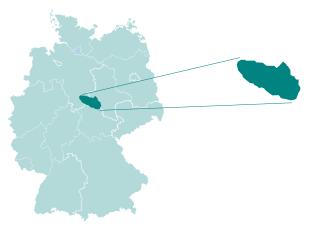


# REWIMET in the Harz Region



Recycling cluster for economically strategic metals in the Harz region



# Region Harz, Lower Saxony, Saxony-Anhalt and Thuringia

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appr. 1,9 Mio inhabitants



15.200 km<sup>2</sup> area



125 per km<sup>2</sup> population density

# Characteristics of the region

- → The region is characterized by a history of significant mining activity.
- → Building on the knowledge of metal extraction and processing, structural change has led to the formation of a recycling cluster in the Harz region, comprising numerous companies that no longer extract primary raw materials, but instead recycle metals back into the economy.

# **Baseline situation and objectives**

"Only if we succeed in transferring what we develop in research into society will we have a chance of becoming a circular economy."

Dr. Daniel Tomowski, WiReGo GmbH & Co. KG

The Recycling Cluster for Strategically Important Metals (REWIMET) was founded in 2011 as a network of companies, research institutions and municipalities in the Harz region. The aim of the companies is to supply economically strategic metals. To achieve this, the companies, with the support of the scientific community and local authorities, focus on recycling to increase the security of supply of raw materials.

The REWIMET association serves as a platform to foster networking between companies, research institutions in the region and other stakeholders. It also promotes the training and qualification of the workforce. Part of its mission is to promote innovation through exchange between members from practice and research and to strengthen the supply, accessibility, quality, usability and benefits of recycling technologies. This approach aims to strengthen the regional economic structure not only implicitly, but also actively and strategically.

# Focus of the project

As depicted, the promotion of metal recycling is at the core of REWIMET's activities. Digitalization and climate protection have also gained in importance. In addition, the decarbonization of metal extraction is a key issue. REWIMET deals with issues of regional importance, such as the potential of old mine dumps and the extraction of resources from processing residues.

A new focus lies on projects aimed at engaging the civil society. For instance, a project was implemented to raise awareness about the significance of copper in schools. Further projects are planned to raise awareness of metals and recycling beyond the specialist community.



REWIMET-Excursion © REWIMET e. V.

## **Stakeholders** involved

- Primarily, companies in the recycling industry and companies with products for the recycling sector (e.g., software industry).
- Universities in the region, particularly in the field of applied sciences
- Municipalities
- The majority of REWIMET members are located in the Harz region and its surrounding areas, between the cities of Magdeburg, Leipzig, Kassel, and Hannover. However, the initiative is open to interested parties from across the entire German-speaking area.

# Financing

- The cluster management and some of the network's activities are financed through membership fees.
- Projects and research endeavors are funded through grants secured by the network or its members (typically the participating universities).

# Achievements of the Initiative

"The network saves us a lot of effort and work that we would otherwise have to do on our own. It is essentially like a dating service for those interested in recycling. They match individual partners and bring them together."

Dr. Juliane Messe-Marktscheffel, H.C. Starck Tungsten GmbH

REWIMET serves as a unifying platform for promoting innovation and fostering links between companies in the metals and recycling industry and those in adjacent sectors, such as companies active in digitalization. Similarly, the network facilitates the synergy between academia and practitioners, enabling the exploration of relevant issues in joint projects. In this way, REWIMET contributes to the exchange of knowledge and information at institutional and individual level.

REWIMET's efforts have been acknowledged through the European Union's recognition of Southeast Lower Saxony as Germany's first circular economy region.

# \* Spotlights

# "REWIMET Symposium" and "Innovation Forum Recycling Region Harz"

The cluster management carries out numerous activities to promote networking between members and to encourage innovation. The two formats "RE-WIMET Symposium" and "Innovation Forum Recycling Region Harz" have become well established. These events take place every two years, focusing on scientific topics and application-oriented topics. Both formats provide platforms to discuss and develop current issues through cooperation with science and practice. The events facilitate networking within and across different fields.

## **Company excursions**

REWIMET regularly organizes day trips and company visits. These serve as networking opportunities and to introduce new technologies and processes to the members. Challenges and added value can be discussed based on concrete examples, and knowledge can be built concerning general technological and economic advancements. Some of these events are also tailored to specific target groups, such as young professionals. The benefit for the members lies in the opportunity to engage in exchanges with other companies regarding specific processes or industry developments, which may

not occur as frequently in their everyday work environments. Consequently, the events organized by REWIMET contribute to an increase in knowledge and the circulation of information among the participants.



Lower Saxony's Environment Minister Olaf Lies at the REWIMET Symposium 2021 © REWIMET e. V.

# **Challenges and barriers**

- The expansion of renewable energy is a prerequisite for the decarbonization of the (recycling) economy. The regional conditions for the use of renewable energy are generally favorable, but the current approval processes do not allow for the desired pace of expansion.
- Recycling and related industries require a skilled workforce. Retaining young people in the region or attracting skilled workers to the area poses a challenge, despite the region's attractive features such as abundant greenery, quality of life, cultural offerings and relatively affordable cost of living.

The membership fees must generate sufficient revenues for the association to finance the cluster management and all activities beyond eligible projects.

# **Outlook**

The example of the Harz Recycling Region illustrates how a region can manage the transition from a mining region to sustainable resource management based on the circular economy. The existing knowledge of people, companies, and research institutions was transferred from primary resource extraction to circular resource utilization. The region's economic model has evolved

# Key learnings and replicability

To ensure the success of cluster management, participating companies must understand that they gain value from networking activities, even if the benefits are not immediately reflected in monetary terms. Having said that, effective cluster management is required to continuously generate added value.

A key factor for the added value of REWIMET is the trust established among the involved stakeholder groups, facilitated by the cluster management, which provides a common framework and fosters commitment among its members.

"Before we became members, we saw ourselves as lone fighters. We closed ourselves off with our knowledge, so you basically fight for yourself. Through opening up and putting trust in other companies, synergies naturally arise."

Peter Kolbe, MPM Environment Intelligence GmbH from a linear to a circular model, building on its strengths and potential.

By addressing the topics of digitalization and the integration of renewable energies, the initiative tackles two key issues of the future. REWIMET thus contributes to the ability of its members to continue to present innovative approaches. As a result, REWIMET will keep promoting the competitiveness of the Recycling Region Harz. If REWIMET further engages with the public through its projects, it will actively contribute to strengthening systemic circular economy principles within society.



Signatories of a Memorandum of Understanding on the Establishment of a Battery Recycling Centre © REWIMET e. V.

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