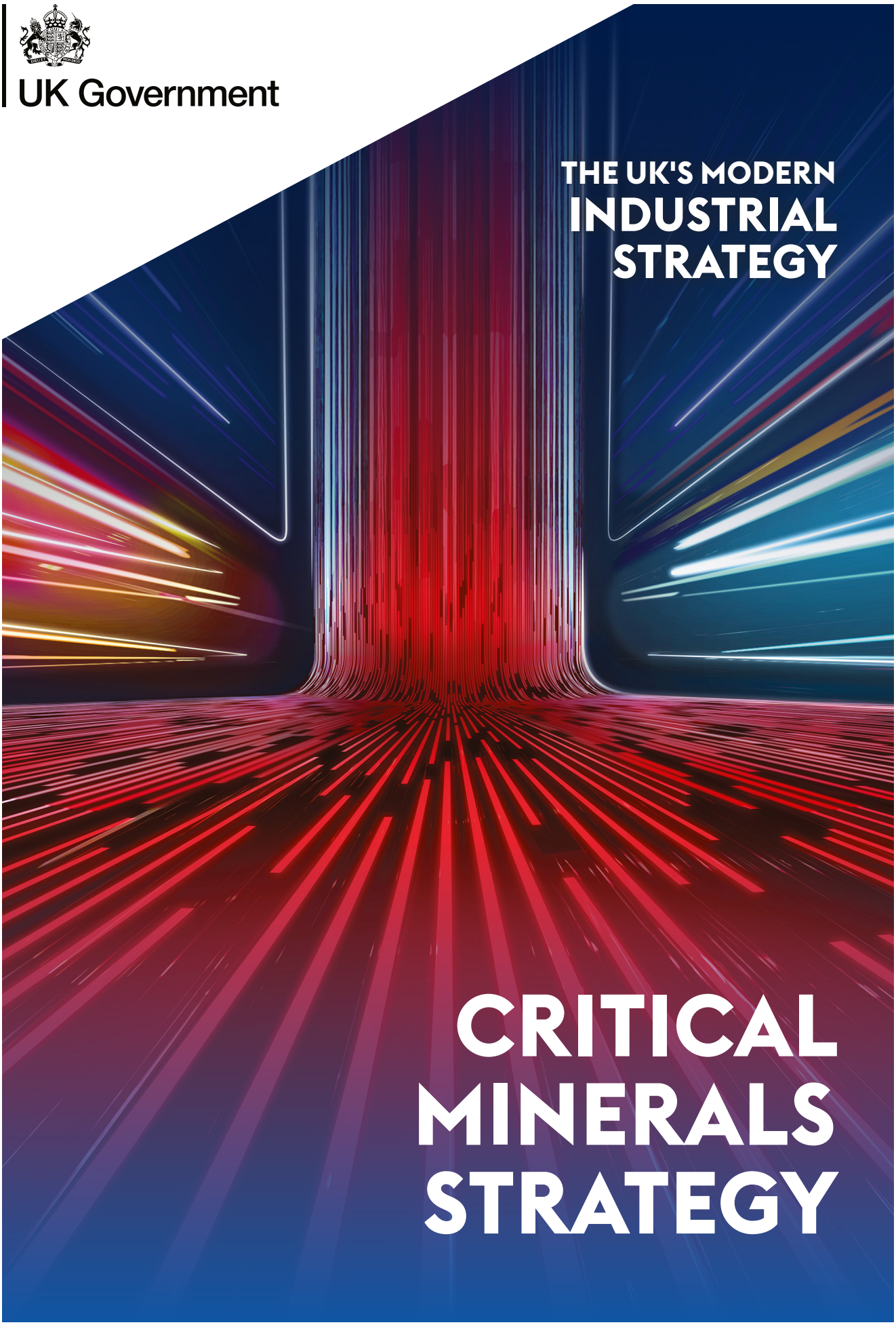
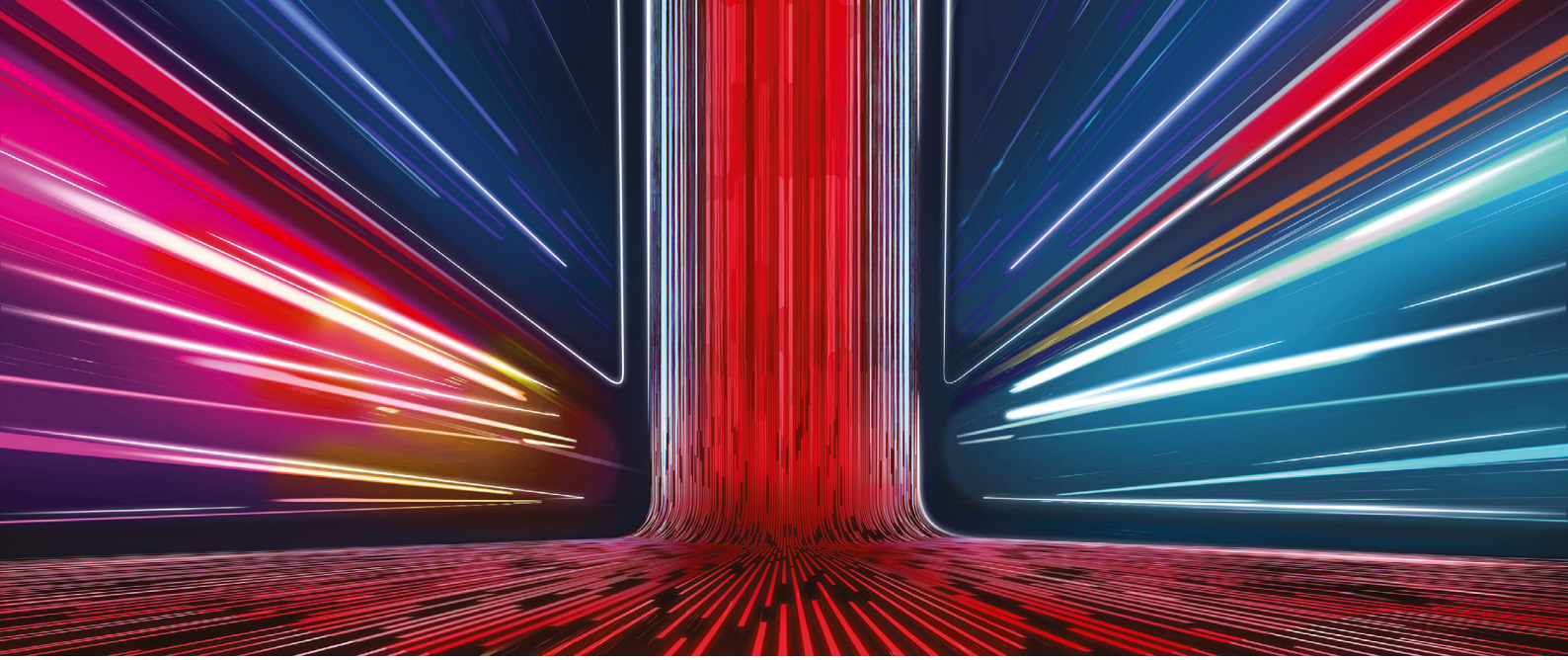
UK Government

THE UK'S MODERN
INDUSTRIAL
STRATEGY



CRITICAL MINERALS STRATEGY

Contents



Ministerial foreword

Chris McDonald MP

Minister for Industry at the Department for Business and Trade and Department for Energy Security and Net Zero

Critical minerals are integral to our modern way of life, from lithium in the smartphones we rely on to rare earth elements in the permanent magnets that drive the wind turbines and electric vehicles which will help power the green transition. These vital metals and minerals are used in communications, critical infrastructure, defence, renewable energy, transport and life sciences. Without them our lives would grind to a halt. Industries would shut down overnight and communities would not be able to function.

In the UK alone, we anticipate that between now and 2035 yearly demand for copper will almost double, while demand for lithium will increase by 1,100%. As economies across the globe undertake the green transition, the demand for these minerals will only increase as their energy sources and transport systems become increasingly reliant on low-carbon technology.

In the global market, we have seen increasingly concentrated processing and mining supply chains in recent years. Such concentration means that the supply chain is particularly vulnerable to shocks such as natural disasters, war or geopolitical fallout. It is vital, therefore, that we have a plan to secure critical minerals for our industries and to diversify our supply chains.

This government recognises the huge opportunities on offer for both our critical minerals industry and the vital growth sectors it serves which is why we are setting out our strategy to both take advantage of those opportunities and guard against the dangers of shortages or disruption.

Through this government's Growth Mission, we are on the path to making the UK a world leader in technological innovation and a clean energy superpower. The Industrial Strategy we launched in July 2025 underpins that Growth Mission, setting out a blueprint for 10 years of sustained economic growth through our most important growth sectors. This Critical Minerals Strategy – Vision 2035 – is key to making this a reality.

Our strategy sets out how we will grow our domestic production and use our international partnerships across the globe to support the resilience of the country's Industrial Strategy growth sectors. In England, critical mineral strengths span across areas such as the North East of England, including County Durham and Teesside, and the South West including Devon and Cornwall. Scotland is embedding critical minerals' resilience in its broader commitment to meeting net zero and creating a more circular economy. Wales has leveraged the geology and skills of the local workforce to retain nickel and titanium product manufacturing to this day. In Northern Ireland research from the Queens University Belfast is contributing to new ways of recycling permanent magnets used in applications from wind turbines to vehicles.

By strengthening our own capabilities for mining, refining and recycling, we can create a more circular economy, support British industry, and reduce reliance on imports. This will be especially important in areas like the South West and the North East, which could see an industrial renaissance through the mining, processing and recycling of critical minerals.

Partnerships with resource-rich countries, alongside leveraging the UK's capital markets, delivering our Trade Strategy and considering industry-led resilience measures in sensitive sectors like defence, will help secure the supply of critical minerals we need to meet future demand whilst supporting global diversification of critical minerals supply chains. We will promote supply chains that are responsible and transparent, upholding high Environmental, Social and Governance (ESG) standards.

We will also strengthen the sector by utilising our world-leading credentials in academia, research and development (R&D), finance and trade – including the City of London and world leading institutions, like Camborne School of Mines. This will not only help expand our domestic production, but also enhance our ability to pursue our international growth partnerships, tap into global markets, and maintain reliable links with overseas supply chains during global shocks.

Vision 2035 directly links critical mineral demand to the UK's growth sectors. We are not only identifying how short-term demand for critical minerals can be addressed, but also how the UK can create a thriving critical minerals industry which rejuvenates industrial communities and spurs growth in those sectors, including Advanced Manufacturing, Clean Energy Industries, Digital and Technologies, Defence and Life Sciences.

Through this strategy we are taking bold steps to make the UK one of the most advanced, resilient and future-facing economies in the world.

Executive summary

Critical minerals are essential to the UK's economy, national security, and clean energy transition. UK economic resilience is a core objective of the UK's Industrial Strategy. As foundational inputs to sectors driving the Industrial Strategy, critical minerals are vital to achieving the government's mission of stimulating long-term economic growth. However, the global geopolitical landscape and complex supply chains pose persistent challenges to securing these vital resources. In this global, dynamic context, a new approach to critical minerals is required.

This new, targeted Critical Minerals Strategy sets the UK's long-term ambition for securing critical minerals and harnessing our competitive advantage in recycling and innovative midstream processing – the transformation of mined or recycled materials into refined or upgraded forms suitable for manufacturing. This approach is based on proactively addressing market challenges and anticipating future demand for key minerals to ensure a reliable, sustainable, and future-proof supply of critical minerals.

Achieving our ambitions requires a whole of society effort – from the choices we make about recycling our old smartphones, through to the technologies we adopt to warm our homes, like heat pumps. Critical minerals are embedded throughout the UK economy, in the new tech consumers buy, the IT our businesses rely on and in our critical national infrastructure.

The UK's global positioning on critical minerals shares similarities with partners but also reflects distinct national characteristics. As a net importer of critical minerals, the UK faces strategic vulnerabilities, shared by partners such as the EU. Like the EU, we depend on geographically concentrated global supply chains for key sectors such as advanced manufacturing and defence. Unlike major producing countries, our domestic mining sector is smaller in scale – but it remains an important contributor to global markets. In the context of increasing state intervention in critical mineral markets, the UK must prioritise how best to deploy its resources to achieve its aims. So, the UK must set out a path which reflects our unique set of strengths in securing critical minerals for the UK.

To reduce our vulnerability, the UK will make strategic use of its own available mineral resources and capabilities. At the same time, we will work with international partners, whether net importers similar to the UK such as the EU or major producers like Canada or Australia, to build more resilient and diversified supply chains. By leveraging our strengths – such as world-class research and development, mineral processing and recycling, and vibrant capital markets – we will secure a resilient, sustainable supply of critical minerals for the Industrial Strategy's eight growth driving sectors.

To focus efforts across government and support collaboration with industry, we have two key policy objectives:

- optimise domestic production
- build resilient UK and global supply networks

Optimising domestic production of critical minerals will help protect UK supply against global trade and supply chain disruptions. It is key that the UK makes the most of its mineral deposits while cultivating our midstream processing and recycling to help enable a circular economy and reduce the impact of external shocks.

We will do so by supporting UK businesses through our strong public finance offer, including the National Wealth Fund and UK Export Finance. We will provide support on energy prices for eligible businesses, including a new British Industrial Competitiveness Scheme (BICS) and will launch a consultation on eligibility for the scheme shortly. We will support permitting for innovative projects through the Environment Agency's priority tracked service and understand and support the skills required in the UK, in collaboration with Skills England and the Department for Work and Pensions (DWP). And following the 2025 Spending Review, the Department for Business and Trade (DBT) will provide funding support of up to £50 million for critical mineral projects in the UK, as part of the wider innovation landscape.

We will work with industry to explore a demand aggregation platform to map their demand for critical minerals across the UK. This will support government and industry to have a much richer picture of UK industrial demand across many downstream sectors. In doing so, it will enable better decisions on where to target government engagement and support to help UK companies invest to secure a critical mineral supply internationally and de-risk their further business.

We will also consider options to implement targeted, industry-led resilience measures for the UK defence sector. Measures could include stockpiling, including through procurement mechanisms. This aligns with the Ministry of Defence's commitments to build resilience in critical mineral supplies for UK defence and use its procurement levers to promote resilient defence supply chains set out in the Defence Industrial Strategy 2025 sector plan.

To ensure the UK has a secure, diverse supply of critical minerals and to limit our exposure to global shocks, we will support UK industry and identify investment opportunities in shared supply chains by building and leveraging international partnerships. Our international partners will benefit from the UK's world class capital markets, financial services sector, public finance institutions, world leading academic research, technological innovation, and geological, mining and technical expertise, in developing these deeper partnerships.

We will support this more targeted international approach through engagement in multilateral fora such as the G7, G20, Minerals Security Partnership (MSP), International Energy Agency (IEA) and NATO, along with promoting responsible and transparent supply chains through initiatives such as the Global Clean Power Alliance (GCPA). These multilateral organisations and initiatives play an important role in coordinating investment and action on supply chains, setting common standards and promoting responsible and transparent supply chains.

Finally, to support our two key policy objectives, we are building on the existing list of critical minerals by also introducing the UK's first growth minerals list. This will complement the Critical Mineral Intelligence Centre's UK 2024 criticality assessment[1] by anticipating future demand of minerals for the Industrial Strategy's growth-driving sectors. As we plan for future criticality and growth assessments, we will evaluate which additional minerals and materials will need to be in scope to reflect the UK economy's growing demands amidst evolving global supply chain dynamics.

To drive progress towards Vision 2035, we are setting out our ambition in tangible terms, ensuring progress can be measured and tracked. We recognise the fast-changing nature of the critical minerals landscape, so we will be agile and responsive to new, emerging challenges in our strategy implementation while ensuring we are delivering our long-term vision.

Vision 2035

The UK's Industrial Strategy and the accompanying sector plans set out how the government's mission of kick-starting economic growth will be achieved. Critical minerals are identified as a foundational industry to the majority of the Industrial Strategy's growth-driving sectors and are vital to delivering the growth mission. However, the current geopolitical and trade environment reflect the complexity of critical minerals' supply chains and persistent market challenges.

A proactive approach is needed to ensure the UK retains and future-proofs our supply of critical minerals. Working in close partnership with industry, including producers, traders and users of critical minerals, this new, targeted Critical Minerals Strategy sets a shared long-term ambition for addressing these complex market challenges and supporting the growth-driving sectors.

To anticipate future demand for growth-driving sectors and to help realise government's missions over the next 10 years, our strategy sets out a clear vision for UK critical mineral supply chains to 2035:

> "The UK has the critical minerals it needs to drive economic growth and the clean energy transition, harnessing our competitive advantage in midstream processing and recycling of critical minerals."

Features of the ambition

To ensure clear industry and government progress towards delivering the Vision 2035 in partnership, we define success as:

- At least 10% of annual UK industrial demand for critical minerals[2] in the aggregate is met by industry through domestic production (primary extraction, processing and refining of critical minerals) by 2035
  - as part of this, at least 50,000 tonnes of lithium (or lithium carbonate equivalent[3]) is produced domestically by 2035
- 20% of total annual UK industrial demand for critical minerals[4] is met by industry through recycling of products to recover critical minerals by 2035
- Supply is diversified, so that no more than 60% of the UK's annual demand for any critical mineral is imported from any one country by 2035[5]

Success will require sustained effort, delivered by private investment and through the actions and choices of critical mineral producers, traders and users. Government will set the conditions for success by facilitating and assisting private sector activity through the measures in this strategy.

UK strengths

We will leverage the UK's range of existing strengths in critical minerals to boost our domestic production while demonstrating what the UK brings to international growth partnerships. The UK's strengths are outlined as follows:

Research and development (R&D) and innovation

The UK has an extensive network of universities and academic centres of research on critical minerals. Institutions such as the Camborne School of Mines, University of Birmingham, and Queens University Belfast are developing key technologies and knowledge to support UK industry and unlock innovation across disciplines, including chemistry, metallurgy, geology, midstream processing, recycling and mining engineering. The British Geological Survey – a world-leading geological survey and global geoscience organisation – supports innovation challenges of stakeholders. We also need to ensure we maintain and grow our human capital across such institutions to achieve our Vision 2035.

Midstream processing and recycling expertise

In April 2025, Frazer-Nash Consultancy, in partnership with the Critical Minerals Association (CMA) and the Materials Processing Institute (MPI), delivered a report assessing the potential to grow the UK's midstream processing and recycling capability[6]. The report highlights the UK's well-established and growing capabilities in refining and recycling specific critical minerals, such as lithium, Rare Earth Elements (REEs) and Platinum Group Metals (PGMs), all to high Environmental, Social and Governance (ESG) standards.

Expertise across the value chain and the UK's mineral wealth

The UK offers outstanding capabilities across the full mining and minerals value chain (the stages of turning mined minerals into finished products) at home and overseas. Hosting both global mining major and junior miners, UK companies provide expertise across the mining lifecycle from extraction to midstream processing and recycling to supporting services such as finance, legal, and consultancy.

Further, the UK has distinct pockets of mineral wealth with a deep mining history: tungsten and tin in Cornwall; lithium in Cornwall, and County Durham; and exploration underway for copper and zinc in Anglesey, tellurium and antimony in Mid-Tyrone and nickel and cobalt in Aberdeenshire.

Centre of mining finance and metals trading

London plays a key role in developing domestic projects and mobilising finance internationally, contributing to the development of resilient and sustainable supply chains. A range of mining companies are listed on the London Stock Exchange (LSE), and the City of London continues to operate as a centre for mining finance. The London Metal Exchange (LME) is a global hub for metals trading which supports critical minerals trading with physically settled exchange traded contracts in aluminium, cobalt, nickel and copper, tin, zinc and a cash settled contract in lithium. It is planning to launch an expanded market for sustainably sourced metals which will support responsible transparent supply chains. The exchange is closely consulting with stakeholders on proposals for four key metals: aluminium, zinc, copper, and nickel. In addition, ICE Futures Europe – the UK exchange that hosts trading in half the world's crude and refined oil futures – has recently expanded into critical minerals with the introduction of four battery material contracts in lithium and cobalt. Through this, the UK can help facilitate solutions to the price transparency challenges and also provide certainty and stability to businesses.

Regional clusters

UK strengths are concentrated in clusters across the UK – including Aberdeen, Belfast, Birmingham, Cornwall, Devon, County Durham, Fort William, South Wales and Teesside – where the right expertise, geological and geographical assets make these places optimal for domestic production. Additionally, the UK's investment zones and freeports, such as Teesside, offer a strong base on which to build and scale up critical mineral businesses. These will be strengthened through the Industrial Strategy Zones Action Plan.

International development and diplomacy

We have a strong diplomatic network with expertise across commercial and development issues to support investments, exports and local development. Our networks and UK mining services expertise means we can support countries' delivery of critical mineral projects, helping to reduce negative impacts on local communities, environmental damage and risks around the initiation or exacerbation of conflict.

The UK has been a part of crucial standards bodies such as the International Standards Organisation (ISO). Our ISO membership through the British Standards Institution (BSI) ensures we can influence global standards to increase transparency while promoting responsible practices. In turn, this creates highly visible and resilient global supply.

Endnotes

1 ukcmic.org/downloads/reports/ukcmic-2024-criticality-assessment.pdf

2 See Figure 1 on the critical minerals and additional growth minerals in scope.

3 Lithium exists in various forms (carbonate, hydroxide, etc.) in different deposits and products. Lithium carbonate equivalent provides a common unit for comparing these different forms.

4 See Figure 1 on the critical minerals and additional growth minerals in scope.

5 As measured by HM Revenue and Customs *Country of Origin* import data.

6 UK critical minerals midstream and recycling capability report - GOV.UK

Policy objectives

Optimise domestic production

The critical minerals sector contributes £1.79 billion to the UK economy and directly supports over 50,000 jobs. Currently there are over 50 critical mineral projects based in the UK. Spanning established production facilities, alongside mining, processing or recycling projects at various stages of development, these projects represent the UK's domestic capabilities across the supply chain, particularly in the midstream. Producing more critical minerals domestically to high Environmental, Social and Governance (ESG) standards will become increasingly vital to meet UK demand, in a world of shifting geopolitics and potential for supply chain disruptions. To do so, we will need to address the key challenges facing many of our domestic businesses, from high energy costs to planning and permitting to skills and access to finance.

We have two domestic sources of critical minerals: those in the ground and those in our homes and businesses. Building an innovative circular economy to not only recycle, but also reuse, repair and prolong the life of products containing critical minerals allows us to fully utilise the second source. In doing so, we use the resources already within the UK, reduce import reliance and reduce waste, pollution and carbon emissions. Defra's upcoming Circular Economy Growth Plan will drive England's transition away from a "take-make-waste" model by promoting resource efficiency, reducing waste and supporting green jobs and infrastructure.

To support optimisation of domestic capabilities while better securing our supply of critical minerals, greater visibility is needed of UK supply chains at each stage from mining to downstream manufacturing by both industry and government. Mapping UK supply chains will deepen our understanding of any 'gaps' in UK supply chains and help us focus on international collaboration and investment opportunities.

UK wide approach

Whilst this is a UK government Critical Minerals Strategy, we work together with devolved administrations to ensure that the strategy is tailored to the needs of industry and leverages strengths across the whole of the UK.

The Scottish Government is advancing its approach to critical minerals as part of its broader commitment to resilient and sustainable supply chains that support the transition to net zero in Scotland. Core to the Scottish Government's approach is creating a more circular economy, where critical materials are recovered and recycled as recognised within Scotland's Draft Circular Economy Strategy. Its Scottish National Adaptation Plan 3 and Green Industrial Strategy also recognise the importance of strengthening the resilience of critical minerals supply chains against external shocks. The Scottish Government and its national economic development agency Scottish Enterprise are building a stronger evidence base on future vulnerabilities and opportunities for critical minerals in the Scottish economy.

During the 19th century, Wales was a world centre for metal smelting and processing, including steel, zinc, lead and copper. With this strong history in metal production, Wales has utilised the advantages of the local geology and the skills of the local workforce to retain nickel and titanium product manufacturing to this day. Building on legacies of past practices, Wales is global leader in the transition to a circular economy. The Welsh Government's circular economy strategy, Beyond Recycling, highlights the need to capture and feed key materials back into the economy to build supply chain resilience.

Northern Ireland has a diverse mineral heritage, with historic mining focused on the productions of iron ore, salt and gold. Building on this, Northern Ireland recognises that security of supply is critical for high-value manufacturing and renewable energy technology, and that moving towards a circular economy is vital to reducing pressure on primary supply. Northern Ireland is pioneering innovation in the field of critical minerals recovery from end-of-life products, with research from the Queens University Belfast contributing to new ways of recycling permanent magnets used in applications from wind turbines to vehicles.

In England, critical mineral strengths span across areas such as the North East of England, including County Durham and Teesside, and the South West including Devon and Cornwall. For example, the Critical Minerals Challenge Centre, based at the University of Exeter with funding from UK Research and Innovation (UKRI), was created in Autumn 2024 in partnership with multiple businesses, Cornwall, Devon

and Somerset Councils, Great South West and regional non-governmental organisations (NGOs).

Produce more and better

Domestic production is vital to develop our domestic supply of critical minerals in the UK. And it is only possible by addressing the key challenges facing many of our domestic businesses, in particular high energy costs, planning, permitting, skills and access to finance. Our aim is that production in the UK is focused on both mining and processing critical minerals to high ESG standards as well as recycling, repurposing and reusing critical minerals in a circular economy.

Energy costs and infrastructure

Our new Critical Minerals Strategy aligns with the Industrial Strategy's commitment to tackle unreasonably high energy costs, continually cited as a key barrier across industry. The introduction of the new British Industrial Competitiveness Scheme (BICS) will bring GB energy costs more in line with other major economies in Europe across the most electricity intensive IS-8 manufacturing industries and the foundational industries, including critical minerals. Eligibility of BICS will be informed by an upcoming consultation. From 2027, this new scheme will reduce electricity costs by up to £40 per megawatt hour, which could benefit over 7,000 businesses.

The British Industry Supercharger already supports many electricity-intensive industries, including some existing producers of critical minerals. We are planning to review eligibility for this scheme in 2026 to ensure that it targets those businesses most at risk of carbon leakage from high electricity costs. We will actively consult with stakeholders as part of the review and ensure that businesses in the critical minerals industry engage in this process. Furthermore, we have committed to increasing the level of relief offered through the Network Charging Compensation Scheme from 60% to 90% from 2026. This will further reduce electricity prices for the 500 most electricity intensive businesses by £7-10 per megawatt hour, bringing the total discount offered by the British Industry Supercharger to around £78 per megawatt hour.

A number of critical mineral producers already benefit from energy support, but many critical mineral projects are not yet fully operational and producing commercially. With long project life cycles from mineral exploration to production, the early-stage projects of today are the producers for 2030 to 2035 and beyond. We will need to support these future projects to commercialisation through competitive energy costs and the associated grid infrastructure to access energy. The Industrial Strategy also sets out its commitment to build up electricity network supply chains to this end.

Environmental planning and permitting

To support growth sectors, the Environment Agency's priority tracked service allows developers in England to work with a dedicated team for innovative projects requiring complex permitting solutions. The scope of this service has been extended to include the critical minerals industry. Coordinators will bring together the expertise and advice required to successfully navigate the requirements of the Environmental Permitting Regulations and ensure the process meets critical deadlines.[1] These service improvements will result in quicker timeframes and more flexible decision-making in moving developers through the system.

The Government recently consulted on reforms to modernise environmental permitting for industry and energy sectors – with the government response to the consultation planned for early 2026. The reforms aim to support industrial innovation through regulatory sandboxes, to streamline regulation of low-risk sectors and to ensure necessary standards are developed promptly for high growth sectors to enable rapid permitting. The consultation included a section on mining and treatment of metals and minerals.

National Planning Policy Framework (NPPF) consultation

The revised National Planning Policy Framework (NPPF), published in December 2024, sets out the government's planning policies for England and how these are expected to be applied. This includes setting out policies in relation to facilitating the sustainable use of minerals. The government remains committed to delivering a streamlined, plan-led planning system that is pro-growth, accessible, and offers greater certainty. The government will consult on a clearer set of national policies to support decision-making this year.

Skills in the UK's critical minerals and mining industry

Domestic production relies on people's skills and capabilities in the UK that span the critical minerals value chain as well as across industry, academia, and research. Just as we anticipate demand for critical minerals to grow, so will the need for the commensurate workforce and talent to help meet this demand.

It is therefore imperative to explore the skills needed by the critical minerals and mining industry, working collaboratively with Skills England and the Department for Work and Pensions (DWP) to ensure a joined-up understanding of current and future skills needs, while supporting people to pursue careers in the industry through Jobcentres and the new Jobs and Careers Service in England. This collaboration will build on the skills development activity led by the Critical Minerals Association, funded by the Department for Business and Trade, bringing industry, academia and government together to consider the skills required to grow the UK critical minerals industry and identify barriers and solutions for retaining and attracting talent.[2]

Access to finance for domestic companies

Lack of access to finance is a key barrier to the market's ability to respond to the anticipated rise in demand for critical minerals. Price decreases and volatility hit new and emerging projects the hardest as investors look to invest in stable and diversified supply chains. For example, in 2024, lithium spot prices fell by 75%, and cobalt, nickel and graphite prices dropped by 30% to 45%.[3] The long lead time for a mine to come online after mineral discovery, and the uncertainty associated with future commercial success, present additional risks to investment. Therefore, providing access to finance to help reduce risk for these projects is often essential.

The UK has a strong public finance offer available to support UK critical minerals companies, from the National Wealth Fund (NWF), to UK Export Finance (UKEF) to the British Business Bank (BBB), as detailed in this section. However, the mandates of our public finance institutions (PuFins) can constrain their ability to address emerging risks and market volatility associated specifically with critical minerals projects. This has resulted in some critical mineral companies and projects finding it difficult to access government-backed support. To address this, we will work with UK PuFins to identify ways in which critical minerals projects with high potential and strategic value can be supported more effectively by government in a more coherent way. In doing so we will boost jobs, growth and the resilience of UK critical mineral supply chains.

As part of our review of the role of UK PuFins, we have agreed to expand the eligibility criteria for UKEF's Critical Minerals Supply Finance. This will ensure the scheme remains responsive to current and future UK offtake demand, while also supporting the development of bilateral and multilateral supply chains. As a first step, UKEF has updated its eligibility to include the new growth minerals list.

While the UK has some financing and grant processes in place to support certain critical mineral projects at specific levels, there is an opportunity to provide more bespoke, targeted grant funding to help deliver our growth mission. Following Spending Review 2025, funding of up to £50 million will be made available by DBT to support critical mineral projects, which could include expanding research and innovation as well as supporting commercialisation. Further detail will be announced in 2026.

To date, Government has provided over £165m of support to critical businesses right across the UK. Looking forward and taken together, Government fully supports the UK's growing critical mineral sector through the new 'up to' £50m critical mineral fund as well as DRIVE35 and PuFins outlined in this section.

Attracting investment

A whole of government approach is being taken to attract and enable investment into the UK. DBT is working with over 50 critical minerals growth projects across the critical minerals value chain. We have worked closely with the Critical Minerals Association and industry to produce a new investment prospectus showcasing the UK's capabilities and helping to attract investment. DBT's Office for Investment (OfI) and the UK's extensive network of embassies and high commissions around the world will continue to support investors interested in these opportunities. The expanded OfI is responsible for driving a strategic cross-government approach to investment, streamlining the government's approach to securing investment aligned to the Industrial Strategy priorities. OfI will bring together expertise from industry and business to provide a bespoke service to support investors, land investment and overcome barriers to growth

Driving Research and Investment in Vehicle Electrification

As announced in the Advanced Manufacturing Sector Plan, Driving Research and Investment in Vehicle Electrification (DRIVE35) will support the latest R&D in strategic vehicle technologies, accelerate their commercial scale-up, and unlock capital investments in zero-emission vehicles, batteries and their supply chains. DRIVE35 builds on the Advanced Propulsion Centre R&D programmes and the Automotive Transformation Fund, which has funded a number of critical mineral projects that strengthen the UK's electric vehicle (EV) supply chains from lithium refinery Green Lithium to battery recycler Altilium.

National Wealth Fund

The National Wealth Fund (NWF) is at the forefront of investing public money across the UK. It has £27.8 billion financial capacity to help deliver the government's growth and clean energy missions, generate a return for the taxpayer and crowd in significant private investment.

The NWF finances investment in capital-intensive projects across the UK and has the mandate to support projects in the critical minerals sector where they meet NWF's investment criteria. NWF has a range of tools including loans, guarantees and equity investments which it can deploy. NWF prioritises investments across the clean energy, digital and technologies, advanced manufacturing and transport sectors, and can also play a role in supporting the delivery of the wider industrial strategy, including the defence sector. This includes investments to support supply chain resilience across these sectors to better support the UK's resilience and economic security. In the last two years NWF has completed equity investments of £24 million into Cornish Lithium (2023)[4] and £28.6 million into Cornish Metals (2025)[5] to support UK critical mineral supply chain resilience. In 2025, the NWF announced a further £31 million commitment to invest in Cornish Lithium[6].

UK Export Finance

UK Export Finance (UKEF), the UK's export credit agency, has a mission to ensure that no viable export fails for lack of finance or insurance, doing that sustainably and at no net cost to the taxpayer. UKEF has a suite of products comprising of guarantees, loans and insurance that can support domestic and international critical minerals projects. Through its flexible working capital support to UK exporters, UKEF can support domestic businesses and those that are seeking to invest in the UK (with plans to export in future), and can also come alongside other UK public finance institutions and government funding schemes.

UKEF recently expanded its domestic financial support to include both the domestic producers and suppliers of UK exporters who are involved in critical minerals supply chains. The Critical Goods Export Development Guarantee enables suppliers of critical minerals products to UK exporters, to access working capital, helping them to secure long-term import contracts or invest in domestic capability building. These suppliers play an important role in the value chain as producers and importers of critical minerals. To qualify for this support, 50% of the supplier's critical minerals-related production needs to go to UK exporter(s). This support aims to give these firms the finance they need to make investments that will protect them from geopolitical risks and bolster supply chain resilience.

British Business Bank

As announced in the Industrial Strategy, a new £4bn initiative, British Business Bank (BBB) Industrial Strategy Growth Capital, will be invested through the Bank's existing capabilities across the eight growth-driving sectors. There is also BBB's Nations and Regions Investment Funds, which supports innovation and creating local opportunity for new and growing businesses across the UK. Given critical minerals are a foundational industry to the growth sectors and considering the regional clusters of critical minerals expertise, BBB will explore how their initiatives may ensure that critical minerals SMEs can access the appropriate finance options to start and scale in the UK.

Promote a circular economy

Given the significant increase in demand for critical minerals over the next 10 years, as highlighted by our demand signals in Annex I, primary sources cannot meet this demand alone. That is why the UK will look to build on its strengths in recycling to maximise the amount of critical minerals which can be recovered and R&D and innovation to reduce, substitute or prolong critical mineral usage. This presents not only an economic opportunity, but reduces waste, cuts carbon emissions and increases the UK's security of supply.

Currently, recycling of critical minerals is held back by a low availability of critical mineral-rich waste streams, low collection rates and the high cost and difficulty of recovering critical minerals from end-of-life products like electronic equipment, EV batteries and wind turbines.

Despite this, some critical minerals have a good recycling rate at end of life because of their value and high technical recyclability. For example, PGMs that enter secondary production directly from industrial processes, such as industrial catalysts, are recycled at a rate near the 95% maximum potential[7]. This success rate is evidenced by the UK being home to the largest PGM secondary refiner in the world, Johnson Matthey.

Due to timescales at which clean energy technologies will reach end of life, recycled sources of critical minerals will ramp up from 2030 and become a significant source of critical minerals by 2040.[8] This time scale grants government and industry a window of opportunity to consider appropriate action and build on the available domestic opportunities.

Promoting a circular economy in the UK will also support the UK's wider commitment to circularity in global supply chains, and efforts through the Global Clean Power Alliance, a multilateral initiative to speed up the clean energy transition.

Circular Economy Growth Plan

DBT is working closely with DEFRA and other government departments on the forthcoming Circular Economy (CE) Growth Plan for England. The Growth Plan will be England only in scope and will consider policy areas that are a reserved competence, for example waste exports. The government will actively look for opportunities to align with the work that devolved governments have underway.

The EU's Critical Raw Materials Act includes measures that aim to incentivise the recyclability of critical materials, which are compatible with the aims of our Critical Minerals Strategy. In April 2025, the government agreed to add the relevant provisions of the Act to the Windsor Framework, applying them in Northern Ireland, and to consider equivalent arrangements in Great Britain where necessary. This commitment has been taken into account as we continue to develop the CE Growth Plan for England.

The CE Growth Plan will outline regulatory reform to incentivise the recovery of critical minerals from end-of-life products alongside reducing demand. Boosting the UK's domestic recycling skills and infrastructure is a prerequisite to delivering an effective resilient circular economy for critical minerals. Development of CE Growth Plan has encompassed key insights from the Critical Minerals Intelligence Centre[9] (CMIC) alongside the new UK Technology Metals Observatory[10] and Met4Tech's circular economy roadmaps on battery materials[11] and rare earth magnets[12].

Map and secure UK supply chains

Tracing the journey of critical minerals from mine to end product, across multiple geographies and numerous entities, is complex. Due to the opaque nature of supply chains and depending on the sector in which critical minerals are used, there is often a lack of clear data on supply chains which fulfil UK demand.

Building on work to date, we will continue to work closely with CMIC and DBT's Supply Chains Centre in collaboration with industry stakeholders to better understand both the reach, gaps and vulnerabilities in UK supply chains. The UK Technology Metals Observatory will work alongside CMIC to provide data on the stocks and flows of technology metals in the UK and globally.

We will work with industry to explore a demand aggregation platform to help unlock opportunities for the UK, both domestically and internationally. This platform will help to identify where the UK's growing domestic capabilities can meet specific growth sector requirements, allowing us to focus investment and government support. It will also facilitate decisions on where joint action between industry and government can secure supply from international partners in a more coordinated way.

Supply chain resilience for UK defence sector

Recognising the increasing complexity of global supply chains and their implication for national security, the UK will support industry-led supply chain resilience in the UK defence sector. We will consider mechanisms for establishing and building resilience in critical mineral supply into the UK defence sector. This could, for example, take the form of industry-held stockpiles mandated through Government procurement mechanisms, or ensuring defence equipment always source critical minerals from more than one country.

We will also explore opportunities to collaborate on increasing strategic resilience with other partners implementing similar approaches. This approach will help to reduce the economic security risks in key supply chains. In the long-term this can be used to help to build diverse sources of critical mineral supply more broadly.

As one of the UK's established economic tools, the National Security and Investment (NSI) Act gives the government powers to intervene in investments and other acquisitions of control in the UK economy to protect national security.

The government is currently reviewing the Notifiable Acquisition Regulations (NARs), which define the areas of the economy subject to mandatory notification under the NSI Act. Proposals in the NARs consultation, which closed on 14 October 2025, include the creation of a standalone Critical Minerals area (currently covered within the Advanced Materials area). The Government will report on changes to the regulations in due course.

A key limiting factor in the data on critical mineral supply chains is the lack of visibility on critical minerals in embedded components. To date, and as demonstrated by Annex I, we have focused on the UK's need for primary and midstream resources needed for the growth sectors. Future data and analysis including by CMIC and the UK Technology Metals Observatory will help increase our understanding of the current and anticipated future flow of minerals in specific technologies and for industrial decarbonisation.

Case Study: Tin

Identified as a growth mineral, tin is essential for electronics and used in chemicals. The UK has a history of tin extraction and processing, with projects under development that have potential for primary tin extraction and secondary extraction from waste and scrap metal products. Currently, UK extraction of tin is exported to be refined and processed, before high purity tin and tin-containing products are imported. This highlights the midstream 'gap' in the value chain of tin extracted in the UK. The absence of midstream refining and smelting of tin presents an opportunity for international collaboration and provides a focus for investment.

Recognising UK's continued dependence on international partners for smelted and refined tin, the UK can use available levers to build growth partnerships which are transparent and responsible, by using support offered by UKEF and the expanded NWF mandate to build domestic resilience of tin supply chains.

Further, the midstream tin gap, presents an investment opportunity into the UK, where existing strengths such as the City of London as a centre of finance, expertise in the supporting ecosystem and a whole of government approach to supporting Foreign Direct (FDI) and Foreign Indirect (FII) Investment can be leveraged. In the case of tin, the development of upstream projects for tin production, provides an incentive to access clustering benefits for investors.

Case Study: Nickel

The Vale Base Metals (VBM) refinery in Clydach, Wales, has an annual capacity of 40,000 tonnes of nickel. As the UK's only nickel refinery and one of the largest in Europe, Clydach plays a critical role within a globally integrated network. The refinery currently processes nickel that originates from Indonesia and Canada, where VBM undertakes mining operations. This nickel undergoes intermediary processing in Japan or Canada before being imported to the UK for final processing into a Class 1 battery-grade nickel (99.9% purity). The resulting high-purity product is an essential material in speciality alloys used for aerospace and defence, as well as products that go into electronics, industrial catalysts, stainless steel, and battery precursors for electric vehicles.

The refinery's products are sold to the domestic UK market as well as the EU, Asia and the US, highlighting the role of the UK in the high-value processing segment of critical mineral value chains. The Clydach facility is also a leader in low-carbon industrial practice, with Vale actively pursuing decarbonisation through combined heat and power generation, and innovative algae-based carbon capture in collaboration with Swansea University.

As global competition for critical minerals intensifies, Clydach and similar UK capabilities demonstrate how the UK can serve as a reliable, value-adding partner in partner supply chains, contributing to secure and transparent sourcing routes for refined products.

Clydach also demonstrates UK's growing competitive advantage in midstream. With the introduction of growth minerals and accompanying demand signals, business and projects can utilise various products and support from the NWF, UKEF and the Environment Agency and others to pursue opportunities in nickel and complementary critical mineral value chains.

As shown by both these case studies, UK critical mineral supply chains are part of broad and complex global networks. They span mining, intermediate processing and manufacturing, across multiple jurisdictions. The UK's projected increase in demand of minerals vital to growth-driving sectors is set to rise (see annex I).

Rise in global demand and reliance on finite sources is creating supply pressures and unstable markets. Initiatives to optimise domestic capabilities must work hand in hand with our international collaboration. Working with international partners is crucial to delivering Vision 2035.

Resilient global supply networks

We will continue to be reliant on imports of critical minerals, even as we ramp up our domestic capabilities, and improve our circular economy. Our future demand for critical minerals cannot be met by domestic production alone, and we will therefore need to diversify our supply of critical minerals through working with international partners. Currently, we are seeing increased global protectionism, unfair market practices, and increasingly concentrated processing and mining supply chains, threatening the UK's economic security.

Meeting the future mineral needs of the UK's industrial strategy sectors will require a step change in the way we build international partnerships. Those partnerships will drive direct relationships between industries, governments and other key stakeholders and will be essential to building global diversity and resilience, enabling the global energy transition, and promoting equitable international development.

Along with countries across the world, diversification of processing and mining internationally is a key goal of this strategy in order to safeguard access to these minerals for our business and to bring economic growth to the country. The 60% success feature supporting diversification set out in our Vision 2035 is ambitious.

China's central position in global critical mineral production has created highly concentrated supply chains. For example, China dominates the rare earths supply chain, controlling 70% and 90% of rare earth mining and refining respectively. We will continue to work closely with China while building wider international partnerships to diversify supply to ensure the UK has the sustainable long-term supply our businesses and people need.

To deliver greater diversification, we will form strong strategic relationships with partners to help mitigate supply disruptions and potential export restrictions risks. We will develop international growth partnerships, mobilise investment and leverage our country's central role in mining finance – particularly the UK's strengths in capital and commodity markets, and continue to promote responsible and transparent supply chains.

Developing international growth partnerships will set the UK and our industries in the right direction to meet our 60% success feature to diversify supply chains as we look to secure supplies of critical minerals from key trading partners, resource-rich countries and technology partners. Working with these partners, we will also look at ways to secure global supply where joint action will be most successful while identifying where we can support local value creation, economic diversification and sustainable jobs through our international development expertise and programming. Multilaterally, we will continue to work through international forums including the G7, G20, International Energy Agency, Minerals Security Partnership and NATO to promote high ESG standards which incorporate conflict sensitivity, ensure responsible business practices and share data.

International growth partnerships

We will deepen relationships with key trading partners and develop international growth partnerships with resource-rich countries and technology partners to help UK industry secure its critical mineral supply, complementing domestic initiatives and supporting broader international objectives shared by the UK and international partners.

Given the global nature of supply chains, shared approaches to developing supply chains are essential. Working with partners we can also identify joint solutions for project development, financing, construction and offtake. The UK will export its expertise in standards, R&D capability, surveying, and finance, working with partners across a complex security and economic landscape. We will draw upon the deep and varied expertise available in partner countries, pooling our knowledge, relationships and tools to achieve our collective aims and drawing upon the strengths of others. We will align policies in areas like standards and traceability where possible.

As well as the UK's expertise, international growth partnerships will be underpinned by:

- Supply chain collaboration, including demand aggregation and industry offtake facilitation (support long-term supply agreements between UK buyers and international producers)
- Access to finance for international supply chains
- Using trade policy tools to promote and protect the UK's security of supply for critical minerals
- Reinforcing multilateral action

Supply Chain Collaboration

As we develop international growth partnerships with other countries, we will develop an increased understanding of how collaboration can help to meet the UK's demand requirements and achieve broader goals and ambitions set in collaboration with like-minded partners internationally.

Through conducting supply chain analysis both across the UK and in conjunction with our international partners, we will be able to identify priority projects and scope the potential for both private investment and public finance for these projects. This will support the UK in diversifying its supply of critical minerals and focussing our international engagement on the highest value partnerships.

Priority partners include but are not limited to the US, EU, Canada, Australia, Saudi Arabia, India and Japan. We will also continue to refine our partnership with those countries with whom the UK has existing Memorandums of Understanding (MOUs).

China is our fifth largest single country trading partner and an important player in critical minerals markets. We will be guided in our engagement by the principles set out in the UK's Trade Strategy.

International Offtake Agreements

The UK will take a more active role in helping to facilitate offtake contracts, potentially through a demand aggregation platform that DBT will explore, taking account of the experience of partners developing or considering other similar initiatives. Such a platform could make it easier for UK buyers to collaborate on securing offtake from overseas critical minerals projects in partner countries by benefitting from economies of scale. This approach will be supported by UKEF's Critical Minerals Supply Finance support described below.

This more proactive approach to securing offtake agreements by the UK will increase the likelihood of identifying new sources of supply in partner countries. This will have an additional mutual benefit to our relations with these countries. Further, by aggregating demand, the UK can promote sustainable credentials and sourcing of critical minerals for upstream suppliers.

A system for aggregating UK demand will broaden the UK's scope for collaboration with international partners and support the development of targeted International Growth Partnerships.

Access to finance for international supply chains

Developing new, diverse supply chains to support UK industry requires investment. This can come from private investors and industry, or public sources like development finance institutions and export credit agencies like UKEF.

UKEF can provide support to UK supply chains through its Critical Minerals Supply Finance. This support is available to overseas critical minerals projects or companies (including producers of goods containing critical minerals) that supply UK exporters with long-term offtake or import contracts. UKEF can also work with other international export credit agencies (ECAs) and overseas governments' public finance institutions, including development banks, to co-finance projects in third countries. This support helps to de-risk projects, crowd-in private finance and secure UK supply chains. UKEF's standard international buyer finance support (where eligibility is based on the procurement of UK goods and services contracts) is also available to support critical minerals companies and projects.

UKEF also recently launched the Early Project Services Guarantee which can support critical minerals projects. This provides a guarantee to a bank making a loan to an overseas buyer to finance the purchase of design, engineering or technical services from a UK supplier for early-stage project work such as feasibility studies, conceptual designs, and surveys.

We will commit to working with UK public finance institutions to explore how they can further support critical minerals supply chains.

Alongside these targeted efforts, the UK will seek to encourage more investment into mining, globally, working with multilateral development banks, and address barriers to investment.

Trade policy

We will continue to identify and address market access barriers in key export markets, which cause additional costs to companies in the UK's critical minerals supply chains. We will help to ease regulatory burdens, unlock new overseas investment, and assess the impact of export controls on critical minerals. Where consistent with the Trade Strategy, we will consider the use of trade policy levers to ensure the supply of critical minerals into the UK, and support domestic extraction and recycling.

In line with the Trade Strategy, we will consider where we can deepen relationships with established trading partners. Using growth minerals and accompanying demand signals we will develop agreements with new partners to support greater investment in new secure and transparent supply chains of critical minerals across borders, helping to diversify global supply chains. For future Free Trade Agreements (FTA) the UK will seek to pursue higher ambition outcomes regarding critical minerals, for example with the inclusion of specific chapters on critical minerals collaboration or supply chains. We will also seek to make use of bilateral critical mineral agreements with international partners to foster supply chain collaboration, and open and expand markets for UK industry and investors.

The Trade Strategy outlined our strengthened approach to trade defence – ensuring we can guard UK businesses, and the critical minerals sector, against an increasingly turbulent trading environment. This includes introducing new legislation to expand our powers to raise tariffs in response to unfair trading practices.

As announced in the Industrial Strategy, the new Supply Chain Centre, will help identify and mitigate supply chain risks for UK companies in the critical minerals sector. The Supply Chain Centre will undertake data-driven, business informed reviews of critical supply chains to identify actions needed to ensure resilience. We will also introduce legislation to expand our powers to respond to unfair trade practices, and guard against global turbulence in critical sectors

Reinforcing multilateral engagement

Our bilateral international growth partnerships will complement the UK's existing and well-established participation in multilateral initiatives. We will leverage similar finance, trade policy and partnership tools where possible to build global resilience in critical mineral supply chains.

The UK will continue working multilaterally through international forums including the G20, G7, WTO, NATO and the IEA. We will work alongside the respective Presidencies to ensure that action in the G20 and G7 focuses on delivering genuine changes that seek to improve global supply chain resilience, diversification and sustainability. The UK will leverage its international equities, expertise, UK capital markets, emerging market relationships and public-private partnerships to increase coherence in international critical mineral systems and build distributed growth partnerships to counter-balance dominant national interests.

We will promote projects and markets that meet internationally recognised responsible business practices and standards. This includes building the capacity in resource-rich countries to meet these standards in the long term.

Case Study: Kazakhstan

Kazakhstan has deposits of almost every known element in the periodic table and is a globally significant producer of 18 minerals on the UK's priority list, including titanium, beryllium and chromium. The UK-Kazakhstan Memorandum of Understanding on Critical Minerals Cooperation was signed in March 2023, followed by a bilateral roadmap signed in March 2024.

These political agreements have supported the development of two major UK-led Critical Minerals projects in Kazakhstan. The first, a joint venture between UK SME Maritime House and Kazakhstan state enterprise Zhezkazganredmet, is focused on rhenium recycling. The finished product is now in the UK supply chain of Rolls Royce, and when the project is at full capacity it will produce 25% of the global supply of rhenium.

The second, developed by LSE-listed and UK-financed Ferro Alloy Resources is a globally significant vanadium deposit and processing plant. Vanadium – used in steel production – is currently produced there as a recycled waste product from the oil industry, and when the mine and plant facilities reach full capacity, the project will produce 10% of the global supply of vanadium.

The UK-KZ minerals partnership is expanding into further work matching UK industry with Kazakh mineral producers, for opportunities in technological partnerships and supply chain security. It is also developing several education partnerships between UK and Kazakh universities specialising in geological sciences.

The UK: a centre of mining finance, trading and services

The UK uniquely offers access to vibrant capital markets, world-class commodity exchanges, standards bodies, investment funds and a full suite of professional services. These will be instrumental in realising our domestic and international critical minerals ambitions.

Together, these UK strengths can play a crucial role in mobilising the capital needed to develop diverse and resilient critical minerals supply chains around the world that better serve UK industry and support our international partners' mining sectors.

Around $580 billion in capital investments will be required globally by 2040 to develop new critical minerals mines under the Announced Pledges Scenario (APS), according to the IEA Global Critical Minerals Outlook 2024. However, the international market for critical minerals features structural imbalances due to the concentration of existing supply chains in a small number of markets. The resultant price opacity undermines private capital's appetite to invest in critical minerals projects around the world, including in the UK.

The UK, with its expertise in financial services, is well positioned to facilitate solutions to these challenges by mobilising investment where it is most needed. Domestically, we will work to ensure that UK projects have the financing they need to reach production and offtake positions and that viable late-stage projects receive the funding they need to reach production. Internationally, we will promote the UK as a market for raising capital for global projects while working to leverage UK financial services strengths to tackle collective critical minerals market challenges. To mobilise investment both domestically and internationally, we will focus on facilitating the following:

- Promoting the UK's capital markets to attract investment into critical minerals supply chains
- Providing access to capital
- Strengthening the international market for sustainable critical minerals

Promoting the UK's vibrant capital markets

The UK's capital markets are some of the strongest and deepest globally, delivering capital to support high growth and innovative businesses around the world. This includes a wide range of companies involved in critical minerals production.

The LSE has a critical role in developing our domestic projects and mobilising financing for projects internationally, contributing to the development of resilient and sustainable supply chains. The UK's two growth markets – Alternative Investment Market (AIM) and Aquis Growth Market – are particularly relevant for smaller companies operating across the critical minerals value chain and are seeking to raise investment to advance their projects to commercialisation. AIM is the largest growth market in Europe: over the past five years, more than 50% of all capital raised on European growth markets was raised on AIM.

We will take advantage of the opportunities offered by ongoing capital markets reforms delivered by HM Treasury and the Financial Conduct Authority (FCA) to encourage companies with projects operating across the critical minerals supply chain to choose London as a venue to raise capital. This includes overhauling the UK Prospectus regime, as well as legislating for an innovative new type of stock exchange for trading private company shares. These will complement the new UK Listing Rules, providing more flexibility to firms and founders raising capital on UK markets.

Providing access to capital

There are many sources of capital in the UK, and these include the public equity market, institutional investors, capital funds, private equity, family offices, pension funds, government grants and more. Overlaying these sources are the variety of instruments that can be used to secure capital. Some midstream projects and many junior mineral companies are often small with leadership teams that are mining and technically focused, making navigating capital markets time consuming and inefficient.

The UK has world leading service companies that can assist businesses to source funding, trade minerals, and operate. This includes legal services, banking, insurance, market analysis and commodity tracking, feasibility, engineering and design. We will promote these UK capabilities both domestically and overseas, alongside the benefits of new companies headquartering in the UK to access these services and other available support.

Strengthening the international market for sustainable critical minerals

The international critical minerals market is currently exposed to manipulation and non-market practices, undermining both our domestic and international ambitions. This is a global challenge, and we will work with like-minded partners to seek consensus on action to address imbalances, including in international forums like the G7 and G20.

The UK supports free market approaches. Market failures and volatility can deter investment in critical minerals supply chains. UK PuFins, including NWF and BBB are committed to environmental, social and governance (ESG) principles. UKEF's commitment to internationally recognised standards such as the OECD Common Approaches, International Finance Corporation and the Equator Principles, means that UKEF support helps to raise the ESG credentials of overseas projects and encourages adherence to responsibility and transparency in the projects it supports. We will promote UKEF support as a key tool to encourage investment across the critical minerals supply chain.

The UK also has world-class commodity markets, with the majority of all non-ferrous (non-iron containing) metal futures business being transacted on the LME's platforms. Prices discovered on UK commodity markets are used as the global reference price around the world. We believe these UK strengths in commodity trading and standard setting offer critical components that will underpin solutions. We see opportunities to use these strengths to facilitate solutions to price transparency challenges and promoting price premia for sustainably sourced metals.

We will also consider wider approaches in coordination with our like-minded partners. Solutions like traceability mechanisms, long-term offtake agreements, and targeted stockpiling measures (both industry and government led) offer options to promote effective price discovery and support demand for sustainably sourced metals, but we will work to ensure that any policies deployed have a clear, tangible benefit to UK industry.

Case Study: London Metal Exchange

The LME plays a pivotal role in enabling price discovery, risk management, and market access across global critical minerals supply chains. It is increasingly active in advancing sustainability in metals markets through initiatives like LME passport, which enables producers to disclose provenance and ESG performance data. The LME also enforces mandatory responsible sourcing standards for key metals such as cobalt and tin, contributing to improved due diligence and greater transparency across supply chains.

In 2024, the LME launched a physically settled spot trading contract for low-carbon nickel, providing a route for buyers to differentiate and reward lower-emission production. This initiative reflects growing market appetite for credible, sustainability-linked trading options. Over time, similar contracts could be developed for other critical minerals, creating mechanisms that encourage responsible production through price incentives. These efforts are closely aligned with the UK's international objectives to support responsible and transparent supply chains and promote the uptake of stronger sustainability standards globally.

The UK government is working closely with the LME and market participants to explore how existing trading infrastructure and transparency tools can be leveraged to promote better practices across mineral supply chains. As part of the broader UK financial and mining ecosystem, the LME offers a powerful platform to embed sustainability into global metals markets, supporting both the energy transition and long-term economic resilience.

Responsible and transparent supply chains

The UK has a leading role in ensuring critical minerals are produced responsibly and transparently. Currently, some critical mineral supply chains are associated with significant ESG harms, including human rights abuses, biodiversity loss, deforestation and corruption. The government is committed to promoting improved governance, increased supply chain transparency, and greater adoption of responsible business practices that protect the local environment and surrounding communities. ESG risks also create added vulnerability to supply disruption; critical mineral supply chains are not secure unless they are also responsible and sustainable.

We also recognise that mining and processing operations take place in very different contexts across the globe. Maintaining standards is crucial, transparent supply chains enable the UK to anticipate and mitigate external shocks. Responsible supply chains built on robust standards are resilient to sudden changes. Limited access to financial resources and technical expertise pose challenges to achieving this.

We are committed to the responsible and sustainable development of resources in the UK and encouraging due diligence in supply chains. In Cornwall, domestic critical mineral projects are exploring low-impact extraction methods, such as Direct Lithium Extraction, and innovative low-carbon processes, including using geothermal energy to power operations. We want the UK to contribute this expertise in responsible mining. The Government expects all UK companies to respect human rights, workers' rights and the environment throughout their operations and supply chains in line with the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and the UN Guiding Principles on Business and Human Rights (UNGPs).'

We will promote responsible and transparent supply chains through:

- Inclusive development and responsible business practices
- International development finance
- Global initiatives and multilateral forums

Inclusive development and responsible business practices

Critical mineral production can support inclusive and sustainable economic development under the right conditions. The UK will focus on ensuring the extraction of critical minerals works for the benefit of resource-rich countries, particularly in emerging markets and developing economies. We will identify where we can support local value creation, economic diversification and localise benefits through our growth partnerships. This encourages transparency in global supply networks, resulting in a secure supply of critical minerals for the UK.

Case Study: UK Green and Inclusive Growth Centre of Expertise

The Green and Inclusive Growth (GIG) Centre of Expertise has a number of Official Development Assistance (ODA) funded initiatives already delivering critical mineral interventions, in partnership with national and local governments, as well as investors and civil society. In line with our mission to reset the UK's relationship with the Global South and Africa Approach, we are pursuing a modernised development approach focused on promoting local leadership and genuine partnership with resource-rich developing countries. Some of the key activities and results from the GIG Centre of Excellence include:

- Support for partner governments to understand, digitalise and sustainably manage their critical mineral resources including via the British Geological Survey as well as other delivery partners
- Cooperation with private sector to attract and mobilise investment into critical minerals processing in resource rich countries

Irresponsible mining practices can exacerbate geopolitical risks and social harm, including impacts on Indigenous peoples' rights, and increase the risk of modern slavery. The UK is committed to eradicating all forms of modern slavery, forced labour and human trafficking in line with achieving Sustainable Development Goal 8.7. The UK will continue to provide international leadership on this agenda, working with multilateral partners to promote joint action to tackle modern slavery and enhance responsible business practices in critical mineral supply chains.

As announced in the Trade Strategy, the UK is reviewing its approach to responsible business conduct policy. The review will focus on the global supply chains of businesses operating in the UK including businesses who extract, import or use critical minerals, where human rights abuses and environmental harms are more pertinent. This will cover all areas of the economy, including businesses linked to critical minerals. In addition, FCDO is carrying out a National Baseline Assessment (NBA) on the implementation of the UN Guiding Principles. An NBA will contribute to the evidence base to inform the UK's approach to tackling business related human rights abuses, including in global supply chains.

International development finance

The development of new, diverse critical mineral supply sources requires significant responsible investment. The UK's development finance institution, British International Investment (BII), currently supports investments in the enabling infrastructure around critical mineral projects. For example, BII is invested in the Owendo Bulk Port in Gabon,[13] which facilitates the export of locally mined manganese ore, and the import of

aggregates and cement constituents. FCDO and BII continues to explore opportunities to invest more in infrastructure for critical minerals through BII's next five-year strategy.

Multilateral Development Banks (MDBs) play a crucial role in the development and management of critical minerals, providing significant funding for projects related to the extraction and processing of critical minerals. The UK also works with multilateral development banks such as the World Bank Group, supporting the delivery of the Resilient and Inclusive Supply-Chain Enhancement (RISE) Partnership to diversify and help create enabling investment environments in mineral-rich, low and middle-income countries.

Global initiatives and multilateral forums

We will promote responsible investment through the Global Clean Power Alliance (GCPA). The GCPA's Supply Chain Mission will identify and deliver the most critical changes needed to diversify clean energy supply chains, drive investment, shorten lead times and hasten the clean energy transition at lower cost. We are developing a two-year roadmap for the Supply Chain Mission alongside like-minded, ambitious partners, which could include support to responsible critical mineral supply chains and midstream opportunities to increase local value addition in emerging markets and developing economies.

As Chair of the Voluntary Principles for Security and Human Rights initiative, the UK will seek to influence other governments and businesses to lower the risk of violence, conflict and human rights abuses in the extractives sector. As Chair, we will focus the impact of the Voluntary Principles at a grass roots level and aim to foster a more stable business environment while reducing the risk of human rights abuses.

The UK was the driving force behind the inception of the Extractive Industries Transparency Initiative (EITI) and continues to support their mission, working to ensure that countries benefit from a higher percentage of revenue from natural resource extraction and encouraging robust governance systems, which aid stable investment climates.

International standards can help to reduce risk in investment jurisdictions. Globally agreed technical standards, such as those developed through the International Organization for Standardization (ISO), play an important role enabling transparency and credibility of critical minerals markets. Enhancing such standards will in turn strengthen data on origins and enable consistency with ESG standards. The UK will promote building capacity in resource-rich countries to meet these standards in the long term. We also support partners to consolidate the number of existing standards, with the ambition of raising the floor on the minimum acceptable standard of behaviour, rather than creating additional standards.

Endnotes

1 Request environmental permit coordination for major projects - GOV.UK

2 REPORTS | CMA

3 Global Critical Minerals Outlook 2024 – Analysis - IEA

4 Case study – Cornish Lithium equity investment | National Wealth Fund

5 Cornish Metals Inc | National Wealth Fund

6 National Wealth Fund announces a £31m commitment to Cornish Lithium to advance projects to next stage of development | National Wealth Fund

7 International Platinum Group Metals Association (IPA). 'Mining & recycling'

8 IEA (2022), 'Reliable supply of minerals – The Role of Critical Minerals in Clean Energy Transitions – Analysis - IEA'

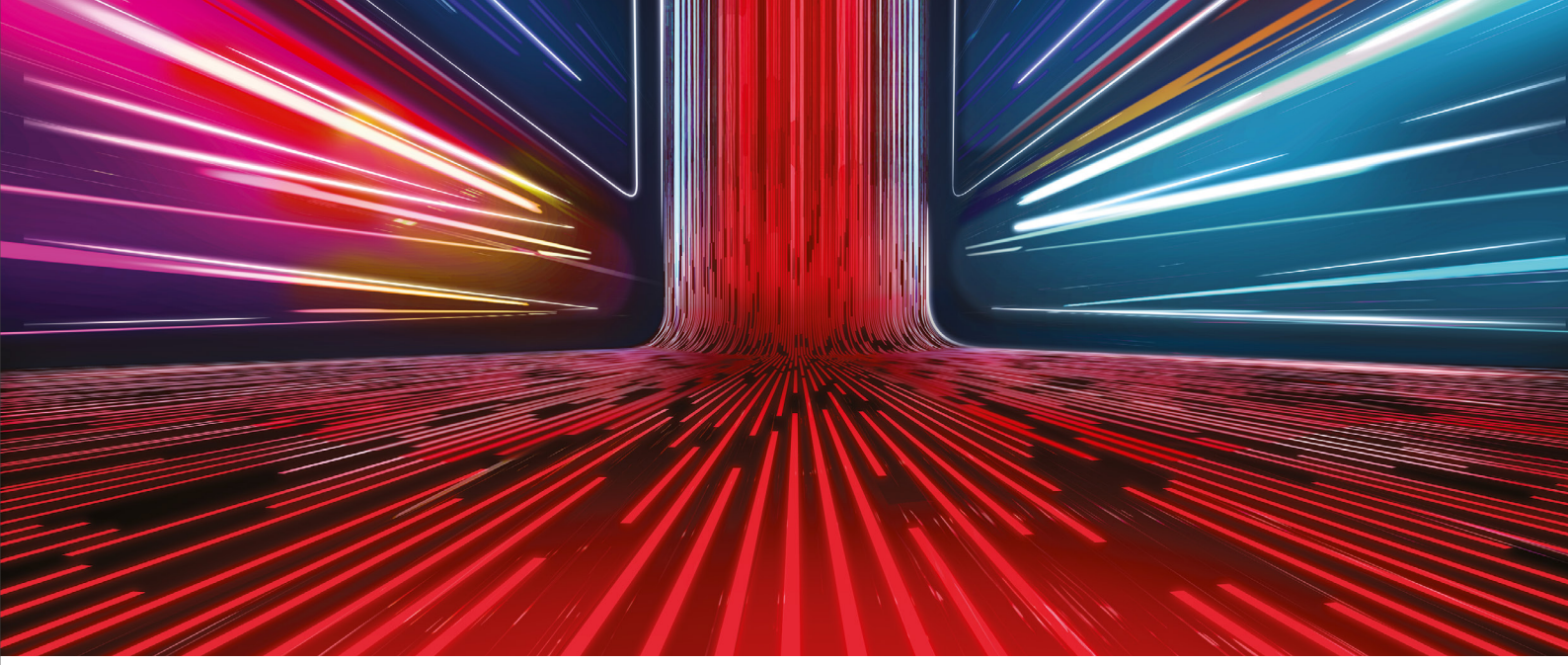
9 https://www.ukcmic.org/

10 UK Technology Metals Observatory

11 Introduction - Met4Tech Battery Roadmap

12 Introduction - Met4Tech Magnet Roadmap

13 GSEZ Mineral Port S.A. - Investment 02 - British International Investment



Growth minerals

To drive both government and industry efforts towards achieving Vision 2035, future demand of minerals vital to the UK economy's growth sectors needs to be better understood. A demand forecast of key minerals required by the growth sectors provides a lens to inform proactive domestic and international initiatives across government and industry and supports prioritisation of resources.

We are introducing a new growth minerals list to sit alongside the critical minerals identified in the 2024 Criticality Assessment, to provide this expanded focus on the current and future mineral needs in the growth sectors. The growth minerals list is accompanied by demand signals, across key technologies in the growth sectors, as illustrated in table 1. Growth minerals and the demand forecast complement the existing critical minerals list by offering a forward-looking assessment linked to the Industrial Strategy's growth sectors. This identifies minerals significant for the future of UK-based manufacturing across the relevant growth sectors, based on the end use of minerals in these key sectors.

The estimates will inform domestic production by identifying where secure supply of minerals most important for the UK's growth sectors. This approach also provides direction to our international growth partnerships, which can assess mineral specific opportunities for collaboration. A long-term growth mineral forecast will signal government priorities to projects and businesses across the critical mineral industry and support the existing critical minerals list.

As highlighted in Figure 1 there is an overlap between the critical and growth minerals lists, reflecting the fact that the demand for a high number of critical minerals in the growth sectors is expecting to increase in future. Currently the Critical Minerals Intelligence Centre (CMIC) assesses minerals against two dimensions to determine criticality:

- Global supply risk
- UK economic vulnerability

Some growth sectors depend on minerals which are not currently assessed to be critical – this has resulted in the identification of beryllium (used in aerospace and defence), chromium (used in aerospace), copper (used across advanced manufacturing, particularly clean energy applications), uranium (used in defence and nuclear), and synthetic graphite (used in the automotive sector) as growth minerals.

The critical and growth mineral lists complement each other. Risk of global supply disruption and the UK's vulnerability to disruption is captured by the critical minerals list on the basis of past data. Growth minerals identify the key future requirements for the UK economy's growth sectors. Together both lists provide government with the ability to respond to global supply risk while adopting a forward-looking approach to securing critical minerals for the UK.

International partners have also been using multiple lists to help guide their approach to securing mineral supply in strategic sectors. For example, the EU's Critical Raw Materials Act of 2024 updated the EU list of critical raw materials and introduced strategic raw materials for strategic technologies such as green, digital, defence, and aerospace applications. However, we recognise the potential for lack of clarity with two lists and have accordingly set out the key similarities and distinctions.

What does it mean to be a UK growth mineral?

Critical Minerals

- Bismuth
- Borates
- Indium
- Iron
- Magnesite
- Magnesium
- Niobium
- Phosphorus
- Sodium compounds
- Tellurium
- Vanadium
- Zinc

Critical & Growth Minerals

- Aluminium
- Antimony
- Cobalt
- Gallium
- Germanium
- Graphite (natural)
- Hafnium
- Helium
- Manganese
- Nickel
- PGMs*
- REEs
- Rhenium
- Silicon
- Tantalum
- Tin
- Titanium
- Tungsten
- Lithium

Growth Minerals

- Beryllium
- Chromium
- Copper
- Uranium
- Graphite (natural & synthetic)

Available Support

- ▲ Eligible for NWF finance for businesses in critical mineral value chain
- ▲ UKEF: domestic critical minerals support linked to exports
- ▲ UKEF: Support for critical minerals from abroad for UK exporters
- ▲ Eligibility for Environment Agency's (EA) tracked service for early development projects
- ▲ Support from British Business Bank (BBB), DRIVE35 where project meets eligibility criteria

Available Support

- ● We are exploring existing support from BBB, DRIVE35, NWF, UKEF and EA to both Critical and Growth Minerals
- ● Up to £50m in bespoke critical mineral support

*PGMs incl platinum, rhodium and ruthenium (excl palladium and osmium)

Available Support

- ▲ Eligible for NWF finance for businesses in critical mineral value chain
- ▲ Eligibility for Environment Agency's (EA) tracked service for early development projects
- ● We are exploring extending UKEF mandate to support overseas growth mineral projects for UK industry

Key

▲ Support available now

● Future support being explored

Figure 1. Landscape of Critical and Growth Minerals and the accompanying support available now and future support being explored

To secure future supply of minerals needed for the growth sectors and harness competitive advantage, we intend to align government public finance support to include these growth minerals. Alongside critical minerals projects, projects in England with growth minerals will also be able to use the Environment Agency's tracked service for permitting. Given the overlap between critical minerals and growth minerals, in practice this means extending eligibility across these support schemes to beryllium, chromium, copper, uranium and synthetic graphite. As a result, government efforts will be expanded to include minerals the UK anticipates needing most in future, for use within the growth sectors.

For growth minerals, we have compiled signals of expected demand up to 2035 in line with the timescale of the vision for this strategy as shown in table 1. The signals are tailored to UK manufacturing using raw and intermediate critical minerals, to quantify the needs of the IS growth sectors. Annex I highlights the expected rise in demand up to 2035 for selected Growth Minerals. These demand signals are a first step in understanding UK demand, upon which future developments can be made.

Use case for growth minerals

A deep dive into copper illustrates how the list will enable initiatives across government to secure supply of critical minerals for growth sectors.

Copper is identified as a growth mineral with the accompanying demand forecast, signalling a sharp rise in copper demand for growth sectors alongside concerns about potential copper shortfalls by 2035[1]. The National Wealth Fund is able to support existing and new growth mineral projects, including copper projects across the value chain. For copper projects that meet NWF's investment criteria, NWF is able to help crowd further private investment into projects which ensure a secure supply of these minerals for the UK's growth sectors.

Following the inclusion of copper in the growth minerals list, early-stage copper projects in England will also be able to leverage the Environment Agency's (EA) tracked service for complex permitting solutions. This service will provide co-ordinated advice and support to copper projects to help avoid delays and navigate the permitting and licensing system. UKEF will update its eligibility to include growth minerals as part of its critical minerals-focused international and domestic support to help strengthen copper supply chains for UK businesses and projects. This support will help to enable the UK to meet the expected rise in future demand and complements CMIC's criticality assessment given copper was not deemed critical at the time of assessment based on historical data.

A summary of the methodological approach for creating demand signals on a mineral-by-mineral basis can be found in Annex III. Demand estimates for Defence industry have been excluded.

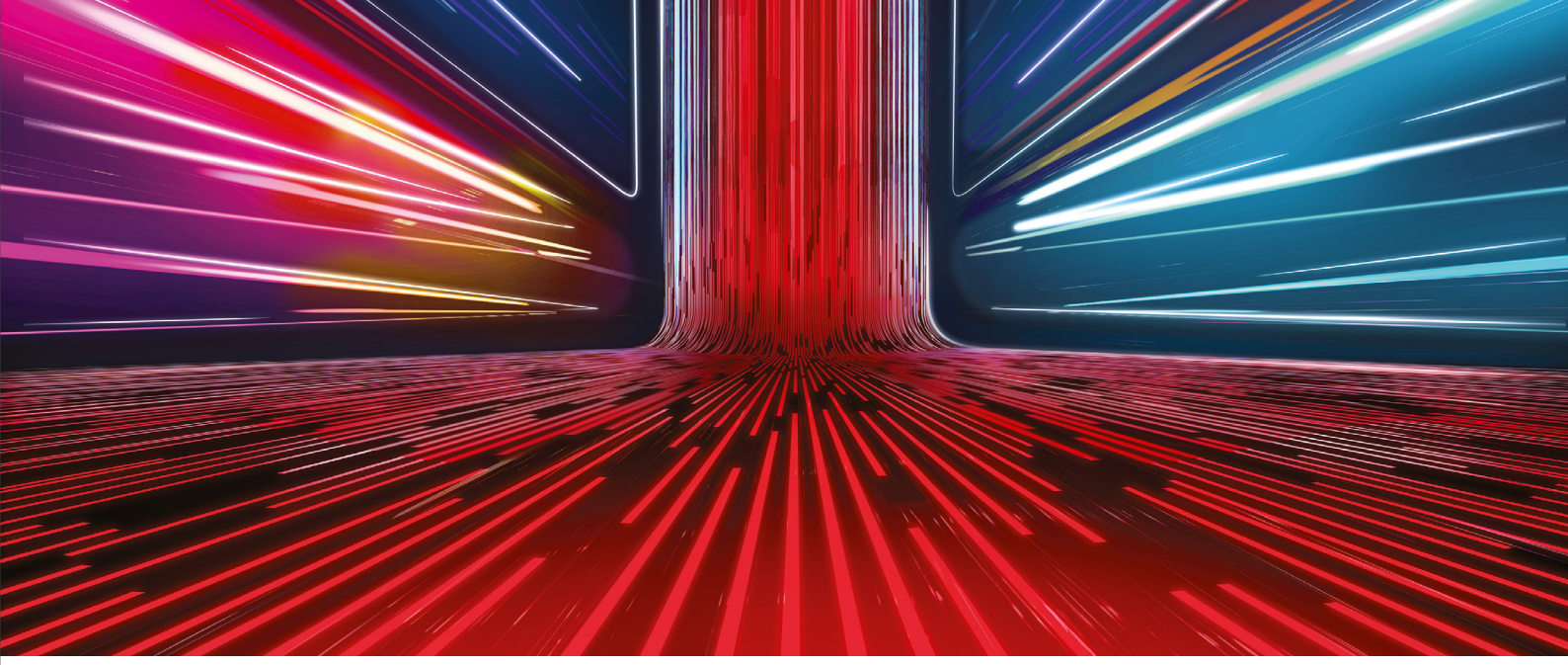
Table 1: Demand signals (cumulative, tonnes) for select growth minerals

Mineral	Examples of technologies and products considered	2027	2030	2035
Aluminium	EVs (batteries and bodies), clean energy, electricity grid	1,860,000 to 1,890,000	3,960,000 to 4,030,000	7,950,000 to 8,060,000
Cobalt	EVs, aerospace alloys	32,200 to 34,600	69,900 to 78,800	139,000 to 172,000
Copper	EVs, traction motors, electricity grid	804,000 to 1,050,000	1,670,000 to 2,230,000	3,180,000 to 4,060,000
Graphite	EVs, fuel cells	28,600 to 28,700	138,000	448,000 to 450,000
Lithium (LCE)	EVs, air treatment, portable batteries	28,700	113,000	339,000
Rare Earth Elements	Traction motors, industrial magnets, clean energy, consumer electronics	6,770 to 8,810	16,000 to 20,000	34,200 to 41,700
Titanium	Aerospace alloys, clean energy	173,000 to 178,000	347,000 to 365,000	636,000 to 704,000

The full list is included in Annex I.

Endnotes

1 IEA (2024), Global Critical Minerals Outlook 2024



Implementation

Having set out our new strategy and Vision 2035, our focus will pivot to ensuring government activities deliver on these objectives, while ensuring the strategy itself remains fit for purpose.

We will leverage the UK's strengths and close collaboration with industry to deliver our vision of securing the UK's critical mineral supplies for the growth-driving sectors, harnessing our competitive advantage in midstream processing and recycling. We outline a high-level implementation plan up until 2028, which we will further develop and deliver across government and with industry. Implementation of the Critical Minerals Strategy will be reviewed, typically on an annual basis, with appropriate input from industry and bodies such as the Critical Minerals Expert Committee (CMEC).

To co-ordinate effort, workstreams closely linked to the policy objectives of the strategy are identified through which to deliver progress:

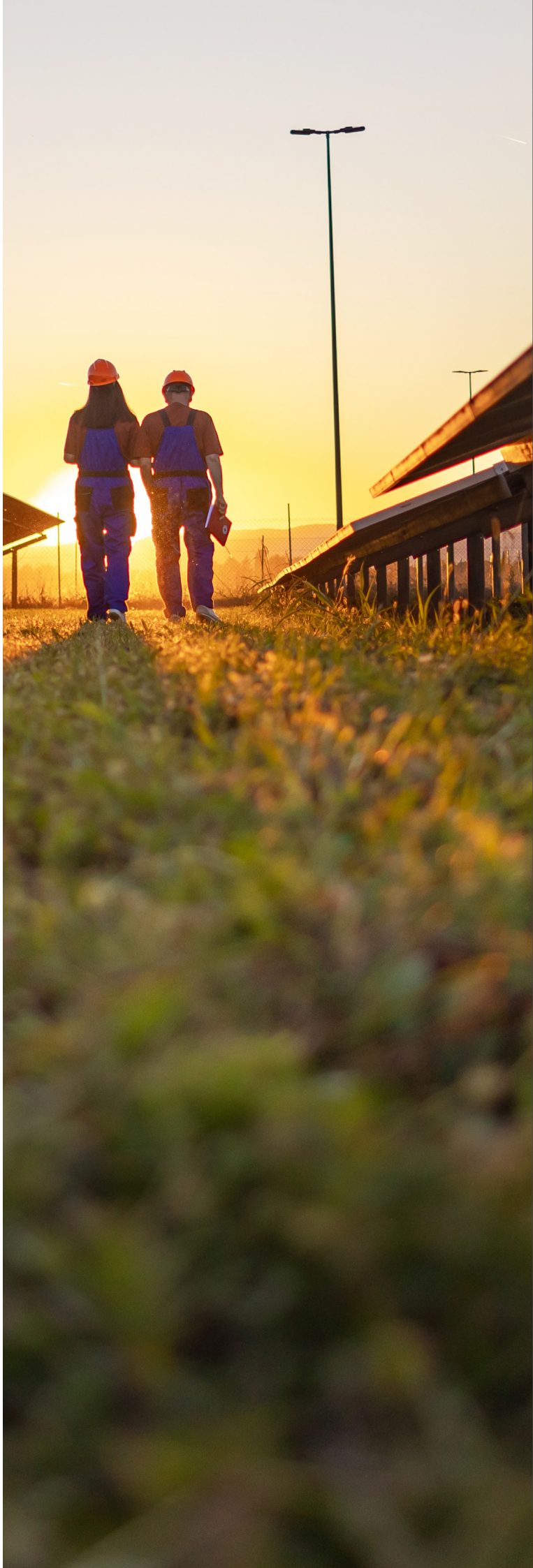
- International collaboration: Delivering domestic security of critical minerals and contributing to global resilience through international partnerships and multilateral forums.
- Building critical minerals security: Initiatives designed to secure supply of critical minerals critical for UK's security, including supporting domestic production and recycling, developing a new critical mineral fund, building resilience in defence supply chains, and working with devolved governments.
- Opening up access to finance: By leveraging existing strengths, enhancing the flexibility of existing tools and if required, developing new products to enable critical mineral businesses and projects to access finance.

- Critical minerals intelligence: Enable informed policymaking by continuing to develop the Critical Minerals Intelligence Centre and seek independent advice from the Critical Minerals Expert Committee.

Updates on the progress made across the strategy will be provided as we undertake delivery.

Medium to longer term

Critical minerals are a rapidly evolving industry in a fast-moving geopolitical context. The government's approach needs to remain agile to respond to market changes and state intervention across global networks. Therefore, we will consider and develop additional specific initiatives as necessary in the medium and long term to meet the objectives of the UK's Critical Minerals Strategy, as we report on delivery progress. We will also continue to work across government to make Vision 2035 a reality through delivery of the Industrial Strategy and its growth sector plans.



UK Government