

# **Arklow Local Area Plan Submission - Report**

Who are you:	State Body		
Name:	Department of the Environment, Climate and Communications		
Email Address:	PlanningAdvisory@decc.gov.ie		
Reference:	ARKLAP-142125		
<b>Submission Made</b>	March 28, 2024 2:39 PM		

# Topic

Heritage – Biodiversity- Green infrastructure- Climate Action- Energy

### Submission

Please see attached a submission on behalf of the Department of the Environment, Climate and Communications.

# File

2024-03-28 DECC Submission Pre-Draft Arklow LAP.pdf, 2.12MB

An Roinn Comhshaoil, Aeráide agus Cumarsáide Department of the Environment, Climate and Communications



Administrative Officer,
Planning Department,
Wicklow County Council,
County Buildings,
Station Road,
Wicklow Town,
Co. Wicklow
A67 FW96

RE: Preparation of the Draft Arklow Local Area Plan

Dear Sir / Madam,

Further to the notice given to this Department of the publication of an invitation for submissions on the pre-draft stage of the Arklow Local Area Plan (the Plan), the following submission outlines its observations in respect of a number of policy areas for which the Department is responsible.

The Department of the Environment, Climate and Communications' vision of a climate neutral, sustainable, and digitally connected Ireland will be achieved by collaboratively delivering policies and programmes to empower people, communities, and businesses to continue the transition to a better quality of life for current and future generations. This vision also aligns with the UN 2030 Agenda for Sustainable Development and the 17 SDGs, which provide a plan of action for people, prosperity and planet, with the commitment to leave no-one behind.

The step change in our ambition from a low carbon to climate neutral Ireland requires strong leadership across Government and the wider public sector. This Department will drive the climate agenda by engaging with local authorities to build resilience in citizens, communities, and business to overcome climate adaptation challenges, maximising climate mitigation and adaptation opportunities and facilitating the transition to a truly Circular Economy.



This will also help to deliver on the Government's 'whole-of-society' approach for the successful implementation of the SDGs, driving in particular the achievement of Goal 7 on Affordable and Clean Energy, Goal 12 on Responsible Consumption and Production, and Goal 13 on Climate Action. Achieving the SDGs overall will require fundamental changes in many parts of Irish life, but it is also an opportunity to create a cleaner, greener, fairer economy and society.

The Department asks that you take the material outlined in the following sections into consideration when drafting the Arklow Local Area Plan, which align with our Statement of Strategy for the period 2021-2023, <u>Le Chéile 23</u>, which itself sets out our vision, mission, and five strategic goals in key policy areas.

The Department also asks that you take into consideration the framework of <u>Agenda 2030</u>, <u>the Sustainable Development Goals (SDGs) and their respective targets</u>, in the overall drafting of the Plan, and in relation to the specific areas outlined below.

# Wicklow County Development Plan (WCDP) 2022-2028

The Planning and Development Acts 2000 (as amended) require the LAP to be consistent with the objectives of the Development Plan and its Core Strategy. In this regard, DECC note the positive objectives of the WCDP 2022-2028 which places climate action as a strategic principle of the plan. Objectives at County level for climate action, renewable energy infrastructure, communications infrastructure inter alia should be reflected by objectives and actions of the LAP, as relevant for the plan area, to support implementation of national, regional and county level policy on these themes.

The following recommendations, which are reflected in the Department's previous submission for the WCDP review process, are an opportunity to strengthen objectives of the LAP.



### **Climate Action**

The <u>Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act 2021)</u> amends the Climate Action and Low Carbon Development Act 2015 and sets Ireland on a legally binding path to net-zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade. The significantly strengthened legally binding framework established under the Climate Act, with clear targets and commitments set in law, will help ensure that Ireland achieves its national, EU and international climate goals and obligations in the near and long-term. In this regard, we would draw the Council's attention to Section 15(1) of the principal Act (as amended), which requires public bodies to "...perform its functions in a manner consistent with —

- (a) the most recent approved climate action plan,
- (b) the most recent approved national long term climate action strategy,
- (c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
- (d) the furtherance of the national climate objective, and
- (e) the objective of mitigation greenhouse gas emissions and adapting to the effects of climate change in the State"

The <u>Climate Action Plan 2023</u> (CAP23) was the first climate plan adopted on a statutory basis and is currently being updated as <u>Climate Action Plan 2024</u> (CAP24), which sets a roadmap for taking decisive action to halve our overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. We request that the County Council consider how the actions set out therein can be incorporated into the Local Area Plan, where relevant.

<sup>&</sup>lt;sup>1</sup> The Department notes the CAP24 is open for public consultation in early 2024 and will be adopted in early 2024.



We request the Local Authority consider the following when finalising the LAP:

- The <u>Long-term Strategy on Greenhouse Gas Emissions Reductions</u> which sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050.
- Ireland's <u>National Climate Objective</u> and the <u>European Climate Law</u>.
- The <u>National Adaption Framework</u> (NAF) which sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. A new NAF is currently being developed by the Department and a draft is due to be completed by early 2024.
- In all matters relating to Climate Action, local authorities should consult directly with their own CAROs.

The Climate Act 2021 sets out that each local authority shall prepare and make a plan, referred to as a Local Authority Climate Action Plan (LA CAP), specifying the mitigation and adaptation measures to be adopted for a period of five years. The plans represent a new opportunity to further embed climate mitigation and adaptation in local authority Development Plans and will enhance local authorities' ability to lead, coordinate and become agents of change in response to the ongoing climate change crisis. The plans are due to be adopted in early 2024. The preparation of the LAP is a positive opportunity to support the implementation of WCDP 2022-2028 objectives for climate action and support the implementation of the Wicklow County Climate Action Plan.

We would also draw attention to the framework of Agenda 2030 and the Sustainable Development Goals and ask that the Council pay particular attention to the targets outlined in SDG13 –Climate Action.

### Recommendation 1:

Consistent with climate action policies and objectives of the WCDP 2022-2028, the LAP should support the implementation of the national Climate Action Plan, the UN Agenda 2030 and the Sustainable Development Goals, and the Wicklow Council Climate Action Plan through the preparation of effective objectives and actions for climate action in LAP area.



# **Transport**

The CAP24 commits the Government to reducing transport emissions by 50% from 2018 emissions rates. To facilitate the reduction in greenhouse gas emissions (GHG emissions), CAP24 supports a significant increase in sustainable transport trips, through enhanced land-use planning, public transport, active travel, vehicle efficiency, 20% reduction in total vehicle kilometres, 50% reduction in fuel usage, fleet electrification and biofuels.

We note the sustainable mobility objectives of the Local Authority with regard to reducing the demand for vehicular travel, public transport and active travel.<sup>2</sup>

We encourage the Council to refer to Agenda 2030, with particular consideration of the SDG targets relating to sustainable transport, within SDGs 3, 7, 8, 9, 11, 12 and 14.

### Recommendation 2:

The Local Authority is requested to consider the measures within the CAP24 and sustainable transportation objectives of the WCDP 2022-2028 relating to sustainable mobility and reducing the demand for transport journeys by private vehicles (Avoid-Shift - Improve Framework) through more effective land use and transport planning integration and compact growth principles when drafting the Local Area Plan.

# Land Use, Land Use Change and Forestry

The Department would like to bring to the Local Authority's attention the call for the integration of bioeconomy policy development into the planning framework, under Action 5.1 of the <u>Bioeconomy Action Plan 2023 – 2025</u>. This action seeks to enhance bioeconomy governance in Local Authorities and improve policy making for the bioeconomy to address climate action, green economy, enterprise, and economic development.

We would ask the Council to also again consider the related SDG targets outlined in Agenda 2030, in particular those set out in SDG 15 – Life on Land.

<sup>&</sup>lt;sup>2</sup> 12.8 Sustainable Transportation Objectives, Chapter 12 Sustainable Transportation, Wicklow County Development Plan 2022-2028



### Recommendation 3:

The Local Authority is requested to consider the Actions of the Bioeconomy Action Plan 2023-2025 including Action 5.1, as relevant for the plan area, when drafting the Local Area Plan, and consider the related SDG.

# **Renewable Energy**

The target of delivering up to 80% of Ireland's electricity from renewable sources by 2030, as set out in the <u>National Development Plan 2021-2023</u> (NDP) and the CAP24, will come from a combination of onshore and offshore renewable sources. Regular <u>Renewable</u> <u>Electricity Support Scheme</u> (RESS) auctions will deliver competitive levels of onshore wind and solar electricity generation.

The Local Authority should note the Governments renewable energy generation targets under the CAP24: Solar PV Capacity targets of up to 5GW by 2025 and 8GW by 2030. Onshore wind capacity of 6GW by 2025 and 9GW by 2030.

The CAP24 includes actions to accelerate renewable electricity generation:

- By delivering a streamlined electricity generation grid connection policy and process, and remove barriers, where possible, for the installation of renewables and flexible technologies reducing the need to build new grid, including hybrid (wind/solar/storage) connections.
- Ensuring that the permit-granting procedure, the planning, construction and operation of renewable energy plants, the connection of such plants to the grid, the related grid itself, and storage assets are presumed as being in the overriding public interest.

We also note the objective of the Local Authority to support the development and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.18



The Department notes policy of the Local Authority which states:

- 'To support and facilitate to the highest degree possible the development of alternative and renewable sources of energy, particularly in the generation of electricity / heating and for use as transport fuel'.<sup>4</sup>
- 'To support and promote the development of 'Sustainable Energy Communities' and in particular to encourage and facilitate developments that are energy neutral / low emission, integrate renewable energy technology or involve local renewable energy production'.<sup>5</sup>
- 'To facilitate and support the development of solar generated electricity'.6
- 'To facilitate and support the development of small-scale electricity generation installations'.<sup>7</sup>

We would also ask the Council to consider the particular targets set out in Agenda 2030 regarding SDG7 - Affordable and Clean Energy.

# Recommendation 4:

We would encourage the inclusion of an objective of the Council in the LAP to promote the development of appropriately scaled renewable energy installations (rooftop solar, geothermal energy and other types of installations appropriate to urban environments) and to support the development of additional supporting grid infrastructure. It is crucial that all counties look to continue to increase their contribution to the national renewable electricity generation target and, where possible, aim for developments that are carbon or energy use neutral.

<sup>&</sup>lt;sup>4</sup> Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.01

<sup>&</sup>lt;sup>5</sup> Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.03

<sup>&</sup>lt;sup>6</sup> Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.08

Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.15



Response no. 25 of the National Energy Security Framework (NESF) proposes to align all elements of the planning system to fully support accelerated renewable energy development and ensure that the local planning policy framework "fully supports the national objectives." The NESF provides an overarching and comprehensive response to Ireland's energy security needs in the context of the war in Ukraine. The Framework outlines the structures which are in place within Government to monitor and manage our energy supplies. It sets out the plans which are in place to deal with energy security emergencies should they arise and outlines out how these plans will be tested in light of the war in Ukraine. This includes shifting away from fossil fuel energy generation and use. A key aspect of this is local, community-based approaches to renewable energy, the reduction in the reliance on the grid transmission system (through local and domestic generation) and through microgeneration.

### Recommendation 5:

The LAP should include objectives supporting local and community based renewable energy projects to address Government policy and strategy for sustainable, secure and affordable energy.

The Department notes the following measure of the CAP24 with regard to the required acceleration of renewable electricity generation and the potential use of existing State infrastructure:

'All relevant public bodies will carry out their functions in a manner which supports the achievement of the renewable electricity targets, including, but not limited to, the use of road and rail infrastructure to provide a route for grid infrastructure where this is the optimal solution'<sup>8</sup>

# Recommendation 6:

We request that the Local Authority ensure that no objectives are included in the final LAP that precludes options relating to the use of public infrastructure for multiple purposes.

<sup>&</sup>lt;sup>8</sup> Section 12.4.1 Climate Action Plan 2024.



# Retrofitting

The Programme for Government and the CAP24 set ambitious targets to retrofit 500,000 homes to a Building Energy Rating of B2 (or cost optimal equivalent) by 2030, and to install 400,000 heat pumps in existing dwellings, to replace existing heating systems by 2030. This represents approximately 30% of the housing stock and is among the most ambitious retrofit programmes worldwide. The review of the NDP resulted in an unprecedented financial commitment to support achievement of the Government's retrofit targets including a €45m investment in the Community Energy Grant Scheme which includes grants for public, commercial and community buildings. The ambitious National Retrofit Plan, sets out how the Government will deliver its ambitious retrofitting targets. The Plan identified an €8 billion Exchequer commitment to 2030 to support homeowners to upgrade their homes through SEAI home energy grant schemes including free energy upgrades for households at risk of energy poverty. It is designed to address barriers to retrofit across four key pillars: driving demand and activity; financing and funding; supply chain, skills, and standards; and governance. For each pillar, barriers were identified and timebound policies, measures and actions were put in place to address them.

This also aligns with SDG targets relating in particular to SDG 11 – Sustainable Cities and Communities.

Th Department notes policy objective of the Eastern and Midland Regional Assembly and Local Authority, which states:

• 'Local authorities shall include policies in statutory land use plans to promote high levels of energy conservation, energy efficiency and the use of renewable energy sources in existing buildings, including retro fitting of energy efficiency measures in the existing building stock and energy efficiency in traditional buildings. All new buildings within the Region will be required to achieve the Nearly Zero-Energy Buildings (NZEB) standard in line with the Energy Performance of Buildings Directive (EPBD)'.9

<sup>9</sup> Regional Policy Objective 7.40, Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy



- 'To support and facilitate to the highest degree possible the development of alternative and renewable sources of energy, particularly in the generation of electricity / heating and for use as transport fuel'.<sup>10</sup>
- 'To facilitate retrofitting of existing building with heat saving devices and installations, where permission is required for such works'.<sup>11</sup>

### Recommendation 7:

The Local Authority should be mindful of the regional policy objective and County Development Plan when drafting the Local Area Plan and explore how it can effectively be implemented at local level, for example, by identifying retrofitting initiative priorities within the local area, supporting initiatives that seek retrofitting infrastructure to existing buildings and provide for policies to implement same.

# **Public Buildings**

We request the Local Authority consider the following when finalising the LAP:

- The <u>Energy Efficiency Directive</u>, which sets specific obligations for the public sector
  to achieve energy consumption reductions of 1.9% each year over the period of
  2021 to 2030, and requires Member States to renovate each year at least 3% of the
  total floor area of buildings owned by public bodies
- The <u>Energy Performance in Buildings Directive</u> (EPBD) which contains minimum energy performance standards for public sector buildings and mandates the installation of Solar PV on new and existing public buildings and the phase out of fossil fuels.

The Department, together with SEAI, are in the process of carrying out an analysis on the implications of the various requirements on local authorities and other public bodies with a view to setting these out comprehensively prior to further engagement.

<sup>&</sup>lt;sup>10</sup> CPO 16.01

<sup>&</sup>lt;sup>11</sup> CPO 16.33



### Recommendation 8:

We would encourage the Local Authority to consider the policy where relevant for the LAP area.

### Heat

The National Heat Study provides a comprehensive assessment of the options available to decarbonise Ireland's energy used for heating and cooling homes, businesses, and industry. Options available include the electrification of heating. The CAP24 adopts measures to support the electrification of heating by strengthening our existing Building Regulations and implementing an ambitious National Residential Retrofit Plan. Targets set are 170,000 new dwellings using heat pumps by 2025, and 400,000 by 2030, and 45,000 existing dwellings using heat pumps by 2025, and 400,000 by 2030. The Local Authority is requested to consider the development of the electrification of heating during the preparation of the Local Area Plan, having regard to the CAP24.

This also aligns with SDG targets relating in particular to SDG 11 – Sustainable Cities and Communities and SDG 7 – Affordable and Renewable Energy.

# Recommendation 9:

The Local Authority is requested to consider the development of the electrification of heating to further their objective during the preparation of the Local Area Plan, while having regard to the CAP24 and the WCDP 2022-2028.

We would also note Response no. 17 of the National Energy Security Framework, which (building on specific actions in the Climate Acton Plan) seeks to reduce the reliance on fossil fuel heating systems.

### Recommendation 10:

The Local Area Plan should include development management objectives to achieve the ambition of reducing reliance on fossil fuel heating systems.



# **Compact Growth and District Heating**

When preparing the draft Local Area Plan, due regard should be given to the ambition of the National Planning Framework, Regional Spatial and Economic Strategy and WCDP 2022-2028 which requires the achievement of compact growth and explicitly recognises the potential for such compact growth to facilitate the development of low carbon district heating.

# Examples include:

- National Planning Framework: 'District heating networks will be developed, where technically feasible and cost effective, to assist in meeting renewable heat targets and reduce Ireland's GHG emissions'.<sup>12</sup>
- Regional Policy Objective 7.38: 'Local authorities shall consider the use of heat mapping to support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted. A feasibility assessment for district heating in local authority areas shall be carried out and statutory planning documents shall identify local waste heat sources'.<sup>13</sup>
- CPO 16.34: 'To support the development of district heating systems, particularly those generating heat from renewable sources.' 14

The Department therefore encourages the Local Authority to examine the potential of district heating including district heating derived from waste heat, where available, technically feasible and cost effective and commit to carrying out a feasibility exercise and the use of heat mapping in support of same in the draft policies. As such, policies in support of same are encouraged in the Draft Arklow Local Area Plan. The SEAI Centre of Excellence will be established to provide guidance and support in this regard, however, the Heat Policy division is available in the interim.

<sup>&</sup>lt;sup>12</sup> National Strategic Outcome 9, National Planning Framework, Pg 149

<sup>&</sup>lt;sup>13</sup> Regional Policy Objective 7.38, Eastern and Midlands Regional Spatial & Economic Strategy

<sup>&</sup>lt;sup>14</sup> Wicklow County Development Plan 2022-2028, Volume 1- Written Statement, Chapter 16 Energy & Information Infrastructure, CPO 16.34



### Recommendation 11:

The Local Area Plan should emphasise the importance of appropriate spatial planning in climate change action, particularly achieving compact growth as prioritised across national, regional and county level planning policy to reduce greenhouse gas emissions and facilitate more sustainable infrastructure provision, including low carbon district heating.

# **Circular Economy**

The Circular Economy is an alternative to the predominant 'take-make-waste' linear economic model. Meeting Ireland's climate action targets requires a transition to a circular economy which protects and restores our environment through sustainable resource use, as 45% of global emissions come from current systems of production and resource consumption. The challenge Ireland faced was around creating a policy or framework that would radically shift focus back to the start of the product life cycle, to focus on prevention and designing out waste, and to effect behavioural change at an individual, household, and business level. This policy is set out in the government's <u>Waste Action Plan for a Circular Economy</u>, and the Whole-of-Government Circular Economy Strategy.

The <u>Circular Economy Act 2022</u>, will ensure all households have access to and use segregated waste services and incentivise the commercial sector to increase waste separation, as well as providing waste authorities with new tools to tackle illegal dumping. The Act also provides for the reconfiguration of the Environment Fund to become Ireland's Circular Economy Fund, ring-fenced to support environment and circular economy projects and initiatives.

Ireland's first Whole of Government Circular Economy Strategy was approved by Government and launched last year. This first iteration of the Circular Economy Strategy marked a significant milestone in Ireland's transition towards greater circularity. In tandem with the Strategy, the EPA developed a new Circular Economy Programme. This new programme will be a driving force in Ireland's move to a circular economy by businesses, householders, and the public sector. The Council is requested to consider all aspects of how it can support the transition to a circular economy in the preparation of the local area plan. The Department encourages the Local Authority to support and promote circular economy principles within the LAP.



The Department notes the objective of the Local Authority in the Wicklow County Development Plan 2022-2028, CPO 9.21, which states:

'To encourage and facilitate the 'circular economy' and the development of 'green' industries, including industries relating to renewable energy and energy-efficient technologies, material / waste recycling and conservation'.

The Department advise the Local Authority to consult with their respective Regional Waste Management Planning Office regarding development of the LAP.

The Department would also ask the Council to have regard to the targets set out in the SDGs, in particular in relation to SDG12 – Responsible Consumption and Production,

### Recommendation 12:

The Local Area Plan should support circular economy principles in the Arklow Local Area Plan and implement policy for same.

# **Waste Management**

The Department draws the Local Authority's attention to the new guidance in respect of construction waste management, titled "Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects". The purpose of these guidelines is to provide a practical approach to construction and demolition (C&D) which is informed by best practice in the prevention and management of C&D wastes and resources from design through to construction and deconstruction.

The Department advise the Local Authority to consult with their respective Regional Waste Management Planning Office regarding development of the LAP.

The Department would also ask the Council to have regard to targets set out in the SDGs, in particular in relation to SDG 11 – Sustainable Cities and Communities and SDG12 – Responsible Consumption and Production,



# Recommendation 13:

The Local Area Plan should have regard to the guidance "Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects" and give effect to them through the objectives of the plan.

# **Geoscience Policy**

The Department encourages the Local Authority to consider the following when finalising the LAP:

- Policy Statement on Mineral Exploration and Mining which puts in place a clear and sustainable policy framework that can play a role in Ireland's transition to a circular economy and net-zero greenhouse gas emissions.
- Policy Statement on Geothermal Energy for a Circular Economy which outlines the
  regulatory framework, highlights the requirement for meaningful engagement with
  the public, and for further work in the collection of data on Ireland's geothermal
  resources.

The Department notes the objective of the Local Authority in the Wicklow County Development Plan 2022-2028, CPO 16.16, which states:

'To facilitate the exploration of geothermal energy where such development does not have a negative impact on the surrounding environment, landscape, biodiversity or local amenities'.

# Recommendation 14:

We would encourage the Local Authority to consider the policy where relevant for the LAP area.



### **Geoscience Data**

A list of Geological Survey Ireland's (GSI) Publicly Available Datasets Relevant to Planning, EIA and SEA processes, following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018(S.I. No. 296 of 2018), is attached to this submission provides the datasets available for the following areas:

- Land & Soil
- Water
- Landscape
- Air and
- Climate

The maps and data listed in the attached chart are available on the Geological Survey Ireland map viewer. Please read all disclaimers carefully when using Geological Survey Ireland data.

# **Telecommunications**

Ireland's national and international digital connectivity is critically important to maintaining and enhancing Ireland's competitiveness in global markets and in the knowledge and information economy while supporting the shaping of Europe's digital future. This Department provides digital policy leadership and foster investment in high quality communications infrastructure while driving digital entrepreneurship and innovation and promoting the digital society at national, European, and international levels.

An agile, responsive, and resilient digital infrastructure is needed to support the development of the digital economy while improved cyber security will build trust and confidence in online activities and support digital transformation for the benefit of every citizen, business, and community in Ireland. The creation of a gigabit and fully connected digital society, that safeguards the citizen in their use of digital services and applications will promote the use of digital services to meet societal needs, foster innovation and enhance the quality of citizens' lives.



In 2022, the Government published a new national digital strategy, <u>Harnessing Digital</u> – <u>The Digital Ireland Framework</u>, to drive and enable the digital transition across the Irish economy and society. Dimension 2 of the framework places importance on supporting 5G rollout across all populated areas of Ireland by 2030.

National Strategic Objective 6 of the NDP states that high-quality, secure, and reliable connectivity to global telecommunications networks is of significant strategic importance to the Irish State. To achieve this Ireland must develop high capacity and diverse connectivity routes directly to mainland Europe, whilst continuing to encourage investment in cable projects from North America to Ireland. Further measures may be required over time in order to leverage the private investment required to further develop international connectivity to mainland Europe and to ensure that Ireland becomes a central connectivity hub.

It is considered that national policy objectives in terms of digitalisation, 5G rollout and enhancing Ireland's national and international connectivity outlined in those policy documents can be further underlined and supported by Local Authorities via specific reference to these matters in Local Area Plans. Such support is provided in the WCDP 2022-2028 through communication objectives CPO 16.35 to 16.39. Aligned objectives in the LAP will support implementation of these objectives.

The enhancement of Ireland's connectivity and telecommunications area also key to achieving Agenda 2030, with many related targets set out in a number of the Goals, including, but not limited to, SDG4, 5, 9, and 17.

### Recommendation 15:

The Local Area Plan should provide objectives in support of digital communication infrastructure, in particular direct support for 5G rollout and the National Broadband Plan. Further measures to consider include:

 Regarding 5G /Small Cell deployment we would encourage a commitment to identify suitable urban and suburban locations owned by the State for Masts/Small Cells to support smart town initiatives/programmes. In particular, specific support for 5G infrastructure in the draft Local Area Plan would be welcome from a DECC perspective.



- With respect to Smart programmes, we would encourage a commitment to replicate smart programmes / initiatives across all towns and villages across the county.
- The Gigabit Infrastructure Act (GIA).



### Conclusion

We would be grateful if Wicklow County Council would take these matters under consideration in the drafting of the Arklow Local Area Plan.

Department officials can make themselves available for a discussion on any matters raised in this submission or any other matters within the remit of the Department of the Environment, Climate and Communications relevant to the preparation of this plan.

Officials can provide support to the Local Authority in the following areas:

- Climate Action, Engagement and Adaptation
- Energy Generation and Networks
- Energy Use / Demand in the Built Environment
- The Circular Economy
- Communications
- Environmental Policy and Governance
- Waste and Natural Resources (including geosciences)
- UN Agenda 2030 and the Sustainable Development Goals (SDGs)

Please direct any requests for further consultation to <a href="mailto:PlanningNotifications@decc.gov.ie">PlanningNotifications@decc.gov.ie</a>

Yours sincerely,

Planning Advisory Division

Department of Environment, Climate and Communications

# Encl.

- 1. List of Recommendations
- 2. Supplementary Submission from Geological Survey Ireland



### Recommendations

### Recommendation 1:

Consistent with climate action policies and objectives of the WCDP 2022-2028, the LAP should support the implementation of the national Climate Action Plan, the UN Agenda 2030 and the Sustainable Development Goals, and the Wicklow Council Climate Action Plan through the preparation of effective objectives and actions for climate action in LAP area.

### Recommendation 2:

The Local Authority is requested to consider the measures within the CAP24 and sustainable transportation objectives of the WCDP 2022-2028 relating to sustainable mobility and reducing the demand for transport journeys by private vehicles (Avoid-Shift - Improve Framework) through more effective land use and transport planning integration and compact growth principles when drafting the Local Area Plan.

### Recommendation 3:

The Local Authority is requested to consider the Actions of the Bioeconomy Action Plan 2023-2025 including Action 5.1, as relevant for the plan area, when drafting the Local Area Plan, and consider the related SDG.

# Recommendation 4:

We would encourage the inclusion of an objective of the Council in the LAP to promote the development of appropriately scaled renewable energy installations (rooftop solar, geothermal energy and other types of installations appropriate to urban environments) and to support the development of additional supporting grid infrastructure. It is crucial that all counties look to continue to increase their contribution to the national renewable electricity generation target and, where possible, aim for developments that are carbon or energy use neutral.



### Recommendation 5:

The LAP should include objectives supporting local and community based renewable energy projects to address Government policy and strategy for sustainable, secure and affordable energy.

### Recommendation 6:

We request that the Local Authority ensure that no objectives are included in the final LAP that precludes options relating to the use of public infrastructure for multiple purposes.

### Recommendation 7:

The Local Authority should be mindful of the regional policy objective and County Development Plan when drafting the Local Area Plan and explore how it can effectively be implemented at local level, for example, by identifying retrofitting initiative priorities within the local area, supporting initiatives that seek retrofitting infrastructure to existing buildings and provide for policies to implement same.

# Recommendation 8:

We would encourage the Local Authority to consider the policy where relevant for the LAP area.

### Recommendation 9:

The Local Authority is requested to consider the development of the electrification of heating to further their objective during the preparation of the Local Area Plan, while having regard to the CAP24 and the WCDP 2022-2028.

# Recommendation 10:

The Local Area Plan should include development management objectives to achieve the ambition of reducing reliance on fossil fuel heating systems.



### Recommendation 11:

The Local Area Plan should emphasise the importance of appropriate spatial planning in climate change action, particularly achieving compact growth as prioritised across national, regional and county level planning policy to reduce greenhouse gas emissions and facilitate more sustainable infrastructure provision, including low carbon district heating.

### Recommendation 12:

The Local Area Plan should support circular economy principles in the Arklow Local Area Plan and implement policy for same.

### Recommendation 13:

The Local Area Plan should have regard to the guidance "Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects" and give effect to them through the objectives of the plan.

# Recommendation 14:

We would encourage the Local Authorities to consider the policy where relevant for the LAP area.

# Recommendation 15:

The Local Area Plan should provide objectives in support of digital communication infrastructure, in particular direct support for 5G rollout and the National Broadband Plan. Further measures to consider include:

- Regarding 5G /Small Cell deployment we would encourage a commitment to identify suitable urban and suburban locations owned by the State for Masts/Small Cells to support smart town initiatives/programmes. In particular, specific support for 5G infrastructure in the draft Local Area Plan would be welcome from a DECC perspective.
- With respect to Smart programmes, we would encourage a commitment to replicate smart programmes / initiatives across all towns and villages across the county.
- The Gigabit Infrastructure Act (GIA).





**Planning Department** Wicklow County Council **County Buildings** Wicklow Town Wicklow, A67 FW96

12 March 2024

Re: Arklow and Environs LAP - Pre draft consultation

Your Ref: n/a Our Ref: 24/72

Dear Sir/Madam,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our website for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site specific assessments.

With reference to your email received on the 11 March 2024, concerning the Arklow and Environs LAP – Pre draft consultation, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

### Geoheritage

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS) in the Department of Culture, Heritage and the Gaeltacht to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme in Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme were rigorously selected by a panel of theme experts.

County Geological Sites (CGSs) have been adopted in the National Heritage Plan, and will form a major strand of geological nature conservation to complement the various ecological and cultural conservation measures. It is important to note however, that management issues for the majority of geological heritage sites may differ from ecological sites. County Geological Sites are the optimal way of addressing the responsibility of each authority under the Planning and Development Act 2000 and its amendments, to protect sites of geological interest.

The audit for Wicklow was published in 2014. The full report details and individual CGS Reports can be found here. Our records show that there are no CGSs in the vicinity of the proposed LAP.

### Geotourism

Over the past number of years geology has become a large part of Irish tourism. Ireland currently has three UNESCO Global Geoparks, and a number of other geotourism projects. These Geoparks, along with other tourism initiatives such as the Wild Atlantic Way, Irelands Ancient East, and Irelands Hidden Heartlands have bolstered tourism in various parts of Ireland and helped to increase its levels in areas that were previously not as popular with tourists. We are encouraged by Wicklow County Council continuing this trend, making the geological audit information easily available to the general public by way of a popular book, 'Glaciers, Glens and Granites' that has been published and launched in November 2022. We would encourage geology to be a significant part of any tourism initiatives that may be introduced.





### **Dimension Stone/Stone Built Ireland**

Stone Built Ireland is a 2 year research collaboration agreement between Geological Survey Ireland, Trinity College Dublin & the office of Public Works. The project aims to document building and decorative stone in Ireland to inform government agencies, building owners and conservationists of the sources for suitable replacement stone in restoration work and to develop a greater awareness among the general public.

In addition to promoting citizen science and awareness of local materials, the inventory will aid the public in complying with part 4 of the Planning and Development Act 2000, which requires owners to conserve protected structures. It will also assist local authorities in issuing Section 57 Declarations, which outline 'the type of works which it considers would or would not materially affect the character of the structure or any element of the structure'.

This project builds on work already completed funded by the Irish Research Council (March 2019 - September 2020) that carried out primary research on the topic and developed a simple database and web-based platform as well as hosting various heritage displays at venues (<a href="www.stonebuiltireland.com">www.stonebuiltireland.com</a>).

### Groundwater

Geological Survey Ireland's <u>Groundwater and Geothermal Unit</u>, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.

There are aquifers underlying the proposed LAP including a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones', a 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones' and a 'Locally important gravel aquifer'. The Groundwater Vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas.

<u>GWClimate</u> is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the <u>Map viewer</u>.

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. The Groundwater Protection Response overview and link to the main reports is here: <a href="https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx">https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-protection/county-groundwater-protection-schemes/Pages/default.aspx</a>

# **Geological Mapping**

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found <a href="https://example.com/here">here</a>, in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k.zip file on the <a href="Data & Maps">Data & Maps</a> section of our website.





### **Geotechnical Database Resources**

Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.

### **Geohazards**

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.

Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.

Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.

Coastal Vulnerability while seen as a potential geohazard, is discussed in more detail under our marine and coastal unit information below.

### **Geothermal Energy**

Geothermal energy harnesses the heat beneath the surface of the Earth for heating applications and electricity generation, and has proven to be secure, environmentally sustainable and cost effective over long time periods. Geothermal applications can range in depth from a few metres below the surface to several kilometres. Ireland has widespread shallow geothermal resources for small and medium-scale heating applications, which can be explored online through Geological Survey Ireland's Geothermal Suitability maps for both domestic and commercial use. We recommend use of our Geothermal Suitability maps to determine the most suitable type of ground source heat collector for use with heat pump technologies. Ireland also has recognised potential for deep geothermal resources.

The Roadmap for a Policy and Regulatory Framework for Geothermal Energy was launched at the Geoscience 2020 Conference in November 2020. The Assessment of Geothermal Resources for District heating in Ireland and the Roadmap for a Policy and Regulatory framework for Geothermal Energy in Ireland documents have been developed to support the Government's commitments under the Climate Action Plan 2019 and the Programme for Government.

For further information please see our Geoenergy pages on our website or contact the Groundwater and Geothermal Unit of the Geological Survey Ireland directly.

# Natural Resources (Minerals/Aggregates)

Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process.

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer. We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in developments are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.





# Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions.

Data is available at <a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and Carlos (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and Carlos (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland and Carlos (<a href="https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx">https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx</a>. Geological Survey Ireland (<a href="https://www.gsi.

### **Geophysical data**

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gamma-ray radiation) of soils & rocks as part of the <u>Tellus programme</u>. These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk.

### **Historic Mines**

The EPA, Geological Survey Ireland and the former Exploration & Mining Division undertook a joint project entitled "Historic Mine Site - Inventory and Risk Characterisation (HMS - IRC)". This project carried out detailed site investigations and characterisation on priority historic mine sites in the country.

A risk ranking methodology was developed which categorised the sites according to the risks posed to human and animal health and the environment. The project commenced in January 2006 and was completed in December 2008. A final report and a GIS geodatabase was produced on completion of the project. Reports and maps available <a href="here">here</a>. The project provides an understanding of the impacts of historic mining sites in Ireland and their status at the time of the study.

### **Marine and Coastal Unit**

Our marine environment is hugely important to our bio-economy, transport, tourism and recreational sectors. It is also an important indicator of the health of our planet. Geological Survey Ireland's Marine and Coastal Unit in partnership with the Marine Institute, jointly manages <a href="INFOMAR">INFOMAR</a>, Ireland's national marine mapping programme; providing key baseline data for Ireland's marine sector. The programme delivers a wide range of benefits to multi-sectoral end-users across the national blue economy with an emphasis on enabling our stakeholders. Demonstrated applications for the use of INFOMAR's suite of mapping products include Shipping & Navigation, Fisheries Management, Aquaculture, Off-shore Renewable Energies, Marine Leisure & Tourism and Coastal Behaviour.

INFOMAR data such as bathymetry, backscatter, sediment classification, shipwrecks and survey metadata can be downloaded free of charge in a variety of formats at the INFOMAR Marine Data Download Portal:

 $\underline{\text{https://experience.arcgis.com/experience/9213db3d963d4f3cab3a220323d7cd4e/page/Page-1/?views=Download-Vector-Datasets}$ 

INFOMAR also produces a wide variety of seabed mapping products that enable public and stakeholders to visualize Ireland's seafloor environment <a href="https://www.infomar.ie/maps/downloadable-maps/maps">https://www.infomar.ie/maps/downloadable-maps/maps</a>. Story maps have also been developed providing a different perspective of some of the bays and harbors of the Irish coastline. We would therefore recommend use of our Marine and Coastal Unit datasets available on our <a href="https://www.infomar.ie/maps/downloadable-maps/maps">website</a> and <a href="https://www.infomar.ie/maps/downloadable-maps/maps">Maps/downloadable-maps/maps</a>. Story maps have also been developed providing a different perspective of some of the bays and harbors of the Irish coastline. We would therefore recommend use of our Marine and Coastal Unit datasets available on our <a href="https://www.infomar.ie/maps/downloadable-maps/maps/maps">website</a> and <a href="https://www.infomar.ie/maps/downloadable-maps/maps">Maps/downloadable-maps/maps</a>.

The Marine and Coastal Unit also participate in coastal change projects and are undertaking mapping in areas such as coastal vulnerability and coastal erosion. Further information on these projects can be found <a href="here">here</a>.

# **National Coastal Change Assessment**

Geological Survey Ireland is undertaking a National Coastal Change Assessment. As part of this initiative two mapping products will be delivered for the entire Irish coastline: **coastal vulnerability mapping and shoreline change.** 





Coastal vulnerability maps will provide an insight into the relative susceptibility of the Irish coast to adverse impacts of sea-level rise through the use of a **Coastal Vulnerability Index** (CVI). Currently the project is being carried out on the east coast and will be rolled out nationally over the next couple of years, detailed information and maps are available <a href="here">here</a>. **Shoreline change rates** for the period 2000 to 2023 are being prioritised and will be released by county on a rolling basis over the next 12 months. Shoreline change rates database and reports will be accessible from <a href="mailto:GSI">GSI</a> web mapping viewers. These suite of coastal mapping products are aimed at coastal managers to prioritise or concentrate efforts on adaptation.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to the Geological Survey Ireland Planning Team at <a href="mailto:GSIPlanning@gsi.ie">GSIPlanning@gsi.ie</a>.

Yours sincerely,

### **Geoheritage and Planning Programme**

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.





### Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)

Geological Survey Ireland				n	
Programme	Dataset	Relevant EIA Topic	Coverage	Description / Notes / Limitations	Link to Geological Survey Ireland map viewer
				Associated guidance documentation relating to the National Landslide	
Geohazards	Landslide: National landslide database and landslide susceptibility map	Land & Soil/Climate/Landscape	National	Susceptibility Map is also available.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=b68cf1e4a9044a5981f950e9b9c5625c
				Provide information of historic flooding, both surface water and	
				groundwater. [A lack of flooding presented in any specific location of the	
				map only indicates that a flood has not been detected. It does not	
				indicate that a flood cannot occur in that location at present or in the	
Geohazards	Groundwater Flooding (Historic)	Water	Regional	future]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
				Provides information on the probability of future karst groundwater	
				flooding (where available). [The maps do not, and are not intended to,	
				constitute advice. Professional or specialist advice should be sought	
				before taking, or refraining from, any action on the basis of the flood	
Geohazards	Groundwater Flooding (Predictive)	Water	Regional	maps]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
Geohazards	Radon Map	Land & Soils/Air	National		http://www.epa.ie/radiation/radonmap/
				All geological heritage sites identified by Geological Survey Ireland are	
Geoheritage	County Geological Sites as adopted by National Heritage Plan and listed in County Development Plan	Land & Soils/Landscape	Regional	categorised as CGS pending any further NHA designation by NPWS.	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228
Geological Mapping	Bedrock geology:	Land & Soils	National	1:100,000 scale and associated memoirs.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
				Broad-scale physical landscape units mapped at 1:100,000 scale in order	
Geological Mapping	Physiographic units:	Land & Soils	National	to be represented as a cartographic digital map at 1:250,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=afa76a420fc54877843aca1bc075c62b
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	Land & Soils	Regional	includes 3D models	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9768f4818b79416093b6b2212a850ce6&scale=0
				Digitised geotechnical and Site Investigation Reports and boreholes which	
Geological Mapping	Geotechnical database	Land & Soils	National	can be accessed through online downloads	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=a2718be1873d47a585a3f0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	land & Soils/Water	National	available online	https://secure.dccae.gov.ie/goldmine/index.html
					L
Groundwater & Geothermal	Groundwater resources (aquifers)	Water	National	Data limited to 1:100,000 scale; sites should be investigated at local scale  Data limited to 1:40,000 scale; sites should be investigated at local scale;	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.	Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geotherman	Groundwater recharge.	water	National	long term annual average recharge	https://dcenr.maps.arcgis.com/apps/webappviewer/index.ntmi?id=7e8a202301594087ab14629a10b748er
Groundwater & Geothermal	Groundwater vulnerability.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale	https://dcenr.maps.arcgis.com/apps/webappyiewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geotherman	Groundwater vulnerability.	water	INGLIOITAL	Not all PWS / GWS have SPZ / ZOC. Check with IW / coco / NFGWS for	Intus://ucemi.maps.arcgis.com/apps/webappwiewer/intex.intim:ru=/eoazuz30133406/a014023a100/40ef
Groundwater & Geothermal	Group scheme and public supply source protection areas.	Water	National	private supplies.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geotherman	Group scriente and public supply source protection areas.	water	INGLIGITAL	Data is limited to scale of 1:40.000. Data does not include all of the source	Inters.//ducini.niaps.aregis.com/apps/webappviewer/index.numrid=7e6a202301334067a014023a100740er
Groundwater & Geothermal	Groundwater Protection Schemes	Water	National	protections areas	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Catchment and WFD management units.	Water	National	protections areas	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geotherman	Catchinent and WFD management units.	water	Ivational	For areas underlain by limestone, includes karst features, tracer test	inteps://ducini.nnaps.arcgis.com/apps/webappviewer/index.intmirid=/edd202301334007a047a047a067
Groundwater & Geothermal	karst specific data layers	water	National	database; turlough water levels (gwlevel.ie).	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Wells and Springs	Water	National	Not comprehensive, there may be unrecorded wells and springs	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
a. aawater a ocothermal	··				
ĺ				Not exhaustive; only those in designated SACs; could be other GWDTEs;	https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/activities/understanding-
Groundwater & Geothermal	Groundwater body Descriptions	Water	National	for more information contact NPWS / EPA / site investigations	ireland-groundwater/Pages/Groundwater-bodies.aspx
a. aawater a ocothermal	and the same of th			Also, Roadmap for a Policy and Regulatory Framework for Geothermal	
Groundwater & Geothermal	Geothermal Suitability maps	land & Soils/Water	National	Energy, November 2020	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9ee46bee08de41278b90a991d60c0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's		National	VII	https://secure.dccae.gov.ie/GSI/INFOMAR_VIEWER/
Marine & Coastal Unit	CHERISH - Coastal change project (Climate, Heritage and Environments of Reefs, Islands, and Headla		Regional		http://www.cherishproject.eu/en/
	Or project (amount) records and record failures) and record	***	.5	Currently the project is being carried out on the east coast and will be	https://www.gsi.ie/en-ie/programmes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability-
Marine & Coastal Unit	Coastal Vulnerability Index (CVI).	water /Land & Soils	Regional	rolled out nationally	Index.aspx
	, and and	,	.5	Consideration of mineral resources and potential resources as a material	
				asset which should be explicitly recognised within the environmental	
Minerals	Aggregate potential	Land & Soils/Material Assets	National	assessment process	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
	Active quarries	Land & Soils	National	annual property	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
	One of the other ot				
				Inventory and Risk Classification 2009. Environmental Protection Agency,	https://gis.epa.ie/EPAMaps/default?easting=?&northing=?&lid=EPA:LEMA Facilities Extractive Facilities
Minerals	Historic mines	Land & Soils/Cultural Heritage	National	Economic Minerals Division and Geological Survey Ireland (DECC).	https://www.epa.ie/enforcement/mines/
Tellus	Geochemical data: multi-element data for shallow soil, stream sediment and stream water	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
Tellus	Airborne geophysical data including radiometrics, electromagnetics and magnetics	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
Tellus		Land & Soils	Regional	A THOUGHAIN MAPPING PROGRAMMIC	https://dcenr.maps.arcgis.com/apps/mapseries/index.html?appid=0304e122b733498b99642707ff72f754
101103	aroun Securionist i mapping (public sonar project),	Luna & 30113	перина		

- 1. The maps and data listed above are available on the Geological Survey Ireland map viewer https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx
- 2. Please read all disclaimers carefully when using Geological Survey Ireland data
- 3. Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

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