

# exchangeEU

## Driving Change: **How to implement a successful regional just transition**

First hand recommendations from  
coal+ regions in transition



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A green future for everyone

Recognising climate change as a global threat, the European Union adopted the [European Green Deal](#) committing to reach net-zero greenhouse-gas emissions by the year 2050. To achieve this goal, many EU countries have committed to phasing out coal-fired power plants by the 2030s and 2040s. The [Initiative for coal regions in transition](#) works to support coal, lignite, oil shale, gas, and peat regions (coal+) in EU member states meet these commitments by [connecting stakeholders](#), delivering [technical assistance](#), and providing supportive [resources](#).

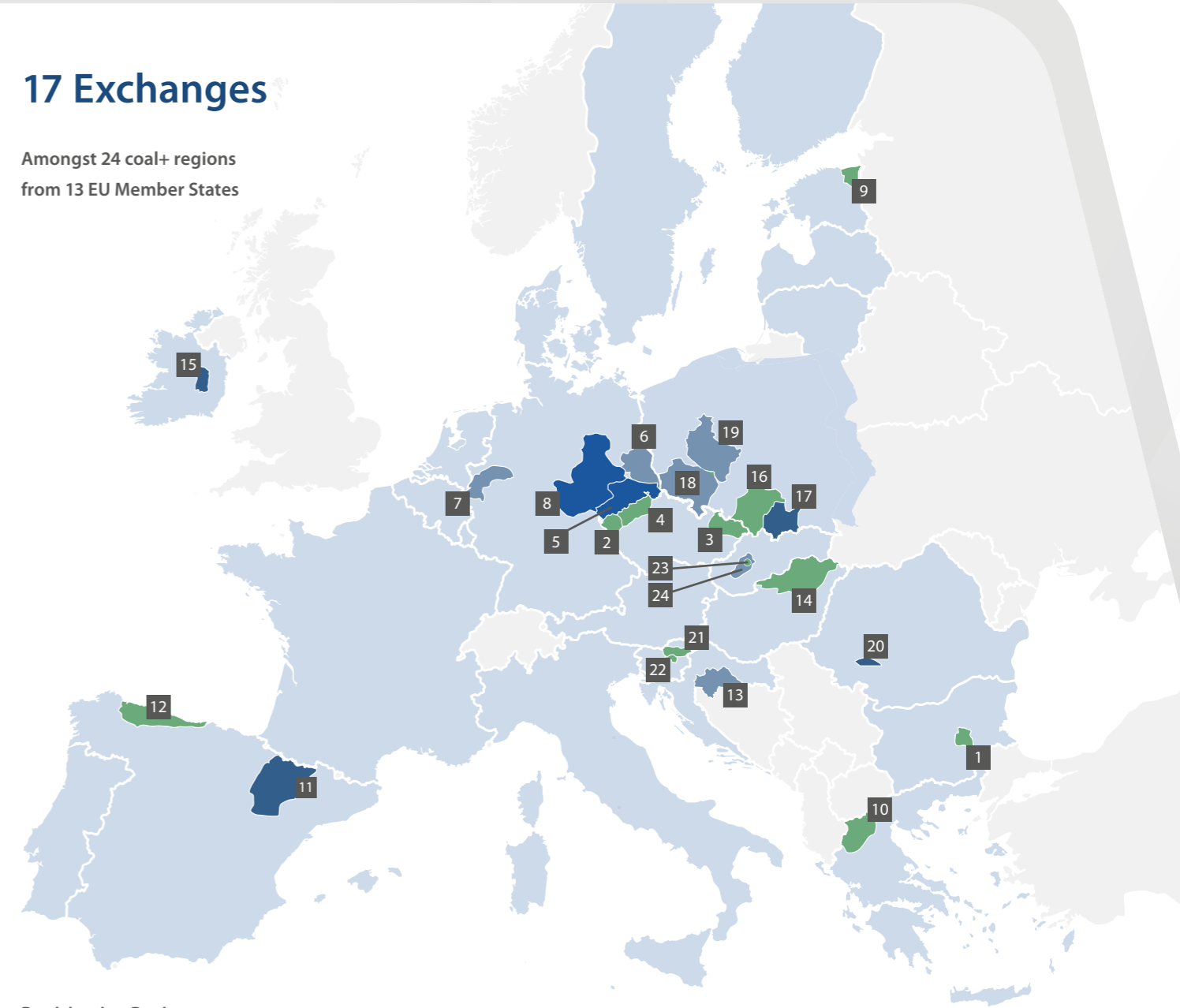
The [exchangeEU programme](#), one of the offerings of the Initiative for coal regions in transition, was established to further support coal+ regions that are undergoing a transition: a societal transition into a future without fossil fuels that leaves no one behind. Fossil fuels, especially coal, used to be the backbone of industrialisation and the basis for today's wealth in many countries. However, it also presents a unique window of opportunity, as bold climate action today can fortify future economies and societies as well as vastly improve the livelihoods of millions of people. exchangeEU assisted regions in transition make the most of this opportunity by connecting practitioners from all over the European Union, bringing them together to visit and learn from each other and gain insights about each other's just transition process.

This lessons learnt brochure is the final document of the exchangeEU programme. It summarizes and presents the key takeaways from the 17 exchanges conducted over the course of the programme. The following chapters highlight common challenges, participating exchange regions and best practices. The overall aim is to provide this information to practitioners and policymakers throughout Europe who may encounter similar challenges.

exchangeEU has demonstrated that there is no one-size-fits-all approach for implementing a just transition. Each state and region must tailor the process to their specific circumstances and challenges, charting their own path towards a fairer and fossil-free future. However, the exchanges have revealed that many regions face similar obstacles and that learning from each other's experiences can be extremely beneficial. The exchangeEU programme hopes that interested readers will be inspired by the examples on the following pages, but also that they will be encouraged to reach out to other jurisdictions for advice and support. If you are working in the just transition field: you are not alone!

17 Exchanges

Amongst 24 coal+ regions from 13 EU Member States



Participating Regions:

- |                               |                               |                                       |
|-------------------------------|-------------------------------|---------------------------------------|
| 1 Stara Zagora, BG            | 11 Aragón, ES                 | 21 City of Velenje, Savinjska, SI     |
| 2 Karlovy Vary, CZ            | 12 Asturias, ES               | 22 Zasavje, SI                        |
| 3 Moravia-Silesia, CZ         | 13 Sisak-Moslavina County, HR | 23 City of Prievidza, Upper Nitra, SK |
| 4 Ústí, CZ                    | 14 Northern Hungary, HU       | 24 Upper Nitra, SK                    |
| 5 City of Leipzig, Saxony, DE | 15 Midlands, IE               |                                       |
| 6 Lusatia, DE                 | 16 City of Bytom, Silesia, PL |                                       |
| 7 Rhinish Region, DE          | 17 Malopolska, PL             |                                       |
| 8 Saxony-Anhalt, DE           | 18 Turów, Lower Silesia, PL   |                                       |
| 9 Ida-Virumaa, EE             | 19 Wielkopolska, PL           |                                       |
| 10 Western Macedonia, EL      | 20 Jiu Valley, RO             |                                       |

<span style="color: darkblue;">■</span>	Participated in round 1
<span style="color: lightblue;">■</span>	Participated in round 2
<span style="color: green;">■</span>	Participated in both rounds



A good transition strategy can provide guidance throughout the entire Just Transition process.

## TRANSITION STRATEGIES

Structural change is a long-term process. An overall regional just transition strategy, as for example, represented by the Territorial Just Transition Plans, is important to coherently and effectively guide the EU Territorial various stakeholders and decision makers in transition processes. Such strategies also align actions and projects with available funding and financing instruments. Moreover, transition strategies give planning security to workers, industries, investors and communities.

### exchangeEU regions recommend:

#### ➤ **The earlier a managed transition starts, the better:**

A look at energy plans and climate neutrality scenarios of European countries clearly shows that, in some countries, there will still be shares of coal in the energy mix in the coming years and even decades. Nevertheless, the remaining carbon budget will put more and more pressure on European coal and fossil fuel use in the next years. Given that new jobs for workers, regional economic regeneration, and company's reorientation towards new business models do not happen overnight, all European coal+ regions need to begin a well-managed, just and pro-active transition as early as possible. Asked about what they would do differently, if they had the chance to start their regional transition again, numerous exchangeEU participants answered that they would have started their transition earlier in order to have more time to actually develop a well-planned, stakeholder-supported transition strategy based on regional needs and specificities. From historical transitions, we know that it will always be better to have a managed and pre-emptive transition than an

unmanaged structural change process. Even old industrial towns and coal regions such as Ruhr area in Germany, Genk in Belgium or Appalachia in the U.S., still have ongoing transition processes, despite facing a decline in coal decades ago. Many regions have tried to prolong their coal industries for a long time rather than proactively planning the transitions ahead.

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**Set out a firm phase-out date in line with the Paris Agreement: Several exchangeEU regions lack a set coal phase-out timeline. They wish for a strong political commitment, especially on the national level, for a firm coal power plant and mine closing date. This is the key to shifting the mindset of workers and communities to begin imagining and orienting towards a future beyond a coal mining economy and to give all stakeholders the necessary planning security.**

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### Steps of the simplified policy cycle

Strategy development can be structured around the four elements of the simplified policy cycle:



More information about how to apply the policy cycle for effective regional just transition strategies are provided in the [Toolkit](#) "Transition strategies – How to design effective strategies for coal regions in transition" and the ["Just Transition Toolbox for coal regions"](#).

Source: European Commission (2020): Toolkit: Transition strategies – How to design effective strategies for coal regions in transition.

#### ➤ **Make sure your transition strategy is in line with climate goals:**

A regional transition strategy needs to be in line with existing sustainability goals. This includes the international climate objectives of the Paris Agreement, the Sustainable Development Goals of the Agenda 2030 (SDGs) and other national or multinational legislation and strategies. In the EU this specifically means that both the long-term visions and short-term objectives need to be aligned with a zero-carbon pathway before 2050. Phasing out coal, peat and oil shale is already a huge step towards climate-neutrality. Nevertheless, this step alone unfortunately does not make a region climate neutral. exchangeEU regions highlight that **all new economic structures and infrastructures need be compatible with a climate-neutral economy and society**. Building the infrastructure today which is not climate and future-proof, may lead to heavy costs in ten to twenty years.

#### ➤ **Assessing the challenges – mixing participatory processes with research:**

exchangeEU regions advise coal+ regions in transition to start their transition with a thorough **diagnosis of their regional challenges, needs and opportunities as well as socio-economic impacts of the transition**. exchangeEU regions

recommend using a participatory bottom-up approach to define needs and priorities of local citizens and regional stakeholders. In addition, assessments should be backed up by high quality, independent and objective data analyses, carried out by qualified actors, such as regional research centers and universities. The latter is crucial, as public perception sometimes overstates some challenges and overlooks others. For example, various actors perceive the loss of jobs as the biggest challenge of the lignite phase-out in Lusatia, east Germany's largest lignite mining area. Thus, national and regional support programmes for Lusatia primarily aim at creating and retaining jobs. At the same time it has become increasingly clear in recent years that, in fact, one of the greatest challenges for the region is the lack of skilled workers.<sup>1</sup>

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**Further advice on how to gather sound knowledge concerning the regional challenges, facts and figures can be found in the Toolkit ["Transition strategies – How to design effective strategies for coal regions in transition"](#), chapter "Getting the facts right: information to be gathered" (pages 7 and 19-20).**

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<sup>1</sup> See for example [Wirtschaftsregion Lausitz \(2019\)](#).

➤ **Ensure continuity:** For several exchangeEU regions a major challenge is the lack of continuity in actions and projects undertaken as part of the just transition process. As a main reason for this, participants cite the lack of specific funding for a centralized office or authority responsible for coordinating the overall just transition process at the regional level. Therefore, they advise all countries and regions in transition to actively manage just transition processes from start to finish, including the development of an **effective, transparent governance structure** that clearly allocates responsibilities between different governance levels, departments and stakeholders (see also chapter “[Multi-actor governance and participation](#)”). The local and regional levels in particular need funding to establish a central coordination office. Moreover, exchangeEU regions explain that broad participation of stakeholders, a robust financing plan and a focus on key priorities are helpful to ensure continuity. The priorities should be in line with the region’s vision for its future development as well as climate neutrality goals.

➤ **Keep the transformation process flexible to changes and evaluate regularly:** Structural change is a long-term process that will take several years or even decades. During this time, many framework conditions that influence regional development can change, for example, as new technologies are developed, changes occur in the labour market or the effects of the climate crisis are felt more and more strongly. Challenges and needs diagnosed at the initial stage of planning may become less important or even obsolete, while other



“Developing and implementing a Territorial Just Transition Plan requires long-term preparations, but dedicated people and patience are just as crucial.”

**Tomasz Janik**, Deputy head of the Department of Strategy, European Funds and Investor Support, City of Bytom (Poland)

challenges may increase or even emerge completely anew. This is why the regional transition strategy should be based on **experimentation and iterative learning approaches**, as well as incorporate regular evaluation loops that enable **adaptations and changes**. In general, exchangeEU regions emphasise that monitoring, evaluation and reassessment are important parts of every transition strategy. The plan should be monitored and evaluated through meaningful partnerships that engage all stakeholders in an open, inclusive process.



### Practice example: The Czech RE:START Strategy

The Czech RE:START strategy is one example of a national strategy process for the regional development of coal mining areas. It has been the objective of the Czech government to develop a single common strategy for the country’s coal region under the leadership of the national Ministry of Regional Development. But it was clear that expertise on the specifics of the regions lies with experts from the regions and that the three Czech coal mining areas do in fact

show quite some differences with respect to socio-economic characteristics, specific challenges and possible solutions. As a result, a governance structure has been devised that matches national institutions with regional counterparts, acknowledging each region’s specific needs and potential.

➔ [read more](#)

### Further resources

#### **European Commission (2020): Toolkit: Transition strategies – How to design effective strategies for coal regions in transition.**

This toolkit provides guidance for regional practitioners on how to:

- develop a transition strategy in coal+ regions;
- identify actions and projects to support the strategy;
- monitor, evaluate and continuously adapt the strategy.

Each topic is illustrated by several practice examples from different European coal regions. The annex provides a comprehensive overview of further helpful tools and handbooks for developing transition strategies.

➔ [read more](#)

#### **Wuppertal Institute (2022). Just Transition Toolbox for coal regions: Developing strategies for a Just Transition in coal regions.**

The Just Transition Toolbox is based on the Toolkit about Transition strategies (see above), but explores the topics in greater depth and includes both European and international examples.

➔ [read more](#)

#### **International Institute for Sustainable Development (2018): Real People, Real Change: Strategies for just energy transitions.**

The purpose of the report is to provide governments from the Global North and Global South with key recommendations on how to address just energy transition. It highlights political and communication strategies used in the process and is based on past and current research and case studies done in Canada, Egypt, Indonesia, India, Poland, and Ukraine.

➔ [read more](#)

#### **WWF (2021): Toolkit for assessing effective Just Transition Plans.**

The WWF developed an online scoreboard that allows users to check the quality of their Territorial Just Transition Plan and its potential to deliver just transition, and to see how other regions are doing in comparison. The tool is aimed at policy makers, municipalities, civil society and other partners involved in developing the plans. It is based on the WWF’s ten principles for a just transition.

➔ [read more](#)

➔ [online scoreboard](#)

# MULTI-ACTOR GOVERNANCE AND PARTICIPATION

Transitions in coal+ regions are obviously much more than just a shift away from fossil fuels to clean and modern energy technologies. They include major changes in the economy and a complex transition of the social fabric of an entire region. Consequently, good governance to support this process requires effort from multiple governmental and non-governmental actors. This is particularly challenging since coal+ regions often do not correspond to a clear administrative boundary.

## exchangeEU regions recommend:

### ➤ Set up a multi-actor and multi-level governance structure:

exchangeEU regions declare unanimously that the engagement from and the effective collaboration between different governance levels (local, regional, national), governance departments (e.g. for energy, environment, economy, regional planning, culture, education and family) and stakeholders (such as citizens, civil society organisations, businesses, unions, academia and educational institutions) is crucial to a successful and just transition. The **governance structure needs to be transparent for all involved actors as well as for the general public** (see below). It is also vital that responsibilities are clearly allocated between different governance levels, departments and stakeholders.

➤ **Pay more attention to the municipal level:** Several exchangeEU participants cite that transition plans, strategies and project plans are developed and decided mainly at regional and national level. Their implementation, however, takes place in the municipalities, which often lack sufficient resources for this task (in terms of finance, staff and knowledge). exchangeEU regions therefore advocate that the **municipal level must be included as an equal in the planning and decision-making process** and municipalities need to be supported in building up the necessary capacities for shaping and implementing the local just transition. Moreover, exchangeEU regions encourage different **municipalities to cooperate with each other**. This can enable knowledge transfer, conserve capacities, in particular in small municipalities, and strengthen the municipalities' position in the planning. Especially for

## Common barriers and solutions in stakeholder engagement

### ? Problem

Process is time-consuming and resource-intensive

### ↻ Approach

Long-term commitment and clear expectations

Stakeholder engagement should start early and be sustained over time. It does not end when a region's strategy is launched.

### ? Problem

It is hard to achieve meaningful inclusion of certain stakeholder groups

### ↻ Approach

Awareness raising, empowering stakeholder and effective facilitation

Awareness raising can bring certain stakeholders onboard, while targeted support can strengthen the voice of those not usually involved in decision-making. A good facilitator ensures equal engagement of all stakeholders.

### ? Problem

Lack of agreement regarding information needed to make decisions

### ↻ Approach

Joint fact finding processes

There are solutions to avoid contestation of the evidence available and build objective and constructive stakeholders debates.

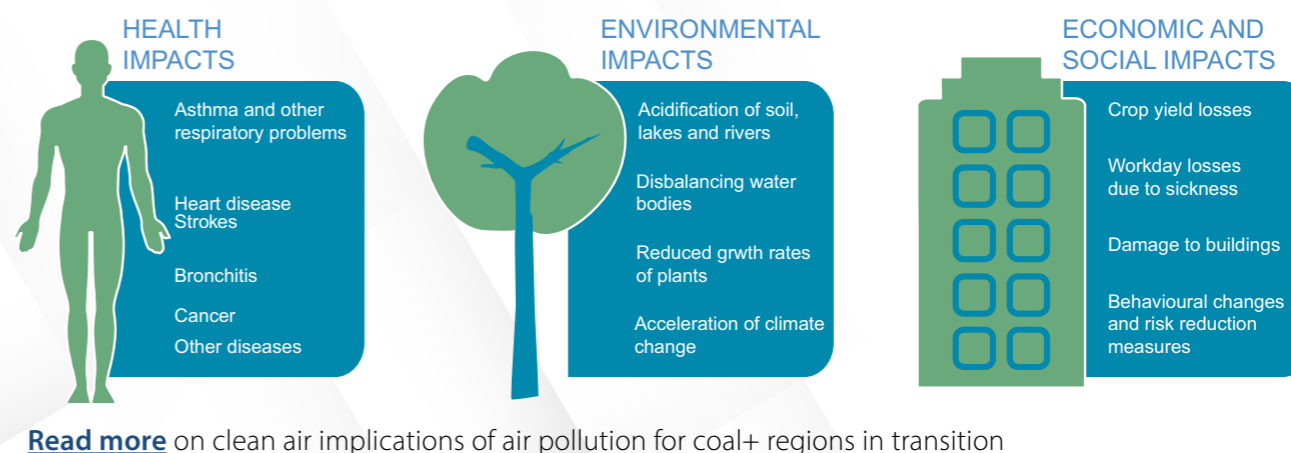
[Read more](#) about common barriers and solutions in stakeholder engagement and how to approach them.

Source: European Commission (2020): Toolkit: Governance of transitions – Design of governance structures and stakeholder engagement processes for coal regions in transition.

## Regional key benefits of the energy transition

- Improving **air quality** and thus the quality of life. Coal-fired power plants continue to be responsible for the largest amounts of key pollutants released to air: burning coal causes about [22 900 premature deaths](#) a year in Europe!
- **Villages, ecosystems and fertile soils** threatened by mining can be preserved. The regional **water balance** will not be further destroyed. This is particularly important in times of increasing water scarcity due to climate change.
- An early coal+ phase-out offers the chance to modernise the **local economy** with support from EU funds.

## Negative effects of air pollution



Source: European Commission (2021): Toolkit: Clean air – Implications of air pollution for coal regions in transition.

neighbouring communities, regular exchange and co-operation has been very fruitful.

### ➤ Put people at the center of the transition and develop high quality participatory approaches:

Several exchangeEU participants report that many people in their regions do not feel heard and valued in the transition process. Asked about what they would do differently if they could start their transition process again, exchangeEU regions answered that they would improve the quality of their participatory approach to actually **create a common ownership for the transition and to get the necessary backing in the community**. To promote participation, they strongly recommend establishing governance mechanisms that allow citizens, civil society organisations and other stakeholders to truly be part of the planning and decision process. This requires national, regional and local transition leaders to see them as powerful partners in the transition rather than as vehicles to build social acceptance. **Citizen and stakeholder involvement should start from the beginning** with co-creating a vision for the future and must be understood as an ongoing process. exchangeEU participants suggest ex-

panding the activity portfolio to a wide range of participatory tools, like citizens' councils, citizen dialogues and stakeholder meetings. In addition, an active communication strategy, informing the general public about the process, how they can engage and outlining next steps, is viewed as very helpful. Moreover, exchangeEU participants criticise that thus far civil society initiatives and NGOs have almost no possibility to apply for funding from the different just transition programmes despite their often high levels of motivation and expertise in the area of sustainable development.

### ➤ Communicate the need and benefits of the transition:

A main challenge local authorities in many exchangeEU regions face is to increase public awareness for the need of phasing out fossil fuels and to convince citizens to actively engage in the transition. Often, local citizens still lack awareness about the long-term consequences of greenhouse gas emissions for their future livelihoods. Moreover, several exchangeEU participants report that in their regions **reliable and easily accessible information** about the envisaged transition and its potential benefits is lacking, while the spread of fake news is very strong. Therefore, they recommend

making greater efforts to communicate the need for and benefits of the just transition to the wider public, and to explain why it is crucial for the region to thrive again. exchangeEU regions explain that from their experience it is highly important to clearly communicate that coal+ mining and burning will phase-out and that though this process will change the region, there is a vision in place, which citizens can co-create.

➤ **Provide ongoing information on the transition governance, plans and activities:** The experience of exchangeEU regions shows that **transparency** of policy processes, decision-making criteria and activities are essential to build trust in the local community about the transition (apart from being a crucial democratic principle!). exchangeEU participants recommend all regions in transition to keep track of their activities and to keep citizens informed. This helps to assure them that their specific concerns are being considered, and that their needs are being addressed.

➤ **Involve youth and students:** Asked about which societal groups should receive more attention in the just transition process, most exchangeEU regions highlighted youth and students. Young people can be perceived as transition experts as they know what they need for the future they want. To prevent brain drain it is important to involve young people in decision-making, to provide them with future-proof training and education and to co-create realistic visions in the region. Policy makers and community leaders should understand and respond to young people's needs by



*“Involving local communities in the decision-making process for planning the transition from coal not only helps to address the concerns and needs of affected communities, but also leads to more successful and sustainable outcomes.”*

**Agnieszka Spirydowicz**, President of ZKlaster, Zgorzelec, Poland

creating policies and programmes that support their development.

➤ **Focus on common goals:** Participants from exchangeEU found that the pivotal factor to getting all relevant government bodies and stakeholder groups involved in the transition process is to start from a pragmatic standpoint and **establish working relationships despite potential differences** by focusing on the common challenges and solutions. Regions in which interest in the transition was very low or in which there was strong resistance, found it effective to start the transition process by **building coalitions of the willing**.



## Practice example: The Ida-Virumaa Youth Climate Assembly

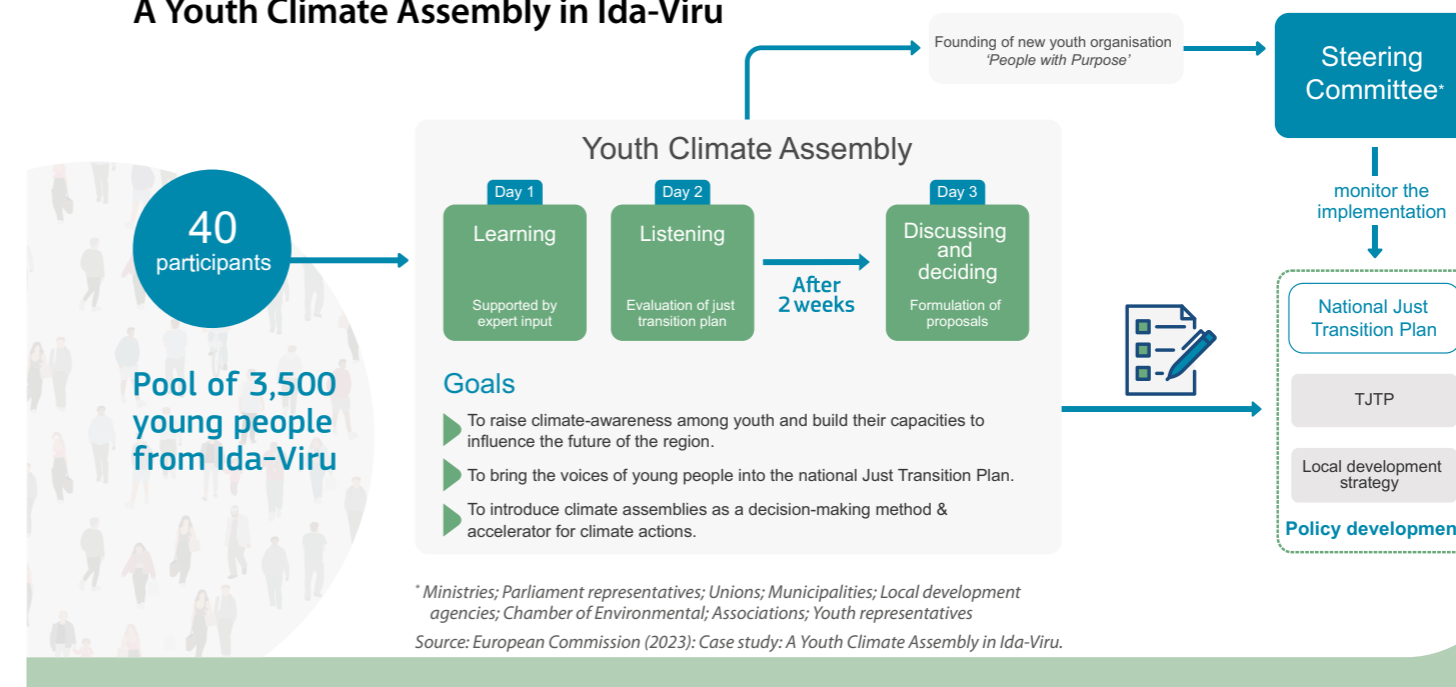
The Ida-Virumaa Youth Climate Assembly is a powerful example of how to give youth a voice in the transition process. It aims at empowering young people to proactively shape the future of their region and at the same time to raise awareness about climate change among young people. Through the assembly, a group of 25 people between 16-29 years came together to discuss their vision for the Ida-Virumaa region and formulated a set of recommendations for national policy

makers. Most of these recommendations were included into the National Just Transition Plan that was developed at the same time.

The Youth Climate Assembly was a part of the project “Climate action by European citizens for development” implemented by 20 European NGOs and funded by the European Union.

→ [read more](#)

## A Youth Climate Assembly in Ida-Viru



## Further resources

### European Commission (2020): Governance of transitions: Design of governance structures and stakeholder engagement processes for coal regions in transition.

This toolkit provides guidance for regional practitioners on how to:

- build effective governance models for coal+ transitions;
- design and implement stakeholder engagement processes;
- increase the role of civil society in the transition and
- ensure social dialogue.

Each topic is illustrated by several practice examples from different European coal regions. The Annex of the toolkit provides a comprehensive overview of further helpful tools and handbooks about transition governance, participation and stakeholder engagement.

→ [read more](#)

### Wuppertal Institute (2022). Just Transition Toolbox for coal regions: Designing effective governance models.

This chapter of the Just Transition Toolbox is based on the Toolkit about Governance of transitions (see above), but explores the topics in greater depth and includes both European and international examples.

→ [read more](#)

### European Commission (2019): Youth for a just transition: A toolkit for youth participation in the just transition fund.

This toolkit is addressed in particular at regional and local policy-makers responsible for implementation of the Just Transition Fund. It provides a set of principles, best practices and strategies of how to maximise the meaningful participation of youth in the programming, implementation, monitoring and evaluation of the Just Transition Fund.

→ [read more](#)

### Europe Beyond Coal Network (2019): Seven Golden Rules for open and inclusive just transition planning at the regional level.

This short briefing provides guidance principles for regional and national authorities to ensure effective stakeholder participation at the regional level.

→ [read more](#)

### Brouwer and Woodhill (2015): The multi-stakeholder partnerships tool guide.

This guide links the underlying rationale for multi-stakeholder partnerships with a clear, four-phase process model, a set of seven core principles, key ideas for facilitation and 60 participatory tools for analysis, planning and decision-making. It is available in English, French and Spanish.

→ [read more](#)

→ [online tool overview](#)



Tourism can be a promising alternative sector for many regions, as illustrated by the mineral baths in Stara Zagora (BG).

## SUSTAINABLE ECONOMIC DIVERSIFICATION AND REGIONAL DEVELOPMENT & EMPLOYMENT

Direct job losses of miners is the number one topic which comes to most people's mind when discussing coal+ transition. Obviously, the issue is more complex: many coal regions are structurally weak with high unemployment rates and job losses in mining are hard to compensate. On the other hand, many coal regions face an increasing lack of skilled labour. Thus, a just transition in coal regions is an opportunity to take a broader view at economic diversification, looking at regional development at large, including all sectors and addressing long-term issues like education and training for young people.

### exchangeEU regions recommend:

➤ **Strengthening the educational system:** Participants from exchangeEU stressed that the educational system at large needs to be strengthened (or even "transformed") in order to provide future generations with perspectives and attract them to stay in the region. In order to diversify the economy, a high skill level in the region is a prerequisite to attract companies or foster innovation. Universities and research institutes play an important role here but also high-quality education in non-academic areas. Public-private partnerships in the form of dual education programmes can help to

align educational curricula better with (future) skill needs of the local private sector. In the exchangeEU region [Prievidza](#) (Slovakia) a dual education programme allows high school students to do an apprenticeship in the development centre of an automotive supplier company. In Ida-Virumaa (Estonia) a coding school offers a two-year educational programme to address the lack of software engineers in Estonia. Several regions also highlighted that providing internships for young people in secondary and higher education can be beneficial.

### ➤ **Reskilling of coal miners and power plant workers:**

It is specifically an issue in regions in which a high number of miners risk losing their jobs in a relatively short period of time. Many regions have had experiences with reskilling programmes – and can also share learnings on "what to avoid" or "not to repeat". Vocational training and education programs should start early and be available well after the last mine closes. Another identified good practice was **contact centers for miners** which offer a more holistic support, including social, legal, health and psychological consultations as well as support to find re-training courses. It was mentioned that miners would also need to mentally adjust to their new role in their community (see also section on cultural heritage below). One interesting idea, which came up in one exchange, is that miners & coal workers could be invited to communicate about the benefits, effectiveness, support from re-skilling and upskilling programs as a method to show that these programs are relevant. This could also strengthen the ownership and contribute to a discourse on if and how the future of the region can be shaped by the region.

➤ **Skill mapping:** Identifying the appropriate skills that will be relevant for the future was considered a very tough challenge by many participants. This is not only relevant for re-skilling programmes but for educational activities in general. An interesting measure is to elaborate a 'skills map', ideally spearheaded by unions and regional employer organisations to identify the skill set of the local workforce, thus, giving local authorities clearer guidance on which re-skilling programmes to set up.

➤ **Agency for regional development and economic diversification:** Many coal+ regions across the EU have had good experiences with regional development agencies supporting their economic transformation. One success factor is that those agencies often focus on the specific region (with its specific challenges and opportunities) and not necessarily on administrative boundaries. In one exchange, representatives from Asturias shared their experiences collaborating with their Economic Development Agency (IDEPA) to support local companies to generate new business activities via incubator networks and a business innovation centre. Participants highlighted the importance of bundling such activities and providing a "one-stop-shop" for businesses.



"The transition process requires ensuring that vulnerable groups, such as low-income families and workers in traditional industries, are actively involved in the transition process. It's essential to ensure that these groups have access to training, education, and resources necessary to participate fully in the new economy."

Vojtěch Franta, Deputy governor of the Karlovy Vary region for spa, tourism, UNESCO and ICT of Karlovy Vary, Karlovy Vary (Czech Republic)

➤ **Improving regional infrastructure:** exchangeEU participants pointed out that infrastructural connectivity plays a bigger role in structural change than one might think. If there are no adequate road and rail links, then the conditions for living and working locally, for tourism, for other industries, are lacking. This is no surprise, as many coal+ regions are rural and often border regions and are structurally weak in many respects. Since large scale infrastructure is very costly, it is important to strategically plan infrastructure which is specifically in line with regional needs, development options and sustainability targets, including the EU's target to become climate neutral by 2050 through measures such as clean transport options. Plans to improve regional infrastructure can and should build on what already exists – including old mining and industrial infrastructure – and rebuild it for new purposes.

➤ **Supporting start-ups and SMEs:** One key element in diversifying and transforming the economy in coal+ regions is to attract new companies to the region. But substituting the existing coal+ industries one-on-one with one new industrial player is often

### Why regional transition policies should put a stronger focus on women

Since it is predominantly men who work in coal industry, debates on coal transitions often focus on the male miner. However, this ignores the fact that coal transitions do have significant impacts on women's work and life in general. [Studies](#) on past coal transitions show that when male miners lost their jobs, women increasingly started to work in paid jobs in order to compensate for the decrease in household income. These jobs were and are often precarious jobs, located mainly in the service sector and characterised by poor working conditions and wages as well as little social protection. Furthermore, in historical coal transitions, an overly proportional share of well-educated young women left the mining regions with their highly masculine oriented working environment, adding to depopulation and brain drain.

Given these factors, it becomes obvious that responding to the needs of women must be a cornerstone in any just transition strategy of coal regions:

- ▶ Compensation schemes must not only address the miners but also coal mining communities at large.
- ▶ Job training and qualification programmes are to be made available to all people in the affected region, not only former (male) coal miners.
- ▶ Steps should be taken to ensure that women have access to emerging, well-paid jobs in new economic sectors. The working conditions in female-dominated sectors like the service sector must be improved.

very difficult. Consequently, in many exchanges the options to foster SMEs (new or existing) and to support start-ups were extensively discussed. One learning was that business incubators can play an important role. To be successful, they should best be embedded in the innovation landscape of the regions – with links to local universities, the chamber of commerce, trade unions, consultancies, and other relevant economic actors. Participants of the exchange in [Zasavje](#), Slovenia were impressed by the local incubator Katapult. One of its success factors was its close link to a local, world-class IT company. Using such links can greatly improve the impact of the incubator. But some participants also reflected that not all coal+ regions have such a good starting position. Obviously, no blueprint exists, but local solutions have to be developed, seeking synergies with the locally existing infrastructure, business environments and research and educational systems.

- ▶ **Regional development and quality of life:** Population and brain drain were named as key challenges many coal regions are struggling with. As important as jobs and a healthy economy are – many participants stressed that a broader perspective is necessary. Culture, art, local events and public meeting places were considered important to avoid the feeling of being disconnected from the world. Consequently, it was recommended to not only concentrate on job creation but also on **providing attractive local social infrastructure and community services** (for example culture, education, sport facilities, recreational areas, childcare) to increase the quality of life in the region. It was highlighted that citizen engagement in planning processes can be a key to shape the region according to the needs of its inhabitants – and by doing so the region could become more attractive for skilled workers and companies from outside. Several exchangeEU site visits showed examples in which cheap spaces were offered for creative usage (including arts, education and start-ups) as well as business incubators to attract creative people to stay in the region.

### Further resources

#### European Commission (2020): Sustainable employment and welfare support toolkit

This toolkit provides guidance for regional practitioners on how to:

- ▶ anticipate future skill needs;
- ▶ design tailored support for workers;
- ▶ involve key actors in cooperation processes and social dialogue and
- ▶ support an economic diversification and transformation of coal+ regions

Each topic is illustrated by several practice examples from different European coal regions. The annex provides a comprehensive overview of further helpful tools and handbooks.

→ [read more](#)

#### Wuppertal Institute (2022). Just Transition Toolbox for coal regions: Employment

– Paving the way for new business opportunities and sustainable employment

This chapter of the Just Transition Toolbox is based on the Toolkit about Sustainable employment (see above), but explores the topics in greater depth and includes both European and international examples.

→ [read more](#)

#### European Commission (2019): Skills for industry

A series of handbooks addresses a broad range of topics concerning skill development in industry: from digitalisation to skills specifically for SMEs or on how to meet training needs in online formats. Many good practical examples across Europe are given highlighting how the increased demand for high-tech skills can best be met.

→ [read more](#)

#### Tracer (2020): Best practice report on labour markets, social issues and tourism.

Based on eleven case studies from European coal-intensive regions, this short report offers a guideline for a step-by-step strategic approach to labour market and social transformation processes. It includes a condensed assessment procedure for labour market structures and social challenges, drivers for a sustainable transition and recommendations on how to facilitate a successful change process.

→ [read more](#)



### Practice example: The Access for All project from the Midlands (Ireland)

The Midlands region in Ireland developed a highly innovative idea for how to combine community engagement with creating new and decent jobs for community members. The Access for All project in Lanesboro/Ballyleague offers boat tours by disabled people for disabled people, creating inclusive jobs and attracting thousands of visitors per year. The project offers daily sailings – including activities like fishing or sightseeing – on a small tailor-made, wheelchair accessible passenger vessel to people with disabilities. The boats are also very appropriate for the needs of elderly persons. As the passenger vessel is the only one of its kind in Ireland, the project attracts visitors from all over the country and thus also fosters tourism in the region. The project is organised by a non-profit organisation and is financed, among others, by the Just Transition Fund.

→ [read more](#)







Environmental rehabilitation is one key aspect of the Just Transition process.

## ENVIRONMENTAL REHABILITATION & CULTURAL HERITAGE

Coal+ regions have always undergone a cycle of prospecting, operation and eventual closure. When these industries close, they leave behind a legacy of environmental degradation alongside many other challenges. Locations formerly used for mining and related industrial activities require environmental rehabilitation. The repurposing of land and infrastructure is a key element of coal regions' transition, and a basis for economic diversification as well as improving the quality of life in the region.

### exchangeEU regions recommend:

➤ **Be aware that thorough environmental rehabilitation is a key element for coal+ regions to thrive again:** exchangeEU participants cite environmental rehabilitation as a key task for their regions. Coal mining causes considerable environmental and economic damage, such as contamination of soil, groundwater and rivers, soil subsidence and impairment of the water balance. Especially the latter, in combination with climate change, will lead to many coal+ regions being severely affected by water scarcity. As a result, future social, economic and ecological development in the respective regions is seriously impeded. Rehabilitation must not be viewed as a liability but rather as the key element to protect citizens and increase the regional quality of life by **creating a safe, clean and healthy environment**. Moreover, it is a prerequisite to attract highly skilled workers to the region, new businesses and create new jobs. During their exchange some exchangeEU participants discussed the rehabilitation of abandoned coal mines and repurposing ideas with an

environmental NGO. This meeting was perceived as very helpful as many environmental NGOs have high expertise in this area.

➤ **Make sure to enforce the polluter pays principle:** Several exchangeEU regions report that it is a challenge to fully apply the polluter pays principle. The polluter pays principle means that the entity whose action caused environmental and other damage must bear the costs of their remediation. This is highly important for coal+ regions as environmental rehabilitation of coal mining areas comes at very high costs and is a long-term process. Therefore, governments need to ensure early on that mining companies have the necessary financial resources for this task – even in case of premature closures that occur before depletion or in case companies should go bankrupt or be taken over by another company. If the polluter pays principle is not enforced, the costs for mine closure and the so-called perpetuity costs from mining will represent a risk worth billions of Euros for the general public.

➔ **Mine closure creates substantial liabilities for public safety and health, and is, consequently, generally highly regulated in European countries. The EU Extractive Waste Directive 2006/21/EC sets minimum standards including the requirement for mining companies to set aside funds for post-mining rehabilitation.**

➤ **Keep the cultural heritage alive:** exchangeEU participants explain that mining is a central part of the local heritage and the community's identity. Miners are rightfully proud of their achievements and contributions to the economic development of the region. This must be acknowledged when envisioning a just transition. Many regions try to keep the heritage alive by **setting up museums, creating touristic parks, or refurbishing old industrial and mining buildings for new uses**. However, it is important to remember that coal+ mining did not only bring jobs, prosperity and well-being to regions and their inhabitants. In particular, mining in open cast mines is linked to the destruction of homelands, entire villages and fertile fields. Furthermore, inhabitants in coal+ areas are also often exposed to severe air pollution. Public debates in coal+ regions are not only shaped by the coal mining industry, but also by resistance against its negative effects. Museums, exhibitions and other formats that preserve the mining heritage



**“Environmental sustainability must be prioritized as a core element of just transition to mitigate negative impacts. To make the transition a truly just transition, we need to integrate strategies for renewable energy, climate adaptation, and ecosystem protection into the transition plan from the outset.”**

Andraž Malovrh, Project Manager at Zasavje Regional Development Agency, Zasavje (Slovenia)

### THE RAG FOUNDATION APPROACH TO PERPETUAL REHABILITATION COSTS

- In 2018, after 150 years of hard coal mining, the last mine closed in the Ruhr Area, Germany.
- Many corporate duties remain and will remain in the long-term, including for example: securing the old shafts and tunnels, permanent management of pit water and groundwater purification.
- To finance those perpetual post-mining tasks, a large share of the assets of the mining companies (including real estate) were brought into a foundation (the RAG Stiftung).

More information about secure financing for mine closure are provided in the [Toolkit](#) “Environmental rehabilitation and repurposing”

should appreciate the work of the miners while simultaneously recognizing the socio-economic, physical, environmental and health consequences of coal+ mining and burning.

➤ **Blend the old with the new:** exchangeEU regions show that there are successful ways to preserve their heritage and while working towards an increased quality of life, sustainability and economic welfare. For example, industrial heritage like coal mines and coal power plants can be transformed into offices, co-working spaces, cultural hubs, community halls, museums, educational centers or local recreation areas. Moreover, coal and shale oil-related infrastructure often have assets like strong electricity grids or railway lines, which can offer interesting potential for future renewables energy projects or industrial investments. **Former mining sites and power plants are often very well suited to be repurposed for renewable energy production and storage** (see also chapter [clean energy transition](#)). Moreover, exchangeEU participants advise that care should be taken to ensure that repurposing of former mining areas really benefits the local communities and citizens, for example, through the creation of new public spaces or by giving municipalities a share of the revenue from new installations, such as newly built solar parks.

**Further resources****European Commission (2020): Toolkit: Environmental rehabilitation and repurposing. Guidance on the governance of environmental rehabilitation and repurposing in coal regions in transition**

This toolkit provides guidance for regional practitioners on the governance of environmental rehabilitation and repurposing in coal regions in transition, including information about challenges, opportunities, financing, tools and institutions. Each topic is illustrated by several practice examples from different European coal regions. The annex provides a comprehensive overview of further helpful tools and handbooks.

→ [read more](#)

**Wuppertal Institute (2022). Just Transition Toolbox for coal regions: Coal-related infrastructure repurposing.**

This chapter of the Just Transition Toolbox is based on the Toolkit about environmental rehabilitation and repurposing (see above), but explores different repurposing options of coal mines and coal power plants in greater detail.

→ [read more](#)

**TRACER (2019): Best practice report on environmental protection and post-mining land reclamation.**

This report gives a brief overview among others on:

- ▶ the respective regulatory framework in the EU;
- ▶ guidelines for mine site reclamation and nature preservation and
- ▶ best practice solutions for agriculture and forest reclamation.

The report was developed within the project TRACER (Transition in Coal intensive Regions) funded by the EU.

→ [read more](#)

**International Council on Mining and Metals (2019): Integrated Mine Closure - Good Practice Guide**

Description: the International Council on Mining and Metals (ICMM) good practice guide aims at improving the closure-related performance of companies and regulators. It contains examples of good practices and a range of tools that can be used to make well-considered decisions when planning for the closure of a mine.

→ [read more](#)



## Practice examples: Rehabilitation of former mines

Here are some inspirations from exchangeEU regions how old mining sites can be used:

- ▶ **Lusatia (Germany):** 20ha of the open cast mine were converted to a landscape-garden, the Boulder Park Nochten, which features erratic mountain boulders and a variety of blooming plant species, such as heathlands.
- ▶ **Silesia (Poland):** An industrial monuments route connects 36 mining sites and other former industrial sites.
- ▶ **Zasavje (Slovenia):** Zasavje holds an annual inter-municipal cultural festival and has built a virtual mining museum, which uses multimedia to explore the mining history of the region.
- ▶ **Zgorzelec/Turów (Poland) and Lusatia (Germany):** During their exchange the neighboring regions of Zgorzelec/Turów and Lusatia developed the idea to convert parts of the abandoned coal mining land into hiking and adventure trails that connect both regions while displaying the mining history of the region on boards along the trails.

# CLEAN ENERGY TRANSITION:

The enhanced use of clean energy is both an opportunity and a special challenge for coal+ regions. Renewable energy and energy efficiency can at least partly substitute economic losses of the coal phase-out. The existence of energy related infrastructure (such as grid connection and power plants) puts the region in a position to be a future provider of clean energy. Many regions have the mindset of being an “energy region”, and would like to leverage this identity and knowledge of energy technologies. But there are also hurdles to overcome: both knowledge and mindsets of older experts and lobbyists are still often geared towards fossil fuels slowing down the support of the transition. Consequently, the topic of clean energy technologies and how to best utilise them in coal+ regions was high on the agenda of many exchanges.

**exchangeEU regions recommend:**

- ▶ **Social acceptance:** There are a variety of and often controversial views within coal+ regions on the future of coal and the potential of clean energy. Exchange participants highlighted challenges around garnering public acceptance for the transition ahead given concerns about energy poverty. For those residents in coal+ regions who struggle already today to pay their energy bills, the transition away from fossil fuels can be quite scary. On the other hand, energy efficiency as well as renewable energies have the potential to bring down energy costs, diminish heating demand, improve quality of life and create local jobs. To reap these benefits, it is necessary to actively design the clean energy transition with all socioeconomic groups in mind. Doing so can facilitate greater acceptance for the transition at large. In the exchange between Lusatia, Germany, and Turów, Poland, the idea emerged of organising site-visits for the local population to existing renewable energy sites, for example, a solar park which is right next to a coal mining field. Such an open day could be supported by guided tours and presentations to show the potentials of clean energy solutions and allow the local community to have a first-hand understanding of the benefits of clean energy projects.

- ▶ **Support energy communities:** Limiting energy costs for poorer parts of the population was considered a key objective in the transition by many exchangeEU participants – as was local ownership. Consequently, energy communities received a lot of attention in

many exchanges. They were seen as a tool to deploy infrastructure for renewable energies and at the same time ensure affordable and clean energy supply for citizens. However, it was also stressed that administrative and legal barriers (often at national level) need to be removed and specific financing instruments for energy communities should be created. During one exchange, the participants explored possibilities for joint projects: The delegation from Zgorzelec (Poland) offered to support the City of Weißwasser in establishing small-scale energy community projects to guarantee social returns to local citizens. A first implementation step will be to organise a meeting between experts from Zgorzelec, the municipality of Weißwasser, UNU Flores and interested citizens to better articulate the project idea.

- ▶ **Lack of clean energy experts:** Some participants stated that they lack data on regional or local level, for example on renewables potential or the energy consumption of specific users/sectors. This hinders efficient planning and robust strategy development. Widely shared was the view that the lack of skilled workers and experts can become a bottleneck. There is generally good energy expertise, but unfortunately mainly in fossil fuel related technologies. For the transition it is necessary to develop knowledge on clean energy technologies amongst planners, architects, craftsmen and public administrators. To support this process, there are plans in Slovakia to establish regional competence centers for energy with the aim to build capacity and knowledge in the field of renewable energies and to optimize energy needs in the respective area.

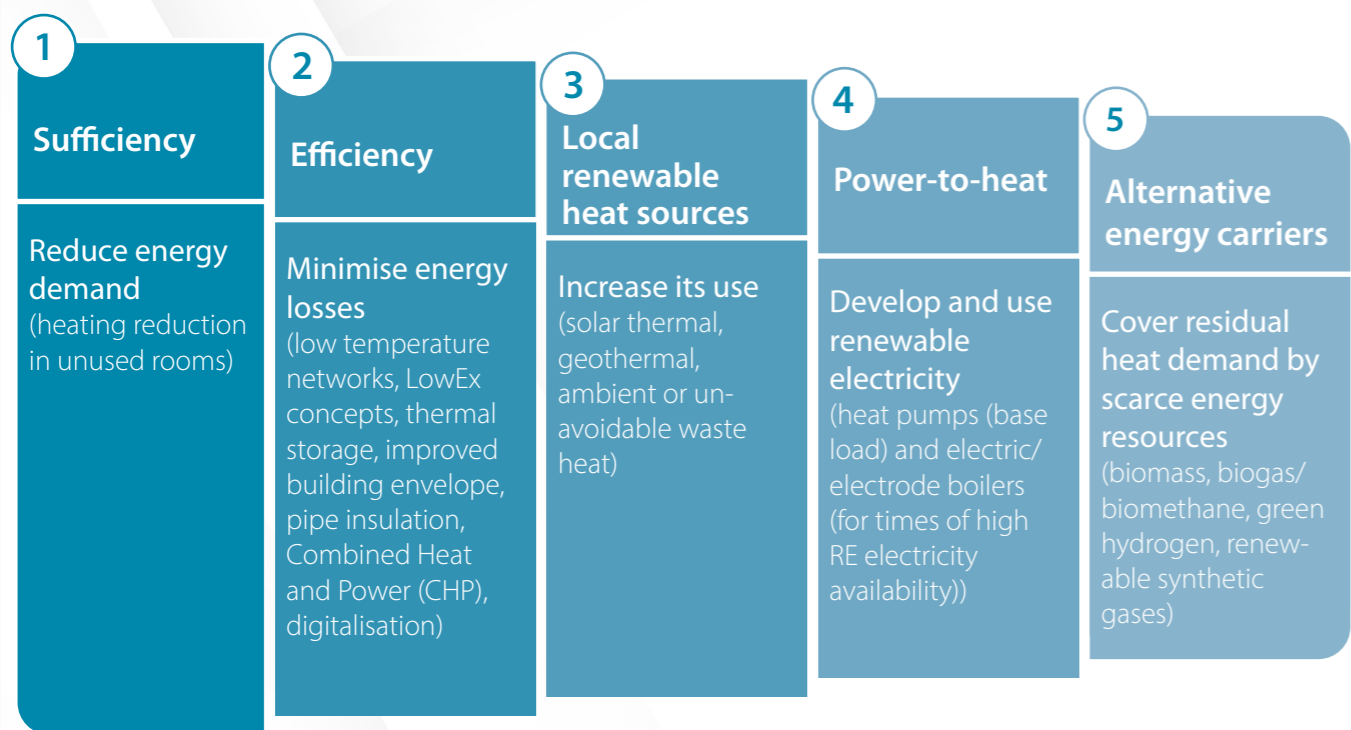
➤ **Make use of abandoned coal mining land for renewable energies:**

Wind and solar energy require appropriate land for the production of energy. Coal+ regions with open pit mining are in an advantageous position to use closed mining sites as sites for solar PV parks, which paired with mine rehabilitation, is a very cost-effective approach. However, some exchangeEU regions face the challenge that recultivation plans were decided once land was transformed into coal mines, which was often more than twenty years ago. As a result, these plans did not foresee a need for areas to be designated for solar PV or wind turbine projects, making installing them difficult today. Regional and/or national governments need to address these regulatory and planning restrictions for coal+ regions to take full advantage of developing clean energy projects on former mining sites.

➤ **Transforming district heating systems:** Many coal+ regions in cooler climates and specifically in central and eastern European countries have high shares of district heating. For these regions, the transition away from fossil energy sources is a major challenge. It starts with the mindset. Many exchangeEU participants stat-

ed that in the past heat was a “waste product” of electricity generation. Consequently, energy efficiency was never an area of focus for planners or energy consumers. Now, reducing energy demand is key to make renewable heating systems cost-effective. Both, energy efficiency (such as insulating buildings) and sufficiency (reducing demand) need to be promoted. During the exchange programme social awareness and financial incentives were discussed as key approaches to be cultivated, specifically at the local level. Existing district heating networks put communities (regional authorities and local utilities) under short term pressure, as coal phase outs force plants to consider alternative sources of fuel. However, with a mid-to long-term perspective, this may be an advantage, because the infrastructure already is in place and can be used for efficient solutions. Participants from exchangeEU regions stressed that to leverage this advantage, it is important that **consumers stay connected to the grid and individual heating solutions are disincentivised**. End-users cannot be enabled to disconnect from the energy distribution network too easily, as a lack of end users will make re-purposing the system inefficient and costly.

**5 principles to transform district heating systems**



A strategy to transform a coal-based district heating system should be built on the five steps presented in the figure – starting with reducing heat demand and then installing substitutes for supply. More detailed support on how to convert district heating systems in coal+

regions can be found in the upcoming toolkit on district heating, which will be available on the website of the [EU Coal Regions in Transition Initiative's](#) website as of summer 2023.



Practice example:  
**Green transformation of the district heating system in the Šalek valley (Slovenia)**

Under the motto “from black to green & bright” the Municipality of Velenje has committed to become climate-neutral until 2030 and was selected for the [EU Mission of 100 climate-neutral and smart cities](#). One of the major challenges to reach this goal is to decarbonise the heating system for the geographical area of the municipality of Velenje and the Municipality of Šoštanj that connects 40,000 inhabitants. Currently, the district heating system is connected to the thermal plant Šoštanj. The municipalities’ goal is to foster the green transformation of the district heating system with new and dispersed renewable energy sources while maintaining high air quality. The latter requires the maintenance of an all-encompassing district heating system. The new system is

planned to be economically and environmentally efficient, decentralised and completely independent of coal. Therefore, the municipality prioritised the following measures:

- Renovating buildings and reducing the consumption of thermal energy by at least 30% in the next five years;
- Transitioning the district heating to renewable energy sources in combination with high-voltage electrode boilers and construction of an own production source based on renewable energy sources;
- Lowering the temperature regime in order to integrate renewable energies into the system

➔ [read more](#)

➤ **Develop hydrogen strategy and action plan:** Gaining more knowledge developing hydrogen projects was considered to be very important. Green hydrogen is a key tool in Europe to reach climate neutrality and create new value chains. However, as the use of hydrogen is many times more energy-intensive and thus significantly more cost-intensive than direct electrification, its use will be limited to special – but rather important – segments, like energy-intensive industry, heavy duty transport, power grid stability. Consequently, exchangeEU participants recommended that the development of a specific regional hydrogen strategy is key. A clear action plan is needed in order to take the substantial investment decisions for necessary infrastructure – a miscellaneous set of projects will not be sufficient. To explore the economic potential for coal+ regions it was recommended to assess the full scope of the hydrogen value chain.

➤ **Supporting renewable energy as quickly as possible:** When asked what they would do differently if they could start again, several participants stressed that they would promote renewable energies earlier in the process, trying to attract investments and prioritizing them in strategic development plans. But even though “starting earlier” would have been great, participants in the exchanges presented or even visited very successful often large-scale renewable projects in coal+ regions for example in Spain, Slovenia and Greece. They also highlighted and saw smaller-scale renewable energy community projects directly benefiting the local residents, for example in Poland and Slovenia.

## Further resources

### Wuppertal Institute (2022). Just Transition Toolbox for coal regions: Energy – Making the shift from fossil to renewable energy.

This chapter of the Just Transition Toolbox offers solid knowledge regarding:

- the technological options for an energy transition, including the development potentials and risks and
- repurposing options for coal mining areas and coal power plants.

→ [read more](#)

### IEA (2021): ETP Clean Energy Technology Guide.

The ETP Clean Energy Technology Guide is an interactive website with an overview of more than 400 individual technology designs and components that aims to make a contribution towards reaching the goal of climate neutrality. The guide provides information for each technology regarding the level of maturity, plans for development and deployment, targets for cost and performance enhancements as well as current developers of these technologies.

→ [read more](#)

### European citizen energy academy (2022): Best practice guide for Southeast Europe: Inspiring community energy initiatives.

This guide illustrates good practices of energy communities in Southeast Europe and provides information on the governance of energy communities, stakeholder engagement, policy advocacy, financing and partnerships and networks. It is available in English, Greek and Albanian.

→ [read more](#)

## Lessons learnt about the exchangeEU programme

The exchangeEU programme's 17 exchanges placed significant emphasis on the invaluable aspect of sharing knowledge amongst coal+ regions. Exchanges proved to be of great benefit to all participants, fostering cooperation, collaboration, networking, and creating a strong sense of community, as evidenced by the following findings.

### exchangeEU has helped navigate common challenges ...

In the exchangeEU programme, diverse regions from across the EU came together with a shared objective of achieving a just transition. Through exchanges and study visits, participants discovered that despite varying scales and cultural backgrounds, their regions encountered similar challenges. This realisation highlights the opportunity for learning from each other's experiences, fostering innovation, collaboration, and responsible practices.

### ... bridge regional disparities,

exchangeEU participants have characterised the sharing of best practices as a powerful tool in mitigating regional economic disparities faced by coal+ regions across Europe. By disseminating successful strategies and solutions in support of economic diversification, participating regions had the opportunity to discuss significant socio-economic and environmental challenges, including high unemployment rates, energy poverty, and air pollution.

### ...forge connections for long-lasting networks,

The first round of exchangeEU saw several participants capitalizing on the opportunity to return for the second round of the programme. Their motivation stemmed from recognizing the importance of cross-regional cooperation among coal+ regions, as it enables mutual learning and the discovery of practical solutions to common challenges in the just transition process.

### ... and create a sense of community.

One of the main benefits of participating in the exchangeEU programme cited by participants is the sense of community it created. Regions transitioning away from fossil fuels can often feel isolated and alone. Through the programme, participants have been able to connect with like-minded and equally affected people from other coal+ regions, which has given them a sense of belonging and support. This sense of community fuels motivation and collaboration, driving the collective effort towards a sustainable and prosperous future. As one participant eloquently expressed, "Participating in exchangeEU instills a sense of community, reminding us that our regions are not

alone. The transition away from fossil fuels is a pan-European journey, and united, we can make it a resounding success." Ivan Sergejev Estonian Ministry of Finance, Ida-Virumaa (Estonia)

In conclusion, the exchangeEU programme enabled transformative exchanges, fostering cooperation and mutual learning for the benefit of several coal+ regions in the EU. Inspired by the success of exchangeEU, we encourage you to seek opportunities to connect with other regions, ignite innovation, and collectively drive change towards a clean and just future.

For more information about exchangeEU visit our website



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## Imprint

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**Note:** Content and quotes in this brochure were derived from the collective knowledge and experiences shared by participants and facilitators of the exchangeEU programme, representing a diverse range of organizations, participating coal+ regions in the EU and the 4 institutions organising the exchanges on behalf of the European Commission: [Guidehouse](#), [ICLEI](#), [ifok](#) and [Wuppertal Institute](#).

exchangeEU is part of the [Initiative for Coal Regions in Transition \(CRiT\)](#)

# exchangeEU

“We learned that we are not alone.  
We are one of 42 other regions who are  
undergoing transition at this time.”

**Sarah Morgan**, Programme Manager,  
Regional Development Office, Midlands, Ireland

