

COAL HERITAGE

RFCS Accompanying Measure Project

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BEST PRACTICES IN COALHERITAGE PROJECT

As more countries in EU announce coal phase-outs for electricity generation, it is worth noting that coal mining is by no means the first sector which is mostly affected. Therefore coal-mining regions are facing significant challenges in the wake of economic shifts, environmental concerns, and the global transition towards cleaner energy sources. As mines close and industrial activities decline, these regions often struggle with unemployment, environmental degradation, and a loss of cultural identity. As an ideal just transition would enable coal companies to transform their businesses and that jobs are preserved. We present some former coal regions which have managed to transform into thriving centers of innovation, preserve mining cultural heritage and introduce new mostly tourist programmes. This transformation is co-created with material objects of coal mining remnants which have become a protected part of the environment, a cultural heritage, co-creating the characteristics of both the past of coal mining and the present.

POLAND

by dr. Sylwia Jarosławska-Sobór

Poland has already many exemplary sites concerning coal mining legacy, but the most spectacular is Zabrze, an industrial city in Silesia with its unique heritage of Queen Louise Adit, Water Tower and Maciej Shaft.

Queen Louise Adit (Sztolnia Królowa Luiza)

Queen Louise Adit (formerly: Queen Louise Mining Open Air Museum; Skansen Górniczy Królowa Luiza) - is part of the Coal Mining Museum in Zabrze. The name "Sztolnia Królowa Luiza" (Queen Louise Adit) is a modern name used for a tourist site composed of two interconnected historic sites: kopalnia "Królowa Luiza" (Queen Louise coal mine) and Główna Kluczowa Sztolnia Dziedziczna (Main Key Hereditary Adit).

The history of the Main Key Heritage Adit begins at the end of the 18th century. In 1779 Friedrich Anton von Heinitz, minister of state and de facto head of the Prussian government, co-founder of the world's oldest mining academy in Freiberg, Saxony, brought Friedrich Wilhelm von Reden to Silesia to played the role of a precursor in the industrial revolution in Silesia. Salomon Isaac of Brabant, a Jewish merchant and later a senior official of the Mining Office in Tarnowskie Góry, discovered coal deposits, thus giving rise first to the Queen Louise mine and later to other mines and steelworks throughout the region.

At present

The Queen Louise Mine sightseeing starts off at ground level where tourists find chunky pieces of machinery, pistons, dials, pipes, photo displays and other industrial detritus clustered around the old "Carnall" shaft (The Carnall Zone). The underground sections are split into three levels for visitors, the first of which is a boat trip along an underground river spanning 1130m, while a guide explains the history and culture of the mine. The 2nd level 40m below ground shown the technologies used for mining over the last 200 years, right up to the huge machinery of the 21st century. The third level is family orientated, specifically for kids, with multimedia elements teaching the history of the mine and the people who worked there.

Above-ground zone, Park 12C is a place combining educational and entertainment dimensions. The place is dedicated to the inhabitants of Zabrze and surrounding cities as a place for walks, family recreation, fun and social gatherings.

Queen Louise Adit Carnall Zone completed in July 2021 is a post-industrial space where we can see a working steam engine, more than 100 years old, or a unique one-of-a-kind exhibition on mine rescue and mine danger. The Carnall Zone become a venue for festivals, concerts and thematic events such as the Carnall Festival or the Barbora Fair.

One of the most unique offers is the Water Route (Fig. 1) in Queen Louise Adit, hidden under the streets of the Zabrze city. A fragment of underground excavations are on foot here, and 1,100 meters is a unique, underground rafting by boat, meeting the legendary Treasurer or Utopka of Upper Silesia. There are also underground ports, passing places, sounds of dripping water and unique chiaroscuro prevailing in the entire underground. This trip has been awarded by the European Commission with the European Heritage Award, Europa Nostra Award 2019 and with the Tourist Facility of the year 2019 by Polish Chamber of Tourism.

Water Tower (Wieża Ciśnień)

Built in 1909, the Water Tower in Zabrze is no ordinary structure, combining a technical building with residential and office space. As a result of the revitalization works, the tower became a facility for social, educational, scientific and cultural activities.

In 2022, an interactive exhibition CARBONEUM (Fig. 2), as

a part of the Zabytkowa Kopalnia Węgla Kamiennego, was opened here. This coal knowledge centre is a modern exhibition that combines the functions of a science centre and a classic educational exhibition.

Maciej Shaft (Szyb Maciej)

Maciej Shaft (Szyb Maciej) (Fig. 3) the part of the former Concordia Coal Mine, is the most modern of Zabrze's industrial heritage sites. It gives an untouched air of authenticity with a possibility to taste the local cuisine in restaurant, which is placed in the Silesian Tastes Gastronomic Route and relax during summer chillout weekends. The primary sights are the hoist tower with the original twin-drum hoisting machine by Siemens-Schuckertwerke which visitors have the opportunity to steer themselves.



Figure 3. Maciej Shaft, Zabrze, (GIG archive)



Figure 1. Water Route in Queen Louise Adit, Zabrze (GIG archive)



Figure 2. Carboneum exhibition, Zabrze (from <https://muzeumgornictwa.pl/>)

SLOVENIA: UNDERGROUND OF PECA

by mag. Matjaž Kamenik

History

The Mežica Lead and Zinc Mine, which is today fine example of coal heritage preservation, is one of the oldest mines in Europe. The Romans were already mining lead ore beneath Mount Peca. Since the mid-17th century, when the first preserved written record of ore exploitation in Črna na Koroškem was made, mining in the Mežica Valley continued without interruption. Intensive exploitation began after the Napoleonic Wars in the early 19th century.

Furthermore, the mine began to develop fast at the beginning of the twentieth century. At that time, its accompanying activities (smelter and separation plant in Žerjav, power plants etc.) started to develop. The powerful company Rudnik svinca in topilnica Mežica (Lead mine and smelter Mežica) was created, which employed over 2,000 people in the mining facilities, separation, smelter, battery production, equipment factory, sawmill, carpentry workshop and general services.

In more than three centuries of mining, the miners unearthed around 19 million tons of lead and zinc ore and over 1000 km of tunnels in the process made.

In 1988, a law was passed on the gradual closure of the mine, and a project was drawn up for the closure of the Mežica Lead and Zinc Mine in 1994. That is when the production of lead-zinc ore finally ended. They began to fill up lower parts of the mine with water.

Museum – Experience the underground of Peca

Today, former mine is transformed in to museum which is Slovenia Unique Experiences that indicates unique 5-star experiences visit of the museum. It starts at the Karavanke UNESCO Global Geopark information centre where an experienced guides welcome you and take you to the entrance to the mine in Črna na Koroškem.

You can take the mining train into the underground of Peca, just like in the past, and explore flooded tunnels with kayaks, you can ride a bike from one valley to another, or go down the adrenaline-pumping Black Hole Trail. It is for the most experienced mountain bikers as the trail features also two steep descents that cannot be ridden on a bike. They are equipped with a steel cable and a carabiner for the bike, while the cyclist must descend into the depths using a ladder.

The museum thus offers more than a classic cave tour:

- **Mine tour by train**

You travel to the heart of the mine on a real mining train. Driving along the 3.5 km long Glančnik tunnel is a unique experience that lasts about 15 minutes. A guide will accompany you will on a thematic circular route with a presentation of the history of mining. The exhibits will help you experience a real “knapovški šiht”(miner’s work) which can be upgraded with a snack.

- **Kayaking adventure through the underground of Mount Peca – Slovenia Unique Experience**

It is done at almost 700 m below the surface of the earth, includes exploration of the underground labyrinth (Fig. 4, 5), flooded tunnels and excavations, sometime a narrow and rapid tunnel kayaking.

- **Underground biking trails** (Fig. 6)



Figure 4. Photo: Tomo Jeseničnik

We usually enjoy riding mountain bikes in the mountains, but you can also ride through the mountain, as museum have found a passage through abandoned and mysterious mining tunnels. With a guide, helmet and flash light, you can safely cycle over five kilometres of a unique underground path from one valley to another and experience an unforgettable adventure.



Figure 5. Photo: Tomo Jeseničnik



Figure 6. Photo: Tomo Jeseničnik

Mine Peca is also example of promoting and preserving geo-heritage as rare mineral wulfenite of various crystal shapes and intense yellow-brown colors is presented here.



Figure 7. wulfenite

The Tourist Mine and Museum preserves and presents the history of more than three hundred years of mining and life in the Upper Mežica Valley.

More at: <https://www.podzemljepece.com/#>



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