



# D2.6 Summary of the effort to twin regions with a strong mining heritage: Cornwall & Saxony

D2.6 Deliverable

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*Rowan Halkes<sup>1</sup>, Frances Wall<sup>1</sup>, Kathy Hicks<sup>1</sup>, Alexandra Sweeney<sup>1</sup>, Meng Chun Lee<sup>2</sup>, Wolfgang Reimer<sup>2</sup>*

<sup>1</sup> *Camborne School of Mines, University of Exeter, Penryn Campus, Penryn, Cornwall, TR10 9FE, United Kingdom*

<sup>2</sup> *Geokompetenzzentrum Freiberg eV (GKZ), Korngasse 1, 09599 Freiberg, Germany*

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## About MIREU

The project MIREU aims to establish a network of mining and metallurgy regions across Europe with a view to ensure the sustained and sustainable supply of mineral raw materials to the EU. The network will help the regions to share knowledge and experiences when facing the challenge to establish and maintain an extractive industry. MIREU will facilitate an exchange between all interested stakeholders in the regions, namely regulatory authorities, political and administrative bodies, development agencies, mining companies, non-government organisations, as well as the general public. The project will develop a shared knowledge base, taking into account the region-specific geographic and economic features, cultural, societal and language diversity, and their historical developments. The network will also learn from experience in other regions of the World. This knowledge base will allow to understand what has been conducive and what hampering to the development of extractive and metallurgical industries. It will also provide the context for a bottom-up integration of these activities into their respective socio-economic and socio-cultural context. Development is about people and, therefore, bringing people into the decision-finding procedure in order to achieve a ‘social license to operate’ will be a key aspect of the project. Guidelines and recommendations for actions to be taken to foster a sustained and sustainable development of the extractive industries will be developed in close co-operation with a range of selected regions from the European Union. These regions will form a nucleus and multipliers for a more extensive network beyond the life-time of the project.

## Partners



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## 1. ACRONYMS AND ABBREVIATIONS

CoMMER	Council of Mining and Metallurgy European Regions
CMA	Cornwall Mining Alliance
CE	Circular Economy
DE	Germany
EC	European Commission
EIP RM	European Innovation Partnership on Raw Materials
ERRIN	European Regions Research and Innovation Network
FAME	Flexible and Mobile Economic Processing Technologies (H2020 project)
GDP	Gross Domestic Product
GTK	Geological Survey of Finland
GKZ	Geokompetenzzentrum Freiberg e.V.
GREENPEG	New Exploration Tools for European Pegmatite Green-Tech Resources (H2020 project)
MIREU	Mining and Metallurgy Regions of the European Union
NGO	Non-Governmental Organisation
REMIX	Smart and Green Mining of EU (INTERREG project)
RGSC	Royal Geological Society of Cornwall
R&D	Research and Development
RIS3	EU Smart Specialisation Strategy
SLO	Social Licence to Operate
SWOT	Strength-Weakness-Opportunity-Threat analysis
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNEXE	University of Exeter
WHS	World Heritage Site
WP	Work Package

## 2. SUMMARY

D2.6 outlines the background to, initiatives undertaken and conclusions from a twinning task between the European mining and metallurgy regions of Cornwall and Saxony as part of the MIREU project. The objective of MIREU is to establish coherent co-ordination and support mechanisms among several EU regions and identify and engage with other relevant EU regions. Subsequently, the Cornwall & Saxony twinning task aims to increase and stimulate the regions, which have numerous similarities and links, capacities to exchange experience, knowledge, best practice and ideas and are seeking innovation, co-operation and research links. The twinning task also contributes to the MIREU project objective of launching the Council of Mining and Metallurgy European Regions (CoMMER) to continue the project's work, and has significance regarding other EU funded projects that involve/have involved Saxony & Cornwall (FAME, REMIX and GREENPEG).

Cornwall and Saxony share many similarities and links, they both have an extensive mining heritage and similar mining history, being rural regions that became heavily industrialised in the 19<sup>th</sup> – 20<sup>th</sup> century, growing to be globally significant producers before industry declined in the latter part of the 20<sup>th</sup> century. As a result of their mining heritage, both regions are host to mining and metallurgy related UNESCO World Heritage Sites. The recent drive in Europe for

a domestic supply of raw materials needed for the ‘green transition’ has led to both regions being re-evaluated regarding their raw material resources. Due to this, and their comparable geo-resources, the regions are host to several similar projects. Both regions are home to world-class mining and metallurgy research & education institutes and industry clusters, and also share civil society links.

Numerous initiatives, including workshops, virtual networking events and joint exhibitions were explored and/or undertaken to twin the regions. These can be broadly grouped into the 4 areas of Heritage, Industry, Research and Society.

Some of the highlighted achievements of the twinning task include:

- Success in a first of its kind mining regions of Europe twinning project targeting every stakeholder level
- Increased awareness of opportunities and interest in collaboration across the areas of heritage, industry, research and society
- Numerous, and varied, activities with development potential, which have also been ‘reality checked’, and can be regarded as best practice
- Generated interest in both personal and business trips to the respective regions
- Several proposed activities that will be continued through, and match, the 2021 working programme of CoMMER
- Cornwall has strengthened access to European networks in the context of Brexit

Lessons learnt, that may apply to similar twinning projects undertaken in the future, have also been identified:

- A bottom-up approach is more effective than top-down
- Stakeholder input on what they would like to benefit from a twinning project is key to understand from the start. A wide as possible range of stakeholders should be consulted as early as possible
- Relationship building projects can require a significant amount of time and resources. Initiatives need to be given time to develop so that they can become ‘self-seeding’, developing links and creating new ones
- Early stages of planning should identify initiatives that offer the greatest potential and return on time and resources, that are realistically achievable
- Follow up events should be held shortly after the initial event maintain momentum

### **3. INTRODUCTION**

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This deliverable, D2.6, outlines the background, initiatives undertaken and conclusions from a twinning project between the European mining and metallurgy regions of Cornwall and Saxony. The twinning project is part of the MIREU projects Task 2.7, in turn, part of MIREU WP2.

In this chapter, the aim and objectives of the MIREU project, Task 2.7 and D2.6 are introduced. Task 2.7 partners’ contribution and relation to other MIREU activities are also included.

#### **3.1 MIREU project aim and objectives**

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The primary aims of the MIREU project are as follows:

- Establish a network of mining and metallurgy regions across Europe to ensure a sustained and sustainable supply of raw materials to Europe and enable the regions to
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share knowledge and experiences when facing challenges related to establishing and maintaining an extractive industry

- Facilitate exchange between all interested stakeholders in the regions, namely regulatory authorities, political and administrative bodies, development agencies, mining companies, NGOs and the public
- Develop a shared knowledge base, taking into account the region-specific geographic, economic features, cultural, societal and language diversity and historical developments. Assess what has hampered and what has aided the development of the extractive and metallurgical industries
- Develop Social Licence to Operate (SLO) Guidelines, Toolkit and Model specific to Europe
- Establish guidelines and recommendations for actions needed to foster a sustained and sustainable development of the extractive industries, developed in close co-operation with a range of selected regions from the European Union.

The overarching objective of MIREU is to establish coherent co-ordination and support mechanisms among several EU regions and identify and engage with other relevant EU regions. Aiming to raise industry competitiveness and public awareness of raw materials through long term cooperation by engaging Regions and their stakeholders and generating win-win situations for Regions by jointly improving framework conditions i.e. improvement at the

- a) administrative level in investment conditions and policymaking,
- b) industry level in joint research partnerships and maintaining and developing training and skilled workforce(s),
- c) civil society level to promote the “European Idea” and to engage early career professionals to discover European mining and metallurgy regions.

This contributes to the implementation of the European Innovation Partnership of Raw Materials, especially Strategic Implementation Plan to foster secure raw materials supply from domestic resources and maintain metallurgical know-how in Europe.

WP2, ‘Networking Regions’ is the WP focused on establishing the network of European mining and metallurgy regions. It makes use of the achievements and findings from other MIREU WPs focused on reviewing and analysing the framework conditions in the raw materials sector at a regional level. This comprises social and economic indicators, funding and smart specialisation to foster reindustrialisation and to increase the valorisation of the Regions raw materials wealth. It also includes mining resumption and revitalisation of mining and metallurgy heritage in terms of developing the tourism sector and/or to convert these sites into spaces for creative industries.

Furthermore, the networking appeals to societal demands through uniting the EU28 and bringing people together. The twinning task can be viewed as a high priority bottom-up approach which coincides with the agenda of the European Commission to give more consideration to Regions as the drivers in the implementation of European level agendas.

## **3.2 Task 2.6 and Cornwall & Saxony twinning project background**

Task 2.7, addresses the ‘development of coherent coordination and support mechanisms for communication tools and platforms for civil society’. This does not necessarily mean all measures described herein are considered to be of non-industrial and non-political character. The opposite is the case, considering peoples empowerment and especially the young generation’s view on a united Europe making use of freedom of travel and possessing better language skills than the older generation.

It is the nature of the MIREU project to provide best practices in networking and to identify exemplarily and appropriate partnerships which bear the potential for being replicated. One example of this is the Cornwall & Saxony twinning task, in turn, part of Task 2.7. The Cornwall & Saxony Twinning task aims to increase and stimulate the regions, which have numerous similarities and links, capacities to exchange experience, knowledge, best practice and ideas and are seeking innovation, co-operation and research links.

Similar projects could be undertaken in regions in societal and industrial transition but also regions that determine EC level agendas, keeping the raw materials sector in EC legislation. In this regard twinning the Regions is not only addressing European partnering but also serves to combine forces to raise the Regions voice in European politics. In this sense, the idea of networking can be thought of as akin to an overall strategy using different levels of ‘strategic twinning’. The twinning level can start by partnerships of individual persons, and move up to organisations such as clusters and associations. This type of collaboration is increasingly being undertaken is the partnering of cities, e.g. Bristol, UK and New Orleans, USA (musical heritage) and Annecy, France and Nerima, Japan (animation) or even Coventry, UK and Dresden, Saxony overcoming WWII estrangements.

### 3.3 Contributions of partners

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Geokompetenzzentrum Freiberg (GKZ), as a triple helix network of industry, research, administration, and University of Exeter (UNEXE) are the representatives of Saxony and Cornwall respectively and are the main two partners involved with Task 2.7, GKZ is the leader of WP2 with UNEXE the leader for Task 2.7. Cornwall County Council is also a partner on the MIREU project and has also been involved in Task 2.7 related work. GTK, project coordinators, and ERRIN, leader of WP8 (Communication & Dissemination), have also contributed to Task 2.7 by helping organise and promote events and initiatives.

### 3.4 Relation to MIREU, and other, activities

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Task 2.7 and twinning task work has been partly built upon and utilised both previous and ongoing work in WP2 and other MIREU WP’s. It will not only contribute to the overarching aim of WP2 but also contribute to the future activities of the institutionalisation of the ‘Network’ in form of permanent Brussels based panel, that Council of Mining and Metallurgy European Regions (CoMMER). CoMMER will be hosted by [ERRIN](#), European Regions Research and Innovation Network.

The twinning task also has significance regarding other EU funded projects that involve/have involved Saxony & Cornwall ([FAME](#), [REMIX](#) and [GREENPEG](#)), that specifically addressed and are addressing policy-making and joint research partnerships up to commodity alliances.

## 4. INTRODUCTION TO CORNWALL & SAXONY

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### 4.1 Introduction to Cornwall

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Cornwall is a region in South West England, UK bordered to the north and west by the Celtic Sea (part of the Atlantic Ocean), to the south by the English Channel, and to the east by the county of Devon (Fig. 4.1). Cornwall covers an area of 3,559km<sup>2</sup>, with the Isles of Scilly covering a further 16.37km<sup>2</sup>. The region has about 561,300 inhabitants and the administrative centre of Cornwall, and its only city, Truro is home to ~18,800 people.

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Economically, Cornwall relies on agriculture and tourism as the two main sectors. A 1/3rd of Cornwall is designated as an Area of Outstanding Natural Beauty and the natural, historic and built environment attracts visitors who spend >£1.2 billion a year, contributing ~24% of Cornwall's GDP and supporting 1 in 5 jobs.

Cornwall provided one-third of the World's copper in the early nineteenth century and had over 1500 separate mining ventures, producing various types of ore, between 1845 and 1913. Its mining heritage is recognised in the form of the Cornwall and West Devon Mining Landscape UNESCO World Heritage site.

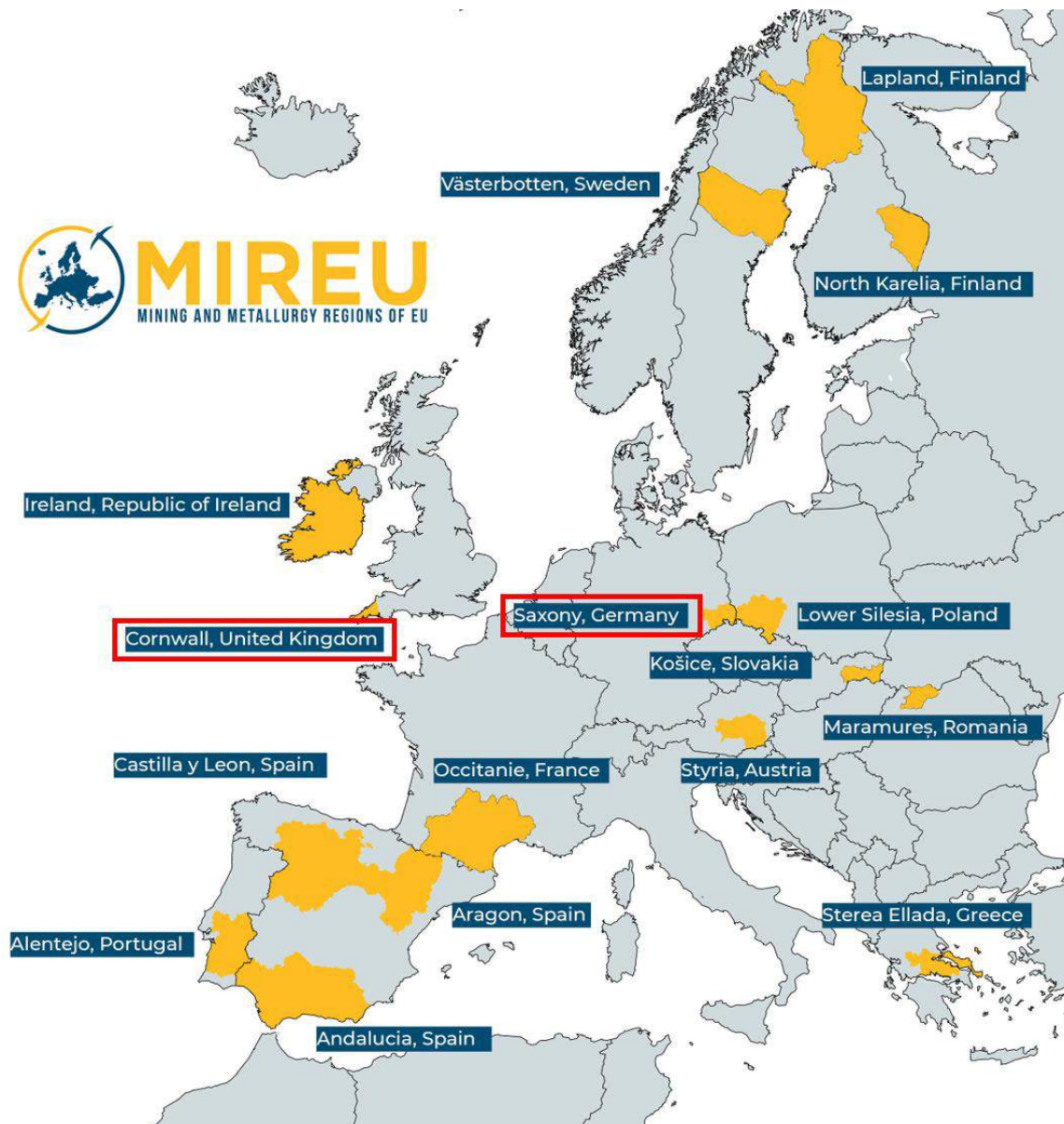


Fig 4.1: Map of Europe with MIREU regions highlighted in yellow and labelled. Cornwall and Saxony are highlighted in red

Cornwall was a centre of world-changing engineering and innovation during its peak in the 18<sup>th</sup> & 19<sup>th</sup> century. Cornish engineers were world leaders in deep mining and exported that expertise around the globe, including South Africa, Ireland, Australia, Mexico, North America and India among others. One of the most famous engineers is Richard Trevithick who is credited with producing the world's first successful steam engine. While the best-known developments in mining technology are related to steam engines, engineers from Devon and Cornwall were also responsible for numerous improvements to boilers, mine pitwork, pumps, hydraulics, surveying equipment and ore-dressing.

Cornwall has a wealth of mineral resources, many of which have strategic regional and/or national significance and are safeguarded from non-mineral developments. Cornwall is a rich metallogenic region and there remains potential for the discovery of new metalliferous deposits and for new technologies to augment the production from lower-grade deposits and secondary resources from mining waste.

Imerys Minerals Ltd is a world-class china clay (kaolin) operation and includes the process and product research laboratories at Par Moor Centre near St Austell. The other active mineral sites in Cornwall are mainly stone quarries, primarily serving the domestic market.

There is an aluminium smelter that recycles car parts near Liskeard in Cornwall. Tin is smelted on a small scale for jewellery manufacture. There are also small (micro and SME) businesses that offer hydrometallurgy services but these tend to be pilot plant scale or specialise in research and innovation for the application of unique solutions to ore beneficiation.

There are numerous mining value and supply chain-related businesses and organisations, which offer research and development, training, technical, analytical, contracting and professional consultancy service and are brought together in the Cornwall Mining Alliance (CMA) cluster of over 100 organisations. The UK's only multidisciplinary mining school, Camborne School of Mines, part of the University of Exeter (UNEXE) is in the region and interacts with many local businesses. There are also other UoE departments and the University of Plymouth (Devon) with active research, innovation and training activities relevant to mining and metallurgy.

Currently, the only producer of tin in Cornwall is Blue Hills Tin Streams, a small-scale operation that uses traditional methods to process tin they extract from beaches and waste dumps. Cornish Metals (previously Strongbow Exploration) purchased the South Crofty Mine in 2016. South Crofty was the last Cornish tin mine to close in 1998. Cornish Metals has a mining licence that is valid until 2071 and are currently in the processes of dewatering the mine and expanding the resource, which also includes copper and zinc, through drilling.

There is also an active tin-tungsten exploration project in North Cornwall. The Redmoor Tin-Tungsten Project has been owned by New Age Exploration since 2012 and through their subsidiary, Cornwall Resource Limited owns a 15-year exploration licence. Since 2016 Strategic Minerals plc (AIM listed) have been equal shareholders in Cornwall Resource Limited.

Since 2019 Tungsten West have been working to reopen the Hemerdon Mine just over the border in Devon. The mine is one of the largest Tungsten reserves in the world and was previously operated by Wolf Minerals from 2015 – 2018.

Lithium has never been commercially produced in Cornwall. However, lithium occurs in the region and exploration work for lithium brine extraction (Cornish Lithium) and hard rock extraction (Cornish Lithium and British Lithium) is underway and have received government funding.

Kaolin deposits in Cornwall are significant. Currently, china clay is extracted in the St Austell area by Imerys Minerals, which produces ~1 million tonnes of kaolin per year, employs ~900

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people and operates in >20 active quarry and industrial facilities. It is the fourth-largest private-sector employer in Cornwall.

Igneous rock, mainly granite but also dolerite and gabbro, and some sandstones are worked for primary aggregates in Cornwall. Secondary sand and gravel are produced as a by-product of china clay processing and are mainly used for concrete production. Granite, slate and micro-granites have also been extensively quarried as building stone and comprise the local vernacular of the built environment in Cornwall.

## 4.2 Introduction to Saxony

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Saxony is a federal state of Germany, bordering the federal states of Brandenburg, Saxony Anhalt, Thuringia, and Bavaria, as well as the countries of Poland and the Czechia (Fig. 4.1). The capital of Saxony is Dresden and the largest city in the state is Leipzig. Saxony is the 10th-largest of Germany's 16 states, with an area of 18,450 square kilometres, and the sixth-most populous, with a population of about 4 million people (eight times the population of Cornwall).

Today, the automobile industry, machinery and semiconductor-related production and services contribute to the economic development of the region. More than 70% of production requires raw materials imports and feeds from its own sources (primary and secondary). Only the industrial minerals resources in Saxony produce enough to satisfy consumption. Nevertheless, with high innovative pyro- and hydrometallurgical capacities in almost all base metals including important carrier metals for recycling and CE, Saxony is a hub of the metallurgy industry in Europe. It is one of the birthplaces of industrialization in Continental Europe and is one of the mostly highly industrialized regions in Europe. Saxony hold a leadership status in RIS3 among all European Regions with a strong focus on mechanical engineering, electrical industry and automotive industry with a high export rate. And it is an important research region within the Federal Republic with a focus on microelectronics, nanotechnologies, photonics, biotechnology, and advanced materials and advanced manufacturing technologies.

Saxony is a mining and metallurgy state and both enjoy – traditionally - a solid public reputation in the region. The region is rich in raw materials including conventional energy materials such as lignite and uranium and materials for the energy transition, such as lithium, indium, cobalt. At present Saxony is one of the principal lignite mining regions in Europe, however subject to regional transformation to terminate lignite mining by 2038. Nevertheless, lignite extraction will be of importance to feed the chemical industry since lignite is a major base material for many chemicals and interim products as well as for the replacement of crude oil. There is a trend towards metal mining resumption, though mineral occurrences tend to be low grade or deep-seated ore bodies. Among the latest mining developments by private business projects on mine resumption and exploration are focusing on lithium, tin, zinc, tungsten, fluorspar, copper and by-products, such as indium.

At present most mining income is generated by lignite mining (for generating electricity and the chemical industry), aggregate and industrial minerals mining such as kaolinite, dolomite, fluorspar. Saxony is not only a region with a long historical mining record but also hosted several ground breaking inventions in mining and metallurgy. As a consequence, for example, the first European china was invented in 1710 in Saxony and the first gas lanterns in continental Europe illuminated the City of Freiberg.

Concerning ore and spar mineralisation, most of the shallow deposits have been mined over a long mining period stretching from the Middle Ages to 1990 with a strong focus on base metals and after 1945 on uranium which made Saxony until 1990, the third-largest uranium producer

in the world. Most of these deposits are now depleted in their upper settings and have become economically unviable. Investigations to valorise the substantial occurrences of close to surface low-grade ore and deep-seated potentially high-grade ore are now subject to R&D and extensive data exploration as well as investigations to improve processing and smelting. These investigations studies are focusing on commodities such as indium, rare earths, tungsten, tin, fluorspar, lithium, gallium, molybdenum, copper and silver.

Saxony was the first Region in Europe to publish its own Raw Materials Strategy. The Strategy is continuously updated and is assigned its own multi-million budget.

As one of the measures from the Saxon Raw Materials Strategy the State Government has set up a programme to archive and update historical data of exploration and mining activities with a focus on data acquired during the 20<sup>th</sup> century in the so-called ROHSA project, initiated by GKZ. The target is to save, digitize and disseminate information making use of the old experts who were involved in the primary data acquisition. The overall aim of ROHSA3 is to attract more investments in mining by reducing surveying and exploration costs.

Saxony is still one of the true metallurgy regions in the EU. Pyro- and hydrometallurgical works are historically closely associated with metal mining. Today, the smelters are entirely operated with scrap, even though backward integration is a raising subject of concern in scrap supply. The main smelters in the Saxony region are Nickelhütte Aue GmbH (Co, Cu, Ni), Befesa (Zn), Muldenhütten (Pb), and Feinhütte Halsbrücke GmbH (Sn), which is one out of four remaining tin smelters in Europe.

Most of the ore and spar deposits in Saxony are located in the Erzgebirge, Vogtland and Northern Saxony. Large occurrences of copper shale have been explored at Schleife and Weisswasser in Lusatia (North Sudeten Basin), REE occurrences north of Leipzig (Delitzsch Granodiorite Massif) and in the central Saxon Hills (Granulitgebirge). Due to the increase in global market prices the exploration of ore and spar, in particular tin, tungsten, zinc, lithium, fluorite and barite, including substantial critical raw material by-products, re-started in 2005 and led to the re-opening of a fluorspar mine in 2015. Saxore Bergbau GmbH holds a mining license according to §8 BBergG for Rittersgrün and Gottesberg II for several commodities.

Another mining project, focusing on lithium in the cross-border region to the Czech Republic, the project is already at the feasibility study phase and permitting procedures started at the end of 2017.

### **4.3 Summary of similarities and links between Saxony & Cornwall**

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Cornwall & Saxony both have extensive mining heritage and a similar mining history. They are both predominantly rural regions that became heavily industrialised in the 19 – 20<sup>th</sup> century, especially concerning mining and metallurgy. Both regions grew to be globally significant producers and exporters in the 20<sup>th</sup> century, Cornwall with copper and tin and Saxony with uranium. Increasing foreign competition and the reunification of Germany and economic re-set led to the decline of Cornwall and Saxony's mining and metallurgy industries in the latter part of the 20<sup>th</sup> century respectively. Since then the focus has been on clean up and revitalisation including business advancement of consultancies and valorisation of mining heritage. The climax was the application and approval of the Cornwall & West Devon Mining Landscape to become a UNESCO World Heritage Site being inscribed in 2006 and the Erzgebirge/Krušnohoří Mining Landscape following 13 years later.

Today both regions are regarded as national hotspots for innovation within the value chain of the raw materials sector although active mining has been significantly reduced. However, the recent drive in Europe for a sustainable domestic supply of raw materials needed for the green

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transition has led to both regions being re-evaluated for their raw material resources. The resource base of both regions makes them interesting for future investments, especially in the context of secure supply schemes and implementation of major European level agendas, like the latest European Raw Material Alliance or the EIP RM.

Due to both regions forming part of the European Variscides (Fig. 4.2) their geological settings are comparable (Fig. 4.3 & 4.4) with extensive granite, and associated mineralisation, domains.

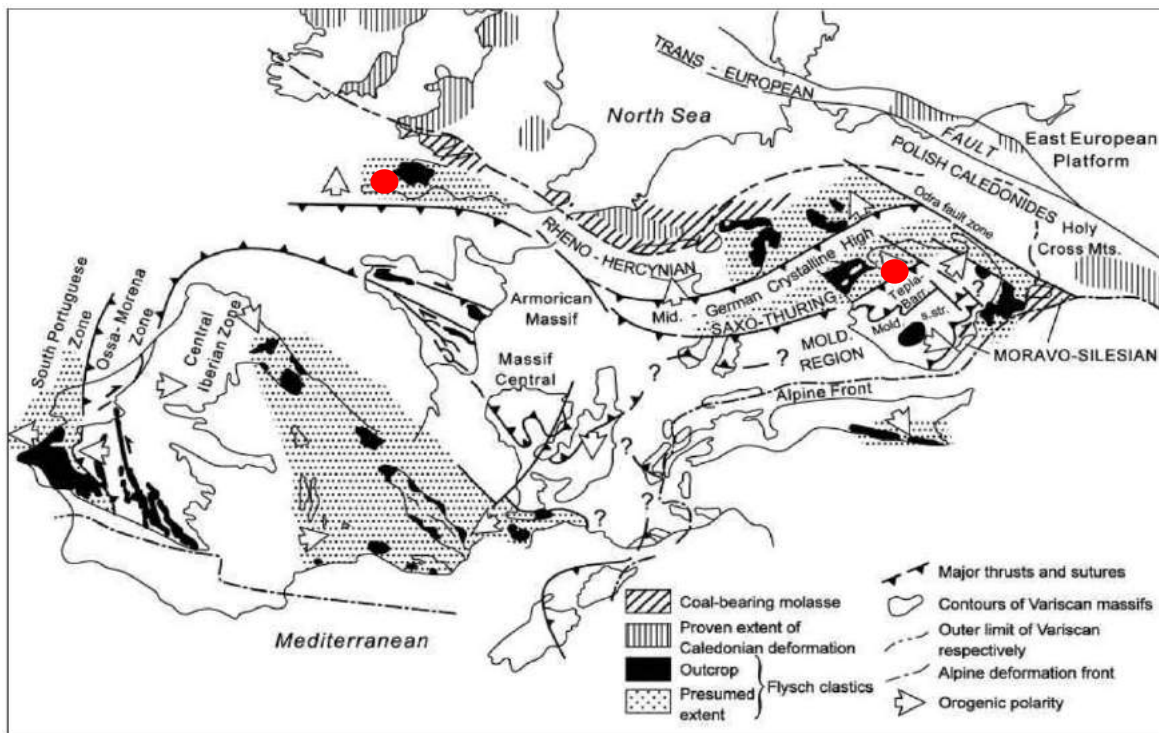


Figure 4.2: Map of western Europe showing the tectonic subdivision of the European Variscides. The location of Cornwall & Saxony, both within the footwall of major thrusts are highlighted in red. Adapted from Franke, 2007.

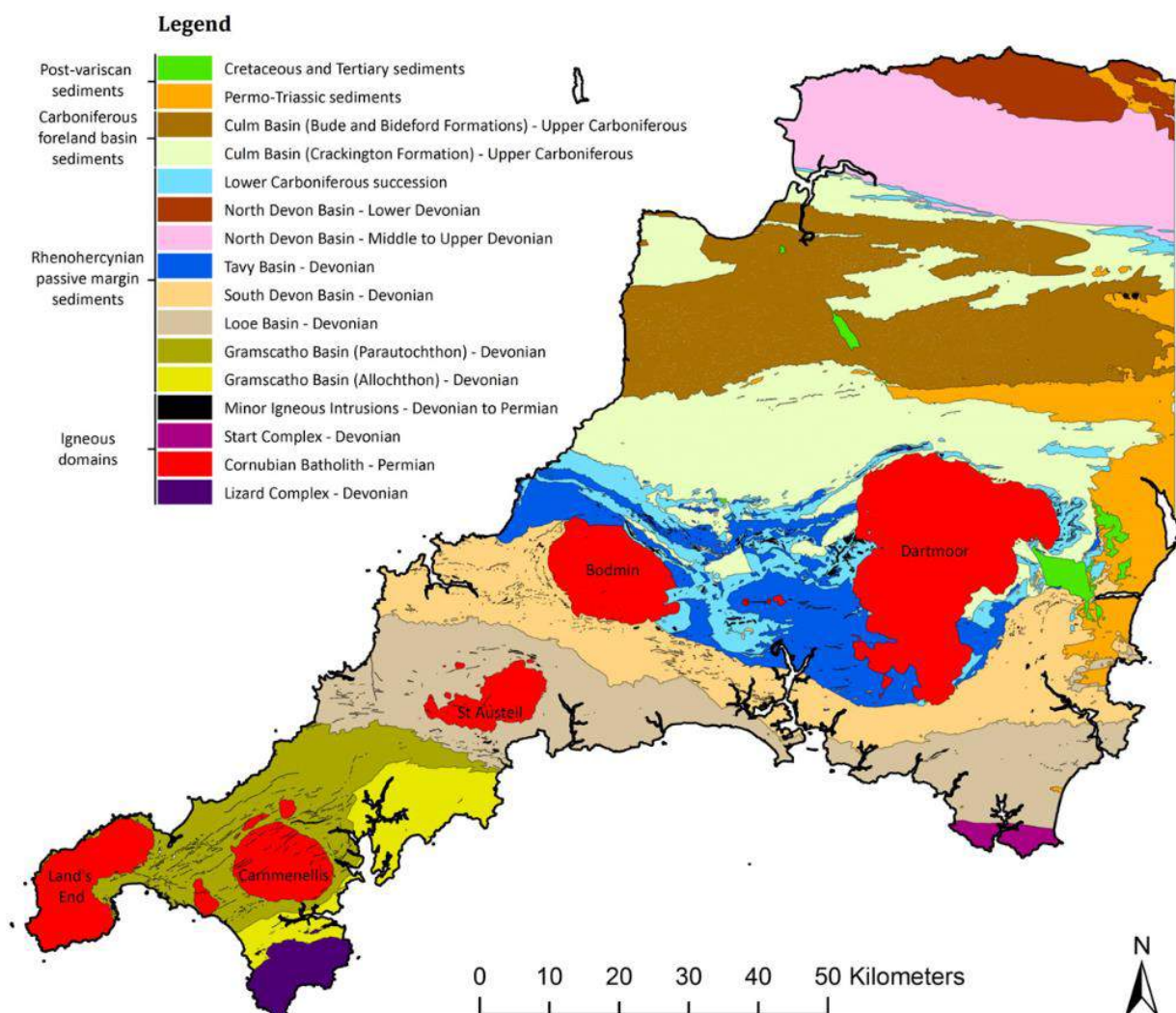


Figure 4.3: Regional scale geological overview map of Cornwall & Devon showing the extensive Variscan orogeny related granite domains which mineral and geothermal resources are predominantly associated with. Taken from Kirkwood et al., 2016.

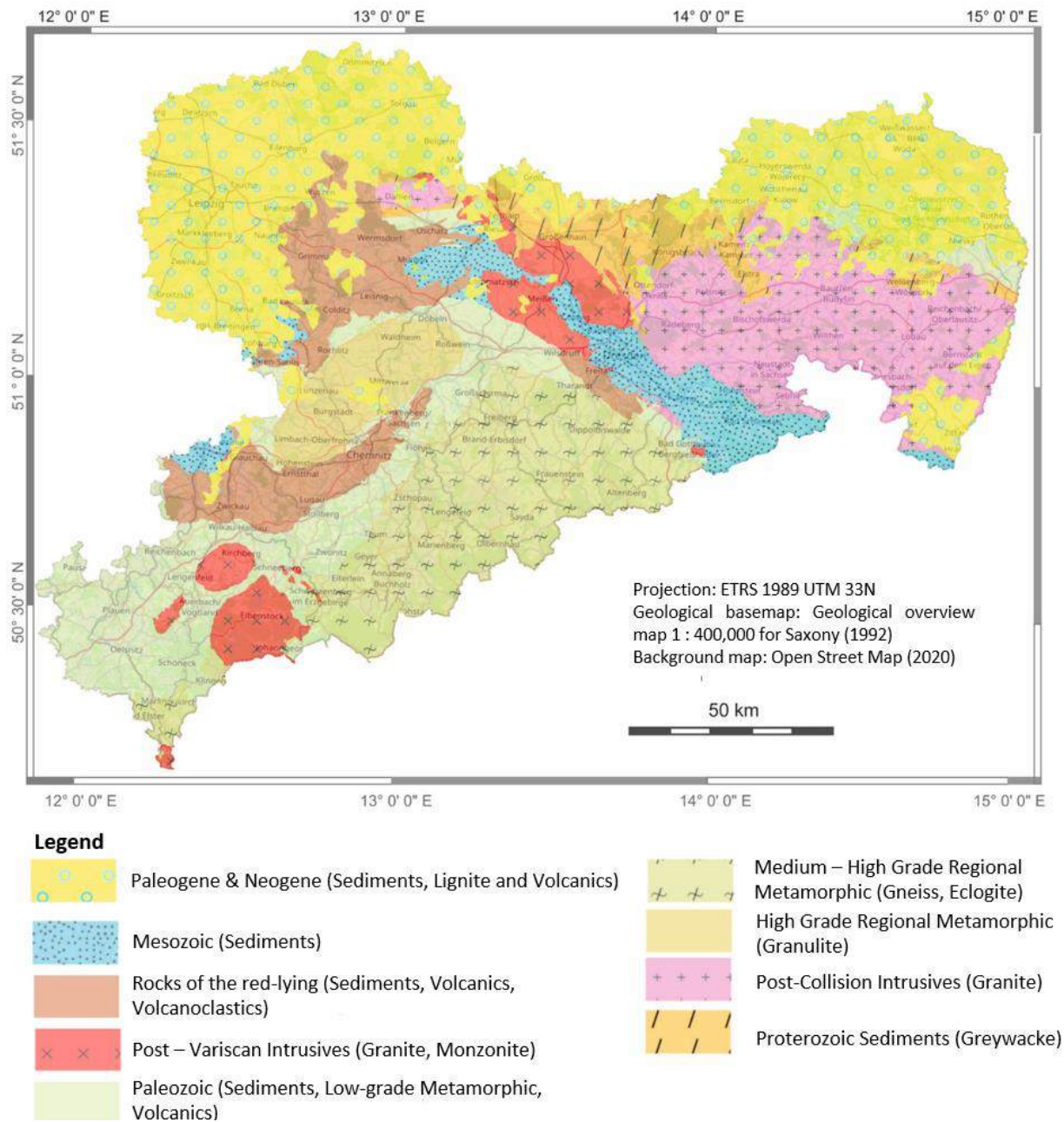


Figure 4.4: Regional scale geological overview map of Saxony, also showing extensive Variscan orogeny related granite domains. Adapted from Saxon State Office for Environment, Agriculture and Geology, 2020.

Due to their similar geological setting the regions have comparable geo-resources, and therefore similar projects are ongoing in each region (Fig. 4.5). As well as the similarity of these exploration projects there are also direct connections between them with professional links between some of the companies, for example British Lithium (Cornwall) visiting Deutsche Lithium’s (Saxony) Zinnwald project

Table 4.1: Comparison of Cornwall & Saxony geo-resources taken from MIREU Networking Matrix. Significant reserves (not reporting code related) in common have translated into the projects highlighted in Figure 4.2

Metallic Minerals	Cu	F	In	Li	Mg	Sn	U	W	Zn
Cornwall (UK)									
Saxony (DE)									

Active mine: Main commodity	Active mine: By-product	Significant reserve	Significant reserve: By-product
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Figure 4.5: Cornwall & Saxony Projects: Projects in both Cornwall (left) and Saxony (right) grouped by commodity showing the similarity of the renewed interest in the regions as providers of raw materials for the green transition.

Both regions are also prospective for deep geothermal, two deep geothermal projects are currently underway in Cornwall and shallow geothermal also being explored. In Saxony a deep geothermal project reached the drilling phase before being halted and it is hoped there will be future projects.



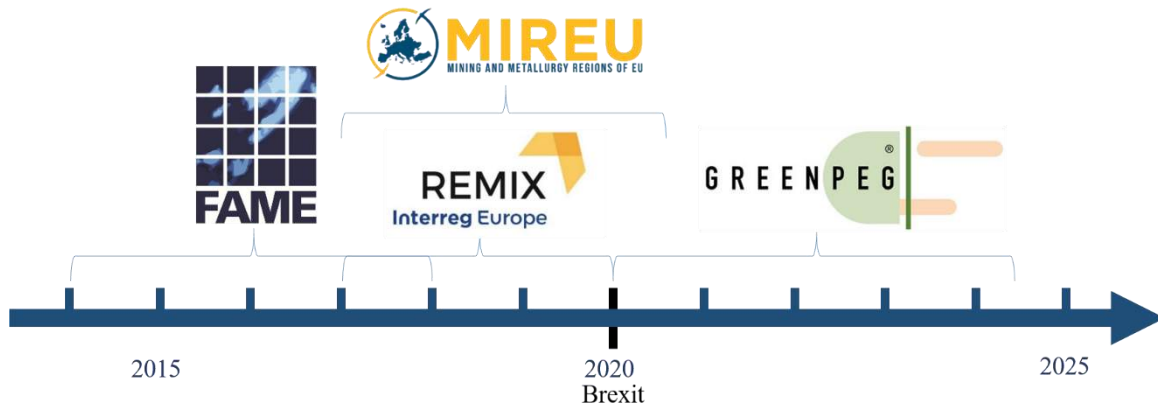


Figure 4.6: Timeline of EU funded projects that Saxony and Cornwall have collaborated on through GKZ and UNEXE.

Both regions are also home to world-class mining and metallurgy research and education institutions, Cornwall with the Camborne School of Mines – University of Exeter and Saxony with Freiberg University of Mining and Technology (Technische Universität Bergakademie Freiberg) and Helmholtz Institute Freiberg for Resource Technology (HIF/HZDR) as well as many Fraunhofer Institutions. UNEXE and GKZ have collaborated on several EU funded research projects (Fig. 4.6). UNEXE and TU Freiberg have also collaborated on various research projects.

Furthermore, both regions contain industry-led clusters that support stakeholders and policymaking, in Cornwall, this is in the form of the CMA (115 members) and Saxony in the form of GKZ’s members (160 members). The clusters contain specialists across the entire raw materials value chain and associated sectors.

There are also civil society links between the regions, Cornwall is the filming location of the Rosamunde Pilcher TV series. One of Germany’s favourite and long-running soap operas which has several million viewers in Germany. It is estimated the series is responsible for ~200,000 German visitors to Cornwall each year. Furthermore, the Nebra Skydisc, a Bronze Age artefact found in modern-day Saxony which contains gold mined in Cornwall, will be on display at the British Museum from July – October 2021.

## 5. ACTIVITIES UNDERTAKEN AS PART OF THE EFFORTS TO TWIN REGIONS WITH STRONG MINING HERITAGE

In this chapter, the work and initiatives that were undertaken and in some cases ongoing as part of Task 2.7 are covered. Figure 5.1 and Table 5.1 show these initiatives, grouped into the 4 areas of Heritage, Industry, Research and Society and the timeline of them being concluded. More detail about each initiative is then given below, including those that were explored but not significantly developed.

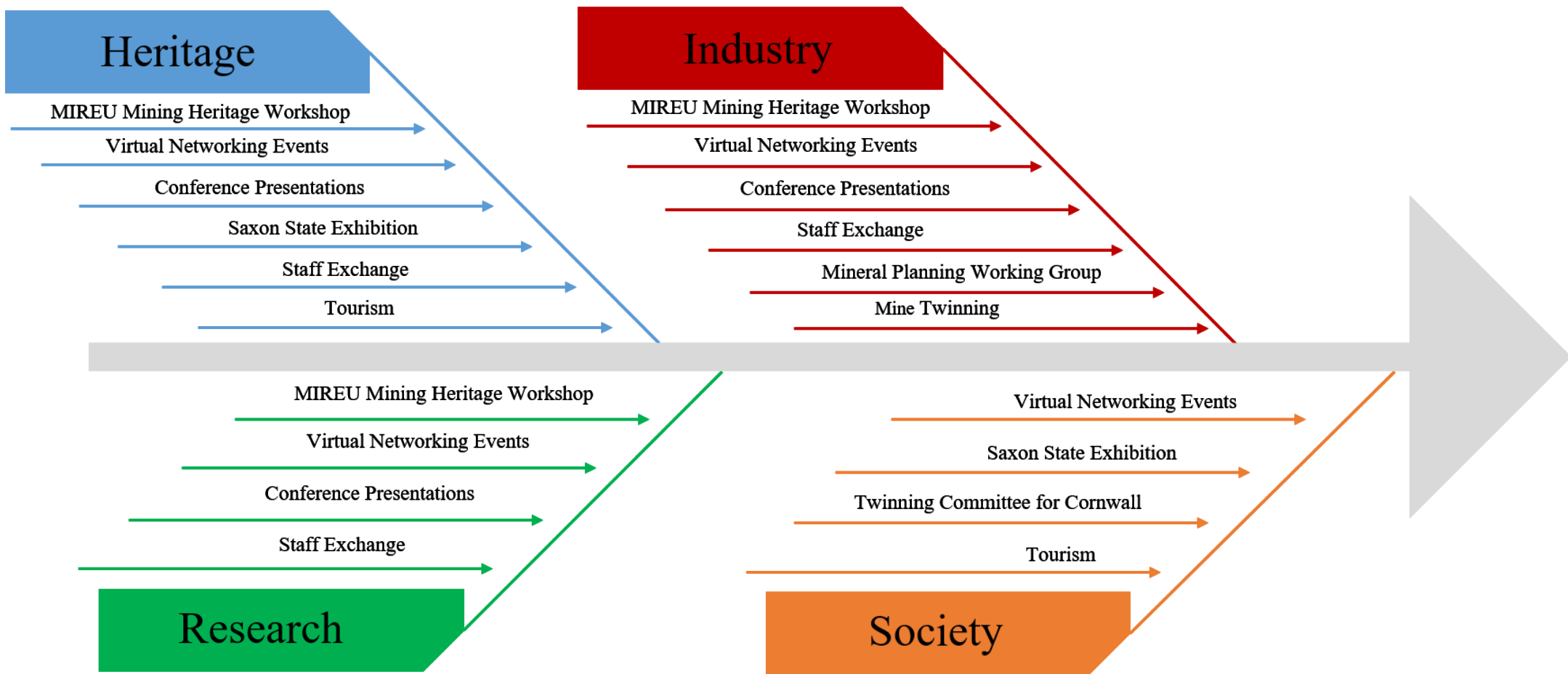


Figure 5.1: Fishbone diagram of the initiatives explored and undertaken as part of the twinning project/Task 2.7 grouped into the 4 areas of Heritage, Industry, Research and Society. More detail about each initiative is then given below, including those that were explored but not significantly developed.

Table 5.1: Initiatives undertaken, the twinning area they correspond to and the timeline for the initiatives being concluded

Initiatives		Twinning Committee for Cornwall	Mine twinning	Tourism	Conference presentations	MIREU Mining Heritage Workshop	Staff exchange	Virtual networking (1 <sup>st</sup> round)	Saxon State Exhibition	Virtual networking (2 <sup>nd</sup> round)	Mineral planning working group
Twinning Areas	Heritage										
	Industry										
	Research										
	Society										
Time line		Nov. 2019	End of 2019	End of 2019	Jan. 2020	Apr. 2020	May 2020	Sept. – Oct. 2020	Nov. 2020	End of 2020	End of 2020

## 5.1 MIREU Mining Heritage Workshop

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The MIREU Mining Heritage Workshop was planned to be held at UNEXE's Penryn campus in Cornwall from the 21<sup>st</sup> – 24<sup>th</sup> April 2020 and was co-organised between GKZ and UNEXE. The programme for the workshop is given in Appendix A. Due to the COVID-19 pandemic, the workshop was cancelled.

The workshop, which >40 people had registered for (Appendix B) before registration closed prematurely, would have brought together stakeholders from both regions and an excellent networking opportunity for all stakeholders, not just those interest in mining heritage. Two sessions dedicated to the twinning work between Cornwall & Saxony were planned,

- 1) an after workshop evening meal and networking event with the CMA and
- 2) a 'Cornwall & Saxony Twinning Session' focused on opportunities related to the CMA and GKZ Corporate partners, best practice exchange and an agenda for a trip to Saxony.

Delegates from mining offices, UNESCO world heritage sites, mineral planning authorities, companies and research institutions planned to attend and discuss potential collaboration opportunities.

Due to the COVID-19 pandemic, the workshop was originally postponed, a potential alternative was running a shortened programme as an attachment to a UNESCO Mining Heritage Conference scheduled in Cornwall in September, but this conference, in turn, was cancelled. The decision was then taken to cancel the MIREU Mining Heritage Workshop, alternative actions and events (see 5.2) were then planned to reduce the impact of the event's cancellation on the twinning task.

## 5.2 Virtual networking events

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To reduce the impact of the cancellation of the MIREU Mining Heritage Workshop two virtual networking events were organised. The aim was to network stakeholders from each region that would have attended the heritage workshop.

The first was a talk co-presented by UNEXE & GKZ to the [Royal Geological Society of Cornwall](#) (RGSC) on the 16<sup>th</sup> September 2020. The RGSC was founded in 1814 to promote the study of the geology of Cornwall and membership is composed of a mixture of professionals, enthusiasts, students and retirees. The talk focused on the links between Cornwall & Saxony, the twinning work being undertaken and opportunities. As a result of the talk, RGSC has expressed interest in organising a society trip to Saxony when possible.

Secondly on the 2<sup>nd</sup> of October 2020 two presentations were given by UNEXE and GKZ respectively at a [Future Focus](#) Business Breakfast. The business breakfasts are a series of talks designed to strengthen the links and collaboration opportunities between the mining industry, and related sectors, and research in Cornwall. A list of the organisations that attended is given in Appendix C.

Following the talks a poll (Appendix D) was opened to attendees to gauge interest in the twinning task and networking opportunities. Results from the poll are displayed in Figure 5.2, and fully in Appendix E. The poll received responses from 18 attendees covering a range of stakeholders, but mostly those involved in industry. 75% of respondees were from Cornwall as they are the target audience of this event and had been engaged beforehand, and 50% represented SMEs or microbusinesses. The majority of people (34.2%) expressed interest in the industry aspect of the twinning task, with research and regulation & planning about equal on 26.3% and 21.1% respectively. Other the ways people wished to engage with the twinning task

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an online networking event (42.9%) and an in-person visit to Saxony/Cornwall (28.6%) were the most popular.

According to the poll result, UNEXE and GKZ will organise a follow-up online event by the end of 2020 to investigate which business and research fields are of the participants' main interest and the possibility of match-making. Furthermore, as the Cornish and Devon regional authorities had expressed their interests in discussing mining regulation and planning with the Saxon mining authority, an independent agenda will be prepared for this session as a preparation of the mineral planning authorities working group.

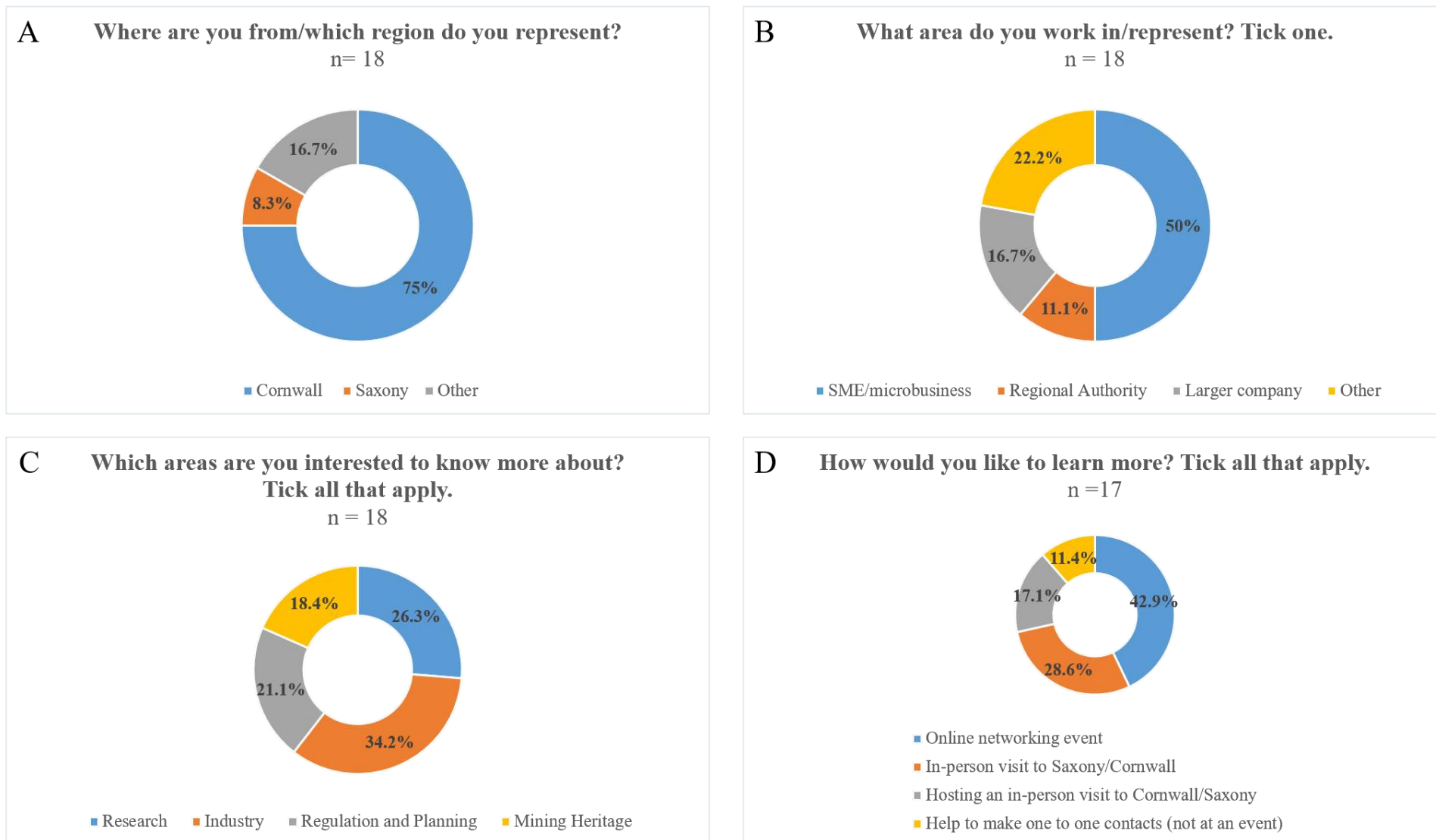


Figure 5.2: A series of pie charts displaying the results, where it was possible to conduct quantitative analysis, of the poll conducted at the end of the Future Focus Business Breakfast presentations. N = the number of responses.

### 5.3 Conference presentations

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Multiple conference presentations by UNEXE on MIREU, featuring the twinning work, were planned for 2020, The Ussher Society Annual Conference (Jan. 2020), Mineral Engineering International Sustainable Minerals (Jun. 2020), and Extractive Industry Geology (Jul. 2020). Due to the COVID-19 pandemic, only the Ussher Society Annual Conference went ahead, with the presentation raising awareness of the MIREU and twinning task but also the links between Cornwall & Saxony and associated opportunities.

### 5.4 Saxon State Exhibition of Industry

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The Saxon State Exhibition features the strong role of industrialisation that made Saxony one of the leading European Regions until 1945. It is titled “BOOM – 500 years of industrialisation in Saxony” and refers to the raw materials resource base, its valorisation, generation of know-how and foundation of the industry from manufacturing up to the global engagement. It is performed with a network of five museums across Saxony, each one dedicated to a certain industrial driver, such as automotive, coal, spinning etc. One of them, the Chemnitz Industry Museum contributes under the title “Engines and Engineering” and integrated within the permanent exhibition a raw materials exhibition that aims at raising raw material awareness and combining the meaning of raw materials in the past with that of the future.

This exhibition within the exhibition will feature an exhibition between UNEXE and GKZ. It is planned with a series of roll-up posters detailing the shared history and links between the regions and the need for raw materials for modern society and the green transition. The Cornwall and West Devon Mining Landscape UNESCO WHS agreed to be a co-producer of the exhibition and aided the development of the posters. The exhibition was originally planned for April 2020 but has been delayed to November 2020. Possibilities for the exhibition to also be displayed in Cornwall are being explored.

### 5.5 Twinning Committee for Cornwall

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In November 2019 UNEXE gave a presentation to the Twinning Committee for Cornwall (a voluntary organisation who support communities who have existing twin towns and help those who might like to twin in the future) at their Annual General Meeting about the Cornwall & Saxony twinning task. The Twinning Committee for Cornwall expressed interest in being involved in twinning villages/towns in Saxony and Cornwall but currently, it was decided not to take this forward due to the time and resources needed.

### 5.6 Staff exchange

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To further the links between the regions through GKZ and UNEXE a 2-week staff exchange was planned for 16<sup>th</sup> – 30<sup>th</sup> May 2020, with a UNEXE member of staff visiting GKZ. The aim was to further links between the institutions but also identify potential areas/sectors for the twinning project to focus on and develop going forward. Due to the COVID-19 pandemic and restricted

travel of UNEXE employees the exchange has yet to happen but may become possible if the MIREU project is extended to April 2021 and travel conditions improve.

## 5.7 Mineral planning authorities working group

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Following the Future Focus CSM Business Breakfast event in October 2020, the Cornwall and Devon mineral planning and permissions authorities expressed an interest in forming a working group with their counterparts in Saxony to exchange best practice and ideas. A preparatory online meeting is now being organised between UNEXE and GKZ.

## 5.8 Other initiatives explored

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Other initiatives were also explored but not significantly developed after initial investigations, during the MIREU project lifetime. However, it may be possible to resume the initiatives in the future when there are time and resources available.

### *Mine Twinning*

Was investigated as part of Task 2.7 & 4.2, and is prospective between Cornwall & Saxony due to the similar projects (Fig. 4.2), some of which have already collaborated. However, after initiating WP4 and Task 4.2 it became clear there was a) already existing connections between projects in Saxony and Cornwall, b) not enough budget to bring people together and establish a physical Twin Mines Program, c) only a concept could be drafted. As a result of this it was decided the twinning task would be better predominantly focusing on other initiatives.

### *Tourism*

Both regions are considered tourism regions in their respective countries and there are strong existing tourism links based around Rosamunde Pilcher and heritage but also the attractiveness of both regions. Concerning Saxony and Cornwall, the joint history and character of the mining past now covered by the UNESCO world heritage site title increases the interest in the others region. As such developing links between the two regions mining heritage tourism industries were investigated with Visit Cornwall and a task force situated at the IWTG of TU Freiberg, led by Professor Albrecht showing interest. However, due to the COVID-19 pandemic and impacts on tourism, it was chosen not to develop this further.

# 6. CONCLUSIONS, RECOMMENDATIONS AND FURTHER WORK

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## 6.1 Summary of achievements and bottlenecks identified

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Achieved at the time of writing:

- Furthered awareness, interest in collaboration & opportunities and future relationships between the regions across the areas of heritage, industry, research and society
  - Organised numerous, and varied, activities with development potential, which have also been 'reality checked', and can be regarded as best practise
  - Strengthened links and relationship between Cornwall & Saxony which has generated interest in personal meetings in each other Regions, e.g. the Royal Geological Society of Cornwall is exploring the potential for a trip to Saxony following presentation from UNEXE & GKZ and attendees of the Future Focus Business Breakfast expressed interest in business trips to the respective regions
  - Minimised as much as possible the impact of the COVID-19 pandemic on the twinning project
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- Success in a first of its kind mining regions of Europe twinning project targeting every stakeholder level
- Several proposed activities that will be continued through, and match, the 2021 working programme of CoMMER
- The UK achieves access to European networks for deepening relationships to continental Europe after Brexit
- Achievements are mostly based on formats bringing together people sharing the European Idea

To be completed/nearing completion before the end of the project:

- Follow-up networking event from the Future Focus Business Breakfast between Cornwall & Saxony stakeholders
- Establishment of a joint working group on ‘Mineral Planning and Permissions’ between the two regions authorities to exchange ideas and best practice
- A joint exhibition between GKZ, UNEXE and the Cornwall and West Devon Mining Landscape UNESCO WHS detailing the shared history and links between the regions and the need for raw materials for modern society with a potential follow-up exhibition in Cornwall.

#### **Bottlenecks:**

- The language barrier, especially in civil society
- Brexit and access to add-on European financial means
- Public perception problems with mining and related sectors & organisations
- COVID-19 related travel restrictions and associated planning difficulties
- The shift of priorities in administrations agenda-setting
- Prioritisation of commercial activities by industrial stakeholders
- Lack of permanent facilitators to coach and to further develop a partnership as a result of the preceding bottlenecks

#### **Future opportunities**

- Add-on activities and projects with participation of Saxony and Cornwall (GREENPEG, CoMMER, Vitalisation of World Heritage )
- Internationalisation of business and Business-to-Business services
- Setting up of task forces within GKZ and CMA
- Engagement of UK based investor groups in Saxony (MedGold, Anglo-Saxony)
- UK based Saxon experts as ‘door openers’ in the UK and vice versa
- Academic exchange programmes and trend of young German careers to learn English and profile their professional career by engagements in the UK
- Historical bindings between Britain and Germany

## **6.2 Future works built on achievements**

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CoMMER will form the platform for the relationship between Cornwall & Saxony to continue to be developed, furthering the work started as part of Task 2.7 across the areas of heritage, industry, research and society in measures according to WP2 Network Matrix (eg Commodity Partnerships, Revitalisation of Mining and Metallurgy Heritage, Investor relationship, Raw Materials Cadastre). This will help support many of the initiatives set-up, such as future in-person stakeholder trips to the regions.

The twinning project, as the first of its kind in Europe, also acts as an example and guide to other regions that may wish to undertake a similar relationship-building project.

### 6.3 Other conclusions and lessons learnt

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- A bottom-up approach is more likely to be effective than a top-down approach
- Stakeholder input on what they would like to benefit from a twinning project is key to understand from the start. A wide as possible range of stakeholders should be consulted as early as possible
- Relationship-building projects can require a significant amount of time and resources. Initiatives need to be given time to develop so that they can become ‘self-seeding’, developing links and creating new ones. The twinning project between Saxony & Cornwall started in earnest in September 2019, making time a pressure in some cases
- Further to the point above, the early stages of planning should identify initiatives that offer the greatest potential and return on time and resources and are realistically achievable
- Follow up events should be held shortly after the initial event to maintain the momentum gained.

## 7. REFERENCES

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## 8. APPENDICES

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### 8.1 Appendix A: MIREU Mining Heritage Workshop Programme

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#### **MIREU Mining Heritage Workshop**

**21<sup>st</sup> – 24<sup>th</sup> April 2020**

**Falmouth, Cornwall**

[University of Exeter Penryn Campus, Penryn, Cornwall, TR10 9FE](http://www.exeter.ac.uk/penryn)

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## Tuesday 21<sup>st</sup> April, Mining Heritage

<b>8:00 – 8:45</b>	<b>Registration</b>
<b>9:00 – 9:10</b>	<b>Welcome and Opening Remarks</b>
<b>9:10 – 9:30</b>	<b>Mining Heritage &amp; UNESCO</b> The Birth & Life of a UNESCO World Heritage Site
<b>9:30 – 10:30</b>	<b>European Regions and Mining &amp; Metallurgy World Heritage</b> Cornwall and West Devon, UK Mining Landscape UNESCO World Heritage Site Erzgebirge, Saxony Mining Region UNESCO World Heritage Site
<b>10:30 – 11:00</b>	<b>Break</b>
<b>11:00 – 12:30</b>	<b>Side by Side – Modern Mining and Mining Heritage</b> Prof. Bernhard Cramer, Supreme Mining Office of Saxony Outokumpu Mining Museum from the North Karelia Callio Lab project from North Ostrabotnia Cornwall UNESCO WHS: Encouraging mining resumption and supporting companies
<b>12:30 – 14:00</b>	<b>Lunch</b>
<b>14:00 – 15:00</b>	<b>Workshops Sessions</b> Challenges to mining resumption in historic areas Transforming historic urban areas and/or cultural landscapes into hubs of social and cultural value, entrepreneurship, creative industries, tourism, and energy Mining cultural heritage and Citizen Science What if regions do not wish to have UNESCO status – does it work the big name? Valorisation of closed and abandoned mines
<b>15:00 – 15:30</b>	<b>Break</b>
<b>15:30 – 17:00</b>	<b>Workshop Sessions cont. &amp; Discussion of Results</b>
<b>17:30 – 19:30</b>	<b>Meeting the Mining Alliance</b> Evening food and networking with members of the <a href="#">Cornwall Mining Alliance</a>

## Wednesday 22<sup>nd</sup> April, Cornwall's Tin Coast Excursion

[National Trust Tin Coast](#) excursion with General Manager, Ian Marsh

<b>8:30</b>	<b>Departure from Falmouth</b>
<b>13:00</b>	<b>Lunch at <a href="#">Geevor Tin Mine Museum</a></b>
<b>16:45 Session</b>	<b>Arrival at Penryn Campus for Cornwall &amp; Saxony Twinning</b>
<b>17:00</b>	<b>Arrival at Falmouth for those not attending Cornwall &amp; Saxony Twinning Session</b>
<b>17:15 – 19:00</b>	<b>Cornwall &amp; Saxony Twinning Session</b> Cornwall Mining Alliance and GKZ Corporate Partners Mine Twinning Agenda for visit to Saxony

### Thursday 23<sup>rd</sup> April, MIREU Project Progress Day

<b>8:30 – 9:00</b>	<b>Registration</b>
<b>9:00 – 9:10</b>	<b>Welcome and Opening Remarks</b>
<b>9:10 – 10:00</b>	<b>Deliverable presentations</b>
<b>10:00 – 10:30</b>	<b>Break</b>
<b>10:30 – 12:00</b>	<b>MIREU Work Package Update Sessions</b>
<b>12:00 – 12:45</b>	<b>Lunch</b>
<b>12:45 – 14:30</b>	<b>MIREU Work Package Update Presentations</b> Work package leaders present outcomes of morning session to all project partners present
<b>14:30 – 15:00</b>	<b>Break</b>
<b>15:00 – 17:00</b>	<b>Round Table MIREU Network Building Session</b>
<b>17:00 – 17:15</b>	<b>Closing Remarks</b>
<b>17:30 – 19:00</b>	<b>Steering Group Meeting</b>
<b>19:30</b>	<b>Conference Dinner</b> Falmouth

### Friday 24<sup>th</sup> April, Eden Project Trip

Potential trip to the [Eden Project](#) (~9:00 – 16:30), dependent on interest. Transport will be provided but attendees will need to pay their entrance fee (£15.05 for groups >15 people) and

for food from their own budget. If you wish to leave during the day you will need to organise your own travel to airports or train stations. There are lockers at Eden to keep your travel bags in.

## 8.2 Appendix B: MIREU Mining Heritage Workshop registered attendees

Organisation	Sector/Type	Region/Country
AGH University	Research/Education	Poland
AMEMM	Regional Authority	Maramures, Romania
Arctic Centre, University of Lapland	Research/Education	Lapland, Finland
Camborne School of Mines, University of Exeter	Research/Education	Cornwall
Conroy Gold	Exploration Company	Ireland
Cornwall and Isles of Scilly Local Enterprise Partnership	Regional Development	Cornwall
Cornwall Chamber of Commerce	Regional Development	Cornwall
Cornwall Council	Regional Authority	Cornwall
Development and Coordination Commission of Alentejo	Regional Development	Alentejo, Portugal
Earthwords	Consultancy	Cornwall
ERRIN	Research & Innovation Network	Brussels, Belgium
European Federation of Geologists	Professional Organisation	Brussels, Belgium
Famas Intergared Geoservices Ltd	Training & Consultancy	Cornwall
Geological society liskeard	Society	Cornwall
Geological Survey of Finland	Geological Survey	Finland
Geolorn Ltd	Project Management	Cornwall
GKZ Freiberg	Triple Helix	Saxony
Institute for Territorial Development	Regional Development	Poland
Marine Minerals Limited	Exploration Company	Cornwall
NMCN	Engineering Firm	Cornwall
North Coast Consulting Ltd.	Mining Consultancy	Cornwall
NOVA University Lisbon	Research/Education	Portugal
Outokumpu Mining Museum	Heritage	Finland
Rosevale Mine restoration project	Heritage	Cornwall
Sodor Geosciences	Consultancy	Cornwall

Tungsten West Ltd.	Exploration Company	Cornwall
Erz & Eisen GmbH	Consultancy	Germany
WEFalck	Consultancy	France
Western United Mines	Consultancy	Cornwall

### 8.3 Appendix C: Future Focus Business Breakfast registered attendees

Organisation	Sector/Type	Region (Country if region unknown)
Adam Wheeler Mining Consultant Limited	Mining Consultancy	Cornwall
Agua Enodo	Groundwater Consultancy	Cornwall
Beak Consultants GmbH	Raw Materials Consultancy	Saxony
Camborne School of Mines Association	Alumni Association	Cornwall
Cornish Lithium	Exploration Company	Cornwall
Cornwall Council	Regional Authority	Cornwall
Cornwall Development Company/Cornwall Trade & Investment	Business Support	Cornwall
Cornwall Resources Limited	Exploration Company	Cornwall
Critical Minerals Association	Raw Material Association	London (UK)
Camborne School of Mine/UNEXE	Research/Education	Cornwall
Delabole Slate	Slate Quarry Operator	Cornwall
Devon County Council	Regional Authority	Devon (UK)
Famas Integrated Geoservices Ltd	Training & Consultancy	Cornwall
Fugro	International Consultancy	Cornwall & Saxony
Future Terrains	Social Enterprise	Cornwall
G T Jones & Co	Engineering Firm	Cornwall
GKZ Freiberg	Triple Helix	Saxony
GRK Bystrinskoe	Mining Company	Russia
Holman Wilfley Ltd	Engineering Firm	Cornwall
JWA Oil	Contracting/Supply Firm	UK
Luleå University of Technology	Research/Education	Sweden
Marine Minerals Limited	Exploration Company	Cornwall
Minerals Engineering International	Media	Cornwall

NMCN	Engineering Firm	Cornwall
Skyber	Technology Company	Cornwall
Sodor Geosciences	Consultancy	Cornwall
Stephens Scown LLP	Legal Firm	Cornwall
Wardell Armstrong International	Mining Consultancy	Cornwall
Westcountry Mines	Consultancy	Cornwall

## 8.4 Appendix D: Future Focus Business Breakfast poll questions

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Q1) Where are you from/which region do you represent?

- Cornwall
- Saxony
- Other

Q2) What area do you work in/represent? (tick one)

- SME/ microbusiness
- Larger company
- Regional Authority
- Research and innovation
- Other (please specify)

Q3) Why are you interested in this partnership and what would you like to get out of any further networking between the two regions?

Q4) Which areas are you interested to know more about? (tick all that apply)

- Industry
- Research
- Mining Heritage
- Regulation and planning
- Other

Q5) How would you like to learn more?

- Follow-up on-line networking event
- In-person visit to Saxony / Cornwall
- Hosting an in-person visit to Cornwall/Saxony

Help to make one to one contacts (not at an event)

Other

Q6) Please feel free to make further comments/suggestions below

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## 8.5 Appendix : Future Focus Business Breakfast poll results

Where are you from/which region do you represent?	What area do you work in/represent? (tick one)	Why are you interested in this partnership and what would you like to get out of any further networking between the two regions?	Which areas are you interested to know more about? (tick all that apply)	How would you like to learn more?	Please feel free to make further comments/suggestions below, or expand on previous answers where 'other' was picked:
Saxony	SME/ microbusiness	Knowledge transfer	Research	Follow-up on-line networking event	
Cornwall	SME/ microbusiness		Industry	Follow-up on-line networking event	
Cornwall	Regional Authority		Regulation and Planning		
Cornwall	SME/ microbusiness	Ensuring out gravity table technology is at the forefront of any future testwork	Research, Industry	Follow-up on-line networking event	
Cornwall	Larger company	Exposure to mining companies that may require our services.	Industry	Follow-up on-line networking event	
Cornwall	SME/ microbusiness		Mining Heritage, Regulation and Planning	In-person visit to Saxony / Cornwall	
Cornwall	Other	Look to build network for funding opportunities with view to submitting a fellowship application using machine learning techniques for mining and geospatial problems	Research, Industry	Follow-up on-line networking event, In-person visit to Saxony / Cornwall, Hosting an in-person visit to Cornwall/Saxony	
Cornwall	SME/ microbusiness	Sure, I hope to get the best out of the networking in terms of building new	Industry, Research, Mining Heritage	Follow-up on-line networking event, In-person visit to Saxony / Cornwall,	I am keen to receiving update from this group.

		relationships and explore partnership with other businesses		Hosting an in-person visit to Cornwall/Saxony	
Cornwall	Larger company	To enable the recovery and growth of the mining and metals industry within Europe	Industry	Hosting an in-person visit to Cornwall/Saxony, In-person visit to Saxony / Cornwall, Follow-up on-line networking event, Help to make one to one contacts (not at an event)	
Cornwall	Other	It's always interesting to learn more about research projects and collaborative initiatives	Industry, Research, Mining Heritage, Regulation and Planning	Follow-up on-line networking event, In-person visit to Saxony / Cornwall	
Devon (UK)	SME/microbusiness	Keen to be involved in exploration / mining projects in both regions.	Industry, Research, Mining Heritage	In-person visit to Saxony / Cornwall, Help to make one to one contacts (not at an event)	
Devon (UK)	Regional Authority	I am a minerals planner interested in community "buy in" and what the issues may be in Cornwall and the other Regions.	Regulation and Planning	Follow-up on-line networking event	
Cornwall	SME/microbusiness	Like to hear of mining opportunities and activities in Cornwall and how it links to other mining areas. And of course, to see Cornish business doing well, my business included!	Industry	Follow-up on-line networking event, In-person visit to Saxony / Cornwall	
Cornwall	SME/microbusiness	I'm interested because I was involved with the European Network of Mining Regions, which was similar to MIREU, but about 15 years ago. I'm interested to see how the industry and its aftermath have developed over time.	Mining Heritage, Research, Regulation and Planning	Follow-up on-line networking event, In-person visit to Saxony / Cornwall	
Cornwall	SME/microbusiness	We are a small innovative engineering company who has been working within the local Cornish mining industry for over 40 years as such we have gathered a wealth of	Industry	Follow-up on-line networking event, In-person visit to Saxony / Cornwall, Hosting an in-person visit to	Thankyou for another enlightening event.

		know-how and application specific knowledge. We also build a range of laboratory scale equipment as well as taking on development projects which we have the capability of taking from customer requirements through in-house design and manufacture all the way to finished products, Testing and CE marking Developing contacts and potentially working with businesses in Saxony would be of great interest to us.		Cornwall/Saxony, Help to make one to one contacts (not at an event)		
Cornwall	Other	Interested in lessons between the two regions about environment and social impact best practice, social licence to operate issues and perception and communication about mining.	Industry, Regulation Planning, Heritage	Research, and Mining	Follow-up on-line networking event, In-person visit to Saxony / Cornwall, Hosting an in-person visit to Cornwall/Saxony	I am interested in learning lessons between areas about exploration and mining, best practice and perceptions. A lot of the results from MIREU are useful for my research and I think there will be future lessons that I can learn.
Cornwall	Other	Research links. Building opportunities for Cornwall Mining alliance. Heritage and Cornwall Council	Industry, Mining Regulation	Research, Heritage, and Planning	Follow-up on-line networking event	
Cornwall	Larger company	Build better sustainable operating companies	Industry, Regulation and Planning, Research		Hosting an in-person visit to Cornwall/Saxony, Help to make one to one contacts (not at an event), Follow-up on-line networking event	It's always good to talk and collaborate