

# What does mine rehabilitation look like around the world?

Mine rehabilitation is carried out all around the world and there are many examples of successful outcomes. While the projects might look different, the principles that underpin success are common to all, including:

- Vision for the Future: Focussed on the long-term
- Adaptability: Outcomes can be adapted for changing scenarios
- Collaboration: Between government, industry, and community

## Around the world

#### Germany

Mine rehabilitation was conducted at the <u>Zollverein</u> <u>Coal Mine Industrial Complex</u> in Germany's Ruhr Valley, a region which has transitioned away from coal mining in recent decades.

The complex is now a <u>UNESCO World Heritage</u> site recognising the project's commitment to preserving the historical and architectural features of the site and enabling sequential land uses. It is now a versatile space housing museums and event venues enhancing local tourism and educational <u>opportunities</u>.



Zollverein Coal Mine Industrial Complex's ice-skating rink and ferris wheel, Essen, Germany. Image courtesy of Jochen Tack.

#### Canada

<u>The Sudbury land reclamation project</u> in Canada involved local communities in initiatives like tree-planting, and mining companies worked to reduce pollution and improve wastewater quality. The copper mining project won an award recognising its commitment to sustainability and bringing health, environmental and economic benefits to area residents. This project is seen as successful for several reasons, involving input from government, mining companies, and local people. Tailored approaches were employed to remediate the mined land.

<u>Rehabilitation efforts</u> began in 1969, with a key part of this process being the <u>Regreening Project</u>, which started in 1978. This initiative treated poor soil with lime and planted <u>millions of trees</u> across more than 3,000 hectares. Continuous monitoring allowed the project to improve over time by adapting strategies based on what was <u>working</u>. After more than 50 years of rehabilitation efforts, the Regreening Project continues today, and is a symbol of pride for the <u>Sudbury region</u>.



Sudbury smelter stack amongst rehabilitated and 'Regreen' land, Sudbury, Canada. Image supplied by Febriyanta.

## **Closer to home**

#### Australia

The Beenup Titanium mine in Western Australia opened in 1997, closing after only two years in 1999. Rehabilitation efforts were undertaken by BHP in partnership with the <u>Beenup Consultative Group (BCG)</u>, which focused on creating permanent wetlands with native vegetation, extending to Scott National Park. The group was independent, led by a representative from the local shire council, a BHP group representative and individuals with different expertise and knowledge. The success of this project relied heavily on <u>BHP</u> allocating sufficient resources and maintaining transparency for effective community collaboration.

Working with the BCG, BHP also formed a <u>Technical Advisory Group (TAG)</u> comprising of BHP members, the Western Australian Biodiversity Science Institute, CSIRO, Curtin University, and The University of Western Australia. The TAG oversaw the rehabilitation and trial of '<u>natural capital accounting</u>'. Natural capital accounting was implemented to measure changes in ecosystems, how they could impact wellbeing and economies, and base rehabilitation planning decisions on environmentally positive results.

The rehabilitation efforts were mostly completed by 2018, almost 20 years after the mine closed, although the ongoing monitoring and management continues. The Beenup rehabilitation project serves as a case study in managing early mine closure through industry commitment, community engagement and technical expertise.

## **Apples and Oranges**

The Latrobe Valley can gain inspiration and integrate knowledge and insights from successful projects elsewhere around the world. However, different mine rehabilitation projects worldwide are not directly comparable. There is no one size fits all solution to mine rehabilitation. The Latrobe Valley approach must fit the region's social, economic, and environmental conditions as well as local values. The obstacle for the Latrobe Valley lies in the magnitude and ecological setting of the three mines, which is unique.

## How does this affect you?

You may have a vision for Victoria's declared mines. Learning more about the technical, environmental, and social issues around mine rehabilitation can help inform this vision. An informed community is an empowered community.

One way of staying informed about the technical, environmental, and social issues around mine rehabilitation is by watching our videos and following us on social media.

## Want to get involved?

Want to join the conversation or meet with us? Contact us at 1800 571 966 or contactus@mineland.vic.gov.au

