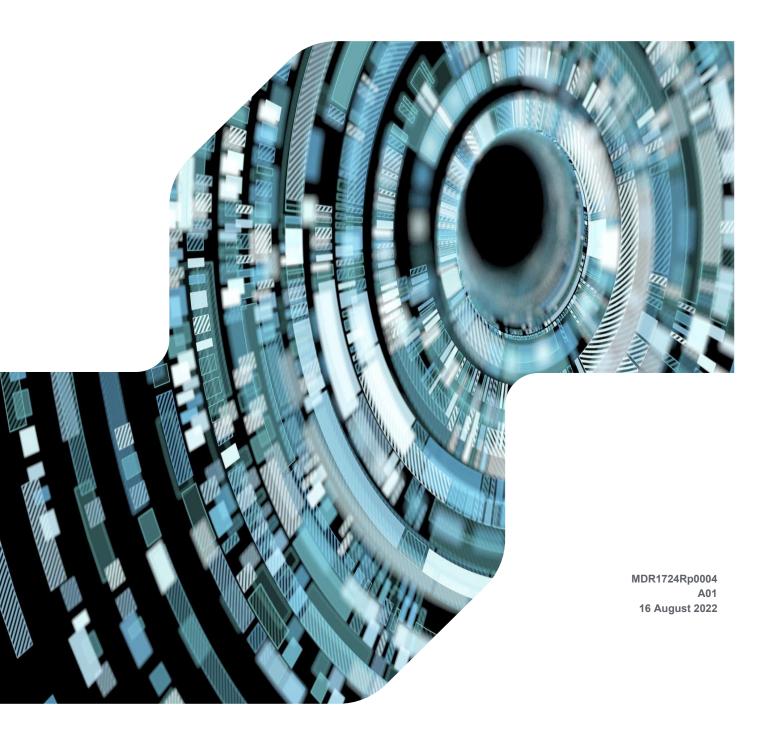




## **SEA STATEMENT**

## **Policy Statement on Mineral Exploration and Mining**

This report was prepared on behalf of the Department of the Environment, Climate and Communications



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#### 1 INTRODUCTION

The Department of the Environment, Climate and Communications (DECC) has prepared the Policy Statement for Mineral Exploration and Mining in Ireland as the first policy document to set out the framework for future decision making on mineral exploration and mining within the State. It also seeks to put in place a clear and sustainable policy framework that supports communities, the environment, the climate and the mineral exploration and mining sector.

This Strategic Environmental Assessment (SEA) Statement has been prepared as part of the SEA of the Policy Statement on Mineral Exploration and Mining (hereafter referred to as the Policy Statement). It has been prepared in accordance with Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental Assessment; Article 16(2) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. No. 435 of 2004) as amended; and Circular Letter PL 9/2013, Department of Environment, Community and Local Government.

This document provides information on the decision-making process and documents how environmental considerations, the views of consultees/stakeholders, the recommendations of the SEA Environmental Report and the assessment carried out under Article 6 of the Habitats Directive have influenced the final Policy Statement to be adopted.

The structure of the SEA Statement is as follows:

- 1. Introduction:
- 2. Summary of Key Facts;
- 3. Summary of the SEA Process;
- 4. Influence of the SEA Process on the Policy Statement;
- 5. How Consultation Feedback has influenced the Policy Statement;
- 6. Preferred scenario and reasons for choosing the final Policy Statement;
- Measures to monitor significant environmental effects of the implementation of the adopted Policy Statement; and
- 8. Addendum to the Environmental Report.

## 2 SUMMARY OF KEY FACTS

Title of Plan:	Policy Statement for Mineral Exploration and Mining in Ireland		
Purpose of Plan:	The Policy Statement seeks to underline the importance of mineral exploration and mining and the role that they can play in:		
	<ul> <li>Ireland's and the European Union's transition to the circular economy and net–zero greenhouse gas emissions;</li> <li>Supporting primary and secondary economic activity and associated jobs creation; and</li> <li>Progressing many of our national, European and international policies and</li> </ul>		
	commitments.		
	It also seeks to put in place a clear and sustainable policy framework that supports our communities, our environment, our climate and our mineral exploration and mining sectors		
Competent Authority:	Department of Environment, Climate and Communications		
Period Covered:	2022 to 2027		
Area Covered:	The Policy Statement is a national policy for mineral exploration and mining in Ireland. It is primarily focussed on activities occurring at the national to regional scale. It is noted that as a high-level policy document, the Policy Statement will not have a spatial element and the principles and priorities provided are at national level. Recognition has been given to the issue of environmental impacts in Northern Ireland also.  There has been no mining and little or no exploration of scheduled minerals in Irish		
	waters to date. The draft Policy Statement affirms that mineral exploration and mining activity does not take place offshore or on the Irish seabed until such time as sufficient data is available to adequately assess the impacts of any such potential mining activity.		
Nature and Content of the	This Policy Statement includes:		
Plan:	<ul> <li>A brief overview of the importance of minerals;</li> <li>A policy context for minerals exploration and mining;</li> <li>The Government's policy on mineral exploration and mining and the principles that will guide its implementation over the next five years;</li> <li>The regulatory framework within which the policy will be implemented; and</li> <li>Appendices providing further detail on the legal definition of minerals, the role of the Advisory Group on Mineral Exploration and Mining, principles for sustainable development and the Environmental Monitoring Programme.</li> <li>This policy statement does not apply to quarries producing aggregates, dimension</li> </ul>		
	stone or agricultural lime.		
Date Plan Came into Effect:	The Plan will come into effect in September 2022		
Main Contact:	Geoscience Policy Division Department of the Environment, Climate and Communications, 29-31 Adelaide Road, Dublin, D02 X285, Ireland		

#### 3 SUMMARY OF SEA PROCESS

#### 3.1 Introduction

The Policy Statement has been subject to a process of SEA, as required under the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations S.I. No. 435 of 2004, as amended by S.I. No. 200 of 2011. This has included the key steps described in the following sections.

#### 3.2 Screening

Screening of the Policy Statement for SEA was undertaken by the DECC. It was determined that SEA was required for the first Policy Statement for Mineral Exploration and Mining for the following reasons:

- The Policy Statement is subject to preparation and adoption by an authority;
- The Policy Statement addresses mineral exploration and mining issues;
- It is intended that the Policy Statement could set the framework for future development consent of projects listed in the EIA Directive; and
- Furthermore, the draft Policy Statement was identified as having potential for likely significant effects on one or more European sites and as such has undergone Appropriate Assessment under Article 6(3) of the EU Habitats Directive [92/43/EEC].

#### 3.3 Scoping and Statutory Consultation

Scoping was carried out to establish the level of detail appropriate for the SEA Environmental Report. An SEA Scoping Report was prepared and sent to the statutory consultees on the 24<sup>th</sup> May 2021, to be used as the basis for statutory consultations. The statutory consultations were undertaken with the environmental authorities for SEA in Ireland. In addition, informal transboundary consultation was undertaken at scoping stage with Northern Ireland. The consultees contacted are outlined in **Table 3-1**.

**Table 3-1 Consultees in SEA Scoping** 

Scoping Consultee		
Ireland		
Environmental Protection Agency (EPA)		
Department of Housing, Planning and Local Government (DHPLG)		
Department of Communications, Climate Action and the Environment (DCCAE)		
Department of Culture, Heritage and the Gaeltacht (DCHG)		
Department of Agriculture, Food and the Marine (DAFM)		
Department of Rural & Community Development (DRCD)		
Transboundary		
Department of Agriculture, Environment and Rural Affairs (DAERA) [Northern Ireland]		

A scoping workshop was subsequently held online on 15<sup>th</sup> June 2021. Representatives from the statutory environmental authorities were invited to attend this workshop. The following organisations were represented on the day:

- SEA team;
- Geoscience Policy Division team;

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<sup>&</sup>lt;sup>1</sup> It is noted that the statutory consultees for SEA in Ireland are identified in S.I. 435 of 2004, as amended. However, this legislation predates a number of Government Department changes, in some cases, departments have split/ merged. The most recent change in department names occurred in September 2020.

- Department of Environment, Climate and Communications; and
- Environmental Protection Agency.

Comments made at the workshop (and in subsequent written submissions) from the consultees were taken into account in the preparation of the Environmental Report. All submissions received from statutory and non-statutory consultation were considered in preparation of the Environmental Report. All of the environmental topics listed in the SEA Directive were considered and all were scoped in for the purposes of the assessment. Consultation is discussed in detail in **Chapter 5**.

#### 3.4 Environmental Assessment and Environmental Report

The preparation of an Environmental Report on the likely significant effects on the environment of implementation of the Policy Statement included consideration of:

- The relevant aspects of the current state of the environment and its evolution in the absence of the Policy Statement;
- The environmental characteristics of areas likely to be significantly affected and existing environmental problems relevant to the Policy Statement
- Links between the Policy Statement and other relevant strategies, policies, plans, programmes and environmental protection objectives;
- The likely significant effects of the Policy Statement on the environment (both positive and negative);
- Measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment;
- An outline of the reasons for selecting the alternatives chosen; and
- The measures envisaged concerning monitoring.

#### 3.4.1 Summary of Assessment

The approach used for the assessment in the SEA was termed an 'objectives-led assessment'. In this case, each of the five key principles were tested against defined SEA Strategic Environmental Objectives; refer to **Table 3-2** which covered all SEA environmental topics under the relevant SEA legislation, e.g. population, biodiversity, material assets etc. Draft Strategic Environmental Objectives were included in scoping consultation and updated following that consultation. The environmental objectives were based on the current understanding of the key environmental issues having regard to the environmental protection objectives outlined in the main Environmental Report. A matrix format was used for the assessment, which permitted a systematic approach and comparison of alternatives.

Table 3-2 SEA Objectives for the analysis of the Policy Statement

Related to SEA Topic(s)	SEA Objective(s)	Links between UN SDGs and SEA of the Policy Statement: Potentially Relevant Goal(s) and Target(s)	
Population and Human Health (PHH)	Objective 1: To protect human health.	3 GOOD HEALTH AND WELL-BEING  Pollution 6	GOAL 3: Ensure healthy lives and promote well-being for all at all ages  TARGET 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil and contamination.
Biodiversity, Flora and Fauna (BFF)	<b>Objective 2:</b> Preserve, protect, maintain and where appropriate restore the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species.	GOAL 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss  TARGET 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular	

Related to SEA Topic(s) SEA Objective(s)

Links between UN SDGs and SEA of the Policy Statement:

Potentially Relevant Goal(s) and Target(s)

forests, wetlands, mountains and drylands, in line with obligations under international agreements.

(LS)

Land and Soil Objective 3: Safeguard soil quality and quantity.



GOAL 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

TARGET 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

Water (W)

Objective 4: Protect, restore and enhance water quality (surface waters, groundwaters and marine waters).



GOAL 6: Ensure availability and sustainable management of water and sanitation for all

TARGET 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping

and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.



GOAL 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

TARGET 14.1: By 2025, prevent and significantly reduce marine pollution of all

kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Air Quality (AQ)

Objective 5: Minimise emissions to air as a result of the Policy Stratement activities.



**GOAL 11: Make cities and human** settlements inclusive, safe, resilient and sustainable

TARGET 11.6: By 2030, reduce the adverse per capita environmental impact of cities.

including by paying special attention to air quality and municipal and other waste management.

Climatic Factors (CF)

Objective 6: Contribute to the delivery of the green economy



GOAL 13: Take urgent action to combat climate change and its impacts

TARGET 13.2: Integrate climate change measures into national policies, strategies and planning.

Material Assets (MA) Objective 7: Support responsible mining and mineral exploration assets without conflicting with environmental protection objectives.



GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

TARGET 8.4: Improve

progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.



GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

TARGET 9.1: Develop quality, reliable, sustainable and resilient infrastructure,

including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

Related to SEA Topic(s)	SEA Objective(s)	Links between UN SDGs and SEA of the Policy Statement: Potentially Relevant Goal(s) and Target(s)
		TARGET 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.  12 Ensure sustainable consumption and production patterns TARGET 12.1: Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.
Cultural Heritage (CH)	<b>Objective 8:</b> Protect places, features, buildings and landscapes of cultural, historical archaeological or architectural heritage.	GOAL 11: Make cities and human settlements inclusive, safe, resilient and sustainable  TARGET 11.4: strengthen efforts to
Landscape (LandS)	Objective 9: Protect landscape character and visual amenity.	protect and safeguard the world's cultural and natural heritage.

While Ireland has a strong legislative regime for mining and mineral exploration (under the Minerals Development Acts 1940 to 1999, the Minerals Development Act 2017, which is yet to be commenced and the Circular Economy and Miscellaneous Provisions Act 2022), there is currently no overarching policy document for the sector. While there was some policy consideration for the sector in the 1990s, the Policy Statement for Mineral Exploration and Mining in Ireland, will be the first Policy Statement to set out the framework for future decision making on mineral exploration and mining within the State. It also seeks to put in place a clear and sustainable policy framework that supports communities, the environment, the climate and the mineral exploration and mining sector. Many of the recommendations and actions under consideration will have direct positive impacts for population and human health and material assets in particular as a result.

However, a number of the actions also have the potential to impact on other environmental receptors directly and indirectly. The assessment of the recommendations and related actions from the draft Policy Statement are summarised in **Table 3-3.** 

Table 3-3 Summary of Assessment on the draft Policy Statement

Plan Action Area	Summary of Measures and Assessment	
Robust Regulation	Existing regulation of the mineral exploration and mining activities is considered to be largely robust and offers a reasonable level of protection for the environment from these activities. This regulation covers both consent stages as well as the enforcement of same during operations. In addition, mining sites are also regulated through the aftercare phase under the existing regulatory regime. While there is potential for direct adverse effects for W. LS, AQ, CF² as well as potentially indirect and secondary adverse effects on BFF, PHH, CH and LandS, these impacts may be largely mitigated by the current regulations. While this principle makes reference to improving the regulatory regime, this will likely be through increased regulation at EU level and there are recommendations proposed as mitigation for this principle. Further recommendations in relation to the transparency of this regulation are included in the following sections.	
Increasing Awareness and Participation	These principles relate to public awareness and engagement around the value and need of minerals and the wider mineral exploration and mining sector. Publicly available information on mining operations is freely available through	<b>√</b>

<sup>&</sup>lt;sup>2</sup> Population and Human Health (PHH), Biodiversity, Flora and Fauna (BFF), Land and Soil (LS), Water (W), Air Quality (AQ), Climatic Factors (CF), Material Assets (MA), Cultural Heritage (CH) and Landscape (LandS).

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Plan Action Area	Summary of Measures and Assessment	Mitigation?
	both the planning portals of the relevant planning authority and the licensing and enforcement files that are maintained by the EPA. In this regard, the mining operations are fully transparent to the public but it is noted that neither State Mining Licence/Lease consent documentation or the details of the biannual enforcement visits undertaken by DECC are made publicly available. A number of recommendations for increased publication of information is stipulated in the mitigation measures for this group of principles. As an awareness raising principle, there are neutral direct impacts on the environment but there is potential for wider indirect positive impacts through greater engagement and transparency in the regulation of the sector. One significant aspect relates to the commitment to examine the articulation of community gain principles to be included in all mining authorisations.	
Sustainable Development	These principles relate to the current sustainability of the mineral exploration and mining sector but also looking forward to improved sustainability. The sustainability of future mining needs to consider the conflicting dynamics of the following:	✓
	<ul> <li>On one hand, mining can foster economic development by providing employment, business development, State revenue and local infrastructure. In addition, many of the minerals produced by mining are also essential building blocks in green technologies such as wind, solar and EVs that are essential to meet national and EU climate targets; and</li> </ul>	
	<ul> <li>On the other, mining extracts a finite resource and has historically contributed to many of the challenges that the SDGs are trying to address such environmental degradation and impacts to human health.</li> </ul>	
	While the economic (MA) and employment (PHH) benefits of mining are well established for the industry, the community and the State, the social impacts are less well understood and can be negative. However, a number of the measures in the draft Policy Statement have a greater social focus which may mitigate these impacts. The maintenance of the existing and evolving regulatory regime for modern exploration and licensing can largely mitigate the potential for adverse impacts to the environment.	
Building Capacity and access to Knowledge	Each of the above principles relates to research and knowledge transfer and therefore have a largely neutral suite of direct environmental impacts. These principles are considered to have potentially indirect positive impacts across all the environmental objectives, where the research better informs the policy and the development of the mineral exploration and mining sector, as well as ensuring the continuation for better innovation. Forthcoming research offers opportunities to ensure that potential impacts on the environment from the development of this sector can be addressed.	Х
International Co- operation	By further promoting Irish mineral potential and the mining industry, these principles likely have significant positive impacts for employment (subset of PHH) as well as MA for mining. Greater investment, if realised will increase employment which is typically in rural areas, support the local economy, aid in security of supply for minerals within the EU and generate exchequer funds. Conversely, an increase investment in exploration and, in particular mining, poses a potential for wider adverse environmental impacts (W, LS, AQ, etc.) but as noted there is significant regulation in place to mitigate such impacts.	Х

#### 3.4.2 Statutory Consultation of the Draft Policy Statement

The draft Policy Statement was published for consultation on the 30<sup>th</sup> July 2021 alongside the Strategic Environmental Assessment (SEA) Environmental Report and the Appropriate Assessment (AA) Natura Impact Statement (NIS). All documents were available for inspection and download online. See further details in **Section 5.3**.

#### 3.5 SEA Statement

In accordance with Article 16 of S.I. 435 of 2004, as amended, the Competent Authority is required to prepare a statement summarising:

- How environmental considerations have been integrated into the plan or programmes, or modification to a plan or programme;
- How (i) the environmental report, prepared pursuant to article 12, (ii) submissions and observations made to the planning authority in response to a notice under article 13 and (iii) any consultations under article 14 have been taken into account during the preparation of the plan or programme;
- The reasons for choosing the plan or programme, in light of other reasonable alternatives dealt with, and
- The measures decided upon to monitor, in accordance with article 17, the significant environmental effects of implementation of the plan or programme.

The main purpose of this SEA Statement is to provide information on the decision-making process for the Policy Statement in order to illustrate how decisions were taken, making the process more transparent. In so doing, the SEA Statement records how the recommendations set out the framework for future decision making on mineral exploration and mining within the State. It also seeks to put in place a clear and sustainable policy framework that supports communities, the environment, the climate and the mineral exploration and mining sector.

#### 3.6 Appropriate Assessment

In addition to the SEA, there is a requirement under the EU Habitats Directive (92/43/EEC) to carry out Appropriate Assessment (AA). The requirement for an assessment derives from Article 6 of the Directive, and in particular Article 6(3) which requires that:

'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.'

In recognition of this, an AA Screening was undertaken, in parallel with the SEA process. It was determined that AA was required, and an NIS was therefore prepared to inform the AA. DECC has determined that the *Policy Statement for Mineral Exploration and Mining,* subject to it securing the proposed mitigation, will not adversely affect the integrity of any European site, whether alone or in-combination with any other plans and projects.<sup>3</sup>

### 3.7 Adoption of the Mineral Exploration and Mining Policy Statement

The Policy Statement for Mineral Exploration and Mining was approved and subsequently published in September 2022.

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<sup>&</sup>lt;sup>3</sup> The NIS and AA determination are available under separate cover and are available on the DECC website.

# 4 INFLUENCE OF THE SEA PROCESS ON THE POLICY STATEMENT

#### 4.1 Integration of the SEA Process

The SEA and the AA processes have been undertaken in parallel to the preparation of the Policy Statement. From the outset, considerations of the environmental consequences of implementing the planning framework (and its reasonable alternatives) have been taken into account. This included:

- Attendance at an SEA Scoping workshop to present the SEA / AA processes and highlight key environmental issues;
- Iterative discussion and development of the alternatives to be considered;
- Advice and guidance on early versions of the proposed action base to highlight environmental risks;
- Evolution of Policy Statement principles and priorities;
- Recommendation of mitigation measures to address the potential impacts arising from the draft principles and priorities and subsequent detailed discussions on how to integrate this mitigation effectively;
- Attendance at an SEA monitoring workshop to discuss realistic and implementable monitoring actions;
- Discussions on integration of stakeholder observations and issues raised through statutory public consultation on the draft Policy Statement.

**Table 4-1** shows how environmental considerations and the input of the SEA and AA have been taken into account in the final Policy Statement.

Table 4-1 How Environmental Considerations have been taken into account in the Policy Statement

Environmental Consideration	Integration into the Policy Statement Process		
Early discussion on policy formation	The SEA / AA teams engaged directly with the Policy Statement team at an early stage to raise issues and create awareness on key environmental constraints relating to plan alternatives and the action base.		
Identification of environmental constraints	The SEA team prepared baseline information on environmental conditions with the focus on SEA environmental topics, including: population, human health, biodiversity, flora and fauna, water, climate, air, land and soil, landscape, cultural heritage, material assets and water. This information was used to focus the SEA objectives, inform the alternatives discussions and the assessment and assess positive and negative impacts associated with the implementation of the proposed Policy Statement. It also influenced the development of the SEA monitoring programme by flagging data gaps. GIS analysis and an Environmental Sensitivity Mapping (ESM) exercise were also undertaken to inform the baseline at a strategic level.		
Assessment of alternatives	The environmental baseline and objectives were used to identify key sensitivities and inform development and assessment of the alternatives. The SEA team and the policy team liaised on possible alternatives during preparation of the SEA scoping document and subsequently through meetings and workshops.		
Recommendation of mitigation measures to address impacts on the wider environment	Mitigation measures were proposed to address negative environmental impacts identified during the assessment process. These included amendments to the wording of recommendations/actions in the Policy Statement and recommendations for changes/ new actions to reflect protection of the environment (See <b>Section 4.2</b> which presents the mitigation measures from the SEA and AA processes and clarifies how they have influenced the final Policy Statement as adopted).		
Required environmental monitoring programme	A monitoring programme was presented in the SEA Environmental Report. This has been amended following statutory public consultation and further discussion with the policy team and will help facilitate the ongoing monitoring of the implementation of the Policy Statement.		
Consultation	Statutory consultation was undertaken with the environmental authorities for SEA in Ireland in relation to scoping of the SEA Environmental Report. Informal transboundary		

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<b>Environmental Consideration</b>	Integration into the Policy Statement Process		
	consultation was also undertaken at that time with Northern Ireland. Issues raised were used to inform the overall scope and context of the environmental assessment.		
	Subsequently, the SEA Environmental Report, the AA Screening and Natura Impact Statement (from the Appropriate Assessment process) and the draft Policy Statement were put on statutory public display in July 2021.		
	All stakeholder feedback was reviewed and proposed changes arising from the feedback were then assessed under the SEA and AA processes to determine if they would result in any additional significant environmental effects or result in adverse effects to any European site(s) prior to finalisation of the Policy Statement (see <b>Chapter 5</b> ).		

# 4.2 Recommended Mitigation Measures and how they have been addressed in the final Policy Statement

As part of the assessment of the draft Policy Statement, both the SEA Environmental Report and the NIS specifically suggested mitigation measures to offset negative impacts identified. These included general measures such as additional text clarifying obligations in relation to protection of European Sites, suggested inclusion of further guidance and studies to inform the evidence base, wording in actions, as well as specific recommendations and suggestions on how to improve the effectiveness of the Policy Statement going forward.

**Table 4-2** and **Table 4-3** present the mitigation measures from the SEA and AA processes carried out on the draft Policy Statement and how this mitigation has influenced the final Policy Statement as adopted. It is clear from the level of change presented in the final Statement ,that the policy makers have had due regard for this mitigation and this is reflected is the significant changes to the policy wording included.

Table 4-2 Mitigation proposed in the SEA

Theme	Proposed Mitigation	Н	ow these have been addressed in the final Policy Statement
General	<ul> <li>It is recommended that DECC prepares an annual statement that documents the full suite of minerals mined in Ireland, the associated quantities and the potential end uses for each mineral extracted. This public information tool would aid in raising awareness and transparency on the green credentials of the sector where these minerals are extracted and utilised for green technology.</li> </ul>	•	The annual statement is not specified in the final Policy Statement but it is noted that there are a wide range of commitments to further engagement and transparency in the sector in Theme B: Increasing Awareness and Participation.
A: Robust and Stable Regulation	<ul> <li>Principle 1.1 (P1.1)</li> <li>It is recommended that the Minerals Development Act 2017 is commenced at the earliest opportunity to provide for the additional powers and responsibilities available to the DECC.</li> </ul>	i	Implementing Action IA-A.1.i states that the Geoscience Bill will allow for the commencement of the Minerals Development Act 2017 as primary legislation is required to address additional legislative issues that have arisen since the 2017 enactment, such as transposing the EIA Directive into Act.
	<ul> <li>The Policy Statement should support the appropriate training of staff undertaking the Environmental Screening Determination and other EIA/AA reviews at consent stages for both exploration and mining to ensure that these reviews are undertaken by suitably competent individuals who are suitably trained in the relevant legislative and evolving case law for EIA and AA.</li> </ul>	•	Implementing Action IA-A.1.ii commits DECC to assess training and development programmes and procurement award criteria, and make recommendations where necessary, to ensure that those undertaking AA reviews for PL and SML consents are competent in ecological assessment as well as the relevant legislation and associated case law.
	It is recommended that DECC prepare a documented enforcement strategy that clearly sets out the criteria for determining the PL activities/sites to be targeted for enforcement inspection (location, activity, operator, compliance history, etc.) to allow for a more focussed and transparent enforcement function and optimisation of the level of resources available to the DECC.	•	Implementing Action IA-A8 commits to the establishment of the Geoscience Regulation Office independently of the Department, the GSRO will initiate a review of the regulatory framework within the lifetime of the policy statement.
	Priority Action 1.1 (PA1.1)	•	This mitigation is not expressly stated in the final Policy Statement
	<ul> <li>The Policy Statement should ensure that the GSRO has the appropriate resources to undertake its roles/functions.</li> </ul>		but inferred through the establishment of the GRSO regulatory function.
B: Increasing	Priority Action 2.1 (PA2.1):	•	Implementing Action IA-B2 commits the GSRO to examine the
Awareness and Participation	The draft Policy Statement should express a commitment to the publication of all environmental protection documentation applicable to all PL and/or mining licences/leases within a specified timeframe to promote transparency. It is recommended that a commitment is made in the Policy Statement that the following information is made publicly available on the DECC website and/or the OPALS viewer:		scope for a project to develop an online gateway to provide public access to information that is not commercially sensitive, including environmental protection documentation on mineral prospecting licences, mining leases and associated applications, permits, permissions, charging structure for royalties, and inspection report
	<ul> <li>All PL holder details submitted seeking consent for advanced exploration activities (drilling, trenching, etc.) including as a minimum a map of the location of the activity, details of the proposed works, duration of the proposed works and the necessary environmental controls. Commercially</li> </ul>		

I Olicy Otate	Tolicy Statement on Williera Exploration and Willing		
Theme	Proposed Mitigation	How these have been addressed in the final Policy Statement	
	sensitive material may be excluded but all technical and environmental information should be supplied;		
	<ul> <li>All application documentation and DECC documentation relating to the granting of State Mining Licence/Leases with particular emphasis in EIA, AA or other environmental documents:</li> </ul>		

- All reports of the enforcement visits undertaken by DECC at mining sites should be made available on the website.
  - This additional clarity and transparency would support public awareness and trust in the decision making framework under the Policy Statement.

#### Priority Action 2.3 (PA2.3):

 It is recommended that the wording of this policy action is amended as follows:

Priority Action 2.3 (PA2.3): DECC will develop and implement a clear road map on the approach to historic legacy mines in terms of the role of the various stakeholders, State and private, particularly with regard to their responsibilities. This roadmap will be developed within two years of implementation of the Policy Statement and a risk based prioritisation of legacy sites will be provided along with target dates and responsibilities for commencement of rehabilitation at these sites.

#### **Priority Action 2.4 (PA2.4):**

The requirement for licence holders to prepare a Community Engagement Plan should be considered to document the commitments of licensees to engage with the community. The measures contained within the Community Engagement Plan may improve engagement opportunities between the sector and the communities in which they work.

Priority Action 2.5 (PA2.5):

 This mitigation has been readily adopted is now amended in Implementing Action IA-C8.1 as follows:

DECC will develop and see implemented a clear roadmap on the approach to historic legacy mines in terms of the role of various stakeholders, State and private, particularly with regard to their responsibilities. The roadmap will ensure any management of legacy mines undertaken under this Policy Statement takes into account inter alia the regulatory protection afforded to EU sites with respect to protection, maintenance, and enhancement.

The roadmap will include specific priority for the protection of European Sites and require all roadmap actions to avoid adverse effects to European Sites. It should also provide opportunities to maintain and enhance the designated interests of those EU Sites both directly and indirectly.

The roadmap will prioritise legacy sites for rehabilitation on the basis of risk. The implementation of the road will be subject to the availability of funding.

 Implementing Action IA-A8 has been included to reflect this mitigation as follows with regard to the review of the regulatory framework to include the following:

The investigation of alternative methodologies to fairly and transparently reflect the views of communities in regulatory decision making through engagement with the social sciences and humanities.

- a feasibility study on the inclusion of community gain principles in all mining authorisations
- consideration of a requirement on Prospecting Licence holders to prepare a Community Engagement Plan, proportionate to the level of activity, to document how they will engage with the local community.
- The terms of reference for the Advisory Group are included in Appendix B of the Policy Statement and includes a commitment to

Theme	Proposed Mitigation	How these have been addressed in the final Policy Statement
	- It is recommended that the wording of this policy action is amended as follows:  DECC will establish a minerals exploration and mining advisory group comprising the regulatory (including land use planning), environment, academic, economic, industry and social pillars to:	the consideration of the articulation of community gain principles to be included in all mining authorisations. The two year time horizon has not been included in the final Statement.
	<ul> <li>examine the articulation commit to a study on the feasibility of community gain principles to be included in all mining authorisations within two years of adoption of the Policy Framework.</li> </ul>	
C: Sustainable	Principle 3.2 (P3.2)	While not expressly committed to within the final Statement,
Development	<ul> <li>It is recommended that DECC publish the charging structure for royalties from all new mining licenses/leases to aid in the transparency of the regulation and operation of these mines.</li> </ul>	Implementing Action IA-C3 commits to the GSRO, independently of DECC, reviewing the Fiscal Framework for Mineral Exploration and Mining to ensure it is fair, equitable and consistent.
	Principle 3.8 (P3.8)	
	<ul> <li>Where there is any change to the Schedule of minerals for which prospecting is permitted, DECC shall provide details of same on the DECC website along with a justification for the change.</li> </ul>	<ul> <li>Implementing Action IA-C4 commits that the process for the review will be transparent and any changes to the schedule arising from the review will be publicised.</li> </ul>
	Principle 3.9 (P3.9)	
	<ul> <li>It is recommended that DECC commission a guidance document detailing the feasibility of end of life land use for legacy mining sites considering such uses as amenity, agriculture, commercial and/or renewable energy to guide operators on suitable commercial or environmental end uses.</li> </ul>	<ul> <li>Principle C8 notes the potential of legacy mine sites to contribute to communities as public amenities and Implementing Action IA-C81 commits to the implementation of a clear roadmap on the approach to historic legacy mines.</li> </ul>
D: Building Capacity and access to Knowledge	None proposed/	• NA
E: International C operation	o- • None proposed.	• NA

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**Table 4-3 Mitigation proposed in the Natura Impact Statement** 

Theme	Proposed Mitigation	How these have been addressed in the final Policy Statement
A: Robust and Stable Regulation	Principle 1.1 (P1.1)  The Policy Statement should include for measures to ensure adequate training is provided for all staff of relevant Competent Authorities, in particular DECC and planning authorities undertaking the AA reviews for PL and SML consents, to ensure that these staff have the relevant expertise to ensure competency in ecological assessment as well as the relevant legislation and associated case law.	<ul> <li>Implementing Action IA-A.1.ii commits DECC to assess training and development programmes and procurement award criteria, and make recommendations where necessary, to ensure that those undertaking AA reviews for PL and SML consents are competent in ecological assessment as well as the relevant legislation and associated case law.</li> </ul>
B: Increasing Awareness and Participation	<ul><li>Priority 2.3 (PA2.3)</li><li>It is required that the road map includes specific priority for the</li></ul>	This mitigation has been readily adopted is now amended in Implementing Action IA-C8.1 as follows:
Participation	adverse effects to European Sites. It should also provide opportunities to maintain and enhance the designated interests of those EU Sites both directly and indirectly.	DECC will develop and see implemented a clear roadmap on the approach to historic legacy mines in terms of the role of various stakeholders, State and private, particularly with regard to their responsibilities. The roadmap will ensure any management of legacy mines undertaken under this Policy Statement takes into account inter alia the regulatory protection afforded to EU sites with respect to protection, maintenance, and enhancement.
		The roadmap will include specific priority for the protection of European Sites and require all roadmap actions to avoid adverse effects to European Sites. It should also provide opportunities to maintain and enhance the designated interests of those EU Sites both directly and indirectly.
C: Sustainable Development	Principle 3.1 (P3.1)  Ensure that the Policy Statement secures a requirement that all actions arising with respect to mineral exploration and the development of mining infrastructure takes into account the legal protection of European Sites; including the application of AA processes with respect to any subsequent plans or projects which emerge as part of the development of that infrastructure.	<ul> <li>This principle is recast as Principle C.1 and Implementing Action IA-C1.i commits that any actions arising from this Policy Statement will meet inter alia the regulatory requirements afforded to EU sites with respect to protection, maintenance and enhancement.</li> </ul>
	Principle 3.2 (P3.2)	<del>-</del>
	<ul> <li>Mitigation by maximising the value and ensuring any actions arising from this Policy Statement consider the regulatory requirements afforded to EU sites with respect to protection, maintenance and enhancement.</li> </ul>	<ul> <li>This mitigation has been more broadly adopted in Implementing Action IA-C1.ii above.</li> </ul>
	Principle 3.3 (P3.3)	
	<ul> <li>Ensure any actions arising from this Policy Statement take into account the regulatory requirements afforded to EU sites with respect to protection, maintenance, and enhancement.</li> </ul>	<ul> <li>This This mitigation has been more broadly adopted in Implementing Action IA-C1.ii above.</li> </ul>
	Principle 3.8 (P3.8)	This mitigation has been more broadly adopted in Implementing Action IA-C1.ii above.

Theme	Pi	oposed Mitigation	Н	ow these have been addressed in the final Policy Statement
	Pri	Ensure any actions arising from this Policy Statement take into account the regulatory requirements afforded to EU sites with respect to protection, maintenance, and enhancement.  Inciple 3.9 (P3.9)  Ensure any management of legacy mines undertaken under this Policy Statement takes into account the regulatory protection afforded to EU sites with respect to protection, maintenance, and enhancement.	•	Implementing Action IA-C81 commits to the implementation of a clear roadmap on the approach to historic legacy mines. The roadmap will include specific priority for the protection of European Sites and require all roadmap actions to avoid adverse effects to European Sites. It should also provide opportunities to maintain and enhance the designated interests of those EU Sites both directly and indirectly.
D: Building Capacity and access to Knowledge	•	None proposed/	•	NA
E: International Co-operation	•	None proposed.	•	NA

# 4.3 Recommended Monitoring Measures and how they have been addressed in the final Policy Statement

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify, at an early stage, any unforeseen adverse effects due to implementation of a principle/priority and to be able to take remedial action. Monitoring is carried out by reporting on a set of indicators, which enable positive and negative impacts on the environment to be measured. The environmental indicators of relevance to the draft Policy Statement were identified from the SEA process.

**Table 4-4** presents the monitoring measures from the SEA and AA processes carried out on the draft Policy Statement; these clarify how they have influenced the final Policy Statement as adopted.

**Table 4-4 Proposed SEA Monitoring Programme** 

Aim for Monitoring & Environmental Issue Area		hat is being monitored?	Та	rget	Indicator		ta Source/ sponsibility	Re	medial Action
Monitoring Objective 1: To protect human and environmental health from mineral exploration. Cross-cutting Areas: Biodiversity, Flora & Fauna Air Quality Water Land & Soil Material Assets	•	Level of enforcement compliance for Prospecting Licence (PL) advanced investigations.	•	100% compliance for all • GSRO inspections on consented PL advanced exploration works (drilling, trenching, etc.).	% of DECC inspections undertaken with no non-compliances recorded.	•	DECC record of GSRO site inspections undertaken to determine compliance with application for consent for advanced investigations.	•	Review of approach to consenting advanced works. Increased frequency of inspection for errant operators in line with risk based enforcement policy. Enforcement action on repeat offenders. Preparation and./or update of sectoral guidance on environmental protection.
Monitoring Objective 2: Safeguard water quality and quantity from mineral exploration and mining. Cross-cutting Areas: Population & Human Health Biodiversity, Flora & Fauna Land & Soil	•	Number of sub- catchments where mining is identified as a potentially significant pressure.	•	Decrease in the current number of catchments where mining is identified as a pressure.	Continued downward reduction in number of catchments where mining is identified as a pressure.	•	EPA Catchments monitoring data (www.catchments.ie)	•	Target the relevant competent authority enforcement inspections at mining sites in catchments where water discharges are a compliance risk. Enforcement action on repeat offenders (where not under a derogation).
Monitoring Objective 3: EPA Licence compliance for mining sites. Cross-cutting Areas: Population & Human Health Water Land % Soils Air Quality	•	Annul number of non- compliances (for incidents and/or limit breaches) issued by the EPA to licenced mining site operators.	•	Decrease in the number of non-compliances issued by the EPA to licenced mining site operators.	Total number of non- compliances issues annually as reported in the AER for each facility.	•	EPA Licence Enforcement files. Link: www.epa.ie/our- services/licensing/licen cesearch/	•	Engage with EPA on further enforcement action. Prioritise performance issues for State Mining Lease/Licence enforcement visits.

#### **Policy Statement on Mineral Exploration and Mining**

Aim for Monitoring & Environmental Issue Area	What is being monitored?	Target	Indicator	Data Source/ Responsibility	Remedial Action
Monitoring Objective 4: Minimise waste generation associated with mining operations. Cross-cutting Areas: Water Land and Soil Air Quality	<ul> <li>Trends towards waste prevention and reduction in mining operations.</li> </ul>	% decrease in waste generated versus ore mined.	Continued downward trends in % waste generated versus ore mined.	EPA Licence     Enforcement files. Link:     www.epa.ie/our-     services/licensing/licencesearch/	operator to predict
Monitoring Objective 5: Extent of rehabilitation of legacy mine sites. Cross-cutting Areas:	The number of legacy mines sites posing a risk to the environment that have been	<ul> <li>All legacy mines sites posing a risk to the environment been rehabilitated.</li> </ul>	<ul> <li>Fraction of 27 sites that pose a residual risk to the environmen remediated.</li> </ul>	DECC prioritised road map on historic legacy mine sites.	Annual review and update of road map to review priorities as required.
Material Assets Population and Human Health	rehabilitated.				<ul> <li>Secure State funding for State remediation liability.</li> </ul>
Biodiversity, Flora & Fauna Water Land & Soil					<ul> <li>Pursue private entities where remediation liability lies with third parties.</li> </ul>

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### 5 HOW CONSULTATION FEEDBACK HAS INFLUENCED THE POLCY STATEMENT

#### 5.1 Introduction

An important facet of the development of the Policy Statement has been comprehensive consultation. Consultation processes held in respect of the emerging Policy Statement included:

- Consultation on the SEA Scoping Report refer to the summary of the process in Section 3.3 and the details in Section 5.2;
- Public consultation on the draft Policy Statement, the SEA Environmental Report and the associated Natura Impact Statement in 2021– see details in **Section 3.4**.

This section of the report summarises the feedback received during consultation and how this has been employed in developing the Policy Statement and the associated SEA and AA processes.

#### 5.2 SEA Scoping Phase

As outlined in **Section 3.3**, an SEA Scoping Report was prepared and sent to the statutory consultees to be used as the basis for statutory consultations. The issues raised in the submissions from statutory consultees is presented in **Table 5-1**. The responses received on foot of the informal transboundary and public scoping consultation responses are summarised in **Table 5-2** and **Table 5-3**, respectively.

Table 5-1 Summary of Issues Raised during Formal SEA Scoping

Consultee	Summary of Points Raised	How this has been addressed?
Environmental Protection Agency (EPA)	<ul> <li>This submission highlights a number of key environmental issues to consider in preparing the Policy Statement and SEA.</li> <li>The relevant aspects of the key actions for Ireland (identified by the EPA-'Ireland's Environment- An Integrated Assessment 2020') and SDG's should be taken into account when preparing the plan and the SEA. This will ensure the Plan aligns with SDG's and EPA ambitions.</li> <li>The relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategies should be considered.</li> <li>The Policy Statement should align with national commitments on climate change mitigation and adaption.</li> </ul>	The relevant policy documentation identified by the EPA in consultation have been sourced and referenced in Chapter 4 of the Environmental Report. This policy base has been used to inform the analysis undertaken of the draft principles and priorities.
	<ul> <li>The Policy Statement should clearly set out the scope, remit and implementation related elements of the Policy Statement as these will guide the level assessment for the SEA.</li> </ul>	This scope, remit and implementation related elements are clearly stated in Chapter 1 of the Policy Statement.
	<ul> <li>The Environmental Report should explain where the proposed Policy Statement will be implemented via other plans, which themselves have been or will be subject to SEA and should be accounted for the in the assessment.</li> </ul>	Section 3 of the Policy Statement outlines the international, EU and National policy base.
	<ul> <li>Further detail should be provided in the Environmental Report and Policy Statement on specific mentioned measures on the relevant environmental assessments at the project stage and mitigation measures. Exploring this further with Environmental Authorities may provide merit during plan preparation and SEA processes.</li> </ul>	Chapter 8 of the Environmental Report assesses each of the draft principles/priorities to identify potential for adverse effect. Relevant mitigation is included in Chapter 9 of the Environmental Report and these assessments are updated in this document.
	<ul> <li>The EPA recommend that the Policy Statement includes summary tables outlining the key findings of the SEA and linking environmental effects identified to the proposed mitigation measures, monitoring programme and</li> </ul>	p. seeses.
	<ul> <li>Policy Statement.</li> <li>Suggests a periodical review of the Policy Statement (2/3 years) for increased transparency during implementation.</li> </ul>	The Policy Statement will be effective for five years and DECC will discuss the implementation at regular intervals with the Minerals Advisory Group.
	<ul> <li>Suggested including a separate section on 'Monitoring, Review and Reporting' in the Policy Statement.</li> </ul>	Section 6.5 of the Policy Statement includes details on the multiparty monitoring regime for mining.
	<ul> <li>Schematics in the Policy Statement are recommended to show the link with other plans.</li> </ul>	Section 3 of the Policy Statement outlines the international, EU and National policy base.
	The Policy Statement should identify any significant data and knowledge gaps including how these can be addresses while the Policy Statement is being implemented.  Programmendation to use socilable EDA resources or a guidance and	<ul> <li>The Policy Statement specifically identifies a knowledge gap in the marine space and has prohibited exploration in these areas in the short term.</li> <li>Noted and these have been used in the environmental assessments.</li> </ul>
	<ul> <li>Recommendation to use available EPA resources, e.g. guidance and resources, the ESM webtool the, EPA SEA WebGIS Tool, the EPA WFD</li> </ul>	

Consultee	Summary of Points Raised	How this has been addressed?
	Application, the EPA Appropriate Assessment GeoTool and environmenta authorities as per the SEA Regulations.	
Department of Agriculture, Food and the Marine (DAFM)	<ul> <li>This submission highlighted the importance of carrying out extensive studies on the marine environment should mineral extraction or exploration be carried out in the marine environment because it is a much different environment to onshore.</li> <li>The submission noted the potential overlap between mineral exploration and mining process and commercial sea fishing when planning or making decision on activities, the importance of the fishing sector as a stakeholder. The submission noted that with the spatial overlap with fishing, there is potential for displacement of fishing activities.</li> <li>The submission noted that there may also be indirect interactions through potential environmental effects which may include damage or loss of habitat; sediment clouds that can smother or otherwise affect marine life; noise pollution and/or other kinds of pollution.</li> </ul>	<ul> <li>data (including both visual and acoustic) is available to adequately assess the impacts of any such potential activity, including on fishers' interests and livelihoods.</li> <li>Noted but as above, no activity in the marine area.</li> </ul>
Geological Surveys Ireland (GSI) as a division of the Department of Environment, Climate and Communications (DECC)	<ul> <li>The relevance of the IUCN Guidelines for geo-conservation in protected and conserved areas.</li> <li>Reference is made to a list of datasets that should be considered.</li> <li>The relevance of the EC Soil Strategy Roadmap in reference to key soil functions and threats.</li> <li>GSI suggest the inclusion of 'Potential impacts on geo-heritage and associated tourism' as it underpins biodiversity, scientific knowledge, and potential educational and tourism values.</li> <li>GSI suggest the inclusion of Ireland's three UNESCO Global Geopark Programmes (Copper Coast, Burren and Cliffs of Moher, and Marble Arch Caves), and aspiring geopark project (Joyce Country and Western Lakes).</li> </ul>	<ul> <li>Under Principle B.1 the Policy Statement commits to the promotion of the development of geo-heritage in general.</li> <li>Data sets noted and employed in environmental assessments.</li> <li>Noted as a reference and considered in the assessment of impacts to soil.</li> <li>Principles and priorities to support development of geo-heritage have been presented within the Policy Statement and assessed within the Environmental Report.</li> <li>These important features are noted and have been taken into account in the heritage baseline in Chapter 5 of the Environmental Report.</li> </ul>

Table 5-2 Summary of Issues Raised during Informal Transboundary SEA Scoping

Consultee	Summary of Points Raised	How this has been addressed?
Department of Agriculture, Environment and Rural Affairs Northern Ireland (DAERA)	including biodiversity, flora and fauna.	Each of the three issues raised by DAERA have been addressed in the Environmental Report and NIS in terms of baseline and potential impact of the draft policy base.

**Table 5-3 Non-Statutory Consultees Scoping Responses** 

Consultee	Summary of Points Raised	How is this addressed?
Irish Whale and Dolphin Group	<ul> <li>Sand and gravel extraction in the marine environment should be generally prohibited.</li> <li>Noted that several EU and non-EU countries are currently permitting exploration and mining in the marine environment and propose that Ireland introduces a ban on deep sea mining until at least a full consideration of environmental impacts can be undertaken.</li> <li>Potential for exploitation of geothermal waters in the seabed and should this be considered in the Policy Statement.</li> <li>Based on above the Policy Statement should limit scope to the terrestrial area of Ireland only and that no exploration licences can be issued for deep sea mining without a thorough review of the impact of such activities.</li> </ul>	The Policy Statement notes that there has been no mining and little or no exploration of scheduled minerals in Irish waters to date. Future exploration and mining for scheduled minerals in our marine waters is not anticipated at this point in time. In addition, given the limited scientific knowledge currently available, it is proposed that mineral exploration and mining activity does not take place offshore or on the Irish seabed until such time as sufficient data is available to adequately assess the impacts of any such potential mining activity.
Private Citizen	<ul> <li>Relevance of the Minerals Development Act 2017 or the relevant corresponding legislation &amp; policies in Northern Ireland.</li> <li>Relevance to the EU nitrates and soils protection issues.</li> <li>Landscape may also need to be addressed in the context of international law &amp; frameworks.</li> <li>The need to separate the potential environmental effects of mining and mineral exploration as these differ greatly.</li> <li>Critical supply of minerals and metals to the Irish economy.</li> <li>Alternatives need to consider the comparative sustainability of importing versus indigenous mining.</li> </ul>	<ul> <li>The legislative basis is noted in the Policy Statement including the implementation of the Minerals Development Act 2017.</li> <li>Environmental issues in general and specific areas raised such as soil and landscape have been addressed and assessed in the Environmental Report with respect to both mineral exploration and mining.</li> <li>Critical raw materials and the need for the sector in the risk economy is presented within the Policy Statement.</li> <li>Alternatives also assessed in Chapter 7 of the Environmental Report.</li> </ul>
Private Citizen	<ul> <li>The need for a wide consideration of relevant policy and the need to consider the Commission's 2019 analysis of the linkages with the United Nations Sustainable Development Goals.</li> <li>The importance of security of supply for Ireland to provide raw materials and the effective implementation of the European Commission's tripartite policy of trade diplomacy, recycling and development of our indigenous raw material resources.</li> <li>The importance of a coherent, supportive, national policy for minerals exploration, is an essential pre-requisite for an economically viable, environmentally sustainable, mining sector.</li> <li>Ireland has a societal, moral and ethical responsibility to contribute to the vision enunciated in the Green Deal, and to help ensure a sustainable future for all, through the exploration and development of our mineral's raw material endowment.</li> </ul>	<ul><li>including the SDG.</li><li>Security of supply of CRM is addressed within Chapter 2 of the Policy</li></ul>

Consultee	Summary of Points Raised	How is this addressed?
Eco Advocacy	<ul> <li>This submission highlights a number of key environmental issues to consider in preparing the Policy Statement and SEA.</li> <li>The need to address conservation of resources, landscape and rural Ireland.</li> <li>The need to address the environmental impacts of backfilling having due regard for the finite gravel and aggregate resources that are required.</li> <li>The need to address the demand for fossil fuel required in the mineral exploration and mining sector.</li> <li>The need to address the potential for mines to collapse.</li> <li>The need to address a societal, moral and ethical responsibility to contribute to sustainability and to help ensure a sustainable future for all.</li> <li>The submission raises and opposes the national policy on data centres and the role of raw materials (lithium among others) in the formation of the data centres.</li> <li>The submission notes that the precautionary principle should be applied to avoid further depletion of finite resources.</li> </ul>	<ul> <li>The environmental issues noted have been addressed and assessed in the Environmental Report with respect to both mineral exploration and mining.</li> <li>Backfilling and aggregates are outside the scope of the Policy Statement and are not addressed.</li> <li>This need is addressed in terms of climate impact in the Environmental Report.</li> <li>Rehabilitation of legacy mines sites is addressed in the Policy Statement with a broad remit that does include wider environmental protection and subsidence.</li> <li>Noted, Ireland's role in CRM development is presented with in the Policy Statement.</li> <li>The end use of minerals and metals covered by the Policy Statement is outside the scope of the Statement.</li> <li>Noted and the precautionary principle is adopted in the environmental assessments undertaken.</li> <li>Geothermal energy is outside the scope of the Policy Statement and is not</li> </ul>
	The need to address Deep Bore Geothermal Energy.	addressed.
Private Citizen	<ul> <li>The need to separate the potential environmental effects of mining and mineral exploration as these differ greatly.</li> <li>To address the role of mined materials in the protection of human health (inclusion of medical devices, medications, medical implants, zinc in sunscreen, etc.).</li> <li>Consideration of relevant policy and the Commission's 2019 analysis of the linkages with the United Nations Sustainable Development Goals (JRC Science for Policy Report, 2019) and Mapping Mining to the Sustainable Development Goals: An Atlas (World Economic Forum white paper, 2016).</li> </ul>	<ul> <li>The environmental issues have been addressed and assessed in the Environmental Report with respect to both mineral exploration and mining.</li> <li>The end use of minerals and metals covered by the Policy Statement is outside the scope of the Statement.</li> <li>The SDG are noted both within the Policy Statement and as a framework for assessment in the Environmental Report, including the specifics for the sector.</li> </ul>
	<ul> <li>The submission notes the example considerations within the strategic alternatives types within the scoping report cannot be deemed reasonable on logistical, economic or ethical grounds.</li> <li>The need to consider a wider range of raw materials required for daily use</li> </ul>	A detailed alternative analysis s presented within Chapter 7 of the Environmental Report.
	beyond the use of metals and minerals essential for the delivery of the green economy.	Noted but outside the scope of the Policy Statement.
Forest Friends	The need to address the conservation of the Irish landscape.	Landscape impacts are addressed within the Environmental Report.
	The need for a wide consideration of proper planning and development regulation and policy.	The theme of Robust and Stable Regulation is addressed in Chapter 4 of the Policy Statement.
	<ul> <li>The need to consider the results of removing the controls and safeguards which exist in protecting the built environment and the possible dire</li> </ul>	

Consultee	Summary of Points Raised	How is this addressed?
	consequences of applying the same criteria in terms of the natural environment.  The need to consider the natural environment in the interest of future generations.	As above, there is a very strong regulatory regime in place to protect both the built and natural environments and this has been taken into consideration in the environmental assessments of the Policy Statement.
	<ul> <li>The relevance to the writings of John Moriarty and other Irish writers and the importance of the landscape in natural and cultural heritage.</li> </ul>	As above, assessed in the Environmental Report and protections built into the final Policy Statement.
	<ul> <li>The relevance of Ireland's previous mining experience and the negative impact to water quality.</li> </ul>	As above, landscape impacts have been assessed.
	<ul> <li>Relevance of the Friends of the Irish Environment reports on Wicklow and Tipperary mines.</li> </ul>	Pressures to water quality from legacy mining sites is clear and documented in the Environmental Report to inform the assessment.
	<ul> <li>The need to consider exclusion areas on mining in certain geographical locations including mountain ranges, lakes and other landscapes.</li> </ul>	As above, legacy mine sites are addressed within the Policy Statement with a view to remediating impact to water quality.
	<ul> <li>The relevance of the 'Protect Connemara Group' that share information and post questions about mining in Connemara.</li> </ul>	Exclusion areas are noted in the Policy Statement, i.e. all exploration and mining within national parks is prohibited unless undertaken to help manage or improve the park under the control of the NPWS.
		No submissions received from this group during consultation.
riends of the	A Ministerial ban on uranium exploration since 2007 should be confirmed.	This ban is confirmed in Section 1.2 of the Policy Statement.
rish Environment	<ul> <li>Exclusion area to be expanded to include Natura 2000 areas and areas to be protected by the Geological Survey Office.</li> </ul>	As noted above, this exclusion is noted in Section 1.2 of the Policy Statement.
	<ul> <li>The need to include County Geological Sites in County Development Plans and County Heritage Plans. Due regard should be given to sites of geological importance at all stages of planning, particularly in the development of quarries, wind farms and roads.</li> </ul>	Under Principle B.1 the Policy Statement commits to the promotion of the development of geo-heritage in general.
	The relevance of the National Landscape Strategy 2015-2025	Noted in the assessment in the Environmental Report.
	The need to incorporate the areas of protected landscapes in each County     Development Plan should form part of the SEA process to accord with the	As above, noted in the assessment in the Environmental Report.
	<ul> <li>National Landscape Strategy.</li> <li>The need to identify areas of inadequate data and in real time.</li> </ul>	Noted as a difficulty encountered in the Environmental Report.
	The need to address the after use of mining areas.	Policy C.8 commits to examining the potential of legacy mine sites to contribute to communities as public amenities.
rish Centre for Research in	Relevance of the EU Thematic Strategy for Soil Protection (2006), which is due to be revised in 2021 (see the European Commission's 2020 discussion decreased. Nov. Soil Strategy Healthy, Soil for a Healthy Life)	This strategy has been considered with respect to impacts to soils in the Environmental Report.
Applied Geosciences (iCRAG)	document, New Soil Strategy: Healthy Soil for a Healthy Life).  The EU Regulation 2017/852 on mercury should also be considered.	<ul> <li>Mercury mining is prohibited under the Minamata Convention on Mercury which was ratified by Ireland in March 2019 and was excluded from analysis.</li> </ul>
	<ul> <li>Consideration of carbon footprint/greenhouse gas emissions associated with exploration and mining activities.</li> </ul>	<ul> <li>Climate impact of mineral exploration and mining are considered in the topic C (Climate) in the Environmental Report.</li> </ul>

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Consultee	Summary of Points Raised	How is this addressed?
	<ul> <li>The submission suggests that potential approaches to the development of alternatives for the Policy Statement on Mineral Exploration and Mining', the Alternative Type 'Value and Effects Oriented' considerations should focus on an action area approach rather than a whole country approach.</li> </ul>	A revised suite of alternatives is presented and assessed in Chapter 7 of the Environmental Report.
Institute of Geologists of Ireland	<ul> <li>This submission highlights a number of key positive economic impacts to consider in preparing the Policy Statement and SEA. This includes: the positive impact of employment and the spin-off industries that have developed from the sector including laboratories, drilling companies, design, consulting and contracting operating in the fields of engineering, geology and environment.</li> </ul>	
	<ul> <li>The submission notes that mineral exploration is dominated by small to medium enterprises (SMEs) operating within a well-regulated framework, providing financial returns to the State, long-term employment of the local population and environmentally beneficial post-closure infrastructure.</li> </ul>	As above, the employment impacts are noted in the Environmental Report.
	<ul> <li>To demonstrate how, with an appropriately positive minerals policy the minerals exploration sector and its immediate downstream industry, mining, can play a significant role in the transition to the carbon-neutral future.</li> </ul>	This important role is noted in Chapter 1 of the Policy Statement.  Policy C 2 and to provide the value to the Evelopment primary.
	<ul> <li>The submission notes that due to the high-risks inherent in minerals exploration, sources of funding are specialist, limited, and migrate to those jurisdictions which offer the best potential return. Therefore, in developing a Policy Statement on mineral exploration and mining, elements that diverts funds from their primary objective have the potential to negatively impact on the potential for resource discovery, to the detriment of the Green Action Plan.</li> </ul>	<ul> <li>Policy C.3 seeks to maximise the value to the Exchequer from mineral exploration and mining by ensuring that Ireland is competitive in attracting investment in the mineral exploration and mining sectors.</li> </ul>
	<ul> <li>The importance of obtaining critical raw materials locally and in a responsible manner using established European environmental standard with due consideration for human rights and sustainable development.</li> </ul>	This is a central objective of the Policy Statement.
Irish Mining and	This submission welcomes balanced and transparent regulation.	Noted.
Quarrying Society	<ul> <li>The need for ongoing educational and publicity programme regarding the importance of minerals to society to enable the realisation of climate change policies is required. It suggests that such a programme needs to be delivered by DECC using its line divisions the Geoscience Regulatory Office (GSRO),</li> </ul>	<ul> <li>The theme of Increasing awareness and participation aims to achieve this objective in the Policy Statement.</li> </ul>
	the Geoscience Policy Division (GSPD) and Geological Survey Ireland (GSI).  Continuation of state support for the development of the Geo Drilling Apprenticeship delivered by IT Carlow is required to ensure that drilling services procured by state agencies employ competent and properly qualified personnel.	Building Capacity and Access to Knowledge includes an action to assist third level institutions and vocational training bodies in equipping mineral technicians, geologists, engineers, social scientists and humanities scholars with the necessary skills needed in drilling, geoscience and mining.
	<ul> <li>The need to re-instate a mineral based third level course similar to the pre- existing Minerals Engineering course in Athlone IT.</li> </ul>	As above.

Consultee	Summary of Points Raised	How is this addressed?
	<ul> <li>Relevance of the European Critical Raw Materials Alliance and the initiative proposed by the Irish Association for Economic Geology, 'Supporting Responsible Exploration' which is linked to the European Federation of Geologists programme.</li> </ul>	CRM initiative noted and details included to inform both the Policy Statement and the environmental assessments.
	<ul> <li>The submission supports greater participation by Ireland in international commitments such as the Intergovernmental Forum on Mining (IGF).</li> <li>The need to define mining and mineral exploration as these differ greatly.</li> <li>Consideration should be given to include the importance of social licence in relation to climate. Relevance to work by the Minerals Information Working Group and supported by DECC is an example of such activity.</li> <li>It supports further reiteration of EU policies in relation to responsible sourcing of raw materials and the responsibilities of individual member states.</li> </ul>	
	· ·	These are noted in detail in Section 3 of the Policy Statement.
Private Citizen	<ul> <li>This submission identifies a number of key social impacts to consider in preparing the Policy Statement and SEA. Bringing them in line with international good practice or EU legislation on public information (Aarhus Convention).</li> <li>Recognition of the Equator Principles which incorporate the IFC Performance Standards on Environmental and Social Performance, EU ESG reporting requirements and other international standards that apply to mining projects.</li> <li>The importance of Social Impact Assessment for any proposed project in Ireland.</li> <li>Relevance of the Sustainable Wellbeing Framework.</li> <li>The submission notes that the development of new mines in Ireland will require a new approach to negotiating good neighbour agreements with affected communities in line with international good practice or these projects will face considerable conflict, litigation and rejection.</li> <li>To conduct further research into good practices for agreement-making with affected communities.</li> </ul>	<ul> <li>These comments were noted and used to inform the population and human health analysis presented in the Environmental Report.</li> <li>These standards are noted by the UN SDG and the relevance to mining have been adopted as the central tenet in monitoring and tracking environmental performance of the Policy Statement.</li> <li>Noted any new infrastructure will be subject to EIA and will require a social impact assessment under the theme of Robust Regulation.</li> <li>Noted – as above.</li> <li>The Policy Statement includes a specific action to engage with key stakeholders and involve community and local groups in the development of a communications strategy and tailor it to reflect how people think and feel about mining.</li> <li>Building Capacity and Access to Knowledge through research and innovation is included as a main theme in the Policy Statement.</li> </ul>
Irish Water	<ul> <li>Relevance of the Water Services Strategic Plan (WSSP), National Water Resource Plan (NWRP), Drinking Water Safety Plans (DWSP).</li> <li>Relevance of the National Pesticides and Drinking Water Action Group (NPDWAG) as well as catchment specific NPDWAG Catchment Focus Groups.</li> </ul>	<ul> <li>These policies are noted to inform the Environmental Report.</li> <li>As above, noted and used to inform the Environmental Report.</li> </ul>
	Relevance of the recast Drinking Water Directive (DWD) 2020.	As above, noted and used to inform the Environmental Report.

Consultee	Summary of Points Raised	How is this addressed?
	<ul> <li>The submission suggests that impacts on drinking water quality must include potential impacts to abstractions from groundwater sources and surface water catchments as key sources of public drinking supplies.</li> <li>Interim drinking water abstraction catchment boundaries should be included</li> </ul>	<ul> <li>Potential for impacts on drinking water have been assessed under the headings of population human health (PHH) and water (W) in the Environmental Report.</li> <li>As noted, these have been considered in the Environmental Report.</li> </ul>
	<ul> <li>in the baseline assessment.</li> <li>The submission suggests that above and below-ground infrastructure operated by Irish Water in the provision of water and wastewater services to communities in Ireland is included.</li> </ul>	These assets are covered under the heading of material assets in the Environmental Report.
	<ul> <li>The submission suggests that the protection, restoration and enhancement of water quality (surface waters, groundwaters, marine waters and drinking water sources) is included.</li> </ul>	<ul> <li>Noted and this is one of the key Monitoring Objectives (No. 2) in Appendix C of the Policy Statement.</li> </ul>
Private Citizen	<ul> <li>This submission identifies a number of key issues in relation to mineral exploration and mining in the marine environment to consider in preparing the Policy Statement and SEA.</li> <li>The submission notes that the content of the Policy Statement is focused on</li> </ul>	<ul> <li>The Policy Statement proposes that mineral exploration and mining activity does not take place offshore or on the Irish seabed until such time as sufficient data is available to adequately assess the impacts of any such potential mining activity.</li> </ul>
	<ul> <li>the terrestrial environment.</li> <li>The submission notes that sand and gravel extraction should be explicitly prohibited in the marine environment on the basis of habitat destruction and carbon sequestration.</li> </ul>	<ul> <li>As above, no marine mineral exploration or mining is proposed.</li> <li>Sand and gravel are outside the scope of the Policy Statement.</li> </ul>
	<ul> <li>To openly consider the potential for future exploration and mining in the marine area as exploration licences have been granted in UK and Norway.</li> </ul>	Noted above on marine areas.
	<ul> <li>To support a ban on deep sea mining to be put in place until such a time that full consideration of environmental impacts is undertaken. This is aligned with views put forward at the UN and in the ISA.</li> </ul>	Noted as above on marine areas.
	<ul> <li>The need to state that no exploration licences for deep sea mining can be issued without thorough review of the impact of such activities.</li> </ul>	Robust Regulation is a theme of the Policy Statement to ensure no adverse impacts on the environment.
	<ul> <li>The need to consider exploitation of geothermal waters in the seabed and the potential for lithium extraction.</li> </ul>	Geothermal is the subject of a separate policy instrument.
Private Citizen	<ul> <li>This submission identifies a number of key issues in relation to the social impacts and the contributions of mining to achieving the wider goal of sustainable development which includes local communities.</li> <li>The submission makes reference to the consideration of social licence, community agreements and externalities.</li> <li>The need to include a full sustainable development agreement making partnership between developers and the host community from the outset.</li> </ul>	<ul> <li>These comments were noted and used to inform the population and human health analysis presented in the Environmental Report.</li> <li>Community agreements and gains are noted and the Policy Statement includes for an Advisory Group to develop such matters.</li> <li>The Policy Statement includes a specific action to engage with key stakeholders and involve community and local groups in the development or a communications strategy and tailor it to reflect how people think and feel</li> </ul>

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Consultee	Summary of Points Raised	How is this addressed?
Private Citizen	<ul> <li>This submission identifies a number of key issues in relation to the economic impacts, particularly in relation to mineral exploration but also includes mining. It highlights a number of key positive economic impacts to consider in preparing the Policy Statement and SEA. This is particularly in relation to mineral exploration but includes mining and the positive impact of employment and the spin-off industries that have developed from the sector including laboratories, drilling companies, design, consulting and contracting operating in the fields of engineering, geology and environment.</li> <li>Relevance of the CRMs and the European Battery Alliance.</li> <li>The submission notes the importance of the exploration industry, including geologists and risk taking financiers in the context of raw materials.</li> <li>The submission notes that, at exploration stage, there is high levels of person-person engagement among geologists and community stakeholders.</li> <li>The submission notes that recirculation needs to be further considered.</li> <li>Mining and post mining can have positive contributions to a locality while referencing the closure of two mines at Galmoy and Lisheen.</li> <li>The submission notes the core founding principles of the State in managing Irish resources for the benefit of wealth and security into the future.</li> <li>The submission notes the increased exploration for raw minerals critical for use in all other areas of Climate Action is urgently required.</li> </ul>	<ul> <li>The economic impacts of the sector are addressed under the heading of 'material assets' in the Environmental Report and informed by the economic scale of the industry as presented within the Policy Statement.</li> <li>These are noted and recorded in the Policy Statement and Environmental Report.</li> <li>Noted and considered in the Policy Statement.</li> <li>Noted and enhanced policy for community engagement is included in the Policy Statement to strengthen this measure.</li> <li>Circular economy is a central theme to the Policy Statement and the recirculation of CRM.</li> <li>The positive economic impacts and wider environmental impacts of both mines are documented in the Environmental Report.</li> <li>Noted and the economics are addressed within the Policy Statement.</li> <li>This is addressed within the Policy Statement.</li> </ul>
	<ul> <li>The need to separate mineral exploration and mining as these have very different objectives.</li> <li>The submission suggests that anything that inhibits mineral exploration is in fact inhibiting the Just Transition and the Climate Action Programme, and significant overseas earnings for services and goods and have a severe negative effect on the environment.</li> </ul>	<ul> <li>The environmental issues have been addressed and assessed in the Environmental Report with respect to both mineral exploration and mining.</li> <li>The wider impact of the sector action or inaction under the Policy Statement on climate and community is addressed within the Environmental Report.</li> </ul>
Private Citizen	<ul> <li>The need to separate the potential environmental effects of mining and mineral exploration as these differ greatly.</li> <li>The submission supports the Policy Statement objective to develop skills, education, knowledge and mineral data.</li> <li>The submission supports stronger policy that provides certainty in a particularly high risk sector of mineral exploration.</li> <li>The submission notes the importance of highlighting the positive impacts of minerals, mineral exploration and mining.</li> <li>The submission suggests that robust regulation need not be cumbersome but simplified and streamlined.</li> </ul>	<ul> <li>The environmental issues have been addressed and assessed in the Environmental Report with respect to both mineral exploration and mining.</li> <li>Building Capacity is a central theme of the Policy Statement.</li> <li>Noted.</li> <li>These are noted in the Environmental Report on balance with the potential negative environmental impacts.</li> <li>Robust Regulation is a theme of the policy and this needs to ensure protection for the environment regardless of the time or complexity of the regulation.</li> </ul>

Consultee	Summary of Points Raised	How is this addressed?
	<ul> <li>The submission cautions at the banning approach of specific minerals and metals.</li> </ul>	Coal, lignite and oil shales are banned under the Circular Economy Act 2022 in line with wider climate and environmental policies.
Irish Association for Economic Geology	<ul> <li>This submission highlights key differences between exploration and mining including consents and impacts.</li> <li>The submission notes several Irish precedents for environmentally responsible mining;</li> <li>The submission notes Irish mineral exploration sector is currently at the forefront of the move to embrace renewable energy and sustainable resources.</li> <li>The submission suggests that the Policy Statement document that the environmental impacts of the industry in Ireland are significantly less than the equivalent activities in less well-regulated nations, from which we source the vast majority of our raw materials, and that a stated reliance on imports is effectively a commitment to the offshoring of carbon intensive industry for the benefit of Ireland and Europe.</li> <li>The submission notes that 'Sector or mineral based prioritisation' may be a consideration with respect to the Policy Statement, which may be used to target and outlaw exploration and mining of specific materials that fall outside of the green and critical raw materials specified in EU and UN policy in relation to the sourcing of minerals. Exploration and mining are global industries, reliant on investment from international markets to raise the significant capital required to carry out speculative exploration programmes. A prioritisation approach would effectively label Ireland as a high-risk jurisdiction for all exploration, and render an already challenging fundraising environment impossible to successfully navigate by Irish companies for Irish-based projects. The complex nature of mineral deposits also means that this approach may inadvertently sterilise deposits of critical raw materials - for example where copper commonly occurs with gold, or zinc with silver. In recent years, the Fraser Institute Survey has rated Ireland favourably as a location for exploration and mining, however, the country's rating has seen a consistent fall of late.</li> <li>The submission suggests that continued over-reg</li></ul>	

#### **Policy Statement on Mineral Exploration and Mining**

Consultee	Summary of Points Raised	How is this addressed?
	<ul> <li>The submission suggests that the Policy Statement have an objective to support, promote, and defend the industry and celebrate Ireland's mineral endowment.</li> </ul>	The Policy Statement seeks to underline the importance of mineral exploration and mining and the role that they can play in:     Ireland's and the European Union's transition to the circular economy
		<ul> <li>and net–zero greenhouse gas emissions;</li> <li>Supporting primary and secondary economic activity and associated jobs creation; and</li> </ul>
		Progressing many of our national, European and international policies and commitments.

## 5.3 Issues Raised and Submissions from Statutory Public Consultation

The draft Policy Statement was published on the 30<sup>th</sup> July 2021 alongside the SEA Environmental Report and the Natura Impact Statement. All documents were available to the general public for inspection as part of the statutory consultation. The SEA environmental authorities set out in **Table 3-1** that were consulted during the scoping stage, including the transboundary authorities, were also contacted as part of the statutory consultation.

Submissions and observations were invited prior to finalisation of the Policy Statement to inform the final policy to be adopted. The deadline for receipt of submissions was the 15<sup>th</sup> October 2021

A total of 23 responses were received from a range of stakeholders and interested parties:

- Table 5-4 presents the feedback from the statutory environmental authorities for SEA in Ireland.
- Table 5-5 presents the feedback from transboundary consultation.
- Table 5-6 presents the feedback from the wider statutory public consultation.

Following a review and consideration of all the submissions, the DECC responded with changes to the final Policy Statement. Significant changes made since the publication of the draft Policy Statement have been screened for the requirement for further consideration under both the SEA and AA processes; this is recorded in **Table 5-7**.

Table 5-4 Summary of Submissions from the Statutory Consultees during Public Consultation

Consultee	Summary of Points Raised	How this has been addressed in the Policy Statement?
Environmental Protection Agency (EPA)	Specific Comments on the Policy Statement     General Comments     The Policy Statement commitments could be codified and differentiated from the body of the text for transparency.     Chapter 2 - National, EU and International Policy Context for Mineral Exploration and Mining	All principles and priorities have been numbered and presented in tabular format to allow for ach of reference.
	<ul> <li>It is perhaps more appropriate to suggest that mine sites, closed satisfactorily, with their extensive infrastructure and space, have the potential to provide hubs or facilitate alternative industrial or business reuse including green business.</li> <li>It is also worth referring to a new EPA Research Report No. 388: Circular Economy Opportunities – Raw Materials Ireland Project. It examined waste outputs from mining, materials processing and power generation in Ireland which are sent for disposal or exported. Potential exists to assess these wastes as secondary raw materials, recover valuable metals and find alternative applications for the residual waste to facilitate a circular economy.</li> </ul>	Noted and this is now included as principle C8 - the potential of legacy mine sites to contribute to communities as public amenities, sites for geoheritage, tourism, renewable energy and businesses, including potential remining, should be enhanced through their management, stabilisation, and rehabilitation, including any necessary environmental remediation and the protection of valuable habitats, some of which only occur on such sites.
	<ul> <li>Chapter 3 – Regulatory Framework</li> <li>In Section 3.1, paragraph 2, there is merit in strengthening the text as follows 'Mineral exploration should shall be compliant with all relevant Government laws and regulations'. Additionally, it is also important to recognise that the relevant European and international legislation/agreements should also be complied with, in implementing the Policy Statement.</li> </ul>	<ul> <li>Noted this section has moved to Chapter 6 of the final Policy Statement but this wording remains unchanged. EU legislation is included at Section 6.2 and the wider EU and international policy base is presented in Chapter 3.</li> </ul>
	<ul> <li>Section 3.2 Measures in place to mitigate the environmental impacts of Mining - in addition to EIA, IPC/IE authorisation also includes full Appropriate Assessment under the Habitats Directive, where necessary.</li> <li>Reference should be made to the Water Framework Directive.</li> <li>Refer to the principle of the application of relevant Best Available Techniques (BAT) in terms of environmental performance and reducing harmful emissions (as highlighted in the SEA environmental report).</li> <li>Note the proposal that mineral exploration and mining activity will not proceed at this time, given the limited scientific knowledge currently available. This would seem to reflect a precautionary approach which is welcomed. Close collaboration and communication with those stakeholders involved in implementing the National Marine Planning Framework will be an important consideration going forward.</li> </ul>	<ul> <li>Section revised in final Policy Statement and incorporated into Chapter 6 with reference throughout to AA process for consenting regimes.</li> <li>Water Framework Directive noted in Section 6.2.</li> <li>This reference is noted in the Environmental Report but is considered overly detailed for a high level Policy Statement.</li> <li>Noted and the restriction on exploration and mining on the marine areas is unchanged.</li> </ul>

Consultee	Summary of Points Raised	How this has been addressed in the Policy Statement?
	<ul> <li>Chapter 4 – Mineral Exploration and Mining Policy</li> <li>On page 27, in paragraph 2, consider amending the text of bullet point 1 as follows 'ensure a robust and transparent regulatory framework is implemented in a manner that supports environmentally sustainable mineral exploration and mining;'</li> <li>The aim of increasing public communications and participation is welcomed as the sector is unfamiliar to most.</li> <li>The advisory group should look to take account of any relevant environmental monitoring/reporting to ensure effective implementation of the Policy Statement is achieved, in collaboration with the relevant stakeholders.</li> <li>The articulation of 'community gain' principles in authorisations would be more appropriate for a planning permission or for a state mining lease/licence rather than for an EPA licence to specify or require.</li> <li>Note the need to maintain and improve the robust regulatory regime for mineral exploration activity and mining and suggest this should be supported by effective monitoring and reporting.</li> <li>In Section 4.1.3 Sustainable development, consider amending the bullet points to reflect the protection of the community and environmental impact.</li> <li>In Section 4.2.5 – Monitoring, Review and Reporting - a review of the Policy Statement considered at least every three years but clarify whether this will include environmental-related monitoring. EPA recommends linking the Policy Statement related monitoring and reporting with the relevant SEA monitoring aspects during these review/reporting periods.</li> <li>In Section 6.6 - Legacy Mines, there is merit in providing further information regarding the legislation and background for State rehabilitation of former mine sites.</li> <li>Chapter 7 - The ongoing co-operation between regulators and industry in Northern Ireland could also be acknowledged in this chapter.</li> <li>Section 8 - In relation to EPA licences, reference should also be made to EIA and AA being part of the licensing process. Consider</li></ul>	framework that supports environmentally sustainable mineral exploration and mining'.  Noted and commitments included under Theme B on this matter.  The remit of the advisory Group included in Appendix B and includes a role in environmental matters and is represented by the Environmental Pillar.  Noted and Implementing Action IA-A8 relate to mining authorisations only as an alternative liability regime is in place for EPA licensing of such facilities.  Section 6.5 of the Policy Statement includes details on the multiparty monitoring regime for mining. Appendix D of the Policy Statement includes the Environmental Monitoring Programme that has been developed from the relevant SEA and AA processes.  Note that the principles listed under the Sustainable Development theme have been significantly revised to ensure that protection of communities, health and the environment are referenced throughout.  Section 5.3 of the Policy Statement includes details on the environmental monitoring that will be undertaken to inform this review. Appendix D of the Policy Statement includes the Environmental Monitoring Programme that has been developed from the relevant SEA and AA processes.  This reference is now included in Section 6.4 of the Policy Statement.  These details are now provided in Chapter 3 of the final Statement.

Consultee	Summary of Points Raised	How this has been addressed in the Policy Statement?
	Table 5.2 summarises the EPA State of the Environmental Report for 2020 be shortened to highlight the key messages of most relevance to the Policy Statement and SEA / AA.	Noted but the detail was considered relevant to the wider environmental baseline for the State.
	In relation to human health considerations, there is merit in also acknowledging the potential radiation dose to mine workers, from exposure to radon as appropriate and relevant.	Noted and this has been taken into consideration within this SEA Statement to ensure this is captured in the SEA process.
	Table 5.7 shows the interrelationships between the SEA Topics but excludes a relationship between 'land and soil' and 'air quality'.	Noted and this has been corrected within this SEA Statement.
	<ul> <li>In relation to water quality impacts, there is merit in considering the occurrence of elevated natural background levels of heavy metals in mining or known mineral-rich areas and their potential impact on surface water quality.</li> </ul>	Water quality baseline trends and those around legacy mines sites are noted in the Environmental Report. Without a spatial element to the Policy Statement it is difficult to provide a more focussed baseline in any area.
	The Environmental Report identified the potential for likely significant effects and provides appropriate mitigation measures to avoid or minimise these. Ensure that the Policy Statement includes clear commitments to implement the mitigation measures.	<ul> <li>Section 4.2 documents hoe the mitigation measures presented in the Environmental Report and NIS have been adopted in the final Policy Statement.</li> </ul>
	The Monitoring Programme should be flexible enough to take account of specific environmental issues and unforeseen adverse impacts should they arise. It should consider and deal with the possibility of cumulative effects. Monitoring of both positive and negative effects should be considered.	Appendix D includes the monitoring strategy proposed in the Environmental Report.
	The monitoring programme could take into account any Emission Limit Value exceedances of heavy metals, at EPA-licensed mines that have occurred over recent years.	Without any spatial element to the Policy Statement, the specifics of any individual site are not addressed in the Environmental Report.
	If the monitoring identifies adverse impacts during the implementation of the Policy Statement, DECC should ensure that suitable and effective remedial action is taken.	This will be addressed at the interim review stage of the Policy Statement.
Inland Fisheries Ireland [DECC]	The Policy Statement should fully consider and make appropriate reference to and provision for aquatic biological diversity, the fisheries resource and relevant stakeholder interests.	Principle C5 of the Policy Statement aims to continue to provide for the protection, restoration and enhancement of biodiversity, as part of exploration and mining activity in line with Government policy, as set out in the National Biodiversity Plan. In addition, Monitoring Objective 2 of Appendix D of the Policy Statement sets specific monitoring regime sand targets to safeguard water quality from mineral exploration and mining.
	A 'circular or more sustainable approach' should hold significant potential to address legacy water quality impacts at historical mine sites in Ireland where acid mine drainage (AMD) and other deleterious mineral influences impact on water quality and aquatic / terrestrial ecology.	Implementing Action IA-C8.1 requires DECC to develop and implement a clear roadmap on the approach to historic legacy mines. The roadmap will ensure any management of legacy mines undertaken under this Policy Statement takes into account inter alia the regulatory protection afforded to EU sites with respect to protection, maintenance, and enhancement.

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Consultee	Summary of Points Raised	How this has been addressed in the Policy Statement?
Geological Survey Ireland [DECC]	No specific comment or observations to make on this matter at this time	Noted.
Department of Agriculture, Food and the Marine (DAFM)	<ul> <li>It is vital to ensure as much data collection is carried out and scientific knowledge gaps are plugged before any exploration in the marine environment commences. However, it is vital that an early and full assessment of the impact on fisheries is explicitly included in the process of assessing the impact offshore mineral exploration and mining would have on the marine environment and natural capital.</li> <li>Commercial sea fishing is a long standing, pre-existing and traditional activity in the marine environment. The evaluation and consideration of potential impacts on any commercial sea fishing activities needs to be given consideration as part of any planning/proposal process and during the development process itself. It is imperative that engagement should be sought with the fishing industry and other relevant stakeholders at as early a stage as possible to discuss any changes that may affect them to afford a chance for their input. Fishers' interests and livelihoods must be fully recognised, supported, and taken into account.</li> </ul>	<ul> <li>available, it is proposed that mineral exploration and mining activity does not take place offshore or on the Irish seabed until such time as sufficient data is available to adequately assess the impacts of any such potential mining activity.</li> <li>As above, no mineral exploration or mining in the marine area and no potential for disturbance to sea fishing.</li> </ul>

#### Table 5-5 Summary of Submissions from the Transboundary Consultees during Public Consultation

Consultee	Summary of Points Raised	How this has been addressed?
Agriculture, Environment	<ul> <li>In general, all DAERA departments were satisfied with the detail in the documents and the clarity of the impacts presented. The following specific noted were added.</li> <li>The potential for transboundary effects with respect to designated sites in Carlingford Lough is noted, particularly in relation to its cumulative sensitivity.</li> <li>Absence of marine policy documents (the UK Marine Policy Statement and the draft Marine Plan for Northern Ireland)</li> </ul>	<ul> <li>Transboundary impacts noted and considered within the Environmental Report.</li> <li>Noted but marine policy documents in general were not presented in detail given the commitment that the Policy Statement excluded exploration and mining in these areas in the lifetime of this Statement.</li> </ul>

#### Table 5-6 Summary of Submissions from the Public and Other Groups during Public Consultation

Summary of Points Raised	How this has been addressed in the Policy Statement?
<ul> <li>The area which may need most building is in the area of addressing social impacts. This in turn touches on the environment assessments as relationships with communities often benefit from</li> </ul>	The SEA and AA have been prepared in accordance with the relevant legislation and guidance. Specifically in relation to social impact, the

#### **Summary of Points Raised**

doing participatory impact assessments. The draft Policy Statement is not balanced and fails to consider international standards and practice on social impact assessment and human rights.

- It could be suggested that the draft Policy Statement will support reduced anthropogenic noise sources by making a positive contribution towards the aims and objectives of the NCAS by providing green technologies.
- There is no clear national guidance with respect to ground borne vibration or overpressure
  arising from mineral extraction. The mineral extraction sector would benefit from clear guidance
  in this regard.
- It is considered that clear national guidance on underwater noise assessment is required given the potential for offshore mining in the future.
- The AACI asks that the Policy Statement takes into account local authority noise action plan objectives. This particularly relates to road and rail transport of minerals.
- It is noted that Ireland is bound under EU law EIA Directives –Aarhus package-, and European Landscape Convention) and International Law to the European Landscape Convention and the World Heritage Convention - the 7 sites inscribed on the tentative list should be excluded from mining activities due outstanding universal value.
- It is important that excluded areas (for all mining activities) include all Natura 2000 protected sites (Birds and Habitats Directives), heritage sites and sites of community interest.
- An important issue to consider is Ireland's (possible) ratification of the Canada-EU trade agreement (often referred to as CETA) and the reality of investor state dispute settlements and potential claims if entering into mining agreements with Canadian companies.
- It is advised that the government create a yardstick by which 'public interest' in mineral
  exploration and mining is determined, at the policy planning stage, i.e. in advance of any
  prospecting licence being granted.
- If landscape objectives are required for development plans, it follows they are also to be
  considered in the planning process when considering a major intervention, such as a mine, in
  the landscape.
- Section 4 The conflation of mineral exploration with mining in the document is considered in inappropriate. There are clear and documented differences between the two in terms of nature, impact, business model and licence requirements/legislation.
- A suggestion that the schedule of minerals is reviewed regularly and assessed based on the mineral end use, the status as critical and inherent circular sustainability is large point of concern from industry.
- The issues around the public involvement in the decision-making process around the granting / renewal of prospecting licences must be handled appropriately.

#### How this has been addressed in the Policy Statement?

- assessment includes for same under the population and human health (PHH) criteria.
- As noted earlier, end use of materials derived from mining is outside the scope if this assessment.
- Specific limits for vibration from blasting are including in IE licences and regulated by the EPA. To attain consent a clear impact analysis must also be taken to demonstrate compliance with international standards for vibration impact on humans and structures.
- As noted earlier, no potential for offshore mining.
- · This is outside the scope of this Policy Statement.
- Exclusions are listed in Section 1.2 of the Policy Statement and these do not include the sites listed. Each mining operation would require EIA to operate which will include a full landscape assessment.
- Exclusions are listed in Section 1.2 of the Policy Statement and this
  includes all national parks. All other mining development will be subject to
  EIA and AA to attain the relevant consents.
- Noted and Policy C.3 seeks to maximise the value for the exchequer.
- Policy B.3 notes that fair, transparent and proportionate public participation in regulating Mineral Exploration and Mining is necessary to ensure the social legitimacy or licence of these activities.
- Again, these issues have been addressed on a national level in the Environmental Report but locally these would be assessed in detail at EIA stage.
- Section 6 of the Policy Statement delineates the regulatory regime for both elements of the Policy Statement to clearly separate the scope and scale of mineral exploration compared to mining.
- Implementing Action IA-C4.i commits to this review and sets out the criteria that will inform the review.
- Implementing Action IA-B1.ii ensures the GSRO will develop its own communications strategy using simple language, to inform communities how they can participate in the decision-making process around the granting/renewal of prospecting licences and mining leases.

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#### **Summary of Points Raised**

- A clear communication plan would be welcomed to address the current disparity between words and actions in the area of communication on minerals policy.
- There is no transparency in the exploration licencing process in that the objections and requests
  are not subject to the same level of scrutiny, there is no right for the licence holder to respond
  and most importantly of all there is no clarity on how decisions related to these issues are made,
  who makes them or in what timeframe.
- The decision-making process MUST be clearly documented and the GSRO MUST be appropriately staffed in terms of staff and experience.
- There is no reference to the Minerals Development Act 2017.
- The heavy focus of the document on input the minerals industry can have in the spheres of green economy, net zero emissions, and the circular economy etc. detracts from the very real contribution the industry makes CURRENTLY and will continue to have to meet.
- The Draft Minerals Policy needs to recognize that significant risks will remain from mining activities and these cannot all be controlled through the environmental licencing system.
- The Draft Minerals Policy should avoid the use of the 'Green Mining' metaphor as this masks the serious environmental impacts from mining. Mining should be promoted for essential metals only in very limited circumstances in Ireland; and under conditions that professionally build social community cohesion and balances all local sustainable development needs.
- The Draft Minerals Policy should limit the types of mining that can be conducted and avoid open-pit mining and gold mining as a policy.
- Suggest the language from the SEA Report which says 'Ensure a robust and transparent regulatory framework that supports environmentally responsible mineral exploration and mining' be used as the Key Principle 4.1.1.

#### How this has been addressed in the Policy Statement?

- Implementing Action IA-B1.i commits DECC to develop a communications strategy.
- As noted, Implementing Action IA-B1.ii requires a GSRO communications strategy around the granting/renewal of prospecting licences and mining leases.
- As above.
- Implementing Action IA-A.1.i states that the Geoscience Bill will allow for the
  commencement of the Minerals Development Act 2017 as primary
  legislation is required to address additional legislative issues that have
  arisen since the 2017 enactment, such as transposing the EIA Directive into
  Act.
- The potential adverse impacts from mining are well established and are documented in the Environmental Report. In contrast, the potential benefits of a secure supply of critical raw materials for green technology is also noted.
- Theme A on Robust Regulation notes the requirement for a mining operation to attain planning, licensing and mining consents (all of which are subject to SEA) and place a range of commitments on the operators. Through the EOA and AA process any potential for 'significant effects' must be mitigated to acquire these consents.
- The potential adverse impacts from mining are well established and are documented in the Environmental Report to set the framework for the assessment of the principles and priorities in the Policy Statement.
- The Policy Statement limits mineral exploration and mining to the materials listed in Schedule A only. The location, nature and type of mining undertaken is subject to separate regulatory regimes (planning, IE licensing and mining licence).
- Noted and the text for this principle has been updated to reflect wider comments.

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# 5.4 Screening of Final Changes to the Plan

Table 5-7 contains the screening of changes made to the final Policy Statement.

Note that a numbering system was employed for principles and priority actions in the Environmental Report that was not present in the draft Policy Statement. The final Policy Statement has a specific numbering system referenced in the table for clarity.

There has been some change to the principles and priority actions from the draft to the final Policy Statement and these have been screened for SEA purposes. Much of the changes relate to a reorganisation of the draft measures in the final Statement. Where changes are noted these are identified in blue.

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Table 5-7 SEA and AA Assessment of Changes made to the Final Policy Statement

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
Robust Regulation	Robust and Stable Regulation	
Principle 1.1 (P1.1): Maintain and improve the robust regulatory regime for mineral exploration activity and mining.	<ul> <li>A.1 Ensure a robust, transparent and stable regulatory framework that is enforced to ensure occupational health and safety at mines and environmentally responsible mineral exploration and mining, holding regulated operators to account for any significant impacts on the environment.</li> <li>IA-A.1.i: The Minerals Development Act 2017 has not been commenced. The Geoscience Bill will allow for the commencement of the Minerals Development Act 2017 as primary legislation is required to address additional legislative issues that have arisen since the 2017 enactment, such as transposing the EIA and Habitats Directive into Act.</li> <li>IA-A1.ii: The Department will assess, in consultation with all competent authorities, training and development programmes and procurement award criteria, and make recommendations where necessary, to ensure that those undertaking AA reviews for PL and SML consents are competent in ecological assessment as well as the relevant legislation and associated case law.</li> </ul>	This final principle has been significantly strengthened through the stated need for environmental enforcement for mine sites over that in the draft Statement.  In addition, the addition of the two associated implementing actions specifically cite the need for the environmental protection mechanisms in the EIA and Habitats Directive in the regulatory process.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Priority Action 1.1 (PA1.1): We will ensure that a clear separation exists between policy making and regulatory functions in relation to minerals exploration and mining.	<ul> <li>A.2 A clear separation should exist between policy making and regulatory functions in relation to minerals exploration and mining.</li> <li>IA-A.2: Establish the Geoscience Regulation Office independently of the Department of the Environment, Climate and Communications. In accordance with the Code of Practice for the Governance of State Bodies, there will be an ongoing, structured dialogue between the Department and the GSRO on issues of mutual interest, including the implementation of this policy statement.</li> </ul>	Slight rewording of the principle and addition of an Implementing Acton to establish the GSRO.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
	A.3 Prospecting and mining are different activities with different potential economic, social and environmental	

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording	SEA/AA Assessment
3	[Blue text denotes significant changes or additions]	
	<ul> <li>impacts. Accordingly, the regulatory regime will treat them separately.</li> <li>IA-A8: Within the context of the development of the Geoscience Bill, including the establishment of the Geoscience Regulation Office independently of the Department, the GSRO will initiate a review of the regulatory framework within the lifetime of the policy statement. The review will be conducted with reference to the principles set out in this statement and examine in detail relevant submissions received in response to the Draft Policy Statement. The Department will ensure that legislation supports the GSRO in developing an appropriate regulatory regime.</li> <li>(Note – this implementing action is relevant for each of A3 to A8)</li> </ul>	
	A.4 Regulations will be implemented on the basis of strong scientific evidence, while taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.	New principle added requiring implementation only on strong scientific evidence base. Inclusion of the precautionary principle is welcome. With regulatory protection measures elsewhere in this theme, this principle has limited direct impact.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
	A.5 Prospecting activities and mining projects should be socially legitimate. Social legitimacy or 'social licence' is the acceptance of mineral exploration and mining by employees, community stakeholders and the general public. The extended stakeholder network that adjudicates social licence include investors, environmental groups, human rights activists, financial institutions and national and local governments.	New principle added to provide a level of social and community protection for mining projects which is an welcome environmental addition.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
	A.6 Mineral exploration and mining activities should not take place offshore or on the Irish seabed until such time as sufficient data (including both visual and acoustic) is available to adequately assess the impacts of any such	A number of submissions noted on this and welcome that the principle specifies this prohibition until such a time as impact assessment data is available. A positive additional protection.

ment Dringinle/Driggity Manding	SEA/AA Assessment
ement Principle/Priority Wording	SEA/AA ASSESSMENT
significant changes or additions] acluding on fishers' interests and	No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result
	of the changes.
framework, particularly procedures for g permission, licencing and essments (Appropriate Assessments Impact Assessments) should be ctive, and efficient in addressing all the n this policy.	New added principle that specifies the need for EIA and AA for consenting. A welcome additional protection.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
framework should be reviewed at	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
ould be aligned, to the greatest extent National Planning Framework, including ment plans.	New principle to align the Policy Statement with land use policy which has been subject to SEA and AA. No direct impacts.
te the practice of reviewing Local Area Plans and engaging with Local ensure that potential mineral d mining is considered.	No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
ness and Participation	
ould have access to easily understood neral exploration and mining will develop a communications reference to all the principles outlined tatement, and using simple language, activities that differentiate mineral and mining and the safeguards in sure that local communities and the nt are protected ne potential benefits, particularly to omies and SMFs, of mineral	Principle and priority action reworded but the underlying focus remains unchanged from that assessed in the Environmental Report. Welcome that DECC have added a commitment that will allow for community engagement. Second Implementing Action added to allow the GRSO to develop a separate communications strategy. No additional likely significant effects. No additional effects on site integrity (AEOSI) as a result of the changes.
nt ne	ure that local communities and the are protected

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Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
<ul> <li>the benefits and impacts of mineral exploration and mining to local communities;</li> <li>the importance of minerals, including their role in developing green energy solutions as part of the Climate Action Plan; and</li> <li>further promoting the development of geoheritage.</li> </ul>	<ul> <li>Explain the importance of minerals, including their role in developing green energy solutions as part of the Climate Action Plan and</li> <li>Promote the development of geoheritage.</li> <li>DECC will engage with key stakeholders and involve community and local groups in the development of this strategy and tailor it to reflect how people think and feel about mining.</li> <li>IA-B1.ii: In addition to the communications that are already required through the prospecting and licencing processes, the GSRO will develop its own communications strategy, with reference to all the principles outlined in this policy statement, and using simple language, to:         <ul> <li>Inform communities how they can participate in the decision-making process around the granting/renewal of prospecting licences and mining leases; and</li> <li>Ensure the fair representation of communities' views in decision making processes.</li> </ul> </li> </ul>	
Principle 2.2 (P2.2): Promote and facilitate greater transparency and participation in the decision-making processes which regulate mineral exploration and mining activities, including through making more robust scientific data and evidence used in decision making available to the public.  • Priority Action 2.1 (PA2.1): DECC is committed to increasing transparency in its processes and will continue to assess how more information can be made available on-line concerning the decision-making process around the granting/renewal of prospecting licences. The goal is to make as much information as possible available as soon as possible. This is so that the public can have a high level of confidence in the openness, fairness, professionalism and efficiency of the process.	<ul> <li>B.2 Regulatory processes should be transparent and information on regulatory decisions should be made available as soon as possible.</li> <li>IA-B2: Following its review of the regulatory framework (IA-A8) and a design review of relevant procedures, GSRO will examine the scope for a project to develop an online gateway to provide, in addition to the information available on the OPALS Viewer, public access to information that is not commercially sensitive, including all environmental protection documentation on mineral prospecting licences, mining leases and associated applications, permits, permissions, charging structure for royalties, and inspection reports.</li> </ul>	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
<ul> <li>Priority Action 2.5 (PA2.5): DECC will establish a minerals exploration and mining advisory group comprising the regulatory (including land use planning), environment, academic, economic, industry and social pillars to:         <ul> <li>increase transparency in and the profile of the mineral exploration and mining sector;</li> <li>discuss all matters mineral exploration and mining related, including land use planning and mineral sterilisation, education, skills,</li> </ul> </li> </ul>	B.3 Fair, transparent and proportionate public participation in regulating Mineral Exploration and Mining is necessary to ensure the social legitimacy or licence of these activities. 'Social licence' is the acceptance of mineral exploration and mining by employees, community stakeholders and the general public. The extended stakeholder network that adjudicates social licence include investors, environmental groups, human rights activists, financial institutions and national and local governments  • IA-A8: The review of the Regulatory Framework (IA-A8) will be conducted with reference to this principle and will include:  • the investigation of alternative methodologies to fairly and transparently reflect the views of communities in regulatory decision making through engagement with the social sciences and humanities.  • a feasibility study on the inclusion of community gain principles in all mining authorisations  • consideration of a requirement on Prospecting Licence holders to prepare a Community Engagement Plan, proportionate to the level of activity, to document how they will engage with the local community.  • IA-B3: Establish an Advisory Group on Minerals Exploration and Mining in line with the Terms of Reference at Appendix B.	New principle added to facilitate public participation in the regulatory process to allow for greater social protection. A positive addition that will allow for greater social inclusion and protection in the regulatory regime. A new Implementing Action specifies the criteria for the consideration of the regulatory review.  Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.

Draft Policy Statement Principle/Priority Wording		Final Policy Statement Principle/Priority Wording	SEA/AA Assessment
		[Blue text denotes significant changes or additions]	
0	ensure that mineral exploration and mining in Ireland continues to be informed by best practice (including from an international practice perspectives, for instance Canada's Green Mining Innovation);		
0	work with industry to explore the development of voluntary codes of practice (in addition to the existing standards which are obligatory via the conditions in the EPA licences) for the sector in relation to moving towards a 'zero waste' industry and world leader in 'green mining' as well as examining closure and aftercare plans and associated financial provisions and opportunities to protect and enhance biodiversity as well as our natural and built heritage;		
0	promote and discuss the protection of public health and the environment through taking responsibility for ensuring the making safe of legacy mining and mine waste sites;		
0	examine the inclusion of communications, public engagement and community liaison obligations in state exploration and mining consents issued to operators; and		
0	examine the articulation of community gain principles to be included in all mining authorisations.		
Sustair	able Development	Sustainable Development	
Principle 3.1 Maintain and improve the sustainability of mineral exploration and mining, integrating consideration of its employment, social, climate, economic and environmental impacts;		C.1 Our policy on mineral exploration and mining should align with and reflect Ireland's commitments under the UN Sustainable Development Goals. Accordingly, the policy will balance economic, social and environmental considerations. It will seek to improve living standards without exhausting Ireland's natural resources or damaging our natural environment. To do this, the policy adopts the national principles for sustainable development, as set out in The Sustainable Development Goals National Implementation Plan 2018-	Reworded policy is more specific and adopts the SDG goals as a reference point along with the balance of economic, social and environmental considerations.  General obligations in the Implementing Actions that all actions arising from this Policy Statement will meet inter alia the regulatory requirements afforded to EU sites with respect to protection, maintenance and enhancement. This is a strong addition to the wording and affords additional protection to the Policy Statement.

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Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
	<ul> <li>2020 (Table 2.1 Our Sustainable Future Themes and Principles for Sustainable Development).</li> <li>IA-C1.i: All actions arising with respect to mineral exploration and the development of mining infrastructure must take into account inter alia the legal protection of European Sites; including the application of AA processes with respect to any subsequent plans or projects which emerge as part of the development of that infrastructure.</li> <li>IA-C1.ii: Any actions arising from this Policy Statement will meet inter alia the regulatory requirements afforded to EU sites with respect to protection, maintenance and enhancement.</li> </ul>	No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
	C.2 To facilitate investment by private companies in exploration and mining activities, the regulatory process should be clear and transparent, fair, stable, with permissions obtained on a timely basis and providing security of tenure.	New principle added. Clear and transparent regulatory regime is a positive. The need for permissions to be obtained on a 'timely basis' should not be at a cost to the environment. However, wider measures in the Policy Statement offer this protection.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 3.2 Maximise the value to the state (society, climate and economy) from mineral exploration and mining with due regard to its community and environmental impact.	C.3 Maximise the value to the Exchequer from mineral exploration and mining by ensuring that Ireland is competitive in attracting investment in the mineral exploration and mining sectors.  IA-C3: In the context of the Geoscience Bill and the establishment of the GSRO independently of the Department, review the Fiscal Framework for Mineral Exploration and Mining to ensure it is fair, equitable and consistent.	Principle is reworded – as environment and social protection covered adequately elsewhere, this revised principle only related to economic.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 3.4 Ensure that mineral exploration and mining activities themselves continue to adapt in line with evolving environmental, waste action, circular economy and climate action principles and practices, particularly during the operation and post closure phases of mines;	C.4 Our use of the Ireland's mineral resources must be balanced by conservation, support our transition to the circular economy and carbon neutrality and promote equitable development including international and intergenerational equity, as well as generating economic activity through commercial enterprise. Any changes to the minerals for which prospecting and mining will be	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
Principle 3.8 Regularly review the schedule of minerals for which prospecting is permitted, against several criteria including,  o their potential end uses; o their inherent circular sustainability (circularity) and, o their status as critical raw materials.  Our use of the earths' resources must be balanced, supporting our transition to the circular economy, carbon neutrality and more equitable development as well as generating economic activity through commercial enterprise.	permitted should be consistent with principles A4, B1 and C2.  • IA-C4.i : Review, in consultation with stakeholders, the schedule of minerals for which prospecting is permitted, against several criteria, including,  o their potential end uses,  their inherent circular sustainability (circularity)  their status as critical raw material  recognition that particular minerals typically occur in association with others  recognition that assessment against the first three criteria is likely to change over time  Any changes to the schedule should be consistent with the theme of robust and stable regulation, not increase the investment risk in mineral exploration, nor affect the security of exploration licences. The process for the review will be transparent. Any changes to the schedule arising from the review will be publicised.	Implementing Action reworded but positive change is the inclusion of stakeholders in the review and the commitment to publicise the review.
Priority Action 1.2 (PA1.2): We will not issue prospecting licences, mining licenses or leases for coal, lignite and oil shale, in accordance with the Circular Economy Bill, 2021.  Principle 3.3 Maximise the contribution the mineral exploration and mining sector can make to achieve our national, European and international policies and objectives, particularly in the terms of the transition to netzero greenhouse gas emissions by 2050.  Principle 3.5 Develop the economy, technology, knowledge, research and development capability, infrastructure and geoheritage/tourism of regional and local communities during all phases of mineral exploration and mining (exploration, mining and post closure of a mine);	<ul> <li>IA-C4.ii: Discontinue the issuing of prospecting licences, mining licenses or leases for coal, lignite and oil shale, in accordance with the Circular Economy, Waste Management (Amendment) and Minerals Development (Amendment) Bill 2022.</li> <li>IA-C4.iii: The Department will undertake research to better understand the life cycle of minerals developed in Ireland (cradle to recycling) and to better understand the demand for different minerals in Ireland (including Critical Raw Materials), the EU and globally as we transition towards net-zero greenhouse gas emissions by 2050.</li> </ul>	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report. Bill has since become and Act.  Principle reworded as Implementing Action but the underlying focus remains unchanged from that assessed in the Environmental Report.  No longer included but future use of legacy mine sites addressed elsewhere.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
Principle 3.6 Continue to provide for the protection, restoration and enhancement of biodiversity, as part of exploration and mining activity in line with Government policy, as set out in the National Biodiversity Plan.	<ul> <li>C5 Continue to provide for the protection, restoration and enhancement of biodiversity, as part of exploration and mining activity in line with Government policy, as set out in the National Biodiversity Plan.</li> <li>The Advisory Group's Terms of Reference provide for it to work with industry to explore the development of voluntary codes of practice (in addition to the existing standards which are obligatory via the conditions in the EPA licences) for the sector in relation to inter alia opportunities to protect and enhance biodiversity as well as our natural and built heritage.</li> </ul>	Unchanged from that assessed in the Environmental Report. Implementing Action including reference to same for the advisory Group to consider biodiversity.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
	C6 The long-term environmental sustainability of any activity should be assessed in relation to the impact on the status of fish species, their habitats, fisheries and/or the recreational angling or related commercial activities that may utilise these resources.	New principle added to provide protection to water quality but specifically fish and associated habitats. A welcome additional environmental protection principle.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 3.7 Ensure our natural and built heritage continues to be valued and protected for future generations, cherished and enjoyed, in line with Heritage Ireland 2030	C7 Ensure our natural and built heritage continues to be valued and protected for future generations, cherished and enjoyed, in line with Heritage Ireland 2030 and relevant international obligations, recognising the potential for transboundary impacts.	Principle largely unchanged but noted addition of protection for transboundary impact following consultation with DAERA.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 3.9 Enhance the potential of legacy mines through their management, stabilisation, and rehabilitation (including any necessary environmental remediation and the protection of valuable habitats some of which only occur on such sites), so that they can contribute to communities as public amenities, businesses, geoheritage, tourism and renewable energy, as well as examining their re-mining potential.  Priority Action 2.3 (PA2.3): DECC will develop and implement a clear road map on the approach to historic legacy mines in terms of the role of the various stakeholders, State and private, particularly with regard to their responsibilities.	C8 The potential of legacy mine sites to contribute to communities as public amenities, sites for geoheritage, tourism, renewable energy and businesses, including potential re-mining, should be enhanced through their management, stabilisation, and rehabilitation, including any necessary environmental remediation and the protection of valuable habitats, some of which only occur on such sites.  IA-C8.i: DECC will develop and see implemented a clear roadmap on the approach to historic legacy mines in terms of the role of various stakeholders, State and private, particularly with regard to their responsibilities. The roadmap will ensure any management of legacy mines undertaken under this Policy Statement takes into account inter alia the	Principle reworded but underlying theme is largely unchanged – noted change from 'examining re-mining' to 'potential re-mining' – potential for impact but would be subject to EIA and AA in any project level operation. Implementing Action has been enhanced to provide additional protection to EU sites which is positive.  As per the principle, two additional implementing actions relate to future use of legacy mine sites including potential re-mining. Such a move would be in line with the circular economy and positive for material assets. Any potential adverse impacts at project level would need to be fully established and mitigated through the EIA and AA processes to inform the consents required.

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Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
	regulatory protection afforded to EU sites with respect to protection, maintenance, and enhancement. The roadmap will include specific priority for the protection of European Sites and require all roadmap actions to avoid adverse effects to European Sites. It should also provide opportunities to maintain and enhance the designated interests of those EU Sites both directly and indirectly. The roadmap will prioritise legacy sites for rehabilitation on the basis of risk. The implementation of the road will be subject to the availability of funding.  IA-C8.ii: GSI to consider viable end uses for mining sites (including mines, processing areas, the elemental composition of mine wastes and tailings) to include both operational and legacy mines to provide guidance to the sector on viable end uses, such as for amenity, agriculture, commercial and/or renewable energy to guide operators on suitable commercial or environmental end uses including mine waste as a source of Germanium and Zinc.  IA-C8.iii: In the context of the Geoscience Bill and the establishment of the GSRO independently of the Department, GSI will provide for the preservation of and access to data and samples from former mine sites for research purposes, especially to mine sites where there may be potential to extract essential minerals from tailings/spoil heaps.	No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Building Capacity and Access to Knowledge	Building Capacity and Access to Knowledge	
Principle 4.1 (P4.1): Ensure that Ireland has the necessary mineral exploration and mining personnel, skills, education, knowledge and mineral data to fully realise our mineral potential.  Priority Action 4.1 (PA4.1): We will undertake research to better understand the life cycle of minerals developed in Ireland (cradle to recycling) and to better understand the demand for different minerals in Ireland (including Critical Raw Materials), the EU	D.1 Ensure that Ireland has the necessary qualified and certified mineral exploration and mining personnel, skills, education, knowledge and mineral data to fully realise our mineral potential.  IA-D1: In the context of the Geoscience Bill and the establishment of the GSRO independently of the Department, GSI will assist third level institutions and vocational training bodies in equipping mineral technicians, geologists, engineers, social scientists	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.  Recast Implementing Action but the focus remains on research and no environmental impact.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording	SEA/AA Assessment
	[Blue text denotes significant changes or additions]	
and globally as we transition towards net-zero greenhouse gas emissions by 2050.	and humanities scholars with the necessary skills needed in drilling, geoscience and mining that will allow the sector to reduce its environmental and social footprint and contribute to, and catalyse, the achievement of net climate neutrality by 2050.	
Principle 4.2 (P4.3): Map and safeguard our mineral potential and make available the data on our mineral wealth for current and subsequent generations to be in a position to make decisions on their future.	<ul> <li>D.2 Map and safeguard our mineral potential and make available the data on our mineral wealth for current and subsequent generations to be in a position to make decisions on their future.</li> <li>IA-D2: DECC to continue the practice of reviewing Local Area Development Plans and engaging with Local Authorities to ensure that the potential for mineral exploration and mining is considered.</li> </ul>	No change to that assessed in the Environmental Report other than addition of Implementing Action with no impact. No additional likely significant effects. No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 4.3 (P4.3): Support our geoscience data analytics and research capacity to deepen our knowledge of Ireland's geology for geothermal energy, minerals and water and other uses.  • Priority Action 4.3 (PA4.3): We will examine ways to further promote the compilation, availability and accessibility of mineral data and highlight the role that geoscience and technical data and can play in assisting other sectors (for example agriculture or construction).	<ul> <li>D.3 Ireland's geoscience data analytics and research capacity should be supported to deepen the available knowledge of Ireland's geology for geothermal energy, minerals and water and other uses.</li> <li>IA-D3: GSI will, in discussion with GSRO, examine ways to further promote the compilation, availability and accessibility of mineral data, including to the public, and highlight the role that geoscience and technical data and can play in attracting investment and in assisting other sectors (for example agriculture or construction).</li> </ul>	Principle reworded but the underlying focus remains unchanged from that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Priority Action 4.2 (PA4.2): Further research for consideration could include topics such as: improved (more accurate) and less intrusive exploration techniques; 'clean' and 'green' mining and best practice remediation; zero-waste mining; the application of analytics to minerals data to deliver new insights; public acceptance of exploration and mining/social advocacy; and risk perception and communications.	No longer included in the final Policy Statement.	Not Applicable.
International Co-operation	International Co-operation	
Principle 5.1 (P5.1):Further promote our industry abroad as world class in terms of our expertise, sustainable mining practices and skilled workforce in order to continue	E.1 Further promote our industry abroad as world class in terms of our expertise, sustainable mining practices and skilled workforce in order to continue to attract inward	No change to that assessed in the Environmental Report other than addition of Implementing Action with no impact.

Draft Policy Statement Principle/Priority Wording	Final Policy Statement Principle/Priority Wording [Blue text denotes significant changes or additions]	SEA/AA Assessment
to attract inward investment and facilitate Irish companies and personnel to compete for international contracts.	<ul> <li>investment and facilitate Irish companies and personnel to compete for international contracts.</li> <li>IA-E1: Represent Ireland at international conferences, exhibitions and other mineral related fora, such as the annual convention of the Prospectors &amp; Developers Association of Canada (PDAC).</li> </ul>	No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 5.2 (P5.2):Actively participate in European and international fora for advancing the technology, science and sustainability of exploration and mining, as well as supporting collaborative actions.	E.2 Actively participate in European and international fora for advancing the technology, science and sustainability of exploration and mining, as well as supporting collaborative actions.	No change to that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.
Principle 5.3 (P5.3):Ensure that minerals which cannot be developed in Ireland are sourced in accordance with international best practice and from conflict free sources and that they have the minimal impact on biodiversity and ecosystem services internationally, as set out in the National Biodiversity Plan.	E.3 Ensure that minerals that cannot be developed in Ireland are sourced in accordance with international best practice and from conflict free sources and that they have the minimal impact on biodiversity and ecosystem services Internationally, as set out in the National Biodiversity Plan.	No significant change to that assessed in the Environmental Report.  No additional likely significant effects.  No additional effects on site integrity (AEOSI) as a result of the changes.

# 6 PREFERRED SCENARIO AND REASONS FOR CHOOSING THE FINAL PLAN

#### 6.1 Introduction

The consideration of alternatives is a requirement of the SEA Directive (2001/42/EC). Article 5(1)<sup>4</sup> states that: 'where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and <u>reasonable alternatives</u> taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.'

The Directive does not prescribe at what stage consideration of alternatives should be undertaken, however, to present a useful input into the plan making process, all guidance points to considering alternatives as early as possible. Guidance also recognises that multiple layers of alternatives may exist, particularly for plans of this nature.

Two principal guidance documents have been referenced in the development of alternatives:

- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment, DEHLG 2004; and
- Developing and Assessing Alternatives in Strategic Environmental Assessment, EPA 2015.

Early discussion of possible alternatives was undertaken during the scoping stage for the draft Policy Statement. This chapter of the Environmental Report considers the reasonable alternatives which have been developed through the evolution of the draft Policy Statement.

# 6.2 Approach to Alternatives for the Draft Policy Statement

Given that the Policy Statement is a high-level national Policy Statement, it was important that the alternatives were reflective of its strategic nature.

Both the Policy Statement team and the SEA team have also been conscious of the need for iteration in this regard and consideration of alternatives therefore started early in the process. Alternatives were first discussed in relation to SEA scoping. The basis for alternatives discussions was the EPA Guidance: *Developing & Assessing Alternatives in SEA*. This guidance points to four key criteria for identification of alternatives and broad categories of alternatives that might be considered as outlined in **Figure 6-1**. In the context of the Policy Statement the criteria considered were:

- **Realistic:** Do the alternatives have the capacity to achieve Policy Statement objectives, and those of other national plans;
- **Reasonable**: Do the alternatives consider baselines and trends in the marine area, and also reflect the legal requirement, such as those of the Habitats Directive;
- Viable: Are the alternatives technically possible and feasible; and
- **Implementable:** Are the alternatives capable of being put into action, within realistic timeframes, and for which there are adequate resources.

The SEA Scoping Report included a series of high-level considerations on alternatives for discussion and these are reproduced in **Table 6-1**.

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<sup>&</sup>lt;sup>4</sup> Directive 2001/42/EC on the assessment of effects of certain plans and programmes on the environment, EC 2001.

<sup>&</sup>lt;sup>5</sup> Developing and Assessing Alternatives in SEA, EPA 2015.



Figure 6-1 Criteria for Alternatives and Categories Considered [Source: EPA Guidance, 2015]
Table 6-1 Alternatives proposed for consideration in the SEA Scoping Report

Alternative Type	Description	Example Considerations with respect to the Policy Statement
Strategic	High-level options that achieve a given objective. These types are commonly realistic only at policy level.	<ul> <li>Consideration of a do nothing scenario relating to the business as usual approach.</li> <li>Consideration of a reliance on imports only for minerals.</li> <li>Sector or mineral based prioritisation.</li> </ul>
Value and Effects Oriented	Alternatives that address policy priorities, cultural values or safety issues Such alternatives are most appropriate for addressing public perceptions, concerns and values.  Alternatives that address issues identified during scoping. Such alternatives are effective at mitigating	<ul> <li>Public participation and engagement.</li> <li>Policy prioritisation</li> <li>Whole country versus action areas approach</li> <li>Sectoral controls.</li> </ul>
	potential significant effects.	
Spatial	Alternative locations for the implementation of planning objectives.	The scope of the Policy Statement will not specify geographically where measures will be applied.
Modal	Different technical/ mode alternatives to achieve the same objective	Different methods to achieve improvements, for example:  Legal; Administrative; Protection measures / restoration measures; Financial; Education / awareness / training; and Related research and development
Sectoral and/ or Temporal Prioritisation	Alternatives that look at sectoral feasibility and needs at the strategic level, policies can be formulated to promote one sector versus another.  Alternatives for the timing of implementation of plan/programme measures.  These are most suitable at the local level for addressing infrastructure development.	Alternatives that look at sectoral and temporal feasibility could include:     Consideration of alternatives which are not currently feasible in this fourth iteration of the plan but may become feasible/ economically viable in the future.

Following this initial consideration these alternatives were further considered in the dedicated workshop with the Policy team referenced above. The types of alternatives considered are summarised in **Table 6-2** and these have evolved from the scoping report and evolved further in this analysis.

Table 6-2 Alternatives discussed during Workshop with the SEA and Policy Teams

Alternative Type	Considerations with respect to the draft Policy Statement			
	Strategic Alternative 1 (S1): Business as usual scenario whereby the sector continues in the absence of the Policy Statement on Mineral Exploration and Mining.			
	<ul> <li>Strategic Alternative 2 (S2): Development and implementation of the Policy Statement on Mineral Exploration and Mining.</li> </ul>			
Strategic	<ul> <li>Strategic Alternative 3 (S3): Maintain an open mineral policy on future exploration and mining as per the Policy Statement on Mineral Exploration and Mining.</li> </ul>			
	<ul> <li>Strategic Alternative 4 (S4): Promote the exploration and mining of designated Critical Raw Materials only in the Policy Statement.</li> </ul>			
	• Strategic Alternative 5 (S5): Implement a prohibition on all future exploration and mining within the State.			
	<ul> <li>Value Added Alternative 1 (V1): Business as usual approach to the concept of community gain for future mining authorisations.</li> </ul>			
	<ul> <li>Value Added Alternative 2 (V2): Commitment to community gain principles to be included in all future mining authorisations.</li> </ul>			
Value added	<ul> <li>Value Added Alternative 3 (V3): Business as usual approach to management of legacy mining sites within the State.</li> </ul>			
	<ul> <li>Value Added Alternative 4 (V4): Commitment to develop and implement a clear road map on the approach to historic legacy mines in terms of the role of the various stakeholders, State and private, particularly with regard to their responsibilities.</li> </ul>			
<ul> <li>Spatial          <ul> <li>Spatial Alternative 1 (SP1): Maintain an open spatial policy on future exploration mining with no restriction or siting guidelines on future development.</li> </ul> </li> </ul>				
	<ul> <li>Spatial Alternative 2 (SP2): Prescribe spatial restrictions and/or siting guidelines for future development.</li> </ul>			

#### 6.3 Assessment Parameters

The approach used for assessing alternatives for the draft Policy Statement was an objectives-led assessment. Each alternative has been assessed against a set of strategic environmental assessment objectives. The assessment compares the likely impacts in terms of the Strategic Environmental Objectives to see how alternatives perform in relation to the stated environmental objectives.

For the purposes of the assessment of alternatives:

- Plus (+) indicates a potential positive environmental impact;
- Minus (-) indicates a potential negative environmental impact;
- Plus/minus (+/-) indicates that both positive and negative environmental impacts are likely or that in the absence of further detail the impact is unclear; and
- Zero (0) indicates neutral or no environmental impact.

The following notation is used in the assessment tables:

Symbol	Meaning				
Plus (+)	Indicates a potential positive environmental impact				
Minus (-)	Indicates a potential negative environmental impact				
Plus/minus (+/-)	Indicates that both positive and negative environmental impacts are likely or that in the absence of further detail the impact is unclear				
Zero (0)	Indicates neutral or no significant impact				

Under each alternative a discussion is presented to support the assessment parameters shown and the reason for choosing the preferred alternative. Assessments include qualitative and where possible quantitative information.

# 6.4 Strategic Alternatives

Early discussions with the Policy team identified a number of issues of a strategic nature which could drive the direction of the Policy Statement. These issues and their reasonable alternatives were considered by the SEA team and outcomes fed back to the Policy team for consideration. The issues and alternatives considered are presented in the following sections of this report.

# 6.4.1 Business as Usual versus Policy Statement implementation

#### **Description of Alternative**

Strategic Alternative 1 (S1): Business as usual scenario whereby the sector continues in the absence of the Policy Statement on Mineral Exploration and Mining.

Strategic Alternative 2 (S2): Development and implementation of the Policy Statement on Mineral Exploration and Mining.

Reference	PHH	BFF	LS	W	AQ	CF	MA	СН	LandS
S1	+/-	-	-	-	-	+/-	+/-	-	-
S2	+/-	-	-	-	-	+	+	-	-

**Key: PHH** – Population and Human Health; **BFF** – Biodiversity, Flora and Fauna; **LS** – Land and Soils; **W** – Water; **AQ** – Air Quality; **CF** – Climatic Factors; **MA** – Material Assets; **CH** – Cultural Heritage; **LandS** – Landscape.

**Background:** While Ireland has a strong legislative regime for mining and mineral exploration (under the Minerals Development Acts 1940 to 1999), there is no overarching policy document that governs the industry within the State. No policy statement is required under the Minerals Development Act 1940 or any of the amending legislation up to the Minerals Development Act 2017. The legislation is focussed on the regulation of the sector through licensing.

As outlined in **Chapter 4**, there are a number of international and EU policy mechanisms already in place of relevance to mineral exploration and mining including the United Nations Sustainable Development Goals to which Ireland is a signatory and the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). Within the EU the key policy for the sector is the EU Raw Materials Initiative. These international and EU policies and frameworks provide direction for the sector in Ireland in the absence of any national policy.

In short, there is no current policy for the sector in Ireland and no legal driver for the development of any such policy. To this end the reasonable alternatives considered include the current 'business as usual' scenario with no such policy (S1) and the development of a policy statement for the sector (S2).

The Minerals Development Acts 1940 to 1999 provide for a robust regulatory framework for both mineral exploration as well as mining (which is also regulated under the planning and industrial emissions licensing legislation). With this regulation in place, there is a high level of environmental protection built into the consenting functions for mineral exploration and mining and limited need for additional policy.

Under this 'business as usual' scenario' the regulation elements of the Policy Statement are well established. In addition, Part 7, Chapter 2 of the Minerals Development Act 2017 introduces the concepts of public participation on decision making and regulations. Similarly, the Part 5 of the Minerals Development Act 2017 introduces requirements for the rehabilitation of abandoned mines.

To this end, some of the main concepts (i.e. regulation, participation, rehabilitation) of the Policy Statement are somewhat addressed in the regulations (through not all regulations commenced) in the absence of any policy.

The Policy Statement is a strategic national-level document which seeks to provide overall direction to policy and decision-makers involved in mineral exploration and mining in Ireland. It also seeks to put in place a clear and sustainable policy framework that supports the community, the environment, the climate and the mineral exploration and mining sector. The Policy Statement, therefore, presents a wider and more rounded remit than the regulations alone and is largely centred around five key principles as follows:

- Robust and stable regulation to maintain and improve the robust regulatory regime for mineral exploration activity and mining;
- Increasing awareness and participation to support public awareness, engagement and transparency around the importance of minerals, mineral exploration and mining at national, regional and local level;
- Sustainable development maintain and improve the sustainability of mineral exploration and mining, integrating consideration of its employment, social, climate, economic and environmental impacts;
- Building capacity and access to knowledge ensure that Ireland has the necessary mineral exploration and mining personnel, skills, education, knowledge and mineral data to fully realise the State's mineral potential; and
- International co-operation promote Irish industry abroad as world class in terms of expertise, sustainable mining practices and skilled workforce to attract inward investment.

The potential environmental implications for each of the two scenarios are addressed in the following analysis to determine the reasonable alternative that presents the lowest environmental impact.

**Discussion:** As summarised in the Environmental Report mining has the potential for direct, indirect, secondary and cumulative negative and positive impacts. Robust regulation of the negative impacts from mining is through EIA and AA at application stage for the various consents required including planning, IE licensing and State Mining License/Lease. Environmental protection through the operational and post operational phases is mainly through the EPA and DECC licence enforcement regimes and the aftercare requirements of the Directive 2006/21/EC on the Management of Waste from the Extractive Industry. To this end, modern mining operations are well regulated with a significantly reduced potential for direct adverse environmental impact.

However, historic mining which operated prior to the above consents or enforcement has a significantly higher environmental risk that continues to have environmental impact many years post closure of these mining sites.

Mineral exploration has a significantly reduced environmental risk relative to mining given that much of the exploration undertaken is desktop or non-intrusive works. Where more advanced exploration is required such as drilling or trenching, these works are subject to AA and drilling required both EIA and AA but mineral exploration will have a largely neutral impact.

On this basis, both Alternatives S1 and S2 are assessed as having a net negative impact for BFF, W, LS, AQ, CH and LandS, as while the currently regulatory regime (both with and without the Policy Statement) can greatly reduce the environmental impacts from these activities, there is potential for an adverse environmental residual direct and indirect impact from the sector with or without the Policy Statement.

In terms of PHH, the potential impacts are more mixed under both alternative scenarios. While human health impacts may be considered negative given the reasons outlined above for pathways to the environment, the impacts on population are more mixed. While the sector can have negative impacts for community and tourism, the development of mineral exploration and mining can have positive impacts for employment in an area. These mixed impacts for PHH are largely identical for both alternative scenarios.

However, S2 (Policy Statement) provides for a more specific measures to support public awareness, engagement and transparency in the sector. In this regard, public understanding, acceptance and engagement with the sector would likely be improved under S2 relative to S1 with a potential for a slightly reduced PHH impact.

Under MA, the mineral exploration and mining asset sector of the economy accounted for approximately €586 million in output and 1,400 jobs across the economy in 2017<sup>6</sup>. In this regard, the sector is positive for mining MA but more mixed when considered with other MA such as mining waste

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<sup>&</sup>lt;sup>6</sup> An Economic Review of the Irish Geoscience Sector , Indecon (2017). Link <a href="https://www.gsi.ie/documents/Indecon">https://www.gsi.ie/documents/Indecon</a> Economic Review of Irish Geoscience Sector Nov2017.pdf

management and agriculture. However, when intercomparing the two alternatives, the S2 (Policy Statement) alternative provides for greater emphasis on attracting inward investment for the sector and security of supply. S2 is also more-forward thinking as a coherent policy and brings together the current state of the sector and related legislation and international initiatives/drivers, which should allow for more focused and coordinated direction for this sector in Ireland. As a consequence, S2 offers a more positive MA impact for the mining sector relative to the 'business as usual' S1 alternative.

Finally, future mineral exploration and mining of materials will be important for the green economy to support climate policies and the transition to net-zero greenhouse gas emissions with potentially indirect positive impacts for CF which can offset the negative direct impacts from mining operations and transport. The need for essential minerals and materials to support renewable energy, batteries and other technology is well established and the sector can help to meets these needs but it cannot be at the cost of the wider environment. In this regard, the S2 (Policy Statement) alternative provides for a more rounded instrument to promote the industry but through better regulation and public engagement and offers the greater potential for positive CF impact relative to the S1 ('business as usual') scenario which provides for regulation but no sector direction or decision making framework.

Alternative brought forward in the Policy Statement: The preferred alternative brought forward is S2 (Policy Statement). While both alternatives represent a similar environmental impact and level of regulation, Alternative S2 provides for a more coherent and balanced framework for future decision making on mineral exploration and mining within the State. This balanced approach facilitates the current and potentially improved regulation of the sector offered by alternative S1 but with more direction and focus on public awareness, the green economy and investment in the sector.

# 6.4.2 Scope of the Policy Statement

#### **Description of Alternative**

Strategic Alternative 3 (S3): Maintain an open mineral policy on future exploration and mining as per the Policy Statement on Mineral Exploration and Mining.

Strategic Alternative 4 (S4): Promote the exploration and mining of specified green economy materials only in the Policy Statement.

Strategic Alternative 5 (S5): Implement a prohibition on all future exploration and mining within the State.

Reference	PHH	BFF	LS	W	AQ	CF	MA	СН	LandS
S3	+/-	-	-	-	-	+	+/-	-	-
S4	+/-	-	-	-	-	+	+/-	-	-
S5	+/-	-	-	-	-	+	+/-	-	-

**Key: PHH** – Population and Human Health; **BFF** – Biodiversity, Flora and Fauna; **LS** – Land and Soils; **W** – Water; **AQ** – Air Quality; **CF** – Climatic Factors; **MA** – Material Assets; **CH** – Cultural Heritage; **LandS** – Landscape.

**Background:** Currently, there is no policy in Ireland outlining the restrictions for minerals that may or may not be explored or mined within the State. The Schedule to the Minerals Development Acts 1940 to 1999 lists the minerals to which the legislation applies. Note that prospecting licences, mining licences or leases will not be issued for minerals marked with an \*, i.e. coal, lignite and oil shale, in line with the Circular Economy and Miscellaneous Provisions Act 2022 <sup>7</sup>, and these are omitted from this analysis. Also of note, mercury mining is prohibited under the Minamata Convention on Mercury which was ratified by Ireland in March 2019 and this is also excluded from this analysis.

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<sup>&</sup>lt;sup>7</sup> Circular Economy and Miscellaneous Provisions Act 2022. Link: https://www.oireachtas.ie/en/bills/bill/2022/35/

# Text Box 1: Scheduled Minerals under the Minerals Development Acts 1940 to 1999

Alum Shales. Fireclay. Nickel, Ores of. Anhydrite. Flint and Chert. Oil Shale\*.

Antimony, Ores of. Fluorspar. Platinum, Ores of. Apatite. Ganister. Potash Mineral Salts.

Arsenic, Ores of. Gem minerals. Quartz Rock.

Asbestos minerals. Gold, Ores of. Radioactive Minerals. Ball Clay. Graphite. Refractory Clays. Barytes. Gypsum. Rock Phosphates. Bauxite. Iron, Ores of. Rock Salt.

Bauxite. Iron, Ores of. Rock Salt.
Beryl. Kaolin. Roofing Slate.
Bismuth, Ores of. Laterite. Serpentinous Marble.

Bitumens. Lead, Ores of. Silica Sand.
Calcite. Lignite\*. Silver, Ores of.
Chalk. Lithomarge. Strontium, Ores of.

China Clay. Magnesium, Ores of. Sulphur, Ores of. Chromite. Magnesite. Talc and Steatite or

Chromite. Magnesite. Talc and Steatite or Coal\*. Manganese, Ores of. Soapstone.

Cobalt, Ores of. Marble. Tin, Ores of. Copper, Ores of. Mercury, Ores of. Titanium, Ores of

Corundum. Mica. Tripoli.

Cryolite. Mineral Oils. Tungsten, Ores of.

Diatomaceous Farth Mineral Pigments Witherite

Diatomaceous Earth. Mineral Pigments. Witherite.

Dolomite and Dolomitic Molybdenite. Zinc, Ores of.

Limestone. Monazite.

Alternative S3 is the consideration that the Policy Statement retains an open consideration of all minerals listed in the Schedule (excluding the noted exceptions) in the consideration for future mineral exploration and mining. This alternative would retain the status quo whereby prospecting licences are currently granted for the listed minerals - a number of which are currently mined in Ireland (gypsum, lead and zinc). Retaining this open approach would offer the greatest opportunity to identify and mine the State's full mineral potential but this economic gain may be realised at other social or environmental costs that need to be considered.

Two of the priority actions under the EU Raw Materials Initiative are securing a sustainable supply of raw materials from EU and the establishment a list of Critical Raw Materials (CRMs) which are raw materials of crucial economic importance to the EU economy based on economic importance and supply risk, which currently cannot be reliably and sustainably extracted within the EU. This list is subject to a regular review every three years and the latest list from 2020 is presented in **Text Box 2**. Note that CRMs are important as there is limited source of same within the EU and there is a wider suite of minerals required to support the green economy. A sample of such materials is shown in **Figure 6-2** illustrating the range of materials required to support solar, wind and EV development and while not CRM, these are sometimes referred to as 'green minerals'.

Alternative S4 relates to a policy whereby the scope of the Policy Statement is restricted to only permit future exploration and mining for minerals that have a clear application for the green economy. This alternative would restrict the realisation of the State's mineral potential but would provide a sustainably robust justification for future development within the sector.

It is noted that during scoping consultation, the Irish Association for Economic Geology have noted that a 'prioritisation approach would effectively label Ireland as a high-risk jurisdiction for all exploration, and render an already challenging fundraising environment impossible to successfully navigate by Irish companies for Irish-based projects. The complex nature of mineral deposits also means that this approach may inadvertently sterilise deposits of critical raw materials - for example where copper commonly occurs with gold, or zinc with silver. In recent years, the Fraser Institute

Survey has rated Ireland favourably as a location for exploration and mining, however, the country's rating has seen a consistent fall of late'.

<b>Text Box 2: 2020</b>	Critical Raw	Materials	(additions	sinca	2017	shown in hold)	
TEXL DUX 2. ZUZU	Cillical Raw	water ars	tauuitions	SILICE	<b>2</b> 017	SHOWH III DOIGI	

Antimony	Hafnium	Phosphorus
Baryte	Heavy Rare Earth Elements	Scandium
Beryllium	Light Rare Earth Elements	Silicon Metal
Bismuth	Indium	Tantalum
Borate	Magnesium	Tungsten
Cobalt	Natural Graphite	Vanadium
Coking Coal	Natural Rubber	Bauxite
Fluorspar	Niobium	Lithium
Gallium	Platinum Group Metals	Titanium
Germanium	Phosphate Rock	Strontium

Note: Those in italics show some potential for development in Ireland



Figure 6-2 Minerals required for green energy technologies (source IISD8)

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<sup>&</sup>lt;sup>8</sup> IISD, Green Conflict Minerals, August 2018. Link: <u>https://www.iisd.org/story/green-conflict-minerals/</u>

A third strategic alternative, S5, is proposed whereby the policy prohibits all future mineral exploration and mining within the State in a fashion similar to the current stance on oil shale, lignite and coal. All existing PL and mining leases/licences would continue until expiration but no renewal of licences or new licences would be granted. The industry would be reduced to rehabilitation of mining sites and tailings and the supply of all minerals and metals would be achieved by imports only.

Such an approach would offer the greatest levels of environmental protection to the natural environment through the removal of a potentially significant source of potential pollution from the country, i.e. new mining operations. However, this approach would severely restrict the realisation of the State's mineral potential with a risk of significant losses to the economy and local employment. In addition, this alternative would be at odds with the second pillar of the EU Raw Materials Initiative which aims to secure a sustainable supply of raw materials from EU sources as well as the Responsible Minerals Regulation (Regulation (EU) 2017/821) which requires supply chain due diligence obligations for EU importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high risk areas to prevent the financing of armed groups and security forces in these resource-rich areas.

**Discussion:** As Alternative S3 offers the greatest opportunity for exploration and mining relative to the other alternatives, S3 has the greatest potential for the direct adverse impacts to LS, BFF, W and AQ relative to S4 and S5. This is as result of the wider remit of minerals available for exploration and mining under S3 potentially impacting a larger fraction of the country relative to S4 and S5. However, it is noted that these operations are heavily regulated through a series of consent and enforcement processes to mitigate the significant adverse effects.

S4 will have a potentially lower impact on LS, BFF, W and AQ relative to S3 given the reduced scope of minerals and potentially reduced spatial extent, that may be explored and mined. The localised impacts would be similar and would be mitigated through the same consent and enforcement processes but over a reduced spatial area.

S5 offers the lowest direct impact to LS, BFF, W and AQ within Ireland given that this alternative would eliminate any source of pollution within the State through the future prohibition of mineral exploration and mining resulting in a largely neutral impact. However, while direct adverse impacts in Ireland may be avoided under S5, there is potential for these direct impacts to be realised in other jurisdictions both within and outside the EU. While demand for minerals would still exist in Ireland, the absence of any supply in Ireland would simply push the demand to other countries, some of which are not subject to the same regulatory regime on environmental protection as Ireland and other EU Member States. In this regard, the exploration and mining of minerals in other States has the potential for significant adverse transboundary impacts with these impacts likely more significant than if these impacts were realised in Ireland under the current regulatory regime. As such, alternative S5 simply exports the adverse impacts to other States and likely results in a more adverse impact to the environment.

S3 is also likely to present the greatest potential for indirect and secondary adverse effects to BFF, CH, LandS and for non-mining sectors of MA relative to S4 and S5. Again, this is as a result of S3 potentially impacting a larger fraction of the country compared to the other alternatives. As above, S4 presents a reduced impact for these parameters relative to S3 given the reduced spatial area open under this alternative. S5 would eliminate these potential indirect and secondary effects in Ireland through the prohibition of mineral exploration and mining but, as above, these adverse impacts would be realised as transboundary effects in other States with likely a lower level of regulation than applied in Ireland potentially resulting in greater adverse impacts.

For PHH the impacts of alternatives S3 and S4 are more mixed with potential adverse impacts to community, tourism and human health from discharges to air, water and soils as outlined above. These community, tourism and human health impacts are largely eliminated within Ireland through alternative S5 with the prohibition of future exploration and mining and the elimination of future sources of impact to human health. Again, those adverse community and health impacts would be experienced in other States from where Ireland was importing the minerals.

Conversely, the impacts for employment in Ireland would be negative for S5 given the elimination of a potentially important jobs sector in rural areas. This potential loss of employment would be particularly acute in the rural areas where mines operate. The key objectives of the recently launched Our Rural Future – Rural Development Policy 2021-2025 are delivery of ambitious regional job creation and enterprise development targets for the indigenous sector. The plan also seeks to develop and invest in a Just Transition to a climate neutral society, ensuring that no member of the society is left behind.

Similarly for current and potentially future mining assets under MA, alternative S3 offers the greatest positive followed by S4 given that these alternatives facilitate the economic development of the

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minerals within the State. S5 is potentially a negative impact for mining MA given the absence of any realisation of the natural resources available, the security of supply offered by same and the loss of income to the State.

**Figure 6-3** presents the World Bank Group projected annual demand for minerals up to 2050 under various International Energy Agency projection scenarios including the following:

- B2DS Scenario with a 50% chance of limiting average future temperature increases to 1.75°C by 2100;
- 2DS Scenario with at least a 50% chance of limiting the average global temperature increase to 2°C by 2100; and
- RTS Assumes all countries will implement their Nationally Determined Contributions (NDCs), as proscribed under the Paris Agreement, resulting in an average temperature increase of 2.7°C by 2100.

The data illustrates that for even the least ambitions climate scenario (RTS) the mineral demand will increase from the current base of 40 million tonnes per annum up to 100 million tonnes per annum by 2050 with the most ambitious scenario (B2DS) predicted an increased demand to 180 million tonnes per annum by 2050.

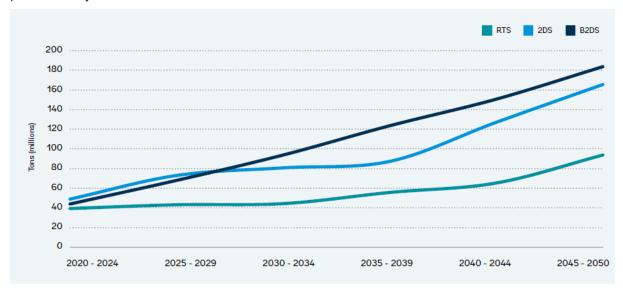


Figure 6-3 Projected Annual Average Demand of Minerals up to 2050 Under the IEA Energy Technology Perspective Scenarios (source World Bank<sup>9</sup>)

Within Ireland, the relevant targets under the Climate Action Plan 2021 that will feed the above demand and the headline targets or relevance are listed as follows:

- Increase electricity generated from renewable sources to 80% by 2030, indicatively comprised of:
  - At least 5 GW of offshore renewable energy;
  - o 1.5-2.5 GW of grid-scale solar energy; and
  - Up to 8 GW total of increased onshore wind capacity.
- Increase the fleet of EVs and low emitting vehicles (LEVs) on the road to 945,000, comprising of:
  - 845,000 electric passenger cars;
  - 95,000 electric vans;

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<sup>&</sup>lt;sup>9</sup> World Bank Group, Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition, 2020. Link: https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf

- 3,500 low emitting trucks; and
- o 1,500 electric buses.

To meet these climate targets, the State will need a secure supply of the appropriate minerals to facilitate the technology demands and securing a sustainable supply of raw materials from EU sources is a second pillar of the Raw Materials Initiative. Alternative S5 presents a significant negative impact for mining MA relative to S3 and S4 and would not comply with current EU policy on security of supply within the EU.

In terms of CF, the potential impacts associated with the sector are direct emissions from mining/processing, the direct impact from transport of materials and the indirect impact of the final mineral use (such as green technology). In the case of direct emissions from mining/processing, these are typically realised at source and in this regard S3 and S4 would result in greenhouse gas emissions from mining within the State which may be regulated under the EU Emissions Trading Scheme (ETS). Alternative S5 and the minerals excluded from mining in Ireland under S4 would be mined in other jurisdictions resulting in analogous greenhouse gas emissions in these States. In this regard, there is limited variation in these impacts for each alternative but it is noted that where the mining is undertaken within the EU, the regulation through the ETS sets reduction targets for operators which may not be regulated in States outside the EU.

In terms of transport emissions for the sector, the extent of emissions is determined by the distance travelled and the mode of transport. As an example, lithium is an essential requirement for batteries for electric vehicles and lithium demand is projected to increase by 500% by 2050 to meet the global demand for electric vehicles. Presently, the EU imports 78% of all lithium from Chile but Ireland has known potential lithium resources that could be responsibly extracted for use within the EU to help meet the demand. This could help reduce the 'outsourced' transboundary impacts in other countries, e.g. impacts to water tables and groundwater drinking supplies from activities to extract lithium from salt lakes, such as the 'lithium triangle' in South America which hosts 75% of the world's known resource <sup>10</sup>. **Table 6-3** sets out a simple illustrative example of transporting a tonne of lithium material by road from a sample facility in the midlands to Dublin Port compared to transporting the same tonne of material from Chile by ship to Dublin Port. The results show the import option is circa 2000% higher in GHG emissions relative to the indigenous mining option per tonne of material transported. As such, alternative S3 offers the lowest potential for transport related greenhouse emissions relative to S5.

Table 6-3 Example of CO<sub>2</sub> emissions generated within Indigenous Supply vs. Import

Alternative	Journey	Approx. Distance (km)	Emission Factor <sup>11</sup> (kgCO <sub>2</sub> e per tonne.km)	Emissions (kgCO <sub>2e</sub> ) per tonne
S3/S4	Athlone to Dublin Port	137	0.07524 (100% laden all HGV)	10.31
S5	Chile (Port of San Antonio) to Dublin Port by ship	13,230 [7,144 nautical miles]	0.01614 (average container ship)	213.53

There is overlap between the demand for minerals under MA and the potential indirect effects for CF where these materials are used for green technology. A sample of these green technology materials are shown in **Figure 6-2** but not all minerals listed in Schedule to the Minerals Development Acts 1940 to 1999 are essential for the green economy. For example, gold is listed in the MDA Schedule and was included in the EU's 2020 CRM analysis for criticality because 'global supply data was available at the extraction stage only' but does not currently have a significant role in green technology (note that this may change with evolving technology). Low-carbon technologies, particularly solar photovoltaic (PV), wind, and EVs are more mineral intensive relative to fossil fuel technologies.

Based on the above, each of the alternatives considered can be proposed to facilitate the indirect positive climate impacts offered by a successful transition to the green economy. Where the technology is made available and Ireland meet's the Climate Action Plan targets, there will be a net

<sup>&</sup>lt;sup>10</sup> Datu Buyung Agusdinata et al. Socio-environmental impacts of lithium mineral extraction: towards a research agenda, 2018 Environ. Res. Lett. 13 123001. https://iopscience.iop.org/article/10.1088/1748-9326/aae9b1

<sup>&</sup>lt;sup>11</sup> UK Greenhouse gas reporting: conversion factors 2020.

positive impact for climate. This is true regardless of whether the materials are mined in Ireland or in other States.

Alternative brought forward in the Policy Statement: While alternative S5 offers a clean and easy mechanism for protecting the Irish environment from the sector, this is not without costs for mining assets and transport emissions as well as the wider environmental and societal implications for this mining being undertaken in other States. In short, alternative S5 simply 'exports' the environmental impact of mineral exploration and mining to other States which may not have the level of environmental regulation or human rights protection that applies within Ireland. In addition, this alternative is not in line with the EU Raw Material Initiative and the principles of securing an EU supply of materials. In this regard, alternative S5 is not considered 'reasonable' and is not considered further.

Alternative S3 largely retains the status quo whereby all minerals listed in Schedule to the Minerals Development Acts 1940 to 1999 are open for exploration and potentially mining. While there are potential direct and indirect adverse impacts to the environment, these are currently regulated to minimise or mitigate such impact. S3 also offers the greatest potential positives for employment (PHH) and for the mining sector, including security of supply and State incomes (MA). Alternative S4 offers similar direct and indirect adverse impacts to the environment and positive economic aspects both of which are at lower scale that the equivalent S3 alternative.

However, alternative S4 may be too constrained and lack the flexibility required for a Policy Statement. With the evolving technological basis for the green economy, new and innovative technology may require a revised sets of minerals for the industry and any policy that precludes minerals may be short sighted. As such, alternative S3 is brought forward in the Policy Statement to maintain an open policy that may then be regulated through this policy on a case by case basis through a clear decision making framework.

# 6.5 Value Added Alternatives

There are two value added alternatives scenarios assessed in terms of community funding and in the area of legacy sites and each of these is assessed in the following sections.

# 6.5.1 Community Gain

#### **Description of Alternative**

Value Added Alternative 1 (V1): Business as usual approach to the concept of community gain for future mining authorisations.

Value Added Alternative 2 (V2): Commitment to community gain principles to be included in all mining authorisations.

Reference	PHH	BFF	LS	W	AQ	CF	MA	СН	LandS
V1	+/-	-	-	-	-	+	+/-	-	-
V2	0	-	-	-	-	+	+/-	-	-

**Key: PHH** – Population and Human Health; **BFF** – Biodiversity, Flora and Fauna; **LS** – Land and Soils; **W** – Water; **AQ** – Air Quality; **CF** – Climatic Factors; **MA** – Material Assets; **CH** – Cultural Heritage; **LandS** – Landscape.

**Background:** Currently, Prospecting Licences and State Mining Licenses/Leases have no provision for community gain. While EPA licences have an EU mandated requirement for financial liability for closure and aftercare of mining sites, there is no community gain associated with this instrument.

For some planning pathways such Strategic Infrastructure Development (SID), the legislation requires ABP to consider some community gain in any grant of permission. The Planning and Development Act 2000 (as amended by the Planning and Development (Strategic Infrastructure) Act 2006 Section 37 G(7)(d)) specifies that in the event that planning permission is granted for a SID, ABP can make provision for community gain arising out of the development:

The Board may attach a condition providing for community gain which may require the construction or the financing, in whole or in part, of a facility or the provision of a service in the area in which the proposed development would be situated and which the Board considers would constitute a substantial gain to the community.

However, mining development is not subject to SID (i.e. it is not listed in the Seventh Schedule of the Planning and Development Act 2000, as amended) and this is not standard for general planning consents from the local planning authority, but it is possible for the planning authority to condition some element of community gain for a development.

Community gain is a more established practice for larger waste sites such as landfills and incinerators and this derived from the former waste policy 'Changing Our Ways' (September 1998) which states that 'Local authorities, working closely with local communities, should utilise a proportion of income from waste charges and gate fees to mitigate the impact of such facilities on these communities through appropriate environmental improvement projects'. These 'portions' vary but a generally modern standard condition imposed is circa €1-2 per tonne of municipal waste accepted at a site is to be placed in a community fund.

Such an approach could be extended to future larger mining authorisations which would have positive community benefits. This community gain may be financial (as a fund) or more community based, such as the provision of parkland or other amenity pre or post closure.

**Discussion:** Alternative V1 represents the current status whereby community gain is not considered for the industry. All environmental protections offered by the current regulatory regime provide some mitigation for the potentially adverse impacts to human health, tourism and community. It is noted that the potential positive impacts through employment results is a mixed PHH impact from V1.

Alternative V2 presents a slightly modified scenario whereby the same environmental protections are offered but with a community gain model applied to the sector. This would likely only apply to the mining operations as exploration is short term and lower impact relative to the longer term mining operation. The requirement may be established at consent stage (either through planning permission or the State Mining Licence) using models such as that currently employed for waste sites. The quantum of gain (if financial) may be set by the DECC or alternatively a set of agreed principles for other community gain options (parklands, community facilities, playing pitches, etc.) may also be considered.

Such an approach would be in line with the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) which commits to leveraging mining for sustainable development to ensure negative impacts are limited and financial benefits are shared.

Alternative V2 offers the same environmental protection principle offered by V1 but with a reduced community and PHH impact. The relative loss to the mining operator would be modest and clearly established at feasibility stage for full transparency resulting in no significant impact to MA mining assets.

**Alternative brought forward in the Policy Statement:** It is recommended that alternative V2 is included in the Policy Statement to impose a requirement on DECC to consider the feasibility of a community gain arrangement on future authorisations.

# 6.5.2 Legacy Sites

#### **Description of Alternative**

Value Added Alternative 3 (V3): Business as usual approach to management of legacy mining sites within the State

Value Added Alternative 4 (V4): Commitment to develop and implement a clear road map on the approach to historic legacy mines in terms of the role of the various stakeholders, State and private, particularly with regard to their responsibilities.

Reference	PHH	BFF	LS	W	AQ	CF	MA	СН	LandS
V3	-	-	-	-	-	0	-	-	-
V4	+/-	+/-	+/-	+/-	+/-	0	+/-	+/-	+/-

**Key:** PHH – Population and Human Health; BFF – Biodiversity, Flora and Fauna; LS – Land and Soils; W – Water; AQ – Background:

**Discussion:** Under Article 20 of the Extractive Industries Waste Directive (2006/21/EC), DECC has compiled an inventory of waste facilities at old mine sites at which historical mining is known to have occurred. These mine sites have been compiled into an inventory of 27 mines and then subjected to a

risk assessment (using a five point risk classification system) by the EPA and GSI<sup>12</sup> and these sites are described in the Environmental Report. The report concludes that the higher risk historic mine sites in Ireland are located at the Silvermines, Avoca and Tynagh. All three mines have large tailings impoundments and significant waste rock piles which currently pose a significant risk to the environment. DECC has commenced remediation at Silvermines, monitoring at Avoca but no works to date have commenced at Tynagh.

Part 5 of the Minerals Development Act 2017, allows the DECC to designate sites as rehabilitation areas and the conditions for making the designation are the following:

- (a) the rehabilitation of the mine site or adjacent land is necessary to ensure the health or safety of the public or animals or to address major environmental damage;
- (b) the rehabilitation of the mine site is complex due to a combination of factors, such as the presence of pollution or hazardous substances, the physical stability of the ground, the heritage significance of the land or structures and the ownership of the land; and
- (c) it is unlikely that the mine site or adjacent land will be rehabilitated within a reasonable time by the person who controls the site.

The Minister may prepare or adopt a rehabilitation plan in respect of each rehabilitation area and, if necessary, revise that plan. These regulations have yet to commence so this instrument is not in place. It is further noted that the scope of this instrument predominately relates to mine safety rather than environmental aspects so there is limited scope for direct intervention.

Alternative V3 relates to the 'business as usual' scenario whereby the current approach to regulation of legacy mining sites is maintained pending the commencement of the 2017 Regulations. Alternative V4 includes a more specific provision for action within the Policy Statement for the management of legacy mine sites that pose a risk to the environment.

**Discussion:** Alternative V3 represents the current status whereby the legacy mine sites are having a potentially adverse impact on PHH, W, AQ, LS, BFF, LandS and MA (agriculture and mining waste capacity). Some improvements have been achieved at Silvermines by capping areas to prevent dust and/or additional leaching but the residual risk from these site remains high. In addition, as legacy sites the benefits for employment (PHH) and mining assets (MA) typically associated for operational mines are not present.

V4 would allow for more direct management action to manage the remediation of these legacy sites and to prevent any further impact on the environment. Setting up the structures to actively manage these sites is a prerequisite to the subsequent remediation strategies that must follow. In the context of this analysis, setting up the necessary structures to manage the remediation effort would be generally positive for the environment relative to V3.

An option to consider for future iterations of the road map is that this remediation may be funded by other operational mines such as through a 'Superfund<sup>13'</sup> type model which is payable by all new applicants to a central fund for the remediation of legacy sites. Such an approach is complex and requires a critical mass of operators to be meaningful but has proven successful for contaminated land sites in the US.

**Alternative brought forward in the Policy Statement:** It is recommended that V4 is included in the Policy Statement to initiate action on the legacy mine sites and to improve the protection of the environment around these sites which is known to be poor. Inaction under V3 is not a viable solution for these sites under the Policy Statement.

# 6.6 Spatial Alternatives

Given the strategic nature of the Policy Statement with no spatial elements, there is limited potential for spatial alternatives to be considered. However, during the alternatives workshop the consideration of maintaining the current, largely open, spatial policy on mineral exploration (and potentially mining)

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<sup>&</sup>lt;sup>12</sup> Historic Mine Sites - Inventory and Risk Classification Volume 1, EPA/GSI, 2009. Link: https://www.epa.ie/publications/monitoring--assessment/assessment/historic-mine-sites---inventory-and-risk-classification-volume-1.php

<sup>&</sup>lt;sup>13</sup> USEPA Superfund Program, Link: https://www.epa.gov/superfund

versus having a more structured approach, such as through siting criteria or guidelines, was discussed. These comparative alternatives are addressed in this section.

#### **Description of Alternative**

Spatial Alternative 1 (SP1): Maintain an open spatial policy on future exploration and mining with no restriction or siting guidelines on future development.

Spatial Alternative 2 (SP2): Prescribe spatial restrictions and/or siting guidelines for future development.

Reference	PHH	BFF	LS	W	AQ	CF	MA	СН	LandS
SP1	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
SP2	+/-	+/-	+/-	+/-	+/-	+/-	-	+/-	+/-

**Key: PHH** – Population and Human Health; **BFF** – Biodiversity, Flora and Fauna; **LS** – Land and Soils; **W** – Water; **AQ** – Air Quality; **CF** – Climatic Factors; **MA** – Material Assets; **CH** – Cultural Heritage; **LandS** – Landscape.

**Background:** Under the Minerals Development Acts 1940 to 1999, there are limited spatial restrictions in applying for and granting Prospecting Licenses (PL) and subsequently State Mining Licences. Currently, there are approximately 430 PL in Ireland which also shows a number of 'excluded areas' (shown in purple) located in the following National Parks:

- Wicklow Mountains National Park, Wicklow;
- Killarney National Park, Kerry;
- Burren National Park, Clare;
- Connemara National Park, Galway;
- Ballycroy National Park Mayo; and
- Glenveagh National Park, Donegal.

All exploration and mining within National Parks are prohibited unless undertaken to help manage or improve the park under the control of the National Parks and Wildlife Service (NPWS).

Outside of the above there are no spatial restrictions imposed by the Regulations on applying for a PL. As noted, when seeking consent for any advanced exploration works (such as drilling or trenching) under a PL, the applicant must be cognisant of the DECC guidance on these activities and for such applications DECC undertake an environmental screening (including Screening for Appropriate Assessment, Aarhus Decision) for all mineral exploration activities and Environmental Impact Assessment is required for drilling activities. Under this regulatory regime, there is a spatial consideration of the location of the proposed exploration and proximity and pathways to sensitive environmental receptors.

Similarly, should a licensee wish to progress to mining stage in an area, the need for AA and EIA to inform the triple consents of planning, EPA licensing and State mining licensing, have inherent spatial analysis built into the consent processes. Each of the regulators may refuse an application in the event of a potential pathway for significant adverse or likely significant effect to an environmental receptor.

While the above addresses the terrestrial environment, in the marine area there has been no mining of scheduled minerals in Irish waters to date. There are no areas of seabed in the Irish maritime area leased or licensed for minerals prospecting or extraction and there are no plans to lease or licence any part of the seabed. Therefore, no significant activity in the marine area is expected in the short term. Looking forward the EU Transforming the EU's Blue Economy for a Sustainable Future advocates that marine minerals in the international seabed area cannot be exploited before the effects of deep-sea mining on the marine environment, biodiversity and human activities have been sufficiently researched, the risks are understood and the technologies and operational practices are able to demonstrate no serious harm to the environment.

In line with the requirements of EU Directive 2014/89/EU, the government formally established the National Marine Planning Framework (NMPF) in May 2021. In relation to mineral exploration and mining the stated objective is as follows:

In line with national policy on mineral exploration and mining, maximise the contribution that the environmentally sustainable exploration and mining sector makes to our society, economic development and the transition to net-zero greenhouse gas emissions through the supply of the raw materials necessary for our sustainable development.

Again, there is no spatial marine element to this objective and the only restriction is in alignment with the Policy Statement.

Alternative SP1 retains the current open spatial regime for mineral exploration and mining as per the Minerals Development Acts 1940 to 1999 for the terrestrial areas and the NMPF in the marine areas. Alternative SP2 is presented whereby the Policy Statement includes for some level of spatial restriction of future exploration and mining based on a wider framework of environmental protection. Note that during SEA scoping consultation the Friends of the Irish Environment advocated that the exclusion area should be expanded to include Natura 2000 areas and areas to be protected by the Geological Survey Office. SP2 represents this increased exclusion area in general terms.

Examples of such a spatial approach are well established in some sectors whereby activities are restricted in close proximity to sensitive environmental receptors. This may include the human environment (residential properties, schools, hospitals, etc.), the natural environment (designated ecological sites, water courses, etc.) or the built environment (cultural heritage structures, roads, airports, etc.). By limiting a type of development in close proximity to such receptors and blanket level of protection may be offered. Examples of this approach include the Wind Energy Development Guidelines or the siting guidelines for waste facilities under the Regional Waste Management Plans.

The EIA criteria for mineral exploration drilling ('considered deep drilling') as legislated for in Ireland contains a number of spatial criteria, which, if met, will guarantee that the project will not have a significant effect on the environment. These criteria are listed below and it should be noted that if a project that does not meet these criteria, it may still proceed if it is determined at the next stage of EIA (screening) that the project will not have a significant effect on the environment:

- Works must be more than 100 metres from:
  - Land to which a notice under section 16 of the Wildlife (Amendment) Act 2000 of an intention of the Minister for Culture, Heritage and the Gaeltacht to make an order designating land as a natural heritage area under Section 18 of that Act applies, or
  - Land designated a natural heritage area under Section 18 of the Wildlife (Amendment) Act 2000;
- The site where the proposed activity will take place is not within a European site;
- The site where the proposed activity will take place is more than 100 metres from water abstraction carried on for the purpose of human consumption on a non commercial basis; and
- The site where the proposed activity will take place is more than 300 metres from water abstraction carried on for the purpose of supply of water to the public.

While no specified spatial constraints are proposed for consideration in the Policy Statement, alternative SP2 considers the relative merits for including such a concept in the Policy Statement for the purposes of environmental protection.

**Discussion:** As noted the imposition of a set of spatial constraints to inform development, as proposed under SP2, can have potential benefits for environmental protection. This is particularly true for parameters where the scale impact is largely dependent on distance such as noise, local air quality, visual impact, etc. However, for other parameters such as water quality and biodiversity, the major issues relate to connectivity rather than distance and setting siting guidelines or spatial constraints for these elements would be better served through catchment based approach.

Alternative SP1 is considered to have a significant level of environmental protection built into the consent and enforcement processes as outlined. As such, while there is potential for adverse impacts for all environmental criteria these may be suitably mitigated at project level through the EIA/AA at consent and the IPC licence during operations.

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Alternative SP2 would potentially add an additional layer of protection but it is open to question if this additional layer would add any significant merit. As an example, while explorations in National Parks are largely excluded, these can be accommodated only with the consent of the NPWS and following the AA process. It is considered that the residual impact to the environmental from SP2 is largely the same as that for SP1 for most environmental criteria.

The only variation in the two alternatives relates to MA (mining) whereby SP2 may restrict a level potential exploration on siting grounds alone. Whereas the SP1 approach would ensure that such exploration is subject to AA/EIA, the additional restriction imposed by SP2 would have limited additional protection merit. In this regard, SP1 is more positive for the MA element relative to SP2.

Alternative Brought Forward in the Policy Statement: Alternative SP1 is incorporated within the Policy Statement as this option presents the requisite level of environmental protection on a case by case basis through the current regulations. The potential additional protection offered by SP2 is limited and is not considered to result in any significantly increased value to the Policy Statement.

#### 6.7 **Overall Preferred Scenario**

The overall preferred scenario brought forward for assessment is therefore a combination of strategic alternatives S2 and S3, value added alternatives V2 and V4 with spatial alternative SP1.

# 7 MEASURES TO MONITOR SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE IMPLEMENTATION OF THE ADOPTED POLICY STATEMENT

#### 7.1 Introduction

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify, at an early stage, any unforeseen adverse effects due to implementation of a plan, and to be able to take remedial action. Monitoring is carried out by reporting on a set of indicators, which enable positive and negative impacts on the environment to be measured. The environmental indicators of relevance to the plan were identified from the SEA process. These will be used to identify unforeseen adverse effects from implementation of the Policy Statement.

# 7.2 Responsibility for Monitoring

Monitoring will focus on aspects of the environment that are likely to be significantly impacted by the Policy Statement. Where possible, indicators have been chosen based on the availability of the necessary information and to show changes that would be attributable to implementation of the Policy Statement.

It is the responsibility of DECC to coordinate the monitoring of the Policy Statement, however, it is acknowledged that DECC will, to a large extent, rely on existing monitoring programmes managed, for instance, by other relevant sections within DECC (such as the GSI) or other relevant bodies, e.g. the EPA. It remains the responsibility of DECC to liaise with data holders to get the data and to report on the monitoring of the Policy Statement.

It is acknowledged that remediation of any unforeseen effects is likely to require a more integrated response across agencies, departments, and other authorities and to fully establish the correct response/actions should such effects be identified. **Table 7-1** presents the proposed Environmental Monitoring Programme, which is also included as Appendix D to the final Policy Statement. The sources of information for monitoring are included in the table.

**Table 7-1 Proposed SEA Monitoring Programme** 

Aim for Monitoring & Environmental Issue Area		hat is being monitored?	Та	rget	Indicator		ta Source/ sponsibility	Re	emedial Action
Monitoring Objective 1: To protect human and environmental health from mineral exploration. Cross-cutting Areas: Biodiversity, Flora & Fauna Air Quality Water Land & Soil Material Assets	•	Level of enforcement compliance for Prospecting Licence (PL) advanced investigations.	•	100% compliance for all • GSRO inspections on consented PL advanced exploration works (drilling, trenching, etc.).	% of DECC inspections undertaken with no non-compliances recorded.	•	DECC record of GSRO site inspections undertaken to determine compliance with application for consent for advanced investigations.	•	Review of approach to consenting advanced works. Increased frequency of inspection for errant operators in line with risk based enforcement policy. Enforcement action on repeat offenders. Preparation and./or update of sectoral guidance on environmental protection.
Monitoring Objective 2: Safeguard water quality and quantity from mineral exploration and mining. Cross-cutting Areas: Population & Human Health Biodiversity, Flora & Fauna Land & Soil	•	Number of sub- catchments where mining is identified as a potentially significant pressure.	•	Decrease in the current number of catchments where mining is identified as a pressure.	Continued downward reduction in number of catchments where mining is identified as a pressure.	•	EPA Catchments monitoring data (www.catchments.ie)	•	Target the relevant competent authority enforcement inspections at mining sites in catchments where water discharges are a compliance risk. Enforcement action on repeat offenders (where not under a derogation).
Monitoring Objective 3: EPA Licence compliance for mining sites. Cross-cutting Areas: Population & Human Health Water Land % Soils Air Quality	•	Annul number of non- compliances (for incidents and/or limit breaches) issued by the EPA to licenced mining site operators.	•	Decrease in the number of non-compliances issued by the EPA to licenced mining site operators.	Total number of non- compliances issues annually as reported in the AER for each facility.	•	EPA Licence Enforcement files. Link: www.epa.ie/our- services/licensing/licen cesearch/	•	Engage with EPA on further enforcement action. Prioritise performance issues for State Mining Lease/Licence enforcement visits.

Aim for Monitoring & Environmental Issue Area	WI	hat is being monitored?	Та	rget	Inc	dicator		ata Source/ esponsibility	Re	emedial Action
Monitoring Objective 4: Minimise waste generation associated with mining operations. Cross-cutting Areas: Water Land and Soil Air Quality	•	Trends towards waste prevention and reduction in mining operations.	•	% decrease in waste generated versus ore mined.	•	Continued downward trends in % waste generated versus ore mined.	•	EPA Licence Enforcement files. Link: www.epa.ie/our- services/licensing/licencesearch/	•	Initiate mine waste capacity review with operator to predict future capacity.
Monitoring Objective 5: Extent of rehabilitation of legacy mine sites. Cross-cutting Areas: Material Assets Population and Human Health Biodiversity, Flora & Fauna Water Land & Soil	•	The number of legacy mines sites posing a risk to the environment that have been rehabilitated.	_	All legacy mines sites posing a risk to the environment been rehabilitated.	_	Fraction of 27 sites that pose a residual risk to the environment remediated.	·	DECC prioritised road map on historic legacy mine sites.	•	Annual review and update of road map to review priorities as required. Secure State funding for State remediation liability. Pursue private entities where remediation liability lies with third parties.

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# 8 ADDENDUM TO THE ENVIRONMENTAL REPORT

This is the addendum to the Environmental Report for the Policy Statement. This chapter serves two purposes:

- 1. To provide clarification and/or additional information following comments in the submissions received during the consultation period on the draft Policy Statement and Environmental Report; and
- 2. To identify where the Environmental Report has been updated in following consideration of comments received in submissions during the public consultation period.

It should be noted that this document supplements and should be read in conjunction with the original Environmental Report. The clarifications and additional information contained herein (shown in *italicised blue text*) have been provided in order to increase the usefulness of the document for the public and decision makers. Significant deletions (such as dates for report publications or incorrect baseline text) are denoted with a strikethrough. The amendments proposed however are not of such an extent that changes to the content or outcome of the assessment contained within the Environmental Report will be required.

# 8.1 Amendments by Chapter

# 8.1.1 Chapter 2 Contents and Main Objectives of the Policy Statement

#### 8.1.1.1 Section 2.5 Current regulation of the Sector

It is noted that since publication of the draft Policy Statement for consultation, the Circular Economy and Miscellaneous Provisions Act 2022 (Act 26 of 2022) has been enacted in July 2022. Part 5 of this Act contains a number of amendments to the Minerals Development Acts as follows:

#### Chapter 1 Amendment of Minerals Development Act 1940

#### Amendment of section 8 of Minerals Development Act 1940

37. Section 8 of the Minerals Development Act 1940 is amended by the insertion of the following subsection after subsection (1): '(1A) A prospecting licence granted by the Minister under this section after the coming into operation of section 37 of the Circular Economy and Miscellaneous Provisions Act 2022 shall not permit prospecting for coal, lignite or oil shale.'

#### Chapter 2 Amendments to Minerals Development Act 2017

#### Amendment of section 17 of Minerals Development Act 2017

38. Section 17 of the Minerals Development Act 2017 is amended by the insertion of the Circular Economy and Miscellaneous Provisions Act 2022. following subsection after subsection (3): '(4) A prospecting licence granted by the Minister under this section after the coming into operation of section 38 of the Circular Economy and Miscellaneous Provisions Act 2022, shall not permit prospecting for coal, lignite or oil shale.'

#### Amendment of section 65 of Minerals Development Act 2017

39. Section 65 of the Minerals Development Act 2017 is amended by the substitution of 'specified minerals other than coal, lignite and oil shales' for 'specified minerals'.

#### Amendment of section 66 of Minerals Development Act 2017

40. Section 66 of the Minerals Development Act 2017 is amended by the substitution of 'additional minerals other than coal, lignite and oil shales' for 'additional minerals'.

These changes were signalled in the relevant Bill and have been accounted for in the SEA assessment undertaken.

#### 8.1.1.2 Section 2.6 Content of the Policy Statement

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The structure of the final Policy Statement has changed since the draft for consultation and this is summarised below

**Chapter 1: Introduction -** A new introduction chapter has been added to the final Policy Statement with details on Ireland's mineral potential, prospecting and mining sector, the GSO and details on the Advisory Group.

**Chapter 2: Minerals -** Much of the information included in Chapter 1 of the draft Statement is now presented as Chapter 2 of the Final Statement.

**Chapter 3: Policy Context -** Much of the information included in Chapter 2 of the draft Statement is now presented as Chapter 3 of the Final Statement. The only notable changes include the following.

- The Whole of Government Circular Economy Strategy has been adopted since the publication of the draft Policy Statement (Section 3.1.2);
- The Climate Action Plan 2021 has been adopted since the publication of the draft Policy Statement (Section 3.1.8);
- The section on Future Jobs Ireland 2019 has been omitted from the final Policy Statement;
- A section has been added on the Raw Material Alliance in the final Statement (Section 3.2.4);
- A section has been added on the EU Industrial Policy Package in the final Statement (Section 3.2.6);
- A section has been added on International Initiatives to source minerals in the final Statement (Section 3.3.2) which were formerly Appendix C of the draft Statement; and
- A section has been added on reducing the demand for minerals and the need to mine in the final Statement (Section 3.4).

**Chapter 4: Mineral Exploration and Mining -** Chapter 4 presents the main policy base in both the draft and final Policy Statement. In the final Policy Statement the principles and priorities are recast in tabular format with a number of changes to wording and additional measures. These have been screened in **Table 5-7** and in general the change are positive for the environment and offer greater protection to communities and the wider environment.

**Chapter 5: Implementation, Monitoring and Review of this Policy -** This section has been added and was not presented in the draft Statement. This section provides clarity on the priority actions which are listed in Chapter 4 and current status as well as details on environmental monitoring which has been informed by the SEA process.

**Chapter 6: Regulatory Framework -** Regulatory Framework was presented as Chapter 3 of the draft Statement. This section has been largely recast with a more detailed overview of the EU and national legislation outlined. This includes environmental legislation such as the Water Framework Directive. Details on mineral exploration in the marine space are clarified but are largely unchanged in the final Statement. Additional details have been provided on legacy mines and enforcement.

**Appendices -** The list of appendices in the final Statement are listed as follows:

- Appendix A Scheduled Minerals unchanged from the draft Statement;
- Appendix B Terms of Reference for the Advisory Group this provides greater clarity on the make up and function of the Group. In the draft Statement, Appendix B was supplemental information on the sector, much of which is now contained within the main document;
- Appendix C includes the Principles for Sustainable Development which is a positive addition. In the draft Statement, Appendix D was international initiatives which are now included in the main document; and
- Appendix D includes the Environmental Monitoring Programme which has been adopted from the SEA analysis. In the draft Statement, Appendix D was a list of FAQ.

A glossary has also been provided at the end of the document.

# 8.1.2 Chapter 4 Review of Relevant Plans and Programmes

Since the publication of the Environmental Report, the following policy changes are noted:

The **Circular Economy and Miscellaneous Provisions Act 2022** defines the Circular Economy for the first time in Irish domestic law. Other key measures within the Act include incentivises on the use of reusable

and recyclable alternatives to a range of wasteful single-use disposable packaging and other items, the redesignation of the Environment Fund as a Circular Economy Fund and introduces a mandatory segregation and incentivised charging regime for commercial waste. The Act also seeks to streamline the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market.

In 2020, the Department of Environment, Climate and Communications (DECC) launched a new national waste policy, **A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020-2025**. The plan builds on Ireland's previous national waste policy, *A Resource Opportunity – waste management policy in Ireland*. Overarching objectives of the Waste Action Plan include ensuring materials and products remain in use longer by rewarding circularity and discouraging waste. The creation of a cross-Government Circular Economy Unit within the DECC and the establishment of an interdepartmental Circular Economy Working Group are among some of the measures in the plan. The plan also foresees the implementation of Deposit Return Schemes (DRS) for aluminium cans and plastic bottles.

The National Waste Prevention Programme (NWPP) has been subsumed into the new **Circular Economy Programme (CEP)** which will provide national-level direction, data and materials for use in undertaking community and regional scale activities, as well as funding for collaborative projects. The CEP will support the Whole of Government Circular Economy Strategy through the Circular Economy Fund and will be a driving force for Ireland's move to a circular economy by businesses, householders and the public sector. The seven key priority areas for EPA action on circular economy are:

- Packaging;
- Plastics;
- Textiles;
- Food, water and nutrients;
- Construction and buildings,
- Electronics and information and communications technology; and
- Batteries and vehicles.

The Whole of Government Circular Economy Strategy 2021-2022 (WoGCES) was published by DECC in 2021 as a strategic document intended to explain what the circular economy is, why Ireland needs to achieve a circular economy and how national policy will develop to support that goal. The strategy sets out the national policy framework to support the transition to a circular economy and encourages investment in reuse, remanufacturing, repair and refurbishment and eco-design. The WoGCES explains why Ireland needs to achieve a circular economy and how national policy will develop to support that goal. It has five key objectives:

- To provide a national policy framework for Ireland's transition to a circular economy;
- To support and implement measures that move Ireland's circularity rate above EU average by 2030;
- To raise awareness about the circular economy and how it can improve citizens lives;
- To support and promote increased investment in the circular economy in Ireland with a view to delivering sustainable, regionally balanced economic growth and employment; and
- To identify and address the barriers to Ireland's transition to a more circular economy.

Future iterations of the strategy will include more detailed circular economy actions and targets as the national policy framework develops.

The **National Hazardous Waste Management Plan (NHWMP)** is a cyclical plan published by the EPA. An objective of the fourth NHWMP 2021-2027, includes to: *'Promote safe reuse and recycling pathways in support of the circular economy'*. Prevention forms an important part of all local and regional waste management plans and the NHWMP recommends that these provisions be implemented in full, especially in relation to hazardous waste.

**The Climate Action Plan 2021 (CAP)** provides a detailed plan to achieve a 51% reduction in overall GHG emissions by 2030 and set the State on a path to reach net-zero emissions by no later than 2050. This plan is supported by measures including the Whole of Government Circular Economy Strategy, the enactment of the Circular Economy Act 2022 and the development of a Bioeconomy Action Plan.

# 8.1.3 Chapter 5 Relevant Aspects of the Current State of the Environment

#### 8.1.3.1 Population

Preliminary results from the 2022 Census have been published and the population analysis updated accordingly:

The current population of Ireland is 5,123,536 as of June 2022 (compared to 4,757,976 in 2016). 14

#### 8.1.3.2 Section 5.3.1 Human Health

This section is updated following comments from the EPA through consultation relating to risk of exposure to radon from mining activity.

#### **Emissions to Air**

Clean air is important to a population's general health. Ireland has in general good air quality and as such the population receives a health benefit from having access to clean fresh air. A potential risk to human health is from fugitive dust emissions generated from stockpiles and tailings management facilities associated with mineral exploration and mining. Wind erosion can occur when finer particles from mine waste dumps and tailings become airborne under dry weather conditions. They are subsequently deposited onto other parts of the mine site or onto adjoining lands. This process can have environmental impacts on soil through the deposition of elevated metal material.

In addition to dust, mines can also act as a pathway to release naturally occurring radon into the atmosphere. On release, radon will rapidly dilute and disperse so open cast mines or communities around mines pose a low risk of impact. However, workers operating in underground mines have a higher risk of exposure. Prolonged exposure to radon through inhalation significantly increases the risk of lung cancer. The Radiological Protection Act 1991 (Ionising Radiation) Regulations 2019 places a specific duty on employers in high radon areas to test for radon. Where the results are greater than the national reference level of 300 Bq/m³, remedial measures must be taken to reduce the radon concentrations to below this national reference level.

# 8.1.3.3 Section 5.3.5 Air Quality and Climate

The national climate emissions have been updated since the publication of the draft Environmental Report and this is updated as follows:

#### Ireland's Greenhouse Gas Emissions Overview

Greenhouse gases (GHGs) in the atmosphere are rising as a result of human activity, in particular the burning of fossil fuels for heating, energy and transport, in addition to other activities such as agriculture, the residential and commercial sectors, as well as waste. As of 2020, the EEA reports that Ireland has the fourth-highest per capita GHG emissions in the EU (behind Luxembourg, Iceland and Estonia) at 13.2 tonnes  $CO_{2eq}$ . <sup>15</sup>

At a national level, according to the latest EPA *Provisional GHG Inventory Report* <sup>16</sup>, for the period 1990-2021, emissions of GHGs in Ireland are estimated to be 61.53 million tonnes (Mt) carbon dioxide equivalents ( $CO_{2eq}$ ) which is 4.7% higher than emissions in 2020. In 2021, emissions in the European Union's Emissions Trading Sector (ETS) increased by 15.2% or 2.02 Mt  $CO_{2eq}$  and ESR emissions increased by 1.6% or 0.73 Mt  $CO_{2eq}$ .

Agriculture and transport sectors accounted for 73.4% of total ESR emissions in 2021. Commercial services emissions decreased by 3.0% and public services sector emissions decreased by 3.8% in 2021. Emissions from combustion in manufacturing industry increased by 0.04 Mt  $CO_{2eq}$  or 0.9% in 2021. The industrial processes sector emissions increased by 16.8% or 0.35 Mt  $CO_{2eq}$ , mainly due to increased cement

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<sup>14</sup> CSO Census of Population 2022 - Preliminary Results. Available at: https://www.cso.ie/en/csolatestnews/presspages/2022/censusofpopulation2022-preliminaryresults/.

<sup>&</sup>lt;sup>15</sup> EEA Country Profiles – greenhouse gases and energy 2020. Available at: <a href="https://www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/climate-and-energy-country-profiles/country-profiles-greenhouse-gases-and-1">https://www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/climate-and-energy-country-profiles/country-profiles-greenhouse-gases-and-1</a>

<sup>16</sup> EPA provisional 1990-2021 Inventory data. Available at: <a href="https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/key-messages/#">https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/key-messages/#</a>

production with all cement plants increasing production above pre-pandemic levels. Emissions from the waste sector decreased by 4.5% or 0.04 Mt CO<sub>2eq</sub> in 2021.

Ireland has an objective of climate neutrality by 2050 with an interim target of a 51% reduction in GHG emissions, including LULUCF, by 2030 relative to a baseline of 2018. The latest EPA projections indicate that the sectoral and overall targets set out in the Climate Action Plan will not be met with the measures currently modelled. An emissions reduction of 28% in 2030 vs 2018 is projected in the With Additional Measures scenario, this is compared to the 51% target, despite an assumption that the lower end of the agriculture target (22% reduction compared to 2018) is met.

# 8.1.3.4 Section 5.3.11 Interrelationships

As noted by the EPA in consultation, there is an interrelationship between soils and air quality and as such, Table 5.7 of the Environmental Report is updated as **Table 8-1**.

Table 8-1 Inter-relationships between SEA Topics

Biodiversity, Flora & Fauna									
Population & Human Health	✓								
Land & Soils	✓	✓							
Water	✓	✓	✓						
Air Quality	✓	<b>*</b>	✓	✓					
Climatic Factors	✓	<b>✓</b>	✓	✓	4				
Material Assets	✓	✓	✓	<b>✓</b>	✓	✓			
Cultural Heritage	Х	<b>√</b>	<b>√</b>	<b>√</b>	х	<b>√</b>	<b>√</b>		
Landscape	✓	✓	✓	✓	х	✓	✓	✓	7
	Biodiversity Flora & Fauna	Population & Human Health	Land & Soils	Water	Air Quality	Climatic Factors	Material Assets	Cultural Heritage	Landscape

# 8.1.4 Chapter 9: Mitigation and Monitoring

The final environmental programme is presented in **Section 7** of this SEA Statement.