

Frequently Asked Questions

Considering responsible critical minerals (re)sourcing in Northern Ireland: Value chain stakeholder engagement

The Department for the Economy (DfE) has commissioned Queen's University Belfast (QUB) social scientists to undertake stakeholder engagement to gauge awareness and understanding of the role of minerals in the growth of the green economy and to draw out and understand stakeholders' perceptions on responsible (re)sourcing of critical minerals. This engagement will consider the whole life cycle of mineral resources (value chain) and will provide the opportunity for stakeholders across the critical minerals value chain to participate and freely express their opinions.

There will be a Stakeholder Workshop with a business focus on 27th February 2023 and a Stakeholder Workshop with a community focus on 29th March 2023. QUB will also undertake one-to-one interviews with some key stakeholders. QUB will report on the engagement process drawing out key recommendations on issues to be addressed which will inform future consideration of minerals policy.

1. What are critical minerals?

Modern economies rely on a range of raw materials. Many minerals have important uses but, due to plentiful supply, functioning markets or an ability to substitute them, do not warrant the focus that others may at this stage. Only some are defined as "critical".

These 'critical minerals'¹ are not only vitally important but are also experiencing major risks to their security of supply. These risks can be caused by a combination of factors. These factors include but are not limited to:

- rapid growth in demand;
- high concentration of supply chains in particular countries, or;
- high levels of price volatility

Many of these critical minerals are produced in comparatively small volumes or as companion metals (meaning they are produced as by-products of other mining activities). They may also be non-substitutable in their applications and have low recycling rates.

2. Why do we need Critical Minerals?

The UK Critical Minerals Strategy¹ and the EU Critical Materials Resilience Communication² set clear strategic direction on the importance of minerals for future sustainable development and each define those minerals considered critical. There is generally a lack of awareness of the role that minerals play to grow the green economy and achieve net zero carbon, self-sufficient and affordable energy through the delivery of the DfE Energy Strategy as well as the impact on other key sectors as identified in DfE's Economic Vision '*A 10X Economy: Northern Ireland's Decade of Innovation*'.

¹ [Resilience for the Future: The UK's critical minerals strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/103111/Resilience_for_the_Future_The_UKs_critical_minerals_strategy-GOV.UK.pdf)

² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0474>

Critical minerals are at the beginning of all supply chains in industrialised markets; the key input ingredients for manufacturing many essential components for a range of technologies including renewable technology.

The UK Critical Mineral Strategy (2022) has identified some of the uses for critical minerals as below:

Department for Business, Energy & Industrial Strategy	Electric vehicles	Wind turbine generators	Solar panels	Nuclear reactors	Hydrogen fuel cells	Advanced alloys	Aerospace	Defence	Electronics
Antimony								✓	
Bismuth						✓	✓	✓	
Cobalt	✓	✓			✓	✓			✓
Gallium			✓						✓
Graphite	✓				✓				✓
Indium			✓						✓
Lithium	✓				✓				
Magnesium					✓	✓			✓
Niobium	✓	✓				✓			
Palladium									✓
Platinum					✓				✓
Rare Earth Elements	✓	✓			✓	✓		✓	✓
Silicon	✓		✓		✓	✓			✓
Tantalum						✓	✓	✓	✓
Tellurium			✓			✓			✓
Tin	✓		✓				✓	✓	✓
Tungsten				✓		✓		✓	
Vanadium					✓	✓			✓

Source: [Resilience for the Future: The UK's critical minerals strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/resilience-for-the-future-the-uk-critical-minerals-strategy)

3. Why are we carrying out this research?

The overall aim of the engagement events is to draw out and understand stakeholders' perceptions on responsible (re)sourcing of critical minerals throughout the value chain.

The researchers will engage with a range of stakeholders to gauge awareness and understanding of the role of minerals in the growth of the green economy. Consideration will be given to the whole life cycle of mineral resources, from initial exploration, through mining and processing ore to recycling/circular economy and technological and engineering inputs/design. In this way it will consider both sustainable sourcing of minerals and the sustainability of minerals throughout their lifecycle.

4. Who is carrying out the research?

This stakeholder engagement series and research is being undertaken by QUB Social Scientists from its School of Management. It forms part of a robust process of policy development. The information from the workshops, focus group and interviews will be gathered and analysed by QUB. The final report and recommendations will be used to inform policy advice to Ministers on future minerals policy.

5. What are the planned outcomes of the research?

It is expected that the QUB-led stakeholder engagement on critical minerals will afford the opportunity for stakeholders across the value chain to participate and to express their opinions on critical minerals value chains. It is expected that the QUB-led research engagement work and associated report will inform consideration of the policy position on critical minerals. From this DfE will be able to review mineral licensing and regulation practices to ensure they meet the present and future needs of the Northern Ireland economy, energy transition and climate adaptation. The research will also derive insights into both emerging critical mineral Small and Medium Enterprises (SMEs) and innovative technology trends across the value chain. It is also anticipated that the research will help understand security of supply issues, circularity of critical mineral value chains, map industrial and research strengths, assess required NI policy levers and identify a prioritised set of actions.

6. Will the research lead to more Mineral Prospecting Licensing or Mining in NI?

This research work is exploratory and open in its nature. It is not a mechanism for increasing mineral licensing or mining. The research plan relies on building and encouraging open consideration and the sharing of diverse opinions. The conclusions of the research will inform the consideration of potential policy options on minerals in relation to both mineral licensing and the circular economy in critical minerals. These options will then be tested through a range of impact assessments including a strategic environmental assessment (SEA) prior to full public consultation.

7. How have participants in the research been identified? How can I be involved?

In order to manage numbers attending it is not possible to run the events as open invite. A broad range of stakeholders has been identified from across government, business, academia, non-government organisations and community groups. It is important to note that these are not consultation events. These events are planned as engagement workshops with representative groups. They are intended as a pre-engagement to inform the development of policy options for future consideration by Ministers and full public consultation.

If you are a representative of an organisation and would like to attend one of the planned events please email: gmsresearch.support@qub.ac.uk

8. How can I find out more?

The Terms of Reference for this research are available at: <https://www.economy-ni.gov.uk/publications/terms-reference-qub-critical-minerals-research-and-stakeholder-engagement>

The Draft Circular Economy Strategy for Northern Ireland is currently out for consultation. You can view the Draft Circular Economy Strategy here: [Circular](#)

[Economy Strategy for Northern Ireland | Department for the Economy \(economy-ni.gov.uk\)](https://economy-ni.gov.uk)

You can respond to the Draft Circular Economy Strategy here: [Draft Circular Economy Strategy for Northern Ireland - NI Direct - Citizen Space](#) **Please note this consultation closes 20th March 2023.**

More information on Mineral Prospecting Licensing and Mining leases in Northern Ireland can be found here: [Minerals licensing | Department for the Economy \(economy-ni.gov.uk\)](#)