

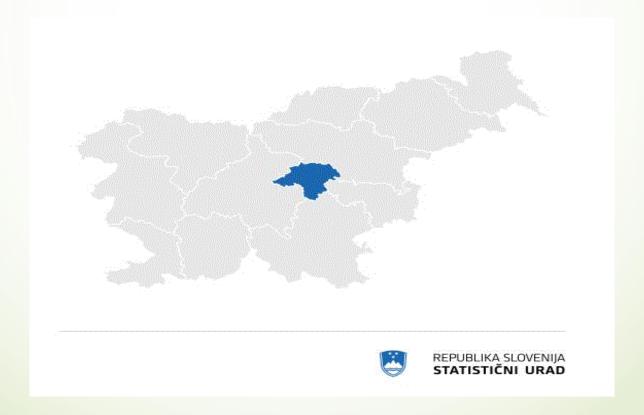
THE GREEN TRANSITION OF ZASAVJE COAL REGION

Eger, 26. 5. 2022 Author: Martin Šikovc



Zasavje region

- Located in the center of Slovenia.
- Consist of four municipalities: Hrastnik, Trbovlje, Zagorje ob Savi and Litija.
- Population: 60.000 inhabitants.





THE POLLUTION OF ZASAVJE COAL REGION

- Due to presence of heavy industry, the Zasavje region was one of the most polluted regions in Slovenia.
- One of the biggest polluters was the Trbovlje Power Plant which was also one of the sources of pollution in other region (air pollution, acid rain).
- Zasavje is even more susceptible to air pollution due to poor ventilation. For that reason the highest chimney in Europe was built for the power plant.
- The state wide opposition against Thermo
 Power Plant was also the cause for the decision on Zasavje Coal Phase out.

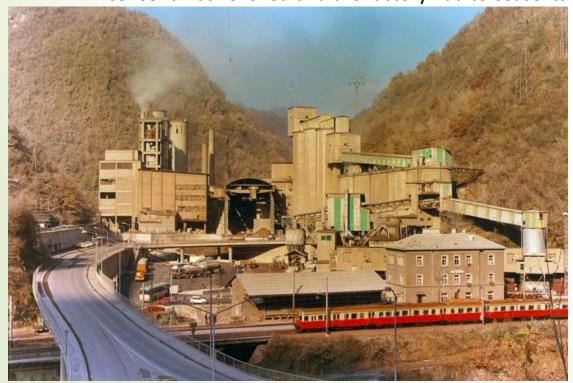




The Pollution of Zasavje Coal Region

The Lafarge Cement Factory in Trbovlje was also one of the heavy polluters in the region.

After the dispute on the use of forbidden alternative fuels, the environmental consent was revoked and the factory had to cease its operations.







Greening of the Zasavje region

- After the coal-phase out and the closure of the cement factory, the greening of the region began.
- The region around power plant and cement factory recovered.
- More than 20 % of the regional territory is protected as Natura 2000 site.
- However, two main sources of pollution still exist: road traffic & energy poverty (the use of waste and wet firewood instead of gas for heating).





Prapretno Solar Power Plant

Built on the former ash dump of the Thermo Power Plant Trbovlje where the ash was dumped for almost a century.

After the grassing the area, the new municipial spatial plan was adopted that envisaged the construction of 12 MW solar farm.

The first phase (3 MW) was constructed this year together with laying of the electrical cable to the new transformer substation (5 km). The construction of remaining phases are planned in the next 5 years.

Some farmers are also allowed to raise sheeps in the area of solar power plant.







Prapretno Solar Power Plant





CENTER FOR DEVELOPMENT, DEMONSTRATIONS AND TRAINING FOR CARBON-FREE TECHNOLOGIES

The project of the national Chemical Institute which has a potential to be a game changer in the regional transformation away from coal.

The project leader is the professor at the Chemical Institute who grew up in the Zasavje region and had therefore a special empathy for the region.

The main purpose of this Center is to educate chemistry students from Universities of Ljubljana and Maribor and other domestic & foreign experts on the field of renewable technologies.

The focus will be on battery development, however the hydrogen and CO2 technologies will also be developed.

The estimated value of the project is around 20 million EUR and was already labeled as one of the strategic regional investments.

There is a huge potential for the creation of new renewable energy jobs around these centers, because new production capacities are usually built around such development & training centers.





- RESEARCH AND DEVELOPMENT EQUIPMENT (PILOT PLANTS): The Center will enable academic
 partners and industry to push research activities to higher technological readiness level. The activities of
 the Center will enable the acceleration of the development of innovations generated in research
 institutions and the economy, as well as the rapid transfer to the industrial environment and
 consequently to the market.
- TRAINING: The mission of the Center will be the transfer of knowledge and expertise of research work
 to younger generations of students and younger researchers. This will increase our competence in the
 international (European) research environment, we will have access to the latest trends in research,
 which significantly contribute to the dissemination and enrichment of educational programs at the
 university level.
- **INTEGRATION INTO INTERNATIONAL PROJECTS**: The establishment and technologically advanced equipment at the Center will enable greater involvement of researchers in the international, especially European research environment
- **CONNECTION WITH INDUSTRY:** to provide access to the equipment for companies from the region and third countries.
- **ESTABLISHMENT OF NEW INFRASTRUCTURE IN SLOVENIA**: connection between industrial and academic partners to validate the concept of innovation in the development of advanced solutions for a carbon-free society and rapid transfer to higher levels of development and faster market entry.



Thank you for your attention!

