



GREEN CITY VELENJE

Slovenia, Velenje

This document is part of a series presenting information and lessons learned on policy approaches at national, regional or local level supporting a just transition to a climate-neutral economy. The Just Transition Platform (JTP) assists EU Member States and regions to unlock the support in this transition. Visit the JTP website: https://ec.europa.eu/regional_policy/funding/just-transition-fund/just-transition-platform_en



The approach of Velenje for implementing a green just transition consists of various components and not every single one can be assigned with a concrete budget.

Region:

Velenje

Sector:

Coal

Financing conditions (co-financing rate in %):

n/a

Sources of funding:

EU funding:

- Just Transition Fund (JTF) (2021–2027): in total EUR 258 million for Slovenia;
- · Green Leaf Award: EUR 200 000.

National funding:

n/a

Regional funding:

n/a

Duration:

- **JTF**: 2022–2027;
- · Green Leaf Award: One year, 2023.

Responsible Managing Authority/Agency:

Municipality of Velenje and JTF Managing Authority

Summary

In January 2022, Slovenia's government adopted the strategic plan to stop using coal for electricity production by 2033. The plan calls for the closure of the Velenje coal mine and comprehensive economic and social restructuring for the region. As a result, the city of Velenje is progressively moving away from coal mining and transitioning to become a climateneutral city through a wide variety of measures. The city's motto 'from black to green & bright' reflects this commitment.

The different measures that the city is undertaking for becoming a more sustainable and green city include: energy efficiency; renewable energy production, especially from solar; transformation of the local district

heating system; hydrogen technologies; adopting circular economy policies; green waste management; sustainable mobility practice; fostering a green economy; supporting SMEs; providing green jobs skills training and retraining; investing in R&D; and repurposing coal-related facilities.

The introduction of all these green initiatives has earned Velenje recognition, including the 2024 EU Green Leaf Award and becoming a part of the Mission on 100 Climate-Neutral and Smart Cities by 2030. Velenje's commitment to the green transition has also opened up funding opportunities for the region, including from the JTF.

Type of policy measure/activities:

The Savinjsko-Šaleška region, where Velenje is located, will receive EUR 148 million of JTF support. The region aims to allocate this funding towards different activities such as innovative industrial processes, enhancing production capacity of SMEs, redesigning the district heating system, promoting clean energy sources, repurposing degraded coal-related facilities and provide lifelong career guidance and training to 2 400 coal workers. The Regional Development Program for Savinjsko-Šaleška Region from 2021 to 2027 is another significant strategy that highlights its strategic focus on transitioning towards a low-carbon and green future in conjunction with the just energy transition of the region.

Aside from the JTF and the Regional Development Program activities, Velenje has undertaken numerous complementary initiatives and strategies. These include the Sustainable Urban Strategy of the Municipality of Velenje until 2030, Hydrogen Technologies in Emission-Free Transport and Decarbonisation of Energy for a Green Community, Energy-Neutral Central Wastewater Treatment Plant of the Šaleška Valley, the Industrial Education Park Future Centre, the Industrial and Technological Park Velenje (TECHUB I4.0), Business Zone Pesje 'Brown Field' Project, Transformation of the Šaleška Valley District Heating System Phase I and participation in the Mission on 100 Climate-Neutral and Smart Cities by 2030, reinforcing its commitment to a sustainable and green future.

As part of the EU Green Leaf Award, Velenje will receive a grant of EUR 200 000. In order to develop their plan of activities, Velenje held workshops and meetings in early 2023 to gather suggestions from stakeholders. They have now identified thematic areas and are developing a programme of events and activities for their green year, including an opening and closing ceremony, a themed conference, projects for schools and educational organisations and cultural events like concerts and exhibitions. The aim is to encourage international cooperation and citizen involvement in making Velenje a green city.

Goals and approach:

Velenje is striving to achieve an energy transition that is not only sustainable but also just. The key to achieving this goal is to develop a flexible and diverse economy that can meet the changing needs of a climate-neutral future while ensuring that all the stakeholders can benefit from the transition.

To achieve this goal, the city has identified the following measures:

- redeveloping the district heating system to provide an affordable source of energy for heating and cooling while maintaining air quality;
- improving energy efficiency;
- increasing production capacity for reliable electricity from renewable sources and establishing renewable energy communities to reduce energy poverty;
- having a pipeline of green projects, i.e. transformation of district heating through the KP Velenje project, hydrogen technologies in emission-free transport and energy decarbonisation:
- accessible learning and lifelong career training, introducing circular education;
- sustainable, flexible and diverse economic development, investing in R&D and SMEs;
- upgrading the start-up ecosystem, including business infrastructure;
- gradual rehabilitation and revitalisation of spatially and environmentally degraded areas;
- dialogue and multi-stakeholder involvement in the elaboration of key strategies and implementation of key activities and projects.

Important outputs, results or achievements:

In the past years, Velenje has made significant advancements in its efforts to transition to a green city through the implementation of various initiatives. As a result, a diverse range of outputs and outcomes have been achieved. Notable examples include rehabilitation of brownfield sites, improved local air quality, implementation of renewable energy systems, establishment of new green industrial areas, and development of a new image for the region.

Velenje can also be described as an 'innovative milieu' which promotes social and economic innovation. For example, in 2007 the municipality established the SAŠA incubator for micro entrepreneurship to support regional talent, new businesses, and rapid growth. The incubator houses a local entrepreneurship centre and has facilitated the creation of 53 companies and 74 jobs in the past years.

Thanks to these and many other undergoing projects, Velenje has been recognised for its exceptional efforts towards sustainable practices, through the European Green Leaf Award. The award acknowledges the effort from smaller towns and cities (20 000–100 000 inhabitants) and their local authorities and it is part of the European Commission's initiatives to encourage and reward green actions that align with the European Green Deal, the New European Bauhaus, and the Zero Pollution Action Plan.

Moreover, the Municipality of Velenje has been chosen as one of the 100 cities to become climate-neutral by 2030 in the context of EU Mission on Climate-Neutral and Smart Cities.

Scalability¹ and transferability²:

Velenje is effectively leading the way towards transitioning away from coal and becoming a green city, and their success story can serve as a valuable example for other regions to follow. Particularly, Velenje's approach, which involves social dialogue and cooperation, can be emulated in other cities facing similar circumstances in their green transition.

It has to be noted that the adoption of environmental action in Velenje began over 35 years ago, when ecological protests erupted in response to the severe damage and pollution caused by coal mining in the region. This led to a behavioural shift in the community, making it easier to implement green activities and measures in the past decade. Other regions in Europe and worldwide may not have reached this level of awareness and acceptance and may require more time to achieve social and local approval, making it more difficult to have the same approach as Velenje.

¹ Scalability entails that a policy approach can be adapted to a bigger scale than just the local context.

² Transferability entails that a policy approach can be applicable to a similar setting and replicated.

Key success factors and lessons learnt:

The city has undergone considerable progress in its green transition in the past years by rehabilitating brownfields, improving air quality in the area, developing RES, building new green industrial zones and creating a new image for the region.

Moreover, the city has implemented a collaborative and bottomup approach by working closely with various stakeholder groups, including industry, civil society, policy, research organisations, and citizens. Good cooperation has also been established within the municipality between the different departments and units.

Lastly, Velenje is committed to promoting knowledge-sharing and learning opportunities, actively participating in EU Commission and inter-regional exchanges, conferences, and events. They are dedicated to facilitating further progress towards a sustainable and green future and aspire to serve as an example for other cities undergoing similar transitions.

Key challenges:

The first and most important challenge is related to the closure of coal mining in Premogovnik and the cessation of operation of the Šoštanj thermal power plant block by 2033 which will lead to the loss of approximately 5 000 jobs in the industry and its supply chain.³ To prevent social distress, migration and brain drain, new industries, jobs and reskilling and upskilling opportunities need to be quickly established. In addition, building modern apartments and infrastructure and creating new business zones and jobs will be crucial in retaining workers and especially young workers.

In the field of skills development and education, the region should upgrade the education system, with the aim of reducing discrepancies between the needs of employers and skills on the labour market.

Improving the local district heating system, which is heavily reliant on energy and runs at high temperatures, is another key challenge that the city is facing.

Further support and incentives for the development of start-ups and to strengthen investments in research, development and innovation is needed. For this it is key to improve the capacity of the business environment to attract public and private financing, including direct domestic and foreign investments.

Lastly, changing the miners' perceptions towards green energy will be crucial as coal mining has deep roots in the city's history. Effective communication will be vital in addressing this aspect.

Central framework conditions4:

Velenje is located in north-eastern Slovenia and counts with a population of approximately 36 000 people⁵. The city has a rich industrial history in coal mining, which dates to the 18th century and in 1905, the first thermal power plant was built near the coal mine. Coal mining in the valley experienced its biggest boom after World War II, when the demand for coal skyrocketed. Velenje became known as one of the top coal producers in Europe and mining was a significant part of the city's economy for many years.

With peak annual production in 1980s of 5 million tons of coal per year⁶, coal mining and electricity generation made the Velenje basin one of the most polluted areas of Slovenia, heavily affecting air, rivers, soil and woodlands⁷. The reaction from the population and emerging civil society, was a mass

protest by around 15 000 people in November 1987; this symbolises the emergence of the local environmental movement.

In 2022, Slovenia adopted the national strategy to phase out coal by 2033 and restructure its coal regions. This strategy includes the closure of the Velenje coal mine and a comprehensive social and economic restructuring of the region. Since then, Velenje has intensified its efforts to become a green and ultimately net-zero city. The city is focusing on the development of alternative sources of energy, investing in in modernisation, renovation, and urban redesign, promotion of tourism and other sustainable practices. Funding from JTF and other European sources also supports these efforts.

Outlook:

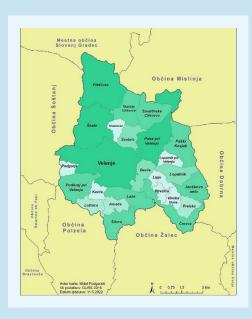
Velenje has committed to implementing a pipeline of projects under the JTF from now until 2027. These projects will aim to diversify the local economy, promote renewable energy sources, and support workers during the transition.

Furthermore, Velenje has begun developing a plan to implement the Green Leaf Award. The plan will involve organising thematic conferences and workshops, undertaking projects in schools, and hosting cultural

events, concerts, and exhibitions, thereby promoting citizen involvement in the green transition.

Alongside these efforts, Velenje will also work on implementing the other existing programmes and strategies towards achieving a net-zero, green economy. By creating an environment that fosters change, they hope to catalyse the shift towards the end goal of becoming a truly net-zero city.

- 3 Presentation for the Coal regions exchange programme of the Initiative for coal regions in transition in the Western Balkans and Ukraine on Regional insights: Eastern Cohesion/ Savinjska statistic region (2022)
- 4 Framework conditions encompass the institutional, informational and socio-economic factors that determine a given environment (contextual information), e.g. market conditions, access to finance, tax regulation, infrastructure and support.
- 5 Municipality of Velenje. https://www.velenje.si/en/about-velenje-en/a-city-with-a-heart/
- 6 Industrial culture as an agent of social innovation: reflections from Velenje, Slovenia (2022) https://www.tandfonline.com/doi/full/10.1080/13511610.2022.2026212
- 7 Sustainable landscape management in Slovenia: Environmental improvements for the Velenje coal mining community 1991–2000 (2001) https://link.springer.com/article/10.1023/A:1021749229959



Source: Wikipedia, Geograf91 (2022)

Partners & contacts:

Lead organisation: Municipality of Velenje

Website: https://www.velenje.si/en/

Social media:

- https://www.facebook.com/movelenje/
- https://www.instagram.com/mestnaobcinavelenje/
- https://www.linkedin.com/company/mestnaob%C4%8Dina-velenje-municipality-of-velenje/
- https://twitter.com/mo_velenje
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