



European  
Commission

# Sokolovsko: Portfolio of Good Practices in Structural Change

Technical Assistance for the City of Sokolov,  
Karlovarský Region, Czech Republic

December 2023

*Regional and  
Urban Policy*

## Acknowledgments

This strategy was developed by ICLEI – Local Governments for Sustainability European Secretariat on behalf of the European Commission. Development of the strategy was coordinated by Arthur Hinsch, with distinct support from Tomaž Cigüt, Adrienne Kotler, Carsten Rothballer and George Stiff. Co-authors of the cases found in this Portfolio were primarily experts from ICLEI Europe (in alphabetical order: Matthew Bach, Tomaž Cigüt and Arthur Hinsch), supported with valuable contributions from experts (Andreja Šeperac and Pdraig Boland) and insights from several interviewees (Karla Sitar, Sonja Wilkens, Katarzyna Kobierska, Sergio Olivero, Karin Künnpass and Waldermar Stange).

## Disclaimers

This document has been prepared for the City of Sokolov with the financial support of the European Commission; however, it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

The report was supported within the EC-funded contract REGIO/2022/OP/0024, under the scope of the Just Transition Platform's [JTP Groundwork](#) technical assistance facility.



“A post-coal mining society”, image generated by Ivana Jágríková with the use of the Bing Image Creator AI tool, Microsoft, 2023.

## Table of Contents

Table of Contents.....	iii
Introduction.....	4
Diversification and economic development.....	5
Incubating new businesses from black to green.....	5
A green, grassroots accelerator for smart sustainability.....	8
Transforming a former coal mine into an innovation hub.....	11
Pioneering circularity in the capital.....	14
Energy communities as a citizen-focused solution.....	18
Capacity building, up- and re-skilling.....	23
Silicon Valley of the Balkans.....	23
Self-learning for a future-proof industry.....	27
Green skills for a sustainable future.....	30
Taking youth seriously for structural change.....	35

## Introduction

As the City of Sokolov and the other municipalities that make up the Sokolovsko area<sup>1</sup> become more and more affected by the transition away from coal mining, efforts to prepare for the closure of coal-mining operations and the related energy transition are ramping up, having been accelerated by the introduction of the European Commission's [Just Transition Mechanism](#) (JTM) and [Just Transition Fund](#) (JTF). The European Commission has already approved the official *Territorial Just Transition Plan* (TJTP) for all three Czech JTF territories, including the Karlovarský Region. In response to this, a new process, the "*Strategic Transformation Plan Sokolovsko*", is being prepared for the Sokolovsko subregion to further emphasise and streamline locally-oriented action.

In parallel, the City of Sokolov is striving to lead by example, by implementing a new stakeholder engagement strategy, created within the scope of technical assistance delivered as part of the Just Transition Platform's [JTP Groundwork](#) support facility, to more effectively bring a diverse set of actors to the table and ensure that the transition is conducted in a holistic and inclusive way, leaving no one behind.

This *Portfolio of Good Practices on Structural Change* represents a carefully selected compilation of cases from across Europe that have been identified as having potential replicability for Sokolovsko. Based on the City of Sokolov's priorities, most cases touch on (green) economic diversification, with many of linked to diversification and business development (in Velenje (SI); Freiburg (DE); Gliwice (PL); Ljubljana (SI); and Magliano Alpi (IT)). Other cases relate to skills and jobs (in Novska (HR); Jõhvi (EE); Laois and Offaly (IE); and in North Rhine-Westphalia, Saxony-Anhalt, Saxony, and Brandenburg (DE)). The last of these is less directly related to economic development, focusing instead on youth engagement, which had been highlighted by Sokolov as a distinct cross-cutting priority.

This portfolio primarily aims to inspire and to assist Sokolovsko, especially in preparing applications for the JTF and other relevant funds. However, of course, the insights found within this portfolio may also resonate with other JTF territories.



Figure 1: Map showing the geographic locations of the nine case studies presented in this portfolio.

<sup>1</sup> Sokolovsko represents the industrial core within the JTF territory of Karlovarský Region in the Czech Republic.

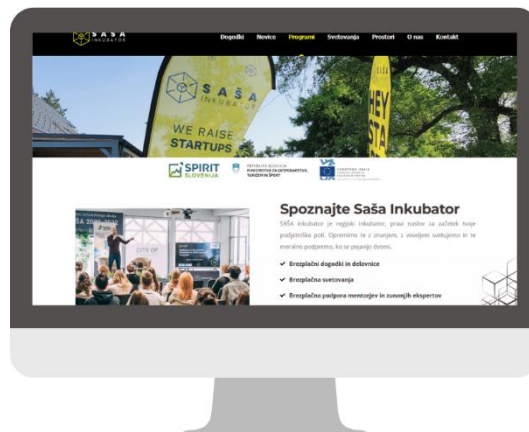
# Diversification and economic development

## Incubating new businesses from black to green

VELENJE, SAVINJSKO-ŠALEŠKA, SLOVENIA

### Summary

The [SAŠA Business Incubator](#) is located in the City of Velenje. The economy of the region largely depends on three industrial entities: the Gorenje appliance company, the Velenje coal mine, and Šoštanj thermal power plant. As part of the just transition process, the City of Velenje aims to diversify its economic activities. To achieve this objective, the Velenje Coal Mine Investment Company established this incubator in 2007; and in 2014, the City of Velenje became its majority owner. With more than 4,000 m<sup>2</sup> of space housing 60 startups, the SAŠA Incubator is one of the largest incubators in the region. It is open to early-stage start-ups from all industries, as well as companies working on Industry 4.0 solutions that are in expansion phases. The incubator has developed six innovative [support programmes](#), and helped launch 97 companies, creating 155 jobs. Today, the incubator is strongly connected within the region and is a driver of the regional entrepreneurial activities.



### Context and motivation to act

Velenje, with over 25,000 inhabitants, is the sixth largest city in Slovenia and the core city in the Savinjsko-šaleška area. In light of upcoming closure of the local mine and thermal power plant – which make up two of the region's three major employers and economic players – Velenje is working to attract new companies to the region and to diversify its economy.

### Enabling conditions

Due to its history and natural resources, the Savinjsko-šaleška region is one of the strongest economic centres in Slovenia, with energy, metal-processing, and construction industries. Furthermore, Gorenje and the Velenje Coal Mine are both Velenje-based companies, putting the city in a strong position to be able to support economic shifts and diversification – those two employers alone cover almost half of the workforce of the entire region!

The City of Velenje had already started preparing for the process of a just transition before rolling-out the incubator. In the course of transition, it aims to establish conditions for a pleasant life in the local community, and to diversify its economic activities beyond just a few large companies, which would not only motivate citizens to stay in the region, but will also motivate others to move in thanks to the high level of services and opportunities provided. The municipality strives to implement an integrated, green transition, and is receiving support in this venture thanks to having been selected to be one of the [100 Climate-Neutral and Smart Cities](#) under the EU Mission.

## Local challenges and solutions

Due to the planned phasing out of coal, the city is facing a difficult period of economic restructuring and transformation of the local environment in all spheres. However, the public authority also sees this as an opportunity for further development of the city and society, creating more jobs in a diverse set of small- and medium-sized enterprises.

This transition is being enacted through the implementation of various Velenje-led projects, programmes and measures that will enable a high-quality and fair reorganisation of the region. For example, they are the organisers of an annual conference where representatives of European countries and regions meet and exchange their experiences in the process of just transition. The first conference edition focused on the Green Deal with the main topic of how to transform district heating systems in Europe, while the latest edition, titled [Welcome, Future 2023](#), focused on economic diversification of European coal regions. The agenda, materials, and recordings are available online for inspiration.

## Stakeholder involvement

The SAŠA Incubator, which is an associate member of the Savinjsko-šaleška Chamber of Commerce, was founded in 2007 by the Velenje Coal Mine Investment Company, which was then the majority owner. Other founders were the City of Velenje, the Regional Development Agency of the Savinjsko-šaleška region, the Velenje Highschool Centre, and the Technical Centre of the University of Maribor. This variety of public, private, and academic stakeholders all shaped its development.

## Budget and finance

SAŠA incubator is one of the largest incubators in the region, hosting the staff of 10-19 member organisations. In 2014, the City of Velenje bought 60 percent of the shares from the Velenje Coal Mine Investment Company, became the majority owner, and started investing its capital in the incubator. The remainder of the incubator is still predominantly owned by the Velenje Coal Mine Investment Company.

## Results and lessons learnt

The SAŠA Incubator's six support programmes provide start-ups with assistance to, for example, obtain grants and subsidies, low-interest and moratorium loans, free services, strategic support, business advice, and more. The SAŠA Incubator has helped many companies, self-employed individuals, freelancers, and others to gain a valuable place in the market. With the support of the start-up incubator, 97 companies have embarked on a business path, creating 155 jobs.

The incubator offers modern offices and co-working spaces with subsidised rent and larger spaces for workshops, events and entrepreneurial programmes. In addition, members of the incubator have access to:

- Mentoring – SAŠA's business advisors provide guidance and support on the entrepreneurial path;
- Free events and workshops – offering knowledge needed for successful market penetration;
- A business network – including access to networking events, and direct connections to entrepreneurs, corporations, and investors;
- An expert advisor – assigning each member an external expert once their entrepreneurial idea and a company have matured to the point where advanced and specific skills are needed.

The incubator also organises various programmes for entrepreneurs, such as the international Future 4.0 industry conference, where large corporations and start-ups come together. Their best-known programme is the “Entrepreneurial Trampoline”, whereby start-ups receive six weeks of intensive consultation, mentoring, and support in the development of an idea to the level of obtaining the first customers, business partners, or investors.

Young companies that operate under the umbrella of the SAŠA Incubator are very successful in obtaining grants for the further development of business ideas. Moreover, they are motivated by the possibility to receive three awards for innovation from the Chamber of Commerce of the Savinjsko-šaleška region, as well as investments by the Business Angels of Slovenia.

In order to expand the activity of the incubator and provide innovative start-up companies with infrastructure and knowledge, the construction of an Industrial-Technological Park with an area of 5,000 m<sup>2</sup> is planned. The park aims to retain fast-growing technology companies in the region and attract new companies from other regions.

### Replication potential

Much like in Savinjsko-šaleška, the economy of the Sokolovsko region is highly dependent on large industrial entities, and facing substantial restructuring in the face of coal phase-out. It will be important for Sokolovsko too to promote an entrepreneurial way of thinking, to raise the level of importance of entrepreneurship development in the environment, and to support good business ideas and projects related to a sustainable future. An incubator can initiate this process and serve as a meeting place for young entrepreneurial talents, freelancers, start-ups, fast-growing companies, managers and corporations.

Sokolov could consider using its depot area for the establishment of a similar business incubator. Moreover, it could evaluate the benefits of hosting an annual regional, national or European gathering on the just transition with changing topical foci, and thus continue the networking, communication and engagement channel *Sokolovsko Inspire* that has started under JTP Groundwork.

### Additional information

The Head of Velenje’s Economic Development and Transition Office, Karla Sitar, should be contacted in case of further interest: karla.sitar[at]velenje.si



## A green, grassroots accelerator for smart sustainability

FREIBURG, BADEN-WÜRTTEMBERG, GERMANY

### Summary

[Grünhof](#) (“Green courtyard”) is widely regarded as a key accelerator for community-led social and economic innovation in the Freiburg region in the south of Germany, supporting green economy start-ups, having established pioneering companies and social entrepreneurs in the development of sustainable technologies and business areas. They seek to reduce energy and resource use, move towards a circular economy, promote the utilisation of environmental data, and provide incentives for socially responsible entrepreneurship and sustainable production. They also work to develop new solutions for the social aspects of sustainability, such as improving social participation or improving the quality of social services. Launched in 2013 in a former railway warehouse, they have worked closely with the City of Freiburg and other stakeholders to build this space for entrepreneurship, which further cements the city’s status and communication brand as one of the greenest cities in Germany and Europe.



### Context and motivation to act

Freiburg is the fourth largest city in the German state of Baden-Württemberg with a population of around 232,000. Located in the Upper Rhine region at the edge of the Black Forest, it is an old university town and archiepiscopal seat with over 800 years of history. Since the 1970s, it has been a sustainability pioneer, hosting the first German ecological research institute (Öko-Institut, the Institute for Applied Ecology) in 1977 and becoming a hub for solar and renewable energy research in the 1980s (e.g., Fraunhofer ISE). Its Vauban district is globally known as an exemplar of sustainable urban planning, bringing together ecological building practices, sustainable mobility and community-led development. Freiburg has also been a global advocate for sustainable cities, joining ICLEI in 1990 and hosting its European Secretariat ever since. The city has received a number of accolades for its work in sustainability, including the German "Federal Capital of Climate Protection" in 2010, the German Sustainability Award in 2012, and being a finalist for the European Green Capital Awards in 2009.

### Enabling conditions

According to Grünhof, supporting a green startup ecosystem can take place almost everywhere, as it only requires two elements: first, a genuine motivation for positive change and a readiness to invest energy to make it happen; and second, a strong connection to the community. For them, the tipping point came when they were able to enter into a public-private partnership with the City of Freiburg (via its Agency for Business, Tourism and Trade Fairs, FWTM) in 2016.

This partnership was founded on an openness to talk and work together, even if they did not fully share the same perspectives. Each partner brought something unique: Grünhof provided grassroots proximity, credibility and technical know-how, whereas the city provided legitimacy towards public funders. The result was a successful effort to acquire significant funds (e.g., 1 million EUR over three



years for the first round of the [Smart Green Accelerator](#), now in its third cycle and one of Germany's most visible green start-up accelerators).



The partnership with the City was also a major enabling condition in terms of access to space. They would not have been able to sign a standard 20-year lease for their space without the City's backing and its willingness to break the lease down into five-year segments, as well as its acceptance that economic profitability would not guide the contract.

Ultimately, however, this partnership would not have been possible if the City hadn't hired dedicated staff to support these efforts. This has also been the experience of other Cities (e.g., Mannheim), which have undertaken similar initiatives.

## Local challenges and solutions

Over time, concerns have emerged that the city was losing its innovative position in the world of sustainability. To this end, the City created a Green City Office in 2008, while its Agency for Business, Tourism and Trade Fairs (FWTM) launched the Green City Cluster. This Cluster has been engaged in connecting the different stakeholders involved in the green economy and ensuring knowledge exchange – from large research institutions to solar architects to zero-emissions hotels. As part of these efforts, the City has sought to foster green and social innovation and entrepreneurship, of which Grünhof has been a central pillar, though a key initial challenge was gaining acceptance from certain stakeholders at the start, especially industry. With time, and through the partnership with the City, Grünhof has been able to gain a broad-based legitimacy.

One of the biggest challenges faced by Grünhof in its development has been a lack of long-term funding and associated security, which forced the initiative to rely strongly on the intrinsic commitment and motivation of its founding members. In an effort to give space to entrepreneurial energy, they decided to not rely only on grassroots and public support, and instead to structure their funding in such a way as to enable commercial development. One strategy here has been to create partnerships with local companies who pay a fee for access to the Grünhof spaces, programmes and community. Another one has been to run their space according to a mixed commercial and not-for-profit model: some of the rents are under market price, whereas others are market-based. This has fostered more stability and the ability to plan into the long term.

## Stakeholder involvement

As noted throughout this case, the engagement of a broad range of stakeholders has been crucial to the success of Grünhof. In essence there are three key sets of stakeholders:

- Public authorities, primarily represented here by the City of Freiburg and its FWTM agency, but also the Federal State of Baden-Württemberg.
- Grassroots organisation and local community, which have been instrumental in both providing initial support for the initiative and longer-term legitimacy.
- Private sector actors, including social enterprises, but also increasingly larger industrial actors who see the initiative as a driver of sustainable innovation.

## Budget and finance

Though Grünhof's overall operating budget could not be shared, they have put in place a 70%-30% split between their commercial business and public funds respectively. Interestingly, they have found

that there is a lot of money available from private funds to invest in social progress, but that a non-profit structure is a requirement for this type of funding.

More specifically, their start-up accelerator has a budget of around 450,000 EUR per year, including one third for staff costs and 15% for overhead. Though this funding has been critical to the emergence of an innovation ecosystem, it has at times been uncertain where some funding cycles have been announced with just a day's notice. The Smart Green Accelerator is funded 50% via the EU Social Fund, 30% by the German state of Baden-Württemberg and 20% by the City of Freiburg.

## Results and lessons learnt

On the whole, Grünhof has been remarkably successful, even though this outcome was by no means assured ahead of time. It required the deep commitment of those involved in the project itself – sometimes willing to take significant financial risks – and foresight from the local authorities who were willing to eschew certain profits in favour of a community-oriented approach.

Grünhof highlights a few lessons learnt that they would like to impart to Sokolovsko:

**Don't start too small.** Though the financial sustainability of a project might not be certain from the very start, space is needed to grow. In this case, this meant a minimum of 2000 m<sup>2</sup>, under which they were not able to be commercially viable.

**Accept that this is a long-term endeavour.** Grünhof has been active for over a decade now. Their ability to keep going over such a time-span is linked to having strong partners who are not focused on getting a huge success story after just a year or two. In this regard, the choice of partners is critical.

Though it may seem impossible to make things work financially, they have found that there is always a way to **make the funding work**. Whether this means combining different sources, branching out into other areas (e.g., co-working spaces), or creating parallel entities (e.g., for profit and non-profit), numerous options exist within each context.

**Think local/regional.** Grünhof emphasises the need to always build on local and regional advantages by carefully considering available resources and gaps.

## Replication potential

One of the crucial points for Sokolov and its region to consider is that the types of innovation that it can try to foster need to be linked to its local potential, whether sports, tourism, agriculture or other. It is easiest to set up an entrepreneurship hub that builds upon a stable, locally-based concept. More specifically, an innovation space such as Grünhof could be explored as an option more closely for the abandoned depot area in Sokolov, if for no other reason that their shared history, Sokolov's as a former railway depot and Grünhof's as a former railway warehouse. Considering that the Sokolov site already is being envisioned as a new economic zone the parallels are even stronger. All that's left is for the City of Sokolov, or some local start-up, to take the initiative to turn it into a zone designed to stimulate creativity, innovation, and the cross-pollination of ideas. One advantage that Sokolov's site has, that Grünhof's lacks, is that due to its proximity to the bus and railway stations, it could make it all the easier to truly become a hub for the whole Sokolovsko region.

## Additional information

The Head of Startup, Sonja Wilkens, should be contacted in case of further interest: [info\[at\]gruenhof.org](mailto:info[at]gruenhof.org).

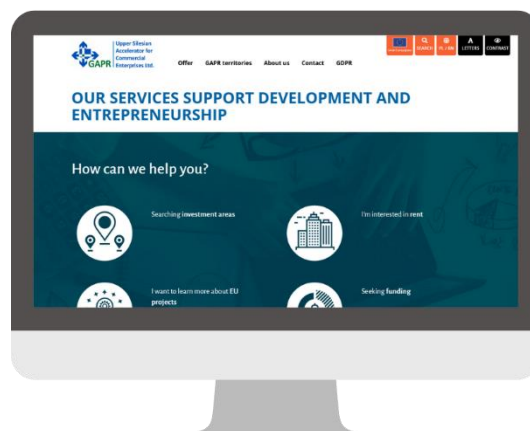


## Transforming a former coal mine into an innovation hub

GLIWICE, SILESIA, POLAND

### Summary

The [Nowe Gliwice](#) (“New Gliwice”) Business and Education Centre is part of GAPR Ltd. (Upper Silesian Accelerator for Commercial Enterprises). It is situated within a revitalised complex of four buildings of the former Gliwice coal mine, dating back to 1901. A few years after the final coal wagon came to the surface, the revitalisation of 15 hectares of the post-mining area began. With its cultural heritage and the historical image of the region still preserved and celebrated, its renovated buildings nowadays are adjacent to modern headquarters of IT companies and advanced technology enterprises from various industries. Its operations, and proximity to such enterprises, create favourable conditions for SMEs (Small Medium Enterprise) through the development of higher education and the creation of new jobs and businesses.



### Context and motivation to act

The City of Gliwice, on the outskirts west of Katowice, is now very well known as a success story in business innovation partially thanks to this project. It remains a positive example of how to convert former coal sites into areas for future-proof businesses which provide reasonable perspectives for locals, and especially to young people, who are given a nearby alternative to either leaving the region or working in the coal/energy sector (e.g., Gliwice’s single coal mine currently still in operation).

The initial spark for the project dates back to 2003, a time when the framework conditions for funding such an endeavour were rather different from, and less favourable than, what they are now. Nonetheless, the underlying motivation and process are still applicable today and their impact can be seen in how the project continues revitalising the city nowadays.

Gliwice municipal authorities saw it as a great opportunity to make use of the Polish system of “Special Economic Zones” to acquire the building complex via a procurement procedure and thereafter to facilitate the participation of investors and companies through a system of tax rebates. The building complex was previously in the hands of the regional state company managing former mining sites, and the municipality was the only one entitled to acquire it from them. In Gliwice’s case, the Special Economic Zone encompassed the entirety of the city and not just the former mining complex. Because of this zone, large investments arrived from the automotive industry, particularly General Motors. The city wanted a sense of balance among the types of new business being generated, and so made use of the former coal site to incentivise a modern business culture for SMEs and start-ups. Together with a business incubator, the city has launched a university to train business managers and has set up criteria requiring that only those companies with an innovative and technology-oriented profile could start operations at this complex. While the concept relied substantially on European Social Fund (ESF) and Interreg funds for the initial years, the project now runs at a 97% self-sufficient business model due to the business tax and rent paid by the companies who are now situated in Nowe Gliwice.

## Enabling conditions

The project has three key enablers which have allowed it to succeed as well as it has. Firstly, the City of Gliwice itself has taken advantage of its clear mandate and strategic plan for structural change and local job creation, as well as its nationally-determined designation as a Special Economic Zone.

Meanwhile, the GAPR Upper Silesia Accelerator, functioning as a kind of regional development agency, has been instrumental in managing most of the development and day-to-day operations. The agency is responsible for maintaining and selling the available business plots on the premises, announces the required public procurement procedures and has been very active in advertising opportunities and proactively looking for potential investors. Interested companies must demonstrate the type of business they wish to do and why it is innovative and fitting to the Nowe Gliwice narrative – this proof of such activity is linked to how the applicants are listed in the Chamber of Commerce.

Finally, of course the availability of applicable EU funds, especially ESF and Interreg, have been vital during the starting process of this initiative. The former allowed Gliwice to develop knowledge on how to develop an innovation economy at a regional level. As part of the latter, dedicated support was provided by the Aachen Regional Development Agency (Germany) which used their own similar experience to give both technical advice and suggestions on how the layout of the premises could be designed in a more social way allowing for cross-pollination between companies.

## Local challenges and solutions

A key challenge was the process of synergising the development of opportunities for businesses on the one hand and making sure that there are enough (young) people educated to enter these new innovative companies as employees. While the local newly established university for economics and business management, which was developed by the GAPR agency, attracted a high number of students during the first five years, the number quickly declined after that. This was likely because many universities around Poland had a similar idea to develop such a school and this led to competition between many cities which are now looking for students specialised in economics and management. Therefore, it has been decided that it would be more effective to use the on-site space, previously reserved for the university, instead for situating additional businesses. A key lesson of this process has been that it would have been better to assess the founding of such an educational centre in relation to similar activities being done (simultaneously) elsewhere. In contact with other Polish cities, it has become clear that many are shutting down, or reducing the scope of, such specific programmes. Not all companies who started on the premises (either inside of the Business Incubator) have necessarily succeeded. However, the company EMS Systems is the most successful one, in the sense that they have taken over much of the premises in just a few years. A key reason for this has been that the owner of the company made strong use of the on-site trainings offered by the GAPR agency.

## Stakeholder involvement

The City of Gliwice was instrumental in the establishment of Nowe Gliwice as it created the concept and vision. It has been the only entity which, legally speaking, could take over ownership of the former mine. The City looked for the initial investors, announced the activities and trained the first set of people who would manage the project, and has handed over day-to-day operations to the GAPR agency. The establishment and intimate involvement of the GAPR Upper Silesia Accelerator as a regional development agency has proven crucial to the City of Gliwice. Likewise, university entities linked to its work have been very important, and cooperation via Interreg with the Aachen Regional Development Agency was extremely beneficial.

## Budget and finance

As mentioned above, the business model of Nowe Gliwice demonstrates that it is already nearly completely (97%) self-sustained at this point. Naturally, the premises do host a robust mix between start-ups and established companies, which are allowed to establish themselves on the premises, as long as they meet the prerequisites for applicants, and of course pay their rent. The rent for companies that are not start-ups, and therefore not part of the Business Incubator, has been purposely set at a higher rate than for associated start-ups. Nonetheless, already existing companies remain interested because they find it attractive to be based at these premises due to the high cross-pollination potential with other companies. Nowe Gliwice still makes use of EU Structural Funds to acquire new plots for development around Gliwice, and the GAPR agency also uses such funding to provide trainings.

## Results and lessons learnt

A major impact of the Nowe Gliwice project has been that Gliwice itself is now widely recognised as an innovation area which successfully conveys to citizens and entrepreneurs the importance of new and innovative businesses, and markets itself under the idea that it “produces companies”. Nowe Gliwice is showing local youth that there are viable alternatives to just working for the large, traditional companies in the region, many of which are affected by the transition, and that they can even start a business themselves and will be supported in doing so.

Nowe Gliwice is now in the process of taking stock of the structural impact of this project. They are specifically looking for hard data to show that young people consider these kinds of innovative businesses as a true alternative to working in the coal/energy sector. Since there is still a local coal mine in operation, it is not always easy to compete with the high wages offered in that sector, even if what Nowe Gliwice might be more future-proof. The City of Gliwice is analysing these trends on a regional level, together with the other cities, since there is strong tendency to commute in the dense urban environment found in Upper Silesia.

## Replication potential

The implementation of such a case is a long-term process which relies substantially on clear leadership from a coordinating entity such as the local government. Nonetheless, it does not need to remain a municipal responsibility forever, and can transfer management responsibilities to a regional development agency or similar. In Sokolovsko’s case, there are already numerous actors who could take up such a role, but also that a new, dedicated agency might be a viable option as well.

It may also be easier to replicate this example in another context, such as Sokolovsko’s, if similar regional economics are at play. Gliwice is located very strategically in Upper Silesia close to Katowice and is located next to a very busy and well-connected highway route / connection hub. This makes it attractive for companies to establish themselves in this area due to a combination of beneficial logistics and a large population able to serve as employees and customers of their services. This might not necessarily be the case (yet) for Sokolovsko, but certainly this is a concept worth investigating to see how it could be replicated there, in particular knowing that the City of Sokolov is already preparing its industrial railway depot site for new business development.

## Additional information

The Head of Gliwice’s City Development Bureau, Katarzyna Kobierska, should be contacted in case of further interest: [kobierska\\_k\[at\]um.gliwice.pl](mailto:kobierska_k[at]um.gliwice.pl).

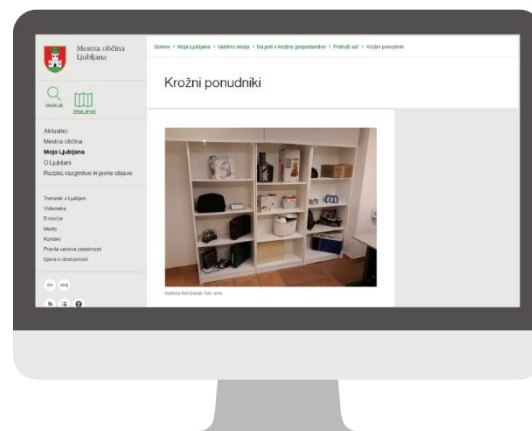


## Pioneering circularity in the capital

LJUBLJANA, SLOVENIA

### Summary

Ljubljana has been widely recognised as a frontrunner amongst cities seeking to implement the circular economy (CE). Their approach is founded on the principle of collaboration across the departments of the municipality and with stakeholders at district, municipal, national, and international levels. As their practices show, both cooperation and communication with citizens is crucial in generating a shift in mindset, which is a precondition for the successful transition to a circular economy.



### Context and motivation to act

Ljubljana is the capital and largest city of Slovenia, located between the Adriatic Sea and the Danube region. It acts as the country's economic, cultural and political center. The city is governed by the municipality, which is subdivided into 17 districts represented by district councils.

The city has received significant recognition for its environmental ambitions, including the title of European Green Capital in 2016. Ljubljana is also a member in key initiatives and networks, including the CE100 programme of the Ellen MacArthur Foundation, EUROCITIES, ICLEI, OECD and many other international activities and projects. In 2022, Ljubljana was selected as one of the 100 cities in the [EU Mission for Climate-Neutral and Smart Cities 2030](#).

Before joining the EU in 2004, Slovenia had no proper waste management schemes in place. Today its capital, Ljubljana, has implemented a new collection and sorting system for municipal waste, making it a frontrunner, and leapfrogging more traditional approaches.

### Enabling conditions

The City Council has cemented its ambitions by adopting a circular economy strategy in January 2022. The implementation of the strategy is coordinated by the circular economy manager, and it focuses on four priority areas: plastics (single use), food waste, textile and electronic and electrical equipment. Each priority area features concrete measures, including responsible organisations/person, timeframes, financial resources required and performance indicators. The majority of the measures have already been initiated.

Ljubljana's transition to CE is based on three pillars:

1. Circular decision-making (being a role model for our citizen);
2. Assembling new, circular value chains;
3. Exchange of knowledge and experience and transfer of good practices.

As cross-sectoral integration is key, the city's circular economy is also embedded in other strategies, roadmaps, or action plans (e.g., the municipal spatial plan, rural and urban agriculture development strategy, urban forest development strategy, local energy concept, cultural development strategy, tourism development strategy, zero waste strategy, and digital development strategy).

## Local challenges and solutions

The city's main challenge has been to foster positive behavioural change, for instance in relation to waste and littering during the COVID-19 pandemic, especially in relation to the rapid increase in the use of single use plastics. Ljubljana also suffers from a lack of staff capacity within the city administration to implement a larger number of initiatives. It is equally challenging to develop the skills needed for managing a large ecosystem of actors and initiatives, and assembling complex value chains. Fortunately, however, there is a large number of community-led circular initiatives, which allows for the continuous advancement of the city's efforts.

Ljubljana's activities in 2023 have been focused on:

- **Overarching**
  - Development of a City Climate Contract related to EU Mission 100 Climate Neutral and Smart Cities.
  - Knowledge sharing and exchange with other cities and stakeholders at local, national and international levels (e.g., Eurocities Working Group on Waste, New Plastics Economy Global Commitment, Circular Cities Declaration, Waste Wise Cities).
- **Detailed Actions**
  - Continued improvements in the collection and separation of waste (biological, glass, paper and cardboard, packaging).
  - Launch of mini waste collection centres.
  - Anti-food waste campaigns (including educating cooks and meal planners in kindergartens and schools on less food waste, e.g. as part of the Interreg project [CoFarm4Cities](#)).
  - Installing new drinking fountains in public areas to minimise single use plastics.
  - Promote repairs and provide a list of Waste Electrical and Electronic Equipment collection points in the city.
  - Contribute to research on excess waste heat usage (within the Horizon Europe project [UP-SCALE](#)).
  - Pilot the separation, collection, and reuse of cooking oils.
  - Procure buses suitable for afterlife recycling (e.g., to become mobile youth centres, outdoor classrooms, etc.).
  - Transition to apps instead of physical contactless cards for travel on public transport and other municipal systems.
  - Implement EU projects related to sustainability and/or CE (e.g., [PSLifestyle](#)).

### Additional Examples:

[Centre ROG](#): The city recently opened a universally accessible creative hub offering nearly 9,000 m<sup>2</sup> of space and a new 8,000 m<sup>2</sup> park available for citizens' daily use and public events. The Centre will provide creators, organisations, businesses, and the general public with an environment to engage in sustainable, socially responsible development (e.g., for fabrication, urban handicraft, applied arts, design and architecture).

[Circular Ljubljana Map](#): The city has supported the creation of a map indicating relevant initiatives (e.g., swap shops, borrowing shops, repair, and recycling facilities), as well as circular economy stakeholders. The aim is to generate citizens' support through visibility.

[Anti-Fast Fashion Campaign](#): The city joined the European Week for Waste Reduction in 2022 with a campaign raising awareness regarding pollution linked to fast fashion. The campaign encouraged citizens to reuse and repair textiles and clothing to reduce the generation of textile waste.

**Swap markets:** In 2023, the city, in collaboration with two local NGOs, began to organise exchange of clothes at the district level. The initiative was joined by 6 of the city's 17 districts. Citizens are encouraged to bring up to 5 pieces of wearable clothing, and can take away as many clothing items as they wish.

**New Libraries of Things:** Ljubljana's first library of things was established in 2014 with two new ones launched in 2022. They are run by youth organisations, and support youth skill development for non-profit circular entrepreneurship.

## Stakeholder involvement

Stakeholder engagement has been at the heart of the city's work on circular economy. Ljubljana engaged with over 80 stakeholders in the co-creation of its Circular Economy Strategy. These included all city departments, public institutions, and public companies. The process was led by a circular economy manager, who was also responsible for the strategy implementation.

The city also collaborates closely with its "big city family", which includes the public water and waste management company VOKA SNAGA. This company actively monitors its separate collection of biological waste, glass, paper and cardboard, packaging, residual waste, bulky waste, and some types of hazardous waste. They also make use of best practices for sustainable water use, including reusing rainwater for watering municipal green spaces and cleaning streets and public spaces.

Beyond the city limits, Ljubljana works a lot with other Slovenian cities, especially Kranj and Velenje (both also part of the EU Cities Mission) and Nova Gorica. This has offered an efficient way to exchange good practices and solve emerging issues. The city also works closely with research institutions (e.g., Institute for Circular Economy), as well as with other public authorities (e.g., national Ministries).

## Budget and finance

Compiling an overall budget for the Circular Economy at the Municipality of Ljubljana is a real challenge, since it is incorporated into many departments and projects. At the Department for Environmental Protection, the budget for soft measures is around 54,000 EUR, though this is only a small fraction of the total.

## Results and lessons learnt

**It's hard!** The Municipality of Ljubljana emphasises that it's challenging to convince citizens to join the circular economy journey, and to overcome some of the stigma linked to reuse. However, good practices such as the reuse of furniture and a widely used bike sharing app have brought many new users to the circular economy.

**Create transition opportunities.** The most significant shift in citizens' mindset occurred in 2016 when Ljubljana was named Europe's Green Capital. They realised that they, too, can participate in this transition process to a circular economy and that everyone can play their part. The mayor played a key role here by continuously (daily) communicating these messages to citizens. As part of these efforts, the mayor organised open days, district visits and other forms of direct communication. The overarching message was that circular economy and environmental measures make a direct contribution to citizens' quality of life.



## Replication potential

Though the context of the Municipality of Sokolov differ in some crucial ways from that of Ljubljana (e.g., size, role as capital city), the majority of the latter's efforts can be replicated in Sokolov.

### Primary Replication Potential

- Co-creation of a municipal circular economy strategy.
- Appointment of a municipal circular economy manager.
- Joining international initiatives and networks for knowledge and capacity building.
- Collaboration with local and national civil society to establish good practices (e.g., repair shops, sharing economy measures).
- Awareness raising and communication campaigns towards local citizens (e.g., on food waste minimization).
- Mapping of and support to existing initiatives.

### Secondary Replication Potential

- Restructuring of local waste management infrastructure.
- Integration of waste streams.

## Additional information

For more information, please visit:

- City of Ljubljana: <https://www.ljubljana.si/en/>



City of  
Ljubljana

## Energy communities as a citizen-focused solution

MAGLIANO ALPI, PIEDMONT, ITALY

### Summary

#### [Magliano Alpi's Renewable Energy Community \(REC\)](#)

was established in 2020, and remains an instructive example of how municipalities can take charge to establish energy communities themselves. The Italian municipality of Magliano Alpi initiated the energy community together with five private citizens, based on a 20 kW<sub>p</sub> photovoltaic (PV) installation on the roof of the city hall, though more capacity is currently underway. The REC, of which the mayor is the president, is equipped with an Internet of Things (IoT) platform to manage energy flows digitally and to allocate benefits coming from shared energy to its members. The REC aims to make the city hall, the library, the gymnasium and the municipal schools energetically self-sufficient. Another objective is to exchange surplus energy between the participating families and small businesses. A general reduction of energy costs for those participating is another benefit, contributing to the alleviation of energy poverty in the area. A charging station for electric vehicles (EV) is also available for REC members. The municipality is additionally supporting the creation of a 'community operational group', a legal entity that aims to create a short local supply chain involving coordination and collaboration between technicians, designers, installers and maintenance workers. The REC therefore also functions as a catalyst for bringing together the skills of the local area.



### Context and motivation to act

The REC is named the Energy City Hall REC-1 due to the fact that the first PV panels were installed on the building of the city hall and that it is the first REC of the municipality. Energy City Hall REC-1 was established by the public administration of Magliano Alpi in December 2020, Magliano Alpi is situated in the province of Cuneo, in the region of Piedmont, Italy, and has around 22,300 inhabitants over an area of 32.6 km<sup>2</sup>.

The municipality of Magliano Alpi is the coordinator and main prosumer of the REC, having installed a 20kW<sub>p</sub> PV system on the roof of the town hall. Since the mayor is the president of the community, it helps increase confidence in the initiative and its replicability in other contexts. Many citizens and small enterprises have already asked to become partners, but due to the current medium/low voltage substation constraints they were unable to join REC-1. Consequently, two new RECs, REC-2 and REC-3 have been established. REC-1 and REC-2 are aimed at guaranteeing the self-sufficiency of the city hall, the library, the gymnasium and the municipal schools, and exchanging surplus energy with the participating families and small enterprises (which include craftsmen, businesses and professionals who benefit from community services). REC-3 is composed entirely of private members. REC-2 and REC-3 were established at the end of 2021, with an overall installation worth 60,000 EUR, involving 7 prosumers and 40 users.

The main goal for the municipality was to reach the objectives of the Clean Energy for All Europeans Package and it has therefore included in its strategic programming document (DUP) the development of innovative models of territorial development based on renewable energy. This aims to combine the advantages of the so-called Superbonus, which provides attractive fiscal incentives for renewable

energy communities in Italy. To reach this goal, the municipality agreed in April 2020 to the “*Manifesto of the energy communities for an active centrality of citizens in the new energy market*”, promoted by the [Energy Centre](#) of the Polytechnic University of Turin. The focus was on the centrality of the citizen-prosumer and of the community, as local aggregator, to offer services to its members and bring socio-economic benefits to the local people. Following the steps defined in the Manifesto, activities began with a funding of 100,000 EUR worth of PV panels installed on the city hall, and energy metres that were placed in private apartments, a gymnasium and a library. It is not only private citizens that are involved in the RECs, but also local technicians and artisans. Having a wider audience fosters the narrative of the REC acting as an engine of change towards a green economy.

## Enabling conditions

The enabling factors for this model are based on several strategic choices and political developments. The municipality of Magliano Alpi has included in its DUP strategy the implementation of innovative models of territorial development based on energy, with the aim of combining the advantages of the Italian Superbonus with incentives for RECs. The municipality has also joined the above-mentioned Manifesto, giving a political-social impetus to the initiative. Thanks to the incentives already available today for the private sector in the energy field, it is possible to create replicable local projects with added value, favouring their aggregation and creating initiatives that exceed the dimensional thresholds of interest for "large" investors (typically several million Euros). Municipalities, thanks to a responsible use of the resources made available by the State for the transition in the period 2021-2023, can acquire enabling technologies and facilitate the aggregation of RECs, operating as innovation catalysts for their own territories.

## Local challenges and solutions

Energy City Hall REC-1 employs technology in the form of PV solar energy generation facilities and two e-mobility charging facilities. A 20 kW<sub>p</sub> system is connected to the city hall's electricity Point of Delivery (POD). The energy produced and not consumed can be shared within the REC. The two EV charging stations will also be connected to the same system, which can be used free of charge by residents. The municipality bought the smart metres, which were linked to all the PODs participating in the REC. In parallel, with the calculations of the shared energy that the Italian distribution system operator GSE will provide, there is a management platform for the analysis of production and consumption energy flows and the management of all energy services. Energy City Hall REC-1 has signed a collaboration agreement with an innovative start-up, an autonomous association of people and public organisations, as well as companies choosing to meet their common economic, social and cultural needs through a jointly owned and democratically controlled company. The REC functions for the sustainable development of local communities through choices and solutions approved by its members.

## Stakeholder involvement

The main actors of Energy City Hall REC-1 are the municipality of Magliano Alpi, the Energy Centre of the Polytechnic University of Turin, and those local families and small enterprises which are its members. The municipality has the role of promoter, acting in line with its strategic plan, whereby measures like building renovations and RECs are important for creating added value for revitalising the territory following the pandemic.

The municipality being the leader secures an element of trust for all those involved and a sense of stability which helps to facilitate the participation of citizens and SMEs. Two additional RECs have been

established to resolve technical constraints that limited further connections to REC-1. The Energy Centre is the technical partner for the development of the REC, in line with its aim to build networks at the national and European levels, to incentivise the development of new entrepreneurial initiatives in the energy sector via opportunities presented by academic research, innovation and partnership. The role of municipalities is central, particularly in the case of Italy with its administrative fragmentation, though in this case this fragmentation is considered an asset, because it facilitates the communication and involvement of citizens, thanks to the proximity between voters and their elected representatives.

Companies, R&D business units and public administrations have the opportunity to collaborate, thanks to an atmosphere that encourages their interaction and involvement in scientific innovation and the various social, technological and managerial issues related to energy. The main stakeholders are Energy4COM and GO-CER (Operational Group RECs). Energy4COM is an innovative start-up involved in the technical-operational management of REC activities, and is engaged in a process of technological and social innovation for a change based on strategies and ideas that satisfy the economic and social development of the reference communities. Meanwhile, GO-CER raises citizen awareness around the advantages of RECs and advises them on local companies and professionals. Thanks to its wide territoriality and cooperation with several additional actors, GO-CER is able to trigger impactful environmental, economic and social benefits for not only producers and consumers of the REC, but also for the wider area concerned. These two stakeholders technically and operationally support the dissemination of knowledge developed in Magliano Alpi, to the benefit of other Italian municipalities and businesses.

Operationally speaking, Energy City Hall REC-1 is organised as an association, with the Magliano Alpi mayor as president. It has a Technical Scientific Committee, which addresses and supports technical issues related to the REC, and is composed of the President, an expert in innovative business models for the energy transition, and six other members. GO-CER acts as an operational arm favouring the creation of local supply chains of professionals and business to ensure that the planning, construction and management activities remain local in character and stimulate added value locally. Designers and installers, together with communication and marketing experts, form the Operational Group, with the aim of reaching a large number of private citizens, companies and organisations.

Interested applicants to the REC can download and complete the form readily available on the municipal website of the municipality and anyone is able to join as a REC prosumer, as long as they have a PV system installed after March 2020 and which is connected to the same secondary transformer substation in a specific geographical area (due to technical constraints). If these prerequisites cannot be met, they can still participate as a consumer. Consumers affected by energy poverty can be supported by the RECs and be connected to the local grid of the REC (dependent on specific boundary constraints) and the extra energy produced by community-owned PV is also shared with them.

## **Budget and finance**

The business model of Energy City Hall REC-1 is “Public Authority driven”, in that it is based on an initiative that originates from a public entity (in this case, the municipality of Magliano Alpi) and installed renewable generation plants are located on a public authority building, with the excess energy shared with other users, be they residential users, tertiary, commercial or other public buildings, while respecting the boundary constraints imposed by the law. In this model, alongside the “user driven” model, the public authority will turn to external suppliers of technologies and services

to the extent that these are necessary for the creation and management of the community. Utilising a first investment of 100,000 EUR, the municipality of Magliano Alpi funded the PV installation on the roof of the city hall and bought smart metres to collect and manage data from PODs of all members using the REC. The enlargement of the REC was achieved thanks to a public-private funding of 80,000 EUR for the part concerning the sporting centre, while the industrial facility was financed with 50,000 EUR of private capital. The RECs are starting a cooperation with the Smart Grid Interoperability Lab of the EC's Joint Research Centre (JRC). They also are linked to the Smart Cities & Communities Laboratory of the national energy agency ENEA, with local energy utilities and several cities having requested support to design, create and manage their own RECs. Pricing is based on the service/work contribution requested, though the test of services, tools and technologies will generally be for free, as long as the information outcome is shared. Technical support, data mining and meeting with stakeholders will be priced on a case-by-case basis.

## Results and lessons learnt

The immediate benefits are due to the reduction of energy consumption and subsequent reduction of greenhouse gases and other air pollutants which traditional energy systems would have produced. It is estimated that the community will be able to save up to 30% of electricity consumption. A charging station for EVs is made available for free for REC members. Energy cost reduction is the main benefit for citizens involved. The RECs are also catalysts for local short-supply chains which have high added value for the community. The fact that the RECs involve not only private citizens, but also local SMEs, designers and technicians, means that this wide membership promotes the development of such municipally-led RECs to other municipalities and stakeholders. The municipality is supporting the creation of a Community Operational Group as a cooperative entity aiming to create a short supply chain of technicians, designers, installers and maintenance workers able to contribute to the uptake of this approach. The RECs therefore represent the catalyst for this process of skill aggregation in the territory, essential for creating development and jobs in the post-pandemic phase. Among the benefits of RECs, there is a significant reduction in the cost of energy. This reduction will also be conveyed through fair and supportive initiatives to significantly reduce the costs of bills for the marginalised residents. Fighting energy poverty by sharing any surplus of production with vulnerable families of classes is one of the main aims of local authority.

## Replication potential

Based on the findings of this case, the main recommendation for REC initiators and developers would be to replicate the innovative business models, and to use a digital platform to manage RECs with tailored tools. The use of such tools means that private citizens, companies, and public bodies can easily view what occurs when they opt-in for self-consumption. Furthermore, they will be able to enjoy a number of direct benefits such as reduced energy bills, while still contributing to societal ones like reduced emissions of greenhouse gases or alleviating energy poverty among their more vulnerable neighbours.

Local authorities wishing to institute a local REC could either play an active role in the governance structure, as Magliano Alpi does, or simply be supportive of citizen-led initiatives (e.g., contributing to awareness-raising, facilitating administrative processes and/or even acting as a liaison to bring citizens to the table with other key actors). Regardless of how it is managed, it is generally necessary to have a specific policy programme and action plan in place to manage public land and buildings used by RECs, while the environmental impacts of its activities must also be duly assessed. Administrative and technical support is required to speed up internal procedures for renewable energy installations, as

well as for the interventions that involve the infrastructure of the electricity grid in the municipal area, where the local authority and the distribution system operator are the main actors.

### Additional information

The [JTP's toolkit on energy communities](#) may also prove to be a valuable resource. This particular case has been adapted from previously produced work as part of the EU-funded [COME RES](#) project, and the Head of Finance & Business Innovation at the Polytechnical University of Turin, Sergio Olivero, should be contacted in case of further interest: [sergio.olivero\[at\]polito.it](mailto:sergio.olivero@polito.it).



## Capacity building, up- and re-skilling

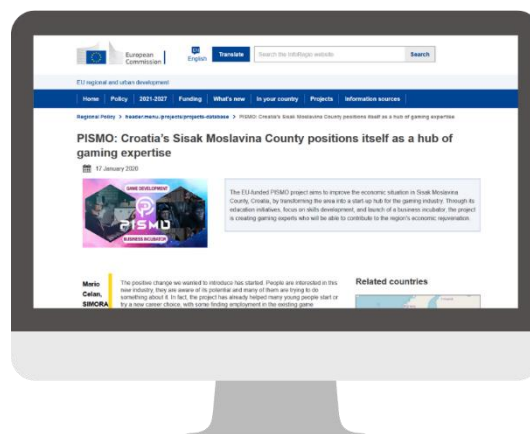
### Silicon Valley of the Balkans

NOVSKA, SISAK-MOSLAVINA COUNTY, CROATIA

#### Summary

The initiative for digitally transforming SMEs, and specifically aiming to foster a new [game development hub](#) in Sisak Moslavina County began in 2016. It grew out of a realisation that the County's unemployment rate exceeded 30% in 2015 after the previously dominant major industries collapsed. This loss left behind a considerable pool of skilled workforce, but also few (economic) prospects for young people, leading to an enormous emigration rate of young, educated people to the nearby capital and abroad.

The initiative was designed to address key challenges felt in this JTF territory, namely a need to innovate lifelong learning, to align the educational system with future-oriented market needs, to create new jobs and to decrease brain drain. It envisions six steps to help break such cycles: 1. free English courses already in kindergarten; 2. IT workshops for making video games in primary and secondary schools across the region, as well as six-month courses for unemployed people; 3. stimulating new start-ups in general through a business incubator "[Pismo](#)"; 4. new four-year high school programme for video game technicians; 5. support for launching start-ups specifically in the field of video game development (i.e., up to 20,000 EUR per start-up); and finally 6. the establishment of a multi-purpose Gaming Centre, including for university courses/labs, incubator, accelerator, student dormitory and sport facilities to make it even more attractive.



#### Context and motivation to act

When this project began in 2016, the data showed a dire situation for Sisak-Moslavina County – the development index was only 48.5% and unemployment was 33% (significantly higher than the rest of Croatia). Lack of entrepreneurial infrastructure was evident, business zones were empty, educational programmes were outdated and insufficient, few new businesses were initiated, and the “grey economy” was prominent. The economy of the County, as well as the entire national economy, had suffered a recent economic crisis and despite certain positive developments (e.g., increase in total income, surplus in foreign trade, etc.), economic activity, investment and steady employment all continued to decline. The regional economy had been built around traditional industries previously employing around 40,000 residents, many of whom became unemployed: energy, oil, (petro)chemicals, metal processing, food, agriculture, forestry, trade, catering, construction, transport and communications. Decision-makers in the region, worried about negative demographic indicators and an unfavourable labour market, knew that something radical had to be done to change things.

#### Enabling conditions

That the County enjoys proximity to local universities and the economic power of the capital should certainly not be underestimated as crucial enablers allowing it to pursue this path relatively more

easily than another more remote region and/or lacking such educational institutions. Furthermore, having an already active regional development agency, [SIMORA](#), with the competence and capacities to manage such a project and its progress should also be seen as an invaluable asset.

In terms of policy, key documents (e.g., national, regional and local development strategies) already highlight the development of a competitive (and socially responsible) economy, especially for SMEs and stimulating investment, as strategically-important goals, and the national smart specialisation strategy features ICT as a priority horizontal theme. At the same time, trends happening worldwide and around different parts of the EU<sup>2</sup> show that the technologies and know-how exist and can enable suitable conditions for those (European) regions willing to take advantage of them, especially since the EU video game market offers creative opportunities, a positive working environment and protection of labour rights. Considering that apparently 40% of video game companies report problems finding the right workforce and talent, there is a niche waiting to be filled. Even so, smaller companies generally lack the funds and capacity to simultaneously hire and educate (new) employees. This indicates that the talent pool can be improved through better cooperation between the video game industry and educational institutions, especially since the sector is seeing high growth, even already in Croatia<sup>3</sup>.

## Local challenges and solutions

In many regards, the entire concept was a challenge needing to be overcome. The region was recovering from economic collapse and the development of a brand-new video game industry was not readily seen as a sane choice, because there were no explicit initiatives or policies fostering such an industry, neither in the region nor nationwide, though as mentioned above certain strategies hinted at possibilities in such a direction, which is exactly what was decided.

Despite the rather traditional industries listed above, the County has seen the introduction of more sophisticated sectors (e.g., electronics and pharmaceuticals) in the last years. This has evolved even more recently, possibly related to the initiation of these new IT-oriented industries, to encourage new technologies in manufacturing and a more entrepreneurial environment in general. Now the conditions for accelerating the burgeoning gaming industry (i.e., infrastructure, equipment, educational system, skilled workforce and management capacities through the Pismo incubator) are either in place or being developed on a known pathway, including leveraging the JTF to finance them.

## Stakeholder involvement

For all the success that has been so far achieved, numerous stakeholders had to be engaged, and synergies in the public sector appear to be rather robust. The regional development agency SIMORA has been the main driving force, initiating the concept and bringing it to life, including key enablers like the Pismo incubator and coordinating education development in this sector. The regional coordinator of Sisak-Moslavina County leads the gaming industry centre, while the County administration oversees all regional development, as well as providing incentives for start-ups and SMEs, is in charge of managing public schools (and new curricula) and political/financial support to the project developing video game industry. The town of Novska provides valuable local political support and further incentives for SMEs. Among public education institutions, high schools in Sisak and Novska both cooperated in the new video game technician programmes, while several faculties (i.e., in Sisak, Zagreb and Varaždin) cooperated in higher education programmes, as well as providing

<sup>2</sup> DG CNECT's report "[Understanding the value of a European Video Games Society](#)" provides EU-wide insights.

<sup>3</sup> The Croatian Game Development Alliance prepared a [financial analysis](#) for the country.



technical expertise to the whole project. Meanwhile, the Croatian Unemployment Service cooperated with the initiative through its normal offerings for local unemployed people (e.g., advice, trainings and incentive programmes, as well as statistics), but which could also be steered towards the burgeoning video game sector.

At the same time, the private sector has been very strongly engaged (by SIMORA) as well. The Croatian Innovation Centre ZICER has been a partner on the Pismo incubator, along with SIMORA and the regional authority. Croatian Game Development Cluster attracts (foreign) gaming companies to Croatia via organised events and media work, as well as collecting statistics measuring the industry's growth. Several business support institutions and local development agencies provide expertise and support in aligning and implementing projects at the local level. The regional chamber of commerce, similar to the unemployment service, offers advice and trainings to SMEs (and large companies), and likewise could steer them in directions complementing the video game industry. The SMEs themselves were engaged as a target group to provide valuable information on what their needs are, in order to better align with this new workforce as potential employers. Finally, financial institutions (i.e., banks, EU funds and national funds) provided crucial access to financial resources, through incentives, grants and loans, without which none of the project successes would have been achieved.

## **Budget and finance**

The project about creating a stimulating entrepreneurial environment through the entrepreneurial incubator Pismo is managed by SIMORA, in partnership with the County and Croatian Innovation Centre ZICER. It initiated operations from 2017-2020 based on a 3.4 million EUR investment (79% being a grant financed through the European Regional Development Fund 2014-2020), but already now operates several years within SIMORA's own operational budget.

Meanwhile the development of the gaming industry centre is led by the regional coordinator of the County, in partnership with SIMORA, the County itself and the town of Novska. This project begins operations in early 2024, until the end of 2027, and is funded at a value of 60 million EUR, including a nearly 40 million EUR grant, financed through the JTF.

## **Results and lessons learnt**

The video game development educational programme began already in 2018, now having trained a total of 300 graduates so far, and another 65 currently in progress. Some graduates have already sought employment in established videogame development studios, and others have decided to start their own related businesses. Another interesting aspect is that over half of the educational participants come from other parts of Croatia, indicative of how it is already succeeding to attract new talent, many of whom seem to intend to stay in the region to continue work in the industry. Since the first SME started using Pismo incubator services in late 2019, their number has been steadily increasing, so far with over 70 game development SMEs having emerged, employing 120 people and a total revenue of more than 800,000 EUR in 2022.

Meanwhile, other immediate results so far include numerous events (e.g., job fairs, conferences, and networking events) giving high visibility to the new video game industry, as well as a much more dynamic business ecosystem in the region, now better equipped to raise entrepreneurial activity further. Mid-term achievements can be evident in the form of already-positive trends in entrepreneurial activity and in the rise of the new video game development in the County, as well as this new industry's attractiveness for (young) people moving there in search of front-running job opportunities, not to mention the positive impacts on other businesses (e.g., real estate) with an influx of new customers.

In the long-term, economic and demographic statistics are improving, as well as increased tax revenues to the public authorities coming from rising population and more robust commerce, which of course can be translated into improved public services offered. All this is especially the case in the town of Novska, which had the foresight to support this initiative early on, but it is also still reflective of the overall performance in Sisak-Moslavina County as other towns benefit less directly, as well as begin to awaken their own ambitions with the opportunities that a just transition can bring. In the end, the main lesson learned from this initiative has been that only a holistic approach for tackling serious challenges, such as the mitigation of negative socio-economic trends, can be successful – a comprehensive approach, with active participation of all relevant stakeholders, can generate very positive, concrete results.

## Replication potential

Because such an IT-centred industry like video game development can easily cross borders, the whole concept of this project should, in theory, be transferable to other territories and their target groups, possibly even including to Sokolovsko. Linking up graphic designers, storytellers, designers, programmers, etc., and motivating them to exchange their knowledge and upgrade their skills, at its heart, is simply about making the right connections. Of course, it is not so straightforward as only being a liaison, but rather about having the right kind of expertise and being able to bring all the right actors to the table – and considering how radical the idea was perceived at the start, clearly a strong sense of perseverance may be crucial.

In terms of the trainings themselves, they can be open for use by other organisations in partnership. Considering the worldwide universality of the programming languages, software and basic methodologies used for video game development, minimal adjustment should be necessary for adapting the actual content, except maybe in a language sense (although English is considered to be a rather universal gaming language).

However, when it comes to Sokolovsko area, perhaps the largest disadvantage it has in comparison to Sisak-Moslavina County, is its lack of local universities to partner with on the ground. The Croatian case benefits from several nearby faculties, while none really exist in Sokolovsko at all. Nonetheless, if this is a pathway that local decision-makers wish to pursue, then this institutional gap certainly is not insurmountable, given the digital nature of the sector – partnerships could be fostered with university experts from outside the region, and perhaps the pedagogical school which Sokolovsko does have could be leveraged to ensure that expertise brought in from other parts of the country can be based on sound teaching principles.

## Additional information

The Director of the Regional Agency SIMORA, Andreja Šeperac, should be contacted in case of further interest: aseperac[at]simora.hr.

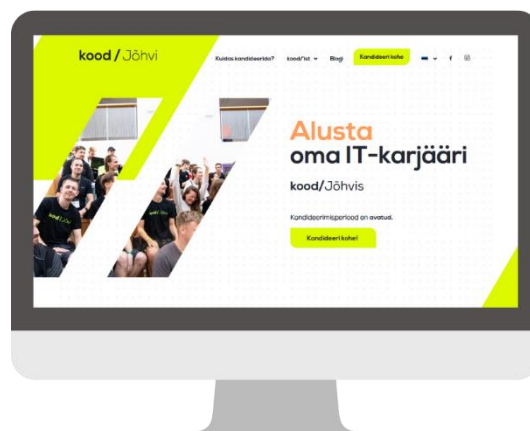


## Self-learning for a future-proof industry

JÕHVI, IDA-VIRUMAA, ESTONIA

### Summary

[Kood/Jõhvi](#) represents a new kind of programming school since its launch in 2021 in the JTF territory of Ida-Virumaa, in the northeastern part of Estonia. The school's concept is based on computer-guided peer-to-peer self-learning among students, meaning there are neither classes nor teachers, intended as a two-year full-time programme. Learning takes place on a cloud-based learning platform, where theory and practice go hand in hand – each learner solves the tasks given by the system and moves forward at their own pace. Already it is considered a top-level international programming school designed for adults of all ages who are looking for opportunities for self-development or retraining. Starting in 2023, new IT specialists will be able to enter the labour market every year with the help of the school, and able to apply strong IT knowledge, in at least three language skills, and familiarity with an entrepreneurial lifestyle valuable for such innovative industries.



It is worth highlighting that Kood/Jõhvi can be offered tuition-free, under certain conditions, making its (local) uptake even more viable. Being located in a JTF territory brings added value to the community and increases the economic competitiveness of the region, while creating new (job) opportunities for locals and a competent workforce for local businesses (to innovate). By offering high-level education and training top-tier specialists, it directly contributes to the achievement of educational goal H1 of Ida-Virumaa's development strategy (i.e., to offer versatile education in the region by 2030). Their approach offers a new alternative to regular schools and strengthens the overall education system with more diverse technical and business skills, while still creating a strong foundation for further university studies or work in technology companies, while also helping to address a relative lack of software developers in Estonia.

### Context and motivation to act

The Kood/Jõhvi school was founded by eight Estonian entrepreneurs who have worked for various start-ups in the past, but all of whom have experienced a severe lack of software engineers and other qualified IT staff globally, but also particularly in Estonia. They determined that a classical approach (i.e., changes of the official school curriculum), would take too much time, especially since digital technologies develop at an extreme pace, including to modernise Estonian teaching styles to keep up.

The school operates as an adult education programme and is open for students of all ages, though the average age is 27, with tuition waived for certain graduates. It manages to educate hundreds of students per year overseen by only ten employees, largely due to the curriculum being based on self-learning – though it is also worth noting that students must apply via a lengthy process meant to ensure that only those students who are truly comfortable with a self-studying approach enter the programme. There are no lectures and no teachers in the classical sense, rather the school's curriculum is based on an online, module-based education platform which is constantly updated.

The founders had specifically chosen to establish the school in a smaller city, ultimately choosing Jõhvi due to added value in addressing local demographic change and brain drain. As such, it is no wonder

that the school has been very well received by the local government, which intends to provide direct financial support in the future.

A key motivation of the school is to connect students and graduates directly with actors in the labour market. For this reason, they partner with different relevant organisations that directly contribute to the school's curriculum, act as sponsors, and offer internships. Due to the practical nature of the school, students are able to already develop a portfolio of projects to showcase during job interviews, greatly facilitating their transition into the workforce.

### **Enabling conditions**

The key enabling condition is the excellent network of the school's staff to companies acting as sponsors, internship-providers and technical experts contributing to the curriculum. Given the fully-digital nature of the school, as well as the (often-remote) nature of the work, graduates end up with no professional need to move to relocate, meaning that it allows them to stay within the region.

### **Local challenges and solutions**

The school follows a very innovative concept and there is no clear-cut legal framework yet for a "school without teachers". Nonetheless, the founders are pushing for a legal change in order to be recognised as an official education institution. This is important because students at the school currently do not receive national health insurance and have access to student loans, because they are not "students" in a legal sense. To some degree, this is being compensated through the provision of scholarships and private health care to students, while for others working at the same time as they are enrolled in the school (~40%) can address this, though of course it is not necessarily recommended and can be overly taxing. Nonetheless, they can be assured that the tuition fee must only be paid if they enter the general work market; but graduates who end up working for one of the school's partners have their tuition waived.

The founders of the school are currently in the process of creating another school in Finland where they receive EU funding support during the establishment phase. Due to a more up-to-date legal framework, the school in Finland will already be recognised as an educational institution from the start which means that its students will receive state student benefits.

### **Stakeholder involvement**

In addition to the already-mentioned important role of Kood/Jõhvi founders and staff, the school has benefitted from professional contacts in the industry and specifically an investment by a Nordic bank during the start-up phase. Some governmental support was also used in order to renovate the building where the school offices are located, and as mentioned above local government intends direct support as well.

### **Budget and finance**

Compared to other education programmes (e.g., those which are specifically meant to re-educate people as part of structural transformation programmes), Kood/Jõhvi currently has a lower societal cost, since students do not (yet) receive direct state benefits – though it is hoped that this status will change. In the meantime, the school does provide software licences, laptops and in a few cases, also scholarships and support for living expenses and rent.

Due to the fact that the school only employs 10 staff, it is much more economically efficient compared to a classical university. The school is financially supported by companies who are part of the network and act as sponsors, as well as through tuition fees.

### **Results and lessons learnt**

Since the initial Kood/Jõhvi generation finished their course in 2023, more than 60 graduates already have successfully entered the workforce, while another 500 students are currently enrolled in the school and with thousands of incoming applications annually. The school does not consider itself as direct competition with traditional education institutions, though it seems many of its students find it to be quite an attractive alternative to the traditional teaching approach offered by most universities. The main lesson is that educational programmes such as this one can function as a more agile response than classic education programmes, but still be designed so as to complement more traditional (re-)training programmes.

### **Replication potential**

Kood/Jõhvi would like to offer a direct replication service to other JTF territories, in particular to Sokolovsko, based on recent experiences they already have made with establishing a similar school in Finland. They have developed a blueprint for developing their concept, and believe that it could be applied well in Sokolovsko or other similar regions. They are interested in finding a local partner to work with who could manage a local team and secure financing, which could work similarly as their model in Estonia. In the long term, they are planning to establish a Europe-wide cooperation network of similar schools and would be glad to support stakeholders from Sokolovsko to set it up adapted to their own context.

### **Additional information**

The Head of the School, Karin Künnpass, should be contacted in case of further interest: [karin\[at\]kood.tech](mailto:karin[at]kood.tech).

The logo for Kood / Jõhvi is displayed on a bright yellow rectangular background. The text 'kood / Jõhvi' is written in a dark, sans-serif font. 'kood' is in lowercase, while 'Jõhvi' is in title case with a tilde over the 'õ'.

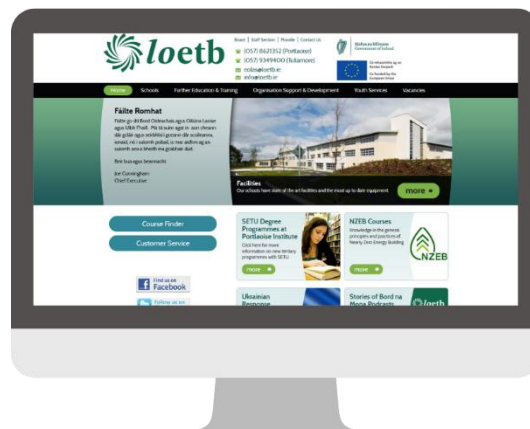
## Green skills for a sustainable future

LAOIS AND OFFALY, MIDLANDS, IRELAND

### Summary

The overall focus of the just transition work done by the Laois and Offaly Education and Training Board ([LOETB](#)) in the Irish Midlands is in supporting the sustainability of rural (peatland) communities as they transform themselves, and in particular the provision of marketable future skills for individuals which align with the current labour market and upcoming plans for the local, regional and national economy.

The LOETB's approach is based on primary and secondary research into national and regional policies and into the status of the most affected workers, families and communities, and especially balancing current skillsets with analyses for real training needs. Programme planning then ensures that intended offerings are compatible with relevant policies – especially climate action – and actual labour market opportunities in the intended sector. Those selected for the opportunity to (re)engage in upskilling are matched with trainings appropriate to their current educational levels, and are meant to provide a pathway that aligns not only to their ambitions, but also the real skill needs for their career progression to have the best chances for success.



### Context and motivation to act

The Counties of Laois and Offaly, within the JTF territory of the Irish Midlands, have a total of around 163,000 residents (among the least populated in Ireland) and the area is comprised mainly of rural communities – apart from the main urban centres Portlaoise (population: 22,050) and Tullamore (population: 14,607). Agriculture, peat extraction and the energy industry play the most important roles in the local economy, but communities are not only economically dependent on peat, but also reliant on it for heating. Many of trends at play mirror those of other (JTF) regions of low population density (e.g., most services only found in urban centres, little public transport, ageing demographics, depopulation, high unemployment, low disposable income, less educated populace, and a higher percentage of unskilled labour in the workforce) compared to other parts of the country.

Though a key part of Ireland's transition towards climate neutrality, the peat utility's [Brown to Green Strategy](#) is in many ways still exacerbating such regional disparities further due to the loss of peat extraction, traditionally highly concentrated in these two counties. Diversification and modernisation of the region's local economy are necessary to alleviate the negative impact of the transition on employment and economic activity, not to mention on the regional identity based on peat. For some of these communities the (necessary) brown to green presents an existential threat. Outmigration, especially of the young, leaves behind an ever-older populace and with various services being reduced (e.g., schools closing down) it is difficult to attract new residents to come/return, further undermining communities' capacity to be economically, environmentally, and socially healthy and resilient.

Meanwhile, the LOETB has as its mission (since 2013) to contribute to covering skill gaps among the populace, at least in terms of promoting and delivering education and training services in the two counties, including a focus on working with youth. It is one of sixteen ETBs across Ireland with the mandate to manage and operate second-level schools, as well as Further Education and Training (FET)

Centres and offer a range of tailored further-education opportunities. The LOETB is one of the main employers in the Midlands with over 1000 staff providing education for over 4000 post-primary students, and further education/training to over 12,000 beneficiaries – it operates eleven FETs within these two counties, including the [Midlands Skills Centre](#), which highlights bio-pharma and med-tech, and the [National Construction Training Centre \(NCTC\)](#), focused on sustainable construction skills. Especially in its efforts to contribute to the just transition, the LOETB’s modern focus is to ensure education is as innovative, flexible and responsive to the needs of learners and employers in their regions as possible.

## Enabling conditions

There is a long list of European and national government bodies and their policies, regulations and initiatives that both shape and support the direction that the LOETB is able to take forward. It has also been able to achieve its successes to date largely because of strategic support from national levels. Being part of a national network of ETBs, and their associated FETs, can enhance LOETB’s own work with lessons learnt in other parts of the country. At the least, the continued support to these ETBs demonstrates that national authorities value further education opportunities, something which is also mirrored in cooperation with regional and local authorities as well.

One of the most tangible demonstrations of strong relationships with public bodies is the NCTC, first developed in 2007 by the national Training and Employment Authority before transferring it to LOETB in 2015. This 13-hectare site simulates a realistic construction work environment, complemented by a 700 m<sup>2</sup> hall, technology-supported classrooms and an upcoming demonstration park about modern methods of construction. The LOETB utilises all these facilities to target skill gaps of the unemployed, under-employed and those requiring upskilling (e.g., a whole suite of courses related to diverse skillsets needed for nearly-zero-energy buildings). There are also special trainings explicitly focused on reskilling workers from the peat utility company, including official certifications (in cooperation with experts in the industry).

## Local challenges and solutions

While the climate actions policies being pursued at European, national and regional levels enable the development of upskilling and reskilling programmes, certain elements of them are not always rural-friendly or may even seem incompatible with local needs. Therefore, the LOETB has invested many efforts in skills audits and needs-analyses among affected workers and communities (e.g., in cooperation with the EU Coal Regions in Transition [START](#) team to produce a *Midlands Pathway to Transition* document) to identify green economic opportunities that make sense for these communities (e.g., green energy construction, sustainable agriculture and remote working).

Educational levels in most JTF territories tend to lag behind national averages, and the case is not different in these two Irish counties, where there is a definite gap between skills held by affected workers and which (modern) skills are in demand in the open labour market. LOETB works to design programmes that bridge this gap by tailoring trainings, striving to validate existing skillsets through official certification (recognised by industries and academic institutions) and supporting a realistic career/educational progression (e.g., via modular programmes distinctly linked to higher education).

At the start of LOETB’s work addressing just transition issues, the peat utility was actually not as engaged as might have been hoped, and in some cases, even hesitant to facilitate their own workers to transfer away into other sectors instead. Nonetheless, the LOETB cleverly nurtured a stronger relationship by also establishing programmes that aligned with the peat utility’s own needs for upskilled workers within the company (e.g., via a Peatland Rehabilitation Traineeship). However, the

utility has progressed beyond their earlier reluctance to offering “Start Your Own Business Programme – New Beginnings” as a means of recognising the need to support their own employees’ transition, in this case to develop viable business plans and providing seed capital to their new start-ups.

Although LOETB enjoys distinct support from public authorities in rather meaningful ways, its staff had to make great efforts to ensure that their ambitions were adequately reflected in regional and national policies. Similarly to how they worked with the utility, LOETB sought to meet the needs of policy-makers which matched with the needs of their own target groups (i.e., affected workers, their families and communities). They have largely succeeded so far, and already the fact that some of their goals mirrored in official policy objectives (e.g., transition to a zero-carbon economy, tailored training for workers whose jobs are at risk or enhanced education in green growth sectors) has proven rather instrumental in gaining the funding and investment to make it a reality.

## **Stakeholder involvement**

As should be clear from all the work described above, a large reason behind LOETB’s success so far has also depended on their persistent emphasis on engaging the right stakeholders at the right time. It cooperated with diverse public entities from local to national levels to make sure that policies align with their own (clients’) needs and that they can collaborate together on concrete projects like the NCTC. This latter example also demonstrates well their solid engagement of other sectors, most notably the private sector for making sure that courses, apprenticeships, and certifications on offer actually remain in line with industry standards and needs, thereby ensuring enhanced employability of participants in their programmes – similarly, the LOETB has also begun co-development of education programmes with the Technological University of the Shannon which align with academic standards.

Furthermore, and as already mentioned above, it is worth re-emphasising their engagement with the peat utility. It seems to be an exemplary case showing how important it is to understand stakeholders’ needs and agendas in detail. Because they had done their homework, LOETB was able to find mutual entry points which allowed initial resistance from the utility to become transformed into synergetic support for their just transition efforts. Additionally, another interesting case not yet mentioned is how LOETB also has liaised with Ireland’s national sustainable energy authority, which has governance over energy efficiency grants for homes and businesses, to ensure that the skills they offer in their courses (e.g., at the NCTC) are compatible with grant criteria, thereby generating enabling conditions of their own for work opportunities to arise which their clients could serve. Finally, it is also worth highlighting that the LOETB has gained a positive reputation in their communities for actively engaging with workers, families and communities and making genuine efforts to meet their needs – this is surely a lesson worth learning for many JTF regions, as well as for those from local to international levels working to enable their just transition.

## **Budget and finance**

It is difficult to quantify the precise amount of money that has been invested in LOETB’s Skills for Transition Initiative, but the specific costs of various programmes include 24,000 EUR for their Remote Work programme, 105,000 EUR for the Sustainable Agriculture Traineeship, 36,000 EUR for their Retrofit Insulation Skills programme and 104,000 EUR for the New Beginnings for a Sustainable Future (Start Your Own Business) programme. All these costs include all associated costs (e.g., rent of premises, tuition, class materials, etc.), and are generally organised through sub-contractors procured following nationally-defined procurement procedures.



All funding has been accessed from LOETB's core funding. They have so far not applied for funding from the national or European JTF, because they feel that these programmes are actually the correct ones for the region and that green jobs present the most likely avenue to achieving their core objectives, regardless of it being a JTF territory or not. Furthermore, they did not wish to compete with local communities or workers for such JTF funding, though nonetheless remain open to that option should some projects emerge that adds value to the region and its most affected communities and individuals, but is for some reason not eligible under their core funding.

## Results and lessons learnt

Many of the LOETB's concrete accomplishments have already been mentioned within the above text, and so will not be repeated here, though an impressive list of specific examples could be shared with anyone interested to learn more. Nonetheless, it is worth highlighting that LOETB has already succeeded in exploring how policy-makers recommendations/demands can match the needs of the counties' affected workers, their families and communities. In fact, their general practice is to ensure that any research done with local communities is directly related to actionable programmes (e.g., a training needs analysis with workers should directly inform the development of related upskilling programmes). This approach is being done in contrast to a tendency within the Irish just transition processes to utilise data gathered for research purposes only, rather than genuine engagement and informed implementation that truly speaks to their needs and brings added value to the region. For example, their work has shown that in certain cases the priority might not be to enhance an affected worker's skills, but rather to cooperate with another family member instead (e.g., due to having a higher education level upon which to build further, or finding complementary skills like a farmer's spouse being trained in digital tools for agriculture).

For those regions which are dealing with a more gradual transition, such as is the case for Sokolovsko, it is crucial to take advantage of such an extended timeframe to engage employers, employees, families and communities as early and thoroughly as possible. The Irish case had to deal with an (overly) accelerated transition from peat, and otherwise could have benefitted from a lead-in period where the proper upskilling of workers could be undertaken at the same time as peat extraction and use was being phased out. This would have avoided the situation whereby some workers were made redundant without any viable opportunity to upskill themselves first. Participation by the most affected workers can be greatly enhanced when they remain securely employed even as they are being offered training for future endeavours.

As pointed out beforehand, other than genuine (and early!) engagement with those individuals and businesses most affected, meaningful consultation with the local communities is essential. Such proactiveness not only provides critical insights, it generates their trust and stimulates their ownership in the entire process, which often is perceived as overly top-down. Furthermore, such a bottom-up approach has even led to other stakeholders in the region looking to LOETB to act as primary liaisons to engage workers, families and communities.

At the same time, of course it needs to be ensured that skills provided remain compatible with top-down European and national policies. However, LOETB's experience indicates that staying within the 'green sectors' almost certainly ensures such synergies, while keeping abreast of policy changes related to the region's priority industries can essentially guarantee full alignment.

## Replication potential

It is absolutely feasible that all programmes outlined above could be replicated in other JTF territories, including Sokolovsko, but self-reflection should be done honestly to ensure if such programmes truly

would be suitable for the local context. The greatest strength of LOETB's approach is the recognition by stakeholders that the offerings have been specifically tailored to Laois and Offaly, even if many of the regional characteristics and challenges remain rather common to other rural regions throughout Europe. The greatest asset and enabler for the success of these programmes has been insight into the specific needs of the region and of the affected workers, families and communities. If Sokolovsko, or any other interested region, were to use such guiding principles as well, then replicability could be better assured.

### **Additional information**

*The FET Manager at LOETB, Pdraig Boland, should be contacted in case of further interest: [pboland\[at\]loetb.ie](mailto:pboland[at]loetb.ie).*

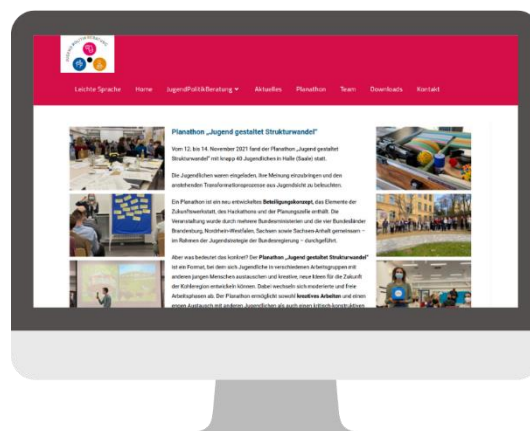


## Taking youth seriously for structural change

NORTH RHINE-WESTPHALIA, SAXONY-ANHALT, SAXONY AND BRANDENBURG, GERMANY

### Summary

Four German federal states – North Rhine-Westphalia, Saxony-Anhalt, Saxony and Brandenburg – which include all eight of Germany's JTF territories, jointly organised a “[Planathon](#)” as a youth-oriented programme shaped around structural change. This November 2021 event, coordinated by Leuphana University in Halle, gathered over forty young people under 27 years old to contribute with their own opinions and recommendations to their respective regions' transformation processes.



Based on a hybrid participation format, including elements of various established methods (i.e., Futures Workshop, Hackathon and Planning Cells), young people from all over Germany spent three days collecting ideas on funding, developing concrete project outlines, and pitching them to regional ministries' representatives. Around six hundred ideas were conceptualised and a large number of concrete project outlines were developed by the young people and discussed with the public authorities present, and the project outlines were subsequently refined and finalised by a youth editorial team into a final “[youth report](#)”. The report presents concrete project concepts for the German JTF regions, as well as recommendations for action, all developed by young people. The final report was officially presented by youth to key decision-makers in the four federal states and the responsible federal ministries.

### Context and motivation to act

Decarbonisation of the energy sector is essential in order to achieve Germany's climate targets. A central building block for this is the phase-out of coal-fired power generation, and thus the end of coal mining. The Bundestag passed the Coal Phase-out Act in 2020, whereby all German lignite-fired power plants must be decommissioned latest by 2038. Specifically, this affects the three coal basins where lignite is still mined today (i.e., the Rhenish Revier in North Rhine-Westphalia, Lusatia shared by Brandenburg and Saxony, and the Central German Region shared by Saxony-Anhalt and Saxony).

The end of lignite mining means that these regions are facing extensive structural change affecting society, the economy and the environment. In order to manage this successfully, the federal government is supporting and promoting its coal regions with the so-called Structural Strengthening Act, meant to help address the just transition and improve prospects for those coal regions. However, in recognition of the need for youth participation to achieve its goals, the idea has been to acclimate young people to the just transition and stimulate their competent involvement in today's political negotiation processes affecting their future.

### Enabling conditions

The main enabling factors were that the federal ministries made funding available for this endeavour. Additionally, a generally increased sense of urgency among Germany's youth when it comes to matters of sustainable development is crucial to engage their interest, especially since there is an increased awareness among youth that they are the generation which will be most impacted by

political decisions taken now. In total, 46 youths participated, most of them are already active in other associations and initiatives. Before the start of the discussions, youth were introduced to the latest regulation and legislative proceedings around the transition away from coal in Germany. Finally, it may also be worth mentioning that the Planathon itself was based on lessons learnt in a previous project exploring demographic change in Germany, and which clearly showed that young people are leaving certain regions to look for employment elsewhere if the right opportunities are not offered locally and regionally.

## **Local challenges and solutions**

There is an inherent risk that youth engagement is only done as a formality or little more than to enhance the image of a political process. It is absolutely essential that youth participation is done in a structured and credible manner which gives young people the opportunity to make suggestions which are officially received by relevant governmental entities and genuinely considered, perhaps even actually integrated.

Another common risk with youth consultations is that they are topically predisposed to expect insights of little depth (e.g., only how young people spend their free time). Instead, the Planathon foresaw youth participation on the same thematic discussions as adults (e.g., economic systems, infrastructure, traffic, public welfare, urban development, digitalisation, tourism, research & development, climate and environmental protection/restoration).

Finally, even though the final participation of youth, 46 individuals in this case, was a sufficient number, it was unfortunately not the case that youth were competing for this offered opportunity. Instead, the organising team had to exert substantial efforts reaching out to youth via different avenues (e.g., schools and social media). A key critique of these kinds of youth-oriented initiatives is that it is often (only) a certain type of youth who participates, namely those who are more highly educated and come from more financially affluent families, and in particular those who are already (politically) aware and active. The experience during the Planathon has shown that, though the group was more diverse than in similar events previously, it may be that a solution could involve targeting those capable of representing different population groups for a rather curated selection.

## **Stakeholder involvement**

As has been mentioned before, public authorities at the federal level were especially important for securing funding, but also for taking part alongside the federal state ministry representatives. Furthermore, the very fact that they visibly participated is important not only to demonstrate the credibility of the event and provide these authorities with direct feedback from youth about the just transition, but also could prove pivotal to encourage (these particular) young people that the authorities are indeed paying attention and that their own voice is worth being heard.

## **Budget and finance**

The Planathon was carried out as part of a larger research project financed by the above-mentioned ministries (around 800,000 EUR total), but the budget required for the event itself was much smaller. What is most important is that access to qualified staff can be guaranteed, either in-house or contracted, who are competent in all the key aspects of the event (e.g., the content itself, event logistics, etc.). What can often be observed with other youth involvement programmes is that oftentimes not enough budget is reserved for engaging professional moderators who are properly trained in carrying out (innovative) participation formats, and specifically with experience in youth dynamics. This therefore requires engaging persons who are trained in making participation fun and

engaging for young people (e.g., via a “complaints wall” or role-playing simulations), while also being able to convey an understanding around the complexities of structural change, and able to combine the two in order to empower youth to discuss these topics knowledgeably and to make suggestions meaningful.

## Results and lessons learnt

Obviously, the participation of youth in political consultations does not replace any formal decision-making procedure, but it nonetheless provides a beneficial indication of what (certain) young people think about the current situation and potential suggested changes they would like to see come to life, and which deserve to be considered seriously. At the same time, the Planathon demonstrates that youth interests can be feasibly integrated into higher-level policy processes. Youth involvement has also become more and more acknowledged within political circles – for example, several governmental funding programmes now mandate some kind of youth involvement as a precondition for accessing public funding, though of course the concern is to avoid merely formal engagement and rather stimulate meaningful dialogue and inclusion. The final report clearly demonstrates that it is possible to involve youth in a structured and credible manner in discussions on complex issues if the right kind of formats are organised by trainers who know well how to engage youth specifically.

## Replication potential

Replication of this approach should be fairly straightforward, but will depend on the presence of trained moderators who are able to work effectively with young people, while still being able to facilitate discussions around the complexities of structural change. The general willingness of young people to participate in extra-curricular activities related to their region’s future is an important variable which cannot be necessarily guaranteed, and might impact how much time will be needed to recruit youth for the opportunity. However, if successful then the impacts for Sokolovsko, or any other given region, could prove to be long lasting and positive as younger generations see that the powers that be actually do listen and care what they think. Considering the problem that Sokolovsko faces, similar to most other JTF territories, of retaining youth and attracting (young) talent, then a prominent and dedicated focus on youth such as this may be sorely needed.

## Additional information

Prof. Dr. Waldemar Stange should be contacted in case of further interest: [waldemar.stange\[at\]leuphana.de](mailto:waldemar.stange@leuphana.de).



**LEUPHANA**  
UNIVERSITÄT LÜNEBURG

Green space near the in Sokolov Castle,  
photographed by ICLEI Europe in  
September 2023



