Gas Networks Ireland

Network Implementation Plan (NIP)

Appropriate Assessment Screening Report

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 will set out the critical infrastructure to be developed across the network over this period, while also setting out the aims and commitments of GNI.

Arup has been appointed by GNI to prepare a report for the purposes of Appropriate Assessment (AA) Screening of the draft NIP.

This 'AA Screening Report' presents the assessment of the likely significant effects, if any, on designated European Sites as a result of the implementation of the draft 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.

1.2 The Requirement for Habitats Directive Assessment

Habitats Directive Assessment (HDA), also known as Appropriate Assessment, is a requirement under the Habitats Directive 92/43/EEC. The Habitats Directive indicates the need for plans and projects to be subject to Appropriate Assessment if the plan or project is not directly connected with or necessary to the management of a Europeansite but is likely to have a significant effect either individually or in combination with other plans or projects on European sites.

1.3 The Purpose of Appropriate Assessment

The purpose of Appropriate Assessment is to identify the possible effects of implementing a plan (or project) on the conservation status of designated European sites within the sphere of influence of the plan (or project).

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the 'Habitats Directive' provides legal protection for habitats and species of European importance. Article 2 of the Habitats Directive requires the maintenance or restoration of habitats and species of interest to the EU in a favourable condition. The Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations, SI 94/1997.

Under Article 6(3) of the Habitats Directive an Appropriate Assessment must be undertaken for any plan or project that is likely to have a significant effect on the conservation objectives of a European site. Article 6 paragraph 3 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."

Therefore, an AA is an evaluation of the potential impacts of a plan/project on the conservation objectives of a European site, and the development, where necessary, of mitigation or avoidance measures to preclude adverse effects. In a situation where it is not possible to fully demonstrate that adverse effects on the site integrity would occur, options must be explored so that any risk of damaging designated sites is avoided.

Plans can only be adopted after having ascertained that there will be no significant adverse effect on the integrity of the sites in question. Components within a plan, such as policies and objectives, can be adjusted or removed to avoid significant adverse impacts prior to implementation. The plan may also proceed if sufficient mitigation or compensation measures are in place to ensure the overall integrity of the European site.

1.4 Habitats Directive Assessment Process in relation to the Preparation of the NIP

In the preparation of this report to inform AA by the competent authority the following documents have been reviewed:

- "Guidance on Energy Transmission Infrastructure and EI Nature Legislation" (European Commission, 2018)
- "Managing European 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 European 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).

This screening report is based on available ecological information and an adequate description of the plan and its likely environmental effects. It also takes into account any policies or proposals that will set the terms for future development. The results of the screening are recorded and will be made available to the public.

In any case where, following screening, it is found that the NIP may have a significant effect on the conservation objectives of a European site or that such an impact cannot be ruled out, adopting a precautionary approach a Stage 2 Appropriate Assessment of the NIP must be carried out.

When the results of the Stage 2 AA under Article 6(3) are negative or uncertain then the provisions of Article 6(4) of the Habitats Directive apply. That is:

- The plan or project will adversely affect the integrity of the site; and,
- Doubts remain as to the absence of adverse effects on the integrity of the site linked to the plan or project concerned.

The European Commission's Methodological Guidance recommends a four-stage approach to Appropriate Assessment:

Stage 1 Screening:

Determining whether the plan/project 'either alone or in combination with other plans or projects' is likely to have a significant effect on a European site.

Stage 2 Appropriate Assessment:

Determining whether, in view of the site's conservation objectives, the plan/project 'either alone or in combination with other plans or projects' would have an adverse effect (or risk of this) on the integrity of the site. If not, the plan/project can proceed.

Stage 3: Assessment of Alternative Solutions:

Where it has not been proven that measures considered will not avoid or mitigate the adverse effect on the European site, then an assessment of the alternatives will be required; and if none are acceptable then stage 4 is required to be considered.

Stage 4: Assessment where no Alternative Solutions Exist and where Adverse Impacts Remain

This will involve assessment where the plan/project is considered to result in adverse impacts on the European site and no alternative solutions remain – the imperative reasons of overriding public interest (IROPI) test must be met before authorisation, permission or adoption of the Plan is agreed. This includes the agreement of compensatory measures.

1.5 Overview of Stage One Screening

The Screening Stage is used to identify whether the Plan, either alone or in combination with other plans or projects, is likely to have a significant effect on a European site. This report follows European Commission (2001) guidance which recommends that screening should follow a four-step process as outlined below:

- Determine whether the plan is directly connected with or necessary to the management of the site. If it is, then no further assessment is necessary;
- Describe the plan and other plans and projects that, 'in combination', have the potential to have significant effects on a European site;
- Identify the potential effects on the European site; and
- Assess the significance of any effects on the European site.

The key to deciding if an AA of a plan would be required is determined by an assessment of whether the plan and its policies and objectives are likely to have a significant effect on a European site. The decision should not be determined by the size of the plan area alone. It will also be influenced by the nature and extent of the development likely to be proposed in the plan, and the plan area's *in situ*, *ex situ* and in combination relationship to adjoining European sites and the wider European network.

When screening the plan and its policies and objectives there are two possible outcomes:

- the plan poses no risk of a significant effect and as such requires no further assessment; and
- the plan has potential to have a significant effect (or this is uncertain) and AA of the plan is necessary.

Screening can be used to establish which policies and objectives have potential to have significant effects, and therefore the ones that require further attention at the AA stage.

An important element of the AA process is the identification of the "Conservation Objectives", "Qualifying Interests" (QIs) and/ or "Special Conservation Interests" (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are bird species listed within Annexes I and II of the Birds Directive.

It is also vital that the threats to the ecological/environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing European sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3) states:

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

The screening stage of the AA takes account of the elements as relevant with regard to the details and characteristics of the draft NIP to determine if potential for significant effects on European sites are likely.

1.6 Appropriate Assessment Process in Tandem with NIP progression

As the NIP is progressed through the plan making process, the AA process will be continued by the competent authority, GNI, in tandem and will inform the decision-making process in terms of any likely significant impacts arising from the NIP on European sites.

This report contains the findings of the screening assessment which was carried out on the NIP.

1.7 Data Sources

Sources of information that were used to collect data on the European network of sites and on the existing ecological environment are listed below:

- Google aerial photography (viewed in September 2020);
- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;
- National Parks and Wildlife Service online data on European Sites (www.npws.ie) (viewed in September 2020);
- National Parks and Wildlife Service online data on protected flora and fauna (viewed in September 2020);
- Information on the status of EU protected habitats in Ireland (National Parks and Wildlife Service, 2013a and 2013b);
- National Biodiversity Data Centre <u>www.biodiversity.ie</u> (viewed in September 2020)
- Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed in September 2020);

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

1.8 Consultation

The plan and this Screening Report for the plan will be placed on public display and will be referred to Government Departments and other statutory consultees for consideration during the consultation process. Submissions will be taken into consideration in the drafting of the final plan and accompanying final Appropriate Assessment reporting.

2 Draft Network Implementation Plan

2.1 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 screening, 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 2.1 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-intime" 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 this AA screening assessment (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.

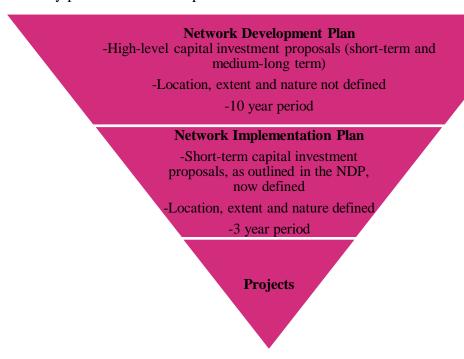


Figure 2.1: Plan Hierarchy

2.2 Plan 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 Brighouse 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 2.2**.



Figure 2.2: NIP Plan Area

2.3 Potential 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 increased 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 potential works 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.

Following the publication of the 2019 NDP, GNI have identified 27 such projects required over the ten-year period 2018/19 to 2027/28. **Table 1** provides a summary of these projects.

The GNI network is broken down into 3 regions across Republic of Ireland (Northern and Western/Eastern and Midlands/Southern) and further divided at a county level.

Table 2.1: 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	3	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 NIP is clear in acknowledging the possibility that changes will occur in the necessity, scope and timing of gas network development.

It is also acknowledged that it is likely, given the continuously changing nature of electricity 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 2.3.1 -2.3.3** and assessed and described further in **Section 4.4.**

2.3.1 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 2.3: Northern and Western Regional map showing location of potential projects (not to scale)

2.3.2 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**.

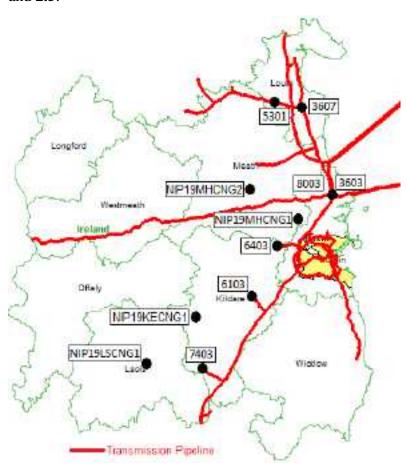


Figure 1.4: Eastern and Midlands Regional map show location of potential projects (not to scale)

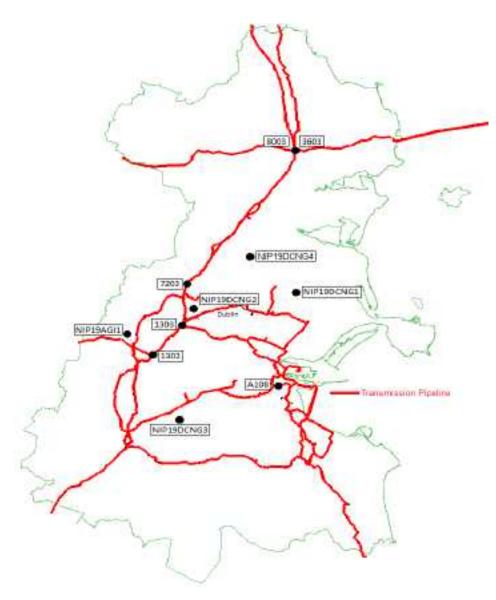


Figure 2.5: Location of potential projects in County Dublin only (not to scale) They are divided on a county level as follows:

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

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- 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 NIP19DAGI1 AGI
- New CNG Station at NIP19DCNG1
- New CNG Station at NIP19DCNG2
- New CNG Station at NIP19DCNG3
- New CNG Station at NIP19DCNG4

2.3.3 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**.

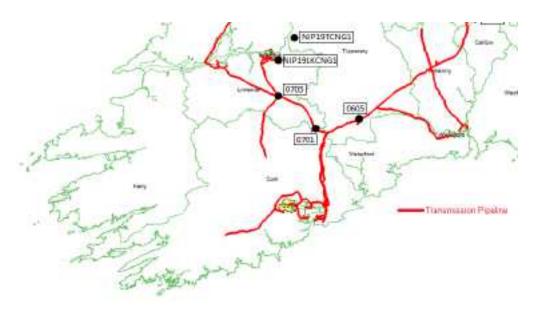


Figure 2.6: Southern Regional map showing locations of potential projects (not to scale)

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

As mentioned above, all potential projects are described and assessed in **Section 4.4** below.

3 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.

As described in **Section 1.3**, 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.

Natural Heritage Area (NHA) are designated sites, protected under the Wildlife Amendment Act (2000). These areas are considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. In addition, there are 630 proposed NHAs (pNHAs), which were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats and are subject to limited protection but can sometimes act as "stepping stones" for QI/SCI species/habitats.

EU Member States are required to monitor habitats and species that are considered threatened across Europe and are listed in the Habitats Directive. The National Parks and Wildlife Service (NPWS) reported in 2013 that only 9% of the habitats considered threatened and protected under the Habitats Directive are in favourable status. The Habitats of most pressing concern in Ireland are those that have reduced range and/or area, notably raised bogs and species-rich grasslands.

Red Lists identify species in most need of conservation interventions. Of 185 birds that breed and/or winter in Ireland, 37 are on the Red List and 90 on the Amber List, based on conservation status. Red-Listed breeding species include the barn owl, corncrake, grey partridge, grey wagtail and red grouse. Red-Listed breeding and wintering species include the curlew, dunlin, golden plover and Bewick's swan. Two birds of prey that have recently been reintroduced, the white-tailed eagle and the golden eagle are both Red Listed.

Member States are required to monitor habitats and species that are considered threatened across Europe and are listed in the Habitats Directive (92/43/EEC). The conservation status of habitats and species is assessed at a national level, not just in Special Areas of Conservation (SACs).

The most recent report of the National Parks and Wildlife Service (NPWS, 2013) provides an overview of the status of Ireland's 58 natural habitats and 61 native species.

The current status and trends of Ireland's habitats are presented in **Figure 3.1** (NPWS, 2013). As indicated in **Figure 3.1** some 91% of habitats in Ireland are of 'bad' or 'inadequate' status. The habitats of most pressing concern are those that have reduced range and/or area, notably raised bogs and species-rich grasslands.

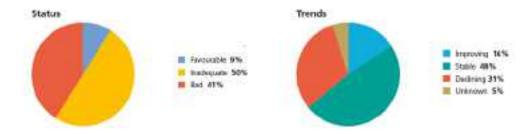


Figure 3.1: Trends in Irish Habitats

4 Natura 2000 Sites

4.1 Zone of Influence

The Zone of Influence (ZoI) comprises the area within which the plan or project may potentially affect the conservation objectives, QI's, or SCIs of a European site. There is no recommended zone of influence, and guidance from the National Parks and Wildlife Service (NPWS) recommends that the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors and the potential for incombination (cumulative) effects. A distance of 15 km is currently recommended in the case of plans but may extend beyond that to include an entire water catchment and mobile QI/SCI species.

As previously outlined, the GNI transmission network includes onshore Scotland, interconnectors and the onshore ROI network and these locations therefore makeup the 'plan area'. However, it should be noted that the projects detailed in the NIP relate to the Republic of Ireland only. No proposals relate to Northern Ireland or Scotland.

Thus, the ZoI for the NIP is considered to be the entirety of the island of Ireland, as well as those generally within 15km of the Republic. The ZoI is illustrated in **Figure 3.1**.

European sites are only at risk from significant effects where a source-pathway-receptor link exists between a proposed development and a European site(s). This can take the form of a direct effect (e.g. where the proposed development and/or associated construction works are located within the boundary of the European site(s)) or an indirect effect where effects outside of the European site(s) affect ecological receptors within the European site (e.g. effects 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 NDP and European site.

4.2 European sites within the ZoI

As outlined in Section 3.1, the NIP is a National Plan. Thus, all European sites in the Republic of Ireland as well as those within 15km of the Republic are considered to be within the ZoI for the purposes of this plan. There are some 433 No. SACs and 154 No. SPAs within the ZoI of the NIP. European sites that occur in the Republic of Ireland are illustrated in **Figure 4.1** below.

Details on the specific qualifying interests and special conservation interests of each European site can be found on the NPWS website which has a dedicated database for European sites. NPWS data for Irish sites was reviewed and considered in the preparation of this Report for the Purposes of AA Screening.

It is acknowledged that the number of European Sites designated, and their boundaries, are subject to change over time and must therefore be verified on an ongoing basis.

Ireland has a higher density of European sites in Galway, Donegal and Mayo where habitats such as blanket bogs, semi-natural grasslands and high-quality water dependent habitats are located. European sites are concentrated along major river catchments in Carlow and along the coast in Wicklow and Waterford and in the south east of Ireland.

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 'Guidance on Energy Transmission Infrastructure and EU Nature legislation,' 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. 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 Nature 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.

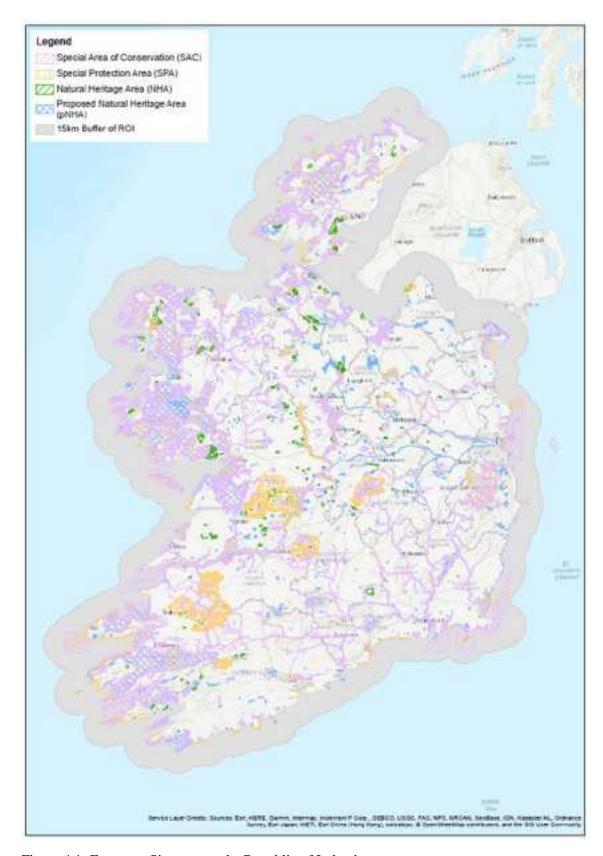


Figure 4.1: European Sites across the Republic of Ireland

4.3 Potential Impacts

Table 4.1: Potential Impacts as a result of proposed projects¹. Those projects indicated in purple will be assessed further by means of Stage 2 AA.

Capacity Upgrade to existing 5501 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

New CNG Station at NIP19CNCNG1

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.

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 ex situ mobile QI species.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

Capacity Upgrade to existing 3607 AGI

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 16.1kscm

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.

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¹ Refer to Appendix A for full sized figure of the European sites in Ireland.

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive

Capacity Upgrade to existing 5301 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

New CNG Station at NIP19LSCNG1

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.

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New CNG Station at NIP19MHCNG1

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.

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 QIs.

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It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

Capacity Upgrade to existing 7403 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

Capacity Upgrade to existing 6403 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

Capacity Upgrade to existing 6103 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

New CNG Station at NIP19KECNG1

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 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

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New CNG Station at NIP19MHCNG2

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.

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

Capacity Upgrade to existing 1303 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

Capacity Upgrade to existing A108 AGI

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

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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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive

Station Bypass Project at 3603 AGI

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 from Dublin County Council, and the appropriate environmental assessments carried out. Refer to the findings of the same on DCCs website.

New 85-70Bar AGI Station 8003 AGI

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 from Dublin County Council, and the appropriate environmental assessments carried out. Refer to the findings of the same on DCCs website.

New 70 -4 bar AGI Station NIP19DAGI1 AGI

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

Capacity Upgrade to existing 1302 AGI

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

Capacity Upgrade to existing 7203 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive

New CNG Station at NIP19DCNG1

The driver of this project is to facilitate the installation of a new CNG station at Clonshaugh 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

AA Determination

Planning permission has been sought for this project from Dublin County Council, and the appropriate environmental assessments carried out. Refer to the findings of the same on DCC website.

New CNG Station at NIP19DCNG2

The driver of this project is to facilitate the installation of a new CNG station at Cappagh, 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 NIP19DCNG2 will change once GNI complete the design of this CNG station

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New CNG Station at NIP19DCNG3

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

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New CNG Station at NIP19DCNG4

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.

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New Renewable Gas Injection Facility at 0701 AGI

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.

AA Determination

Planning permission has been sought for this project from Cork County Council, and the appropriate environmental assessments carried out. Refer to the findings of the same on CCC website.

New Pressure Reduction Skid at existing 0705 AGI

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 350ksmch at the existing AGI.

AA Determination

The proposed works are not directly connected with, or necessary to the conservation management of any European sites.

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.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

New CNG Station at NIP19LKCNG1

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.

AA Determination

Planning permission has been sought for this project from Limerick County Council, and the appropriate environmental assessments carried out. Refer to the findings of the same on LCC website

New CNG Station at NIP19TNCNG1

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

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 QIs.

It is not possible to rule out any significant impacts on European sites as a result of this project. Potential for impacts such as habitat loss, degradation or fragmentation or disturbance and displacement of species is identified. This project will we assessed further at a Stage 2 Appropriate Assessment

Capacity Upgrade to existing 0605 AGI

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

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. However, screening for the purposes of Appropriate Assessment will be carried out, where necessary, at project level, in compliance with the Habitats Directive.

4.3.1 Conclusion

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 purple 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

The plan and these 11 projects will be assessed further at Stage 2 AA in a Natura Impact Report.

4.4 Aims and Commitments

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. Refer to Table 4.2 for the aims and commitments of the NIP.

Each of the aims and commitments outlined in Table 4.2 have been reviewed to inform this report for the purposes of AA Screening. No likely significant effects on European sites are expected to occur as a result of GNI realising any of these aims and commitments.

Table 4.2: Aims and Commitments of the NIP

Aims and	Aims and Commitments of the NIP		
4.1.1	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		

Aims and Commitments of the NIP		
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 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 endeavour 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	

Aims and Commitments of the NIP		
	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.	
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 Cumulative Effects and Transboundary Effects

Assessments of cumulative effects should also be taken into consideration when determining the impacts on European sites, as required by Article 6.3 of the Habitats Directive. Other relevant plans and projects are considered below. It is considered extremely unlikely that significant in-combination or cumulative effects arising from interaction with other plans or projects could arise as each plan or project has either been subject to the Appropriate Assessment process or provides for appropriate biodiversity protection. Each Stage 2 AA or Stage 1 AA Screening concluded that significant effects on European sites arising from the plan or project in question were considered extremely unlikely

This section assesses the effects of the implementation of the draft NIP in combination with each of the key plans and projects. A summary is presented in **Table 5.1**.

The potential for transboundary effects is also considered.

5.1 Plans

5.1.1 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.

5.1.2 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 European sites as a result of this plan. No in-combination impacts with the NIP are predicted as a result of its implementation.

5.1.3 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.

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

5.1.5 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.

5.1.6 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 allisland 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 preconsultation 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.

5.1.7 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.

5.1.8 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 (NOx, SOx 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 an concluded that the plan will have no adverse effects on any European sites. No in-combination impacts with the NIP are predicted as a result of its implementation.

5.1.9 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.

5.1.10 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 **5.1** 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 5.1: Cumulative Assessment of relevant plans and programmes

Plan(s)	Potential for Cumulative Effects
DCCAE 2019, Ireland's Climate Action Plan 2019 DCCAE 2019, Electricity & Gas Networks Sector Climate Change Adaptation Plan DCCAE 2018, Draft National Energy and Climate Plan 2021 – 2030 National Energy Efficiency Action Plan for Ireland #4 2017–2020 National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland - 2017 to 2030 White Paper on Energy: Ireland's Transition to a Low Carbon Energy Future 2015 – 2030 DCCAE 2010, National Renewable Energy Action Plan	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. The NIP sees the introduction of new technologies to facilitate renewable gas injection into the gas network, and to supply Compressed Natural Gas (CNG) from the gas network as a fuel source for commercial vehicles. These new technologies align with the provisions of the plans outlined. The NIP also outlines a range of climate change, environmental and sustainability aims/commitments which align with those in these plans.
CRU 2019, Strategic Plan 2019 - 2020	The NIP aligns with the values and strategic priorities outlined in the CRUs Strategic Plan. No negative cumulative effect is anticipated as a result of the implementation of the two plans.
GNI 2018, Network Development Plan 2018	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. The two plans are generally aligned and, as such, no negative cumulative effects are anticipated as a result of the implementation of both plans.

Plan(s)	Potential for Cumulative Effects
DHPLG 2018, National Planning Framework	The focus of the NPF is on sustainable land use planning for the next 20 years.
	The NIP aligns with National Policy Objective 47: in cooperation 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.
	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.
	Individual projects will be subject to AA screening at a project level to ensure no adverse impacts on European sites.
	As such no negative effects are predicted.
County and City Development Plans Local Area Plans	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.

5.2 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 will be assessed in further detail in Stage 2 AA.

Overall, no potential for significant transboundary effects on European sites or species as a result of the NIP have been identified, for the same reasons as those described in Section 4.3 pertaining to the characteristics of the NIP, and its position in the hierarchy of GNI gas network plans.

6 Screening Statement and Conclusions

The likely impacts that will arise from the NIP alone and in combination with other plans and projects have been examined in the context of a number of factors that could potentially have a significant effect on European Sites.

There are some 433 No. SACs and 154 No. SPAs within the ZoI of the NDP.

It was determined that, while the NIP does outline the capital investment proposals to be implemented over the next 3 years and beyond, including AGI upgrade works and installations, and the provision of new CNG and CGI stations, it does not define the exact location, nature, size/operating conditions of any proposals, or allocates resources to a specific area in Ireland.

At this stage, in the absence of further information or the integration of mitigation measures, it is considered that the NIP may have potential to impact on European sites. In the absence of more detailed information on the NIP and projects listed therein at this stage, the precautionary principle must be applied. Therefore, in accordance with Article 6(3) of the Habitats Directive, AA of the NIP is required. This will be presented in a Natura Impact Report. It should be noted that further refinement of the Screening stage will continue as more detail on the NIP becomes available.

It is the opinion of Arup that 11 of the 27 capital investment proposals have the potential to have a significant effects on European sites and will therefore the plan will be brought forward to Stage 2 Appropriate Assessment.

No potential for Transboundary or Cumulative effects have been identified.

Appendix A

Figures

