

Zasavje: Systemic Transition Supporting Local Businesses

Zasavje region, Slovenia

Circular Cities & Regions Initiative
Communities of Practice

Funded by the European Union

Zasavje: Small Region, Systemic Circular Transition

Sectors:

Multisector and systems thinking approach.

Policy Instruments:

Rather than one tool, Zasavje uses a portfolio of interconnected actions.

Associated EU Policy/Strategy:

- Cohesion Policy and Just Transition.
- Circular Economy Action Plan.

Time Frame

2022 – Ongoing

Stakeholders

- Regional Development Agency of Zasavje - Centre for Just Transition
- Council of Municipalities
- Regional Chamber of Commerce

Cost and Financing

Financing combines Just Transition Funds, national Cohesion Policy funds (Ministry of Cohesion and Regional Development) and targeted investment calls. Approved investment projects account for €30.5 million – a significant mobilisation at the regional level.

Why this case matters

A major challenge in regional policy is translating transition strategies into concrete actions that support local businesses and economic restructuring. Zasavje, Slovenia's smallest region, shows how a post-industrial territory can **turn a circular economy vision into coordinated action**. The region supports local circular businesses and businesses transitioning to circularity through a systemic portfolio combining finance, infrastructure, skills, innovation and governance. Rather than relying on a single flagship project, Zasavje aligns funding, institutions and stakeholders to accelerate transition, diversify the economy and create new green, high-value jobs. This case illustrates **how a region operationalised a systemic transition**. For detailed guidance on replication, see White Paper and Policy guidance document of the CCRI CoP on Supporting Local Circular Businesses.



Visual facilitation outcomes from Zasavje's Circular Academy encompassing the circular vision of Zasavje. Source: Regional Development Agency of Zasavje.

Contextual Background

The region of Zasavje is the smallest region in Slovenia and is located at the heart of the country. It accounts for nearly 60.000 inhabitants across four municipalities (i.e. Zagorje ob Savi, Litija, Trbovlje, and Hrastnik). In the past, the region was characterised by a strong manufacturing industry that is currently undergoing **industrial restructuring** and today retains legacy **rail infrastructure** that can be repurposed to support **circular logistics systems**.

Zasavje has had to face the challenges of **deindustrialisation**, increased **unemployment**, and **workforce migration** to other regions. The closure of coal mining activities resulted in the loss of approximately 5,000 jobs, many of which have not yet been replaced, reinforcing the need for new high value-added employment opportunities. Its GDP per capita stands at €12,287, below the national average (€14,000), while unemployment is 4.5%. In response to these structural challenges, the region began developing a coordinated transition strategy aimed at diversifying its economy, enhancing its circularity and creating higher value-added jobs with the support of national Ministries.

Strong local social capital and traditions of cooperation among institutions, businesses and communities have facilitated coordination and collective action during the transition process. Before major implementation began, the region worked on a pre-preparation phase focused on aligning public and private stakeholders, identifying priority needs, and building a shared transition narrative. This process included consultations with municipalities, local businesses and regional institutions to identify investment priorities, understand business needs and align projects with available transition funding. This groundwork appears to have facilitated faster project development and stronger uptake of funding opportunities.

Vision, Objectives, and First Steps

Zasavje is pursuing **reindustrialisation** and local development through the lens of the **just transition**, focusing on renewable energy deployment for industry and residents, and the development of a local circular economy. Zasavje sees its just transition as a broad socio-economic restructuring process focused on increasing the value added of economic activities. This includes creating higher value-added jobs, supporting local innovative, circular and transitioning businesses in upgrading production and diversifying activities, addressing skills mismatches, repurposing industrial assets, and ensuring to strengthen local communities.

The region has defined ten **strategic goals**, with particular emphasis on circular economy development, employment, innovation, and the competitiveness of local businesses. These include developing a low-carbon circular economy, generating quality and green jobs aligned with the European Green Deal, strengthening innovation and industrial competitiveness, improving sustainable mobility, and enhancing environmental protection and the sustainable use of resources.

At the centre of the governance system is the **Just Transition Centre** within the **Regional Development Agency**, which acts as a coordination hub aligning municipalities, local businesses, and project developers. Working closely with the Council of Municipalities, which sets strategic regional priorities, and the Regional Chamber of Commerce, which represents and mobilises the business sector.

Prior to the implementation of the Just Transition process, **regional stakeholders** identified a gap between the needs of local businesses and the structure of available public support mechanisms, which were often fragmented or insufficiently aligned with the region's economic transformation priorities.

The **regional transition strategy** is not organised around narrowly defined sector priorities. Instead, it supports three complementary dynamics: upgrading existing industrial companies, developing innovation areas such as hydrogen and battery technologies, and enabling new economic activities through business zones and entrepreneurship support. Regional initiatives such as the **Circular Academy** and the **Just Transition Centre** also provide spaces for dialogue, learning and project development, helping identify emerging business needs and support the development of initiatives addressing them.

Business needs and transition challenges

Businesses in Zasavje face several **structural challenges** linked to the region's post-industrial legacy, small economic scale and dependence on nearby metropolitan labour markets. Many firms must upgrade production processes, develop new circular business models and integrate into emerging value chains in sectors such as advanced manufacturing and clean energy technologies. Consultations with stakeholders and regional engagement initiatives carried out by the Just Transition Centre highlight the following needs:

- **Access to finance** for transition investments.
- **Skills shortages** and mismatches between education and industry needs.
- **Access to infrastructure** availability of industrial space.
- **Stronger collaboration** between firms, research institutions and value chains.
- **Guidance on regulatory** and sustainability requirements.
- **Support for project preparation** and participation in EU programmes.
- **Exposure** to international circular economy initiatives and partnerships.
- **Emerging opportunities** for collaboration in areas such as energy sharing and industrial symbiosis.

The regional economy is characterised by **energy-intensive industries and advanced manufacturing** sectors, including glass, chemicals, metal processing, electrical engineering and specialised engineering companies. The region also hosts innovative technology firms such as Dewesoft and Chipolo. These industries form the foundation for the region's transition towards low-carbon and circular production systems. Businesses in Zasavje are engaging with the circular transition at different levels of maturity. While some firms are at early stages, exploring circular product design and initial pilots, others are already implementing more advanced initiatives such as industrial symbiosis and energy-sharing models. This diversity suggests that business support needs are not uniform but vary depending on firms' stage in the transition and could benefit from further differentiation according to firms' stage in the transition.

Implementation, deployment, and upscaling

Rather than relying on a single flagship project, the region implements a **portfolio of complementary measures** addressing different barriers faced by local businesses during the transition. This portfolio combines financial instruments, infrastructure redevelopment creating space for new economic activity, capability-building programmes strengthening skills and project preparation, and innovation initiatives connecting firms with emerging technology sectors. Together, these measures aim to help local businesses diversify, upgrade production processes and participate in new circular and low-carbon value chains.

Finance for business upgrading

Zasavje mobilises a range of financing mechanisms to support business upgrading, including Just Transition Fund (JTF) calls, cohesion funding and targeted industrial grants. These instruments provide co-financing for company investments in circular technologies, equipment and innovation projects, helping firms modernise production processes and develop new sustainable activities. Two major programmes illustrate this approach: a **€26 million** investment scheme supporting sustainable and circular business investments, and a **€4.4 million** R&D and demonstration programme funding pilot innovation projects, with approximately 17 projects submitted by SMEs and larger companies from the region.

To ensure these instruments strengthen synergies and avoid overlaps, coordination is carried out through the **Just Transition Centre**, which aligns funding calls with infrastructure investments, innovation initiatives and skills programmes under a shared regional transition strategy. During the preparation phase, projects and funding instruments were mapped against regional priorities and business needs, ensuring different programmes address complementary aspects of the transition rather than duplicating activities. As a result, financing mechanisms support different dimensions of business transformation-investment, innovation and skills, creating a coherent portfolio of interventions.



Places for business growth

Several infrastructure projects focus on repurposing former mining and industrial sites into new business zones and entrepreneurship facilities. Such facilities are meant to host new and expanding businesses with sustainability and circularity as a priority:

- Business Incubator Kompreshaus Hrastnik: The project involves the conversion of a former mining compressor station into a business incubator supporting entrepreneurship and job creation. The facility is intended to provide space and support for new businesses and entrepreneurial initiatives in the region. Total investment: **€1.4 M** (JTF contribution €600k). The incubator supports entrepreneurship and job creation. Its completion is scheduled to spring 2026.

Business zones for circular collaboration and industrial symbiosis

In supporting the circular transformation of the Zasavje region, the **Centre for Just Transition of Zasavje** has taken an active role in operationalising the strategy through a **business zone-based approach. Several** projects focus on developing business infrastructure on reclaimed mining land to support economic revitalisation and enable new business activity. These projects provide infrastructure and serviced land for companies to establish or expand operations while contributing to the regeneration of former mining areas. The **OIC Lakonca project** develops a craft-industrial zone within a former mining complex with a total investment of **€9.36 million**. The **OC Rudnik Hrastnik project** focuses on transforming a former mining site into a business zone aimed at attracting investment and supporting job creation. The **EPC Kisovec II project**, supported by **€1.5 million in Just Transition Fund funding**, develops economic infrastructure on reclaimed mining land to enable new business activities.

In parallel with infrastructure development, the Just Transition Centre is exploring circular collaboration models within business zones. In the Kisovec zone, a pilot initiative is being developed together with local stakeholders to support circular transformation at the level of the entire business area. Priority areas include energy, waste and food systems. The most advanced initiative focuses on the development of a local energy community enabling companies to exchange surplus energy and optimise energy use within the zone. This approach illustrates how business zones can support industrial symbiosis and collaborative circular solutions between firms.

Capabilities for business transition and ecosystem development

The Circular Academy is a key initiative supporting knowledge development and stakeholder engagement within the region's transition process. The programme was developed by the Just Transition Centre in collaboration with the organisation Circular Change as part of the region's broader just transition strategy. The programme brings together businesses, public institutions, researchers and other regional stakeholders interested in developing circular economy initiatives.

Through training sessions, workshops, study visits, and collaborative events, the Academy helps participants develop knowledge related to circular economy principles, innovation and the broader green transition. The programme also supports the development of practical initiatives by facilitating stakeholder engagement and the co-creation of project ideas. For businesses in the region, the Academy provides opportunities to explore new circular business models, identify collaboration partners and develop project ideas linked to the transition process. Activities such as collaborative project design, networking sessions and thematic workshops help companies strengthen their capacity to participate in innovation initiatives and transition funding programmes.

By connecting actors across sectors and strengthening local capabilities, the Circular Academy contributes to building a shared understanding of the transition process while also helping generate concrete initiatives and investment-ready projects supporting the region's circular and low-carbon transformation.

Innovation pipeline for firms

Centre DUBT: A research and innovation centre dedicated to decarbonisation technologies, including battery and hydrogen research. With a total investment of **€27.3 million**, the centre is operated by the **National Institute of Chemistry** and collaborates with regional industry representatives such as Steklarna Hrastnik, a major glass manufacturer. In the Kisovec business zone, pilot initiatives are also exploring circular collaboration between companies, including the development of a local energy community based on the exchange of surplus energy between firms. The centre also leads initiatives focused on circular critical raw materials, working with regional companies including TKI Hrastnik, Mikrobium and Ceroz. These collaborations aim to support the development of new technologies while strengthening links between regional industry and research institutions.

R&D and demonstration programmes

Project Link

Business Incubator Kompreshaus Hrastnik

Project Link

Centre for Just Transition of Zasavje

Project Link

Circular Academy

Project Link

Centre DUBT

Project Link

Early implementation signals

Because many initiatives are still being implemented, it is too early to assess long-term outcomes. However, several early indicators already signal strong implementation progress in Zasavje.

- **Strong project pipeline and uptake:** 32 project proposals submitted from Zasavje for Just Transition funding calls — high demand indicating local mobilisation and readiness.
- **Rapid fund absorption and mobilisation:** 97% of available Just Transition funding already approved and 60% allocated to active projects — a strong indicator of implementation capacity.
- **New investment and job creation underway:** Nine approved investment projects worth €30.5 million in Zasavje alone. These projects are expected to create 100+ jobs in the region.
- **Strategic infrastructure regeneration launched:** A 35-hectare former mining waste site is being redeveloped with infrastructure platforms to enable new economic activity and future jobs.
- **Flagship innovation project approved:** EU funding confirmed for a zero-carbon technology centre including battery and hydrogen labs, employing at least 15 highly skilled staff.[2]
- **Proven entrepreneurship programme scaling:** Regional entrepreneurship scheme expanded from 40 pilot participants to 360 nationally with a 60% success rate and 16 start-ups created in early phase.[3]
- **Emerging business engagement in circular practices:** Early implementation indicates that firms in the region are beginning to engage in a range of circular economy practices, engage in a range of circular economy practices, including circular product design, industrial symbiosis initiatives, and energy-sharing models.

These indicators suggest strong early implementation capacity, a critical success factor for regional transition strategies. The results reflect strong engagement of local businesses in transition investments and innovation activities, indicating growing participation of firms in the region's transition ecosystem. As implementation progresses, an important area to monitor will be whether emerging circular initiatives at firm level—such as industrial symbiosis, circular product design, and energy collaboration—scale into stable business models and contribute to long-term competitiveness and job creation.

What distinguishes the Zasavje case

Zasavje's transition approach illustrates how a small post-industrial region can translate a transition vision into a coordinated set of actions supporting regional economic restructuring.

A distinctive feature of the Zasavje case is the **strong focus on local circular businesses within the broader transition strategy**. Rather than implementing isolated projects, the region developed a set of measures intended to support companies operating in the region while new economic activities emerge.

Another characteristic of the approach is the **integration of circular economy objectives within the just transition framework**. In Zasavje, circular economy initiatives are not treated as a separate environmental agenda but are embedded within broader regional development efforts linked to economic diversification and employment.

The case also illustrates a **portfolio approach to implementation**. Multiple initiatives are developed in parallel, including investment support for businesses, redevelopment of former mining areas into business zones, capability-building initiatives such as the Circular Academy, and innovation projects such as the DUBT research centre. These initiatives address different dimensions of the transition and are implemented simultaneously.

Coordination plays an important role in enabling this approach. The **Regional Development Agency of Zasavje and its Just Transition Centre** act as a central coordination structure connecting municipalities, businesses and other stakeholders and aligning projects with regional priorities and funding opportunities.

Taken together, these elements illustrate how the transition in Zasavje is organised not around a single flagship intervention, but around a **set of interconnected initiatives implemented within a shared regional transition framework**.

Lessons Learned

Based on the early implementation signals, several lessons emerge from the Zasavje experience.

Systemic lessons

- Small regions can use multilevel governance coordination to support a systems approach to their local transition.
- Early stakeholder mobilization and social cohesion can significantly improve ecosystem alignment and support funding absorption, project readiness, and the engagement of local circular businesses and innovators

Business support lessons

- Align circular business support instruments as a portfolio. Coordinating financial incentives, infrastructure development, skills programmes and innovation initiatives helps address multiple barriers faced by businesses during industrial transition.
- Regional development agencies can act as transition intermediaries. In Zasavje, the Regional Development Agency and its Just Transition Centre connect firms with funding opportunities, advisory support and innovation partnerships while coordinating regional projects and supporting the scaling of circular business models.
- Project preparation support increases uptake of funding. Information sessions, technical workshops and advisory services helped businesses understand funding calls and develop investment-ready proposals.
- Innovation partnerships help firms enter new value chains. Collaboration and industrial symbiosis between companies and research institutions through initiatives such as the DUBT centre enables firms to participate in emerging sectors such as hydrogen and clean energy technologies.
- Strong local collaboration facilitates circular transition implementation. Close cooperation between municipalities, businesses and regional institutions helps identify investment priorities, support local businesses implementing circular practices and build trust during economic restructuring.
- Risk of funding dependence: The transition currently relies heavily on EU and national funding, raising questions about long-term sustainability and the need to strengthen private investment.

Forward-looking insight

As implementation progresses, differentiating business support according to firms' levels of circular maturity could further enhance effectiveness. Tailored support for firms at different stages—from early awareness to scaling—may help accelerate transition pathways and improve alignment between policy instruments and business needs.

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Sources

- Center for Just Transition. (n.d.). *Official website.* https://pravicni-prehod-zasavja.si
- Center for Just Transition (n.d.). *Database.* https://pravicni-prehod-zasavja.si/podatki
- Gospodarska Zbonrica Slovenije (2024). Study on propulsive companies and key RDI stakeholders in priority areas of S5 in the Zasavja region in 2024. Retrieved from: https://pravicni-prehod-zasavja.si/wp-content/uploads/2025/07/2415706444084_1_rra_studijastepsrip_zgz_final.pdf
- Interview with Kristijan Adamlje, Programme Manager at the Regional Development Agency Zasavje Conducted by the author.
- Just Transition Zasavja. (n.d.). *Project database pages (DUBT, Lakonca, Kisovec II, Kompreshaus, Rudnik)*. Retrieved from https://www.pravicni-prehod-zasavja.si
- Regional Development Agency of Zasavje. (2024). Academy for Circular Economy. Retrieved from: https://pravicni-prehod-zasavja.si/wp-content/uploads/2024/12/RRA-ZASAVJE_2024_Academy-for-Circular-Economy_Brochure_digital-use-1-1.pdf
- Regional Development Agency Zasavje. (n.d.). *Official website*. https://www.rra-zasavje.si/

Publication Date

April 2026

About this case study

This case study contributes to the Circular Cities and Regions Initiative (CCRI), which supports European cities and regions in advancing the circular transition.

It was produced as part of the Circular Cities and Regions Initiative (CCRI) Communities of Practice (CoP) project, funded under Horizon Europe, which brings together stakeholders for structured peer learning, knowledge exchange, and capacity building across eight thematic communities.

This case study was developed by Marco Antonio Segovia Bifarini (Climate KIC), with the direct input of the cities participating in the community of practice on “Supporting local circular businesses”.

More information: Circular Cities and Regions Initiative website

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Funded by the European Union