

Briefing Note: **UK Green Skills Agenda**

The Critical Minerals Challenge Centre has been created to accelerate the green economy in the Southwest and beyond, generating secure jobs and sustainable livelihoods. The green economy has the potential to distribute opportunities for empowerment, pay, prestige and progression opportunities. However, this is dependent upon finding, recruiting, and retaining workers and developing open access avenues to upskilling within regional populations and more widely.

Our corporate and civic partners in the Critical Minerals Challenge Centre will help us to examine and define the necessary skills levels and entry and access requirements for the new jobs expected to be created in the critical minerals' green economy.

Reindustrialisation for accelerating the green economy requires a range of workforce skillsets, in new and growing industries that need labour to expand production. The natural resources that will drive reindustrialisation are rooted in place, and so too are the human resources that will transform them into the products that power and protect the future. From recent research funded by the UK Shared Prosperity Fund, we understand there to be three essential elements to this place-based dimension:

1. That **industry, training providers, and policymakers** have accurate, responsive and where possible real-time knowledge and foresight of the full range of skills that need to be developed, and ability to address this amongst the local population.
2. That the **local population** have up-to-date understanding of the kinds of opportunities available in new, emergent and growing economies, a curiosity about these opportunities, access to appropriate training, and pathways to find work.
3. That, where **recruitment of workers** takes place from further afield, localities are perceived as a viable and attractive relocation option for ambitious people.

One of the key findings from our previous research is that the connections between the different elements of 1, 2 and 3 are vital. For example, analysis of participant career journeys has shown that access to industry networks is crucial. Many workers with a relevant skill set struggle to gain employment in the industry that they have trained for and sometimes, individuals gain training following a temporary, ad-hoc work gained through their networks. Access to industry networks is the important element that can introduce jobseekers to potential employers and socialise them into industry knowledges and practices.

The skills element of the Critical Minerals Challenge Centre will develop a 'living lab', attempting to create local networks between the current resident population, industry, and training providers around lithium mining in Mid-Cornwall. The aim of this work is to consider how to build the community relationships required to make new opportunities in green reindustrialisation practically and emotionally accessible.

To reduce reliance solely on new labour market entrants, the skilled labour associated with expanded production can be generated by (1) upskilling within current workforce and transition into new areas, and (2) attracting employees from other sectors into the green economy. This

includes people with transferable skills, those on a career break, or those who want to refresh their careers. There will be many new industries open to new entrants, so a question is - how can the sector compete for these pools of skilled labour?

The figure below shows the levels of job roles and opportunities within a mining company. This picture is from the INTRAW project (2016) as presented in the [Tech Metals Opportunity document](#) prepared the LEP (Local Enterprise Partnership) (Cornwall and Isles of Scilly, 2023).



Adapted from [Intraw \(2016\)](#) pyramid showing the typical, simplified, organisational structure in a mining company. In addition to the need for 'traditional' skills, there is an emerging skills requirements for data scientists, ESG leaders, climate scientists etc. in the Geo-Resources, mining and metals sectors ([AusIMM, 2022: Skills needed for the modern mining industry](#)).

It is also important to consider **building equality of access for EDI into the skills offering**. The evidence in research has shown that diversity improves company performance (Moore et. al., 2025). For example, more accessible online courses could be a useful avenue to bring more people into higher education, where they could then go on to obtain degree qualifications.

When these new workers are in place, there will also be a need for courses to increase skills for career progression. The University of Exeter offers several professional education courses and can tailor these to the company's requirements. An example would be a skills bootcamp (offered by CloS LNP) for people wanting to retrain in biodiversity net gain (BNG). **These courses are in addition to the main degree course offering at the University and several examples are presented below.**

[Tech Metals for a Green Future MOOC](#)

This updated **massive open online course (MOOC)** is one of the main Citizen Science outreach deliverables from the Met4Tech (UKRI Interdisciplinary Circular Economy Centre for Technology Metals) project. The updated MOOC on **Technology Metals for a Green Future** will deliver new learning content on the circular economy for technology metals as well as on the important topics for critical minerals and responsible sourcing. **This course is open to diverse participants from various communities at no cost (unless the participant wants a certificate).** There are four main modules that can be completed at the participants own pace over several weeks, via the Learn Exeter platform.

Bespoke Critical Minerals Training

The Camborne School of Mines has developed a **Continuing Professional Development** (CPD) course for laboratory technicians involved in analysis of minerals and metals, to learn more about mineral processing. There is also specific training developed for **Executive Level Education** in mining methods to complement sustainability and international corporate relations. The Shared Prosperity-funded **Critical Minerals Equipment Hub** has developed bespoke CPD training for staff in local companies. For undergraduate and graduate education – see ‘More through the Door’ (Moore et al., 2025).

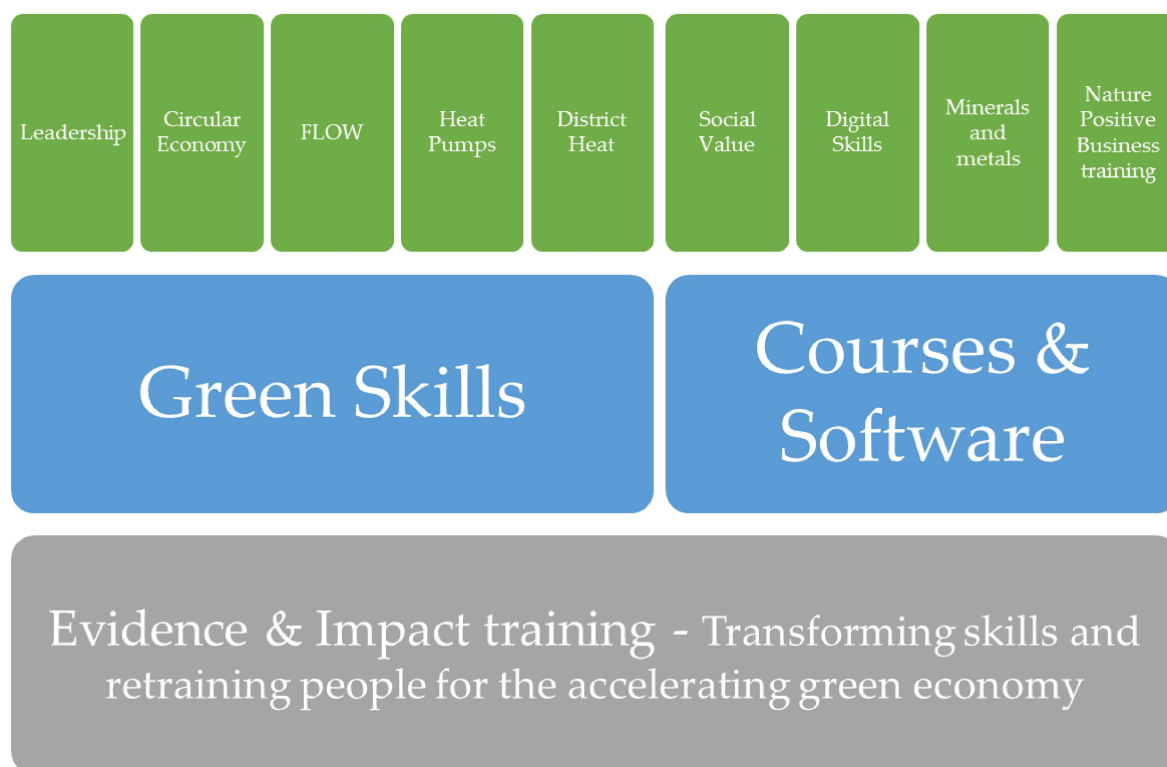


Figure – Examples of skills-oriented projects at the University of Exeter

Nature Positive Business: Online Masterclass

The University of Exeter offers **two nature-positive masterclasses**, one online and one in-person. Nature Positive Business is a 6-week online course of masterclasses that empowers leaders to drive nature-positive impact. Lead by our academic experts, participants explore environmental sustainability, sustainable business practices, and effective leadership for a changing world. Nature Positive Futures is a three-day masterclass that equips business leaders with the tools and strategies to create nature-positive business models, while demonstrating how to integrate biodiversity into core operations for both ecological and financial gain.

Nature Recovery and Economic Development

The Institute of Cornish Studies (University of Exeter) ESRC funded NaRReD project will provide a toolkit for rural local government in the UK to take advantage of the opportunities offered by Nature Recovery and Biodiversity Net Gain. To develop innovation ecosystems and grow local economies, the relationships between local authorities, civil society, central government, and

industry are interrogated alongside the various forms that Biodiversity Net Gain can take. The development of skills and resources required to properly take advantage of these opportunities might be taken forward via the Cornwall and Isles of Scilly Local Nature partnership, and DfE funded Skills Bootcamps.

Digital Skills Initiative (DSI) Interactive Programme

Experts in AI (artificial intelligence) provide participants on this interactive six-week programme with the skills and knowledge to maximise the potential of AI and use it responsibly, minimising risks and preparing their business to thrive in the digital economy. It covers an introduction to key concepts including generative AI, large language models, deep learning and neural networks and emphasises practical steps to apply AI in the workplace. By helping everyone to improve their digital skills, we aim to enhance engagement, learning outcomes, employability, and overall well-being. A self-assessment quiz and digital skills library has already been launched, with positive pilot feedback. [Digital Skills Initiative | Digital | University of Exeter].

Social Value Evaluation

The University of Exeter runs **workshops for businesses** to build organisational capacity to understand their social impact, particularly in procurement processes. Businesses are introduced to impact practice theory (social return on investment [SROI]) and the Social Value Engine (SVE). The SVE is the only accredited platform for measuring social value, by utilizing peer-reviewed financial proxies to assess social impact. This training helps businesses quantify and demonstrate the social value created by various activities, linked to broader goals such as the United Nations' Sustainable Development Goals.

The Future is Green

This skills delivery project is led by the Cornwall College Group in collaboration with other Further and Higher Education Providers (including University of Exeter), for individuals across Cornwall and The Isles of Scilly [UK Shared Prosperity Funding, via Cornwall Council]. The project develops and delivers **seminars, workshops, residential courses, and online/hybrid programmes** with a focus on strategic local sectors, including clean energy and sustainable construction, with overarching themes of innovation & leadership and the circular economy. Under phase one [January 2024 – March 2025] the project has engaged with over 170 individuals and 79 local businesses, delivering nine courses/events resulting in over 2200 hours of learner engagement. This continues under the second phase [April 2025 to March 2026], particularly focusing on development of high-quality online learning programmes resulting in legacy beyond the final close of the project in 2026. [<https://sites.exeter.ac.uk/greenskills/>]

FOR FURTHER INFORMATION, please contact us at: criticalminerals@exeter.ac.uk

We will be happy to direct any enquiries to our colleagues across the University and Centre.

- Pat Foster, inaugural member UK Extractive Industries Transparency Initiative, leads on skills development with the mining industry.
- Joanie Willett and Harry Pitts, lead on the SPF projects on work and skills in local labour markets, including 'Future of Work' and the 'Living Lab' community projects.
- Dave Hodgson leads on training in ecology and Biodiversity Net Gain for the research team and industry partners.

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The views expressed here are those of the authors and not necessarily a consolidated view from the whole Critical Minerals Challenge Centre.

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RESOURCES FOR SKILLS REPORTS:

- Get Britain Working
- Skills England report
- IOM3 Skills Gap Report
- UK Mining Education Forum
- Exeter Regional Skills Strategy
- Cornwall Council Workforce and Skills Strategy
- Future Skills, Institute of Cornish Studies

ORGANISATIONS WITH SKILLS ACTIVITIES:

- Cornwall Council – Devon County Council – Somerset Council
- University of Exeter (including Camborne School of Mines)
- University of Plymouth, Falmouth University
- Truro and Penwith College, Cornwall College
- Cornwall Mining and Geo-resources Alliance
- Cornwall Chamber of Commerce
- Cornwall and Isles of Scilly Local Nature Partnership
- Critical Minerals Association