investigation at AA stage

These projects include:

1. New CNG Station at NIP19CNCNG1
2. New CNG Station at NIP19LSCNG1
3. New CNG Station at NIP19MHCNG1
4. New CNG Station at NIP19KECNG1
5. New CNG Station at NIP19MHCNG2
6. New 70 -4 bar AGI Station NIP19DAGI1 AGI
7. New CNG Station at NIP19DCNG2
8. New CNG Station at NIP19DCNG3
9. New CNG Station at NIP19DCNG4
10. New Pressure Reduction Skid at existing 0705 AGI
11. New CNG Station at NIP19TNCNG1

The Stage 2 assessment involves a further high-level examination of whether these 11 projects are likely to have adverse effects on the integrity of European sites with regard to conservation objectives. Mitigation measures are set out to ensure that there will be no implications for the conservation objectives of European sites and that there will be no adverse effects on the integrity of European sites from the draft NIP.

This stage of the AA process consists of three main steps, namely:

- Impact Prediction, where the likely impacts of the plan are examined. These include direct/indirect, short/long term, construction/operational/decommissioning, isolated, interactive and cumulative effects;
- Assessment of Effects, where the effects the plan are assessed as to whether they have any adverse effects on the integrity of European Sites as defined by conservation objectives; and
- Mitigation Measures. This is where mitigation measures are identified against the adverse effects that the plan is likely to cause.

A “source-pathway-receptor” approach has been applied for this assessment. The source relates to the implementation of the proposed capital investment projects outlined in the draft NIP which have the potential to adversely impact European Sites. The pathways relate to how the proposed capital investment projects can impact European Sites, e.g. habitat loss/ fragmentation, disturbance to species, impacts to water quality etc. The receptor is the European Network, including those transboundary sites for which there is a pathway of connectivity as a result of the implementation of the draft NIP.

As previously outlined, the specific locations of the proposed capital investment projects have not yet been determined, nor has the exact size or scale of each of the proposed projects. As such, the general locations assigned to each of the capital investment projects (e.g. Portlaoise, Monasterevin etc.) have been considered in this assessment.

The proposed capital investment projects will however be subject to AA at project level, where required, once the design details of the project have been determined- i.e. site, land-take, size, scale etc. At the project level the assessment would follow the same steps but would be refined based on the detailed project information which is not available at this stage.

6.2 Zone of Influence of the proposed Capital Investment Projects

6.2.1 Zone of Influence

The zone of influence (ZoI) comprises the area within which the proposed development may potentially affect the conservation objectives or qualifying interests (QI) of a European site. There is no recommended ZoI, and guidance from the National Parks and Wildlife Service (NPWS) recommends that the distance should be evaluated on a case-by-case basis and that the appropriate assessment process should include the following European sites:

- Any European sites within or adjacent to the plan or project area.
- Any European sites within the likely zone of impact of the plan or project. A distance of 15km is currently recommended in the case of plans, and derives from UK guidance (Scott Wilson et al., 2006) but may extend beyond that to include an entire water catchment and/or ex-situ mobile QI/SCI species. For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects.
- European sites that are more than 15km from the plan or project area depending on the likely impacts of the plan or project, and the sensitivities of the ecological receptors, bearing in mind the precautionary principle.

European sites (also referred to as European sites) are only at risk from significant effects where a source-pathway-receptor link exists between a project/plan and a European site(s).

This can take the form of a direct effect (e.g. where the project/plan and/or associated construction works are located within the boundary of the European site(s)) or an indirect effect where impacts outside of the European site(s) affect ecological receptors within (e.g. impacts to water quality which can affect riparian habitats at a distance from the impact source). Consideration is therefore given to the source-pathway-receptor linkage and associated risks between the proposed development and European sites.

6.2.2 European Sites within the Zone of Influence

As outlined in Section 2, the NIP is a National Plan. Thus, all European sites in the Republic of Ireland have been taken into consideration in the AA process.

However, for the purpose of this Stage 2 assessment, European sites within 15km of the indicative locations of the 11 No. proposed capital investment projects taken forward for assessment have been considered, as illustrated in Table 6.1 (orange circle represents the 15km ZoI). Consideration has also been given to sites beyond 15km of the projects where pathways may extend beyond 15km (e.g. entire catchment) or to allow for presence of ex-situ mobile QI/SCI species.

As previously outlined, the specific sites of the proposed capital investment projects have not yet been determined. As such, the general locations assigned to each of the capital investment projects (e.g. Portlaoise, Monasterevin etc.) have been considered in this assessment.

Table 6.1 Zone of Influence of each proposed capital investment project. (Figures Source: OpenStreetMap, EPA GeoPortal. Not to scale)

Table 6.1: ZoI for New CNG Station at NIP19CNCNG1


| Proposed Capital Investment Project | Location | European sites within ZoI |
|---|--------------------|--|
| New CNG Station at NIP19CNCNG1 | Maghera, Co. Cavan | Kilconny Bog (Cloghbally) SAC River Boyne and River Black Water SPA River Boyne and River Blackwater SAC Girley (Drewstown Bog) SAC Lough Bane and Lough Glass SAC |
|  | | |

Table 6.2: ZoI for New CNG Station at NIP19LSCNG1

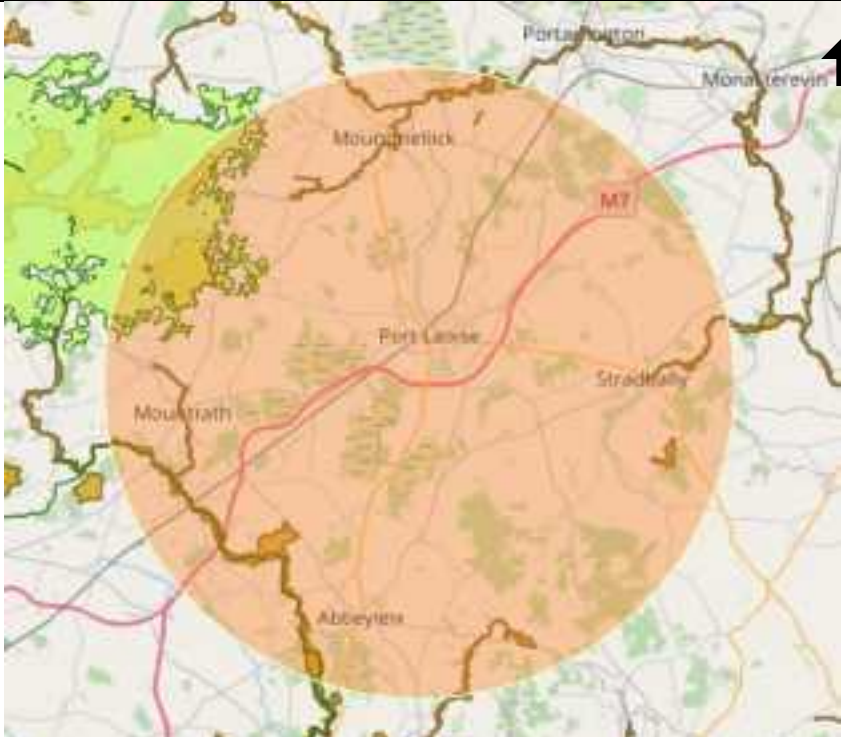
| Proposed Capital Investment Project | Location | European sites within ZoI |
|---|------------------------|--|
| New CNG Station at NIP19LSCNG1 | Portlaoise, Co. Laois. | Slieve Bloom Mountains SAC, Slieve Bloom Mountains SPA, River Barrow, River Nore SAC Ballyprior Grassland SAC Mountmellick SAC |
|  | | |

Table 6.3: ZoI for New CNG Station at NIP19MHCNG1

| Proposed Capital Investment Project | Location | European sites within ZoI |
|-------------------------------------|-----------------------|--|
| New CNG Station at NIP19MHCNG1 | Gormanston, Co. Meath | Boyne Estuary SPA Boyne Coast And Estuary SAC River Nanny Estuary and Shore SPA Skerries Islands SPA Rockabill SPA Rockabill to Dalkey Island SAC River Boyne And River Blackwater SAC River Boyne And River Blackwater SAC |

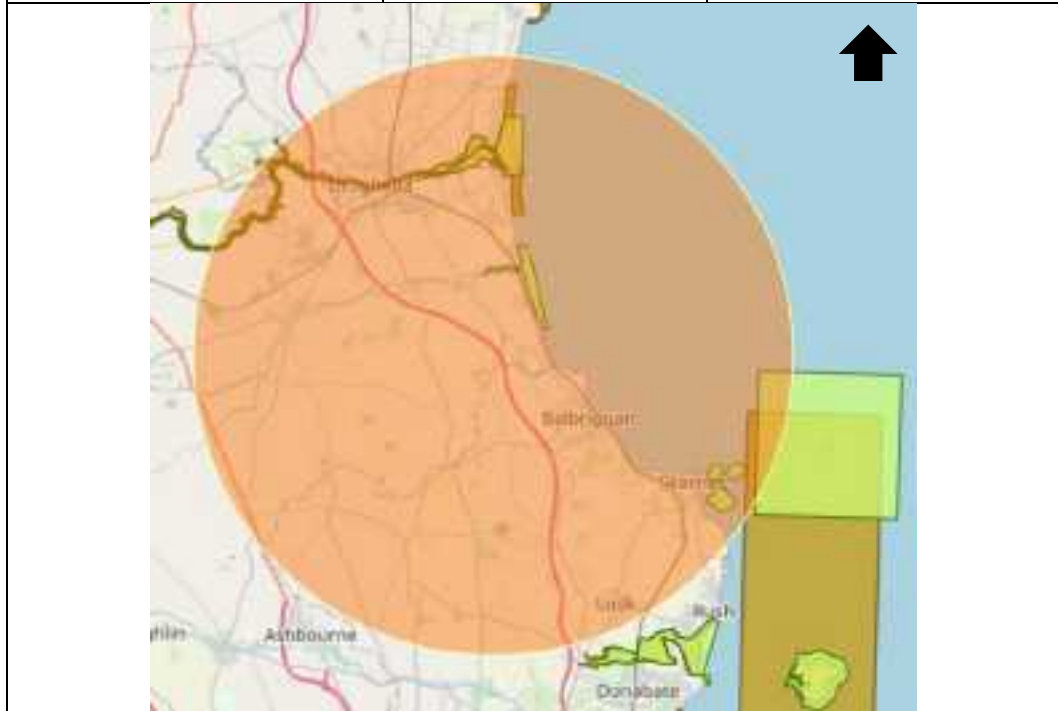


Table 6.4: ZoI for New CNG Station at NIP19KECNG1

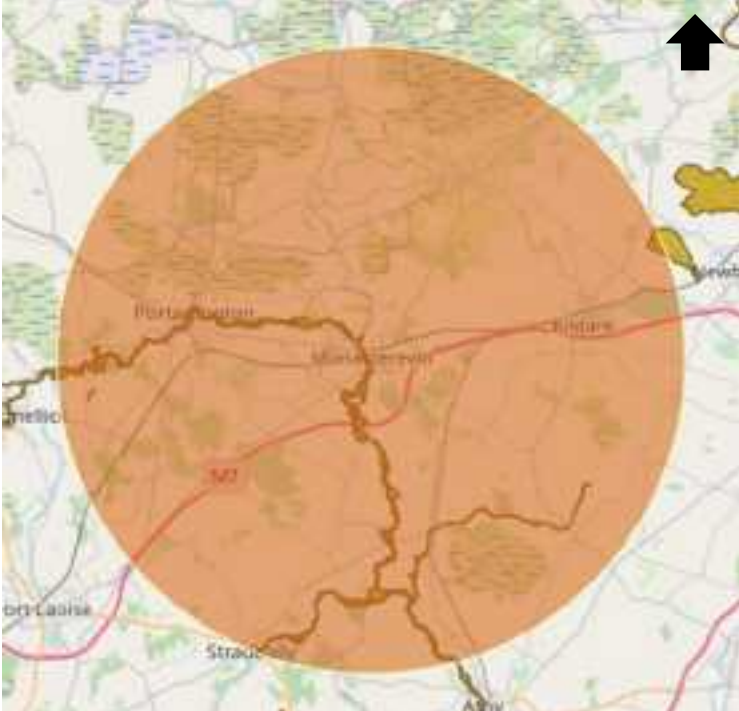
| Proposed Capital Investment Project | Location | European sites within ZoI |
|---|----------------------------|---|
| New CNG Station at NIP19KECNG1 | Monasterevin, Co. Kildare. | River Barrow And River Nore SAC Pollardstown Fen SAC |
|  | | |

Table 6.5: ZoI for New CNG Station at NIP19MHCNG2

| Proposed Capital Investment Project | Location | European sites within ZoI |
|-------------------------------------|------------------|--|
| New CNG Station at NIP19MHCNG2 | Trim, Co. Meath. | River Boyne and River Blackwater SPA River Boyne and River Blackwater SAC |

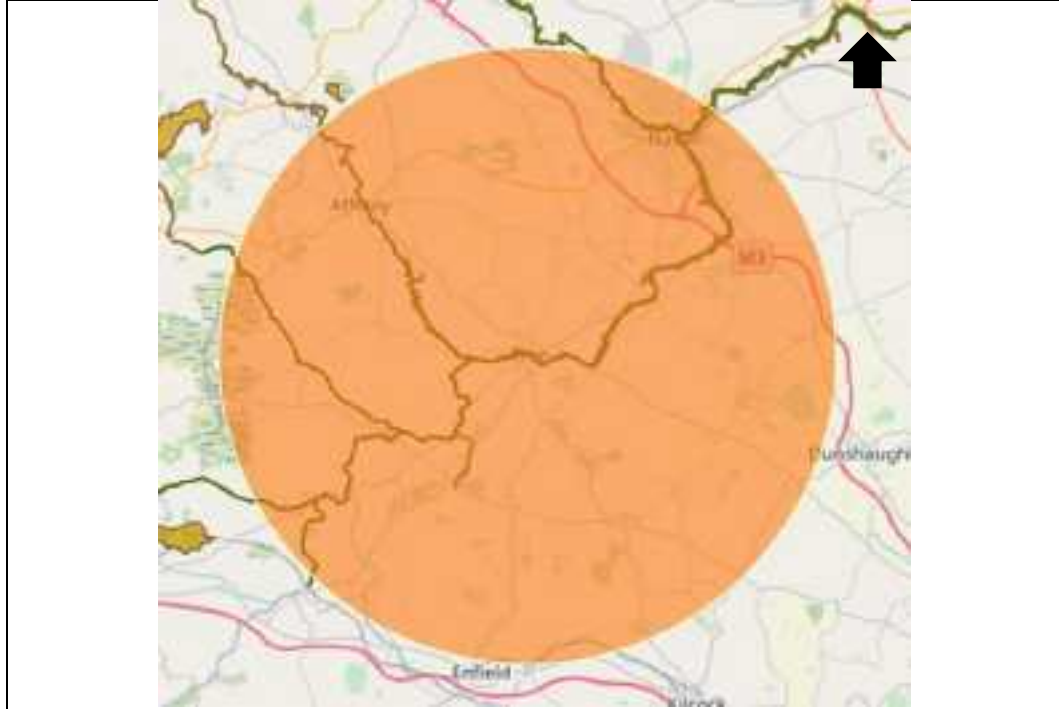


Table 6.7: ZoI for New CNG Station at NIP19DCNG2

| Proposed Capital Investment Project | Location | European sites within ZoI |
|-------------------------------------|----------------------|--|
| New CNG Station at NIP19DCNG2 | Cappagh Co., Dublin. | South Dublin Bay and River Tolka Estuary SPA South Dublin Bay SAC North Bull Island SPA North Dublin Bay SAC Baldoyle Bay SPA Baldoyle Bay SAC Malahide Estuary SPA Malahide Estuary SAC Rye Water Valley/Carton SAC Rogerstown Estuary SAC Rogerstown Estuary SPA |



Table 6.8: ZoI for New CNG Station at NIP19DCNG3

| Proposed Capital Investment Project | Location | European sites within ZoI |
|-------------------------------------|------------------------|---|
| New CNG Station at NIP19DCNG3 | Ballymount Co. Dublin. | Wicklow Mountains SAC Wicklow Mountains SPA Glenasmole Valley SAC Rye Water Valley/Carton SAC South Dublin Bay and River Tolka Estuary SPA South Dublin Bay SAC South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA North Dublin Bay SAC |

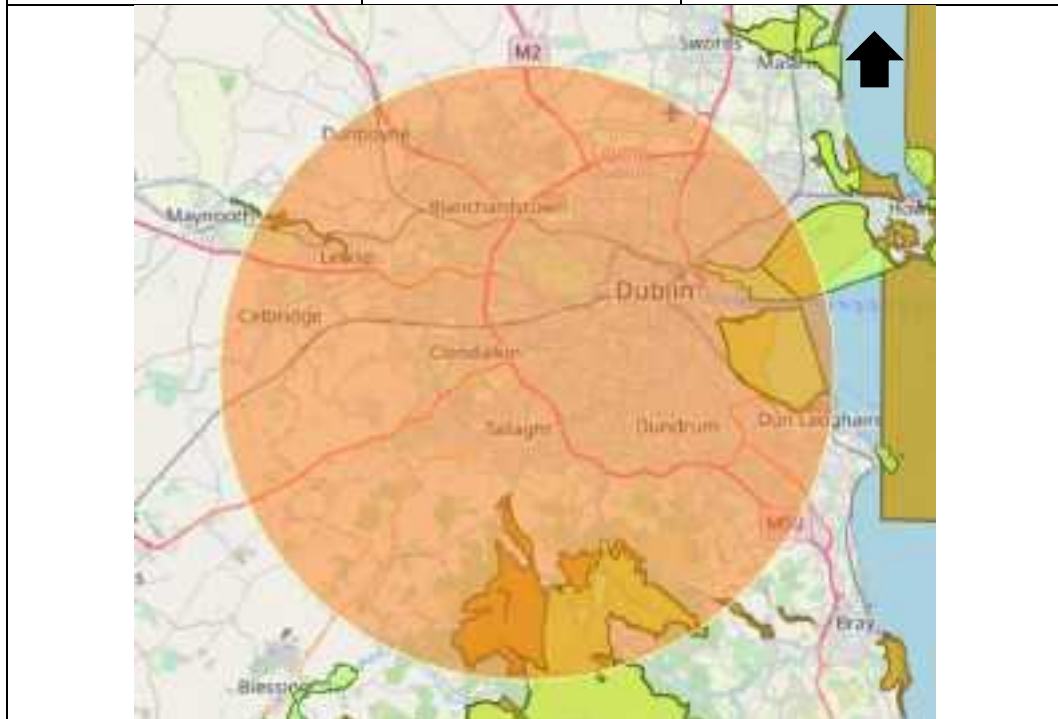


Table 6.9: ZoI for New CNG Station at NIP19DCNG4

| Proposed Capital Investment Project | Location | European sites within ZoI |
|-------------------------------------|---------------------------|--|
| New CNG Station at NIP19DCNG4 | St Margret’s, Co. Dublin. | South Dublin Bay and River Tolka Estuary SPA South Dublin Bay SAC North Bull Island SPA North Dublin Bay SAC Baldoyle Bay SPA Baldoyle Bay SAC Malahide Estuary SPA Malahide Estuary SAC Rye Water Valley/Carton SAC Rogerstown Estuary SAC |



Table 6.10: ZoI for New Pressure Reduction Skid at existing 0705 AGI

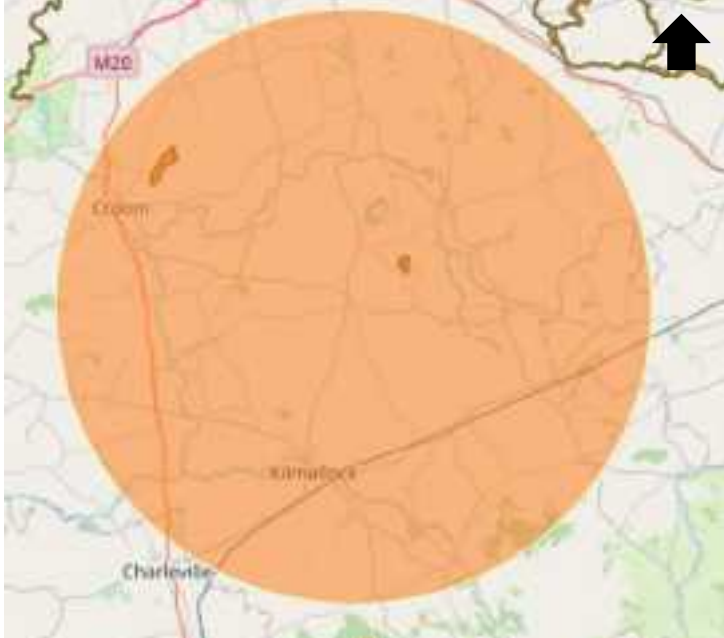
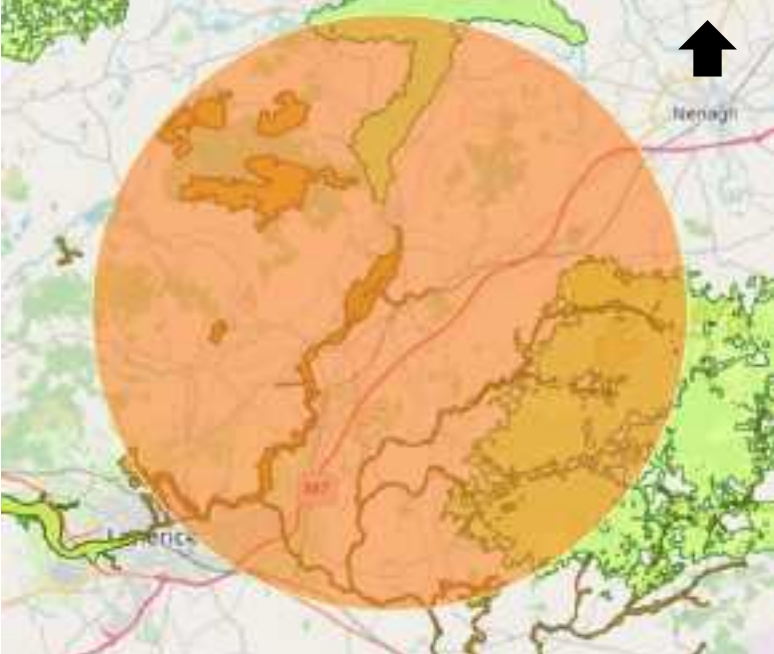
| Proposed Capital Investment Project | Location | European sites within ZoI |
|---|------------------------|-------------------------------|
| New Pressure Reduction Skid at existing 0705 AGI | Bruff, County Limerick | Tory Hill SAC Glen Bog SAC |
|  | | |

Table 6.11: ZoI for New CNG Station at NIP19TNCNG1

| Proposed Capital Investment Project | Location | European sites within ZoI |
|---|--------------------------|---|
| New CNG Station at NIP19TNCNG1 | Birdhill, Co. Tipperary. | Slievefelim to Silvermines Mountains SPA Lower River Shannon SAC Lough Derg (Shannon) SPA Slieve Bernagh Bog SAC Keeper Hill SAC Silvermines Mountains West SAC Glenomra Wood SAC |
|  | | |

6.2.3 Conservation Objectives

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of annexed habitats and annexed species (QIs/SCIs) of community interest for which an SAC or SPA has been designated. The Conservation Objectives (COs) for a European site are set out to ensure that the QIs/SCIs of that site are maintained or restored to a favourable conservation condition. Maintenance of favourable conservation condition of habitats and species at a site level in turn contributes to maintaining or restoring favourable conservation status of habitats and species at a national level and ultimately at the European network level. Detailed site synopses for each European site are also available from the NPWS website. In Ireland ‘generic’ COs have been prepared for all European sites, while ‘site specific’ COs have been prepared for a number of individual sites to take account of the specific QIs/SCIs of that site.

Both the generic and the site specific COs aim to define the requirements for favourable conservation condition for habitats and species at the site level.

Generic COs which have been developed by NPWS encompass the spirit of site specific COs in the context of maintaining and restoring favourable conservation condition as follows;

- For SACs: ‘To maintain or restore the favourable conservation condition of the Annex I habitats and/or Annex II species for which the SAC has been selected’.
- For SPAs: ‘To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA’.

Following from this, favourable conservation status (or condition, at a site level) of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the conservation status of its typical species is “favourable”.

The favourable conservation status (or condition, at a site level) of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats; and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long term basis.

A full list of the COs and QIs/SCIs that each European site is designated for, as well as the attributes and targets to maintain or restore the QIs/SCIs to a favourable conservation condition are available from the NPWS website.

6.3 An overview of potential impacts on European sites

This section provides a general overview of the types of potential effects that can occur when developing energy infrastructure projects, as outlined in the European Commission Guidance¹.

The type and scale of impact is very much dependent on the EU protected species or habitat types present in the site, their ecology, distribution and state of conservation. Hence the need to examine each plan or project individually on a case by case basis. The following is an overview of the most frequent types of impacts that can occur with regards energy infrastructure, as outlined in the European Commission Guidance.¹

6.3.1 Habitat loss, degradation or fragmentation

Energy transmission infrastructure projects may require the clearance of land and the removal of surface vegetation (often referred to as direct land-take). Through this process existing habitats may be altered, damaged, fragmented or destroyed. The scale of habitat loss and degradation depends on the size, location and design of the project and the sensitivity of the habitats affected.

It is important to note that, whilst the actual land take may seem limited, the indirect effects could be much more widespread, especially where developments interfere with hydrological regimes or geomorphological processes, and water or soil quality. Such indirect effects can cause severe habitat deterioration, fragmentation and loss, sometimes even at quite a distance from the actual project site.

The significance of loss also depends on the rarity and sensitivity of the habitats affected and/or of their importance as a feeding, breeding or hibernating place for species. Also, the potential role of some habitats as components of corridors or stepping stones important for dispersal and migration, as well as for more local movements between e.g. feeding and nesting sites, needs to be considered when assessing the significance of any habitat loss or degradation.

6.3.2 Disturbance and displacement:

Disturbance of species in their habitual breeding, feeding or resting sites, as well as along migration routes, can lead to displacement and exclusion, and hence loss of habitat use. The species may be displaced from areas within and around the project site due for instance to increased traffic, presence of people as well as noise, dust, pollution, artificial lighting or vibration caused during or after the construction works. The scale and degree of disturbance, and the sensitivity of the species affected, determines the significance of the impact, as does the availability and quality of other suitable habitats nearby that can accommodate the displaced animals. In the case of rare and endangered species even small or temporary disturbances can have serious repercussions for their long term survival in the region.

6.3.3 Collision and electrocution risk:

Birds, and possibly bats, may collide with various parts of electricity overhead powerlines and other above-ground electrical facilities. The level of collision risk depends very much on site location and on the species present, as well as on weather and visibility factors and the specific design of the powerlines themselves (especially in the case of electrocution). Species that are long-lived, have low reproductive rates and/or that are rare or are already in a vulnerable conservation state (such as eagles, vultures and storks) may be particularly at risk.

As for bats, there is unfortunately a general lack of studies on the potential risks and impacts of collision with overhead power lines, due to the difficulties in monitoring the death of small animals along such long linear infrastructures.

6.3.4 Barrier effects

In the case of electricity, large transmission, receiving and storage infrastructures may force species to bypass the area altogether, both during migrations and, more locally, during regular foraging activities. Whether or not this is a problem depends on a range of factors such as the size of the sub-station, the spacing and routing of electricity cables, the extent of displacement of species and their ability to compensate for increased energy expenditure as well as the degree of disruption caused to linkages between feeding, roosting and breeding sites.

New emerging evidences that animals could be scared away from power cables because these give off UV flashes invisible to humans were reported by several scientific teams.

6.4 Likely Significant Effects

The 11 No. proposed capital investment projects have been assessed against the potential effects outlined in the European Commission Guidance¹, and as summarised in Section 6.3. There is no potential for the proposed capital investment projects to give rise to collision and electrocution risk, or a barrier effects to QI species, as the proposed capital investment projects relate to grounded installations. As such, the proposed 11 No. capital investment projects have been assessed against the following potential effects:

- Habitat Loss, degradation or fragmentation
- Disturbance and displacement

Table 6.12 provides the outcome of this assessment. It is important to note that the assessment takes into account the implementation of the mitigation measures outlined in Section 7.

Table 6.12: AA Stage 2- Potential for Adverse Effects on the Integrity of European Sites and Species

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|--|--|
| New CNG Station at NIP19CNCNG1, Maghera Co. Cavan | | |
| River Boyne and River Blackwater SAC | <p>The River Boyne and River Blackwater SAC and SPA are not located within the area of Maghera, Co. Cavan; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation effects on any European sites. Indirect effects are considered below.</p> | <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace QI species from the nearby SAC/SPA (e.g. breeding/resting places or key foraging areas for birds). However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. With the implementation of the mitigation measures outlines in Section 7, no likely significant effects from disturbance are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified.</p> |
| River Boyne and River Blackwater SPA | <p>Lough Ramon, which is hydrologically linked to the River Boyne and River Blackwater SAC and SPA, is located in close proximity to the Maghera area. There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological or hydrogeological pathway- and subsequent potential for in-direct effects by means of habitat degradation. Impacts associated with construction in the vicinity to Lough Ramon, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SAC and SPA, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources.</p> <p>Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be</p> | <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace QI species from the nearby SAC/SPA (e.g. breeding/resting places or key foraging areas for birds). However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. With the implementation of the mitigation measures outlines in Section 7, no likely significant effects from disturbance are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|--|---|--|
| | no adverse effects on the integrity of the European sites either alone or in-combination with other plans or projects. | |
| Killyconny Bog (Cloghbally) SAC | <p>The Killyconny Bog SAC is not located within the area of Maghera, Co.Cavan; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 4km from the Maghera area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of Killyconny Bog SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of Killyconny Bog SAC include Active raised bogs, and Degraded raised bogs still capable of natural regeneration. The site is also located approximately 4km from the Maghera area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified.</p> |
| New CNG Station at NIP19LSCNG1, Portlaoise Co. Laoise | | |
| Slieve Bloom Mountains SAC, | <p>The Slieve Bloom Mountains SAC and SPA are not located within the area of Portlaoise, Co. Laois; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the European sites, which are located approximately 8km from the Portlaoise area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal, and in a highly developed urban area. As such, no adverse effects on the integrity of Slieve Bloom Mountains SAC and SPA are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace QI species from the nearby SAC/SPA (e.g. breeding/resting places or key foraging areas for birds). However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions.</p> <p>Further, the Portlaoise area, which is a highly developed and urban area is located approximately 8km from the Slieve Bloom Mountains SAC and SPA. With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Slieve Bloom Mountains SPA, | | |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|-------------------------------------|---|--|
| <p>River Barrow, River Nore SAC</p> | <p>The River Barrow and River Nore SAC is not located within the area of Portlaoise, Co. Laoise; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites.</p> <p>The Triogue River flows through the Portlaoise area and this watercourse is a direct tributary of this SAC. There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological pathway- and subsequent potential for in-direct effects by means of habitat degradation.</p> <p>Impacts associated with construction in the vicinity to the Triogue River in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SAC, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources.</p> <p>Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the River Barrow, River Nore SAC either alone or in-combination with other plans or projects..</p> | <p>Having regard to the Q.I species of the River Barrow, River Nore SAC, as well as the distance of the site (11km) from the Portlaoise area, no likely significant effects from disturbance and displacement of QI species are expected to occur as a result of the proposed new CNG station. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted. re predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified.</p> |
| <p>Ballyprior Grassland SAC</p> | <p>The Ballyprior Grassland SAC is not located within the area of Portlaoise, Co. Laoise; the site of the proposed new CNG station.</p> | <p>The Q.I of Ballyprior Grassland SAC Semi-natural dry grasslands and scrubland facies on calcareous substrates. The site is also located approximately 12km from the Portlaoise area.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|--|---|---|
| | <p>As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 12km from the Portlaoise area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of Ballyprior Grassland SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Mountmellick SAC | <p>The Mountmellick SAC is not located within the area of Portlaoise, Co. Laoise; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>There is no known indirect link; hydrological or hydrogeological to the SAC, which is located approximately 10km from the Portlaoise area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of Mountmellick SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I of the Mountmellick SAC is <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail. The site is also located approximately 10km from the Portlaoise area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| New CNG Station at NIP19MHCNG1, Gormanston, Co. Meath | | |
| Boyne Estuary SPA Boyne Coast And Estuary SAC | <p>The Boyne Estuary SPA and Boyne Coast and Estuary SAC are not located within the area of Gormanston, Co. Meath; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> | <p>The Q.I species of the SPA include: Oystercatcher, Golden Plover, Knot, Sanderling, Wetland and Waterbirds, Shelduck, Grey Plover, Lapwing, Sanderling, Black-tailed Godwit, Redshank, Turnstone, Little Tern.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>However, the Gormanston area is located on the coast of the Irish Sea, approximately 7km south of the Boyne Estuary SPA and Boyne Coast and Estuary SAC. There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological pathway- and subsequent potential for in-direct effects by means of habitat degradation. Impacts associated with construction in the Gormanston area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SPA, if unmitigated. However it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works.</p> <p>Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the European sites either alone or in-combination with other plans or projects.</p> | <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace these QI species from the nearby SPA.</p> <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. Further, the Gormanston area is located approximately 7km from the European sites. With the implementation of the mitigation measures outlines in Section 7, no adverse are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified.</p> |
| <p>River Nanny Estuary and Shore SPA</p> | <p>The River Nanny Estuary and Shore SPA is not located within the area of Gormanston, Co. Meath; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>The Gormanston area is however located in immediate proximity to the River Nanny Estuary and Shore SPA</p> | <p>The Q.I species of the SPA include: Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling, Herring Gull and Wetland and Waterbirds. There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace these QI species from the nearby SPA.</p> <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological or hydrogeological pathway- and subsequent potential for in-direct effects by means of habitat degradation. Impacts associated with construction in the Gormanston area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SPA, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works.</p> <p>Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the River Nanny Estuary and Shore SPA either alone or in-combination with other plans or projects.</p> | <p>With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Skerries Islands SPA | <p>The Skerries Islands SPA is not located within the area of Gormanston, Co. Meath; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>However, the Gormanston area is located on the coast of the Irish Sea, approximately 11km north of the Skerries Islands SPA.</p> | <p>The Q.I species of the SPA include: Cormorant, Shag, Light-bellied Brent Goose, Purple Sandpiper, Turnstone, Herring Gull. There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace these QI species from the nearby SPA.</p> <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. Further, the Gormanston area is located approximately 11km from the SPA.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological pathway- and subsequent potential for in-direct effects by means of habitat degradation. Impacts associated with construction in the Gormanston area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SPA, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works.</p> <p>Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the Skerries Islands SPA either alone or in-combination with other plans or projects.</p> | <p>With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>Rockabill SPA</p> <p>Rockabill to Dalkey Island SAC</p> | <p>The Rockabill to Dalkey Island SAC and the Rockabill SPA are not located within the area of Gormanston, Co. Meath; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>However, the Gormanston area is located on the coast of the Irish Sea, approximately 11km north of the Skerries Islands SPA.</p> | <p>The Q.I species of Rockabill SPA include: Purple Sandpiper, Roseate Tern, Common Tern, Arctic Tern. There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially displace these QI species from the nearby SPA.</p> <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. Further, the Gormanston area is located approximately 12km from the SPA.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>There is therefore potential for a source-pathway-receptor link to these European sites, by means of a hydrological pathway- and subsequent potential for in-direct effects by means of habitat degradation. The Q.I species of the Rockabill to Dalkey Island SAC includes the Harbour Porpoise, which is a mobile species and therefore has the potential to occur in waters near to the Gormanston area.</p> <p>Impacts associated with construction in the Gormanston area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI species of the SAC, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the Rockabill SPA and Rockbill to Dalkey Islands SAC either alone or in-combination with other plans and projects. .</p> | <p>With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>River Boyne And River Blackwater SAC</p> | <p>The River Boyne and River Blackwater SAC is not located within the area of Gormanstown, Co. Meath; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> | <p>The Q.I's of Killyconny Bog SAC include Active raised bogs, and Degraded raised bogs still capable of natural regeneration. The site is also located approximately 4km from the Maghera area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. no adverse effects are predicted on the conservation objectives of European sites, and</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 9km from the Gormanston area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal.</p> <p>As such, no adverse effects on the integrity of River Boyne And River Blackwater SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>New CNG Station at NIP19KECNG1, Monasterevin, Co. Kildare</p> | | |
| <p>River Barrow And River Nore SAC</p> | <p>The River Barrow and River Nore SAC is located within the area of Monasterevin, Co.Kildate; the site of the proposed new CNG station. As such, there is potential for direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>The Q.I habitats of the River Barrow And River Nore SAC include Estuaries, Mudflats and sandflats not covered by seawater at low tide, Reefs, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows, Mediterranean salt meadows, Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation, European dry heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Petrifying springs with tufa formation, Old sessile oak woods with Ilex and Blechnum in the British Isles, Alluvial forests with Alnus glutinosa and Fraxinus excelsior.</p> <p>Impacts associated with construction in the Monasterevin area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI habitats of the SAC, if unmitigated.</p> | <p>The Q.I species of the River Barrow and River Nore SAC include: Vertigo moulinsiana (Desmoulin's Whorl Snail), Margaritifera margaritifera (Freshwater Pearl Mussel), Austroptamobius pallipes (White-clawed Crayfish), Petromyzon marinus (Sea Lamprey), Lampetra planeri (Brook Lamprey), Lampetra fluviatilis (River Lamprey), Alosa fallax fallax (Twaite Shad), Salmo salar (Salmon), Lutra lutra (Otter), Trichomanes speciosum, Margaritifera durrovensis</p> <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially disturb or displace these species from the nearby. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---------------------------|---|--|
| | <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works.</p> <p>Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the River Barrow and River Nore SAC either alone or in-combination with other plans and projects.</p> | |
| Pollardstown Fen SAC | <p>Pollardstown Fen SAC is not located within the area of Monasterevin, Co. Kildare; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 14km from the Monasterevin area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of Pollardstown Fen SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of Pollardstown Fen SAC include the Whorl Snail. The site is also located approximately 14km from the Monasterevin area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement as a result of the new CNG station. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|---|---|
| New CNG Station at NIP19MHCNG2, Trim, Co. Meath | | |
| River Boyne and River Blackwater SPA | <p>The River Boyne and River Blackwater SAC and SPA are located within the area of Trim, Co. Meath; the site of the proposed new CNG station. As such, there is potential for direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> | <p>The Q.I species of the River Boyne and River Blackwater SAC include: River Lamprey, Salmon and Otter, and the Q.I specie of the SPA is the Kingfisher.</p> |
| River Boyne and River Blackwater SAC | <p>The Q.I habitats of the River Barrow And River Nore SAC include Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>.</p> <p>Impacts associated with construction in the Trim area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI habitats of the SAC, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the River Boyne and River Blackwater SAC either alone or in-combination with other plans or projects.</p> | <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially disturb or displace these species from the nearby SAC and SPA. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| New 70 -4 bar AGI Station NIP19DAGI1 AGI, Porterstown, Dublin | | |
| Rye Water Valley/Carton SAC | <p>Pollardstown Fen SAC is not located within the area of Porterstown, Dublin; the site of the proposed new AGI station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>While the Porterstown area is located in the immediate vicinity to the Royal Canal, which joins the River Rye (and subsequently the Rye Water Valley/Carton SAC), this occurs some 6km upstream of Porterstown. Contaminants, should they enter the Canal, would assimilate downstream and not reach the SAC. There is therefore no known link; hydrological or hydrogeological to the SAC. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of the Rye Water Valley/Carton SAC are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of the Rye Water Valley/Carton SAC include the Whorl Snail. The site is also located approximately 6km from the Porterstown area, with no known hydrological link to the SAC. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement as a result of the new AGI station. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| South Dublin Bay and River Tolka Estuary SPA | <p>South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC are not located within the area of Porterstown, Dublin; the site of the proposed new AGI station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>The Porterstown Area is however, located in immediate vicinity of the Royal Canal. An in-direct hydrological link between the area of the proposed new AGI facility and the European sites is therefore identified, via the River Liffey, which the Royal Canal flows to before entering Dublin Bay.</p> | <p>The South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC are located some 13km from the Porterstown area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new AGI station.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| South Dublin Bay SAC | | |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---------------------------|---|---|
| | <p>Impacts associated with construction in the Porterstown area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI habitats and species of the SAC, if unmitigated.</p> <p>However, it should be noted that the European sites are located some 13km from the Porterstown area and the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with AGI stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources.</p> <p>Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC either alone or in-combination with other projects.</p> | |
| Glenasmole Valley SAC | <p>Glenasmole Valley SAC is not located within the area of Porterstown, Dublin; the site of the proposed new AGI station. As such, there will be no direct habitat loss, degradation or fragmentation of any European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 13km from the Porterstown area.</p> <p>Further, the scale, nature and land-take associated with the proposed development are expected to be minimal.</p> | <p>The Glenasmole Valley SAC is located some 13km from the Porterstown area, and the intervening land-use is highly developed and urban in nature. The Q.I's of the SAC also relate to habitats only. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new AGI station.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|--|---|
| | As such, no adverse effects on the integrity of Glenasmole Valley SAC are predicted, by means of habitat loss, degradation or fragmentation. | |
| New CNG Station at NIP19DCNG2, Cappagh, Dublin | | |
| South Dublin Bay and River Tolka Estuary SPA | None of these European sites are not located within the area of Cappagh, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below. | The European sites in Dublin Bay are located some some 14km from the Cappagh area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station. |
| North Bull Island SPA | | |
| North Dublin Bay SAC | | |
| South Dublin Bay SAC | There is no known in-direct link; hydrological or hydrogeological to any of the SACs or SPAs, which is located approximately 14km from the Dublin Bay area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation. | No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted. |
| Baldoye Bay SPA | The Baldoye Bay SPA and SAC are not located within the area of Cappagh, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below. | The European sites in Baldoye Bay are located some some 13km from the Cappagh area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station. |
| Baldoye Bay SAC | | |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|---|--|
| <p>Malahide Estuary SPA</p> <p>Malahide Estuary SAC</p> | <p>The Malahide Estuary SPA and SAC are not located within the area of Cappagh, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs or SPAs, which is located approximately 13km from the Malahide Estuary SAC and SPA. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The European sites in Malahide Estuary are located some 13km from the Cappagh area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. On the SAC are therefore predicted.</p> |
| <p>Rye Water Valley/Carlton SAC</p> | <p>The Rye Water Valley/Carlton SAC are not located within the area of Cappagh, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs or SPAs, which is located approximately 13km from the Rye Water Valley/Carlton SAC. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Rye Water Valley/Carlton SAC is located some 11km from the Cappagh area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| New CNG Station at NIP19DCNG3, Ballymount, Dublin | | |
| <p>Wicklow Mountains SAC</p> <p>Wicklow Mountains SPA</p> | <p>The Wicklow Mountains SAC and SPA are not located within the area of Ballymount, Dublin; the site of the proposed new CNG station.</p> | <p>The Q.I species of the Wicklow Mountains SAC and SPA include the Merlin, Peregrine and Otter.</p> <p>The Wicklow Mountains SPA and SAC is located some 7km from the Ballymount area, and the intervening land-use is highly</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
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| | <p>As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs or SPA, which are located approximately 8km from the Wicklow Mountains SAC and SPA. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Glenasmole Valley SAC | <p>The Glenasmole Valley SAC is not located within the area of Ballymount, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 7km from the Ballymount area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Glenasmole Valley SAC is located some 7km from the Ballymount area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Rye Water Valley/Carton SAC | <p>The Rye Water Valley/Carton SAC is not located within the area of Ballymount, Dublin; the site of the proposed new CNG station.</p> <p>As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SAC, which is located approximately 10km from the Ballymount area, and its associated European</p> | <p>The Rye Water Valley/Carton SAC is located some 10km from the Ballymount area, and the intervening land-use is highly developed and urban in nature.</p> <p>As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|---|---|
| | sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation. | the European sites are identified. on the SAC are therefore predicted. |
| South Dublin Bay SAC South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA | None of these European sites are not located within the area of Ballymount, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below. | The European sites in Dublin Bay are located some 11km from the Ballymount area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station. |
| North Dublin Bay SAC | There is no known in-direct link; hydrological or hydrogeological to any of the SACs or SPAs in Dublin Bay, which are located approximately 11km from the Ballymount area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation. | No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. On the SAC are therefore predicted. |
| New CNG Station at NIP19DCNG4, St. Margrets, Dublin | | |
| South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA North Dublin Bay SAC | None of these European sites are not located within the area of St.Margrets, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below. | The European sites in Dublin Bay are located some some 13km from the St. Margrets area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station. |
| South Dublin Bay SAC | There is no known in-direct link; hydrological or hydrogeological to any of the SACs or SPAs, which are located approximately 13km from the St Margrets area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of | No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted. |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|--|---|---|
| | European sites are predicted, by means of habitat loss, degradation or fragmentation. | |
| Baldoye Bay SPA Baldoye Bay SAC | <p>The Baldoye Bay SPA and SAC are not located within the area of St. Margrets, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs or SPAs, which is located approximately 11km from the St Margrets area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The European sites in Baldoye Bay are located some some 1km from the St. Margrets area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Malahide Estuary SPA Malahide Estuary SAC | <p>The Malahide Estuary SPA and SAC are not located within the area of St.Margrets, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites.</p> <p>The St Margrets area is however, located in immediate vicinity of the Ward River.</p> <p>An in-direct hydrological link between the area of the proposed new CNG facility and the Malahide Estuary SPA and SAC is therefore identified as the Ward River flows into the estuary approximately 7km downstream. Impacts associated with construction in the St. Margrets area, in particular sediment pollution from construction run-off would have a potential adverse effect on the QI habitats and species of the SAC and SPA, if unmitigated.</p> | <p>The Q.I species of the Malahide Estuary SPA include: Great Crested Grebe, Light-bellied Brent Goose, Shelduck, Pintail, Goldeneye, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Redshank, Wetland and Waterbirds.</p> <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially disturb or displace these species from the nearby. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. Further, the European sites are located some 7km from the St.Margrets area and the intervening land is highly developed and urban. With the implementation of the mitigation measures outlines in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|--|---|
| | <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources.</p> <p>Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the Malahide Estuary SPA and SAC either alone or in-combination with other projects.</p> | <p>effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>Rogerstown Estuary SAC</p> <p>Rogerstown Estuary SPA</p> | <p>The Rogerstwon Estuary SAC and SPA are not located within the area of St.Margrets, Dublin; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs or SPA, which are located approximately 9km from the St Margrets area, and its associated European sites.</p> <p>Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The European sites are located some 13km from the St. Margrets area, and the intervening land-use is highly developed and urban in nature. As such, no disturbance or displacement of Q.I species of the European sites are likely to occur as a result of the proposed new CNG station.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>New Pressure Reduction Skid at existing 0705 AGI, Bruff, Co. Limerick</p> | | |
| <p>Tory Hill SAC</p> | <p>The Tory Hill SAC is not located within the area of Bruff, Co. Limerick; the site of the proposed new pressure reduction skid. As such, there will be no direct habitat loss, degradation or</p> | <p>The Q.I's of Glen Bog SAC relate to habitat only, and include Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>. The site is also located approximately 3km from the Bruff area. There</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|--|--|
| | <p>fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs, which is located approximately 3km from the Bruff area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects on the SAC are therefore predicted.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| Glen Bog SAC | <p>The Glen Bog SAC is not located within the area of Bruff, Co. Limerick; the site of the proposed new pressure reduction skid station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs, which is located approximately 12km from the Bruff area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal.</p> <p>As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of Glen Bog SAC relate to habitat only, and include Semi-natural dry grasslands and scrubland facies on calcareous substrates, Calcareous fens with Cladium mariscus and species of the Caricion davallianae, and Alkaline fens. The site is also located approximately 12km from the Bruff area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| New CNG Station at NIP19TNCNG1, Birdhill, County Tipperary | | |
| Slievefelim to Silvermines Mountains SPA | <p>The Slievefelim to Silvermines Mountains SPA and Silvermines Mountains West SAC are not located within the area of Birdhill, County Tipperary; the site of the proposed new CNG station.</p> | <p>The Q.I of the Slievefelim to Silvermines Mountains SPA is the Hen Harrier, and the Q.I species of the Silvermines Mountains West SAC relate to habitat only.</p> <p>The site is located approximately 10km from the Birdhill area. There are therefore no QI species associated with the SAC which</p> |
| Silvermines Mountains West SAC | | |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---|--|---|
| | <p>As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the Natura 2000 sites, which are located approximately 10km from the Birdhill area. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of Natura 2000 sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the Natura 2000 sites are identified. on the SAC are therefore predicted.</p> |
| <p>Lower River Shannon SAC Lough Derg (Shannon) SPA</p> | <p>The Lower River Shannon SAC is located within the area of Birdhill, Co. Tipperary; the site of the proposed new CNG station. As such, there is potential for direct habitat loss, degradation or fragmentation of any Natura 2000 sites. The Lough Derg (Shannon) SPA is also located approximately 0.5km to the north of the Birdhill area. Indirect effects are considered below.</p> <p>The Q.I habitats of the Lower River Shannon SAC include: Sandbanks which are slightly covered by sea water all the time, Estuaries, Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons, Large shallow inlets and bays, Reefs, Perennial vegetation of stony banks, Vegetated sea cliffs of the Atlantic and Baltic coasts, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows, Mediterranean salt meadows, Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachion vegetation, Molinia meadows on calcareous, peaty or clayey-silt-laden soils, Alluvial forests with Alnus glutinosa and Fraxinus excelsior</p> <p>Impacts associated with construction in the Birdhill area, in particular sediment pollution from construction run-off would</p> | <p>The Q.I species of the Lower River Shannon SAC include: Freshwater Pearl Mussel, Sea Lamprey, Brook Lamprey, River Lamprey, Salmon, Common Bottlenose Dolphin, Otter.</p> <p>The Q.I species of the Lough Derg (Shannon SPA) include: Cormorant, Tufted Duck, Goldeneye, Common Tern and Wetland and Waterbirds.</p> <p>There is potential for the construction works associated with the proposed CNG station to result in levels of disturbance that could potentially disturb or displace these species from the nearby.</p> <p>However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works, and subsequent air and noise emissions. With the implementation of the mitigation measures outlined in Section 7, no adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the Natura 2000 sites are identified. on the SAC are therefore predicted.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|-------------------------------|--|---|
| | <p>have a potential adverse effect on the QI habitats of the SAC, if unmitigated. However, it should be noted that the nature, scale and land-take associated with the proposed development is expected to give rise to minimal construction works. Further, excavation works associated with CNG stations of this nature are considered only minimally invasive and are considered to pose little risk in terms of interacting with groundwater sources. Having regard to the predicted scale, nature and land-take associated with the proposed development, the conservation objectives of the European sites and with the implementation of the mitigation measures outlined in Section 7 in relation to habitat degradation (hydrogeology and hydrology), there will be no adverse effects on the integrity of the Lower River Shannon SAC either alone or in-combination with other plans and projects</p> | |
| <p>Slieve Bernagh Bog SAC</p> | <p>The Slieve Bernagh Bog SAC is not located within the area of Birdhill, County Tipperary; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs, which is located approximately 8km from the Birdhill area, and its associated European sites.</p> <p>Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of Slieve Bernagh Bog SAC relate to habitat only, and include Northern Atlantic wet heaths with Erica tetralix, European dry heaths and Blanket bogs. The site is also located approximately 8km from the Bruff area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement.</p> <p>No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>Keeper Hill SAC</p> | <p>The Keeper Hill SAC is not located within the area of Birdhill, County Tipperary; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or</p> | <p>The Q.I;s of Keeper Hill SAC relate to habitats onlu, and include: Northern Atlantic wet heaths with Erica tetralix, and Blanket bogs. The site is also located approximately 11km from the Birdhill area.</p> |

| European Sites within ZoI | Habitat Loss, degradation or fragmentation | Disturbance and displacement of Q.I Species |
|---------------------------|---|--|
| | <p>fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs, which is located approximately 11km from the Birdhill area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted.</p> |
| <p>Glenomra Wood SAC</p> | <p>The Glenomra Wood SAC is not located within the area of Birdhill, County Tipperary; the site of the proposed new CNG station. As such, there will be no direct habitat loss, degradation or fragmentation of any of these European sites. Indirect effects are considered below.</p> <p>There is no known in-direct link; hydrological or hydrogeological to the SACs, which is located approximately 9km from the Birdhill area, and its associated European sites. Further, the scale, nature and land-take associated with the proposed development are expected to be minimal. As such, no adverse effects on the integrity of European sites are predicted, by means of habitat loss, degradation or fragmentation.</p> | <p>The Q.I's of Glenomra Wood SAC relate to habitat only, and include Old sessile oak woods with Ilex and Blechnum in the British Isles. The site is also located approximately 9km from the Birdhill area. There are therefore no QI species associated with the SAC which could be subject to disturbance or displacement. No adverse effects are predicted on the conservation objectives of European sites, and therefore no adverse effects on the integrity of the European sites are identified. on the SAC are therefore predicted o adverse effects on the SAC are therefore predicted.</p> |

7 Mitigation Measures

This section details the potential mitigation measures required to ensure that the 11 proposed capital investment projects outlined in Section 6.1 and 6.4 do not result in adverse effects on the integrity of any European sites either alone or in combination with other plans or projects, as a result of the potential impacts described in Section 6.4.

- All projects arising from the implementation of the NIP will themselves be subject to Screening for AA/AA when details of locations and design become known or are refined. Project level AAs will be undertaken (informed by detailed surveys and design details) to determine if likely significant effects on European sites can be ruled out.
- A Natura Impact Statement (in accordance with relevant legislation and guidance) shall be prepared for projects which cannot be screened out for AA. The project level AA for each project will incorporate the findings of consultation and field surveys, environmental assessments and feasibility studies where appropriate, to inform a detailed assessment and mitigation strategy. The identified mitigation will then be incorporated into the final detailed design of the projects to ensure the integrity of European sites in the region are maintained in the long-term
- If, after the application of mitigation measures, possible adverse effects on European sites remain, alternative solutions will need to be identified
- Any project(s) arising from the NIP shall be required to conform to the mitigation measures and key principles for protecting European sites identified within this NIR.
- Regard shall be given to the requirements of relevant legislation in relation to the protection of European sites during the lifetime of the project including project feasibility and design stage. Regard shall also be given to the legal protection of any existing new or modified SPAs or SACs that are identified during the lifetime of the NIP
- To have regard to Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities 2009 or any updated version.
- To actively promote the conservation and protection of areas designated as an NHA (including proposed sites) and to only consider proposals for development within or affecting an NHA where it can be clearly demonstrated that the proposed development will not have a significant adverse effect on the NHA or pNHA;
- To ensure the protection and conservation of areas, sites, species and ecological networks/corridors of biodiversity value outside of designated sites throughout the country and to require an ecological assessment to accompany development proposals likely to impact on such areas or species;

- To implement the requirements of EU Regulations 1143/2014 on the Prevention and Management of the Introduction and Spread of Invasive Alien Species.
- The development of new pipelines shall be subject to route option assessment and environmental assessment, where required.
- The development of new infrastructure shall be subject to site options assessment and environmental assessment, where required.
- Direct habitat loss within designated sites will be avoided, in so far as possible
- The breeding and resting sites of protected species shall be avoided during the appropriate seasons.
- A derogation licence from the respective Wildlife Acts shall be sought, and works shall not be commenced without such consent, where it appears that protected species or their habitats are likely to be unavoidably disturbed
- Where feasible, site clearance involving the cutting or destruction of vegetation and hedgerows shall not take place in the bird breeding season between March 1st and August 31st inclusive.
- Works shall avoid active otter holts. In the event that an otter holt cannot be avoided by the works, it will be necessary to seek a derogation licence under the Wildlife Act to exclude otters from the holt.
- No works shall be undertaken within 150 m of any holts at which breeding females or cubs are present.
- The breeding and resting sites of protected species shall be avoided during the appropriate seasons.
- Works in the vicinity of a watercourse shall be carried out with reference to a water quality protection plan for each site which shall ensure that:
 - All necessary measures shall be taken to minimise the generation and release of sediments into all watercourses.
 - Levels of suspended solids in the river shall be monitored during the course of the works.
 - Precautions shall be put in place to avoid spillages of diesel, oil or other polluting substances.
- Precautions shall be put in place to avoid or minimise the generation and release of sediments into all watercourses.
- The pouring of concrete, sealing of joints, application of water-proofing paint or protective systems, curing agents etc. shall be completed in dry weather conditions to avoid pollution of the freshwater environment.
- Design, construction and operation shall be in accordance with the Guidelines on Protection of Fisheries during Construction Works in and adjacent to Waters (IFI, 2016) (including any updated version of same) including:
 1. All fuels, oils, greases and hydraulic fluids shall be stored in bunded areas well away from watercourses.

2. Refuelling of machinery etc. shall be carried out in bunded areas.
3. Run-off from the site shall not enter watercourse directly and shall be routed via suitably designed and sited settlement ponds and filter channels.
4. Wherever possible, the banks of watercourses shall be left intact. Otherwise, every effort shall be taken to prevent sediment from entering watercourses.
5. Site surface drainage and silt control measures shall be established prior to the commencement earthworks. Run-off from the site or areas of exposed soil shall be channelled and intercepted at regular intervals for discharge to siltraps or lagoons with over-flows directed to land rather than to a watercourse.
6. To avoid siltation of watercourses from crossing point locations, silt traps shall be placed beside temporary crossing points with an associated buffer strip. Silt-traps shall be maintained and cleaned regularly during construction.
7. A maintenance schedule and operational procedure shall be established by the Contractor for silt and pollution control measures during construction. This shall be undertaken in consultation with the relevant statutory authorities.
8. Pouring of concrete for aprons, sills, and other works shall be carried out in the dry and allowed cure for 48 hours before re-flooding. Pumped or tremied concrete shall be monitored carefully to ensure no accidental discharge into the watercourse. Under no circumstances shall mixer washings or excess concrete be discharged to surface water.
9. Oil storage tanks and associated filling areas and distribution pipework shall be located at least 10m from watercourses (rivers, lakes, and streams, field drains) and at least 50m from wells or boreholes.
10. Storage tanks shall have secondary containment provided by means of an above ground bund to capture any oil leakage irrespective of whether it arises from leakage of the tank itself or from associated equipment such as filling and off-take points, sighting gauge etc., all of which shall be located within the bund. Bund specification should conform to the current best practice for oil storage (Enterprise Ireland, BPGCS005).
11. Oil booms and oil soakage pads shall be maintained on-site to enable a rapid and effective response to any accidental spillage or discharge.
12. Abstraction of water from watercourses for dust control should be from dedicated watering points, preferably from silt lagoons located on-site or from an excavated site, replenished by ground infiltration and not by stream infiltration. No abstraction should occur on small watercourses.

8 Monitoring Measures

The SEA of the draft NIP provides a monitoring framework that has been developed for the draft NIP using the SEA objectives and indicators. The proposed monitoring measures for Biodiversity are provided in **Table 8.1** below.

The purpose of this monitoring is to:

- provide the evidence needed to monitor and manage the predicted significant negative effects and unforeseen effects of the draft NIP prior to and during detailed project development and further environmental assessment; and
- monitor the baseline environmental conditions for all SEA objectives and inform the planned three yearly update of the NIP when all available monitoring data will be reviewed.

The monitoring frequency for each source will vary depending on availability however where available these will be recorded and reported on annually. Monitoring using the indicators set out in **Table 8.1** will commence as soon as the final NIP is implemented.

Table 8.1: Proposed Monitoring Measures

| SEA Objective | SEA Indicator | SEA Target | Monitoring |
|--|--|--|---|
| <ul style="list-style-type: none"> Protect, conserve, enhance where possible and avoid loss of diversity and integrity of the broad range of habitats, species and wildlife corridors. To achieve the conservation objectives of European Sites (SACs and SPAs) and other sites of nature conservation. Conserve and protect other sites of nature conservation including NHAs, pNHAs, National Parks, Nature Reserves, Wildfowl Sanctuaries as well as protected species outside these areas as covered by the Wildlife Act. To minimise and, where possible, eliminate threats to biodiversity including invasive species. | <ul style="list-style-type: none"> Number and extent of Designated Sites; Achievement of favourable conservation status of designated sites; Population and range of Designated Species; and Achievement of the Objectives of Biodiversity Plans and County Development Plans. | <ul style="list-style-type: none"> Siting of development of infrastructure installation on non-sensitive sites. Maintenance of favourable conservation status for all habitats and species protected under the Habitat Directive. No loss of protected habitats and species during the lifetime of the Plan. Improve/maintain protection for protected sites and species. Improve/maintain protection for important wildlife sites, particularly urban wildlife corridors. Prevent the introduction of new invasive or alien species. Control/ manage new invasive species. Ensure new development is set back from rivers. | <ul style="list-style-type: none"> Monitoring of the effects of capital investment project development required under separate processes (EIA, AA) Department of Arts, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Monitoring related to relevant Local Area Plans and County/City Development Plans |

9 In-combination Effects

In-combination effects are those that arise when the effects of the implementation of a plan or project occur in combination with those of other plans or projects.

This Section assesses the effects of the implementation of the draft NIP in combination with each of the key plans and programmes.

9.1 Ireland's Climate Action Plan 2019, DCCAE 2019

The Climate Action Plan sets out an ambitious course of action over the coming years to address the issue of climate disruption on Ireland's environment, society, economic and natural resources. The plan builds on the policy framework, Project Ireland 2040 and the draft National Energy and Climate Plan.

The Plan outlines the current state of key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and charts a course towards ambitious decarbonisation targets.

With regards to renewable electricity, the plan cites the need for natural gas in the renewable mix in order to sustain electricity supply when intermittent renewable electricity supplies are low (e.g. wind/solar).

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NIP are predicted as a result of its implementation.

9.2 Electricity & Gas Networks Sector Climate Change Adaptation Plan, DCCAE 2019

This first Adaptation Plan for the energy networks (electricity and gas) sector was prepared under the National Adaptation Framework in 2019. This Plan is the first step towards reducing vulnerability and building resilience in this sector.

The Plan discusses a number of the measures to be put in place in order to ensure the sector is less vulnerable to climate change in the future. GNI will play a role in this Adaptation Plan. A number of adaptation measures are to be adopted, including, but not limited to:

- Natural gas in transport (e.g. via the Causeway Project); and
- Renewable gas (e.g. biomethane production and injection into existing gas network).

GNI will contribute towards the Climate Change Adaptation Plan through the facilitation of the measures above. In the event of an incident, GNI has a Business Continuity Plan, and a Severe Weather Contingency Plan. These Plans, as discussed in the Electricity & Gas Networks Sector Climate Change Adaptation

Plan will ensure the gas and electricity network sector will be more resilient to severe weather incidents caused by climate change.

This Climate Change Adaptation Plan is essentially a policy document and does not set out location specific recommendations.

The AA screening states that individual sectoral plans will be subject to AA to ensure there are no effects on Natura 2000 sites as a result of this plan.

9.3 Strategic Plan 2019 – 2020, CRU 2019

The Commission for the Regulation of Utilities (CRU) have developed a Strategic Plan for the 2019 - 2021 period as a guiding framework for the CRU's planning, resourcing, prioritisation, monitoring and reporting activities.

The 2019 - 2021 Strategic Plan documents the CRU's commitment to deliver a secure, low carbon future at least cost.

It demonstrates our commitment to a co-operative approach with our stakeholders to ensure safe outcomes, sustainability (including environmental and economic), reliability and efficiency across the sectors we regulate.

In accordance with the Energy Act 2016 and the Water Services (No.2) Act 2013, a copy of the CRU 2019 - 2021 Strategic Plan was submitted to the Minister for Communication, Climate Action and Environment and the Minister for Housing, Planning and Local Government.

As outlined in the Strategic Plan, it is an objective of the CRU to:

- *“Ensure utility network policies and infrastructure development deliver a low carbon future whilst supporting competitiveness and security of supply; and*
- *Deliver market policies that support a low carbon future whilst supporting competitiveness and security of supply.”*

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NIP are predicted as a result of its implementation.

9.4 Network Development Plan 2018, GNI 2018

The GNI Network Development Plan (NDP) 2018 provides a view of how the gas network will develop over a ten-year period. The Plan sets out the assessment of the future demand and supply position for the natural gas industry in the Republic of Ireland.

The Plan provides an overview of the planning and development of the gas network, which can involve long lead times in the delivery of infrastructure projects.

The AA screening for this plan determined that it would have no adverse effects on European sites or result in cumulative effects with any other plans or projects.

9.5 Draft National Energy and Climate Plan 2021 – 2030, DCCAE 2018

In accordance with the Governance of the Energy Union and Climate Action Regulation, Ireland was required to submit the first Draft National Energy & Climate Plan (NECP) 2021 - 2030 to the European Commission by the end of 2018. A final version of the NECP was to be submitted by the end of 2019. Ireland has been slightly delayed with this process and as of the time of writing this AA screening report, the draft NECP had yet to be submitted to the Committee. The draft Plan went out for public consultation, which ended in 2019.

The first draft is the first step in the process of putting together the final National Energy and Climate Plan and further iterations of the plan will take into account additional policies and measures and the Climate Action Plan 2019.

This first draft of the NECP takes into account energy and climate policies developed to date, the levels of demographic and economic growth identified in the Project 2040 process and includes all of the climate and energy measures set out in the National Development Plan 2018 - 2027.

According to the first draft NECP consultation, there is support for expansion of the gas network including carbon capture and storage, biomethane grid injection, a LNG terminal, compressed natural gas stations, power-to-gas and a hydrogen transmission network.

There is general support for improved and increased gas and electrical infrastructure through efficient and effective projects, wide implementation of smart grid technology and a proposal for a new system to take projects from inception to delivery.

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NIP are predicted as a result of its implementation.

9.6 National Planning Framework, DHPLG 2018,

The Department of Housing Planning and Local Government (DHPLG), on behalf of the Government, has prepared and published the National Planning Framework under Project Ireland 2040, the overarching policy and planning framework for the social, economic and cultural development of our country.

The National Planning Framework states that *“In order to support the National Planning Framework, additional electrical grid strengthening will be required for parts of the border subject to the necessary planning consents to enhance energy security through further reductions in dependence on fossil fuels, moving towards wind, gas with carbon capture and sequestration, biomass and other renewable sources.”*

National Policy Objective (No. 47) of the NDP states:

“In co-operation with relevant Departments in Northern Ireland, strengthen all-island energy infrastructure and interconnection capacity, including distribution and transmission networks to enhance security of electricity supply.”

A Natura Impact Statement (NIS) was prepared by RPS on the draft NPF prior to consultation. This considered the potential for the draft NPF to adversely affect any European site with regard to its qualifying interests, associated conservation status, structure/function of the site and overall site integrity. This pre-consultation version of the NIS concluded that, subject to the mitigation proposed being incorporated into the NPF, there would be no adverse effects on the integrity of any European Sites as a result of implementation of the draft NPF.

The post-consultation NIS also concluded the National Planning Framework would not, either individually or in combination with other plans and projects, adversely affect the integrity of any designated site within the European network.

No in-combination impacts with the GNI NIP are predicted as a result of its implementation.

9.7 National Energy Efficiency Action Plan for Ireland #4 2017–2020, DCCAE 2017

Article 24 of the EU Energy Efficiency Directive requires Member States to submit a National Energy Efficiency Action Plan (NEEAP) every three years. Ireland's 4th NEEAP was produced in early 2017. It provides a comprehensive overview on

- The progress made towards the above targets;
- The measures in place to ensure the targets are met; and
- The strategies and policies in place across the residential, commercial, transport and public sector.

According to the National Energy Action Plan for Ireland, *“a number of projects (undertaken and planned) by GNI will further improve energy efficiencies and reduce emissions. These include replacement of Waterbath heaters and boilers with high efficiency boilers and new control technology; a pilot project to install a CHP unit (at a Pressure Reduction Installation) and the feasibility of the installation of CHP will be determined based on the outcome of this pilot.”*

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NDP are predicted as a result of its implementation.

9.8 National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland - 2017 to 2030, DTTAS 2017

The National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland: 2017 to 2030 represents a first step in communicating a longer-term vision for the Irish transport sector. It sets an ambitious target that by 2030 all new

cars and vans sold in Ireland will be zero emissions (or zero emissions capable) with the use of fossil fuels vehicles rapidly receding.

The Framework outlines the main fuel options that could provide alternatives to oil in transport namely: electricity, hydrogen, biofuels, and natural gas, in the forms of compressed natural gas (CNG), liquefied natural gas (LNG), and liquefied petroleum gas (LPG). It is likely that electricity will fuel the majority of passenger cars, commuter rail and taxis; while, natural gas and biofuels will play an increasingly important role for larger vehicles such as heavy goods vehicles and buses. Hydrogen use is also anticipated to increase its penetration across the entire fleet spectrum in the coming decades but not in the short-term.

The Framework strongly advocates for a switch to natural gas use in Ireland, stating: *“in Ireland, making a transition to gas would be beneficial for a number of reasons:*

- *Natural gas vehicles (NGVs) produce up to 20% lower carbon emissions per unit of energy produced than diesel in terms of kilometres travelled;*
- *Natural gas could provide greater long-term competitiveness in the freight sector. The use of domestically sourced lower price natural gas would be more economically sustainable;*
- *The price of gas continues to be cheaper than diesel or petrol for similar energy outputs, providing considerable scope for reducing fuel costs and improving transport cost efficiency;*
- *There is considerable health benefits associated with the use of gas as a propellant through improved air quality and significantly reduced local pollutants (NO_x, SO_x and PMs) in cities;*
- *There would be considerable energy security benefits through the use of indigenous gas supplies, particularly biogases; and*
- *The use of natural gas in transport could lead to greater use of the gas network, which could impact positively on gas network charges.”*

An NIS was carried out in conjunction with this plan and concluded that the plan will have no adverse effects on any European sites.

9.9 White Paper on Energy: Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030, DCCAE 2015,

The Government’s energy White Paper sets out a vision and a framework to guide Irish energy policy between 2015 and 2030 and outlines a transition to a low carbon energy system for Ireland by 2050. Its objective is to guide a transition to a low carbon energy system, which provides secure supplies of competitive and affordable energy to our citizens and businesses.

The White Paper states that “oil and natural gas will remain significant elements of Ireland’s energy supply between now and 2035”. However, the White Paper

recognises that there is a clear link between oil and gas production and consumption and global climate change.

The White Paper commits Ireland to radically reducing our GHG emissions by 2050. Ireland has embarked on a firm course to sustainability, mindful of the need to balance competitiveness and security of supply. Oil and gas will contribute to security of supply through the period of transition, on a declining basis over time. This curtailment (and, in the longer term, elimination) of oil and gas in our energy mix will be accomplished gradually in the coming decades through a range of reduction and substitution measures using more sustainable alternatives.

As outlined in the paper, *“providing natural gas and electricity network infrastructure is essential for the proper functioning of the markets and for the provision of secure supplies. These networks will play an important role in the transition”*.

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NIP are predicted as a result of its implementation.

9.10 National Renewable Energy Action Plan, DCCAE 2010,

Article 4 of Directive 2009/28/EC on renewable energy requires each Member State to adopt a national renewable energy action plan (NREAP). Ireland's NREAP sets out our national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020. The plan demonstrates how the Member State will meet its overall national target established under the Directive.

Ireland published the NREAP in July 2010. Following on from the NREAP, all Member States must submit a report on progress to the European Commission every two years. The latest report was published in February 2018, and the final report must be submitted by 31 December 2021.

Table 9.1 below discusses the potential for cumulative effects as a result of the various plans listed above

No publicly available data suggests that this Strategy has undergone Appropriate Assessment. However, the Plan has been reviewed and no in-combination impacts with the NIP are predicted as a result of its implementation.

Table 9.1: Cumulative Assessment of relevant plans and programmes

| Plan(s) | Potential for Cumulative Effects |
|--|---|
| DCCAE 2019, Ireland's Climate Action Plan 2019 | <p>The NIP sets out a range of aims and commitments which will allow GNI to begin to realise their vision for Ireland's gas network to be net zero carbon by 2050.</p> <p>The NIP sees the introduction of new technologies to facilitate renewable gas injection into the gas network,</p> |

| Plan(s) | Potential for Cumulative Effects |
|--|---|
| <p>DCCAIE 2019, Electricity & Gas Networks Sector Climate Change Adaptation Plan</p> <p>DCCAIE 2018, Draft National Energy and Climate Plan 2021 – 2030</p> <p>National Energy Efficiency Action Plan for Ireland #4 2017–2020</p> <p>National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland - 2017 to 2030</p> <p>White Paper on Energy: Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030</p> <p>DCCAIE 2010, National Renewable Energy Action Plan</p> | <p>and to supply Compressed Natural Gas (CNG) from the gas network as a fuel source for commercial vehicles.</p> <p>These new technologies align with the provisions of the plans outlined.</p> <p>The NIP also outlines a range of climate change, environmental and sustainability aims/commitments which align with those in these plans.</p> |
| <p>CRU 2019, Strategic Plan 2019 - 2020</p> | <p>The NIP aligns with the values and strategic priorities outlined in the CRUs Strategic Plan.</p> <p>No negative in-combination effect is anticipated as a result of the implementation of the two plans.</p> |
| <p>GNI 2018, Network Development Plan 2018</p> | <p>As outlined in Section 2 of this report, the purpose of the NIP, which is the subject of this AA, is to set out in more detail, the manner in which the short-term capital investment proposals identified in the NDP will be developed in the Plan area over the three-year plan period 2020-2023.</p> <p>The two plans are generally aligned and, as such, no negative in-combination effects are anticipated as a result of the implementation of both plans.</p> |

| Plan(s) | Potential for Cumulative Effects |
|---|---|
| DHPLG 2018, National Planning Framework | <p>The focus of the NPF is on sustainable land use planning for the next 20 years.</p> <p>The NIP aligns with National Policy Objective 47: <i>in co-operation with relevant Departments in Northern Ireland, strengthen all-island energy infrastructure and interconnection capacity, including distribution and transmission networks to enhance security of electricity supply.</i></p> <p>Appropriate Assessment (AA) have been carried out as part of the preparation of the National Planning Framework and the results have been incorporated into the process to date.</p> <p>Individual projects will be subject to AA screening at a project level to ensure no adverse impacts on European sites.</p> <p>As such no negative effects are predicted.</p> |
| County and City Development Plans Local Area Plans | <p>Potential developments reference in LAPs and County and City Development plans will be subject to AA at a project level where applicable and as such are unlikely to result in any significant negative effects.</p> |

9.11 Transboundary Effects

As previously outlined, the GNI transmission network includes onshore Scotland, interconnectors and the onshore ROI network. However, the NIP focusses wholly on the ROI. While none of the proposed projects in the NIP relate to Northern Ireland or Scotland, consideration must be had to potential transboundary effects with the UK. There are 58 SAC's and 16 SPA's in Northern Ireland.

The closest projects to the Northern Irish boundary are both located in County Cavan:

- *Capacity upgrade to existing 5501 AGI*
- *New CNG Station at NIP19CNCNG1*

The capacity upgrade at AGI 5501 is approx. 18km from the border and the New CNG station is approx. 38km from the border. The capacity upgrade has been screened out on the basis that the works will be very minor and the New CNG station has been assessed as part of this NIR and suitable mitigation measures have been included to prevent any significant impacts on European Sites.

No potential for significant transboundary effects on European sites or species as a result of the NIP have been identified, following implementation of the mitigation measures outlined in Section 7.

10 Conclusion

GNI has prepared the draft NIP for the period 2020 - 2023. The NIP sets out the critical infrastructure to be developed across the network over this period, while also setting out the aims and commitments of GNI.

Arup previously prepared an AA Screening report of the draft NIP on behalf of GNI.

All of the aims and commitments and objectives were screened out as having potential for Likely Significant Effects (LSEs) on European Sites because they were general aims and commitments and the particular aim or commitment did not identify any locations for development or detail what that development might be.

It was determined that, while the NIP does outline the capital investment proposals to be implemented over the next 3 years and beyond, it does not define the exact location, nature, size/operating conditions of all the proposals, or allocates resources to a specific area in Ireland. There are some capital investment projects within the draft NIP that were considered likely to have a significant effect on European sites.

In the absence of further information or the integration of mitigation measures, it is considered that some of the capital investment projects may have the potential for significant effects on European sites. Therefore, it is considered that the precautionary principle must be applied and that an AA of the NIP is required. The AA is presented in this Natura Impact Report (NIR)

This Natura Impact Report (NIR) deals with Stage 2 of the AA process which assesses whether the NIP (or projects therein) are likely to have adverse effects on the integrity of European sites from those LSEs identified at Stage 1 (Screening). Of the 27 projects listed in the NIP, 11 have been brought forward to Stage 2.

A number of key principles and mitigation measures as set out in **Section 7** of this report have been proposed to ensure that there will be no implications for the conservation objectives of European sites from the NIP (or projects therein). With these mitigation measures in place, there will be no adverse effects on the integrity of European sites from the NIP.

It is a requirement that a project level AA screening and subsequently an NIS (as required) will be undertaken for all 11 No. capital investment projects which will have to take this plan level NIR into account. The project level AA for each project will incorporate the findings of consultation and field surveys, environmental assessments and feasibility studies where appropriate, to inform a detailed assessment and mitigation strategy. The identified mitigation will then be incorporated into the final detailed design of the projects to ensure the integrity of European sites in the region are maintained in the long-term.

The conclusion of the NIR for the NIP is that there will be no adverse effects on the integrity of any European site(s), either alone or in-combination with other plans or projects. This conclusion is based on adherence to the key principles for protecting European sites (e.g. avoidance of impacts in the first instance).

Where impacts cannot be avoided, appropriate and effective mitigation will be implemented at the project stage to ensure no adverse effects on the integrity of any European site(s).

11 References

“Guidance on Energy Transmission Infrastructure and EI Nature Legislation”
(European Commission, 2018)

"Managing Natura 2000 sites- The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC" (EC Environment Directorate-General, 2018);

Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001);

Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.
(European Commission, 2007);

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision);

Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;

Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011); and

Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine (Institute of Ecology and Environmental Assessment, September 2018).

Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;

Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;

Information on land - use zoning from the online mapping of the Department of the Environment, Community and Local Government <http://www.myplan.ie>;

Information on water quality in the area available from www.epa.ie;

Information on soils, geology and hydrogeology in the area available from www.gsi.ie;

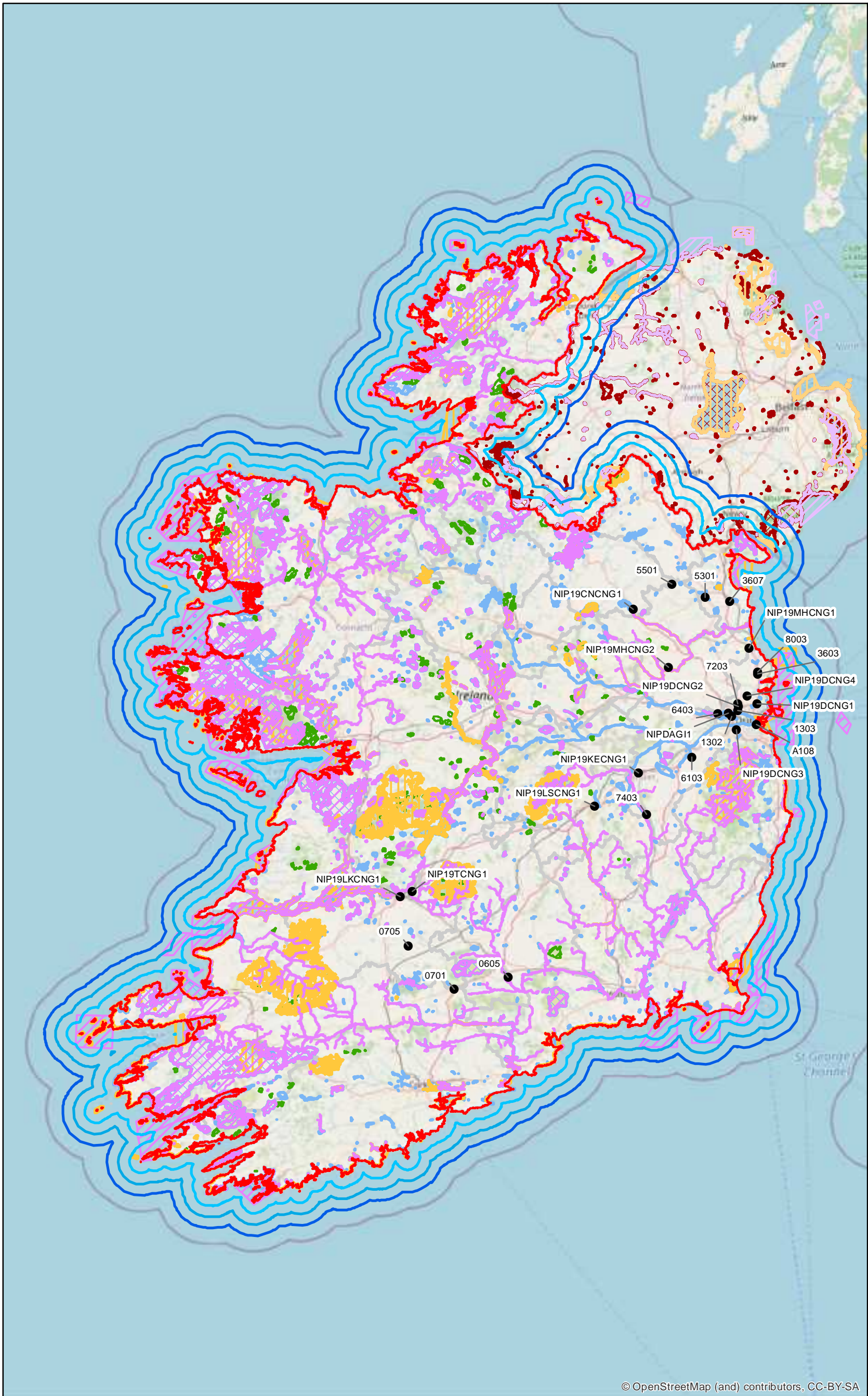
Information on the status of EU protected habitats in Ireland (National Parks and Wildlife Service, 2013a and 2013b);

Information on the conservation status of birds in Ireland (Colhoun and Cummins, 2014);

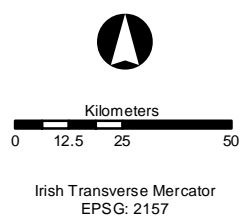
Ecological reports and EIS reports for proposed developments within NIP plan area.

Appendix A

Figures



- Legend**
- Project Locations
 - ▭ Republic of Ireland
 - ▭ 15km Buffer
 - ▭ 10km Buffer
 - ▭ 5km Buffer
 - ▨ Special Areas of Conservation (SAC)
 - ▨ Special Protection Areas (SPA)
 - ▨ Natural Heritage Area (NHA)
 - ▨ Proposed National Heritage Areas (pNHA)
 - ▨ Special Area of Conservation (NI)
 - ▨ Special Protection Area (NI)
 - ▨ Area of Special Scientific Interest
 - ▭ County Boundaries



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| Issue | Date | By | Chkd | Appd |
| | 8/27/2020 | LM | | |

Project Title
 Gas Networks Ireland - Network Implementation Plan

Scale
 1:1,750,000

Date

Drawing Title
 Ecological Designated Sites (including Natura 2000 sites)

Drawing Status

Figure No.
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