



JUSTEM

D3.3

Report on co-creation findings



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ABOUT

Energy transition plans may challenge the social ecosystem of the regions where coal is still king: if energy transition plans don't consider local factors, they may cause higher unemployment rates, aggravated energy poverty, and economic migration. Energy poverty is already a big challenge today in the EU, with coal-dependent regions generally being more affected by the issue.

In the spirit of the EU principle to “leave no one behind” in the transition, JUSTEM addresses the energy transition planning through a double-sided approach: (1) it helps regional authorities to develop ‘just’ energy transition plans that are sensitive to regional impacts such as job losses and energy poverty; and (2) it helps citizens build their capacity and find their place in a greener economy.

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PROJECT PARTNERS



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ABBREVIATIONS

AISVJ	Social Institute Jiu Valley
BSERC	Black Sea Energy Research Centre
CAC	Union of Homeowners Associations
EE	Energy Efficiency
EU	European Union
FAEN	Fundación Asturiana de Energía
ICT	Information and Communications Technology
IRENA	Istrian Regional Energy Agency
ITJ	Just Transition Institute
JT	Just Transition
JTF	Just Transition Fund
JTM	Just Transition Mechanism
JTP	Just Transition Programme
KAPE	National Energy Conservation Agency
LGU	Local Government Unit
LRA	Local and Regional Authorities
NECP	National Energy and Climate Plan
NGO	Non-Governmental Organisation
NRRP	National Recovery and Resilience Plan
PoI	Point of Interest
PV	Photovoltaic
R&D	Research and Development
RED	Renewable Energy Directive
RES	Renewable Energy Sources
SME	Small and Medium Enterprise
SWOT	Strengths, Weaknesses, Opportunities, Threats
SZREDA	Stara Zagora Regional Development Agency
TPP	Thermal Power Plant
UATs	Urban Administrative-Territorial Units

EXECUTIVE SUMMARY

The role of citizens in the Just Transition (JT) is often overlooked. Most of them have **very limited knowledge** about this process and the way it would affect them, and are **rarely involved** in the development, implementation, and monitoring of JT policies.

The activities documented in the current report aim to come up with national and regional **JT policy recommendations** that address the needs and desires of citizens from the Bulgarian, Croatian, Greek, Polish, Romanian, and Spanish regions – the six pilot regions in JUSTEM.

Building on the citizens' needs and concerns related to JT, identified from the previously completed **1st series of citizen workshops** in these regions, we continued the interaction with them to identify solutions. We conducted 73 unstructured or semi-structured **interviews** in total, with selected workshop participants or other community leaders to obtain in-depth understanding of their needs, concerns, and vision about JT in their region. Additionally, we **surveyed** 722 citizens in total on a variety of JT issues. The survey questions were adapted to the regional situation. Furthermore, the **2nd series of regional workshops** translated the outcomes of the 1st workshop, interviews, and surveys into concrete suggestions (recommendations) about the development of the region and the role of citizens in the process.

We critically evaluated and validated citizen's suggestions by conducting a **SWOT analysis**. This analysis, along with the **feedback** received by relevant stakeholders throughout all engagement activities, helped us derive the **final policy recommendations** about regional JT and citizens' role in the process.

In several regions citizens need to be better **informed** about JT process and their potential role in it. Public authorities need to offer **advice** about the opportunities available to them, e.g. through the establishment of **one-stop-shops** consulting reskilling, small investments, and other JT-related actions. In this relation, it is important to encourage people's **entrepreneurship**.

In some regions citizens must be more actively **involved in the policy design**, e.g. by public consultations and working groups, and **policy monitoring**, e.g. via establishment of a JT Observatory. **Education** aligned with the expected needs of the economy of the regions and provision of **reskilling** opportunities for the coal workers are necessary. **Research** is another field promising to benefit the regional economy.

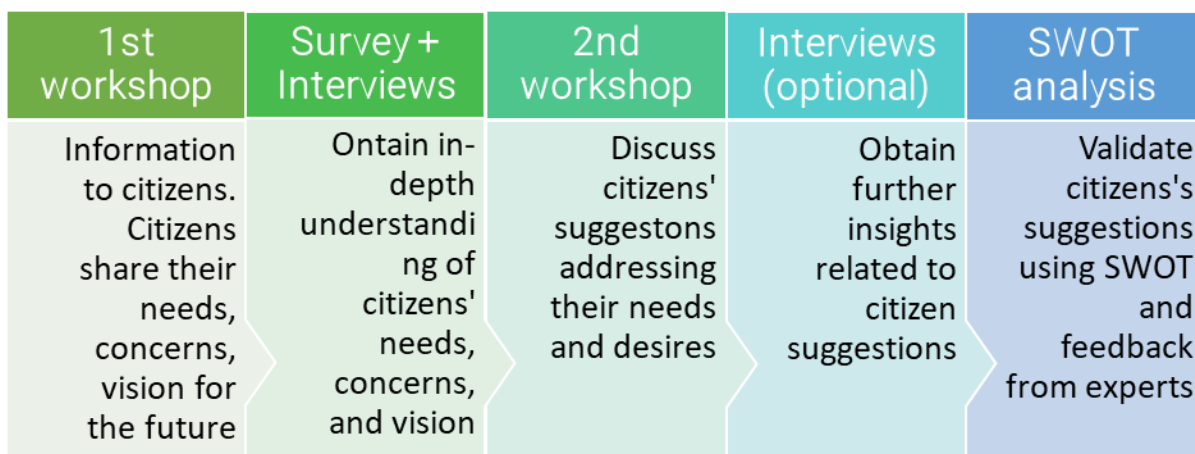
Energy poverty needs to be tackled mainly through measures supporting energy renovation of the building stock, but also through efficient and clean transport. Governments need to upscale supportive frameworks and expand effective mechanisms to protect citizens against the expected increase in energy poverty. **Energy communities** need to be promoted as an instrument to combat energy poverty and decarbonise energy production.

1. Introduction

Citizens and communities must be at the centre of the just transition (JT) to a low-carbon economy. However, their role is often overlooked. Citizens typically have **very limited knowledge** about JT and are **rarely involved** in the development and implementation of JT policies, as evidenced by two JUSTEM outputs - policy analysis (Koasidis K., et al., 2023a) and first series of workshops in the pilot regions (Mazur, A., et al., 2023).

The **1st series of workshops** not only provided citizens from the Bulgarian, Croatian, Greek, Polish, Romanian, and Spanish pilot regions with information about JT and their potential role in the process, but also supported the identification and discussion of the related citizens' needs and concerns.

Building on these findings, the aim of the activities described in the current report is to arrive at national and regional **JT policy recommendations** that address citizens needs and desires. The methodology applied to arrive at these recommendations is shown in the below figure:



After the 1st series of citizen workshops, semi-structured or unstructured **interviews** were carried out with at least 10 workshop participants or other community leaders in each region, to obtain in-depth understanding of their needs, concerns, and vision about JT in their region.

Additionally, at least 100 citizens per region were **surveyed**, in most cases through an online questionnaire, to obtain a more holistic picture about their opinion on a variety of JT issues. We developed a sample list of questions for all regions, but offered the opportunity for project partners to adapt the questions to the regional situation and expected interest of respondents.

The **2nd series of regional workshops** were co-creation events that advanced the discussion with a part of the citizens who attended the previous workshops. The 2nd workshops aimed to translate the outcomes of the 1st workshop, interviews, and surveys into concrete suggestions (recommendations) about the development of the

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region and the role of citizens in the process. The “world café” method, involving parallel discussions of participants divided into several tables, was typically applied, often in combination with other tools (Koasidis K., et al., 2023b). In some regions, policy makers and other stakeholders took part in the events to provide immediate **feedback** to the discussed suggestions, while in other regions these experts were consulted after the events.

Finally, citizens’ suggestions were critically evaluated based on a **SWOT analysis**, conducted by JUSTEM partners, either alone or jointly with citizens or other stakeholders. This analysis and the stakeholders’ **feedback** throughout the whole process, supported the validation and further elaboration of the suggestions, in order to derive the **final recommendations** about regional JT and citizens’ role in the process.

The next six chapters of this report describe the activities and findings in each of the six pilot regions. Finally, the last chapter presents a short summary of the policy recommendations and next steps.

2. Activities and findings in Stara Zagora region, Bulgaria

Second workshop with citizens

Organizers: SZREDA, CAC, BSERC

Location: Stara Zagora Municipal Hall, Stara Zagora, Bulgaria

Date, time, duration: 29 November 2023, 9:45-16:15 h EET

No. and profile of attendees: 44 participants (in person and via ZOOM)



Figure 1: Photos from the 2nd Workshop with citizens in Stara Zagora, Bulgaria

Workshop objectives

The event “Social dialogue for public policies: New energy mix 2023” was co-organised within 2 LIFE-CET projects: SITRANS and JUSTEM and served the objectives of both projects. The JUSTEM-related part aimed to further advance and elaborate citizens’ findings and recommendations from the 1st workshop, survey, and interviews in order to come up with concrete suggestions on what needs to be done for the region’s transition. The participation of policy makers, trade unions, businesses and researchers helped to validate the ideas of citizens.

Co-creation methodology applied

As announced in the agenda, discussions took place during both the lunch and coffee breaks. During both breaks, the participants were standing around 5-6 small tables and the facilitators led the table discussions and took minutes. The facilitators raised different topics for discussion, related to citizen's needs and suggestions from the 1st workshop, surveys (to date), and interviews.

Each table included a mix of citizens, market actors, policy makers, and others, so the topics were discussed from many perspectives. The informal, open and friendly discussion was encouraged by the facilitators and supported by the anonymity of the opinions expressed.

What went well and what did not

As the event was co-organised by 2 projects, it attracted a large number of participants representing a wide range of stakeholders at national, regional, and local level, including key politicians (two deputy ministers, mayors, etc.), important regional and local associations, experts, civil society organisations, etc. This allowed to approach the discussed topics from different points of view and to collect quality feedback. During the co-creation part, participants communicated openly.

The JUSTEM and SITRANS project teams initially had different expectations of the event, so compromises had to be made. It was challenging to combine the high-level (top-down) discussion of policies and financial programmes with the citizens' wishes (bottom-up). In addition, it was not appropriate for the JUSTEM team to use the classic "world café" co-creation methodology, due to the profile of the participants, the setting of the meeting room, etc., so the methodology was adapted to the circumstances.

Citizens' survey

Number of collected surveys

The survey was conducted mainly online, with 104 participants from the Stara Zagora region. The survey was extended to include the methodology of face-to-face interviews during the meetings held in the region and an additional 32 participants were included. Thus, the results of the survey are based on the participation of a total of 136 respondents from the pilot region.

Survey objectives

The main objectives of the survey were to 1) identify the needs and concerns of local residents regarding the coal phase-out process and 2) assess local residents' awareness of current problems associated with the just transition process.

Survey questions

1. Your age: _____

2. Your gender: Male Female Other
3. Please rank from 1 (lowest) to 5 (highest) the priority of the following measures, in view of their contribution to the successful transition of your region:

Measure	Priority
Investments in renewable energy, hydrogen, and storage	
Investments in energy efficiency (e.g. building renovation)	
Investments in sustainable tourism (e.g. in post-mining terrains)	
Digitalisation and innovation	
Investment in green transport infrastructure - railway, charging stations for electric vehicles, bicycle alleys	
Reskilling of coal industry workers	
Education and research in clean energy	

4. Please answer the below questions:

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Do you agree with the statement that you are aware of the plans in your region, regarding coal phase out?					
Comment (optional):					
Do you agree with the statement that the transition to cleaner energy sources will have a positive impact on the quality of life in your region?					
Comment (optional):					
Do you agree with the statement that the closure of the coal-related industries will affect the ability of your family to cope with the costs of electricity and heating?					
Comment (optional):					
Do you agree with the statement that the home your family lives in is in a sufficiently good condition to provide healthy and comfortable living with electricity and heating costs that are affordable for you given the income you have?					
Comment (optional):					
Do you agree with the statement that there are programs that you can rely on to assist your family in the event of an inability to pay the costs for electricity and heating?					
Comment (optional):					

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Survey methodology

The survey was mainly carried out using web-based questionnaires. They were sent to the widest possible range of citizens through all possible information channels at local level - from thematic communities to municipal networks in the region, as well as through the channels of specialised user networks. In this way, the different profiles of citizens at local level were covered as much as possible in order to achieve the greatest possible representativeness of the results obtained.

At the same time, the survey was further complemented by a face-to-face survey of interested citizens who attended the first project meeting in the region. This complementary approach made it possible to verify the results in open discussions on the survey topics.

As a result of the methodology used, the survey can be considered as successfully conducted and the results as representative of the attitudes and views of the local community in the Stara Zagora coal region on the issues raised in the questionnaire.

What went well and what did not

The survey achieved the inclusion of the most diverse target groups of citizens by using the maximum number of virtual communication channels at local level. At the same time, this approach was also supported by conducting a face-to-face survey with the active citizens who participated in the first workshop.

Extra efforts were needed to activate citizens and involve them in the survey. The questionnaire was published and circulated repeatedly in different online channels at regional level. The supportive involvement of the local organization SZREDA was activated to multiply citizen participation.

Citizens' interviews

Number of interviews: 10

Interview objectives

The aim of the interviews was to provide the project team with an in-depth insight into citizens' feelings and suggestions about the transition. The interviewees were asked to elaborate more on the issues raised during the 1st workshop, or any other issues of interest. The interviewees were community leaders.

The information gathered during the interviews was intended to support CAC and BSERC in preparing the discussion topics for the 2nd workshop. In addition, the interviews directly informed the citizens' findings and recommendations.

Interview questions

The interview grid proposed for all JUSTEM countries was considered as a basis:

1. Would you like to be more engaged in the just transition process in your region. If so, HOW?
2. What are the key challenges you see in your region. Do you have any suggestions on how to address them?
3. When you think about phasing out coal in your region, what are your expectations for the region and you personally?
4. Do you think that the closure of the coal-related industries will affect the ability of your family to cope with the costs of electricity and heating? If yes, HOW?
5. What do you think should be done to enable a “just transition” to a greener future in your region?

However, the grid was adapted to each interviewee and only the most relevant questions were selected, typically only 2-3 questions per interviewee.

Interview methodology

Most interviews took place immediately after the end of the 1st citizen workshop. The members of the project team carried out onsite interviews with the most active participants. Additional interviewees, identified by the 3 co-organisers through their contacts, were contacted by telephone between the 1st and 2nd workshops. The average interview duration was 10 minutes.

All interviewees were informed about the purpose of the interviews, how their opinion will be considered, and anonymity of responses. Notes were taken by the interviewers.

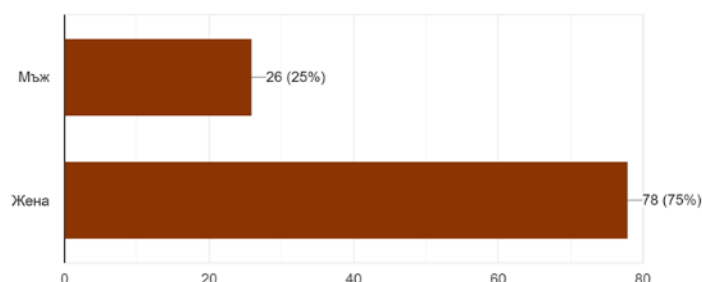
What went well and what did not

The selection of interviewees was good – all had an opinion on the transition process and were able to articulate it.

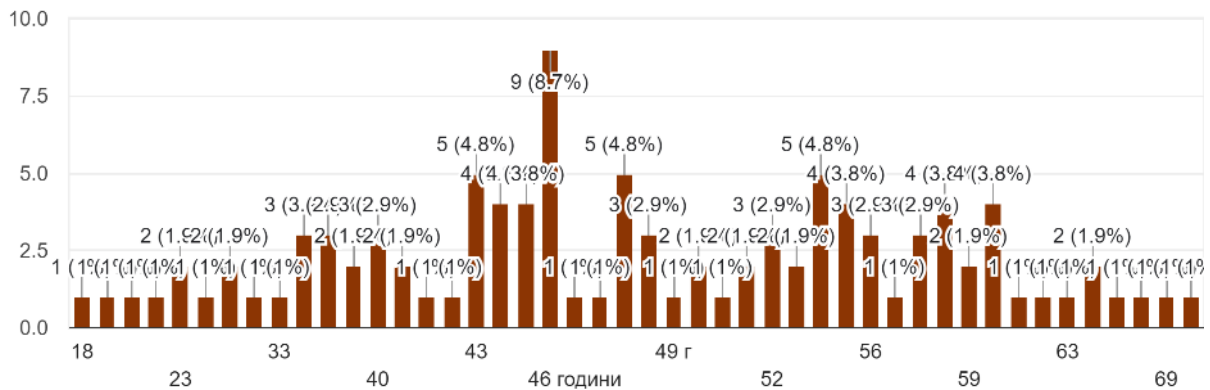
During the onsite interviews, citizens were more open in expressing their opinions, perhaps because during the 1st workshop, citizens were well informed about the context and trust had been built. Some interviewees found it difficult to propose solutions, although they were able to describe the current situation and future challenges well.

Citizens’ findings and recommendations

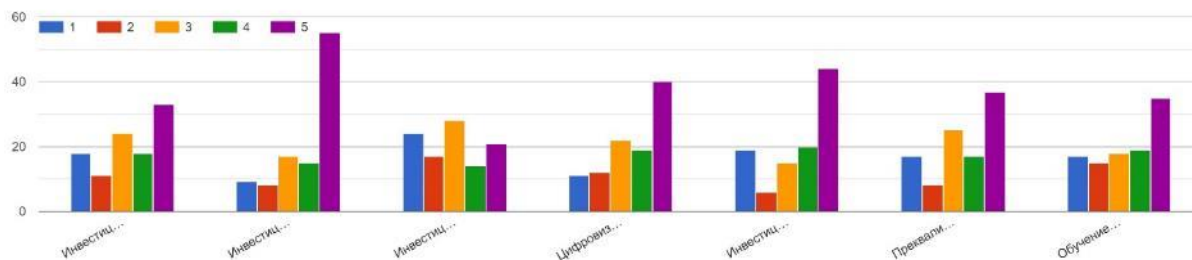
Unsurprisingly, women make up 75% of the survey respondents, who are sociologically distinguished by higher degree of social sensitivity.



The most active age group in the survey are economically active citizens aged 43-49.



1. Citizens identify the main priority areas for policy intervention and targeted measures to address the adverse impacts of the transition out of coal as 1) Investments in energy efficiency (e.g. building renovation) - 5.55, 2) Investment in green transport infrastructure - railway, charging stations for electric vehicles, bike lanes - 5.44, and 3) Digitalisation and innovation - 5.40. Also important for them are areas related to 1) Reskilling of coal industry workers - 5.37, 2) Education and research in clean energy - 5.35, 3) Investments in renewable energy, hydrogen, and storage - 5.33, and 4) Investments in sustainable tourism (e.g. in post-mining areas) - 5.21.



Citizens express a clear stance that improving the energy efficiency of housing should become a key policy instrument in the context of efforts to tackle the expected increase in energy poverty levels as a consequence of the expected income loss or reduction, as well as the anticipated increase in energy prices.

2. More than two-thirds of citizens are concerned that the closure of the coal-related industries will affect the ability of their family's ability to cope with the costs of electricity and heating. This is a clear signal of the real possibility of an increase in levels of energy poverty in the region, which is currently at the national average.
3. More than two-thirds of citizens tend to agree with the statement that the home their family lives in is in a sufficiently good condition to ensure a healthy and comfortable life, with electricity and heating costs that they can afford given their income. However, there is a clear risk that the situation could deteriorate if their income were to fall, which would also affect their quality of life.

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4. More than two-thirds of citizens doubt or rather disagree with the statement, that there are programmes they can rely on to help their family in the event of an inability to pay the costs for electricity and heating. This is a clear indication of the absence of protection mechanisms, which are particularly needed as a social safety net in times of serious transformation, such as the transition out of coal.
 5. Most citizens are not aware what is going to happen in the region and how this would affect them. Most expect that the transition would adversely impact the region, so they oppose the process, although many are aware that it is inevitable. Almost no citizens are proactive, most are waiting for the change to take place.
 6. Predictability/schedule for the transition out of coal is needed to help: 1) coal workers to plan their future (e.g. assess the need and options for reskilling; consider relocation to a place with better job opportunities); 2) potential investors to plan new initiatives; 3) funding programmes to better target their support.
 7. Citizens and local NGOs are currently not involved in the decision-making processes related to the transition and feel that their voice does not matter.
 8. Many support the preservation of the energy character of the economy of the Stara Zagora region in order to use the capacity and expertise of the people who will lose their jobs in the coal sector.
 9. Attracting investments to the region is hindered by the lack of infrastructure, passive municipal administration, and lack of available workforce.
 10. It is important to direct funds to citizens, energy communities, and small and medium-sized businesses, rather than to large enterprises.
 11. It is necessary to introduce measures and funding for the adaptation of small and medium-sized businesses to the economic transition.
 12. It is necessary to reduce the administrative obstacles to energy cooperatives and to the participation of municipalities in energy communities.

SWOT analysis and final recommendations

The below SWOT analysis answers the question “How to decarbonise the region?” by focusing on the topics important to the citizens. The SWOT analysis itself does not assess each of the citizens’ findings and recommendations, but provides a framework for their validation and further elaboration.

Strengths	Weaknesses
<ul style="list-style-type: none"> - High qualification of labour force in energy technology - Well-developed energy infrastructure - High economic development of the region and low unemployment - Comparable to the country average current assessment of energy poverty and quality of life 	<ul style="list-style-type: none"> - High economy dependency on energy and mining industries - Relatively low level of education and R&I in the region - Low citizens' involvement in decision making concerning green transition - Poor energy performance of existing housing increasing vulnerability to energy poverty - Household heating needs delivered and secured largely by carbon-intensive fuels - Household energy efficiency still failing to meet modern standards - Absence of protection mechanisms as a social safety net in the transition out of coal
Opportunities	Threads
<ul style="list-style-type: none"> - Available EU and national funding in support of the transition out of coal - High availability of solar energy and hydrogen production opportunities - High interest of investors in green energy technologies - Capacity of mining land restauration to create substantial employment - Investment in energy renovation to increase energy performance of existing housing and create jobs - Investment directed to citizens to initiate energy communities and small and medium-sized businesses - Investment in green transport infrastructure 	<ul style="list-style-type: none"> - Delayed start of transition planning - Lack of predictability of ongoing processes - Absence of trust and proactive initiative of citizens to coop with the upcoming economic transformation - Expected income loss or reduction - Expected increase in household energy prices after the planned market liberalisation - Expected increase in regional vulnerability to energy poverty as the transition out of coal unfolds

We assessed the citizens' findings and recommendations presented in the previous section considering the SWOT analysis and stakeholders' feedback and came with the following recommendations:

1. A clear schedule for the transition out of coal and all related activities (reskilling, new investments, etc.) must be agreed and enforced through policy.

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2. Citizens need to be informed and advised about the transition, how it would affect them, and how they can prepare themselves. In addition to a range of reskilling options, their entrepreneurship needs to be supported through training and funding.
 3. Citizens and local NGOs need to be involved in transition-related policy development (e.g. through participation in working groups) and implementation (e.g. through their participation in monitoring committees).
 4. To attract more investments to the region, public authorities need to ensure good infrastructure (energy, mobility, ICT, etc.) and a favourable investment climate.
 5. It is important to direct funds to citizens, energy communities, and SMEs and to simplify the administrative procedures for small investments.
 6. The region needs to keep the key role of the energy sector in its economy, especially through small-scale renewable energy and energy efficiency projects.
 7. Introduce measures and funding to help SMEs adapt to the economic transition.
 8. Ensure that energy transition policies prioritise the needs of vulnerable citizens and provide targeted support to affected households.
 9. Upscale supportive frameworks and expand effective mechanisms to protect citizens against the expected increase in energy poverty as a social safety net in the transition process away from coal.
 10. Renovate the existing housing stock in order to increase the energy performance of residential buildings and to improve the living conditions. This process should be accompanied by financial incentives for households according to their socio-economic vulnerability.
 11. Introduce smart energy infrastructure measures to empower those at risk of energy poverty to better manage their energy costs.
 12. Promote the renewable energy communities including and involving vulnerable citizens in situation or at risk of energy poverty, aiming to reduce the burden of energy bills, promoting increased self-consumption and energy sharing.

3. Activities and findings in Istrian Region, Croatia

Second workshop with citizens

Organizer(s): IRENA – Istrian Regional Energy Agency Ltd. and Faculty of Tourism and Hospitality Management (University of Rijeka)

Location: City library Labin, Rudarska ul.1a, 52220 Labin, Croatia

Date, time, duration: 31.01.2024, 17:00h, duration 4h (planned 3:15h, extended to 4h)

No. and profile of attendees: 17 (8 citizens + 9 representatives of various public and private institutions)

Event webpage: [Link](#)

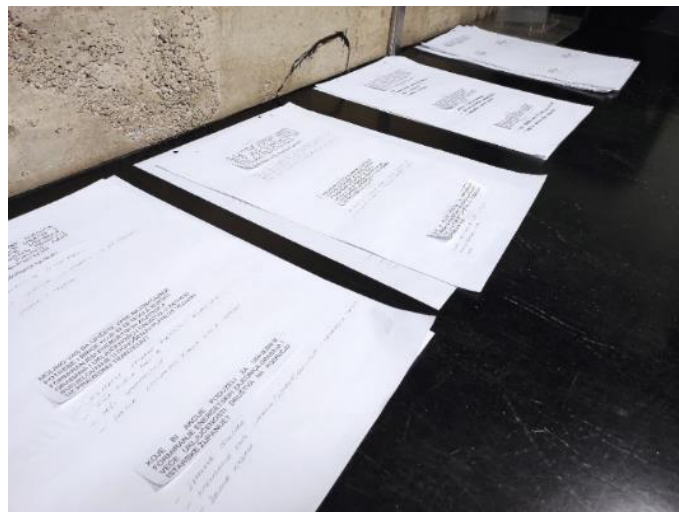


Figure 2: Photos from the 2nd Workshop with citizens in Labin, Croatia

Workshop objectives

The objective of the workshop was to collect feedback from citizens and public bodies involved in decision-making at local and regional level in the Istrian Region on their opinions, needs and concerns regarding the Just Transition process in the region.

The second objective was to further engage the participants, to actively involve them in the process and to provide a better understanding of the thematic areas related to Just Transition and why they are considered important in this context. The active participation in the workshop increased the participants' awareness and critical decision-making skills on the selected topics.

Co-creation methodology applied

Since JUSTEM and the Horizon Europe project BOLSTER, which also deals with Just Transition, require similar inputs to be gathered and analysed at this stage, and since both projects address similar stakeholders, the workshop was organised jointly.

In order to actively involve the participants, it was decided to shorten the theoretical part related to the current Just Transition activities in the Istrian County and the project activities, and to focus more on the workshop part. First, a short introduction was given about the structure and expected results of the workshop, what Just Transition is and what it aims to achieve. This was followed by short introductions of the JUSTEM and BOLSTER projects, presenting their objectives and activities so far. The project presentations were followed by workshop activities. The participants were divided into 3 groups (3 tables) and each group was given 4 topics related to Just Transition to analyse. The topics were: energy poverty, citizen energy communities and social inclusion in active decision making, green/efficient transport and circular economy. For each topic, stakeholders were given two flipchart size sheets for two sets of questions. The first set of questions was about the participants' personal opinions on the topics, including questions about perceived improvements in everyday quality of life, needs and concerns that could be addressed by promoting the topic in question, and perceived actions that could be taken to further promote the topic in question.

The second set of questions consisted of a short SWOT analysis of the process of implementation of each theme in the Istrian County Region. Participants gave their feedback on the strengths, weaknesses, opportunities and threats they considered most relevant for better enabling and promoting each theme. Stakeholders were initially given 10 minutes for each set of questions, but after the first round of questions the time given was extended to 15 minutes due to the ongoing discussions in the groups.

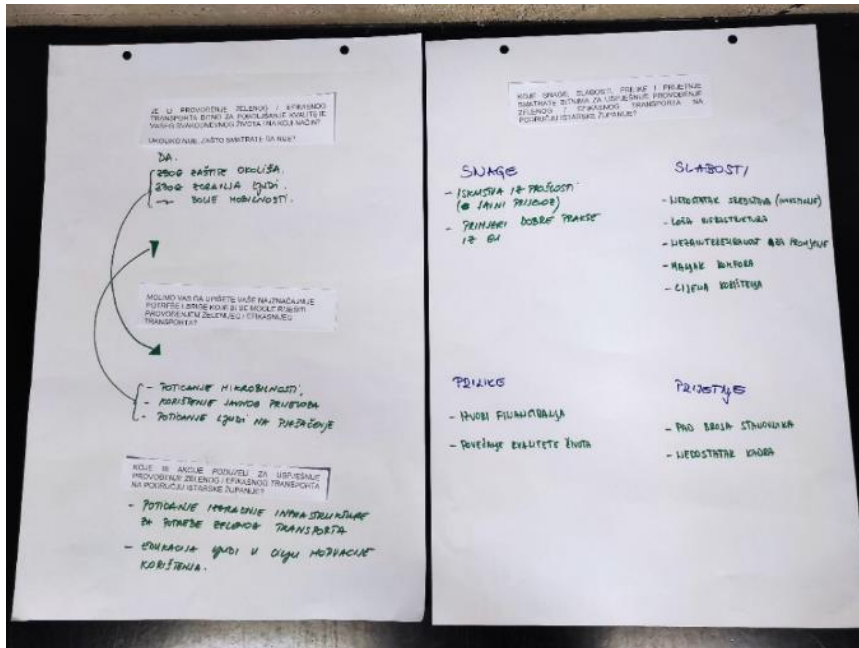


Figure 3: Example of stakeholder input for green/efficient transport topic (Croatia)

After the workshop part, the participants were involved in an open discussion where they shared their impressions and opinions on the topic they considered most relevant. A short summary of the workshop activities and plans for the next project activities was presented at the end of the event.

What went well and what did not

Participants were very active and involved throughout the workshop and open discussion sessions, making the meeting productive. The overall atmosphere was focused but relaxed. The participants were made up of a variety of stakeholder types, including citizens and representatives of different public bodies, which allowed feedback from a variety of different perspectives.

As the main focus of the workshop was on citizen participation and feedback, a large number of local associations and groups directly linked to citizens were invited to participate, but only a very small number of them responded and attended the event.

Citizens' survey

Number of collected surveys: 83 paper-based questionnaires + 105 online surveys

Survey objectives

The aim of the surveys was to get a general idea of the personal needs and concerns of citizens and other representatives of public bodies involved in local and regional decision-making in the region with regard to the Just Transition process, in order to extrapolate the most relevant findings that could be used for the next stage of the project, mainly new policy recommendations and project pipelines.

Survey questions

“Please rank the following measures from 1 (lowest) to 5 (highest), considering their contribution to a successful economic and green transition of your region:”

- Investments in RES, hydrogen and storage
- Investments in energy efficiency (ex. building energy refurbishment)
- Investments in sustainable tourism
- Digitalisation and innovation
- Investments in green traffic infrastructure
- Retraining of workers in coal industry
- Education and clean energy R&D

“Please choose your opinion from “Completely agree” to “Completely disagree” for the following statements:”

- Do you agree with the statement that you are aware of the regional plan for coal phase out in your region and substitution to cleaner (sustainable and ecologically more acceptable) sources of energy?
- Do you agree with the statement that the transition to cleaner energy sources will have a positive impact on the quality of life in your region?
- Do you agree with the statement that the closure and/or transition of the coal-related industries will positively affect your ability to settle electricity and heating costs needed for heating of your household?
- Do you agree with the statement that the level of your monthly income is sufficient to settle electricity and heating costs needed for heating of your household and for the possibility of a healthy and pleasant life?
- Do you agree with the statement that there is organised support, programs and/or initiatives that you can rely on for assistance in the event of an inability to settle the electricity and heating costs needed for heating of your household and other monthly costs?

Survey methodology

The first set of paper questionnaires was distributed in person during the first T3.2. citizen workshop organised in the municipality of Kršan in July 2023. The second set of paper questionnaires was distributed in person during the second T3.2. workshop organised with students in Buzet in December 2023, and additional questionnaires were given to students and teachers to distribute themselves to other students and household members. Some of these questionnaires were received by teachers and given to IRENA staff at a later date. A smaller number of questionnaires were also given to other IRENA staff who attended various meetings with members of local and regional governments, and the questionnaires were distributed and collected during these meetings. Some of the questionnaires were also collected by e-mail. The online survey, which contained the same questions as the previously distributed questionnaires, was

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promoted through the IRENA website, social media, email, telephone and face-to-face communication with various stakeholders. The response rate is difficult to measure as the total online reach is an approximation rather than a precise measurement, and the online surveys are anonymous and there is no way of knowing which of the stakeholders who were asked to complete the survey did so. However, we can say that most stakeholders seemed willing to take part in the survey and that the overall number of contributions collected is satisfactory.

What went well and what did not

IRENA managed to collect a sufficient number of surveys for the task and received responses from a diverse group of people - younger and older populations, students, citizens and people working in public institutions in the region.

The paper and online questionnaires had the same structure and questions in order to analyse the responses more accurately. The first 27 questionnaires unfortunately did not contain the same questions as they followed an earlier version of the instructions, but the answers received are still valid and can be included in the report.

Citizens' interviews

Number of interviews: 10

Interview objectives

The aim of the interviews was to get a general idea of the personal needs and concerns of certain selected stakeholders who were considered to be good representatives of the general public opinion on Just Transition in the region. Their input will also be used in the next phase of the project, which will focus on new policy recommendations and project pipelines.

Interview questions

- Are you familiar with the term Just Transition and do you know what it encompasses? How well are you familiar with the activities and plans related to the Just Transition in your region? Please explain your answer.
- In your opinion, which area of interest (job retraining, energy poverty, specific policies and measures aimed at employment, social support...) is the highest priority in your region and which one should be focused on first? Please explain why you consider this area of interest to be the most important.
- In your opinion, what are the main obstacles to the successful implementation of the Just Transition in the County of Istria? In your opinion, what would be the best activities and/or measures to mitigate or remove the mentioned obstacles with the purpose of better implementation of the Just Transition goals?
- Do you have any suggestions for updating and/or improving the implementation of local and/or regional energy policy in the County of Istria in JT context?

- Would you rate your influence on the implementation of Just Transition policies as low, medium or high and why? Do you think there is a way to increase your level of influence and how? If you think that the level of your influence cannot be increased, what are the main reasons? Please explain your answer.

Interview methodology

Most of the interviews were conducted in the weeks before and during the T3.3 workshop, either by direct contact with the interviewees or by email, where stakeholders were given the interview template and asked to complete it. The remainder were completed after the workshop, mostly by workshop participants. The interviews were short on average, between 10 and 15 minutes.

The interview template was translated into Croatian and the questions were slightly modified from the template provided by the project in order to better specify and explain the questions in the context of the native language. The consent form was also translated into Croatian and completed by all interviewees.

What went well and what did not

All interviewees were open and engaged, willing to discuss the issues at stake. Some interviewees proved to be more knowledgeable about JT than others, so some of the input received is more likely to be used than others. The main issue will be to translate the input received into concrete actions and plans for further project activities.

Citizens' findings and recommendations

The findings and recommendations from the workshops, survey and interviews are presented below.

Survey results (paper questionnaires + online)

The survey results are based on input from a total of 161 people (79.50% male, 20.50% female, total average age 32.93 years).

From the first round of questions, the proposed thematic areas can be ranked in order of priority as follows (1 being lowest and 5 being highest perceived priority):

Thematic area	Priority
Investments in RES, hydrogen and storage	4.13
Investments in energy efficiency (e.g. building energy refurbishment)	4.12
Digitalisation and innovation	4.01
Education and clean energy R&D	3.99
Investments in sustainable tourism (e.g. fields after mining)	3.66
Investments in green transport infrastructure	3.44
Retraining of workers in coal industry	3.06

The results of the second round of questions (as defined in section 2.2. of this report, under "survey questions") are previewed below:

	Completely agree	Agree	Neither agree nor disagree	Do not agree	Completely do not agree	TOTAL NUMBER OF ANSWERS FOR EACH QUESTION/CATEGORY					PERCENTAGE OF ANSWERS FOR EACH QUESTION/CATEGORY				
Question 1	10	85	31	29	6	10	85	31	29	6	6,21%	52,80%	19,25%	18,01%	3,73%
Question 2	36	70	47	7	1	36	70	47	7	1	22,36%	43,48%	29,19%	4,35%	0,62%
Question 3	3	82	51	23	2	3	82	51	23	2	1,86%	50,93%	31,68%	14,29%	1,24%
Question 4	11	85	40	24	1	11	85	40	24	1	6,83%	52,80%	24,84%	14,91%	0,62%
Question 5	2	17	73	62	7	2	17	73	62	7	1,24%	10,56%	45,34%	38,51%	4,35%

Interview findings

The interview findings are based on input from a total of 10 interviewees. From the responses collected, it can be concluded that most of the interviewees had a basic understanding of the Just Transition process, but very few had an in-depth knowledge of the topic. This was mainly due to the fact that Just Transition was very rarely covered in the local media (both online and physical) and that citizens were not involved in the decision-making process.

A large part of the respondents focused on employment encouragement and social support for vulnerable groups as the main priority, as these measures are directly linked to immediate problems and are considered the most urgent to solve.

Among the main perceived obstacles to the successful implementation of JT were a large and slow bureaucracy and administration, a lack of political will and, consequently, a slow decision-making process. The best activities and suggestions to promote the implementation of JT and to address these problems were further education and training of the personnel of public administrations and the organisation of public consultations for citizens to better involve them in the process.

Most of the interviewees described their influence in JT as low, mostly due to lack of information from their side and the opinion that all decisions are made at a higher political level. Most of the respondents are not optimistic about increasing their influence, even with additional training, mostly due to the reasons mentioned above and also due to lack of interest and time to invest in further training on the subject.

Workshop findings

The findings of the workshop are based on the input collected from the participants during the T3.3 workshop held in the Labin City Library on 31 January 2024.

For the thematic issue of energy poverty, participants identified the issue as relevant due to the appropriate financial allocation of resources to vulnerable groups such as pensioners and low-income households, as well as due to the unfavourable demographic structure. When asked about the most important needs and concerns that could be addressed by solving or alleviating the problem of energy poverty in the region, participants mentioned improved health conditions of the dwelling, better integration into the local community, access to current heating technology and to technology that is more financially demanding, improved air quality due to the

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installation of new thermotechnical systems, high energy costs and overall housing quality. When asked about proposed actions to solve or mitigate the problem of energy poverty in the region, responses included co-financing measures, financial support and new financing models, project preparation for socially vulnerable households, formation of organisations to implement social programmes, training and promotion of RES use and refurbishment of houses of vulnerable groups.

The main findings from a SWOT analysis about energy poverty in the region were as follows. The main strengths include LGUs, regional agencies, previous experience with JT, higher RES funding possibilities due to the region being highly developed. Key weaknesses include lack of financial resources, lack of human resources, high dependency on coal-fired TPP Plomin, lack of definitive consolidated list of energy vulnerable households/groups that would facilitate faster and more efficient implementation of measures and funds. Identified opportunities include EU funds, local/regional/national support, large number of sunny days for the installation of photovoltaic power plants, mild climate which in most cases does not require major refurbishment activities. Threats identified include the unstable macroeconomic situation and the expected increase in energy costs (prices) in the near future.

For the thematic topic of citizen energy communities and social inclusion in active decision making, participants identified the issue as relevant due to the possibility of public consultation and digital campaigns, the organisation of panels and workshops, and the partnership between cities and citizens. Some of the problems mentioned were the lack of knowledge about energy communities among citizens, the lack of a clear legal definition and/or regulations for the proper formation of energy communities, the preferential treatment for communities in the heating sector, the preference for collectives instead of communities (two clearly separated options – “Zadruga” and “Zajednica”). When asked about the most important needs and concerns that could be solved with the formation of energy communities and the increase of social inclusion, the participants mentioned the alleviation of the high cost of energy sources, the lack of legal support, the improvement of living conditions in households connected with energy refurbishment and the increased use of RES, the reduction of the household budget spent on heating costs, the increased security of the electric energy supply, the lower end price of energy, the higher level of self-reliance and the sharing of responsibilities (less responsibility).

When asked about suggested actions to enable a more successful implementation of citizen energy communities and social inclusion, participants mentioned organising an event in the form of Energy Community Open Days, carrying out some promotional/marketing activities, suggesting legislative changes, providing technical and legal assistance to citizens in the energy community formation process, providing education to citizens, issuing green licences and enabling interventions through the issuing of zoning/building permits. The main findings of a SWOT analysis to identify the

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main strengths, weaknesses, opportunities and threats for the implementation of citizen energy communities and social inclusion in the region were: the main strengths include public bodies and agencies that provide technical and advisory support; the main weaknesses identified were lack of interest and knowledge among citizens, power grid capacity (lack of support for infrastructure), slow permit issuing process, lack of trust in government, inadequate legal definitions; the main opportunities identified are positive examples and case studies in other EU countries and the existence of SMEs that could easily provide a service for the installation of the necessary equipment; the main threats identified are the need for co-owners' consent and the accessibility and affordability of the necessary equipment.

For the thematic topic of green/efficient transport, participants identified the issue as relevant due to environmental protection, improved health of citizens, better mobility, improved air quality and better connection between rural and urban areas. For the question regarding the most relevant needs and concerns that could be addressed by green/efficient transport, participants mentioned increased micro-mobility, increased use of public transport and walking, less traffic congestion, better mobility for elderly and retired people who no longer drive. In response to the question about suggested actions to make the implementation of green/efficient transport more successful, participants mentioned stimulating the expansion of necessary infrastructure for green transport, information campaign to encourage citizens to use green transport, traffic bans in public spaces, free public transport, limiting the use of parking spaces, etc. The main findings of a SWOT analysis to identify the main strengths, weaknesses, opportunities and threats for the implementation of green/efficient transport in the region were: the main strengths include a favourable geographical location, previous experience and good practices from other EU countries; the main weaknesses include lack of funds, poor infrastructure, lack of willingness to change, lack of comfort, lack of profitability, etc.; the main opportunities include proximity to a future hydrogen valley, which could be used for energy supply; the main threats include population decrease trend and lack of human resources for implementation.

For the thematic topic of circular economy, participants mentioned the issue as relevant due to the reduction of waste production, increase of product durability and shelf life, standardisation of technology and devices, etc. When asked about the most relevant needs and concerns that could be addressed by better use of circular economy, participants mentioned high cost of waste disposal services, high amount of waste, health benefits and improved quality of life (e.g. air quality) related to waste management, environmental impact, creation of new jobs, higher quality of products, etc. When asked about the proposed actions to increase circularity, participants mentioned organising of workshops and public consultations for citizens and public officials, banning on single use of certain products, developing new waste management plans, using recycling yards, etc. The SWOT analysis findings show: the main strengths, including the strong economy in the region, the expertise and good organisational

capacity of the waste disposal companies, the existence of bottle return policies (financial compensation); the main weaknesses - lack of regulations, resistance from construction lobby, small market, lack of sufficient work force, lack of incinerators and recycling yards; the main opportunities - previous work experience and successful case studies abroad, and the main threats - mass tourism and a strong manufacturing lobby.

The open discussion revealed that citizens are aware of the difficulty of forming new 'green' habits, but are not aware of the extent to which energy consumption has an impact on the environment and the possible consequences of pollution. Therefore, continuous education of citizens is necessary. It was noted that many former public transport lines, which were active during the Yugoslavian period, have been abolished due to lack of profitability. The importance of green transport was emphasised because of the constant need and potential use, the high level of traffic congestion, especially during the tourist season, and the widespread habit of private car use, which causes additional pollution and CO2 emissions.

For the circular economy, it was noted that certain measures such as the return of packaging are active, but that the total amount of waste should be reduced over time. It was noted that electric vehicles have a high price compared to regular vehicles and that public transport is promoted, but new transport models are needed. A problem was identified in the lack of legal regulation for energy communities, where there are two separate legal forms in Croatia. There are also no incentives for the formation of energy communities and everything is dependent on one energy source (electricity). It was suggested that energy communities focused on heating should be defined and formed, as there are existing regulations that allow this, but there are also conflicting and unclear legal facts for this type of community.

SWOT analysis and final recommendations

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> - Higher RES financing possibilities due to high development of the Istrian region - Favourable geographic location 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> - Lack of financial resources - High dependence on TPP Plomin (coal-fired plant) - Slow permit issuing procedure (EE/RES) - Lack of trust in government - Poor public transport infrastructure
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> - Possibility of EU funding - Public bodies and agencies providing technical and advisory support - Positive examples and case studies from other EU countries 	<p style="text-align: center;">Threads</p> <ul style="list-style-type: none"> - Unstable macroeconomic situation - Expected increase in energy costs (prices) in the near future - Population decline trend - Mass tourism

<ul style="list-style-type: none"> - Availability of qualified EE & RES experts - Mild climate - Proximity to a future hydrogen valley that could be used for energy supply 	
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According to the main findings of the SWOT analysis, taking into account also the results of the collected surveys, interviews and feedback from the local community during the workshops, what characterises the overall possibility of JT-related improvement in the region and a solution that would address the widest range of perceived citizen problems would be the need for better connection and mobility between local regions through the use of a greener and more efficient mode of transport. The LGUs in the Labin area do not have a unified inter-municipal local transport line, suffer from severe congestion problems during the summer months, and consist of a large number of rural areas and households that are scattered and poorly connected. These households in some cases also have poor access to electricity and water and are more vulnerable to energy poverty issues, also due to the fact that the majority of these households are also elderly. Older people in these households often no longer drive and, in many cases, rely on other family members for transport. Such households would benefit most from access to more energy efficient and environmentally friendly public transport, which could also be free or subsidised to reduce the financial constraints of users.

A green and efficient public transport line would also provide better connectivity and mobility between the surrounding LGUs and rural and urban areas, improve general health conditions, provide better access to public services (e.g. health services for the elderly), stimulate employment (e.g. increased availability of jobs and commuting options for currently unemployed citizens), increase social inclusion in the local community, partially resolve congestion issues related to mass tourism, and ultimately contribute to the decarbonisation of the region and overall quality of life.

The focus on this activity is also in line with the options that received the highest scores in the surveys, mainly 'Investing in RES, hydrogen and storage' and 'Investing in energy efficiency'. The need for this type of project has also been identified earlier in the Community and in discussions with representatives of local and regional authorities.

The preliminary plan would be to explore the possibility of establishing an inter-municipal local and green transport line between the City of Labin and surrounding LGUs for the benefit of all parties involved, with IRENA acting as coordinator and providing technical support. This activity would establish a preliminary route and timetable, explore the possibility of full or partial subsidy options for citizens, explore co-financing options through JTM, explore other related policies (e.g. limiting the use of parking spaces), and enable the development of the necessary infrastructure for green transport in the region. The next step would be to focus on the development or procurement of a sustainable vehicle using a clean energy source (e.g. electric or

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hydrogen bus), either through the involvement of a local SME or through cooperation between IRENA and local authorities. These activities would also be accompanied by a "green" communication campaign, carried out together with local authorities, to further promote the use of clean transport by citizens.

Green and efficient transport can be funded through any of the three JTM pillars, given IRENA's ability to work with and involve both public and private entities in the process.

For the Pillar I: Just Transition Fund, the County of Istria still has the opportunity to receive financial support through Operation 7, which aims to contribute to the reduction of the regional greenhouse gas emissions through a programme of investment in production innovation of small and medium-sized enterprises that want to improve the efficiency of production and business processes in an innovative way.

For Pillar II: Just Transition scheme under InvestEU, which includes investments offered to private and public entities in energy and transport infrastructure, digitalisation and digital connectivity, and circular economy, the timeframe and exact procedure for funding is not yet clear, but will probably be available in the near future.

Pillar III: Public Sector Loan Facility, which is aimed at public entities and provides for public investment in energy and transport infrastructure, district heating networks, energy efficiency measures including building renovation and social infrastructure, is also a viable option. A potential list of suitable projects in Istria County has already been defined and is currently in the process of prioritisation and the most suitable projects will be selected for financing.

The County of Istria is preparing a study for the establishment of a regional public bus transport network, and one of the measures in the study is the development of a modern public transport system, which should become the basis for quality connection of the entire region. This is an opportunity to include a new project proposal mentioned above.

4. Activities and findings in Western Macedonia, Greece

Second workshop with citizens

Organizer(s): National Technical University of Athens

Location: Koventareios Municipal Library, Kozani, Greece

Date, time, duration: 29/01/2024, 17:00-20:00 (3 hours)

No. and profile of attendees: 23 citizens from various backgrounds (members of the public, high school students and their teachers, academics, newsmen, representatives of institutes).

Event webpage: [Link](#)



Figure 4: Photos from the 2nd Workshop with citizens in Kozani, Greece

Workshop objectives

The 2nd workshop of the JUSTEM project in the region of Western Macedonia, entitled 'Just Transition in the hands of citizens: Co-creating proposals to strengthen the new generation, employment opportunities and quality of life in Western Macedonia', aimed to act as an immediate continuation of the 1st workshop, deep diving into the priority topics identified during the first one and explicating detailed bottom-up proposals to strengthen, fine-tune and guide the implementation of the Just Transition Plan in the

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region. Along with the surveys and the interviews, the workshop resulted in the identification of concrete proposals from a diverse set of stakeholders engaged in different ways.

Co-creation methodology applied

Although the initial expectations were centred around a workshop with a similar capacity to the first one (more than 40 people; see paragraph below), the smaller, yet adequate sample present during this second workshop that had a wide diversity of backgrounds, enabled us to adopt a focus group approach. We started with two presentations by Dr. Konstantinos Koasidis (EPU-NTUA, representing the JUSTEM project) about the results of the first workshop and the scope of the second, and Mr. Yannis Kostarellas (Just Transition Institute) on the current progress including gaps in the implementation of the just transition. We then split the discussion into three thematic sessions, as outlined in the title of the event, namely, solutions for the young generation, employment, and overall quality of life. After some brief introductions by the moderator (mainly to familiarise the participants with the results of the first workshop), we facilitated group interactions and discussions in the essence of the focus group methodology to elicit their perceptions on potential solutions to be pursued as part of the just transition that the region is lagging behind in implementing. A key challenge for the moderation was to ensure that the discussions focused on solutions rather than further problem descriptions. Although the number of participants was in the high end of the ideal number for focus groups, such levels of participation are found in the literature (Heaslip and Fahy, 2018), while the exact mix of participants and their backgrounds were adequate for this method to be used, especially coupled with the follow-up interviews to ensure that all participants expressed their views.

What went well and what did not

As with the first workshop, the participants were really engaged in the discussions, posing interesting ideas, and even questions, allowing them to leave the workshops with a better understanding of what a just transition is and the key concepts that are important. The participants also appreciated the diverse set of methods employed during engagement (workshops, surveys etc.), which provided them with a forum to express their viewpoints, noting that some may fear speaking up during a workshop or others prefer to speak rather than answer online questions.

A key challenge faced when engaging with stakeholders during the workshops and which forced the organising team to adapt the strategy was the phenomenon of workshop fatigue coupled with pessimism. Although both workshops had an adequate number of participants (45 and 23 number of participants respectively; around or even exceeding the requirements set for the workshops to provide meaningful results), based on the participation in the first one, the team expected a higher participation in the second workshop as well. However, some citizens expressed the view that many workshops are organised in the region, focusing on roughly similar topics that they feel

can scarcely produce any meaningful outcomes that will alter their lives for the better, hence opting out of participating. This behaviour did not cause any major issues in this series of JUSTEM workshops that could not be addressed through slightly adapting our approach, but moving forward, both the JUSTEM project, and other projects working in the region, need to take note of this phenomenon and ensure that their added value and their impact is adequately communicated.

Citizens' survey

Number of collected surveys: 101 collective responses in the different polls/surveys rolled-out (see below for a description)

Survey objectives

The surveys rolled-out in the region of Western Macedonia as part of the JUSTEM activities were performed in two stages, as a follow-up to each workshop and hence are thematically linked to each workshop. As such the first survey and its set of polls focused on further exploring the notion of the just transition through the perspective of the stakeholders and therefore help them outline priorities for their region, while the second survey focused on providing some preliminary evaluation of solutions arising from the second workshop.

Survey questions

The first stage of our surveys after the first workshop included numerous independent polls based on the questions below:

1. Please provide your level of agreement with the following statements:

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Climate change poses a serious threat to my region					
I agree with the plan for a lignite phase-out until 2028					
I agree with the net zero emissions target until 2050					

2. Please provide your level of agreement with the following statements:

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Deliberation during the design of the just transition plan was adequate					

Deliberation during the implementation of the just transition plan so far is adequate					
I want to further engage in the implementation of the just transition plan					
I don't know how to further engage in the implementation of the just transition plan					
There are no opportunities to further engage in the implementation of the just transition plan					

3. Please rank from 1 (highest) to 5 (lowest) the priority of the following dimensions for your regions. Each number can be used once.

<i>Dimension</i>	<i>Priority</i>
Employment	
Environmental	
Financial	
Social	
Energy	

4. Provide further needs not adequately discussed during the workshop

Open ended question

5. If you were to invest in an energy cooperative/community active in one of the following areas, based on actions currently mentioned in the just transition plan of the region, which one would you choose. You can choose more than one:

<i>Action</i>	<i>Select</i>
PV park	
Green hydrogen plant	
Energy storage plant	
Research valley	
Industrial Park for e-mobility	
Waste management plant	
Biomass plant	
Smart agriculture unit	
Wine tourism	
Modern recovery facility	

The second survey was rolled after the second workshop and featured questions related to the evaluation of some groups of actions arising from the workshop. In this part of our survey-based approach, we focused on the perspectives of the younger generation, an approach directly influenced by the discussions in the two workshops.

1. How strong is the ability of the following actions to improve conditions for you and your future in the region?

Question	Very Low	Low	Medium	High	Very High
Reskilling programs					
Research/Innovation Infrastructure and valleys					
Energy Plans/Industrial Infrastructure					
Supporting Development Actions					

2. How strong is the ability of the following actions to improve conditions for the rest of your peers and their future in the region?

Question	Very Low	Low	Medium	High	Very High
Reskilling programs					
Research/Innovation Infrastructure and valleys					
Energy Plans/Industrial Infrastructure					
Supporting Development Actions					

3. How strong is the ability of the following actions to improve conditions for other members of your community in the region?

Question	Very Low	Low	Medium	High	Very High
Reskilling programs					
Research/Innovation Infrastructure and valleys					
Energy Plans/Industrial Infrastructure					
Supporting Development Actions					

Survey methodology

An online-based approach was used to ensure that an adequate number of responses is collected, and that the use of interactive online tools would be appealing to respondents. The surveys and their respective polls rolled-out were mainly communicated through personalised communications with the participants of the workshops and their immediate networks. This helped collect a wide range of quality—avoiding spamming and fraudulent—responses from a diverse set of stakeholders.

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To collect and analyse the responses, three tools described in D2.2 of JUSTEM (Koasidis et al., 2023b) were used: i) Mentimeter to facilitate the polls of the first stage of the surveys; ii) Google Forms to collect the responses in the second survey; iii) APOLLO-Live to analyse the responses in the second survey.

What went well and what did not

Responders communicated that they found the surveys to be engaging and an easy and quick way to provide their perception/viewpoint in a structured manner. From an analysis perspective, the surveys were a very useful tool to elicit information from the stakeholders and easily analyse them quantitatively to produce specific outcomes. Additionally, through these responses, it was very easy to identify areas of conflict or consensus to help design the workshops and overall drive the discussions.

As with all surveys, a key risk is that respondents do not always share a common understanding on how to respond. This could notably be reflected in the 3rd question of the first survey where stakeholders were asked to rank priority areas. It is possible that some stakeholders may have been confused and provided answers in reverse. Through communications with stakeholders on the structure of the surveys before rolling them out, we attempted to include elaborations to ensure that any potential confusion is mitigated. Additionally, no significant outliers were observed in the results of the survey.

Citizens' interviews

Number of interviews: 21

Interview objectives

Three sets of interviews were conducted, two before each workshop with the aim to assist in the preparation of the material and the themes to be discussed during the physical events, while the third one was conducted after the second workshop, and like the second survey it aimed to elicit the perceptions of the younger generation about their future in the region.

Interview questions

During the first two sets of interviews, the following standardised set of questions (minor adaptation of the questions universally suggested within JUSTEM) was used as a canvas in a semi-structured format:

1. What are the key challenges you see in your region.
2. Do you have any suggestions on how to address them?
3. When you think about phasing out coal in your region, what are your expectations for the region and you personally?
4. Do you think that the closure of the coal-related industries will affect the ability of your family to cope with the costs of electricity and heating? If yes, how?
5. What are the gaps in the implementation of the just transition plan?

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6. What do you think should be done to enable a “just transition” to a greener future in your region?

Notably, before the first workshop we focused on questions 1, 3, and 4, while before the second workshop we focused on questions 2, 5 and 6. This breakdown fits with the overarching approach of the first workshop focusing on problem definition and the second workshop on solution identification.

The line of questioning for the third set of interviews arose during the second workshop, when based on some discussions, participants stressed that the following exercise seemed very useful. As such we decided to expand and elaborate on the discussions in the workshop with the following questions, that are focused on the younger generation:

1. Do you think you will stay in your area for the next decade?
2. Which profession do you want to pursue in the future?
3. In summary, what is the main reason you think you can or cannot pursue this profession in your area?
4. In summary, what is the key element that you would like to change in your region to be able to stay there in the future?

Interview methodology

As mentioned above, the questions acted as a guidance for the discussion, using the semi-structured interview approach. As such the questions were usually posed to the interviewees, but we provided the flexibility to drive the discussion to ideas the participants would like to focus on. This approach was not employed in the third set, given the inexperience of our participants, hence a structured approach was followed.

Most interviews were performed online through platforms such as Zoom and Microsoft Teams, some were conducted physically (mostly those in close proximity to the two workshops and an early field visit in the start of the project), while one interview was conducted through the phone.

What went well and what did not

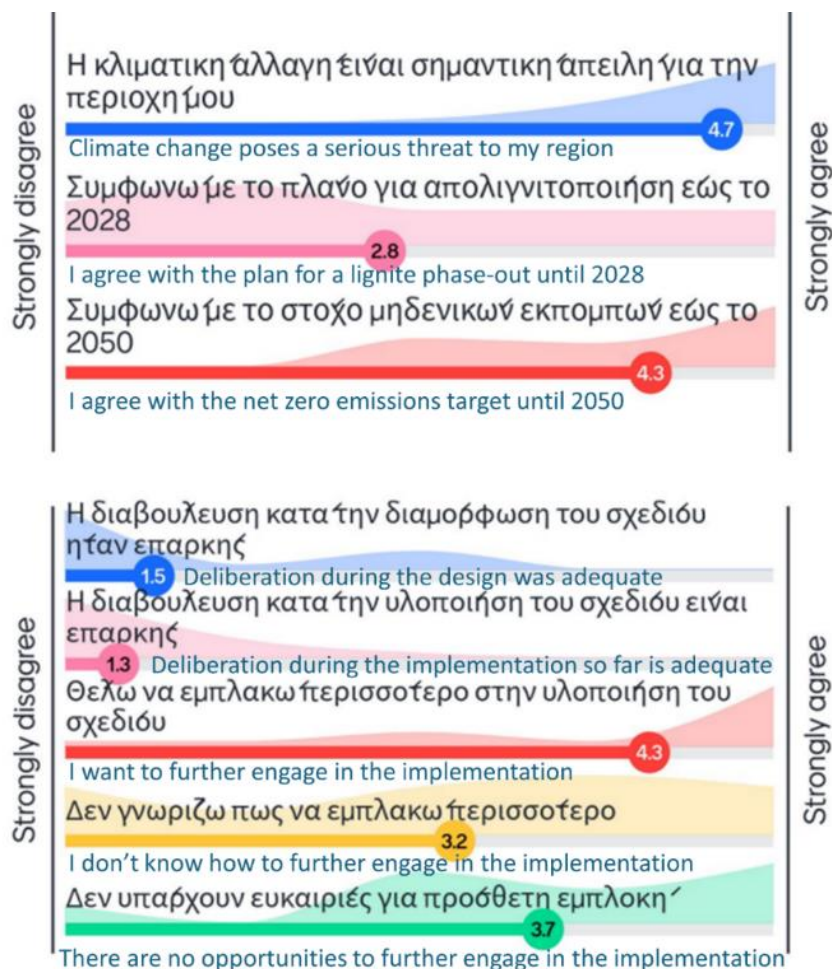
Interviewees were willing to discuss and offer their perspective, while they appreciated the personal exchange enabled through the interviews.

A key challenge arising during the second set of interviews (before the second workshop) related to the willingness of the participants to talk about the problem, compared to the difficulty to propose specific and targeted solutions. Hence, it was very challenging and needed significant effort on the interviewer’s part to ensure that to a certain extent the discussion remained within the scope of the interview.

Citizens' findings and recommendations

Considering the integrated nature of our methodology, it is not always easy to meaningfully differentiate between the steps of our approach and each outcome produced, since all previous tools (workshops, surveys, interviews) were conducted to feed one another. In this section we will synthesise core findings derived from the whole process to feed into concrete recommendations (presented in Section 0).

One of the first findings was that citizens in Western Macedonia firmly believe that climate change poses a significant threat to their society, and consequently are in favour of climate action and long-term decarbonisation targets. Debates however arose when discussing mid-term targets for lignite phase-out, a topic that causes division within the local society, with some agreeing with the plans and others asking for extensions (see also JUSTEM D3.2; Mazur et al., 2023). Although, the NECP clearly provides a target for this phase-out, while discussions are underway for an even faster closure of lignite plants, back-and-forth in the use of lignite within the Greek electricity mix (especially since the energy crisis), have created a sentiment within the local society—and which was expressed in some interviews—that the timeline will be extended, which poses a risk of underpreparing for when lignite phase-out will become a reality.



JUST TRANSITION

Irrespective of this discussion, most participants in our processes identified employment as a top priority for the region, with many jobs being at risk. Re-skilling part of the workforce currently in the lignite/coal industry is a major part of any just transition effort, and activities are already underway. But participants were hesitant of the effectiveness of such initiatives, as from their point of view, these appear uncoordinated, without a clear target, and occasionally not operated within their region, with an interviewee posing the question that “we are re-skilling people, but towards which skills are we guiding them exactly?”. Enhancing the local participation towards revisiting re-skilling appeared as a key ask of the community.

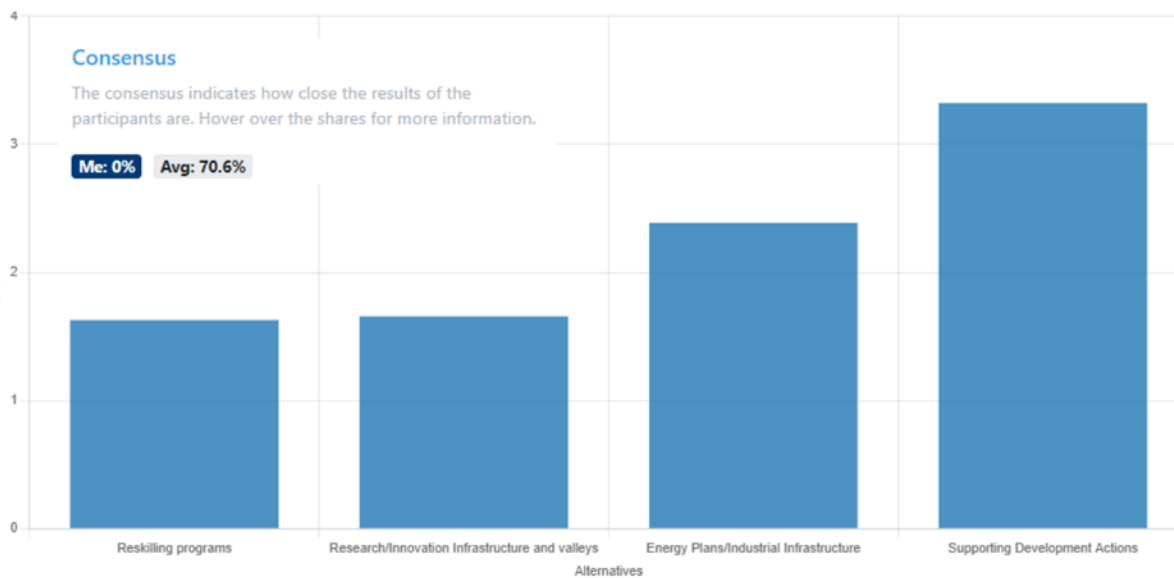
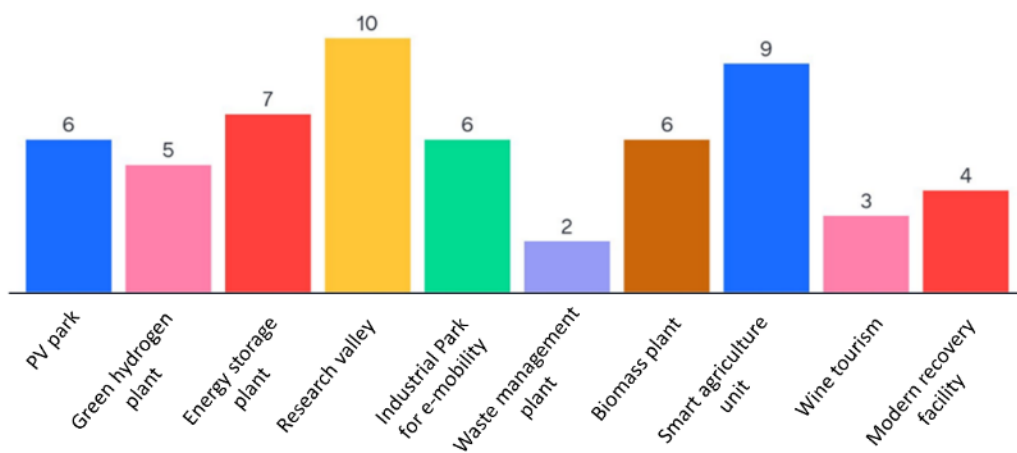
Interestingly, the energy dimension is of the least concern to the regional society, with most concerns stemming from a lack of knowledge regarding the centralised nature of the Greek electricity system; these concerns were mitigated during the workshops, ensuring the citizens that a coal phase-out will not lead to disruptions in the electricity supply. A concern remaining however relates to the district heating system, with participants stressing that the current operation of the system is inefficient, but with a difficulty in identifying solutions for tackling the issue.

The low prioritisation of energy concerns can be also viewed through a different prism. Within the interviews with younger citizens, we asked them about their aspirations for employment, and essentially which types of jobs they would like to pursue in the future. Very few responded that they intend to pursue an energy-related job, which is markedly different from the situation in the previous decades when the aspiration of many young citizens was to be employed within the energy industry. With that in mind, participants stressed the need to revisit course material, especially in technical high schools, to account for these changing dynamics in the regional society, which appears to shift away from its previous energy-focused identity.

Concerning concrete actions/investments presented within the plans, or overall existing in the public debate, participants shared their ideas in all steps of our approach. Notably, most engaged citizens rejected the notion of over-relying on large-scale industrial investments and preferred smaller-scale investments with the participation of the local community, e.g., through energy cooperatives. This goes hand in hand with their suggestion to pursue dedicated spatial planning including the restoration of mine sites, to preserve protected areas. However, one interviewee stressed the need for the region to “get a quick win”, meaning a large project/investment or overall initiative to boost morale and prove that the just transition can be a reality.

During the first set of polls, investments of interest to the citizens were those related to research and innovation, and smart agriculture with other energy-related actions, such as energy storage, PVs, e-mobility and biomass closely following, while discussions supplemented these results with suggestions to pursue investments in the RES manufacturing industry (e.g., PV parts). Interestingly though, a gap identified by our stakeholders was around supporting actions related to the broader development of the

region, with suggestions including an expansion of the rail network to connect the region to Thessaloniki (the major city in Northern Greece), exploiting industrial installations closing as tourist attractions, as well as other actions such as information offices. In the second survey featuring a younger sample, these types of supporting actions received significant attention and high evaluation, while in the interviews, young citizens stressed that the issues in the region which force them to leave their home states (anecdotal evidence from our interviews indicate a share of more than 75% expecting to leave to other urban centres in the next decade) are related to broader limited prospects. Although in this survey, research-related actions lost ground, they were still highly upvoted by the male sample, indicating significant gender dynamics at play (see also JUSTEM’s energy poverty and gender report; Andreosatou, 2024).



Finally, an overarching theme in the discussions with the citizens through all steps, was the so far lack of co-creation processes and the limited engagement of the local society, with participants mentioning their willingness to participate, and requesting that the implementation phase of the just transition is truly co-created.

SWOT analysis and final recommendations

Strengths	Weaknesses
<ul style="list-style-type: none"> - Phase-out of lignite in an advanced stage - Citizens willing to actively engage and a large number of actors/networks active in the just transition - Proximity to major urban centres and economies (Thessaloniki, Ioannina) - Region has an appeal to alternative forms of tourism - Near the northern borders of Greece, a potentially strategic placement if the European grid integration proceeds. 	<ul style="list-style-type: none"> - Region located in a cold climate zone - Much of the economy and the workforce is heavily relying on the lignite industry - Saturated grid - Historical reliance on lignite-powered district heating. - Top-down governing culture with emphasis in Athens (capital), located far from the region - Bureaucratic processes
Opportunities	Threats
<ul style="list-style-type: none"> - Existing funding and open calls (both at the EU and national level) for SMEs and other investments - Interest from large and global companies to invest in the region - Ongoing programs at the national level to improve energy efficiency - Numerous re-skilling programs for unemployed citizens - Region in need of redefining its identity. 	<ul style="list-style-type: none"> - Sense of pessimism and giving up - Scepticism towards the energy transition by non-transparent processes - Young generation abandoning the region - Funds for the just transition spent without a clear impact on the development of the region - Bureaucracy driving investments out of the regions - Re-skilling approaches operated by institutions external to the region.

Based on the analysis in the previous section on the insights from the field work performed in Western Macedonia and through the prism of the SWOT analysis presented here, we can synthesise and highlight the following recommendations for the region, to either influence policy updates or concrete actions and projects to be pursued:

- Spatial Planning (to define zones for installation of renewables while respecting protected areas, e.g., Natura 2000)
- Restoration of mining lands before repurposing. Repurposing should include agricultural uses (not just energy—e.g., PVs—investments).
- Mapping of grid's potential to allow further connections (and consequent expansions to address grid saturation).
- Support to energy communities, to enhance energy democracy, ownership of the transition, which could ensure bottom-up energy investments that could potentially reduce households' energy expenditures.
- Consultation and co-creation in the implementation of the plan (fine-tuning).
- Boost morality through quick win actions.

- Just transition observatory to ensure monitoring of the implementation of the transition.
- Offices and infrastructure to support and provide information on the transition (e.g., potential investment and funding opportunities, re-skilling programmes).
- Establishment of factories/industrial installations to manufacture equipment for PVs, batteries.
- Skilling and re-skilling programmes, coupled with redefining their purpose (e.g., not just programmes but better choosing the skills people are actually trained).
- Redefining school course material—especially in technical high schools—based on current needs (from energy-electricity generation focused to new technologies, smart agriculture etc.).
- Support to research facilities/valleys (again, with a focus on ICT like machine learning, smart agriculture, etc.).
- Exploit infrastructure closing down (e.g., mines, plants) as tourist attractions and areas of industrial heritage.
- Improve the connectivity of cities (e.g., re-opening the railway routes).

5. Activities and findings in Silesia region, Poland

According to the project assumptions and the methodology described in more detail in the WP3 planning document, KAPE carried out 2 workshops and interviews and questionnaires with the citizens of the region in order to collect information within the co-creation activities. After consultations with representatives of the regional authorities, the town of Rydułtowy in the Western Sub-region of the Silesian Voivodeship was chosen to host the workshops with the citizens. This town, like the whole of the Western Sub-region, is highly dependent on the mining sector. Most of its residents work in mines or in companies dependent on mining.

Second workshop with citizens

Organizer(s): KAPE and Rydułtowy City

Location: Rydułtowy Cultural Centre Feniks, 9a Strzelców Bytomskich Street

Date, time, duration: 20th of February 2024, 9:30 – 13:30

No. and profile of attendees: 54



Figure 5: Photo from the 2nd Workshop with citizens in Rydułtowy City, Poland

Workshop objectives

The aim of the second workshop in the city of Rydułtowy - in the Western Sub-region of the Silesian Voivodeship - was to present the current situation, challenges and good practices in the field of just transition in the region and to collect feedback from local residents on their needs and concerns related to this process.

Co-creation methodology

After the experience of organising the first workshop, which had a very low attendance, it was decided to change the approach to organising the second workshop.

JUSTEM

The first meeting showed that there is not only a low level of awareness and knowledge among the citizens of the region about the just transition, but also about the situation in the region due to the transition. It was therefore decided to organise another workshop in cooperation with the municipality of Rydułtowy and to invite guests important for the region, so that the event would become more attractive to local people. The aim was not only to gather information from residents about their concerns and needs, but also to hear directly from local and regional authorities about challenges, solutions and visions for the future of the city and region.

The title of the event was: "The Western Sub-region in the process of moving towards a sustainable economy".

The meeting was opened by Mr Marcin Połomski, Mayor of Rydułtowy, and Joanna Ogrodniczuk from KAPE.

The Mayor of Rydułtowy gave an overview of the town's dependence on the mine, the problems caused by mining, but also ideas for the use of post-mining areas and the steps the town is taking to strengthen local entrepreneurship and urban development. Joanna Ogrodniczuk presented the planned goals and objectives of the JUSTEM project.

Dr. Adam Drobniak, Head of the Department of Strategic and Regional Research at the University of Economics in Katowice, began with a very clear explanation of how energy transition, a just transition and achieving a sustainable transition should be understood today.

Mr. Piotr Masłowski - Senator RP, who comes from the town of Rydułtowy and has been active in NGOs and local government for many years, stressed the importance of the role of local NGOs in building the region's strength. Ms. Anna Hetman, Mayor of Jastrzębie-Zdrój and Chair of the Association of Mining Municipalities in Poland, spoke about the role of local government officials in creating attractive local centres, listening to the voice of local residents, but also of entrepreneurs. Ms. Stefania Koczar-Sikora, Deputy Director of the Regional Development and Transition Department of the Marshal's Office of the Silesian Voivodeship, highlighted the opportunities for financing projects supporting the just transition process provided by the Just Transition Fund.

The panelists' speeches were followed by an open discussion with the audience. The participants in the meeting, which included residents of the region, local government officials and entrepreneurs, took a very active part in the discussion, asking questions that the panelists answered in an accessible and understandable manner. The moderator of the discussion activated the participants of the meeting in order to gather information about their opinions, concerns, hopes and expectations regarding the transition process in the region.

What went well and what did not

In contrast to the first workshop, which did not foresee the participation of local authorities and other stakeholders, the participation of local and regional authorities added a lot of value for citizens, as this time there was a very good level of attendance. In addition, each participant had to register for the event, which made it possible to monitor their number and streamline the collection of surveys.

Citizens' survey

Number of collected surveys: 104

Survey objectives

The main objective of the survey was to identify the needs and concerns of residents in relation to the process of moving away from coal, as well as residents' awareness of the region's current problems in this regard.

Survey questions

1. gender female, male
2. age under 30, 30-50, over 50
3. are you related to mining
 - Yes, I work in the mining sector
 - Yes, at least one person in my close family/household works in the mining sector
 - No
- 4 Please indicate how important the following issues are to you.
Please scale from 1 to 5 (1 not very important, 5 very important):

Air quality	
Replacement of inefficient heat sources	
Investments in energy efficiency (e.g. thermal modernisation of buildings)	
Supporting the use of renewable energy sources in residential buildings	
Investments to reduce energy consumption in enterprises	
Renewable energy investments, water and storage	
Energy transition, phasing out coal	
Development of digitalization and innovation	
Investment in sustainable tourism (e.g. in post-mining areas)	
Investment in green transport - e.g. railway, electric vehicle charging stations, cycle paths	
Re-skilling of coal workers	
Educating and informing the public about available green solutions	
Tackling energy poverty	
Affordable and accessible clean energy for all	

Citizen participation in energy planning. Ensuring dialogue and public participation. A common vision of the future	
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Please indicate whether you agree with the following statements:

	YES	NO	No opinion
I am well informed and aware of the plans regarding the phase-out of coal in my region			
The transition to clean energy sources will have a positive impact on the quality of life in my region?			
The closure of the coal-related industry will have a negative impact on my family's ability to cope with electricity and heating costs			
The house I live in needs thermo-modernisation (e.g. insulation, replacement of windows)			
There are programmes available to support actions to increase home energy savings and improve air quality			
I am aware of programmes that can be used to help my family if there are problems with electricity and heating costs			

Survey methodology

The survey was conducted by a local person who interacts with people in the region on a daily basis. This approach ensured effective contact with citizens and encouraged them to complete the surveys. Furthermore, as previously mentioned, workshop participants were asked to complete the survey when registering for the event.

The survey was created in Google Forms. The person responsible for the survey encouraged residents to complete it during meetings with them. In addition, KAPE disseminated a link to the survey to local organisations (NGOs), local authorities and workshop participants.

Citizens' interviews

Number of interviews: 10

Interview objectives

The main objective of the interviews was to gain an in-depth understanding of local people's feelings about the planned mine closures, their awareness of development opportunities in the region, their involvement in the process of planning the future of the region, and the problems and challenges facing the region from their perspective.

Interview questions

1. In your opinion, what are the 2-3 strongest features of the region/city?

2. What are the biggest problems in the region/city?
3. When you think about phasing out coal in your region, what are your expectations from local/regional authorities?
4. Do you see any opportunities that the city/region can benefit from in the transition caused by the coal transition?
5. Are you aware of plans regarding a just transition of the city/region?
6. Would you like to be more involved in a just transition process in your region? If so, HOW?
7. In your opinion, what are the most important challenges facing the city/region and its citizens in the next 20 years?
8. What do you think needs to be done to make the transition to a more sustainable future for the city/region actually just?

Interview methodology

The interviews were carried out by the same person who administered the survey, as he is acquainted with the citizens and is engaged in various tasks targeting different segments of the population on a daily basis. The involvement of a familiar figure, employed by a well-known local organisation, was intended to ensure a diverse range of respondents and, at the same time, to guarantee honesty and openness in the answers.

Citizens' findings and recommendations

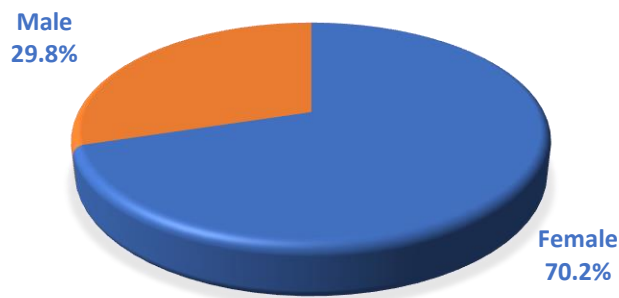
Second workshop findings:

The participants in the 2nd workshop highlighted the following problems and needs arising from the region's transition process:

- Post-mining areas – building on these areas is very expensive, what should be done next with these areas;
- Development of entrepreneurship, diversity of industries, not another business monoculture that kills entrepreneurship;
- Lack of knowledge about just transition, not only among the citizens, but also in the local administration, as well as a reluctance to acquire this knowledge;
- The need to reskill young people, not working miners, who claim they will work in mines until they retire.

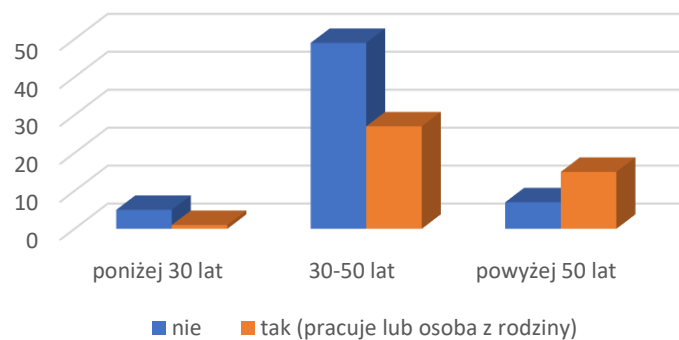
Surveys' outcomes

A total of 104 people completed the questionnaire: 73 females and 31 males



Only in the oldest age group there is a clear majority of people who work or are directly linked to mining through a family member.

Are the interviewees directly linked to the mining industry?



Subjects:	Average subject importance		
	People not involved in mining	people involved in the mining sector	total
Air quality	4,48	4,30	4,40
Replacement of inefficient heat sources	4,21	4,07	4,15
Investments in energy efficiency (e.g. thermal modernisation of buildings)	4,15	4,12	4,13
Supporting the use of renewable energy sources in residential buildings	4,16	3,95	4,08
Investments to reduce energy consumption in enterprises	3,97	3,93	3,95
Renewable energy investments, water and storage	3,95	3,74	3,87
Energy transition, phasing out coal	3,69	3,14	3,46
Development of digitalization and innovation	3,95	3,72	3,86

Investment in sustainable tourism (e.g. in post-mining areas)	3,89	3,72	3,82
Investment in green transport - e.g. railway, electric vehicle charging stations, cycle paths	4,07	3,74	3,93
Re-skilling of coal workers	3,61	3,63	3,62
Educating and informing the public about available green solutions	4,16	3,95	4,08
Tackling energy poverty	3,98	4,14	4,05
Affordable and accessible clean energy for all	4,36	4,35	4,36
Citizen participation in energy planning. Ensuring dialogue and public participation. A common vision of the future	4,10	4,05	4,08

The analysis of the completed surveys clearly shows that air quality is the most important issue for the people living in mining regions, with a significantly lower average rating of importance of this topic for those not directly involved in the mining sector. In contrast, affordable and accessible clean energy is equally important to all.

There is a noticeable difference in support for the energy transition and the gradual phase-out of coal. For those living in mining areas but not directly involved in the mining sector for a living, this topic is clearly more important, although it is also worth noting that the average importance of this issue is the lowest of all the issues raised in the survey.

Tackling of energy poverty, on the other hand, is more important for those linked to the mining sector.

	YES	NO	NO OPINION
I am well informed and aware of the plans regarding the phase-out of coal in my region	43	44	17
The transition to clean energy sources will have a positive impact on the quality of life in my region?	74	16	14
The closure of the coal-related industry will have a negative impact on my family's ability to cope with electricity and heating costs	31	52	21
The house I live in needs thermo-modernisation (e.g. insulation, replacement of windows)	30	73	1
There are programmes available to support actions to increase home energy savings and improve air quality	58	16	30
I am aware of programmes that can be used to help my family if there are problems with electricity and heating costs	37	44	23

Only around 41% of the respondents feel well informed and aware of the plans to phase out coal in their region.

JUSTICE

The vast majority believe that the transition to cleaner energy sources will have a positive impact on the quality of life in the region.

However, only 50% feel that the closure of coal-related industries will not have a negative impact on their ability to cope with electricity costs.

Interviews' outcomes

Interviewees identified air pollution and environmental degradation as major problems in the region. In addition, the reliance on a mono-economy closely linked to mining poses significant challenges. The very low level of entrepreneurship among residents will become a major concern if large companies, including mining enterprises, close down. Furthermore, the very low percentage of working women is alarming and is linked to the prevailing family model where the man works in the mine as the sole breadwinner.

Respondents highlighted the region's strategic location and well-developed transport infrastructure as key strengths, although shortcomings in certain smaller areas make it challenging to access smaller towns. The interviewees also emphasised the significant importance of cultural heritage, as well as the many examples of revitalisation and cultural-tourist use of brownfield sites in recent years.

With regard to energy transition, respondents pointed out that residents are not sufficiently informed about the plans in this area for the coming years. The majority of people have no knowledge on the subject and people who are professionally involved in the issue, e.g. through their work in local government, point out that documents are prepared in a language that is not understood by citizens. Respondents expect more support for residents from regional authorities and point out that public institutions should set a good example.

Education of people at all levels, with a particular focus on children and young people, as well as current workers in the mining sectors to support re-skilling, was identified as key.

The authorities should support the development of an economy based on new technologies, as well as any measures to combat migration, which is depopulating smaller urban areas in favour of large cities.

SWOT analysis and final recommendations

Strengths	Weaknesses
<ul style="list-style-type: none">- Good transport infrastructure- Low level of unemployment- Ability to work under difficult conditions	<ul style="list-style-type: none">- Low level of awareness of the energy and socio-economic transformation process among the inhabitants of the Silesian Voivodeship

<ul style="list-style-type: none"> - Employee loyalty and commitment - Silesian work ethos - Concentration of industrial centres - Large area of post-mining land in the Silesian Voivodeship, representing a potential for development - Possibility of using post-mining areas as energy storage facilities, e.g. water pumping stations, CO2 storage, server rooms - Implementation of investments aimed at improving energy efficiency and developing RES - Availability of workforce with skills needed in green economy areas 	<ul style="list-style-type: none"> - Negative attitude of communities, especially small municipalities, towards the decarbonisation of the economy - Insufficient support for employees in retraining or upgrading their professional skills and qualifications. - Demographic problems, including out-migration of young people (especially from smaller towns) and an ageing population - Critical self-assessment of the chances of coping with the labour market and finding a new job. - Weak entrepreneurial activity of inhabitants of mining regions - Insufficient financial support for small businesses. - Lack of high-quality alternative jobs (level of wages, benefits, sustainability of employment, social prestige) to the mining sector - Unstable working and wage conditions, especially in private companies. - Decrease in income of local governments of mining municipalities and impoverishment of mining regions, resulting in lower quality of social services and adverse impact on local communities - Lack of prepared investment sites. - High costs of energy and socio-economic transformation resulting in economic slowdown. - High-cost intensity of new pro-environmental investments (wind farms, solar panels).
<p style="text-align: center; color: #4f81bd;">Opportunities</p> <ul style="list-style-type: none"> - Regulatory requirements to improve air quality, reduce greenhouse gas emissions and protect water and aquatic ecosystems. - Technological innovations forced by changes in policies and regulations. - Legislative changes in the area of post-mining land, facilitating its transfer, reclamation. - Development of the green technology sector, which means the creation of green jobs. - Implementation of sustainable development principles by 	<p style="text-align: center; color: #4f81bd;">Threads</p> <ul style="list-style-type: none"> - The need for long-term planning of adaptation measures, even before the final closure of a mining site. - Problems in finding alternatives to mining, especially in terms of job creation and retraining of workers. - Migration, causing negative changes in the social structure, especially in small mining municipalities. - Insufficient level of trust in decision-makers and institutions involved in supporting the energy transition - The problem of maintaining wage levels for workers moving from large mining and mining-related companies to the SME sector. - Increase in the number of unemployed. - High financial and social costs of a green transition.

<p>companies and the need to reduce environmental impact.</p> <ul style="list-style-type: none"> - Possibility of obtaining EU funding - Acceleration of technological progress in the Silesian Voivodeship, related, inter alia, to the adoption of the Silesian Voivodeship Development Strategy "Śląskie 2030". Green Silesia 	<ul style="list-style-type: none"> - Collapse of mining-dependent businesses. - Decrease in tax revenues in mining municipalities. - Social and political resistance to transformational change. - Changes in the ecosystem, landscape and biodiversity of transformed areas - Conflicts between mining companies and local stakeholders over environmental issues (mining damage)
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Main recommendations based on SWOT analysis

- Taking action to create new value chains and development opportunities to encourage young people to stay in the region and develop their entrepreneurial skills.
- Support and carry out activities to retrain workers, including within companies - redeployment.
- Undertake a broad information and education campaign on the energy transition plan, targeting both government employees and those directly representing regional and local authorities, employees of the mining sector, entrepreneurs and the general public.
- Increase the involvement of NGOs in supporting the public consultation and the energy transition process.
- Counteracting the incidence of energy poverty through, among other things, advisory and financial support for measures aimed at the thermal modernisation of residential buildings and the replacement of inefficient heat sources.
- Developing economic zones to enable the growth of entrepreneurship in the region and the development of companies which will be able to offer jobs to people previously employed in the mining industry.
- Taking measures to tackle gender imbalances in the workforce, by providing employment opportunities to all mining family members in working age.

6. Activities and findings in Jiu Valley, Romania

Second workshop with citizens

Organizer(s): AISVJ; University of Petrosani

Location: Conference Hall of the University Library of Petrosani, Petrosani, Romania

Date, time, duration: 12th of October 2023, from 14:30 to 19:00 local time, 4.5 hours duration

No. and profile of attendees: 40 (citizens of Jiu Valley, from different social backgrounds, having various occupations)



Figure 6: Photos from the 2nd Workshop with citizens in Petrosani, Romania

Workshop objectives

The 2nd workshop was organised in conjunction with the event “Sustainable Economic Opportunities in the Jiu Conurbation”, as part of the Just Transition Groundwork project by the Valea Jiului Society.

As indicated by the name of the event “Just Transition – from needs, concerns, to a new vision through projects”, the objective of the 2nd workshop was to challenge citizens, who at this point have the knowledge base regarding just transition and its related aspects from the 1st workshop, to express their needs, concerns and worries, and then

JUST SYSTEM

to encourage them to come up with solutions, ideas and project proposals for the Jiu Valley area, which, being in Hunedoara County, benefits along with five other counties from the Just Transition Programme (JTP) under the Just Transition Fund (JTF).

Co-creation methodology applied

Following the analysis of the feedback questionnaires and the open discussions that took place in the 1st workshop, the citizens' desire to learn more about how we can combat energy poverty in the Jiu Valley, the development opportunities for this area, the guidelines that will be developed under the Just Transition Programme and how they can be accessed, the just transition projects that have been implemented in the Jiu Valley, and other concerns and worries related to the transition, was evident. The 2nd workshop was designed in such a way that citizens could come up with project ideas in which they could be directly involved. In this endeavour, during the practical activity sessions, according to the agenda of the second workshop, the citizens were assisted by Sabina Irimie from the Social Institute Jiu Valley Association, Adina Vințan from Valea Jiului Society, and Alexandru Kelemen from the Jiu Valley Integrated Territorial Development Association (ADTIVJ), organisations active in priority areas for the Jiu Valley, such as sustainable urban development, social assistance, environmental protection, and entrepreneurship.

The event also included theoretical sessions with presentations, but the practical activity sessions and interaction with the citizens accounted for almost 80% of the entire event.

What went well and what did not

The second workshop was a constructive continuation of understanding the transition, energy poverty, and stakeholder involvement in this process, resulting in the formulation of four project ideas related to the Jiu Valley. Additionally, stakeholders were invited to participate - each according to their interest, competencies, and knowledge - in one of the four teams.

Although there were online and in-person participations from the European Commission DG Regio (Marco Migliara and Simon Davies - JT Groundwork coordinator in the Jiu Conurbation), the Ministry of European Investment and Projects, the West Regional Development Agency (ADR VEST), the Prefecture and County Council, local representation was much weaker.

Citizens' survey

Number of collected surveys: 100 online surveys + 40 paper surveys

Survey objectives

The objective of this action was to identify the concerns and worries, and to gain a perspective on the level of awareness regarding aspects related to the just transition among citizens.

Survey questions

Age:

Gender: Male Female Other

Stakeholder Category: Civil Society Public Administration Business Environment Education and Research

Please complete the table below by assigning a score from 1 to 8, where 1 represents the lowest priority and 8 represents the highest priority, indicating the priorities for the Jiu Valley according to your vision. Please ensure that each priority is assigned only once in the table.

Proposed measures	Priority	Explanation
Professional Conversion and Training		Implementation of training and preparation programs for coal industry workers to help them find new jobs in emerging fields.
Investment in Green Infrastructure		Modernization of infrastructure to support electric transportation, electric vehicle charging, and the development of renewable energy networks.
Education and Research in Clean Energy		Promotion of research in renewable energies and clean technologies to find innovative solutions for future energy needs.
Resource and Biodiversity Conservation		Implementation of environmental protection strategies and sustainable use of natural resources to ensure ecosystem sustainability and diversity.
Community Participation and Consultation		Active involvement of the community in decisions related to the transition to ensure suitable and accepted solutions.
Energy Poverty Reduction Strategies		Creation of programs to prevent energy poverty through subsidies and financial support for low-income households.
Public-Private Collaboration		Collaboration between the government and the private sector to develop integrated solutions for the transition and accelerate investments.
Communication and Public Education		Launching campaigns for awareness and education to inform the public about the benefits of the transition and gain public support.

Please answer the following questions by choosing one of the response options:

1. Are you aware of the need to reduce coal dependency for environmental protection?
 Yes No Not sure
2. Do you believe that transitioning to cleaner energy sources will have a positive impact on the quality of life in Jiu Valley area? Yes No Not sure
3. Are you concerned that high energy costs could lead to energy poverty in your community? Yes No Not sure
4. Do you believe there should be support measures to ensure energy access for those with low incomes? Yes No Not sure
5. Do you think the local community should be consulted in making economic and energy transition decisions? Yes No Not sure
6. Do you believe collaboration between the private sector, non-governmental organizations, and the community can play a significant role in this transition? Yes No Not sure
7. Are you willing to support long-term investment programs in the development of sustainable alternative industries, even if the results may take several years to become visible?
 - a) Yes, definitely
 - b) Yes, probably
 - c) Not sure
 - d) Not very much
 - e) Not at all
8. Do you think that investments in research and development of ecological, non-polluting technologies should take priority, even if their benefits may only emerge after a few years?
 - a) Yes, definitely
 - b) Yes, probably
 - c) Not sure
 - d) Not very much
 - e) Not at all
9. How would you describe the ideal balance between long-term and immediate measures to ensure a fair and efficient transition?
 - a) The majority of measures should be long-term
 - b) A balanced combination of long-term and immediate measures
 - c) The majority of measures should be immediate and short-term
 - d) Depends on the situation
 - e) Not sure
10. In your opinion, in the future, in which economic sectors do you foresee sustainable economic diversification in the Jiu Valley area?
 - a) Renewable energies
 - b) Tourism
 - c) Timber exploitation and valorisation

- # JUSTEM
- d) Valorisation of traditions and local products (the traditions of the Momârlani, mining, shepherding, and products: wild berries, animal products – milk, hides, wool, meat, game and fishing products)
 - e) Research-development-innovation
 - f) Construction
 - g) Health
 - h) Transport

Survey methodology

In order to achieve the objective, an online survey was carried out with 100 participants and a paper survey, identical to the online one, was conducted with the 40 participants of the 2nd workshop. The interpretation of the results is therefore based on a total of 140 surveys.

The administered survey contained an administration protocol that explained the purpose of the questionnaire within the JUSTEM project and mentioned its confidentiality. In the content of the questionnaire, which has 12 questions with predefined answers, there is also an item that refers to 8 measures to be prioritised and 3 demographic questions.

What went well and what did not

Surveys had a well-explained and easy-to-understand content, being in Romanian, with only alternatives to choose from, the completion took relatively little time, citizens appreciating this, however, the level of understanding of the questionnaire is different from one category of stakeholders to another. Indeed, the collection and activation of citizens required a longer period of time, and several mobilizations were needed, including phone calls with requests to comply with these requests.

Citizens' interviews

Number of interviews: 10

Interview objectives

The purpose of the two rounds of interviews was:

1. To discover the level of awareness regarding the just transition among citizens and the aspects that concern them;
2. To prepare for the second workshop by developing the areas of interest noted by citizens regarding the just transition and its issues;
3. To gather perspectives on the future of the Jiu Valley microregion without coal.

Interview questions

1. What are the key challenges you see in the transition from the Jiu Valley?
2. How can you get involved in the transition process in the Jiu Valley?

3. Do you think the closure of coal-related industries will affect your household's or the area's ability to cope with electricity and heating costs? If yes, HOW?
4. In your opinion, what are the main obstacles to successfully implementing the Just Transition in the Jiu Valley? How could we mitigate these obstacles?
5. What would you replace coal with in the Jiu Valley region to enable a just transition to a greener future in the area?

Interview methodology

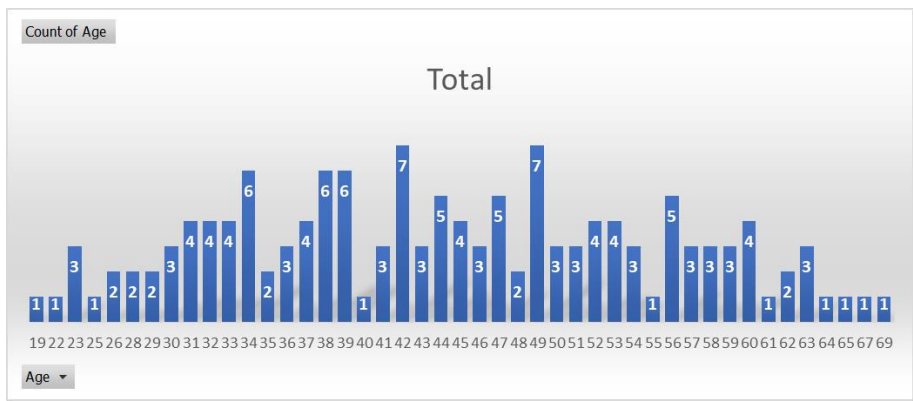
After the first workshop, the interviewed individuals, who were citizens, were asked to elaborate on the aspects discussed in the workshop (transition, energy poverty, alternatives to the coal industry, etc.) during the face-to-face interview. After the second workshop, the interview grid was adapted for each interviewee, who were decision-making leaders, and the most relevant questions were selected, with each interview lasting between 10-15 minutes. This time the interviewees were contacted by phone through an interview protocol, explaining the purpose of the interview, the anonymity of their responses, and the importance of their opinions. The project team members conducted the interview and recorded the interviewees' opinions.

What went well and what did not

The interviewees in the first and second rounds were open, interested, and discussed the issues raised. From the citizens' perspective, their concern is limited to their family and acquaintances, while from the leaders' point of view, solutions are relatively easy to find, but there is considerable concern about their implementation over the years due to political involvement.

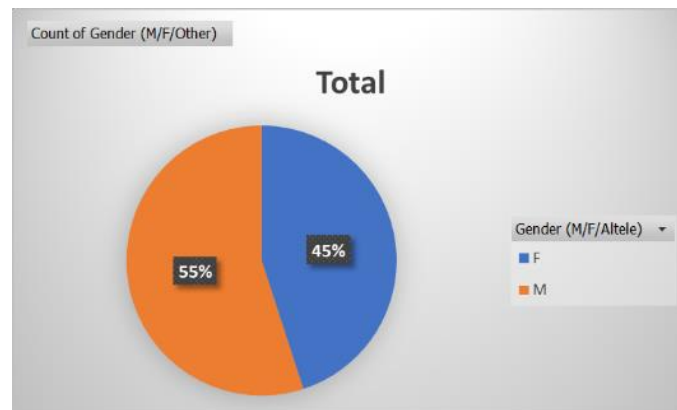
Citizens' findings and recommendations

Survey respondents are aged between 16 and 69 years, represented by number according to the age group as follows: 12 citizens aged 19-29 years, 42 citizens aged 30-39 years, 40 citizens aged 40-49 years, 32 citizens aged 50-59 years, and 14 citizens aged 60-69 years. Therefore, the most active age groups are those aged 30-39 and 40-49, representing over 58% of the total survey participants.

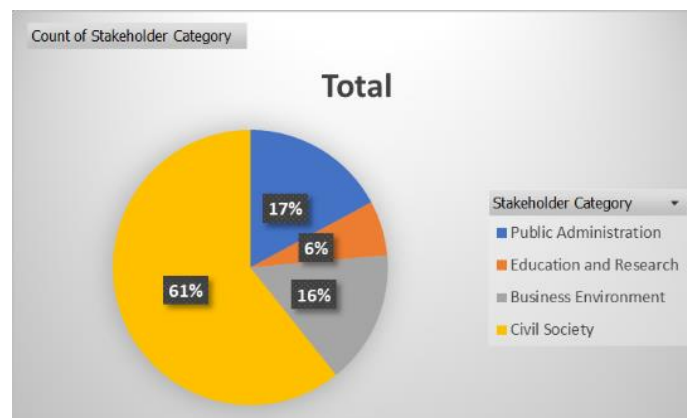


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In terms of gender, the survey respondents consist of 77 men and 63 women, with the percentage of men being 10% higher than that of women.



As for stakeholder categories, the survey respondents consisted of 85 from Civil Society, 24 from Public Administration, 22 from the Business Environment, and 9 from Education and Research.



It was found that, in relation to the priority areas where measures need to be taken to combat energy poverty and other negative effects related to the transition in the Jiu Valley region, citizens gave the highest priority to Energy Poverty Reduction Strategies, followed in priority order by: Professional Conversion and Training, Resource and Biodiversity Conservation, Investment in Green Infrastructure, Community Participation and Consultation, Education and Research in Clean Energy, Public-Private Collaboration, and Communication and Public Education.

After analysing the 10 questions, for which citizens had to choose one of the response options, the following aspects were noted:

- The majority of respondent citizens (53%) are *not* aware of the need to reduce coal dependency for environmental protection;
- The majority of respondents (52%) are *not sure* whether there will be a positive impact on the quality of life in the Jiu Valley area following the transition to cleaner energy sources;

- The majority of respondents (71%) believe that the high energy costs could lead to energy poverty in the community;
- The vast majority (85%) consider that support measures are needed to ensure access to energy for those with low incomes;
- The vast majority (95%) think that the local community should be consulted when making economic and energy transition decisions;
- The vast majority of respondents (94%) believe that collaboration between the private sector, non-governmental organizations, and the community can play a significant role in this transition;
- The majority (52%) answered were certain that they are willing to support long-term investment programs in the development of sustainable alternative industries, even if the results may take several years to become visible.
- The majority (65%) are sure that investments in research and development of ecological, non-polluting technologies should take priority, even if their benefits may only emerge after a few years.
- Regarding the ideal balance between long-term and immediate measures to ensure a fair and efficient transition, the responses were more diverse: 40% think that *the majority of measures should be long-term*, 30% - *a balanced combination of long-term and immediate measures*, 11% - *depends on the situation*, 10% - *the majority of measures should be immediate and short-term*, and 9% - *not sure*.
- When asked to choose the economic sector in which they foresee sustainable economic diversification in the future in the Jiu Valley, 22% of citizens selected *renewable energy*, 20% - *tourism*, 16% - *valorisation of traditions and local products (the traditions of the Momârlani, mining, shepherding, and products: wild berries, animal products – milk, hides, wool, meat, game and fishing products)*, 11% - *timber exploitation and valorisation*, 9% - *health*, 8% - *research-development-innovation*, 8% - *construction*, and 6% - *transport*.

Even though the Jiu Valley is in the stage of accessing the Just Transition Fund (JTF), information events about what just transition means, energy poverty, vulnerable consumers, etc., and involving citizens in the decision-making process in the great transition process, must continue in the same manner for the phenomenon to be known and understood by the majority of citizens.

Identifying the priority areas for intervention to mitigate the negative effects related to the transition can only be achieved if the transition is fully understood and its effects are recognised by all categories of stakeholders. In this regard, one of the main problems in the Jiu Valley is the weak involvement of local authorities in the just transition process.

SWOT analysis and final recommendations

Strengths	Weaknesses
<ul style="list-style-type: none"> - Ethnic, cultural, and religious diversity, manifested through long-lasting harmony - High interest in electric public transportation (with electric buses) - The existence of the Jiu Valley Development/"Revitalisation" Strategy - The international achievements and openness of the University of Petroșani, along with the high-performance standards of INSEMEX, provide a superior competitive advantage - Short distances between some urban administrative-territorial units (UATs) can lead to easier associations and fund access - High mountainous relief offering the potential for the development of sustainable economic activities, especially tourism - Important national and natural parks with high, untapped tourism potential - The business environment has experienced greater diversification - Agriculture specific to the area and animal husbandry - The traditions of the Momârlani 	<ul style="list-style-type: none"> - Sharp decline in the population - Accentuated trend of population ageing - Significant disparities in the standard of living - Poor infrastructure, making access to the area difficult - Resorts have developed chaotically, making it very difficult to bring them to at least a decent level that could generate substantial revenue for the local communities in the Jiu Valley (except for Straja) - Old cable transport installations, posing security issues (except for Straja) - Deforestation - Lack of basic utilities for all households – thermal energy, gas, and communications (internet) - Lack of adequate rail and road infrastructure to attract tourism/investments
Opportunities	Threads
<ul style="list-style-type: none"> - EU funds prioritised for the Jiu Valley to support the transition from coal - Creation of national programmes that support families in increasing birth rates - Increase in funds allocated to disadvantaged population groups - Development of sustainable economic activities specific to different landforms, e.g., mountain tourism - Promotion of the region's unique natural features - Increasing the role and visibility of the academic environment - Conversion of industrial spaces into business centres/incubators 	<ul style="list-style-type: none"> - Depopulation of certain areas and localities due to international migration or migration to more developed regions - Deepening economic disparities between the poor population and the affluent population - Resistance to change among commuters, preferring personal cars over public transport - Climate change could produce dangerous weather phenomena with a strongly negative impact on communities - Unsustainable exploitation of natural resources, especially forests

<ul style="list-style-type: none"> - Development of energy efficiency programmes for public and residential buildings - The existence of a district heating infrastructure that can be rehabilitated and efficiently utilised through a semi-centralised supply of thermal energy to households in at least 4 out of 6 urban centres, to reduce pollution from numerous small individual sources - The majority of individual houses use wood and coal stoves/boilers - Fertilisation of former tailings and closed slag deposits for energy crops or other crops suited to the climate 	<ul style="list-style-type: none"> - Lack of funds for homeowners to undertake energy rehabilitation of their homes - Inability to support the co-financing share required to access any type of funding sources - Decreasing attractiveness to investors due to the lack of a skilled workforce - Inability to attract investors
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Main recommendations based on SWOT analysis

- Diversifying the economy of a mono-industrial area based on coal exploitation and utilisation, such as the Jiu Valley, through tourism, education, research, and vocational training.
- Funding initiatives in tourism, education, research, and vocational training.
- Increasing the involvement of public authorities in supporting public consultation and the energy transition process.
- Creating a dedicated legal framework for energy communities in Romania, as although the European RED II (Renewable Energy Directive) has been transposed into legislation, it has unfortunately not been adapted.
- Counteracting the incidence of energy poverty through education and financial support for measures aimed at thermal modernisation of residential buildings, energy savings, and replacing inefficient heating sources.
- Developing and increasing entrepreneurship for activities that capitalise on local traditions and products (the traditions of the Momârlani, mining, shepherding, and products such as forest fruits, animal products – milk, hides, wool, meat, game, and fish products).
- Promoting and educating citizens about the content of the plan for the coal transition and all related activities (retraining, new investments, etc.).
- For the sustainable development of tourism, establishing the Jiu Valley Tourist Destination Management Organisation.

7. Activities and findings in Asturias region, Spain

In accordance with the project assumptions and the methodology described in more detail in the WP3 planning document, FAEN carried out four workshops to gather information within the co-creation activities (three initial workshops with citizens in Tineo, Ciaño and Moreda, and a final fourth workshop as a “second citizens workshop” in San Martin del Rey Aurelio), along with a series of interviews and questionnaires with the citizens of the region. After consultations with representatives of the regional authorities, the town of San Martin del Rey Aurelio, in the valley of Nalón, was chosen to host the second citizens’ workshop. This town and the entire basin and valley are highly representative of coal mining areas in Asturias.

Second workshop with citizens

Organizer(s): FAEN

Location: Aula Cultural, El Entrego, San Martin del Rey Aurelio, Asturias

Date, time, duration: 10th July 2024, 17:30, 2 hours

No. and profile of attendees: 16 citizens



Figure 7: 2nd Workshop with citizens from the Nalón coal basin region

Workshop objectives

The main objective of the 2nd workshop with citizens was to translate the outcomes of the 1st series of workshops (in Tineo, Ciaño and Moreda), interviews and surveys (citizens’ needs, concerns, visions, ideas for projects and actions in their communities

JUSTICE

and local areas) into concrete proposals that could support the development of policy recommendations, energy poverty alleviation plans, and project pipelines.

Thus, the main idea of this second workshop with citizens was to try to derive 3-4 ideas from the conclusions of the previous set of workshops, together with the results of the surveys and interviews, in order to elaborate a potential project, all through the co-creation session.

Co-creation methodology applied

The co-creation session was conducted in two steps; first, the participants were divided into three groups. Each group was given a list of seven topics based on the results of the previously carried out workshops, surveys and interviews.

Each group then had five minutes to discuss the list and chose one topic. It was explained that once the topic had been chosen, they would have 10 minutes to develop a project idea on this topic using a flipchart and A3 paper.

The project idea had to contain the following sections: a title, 1-2 lines explaining the objective(s); 3-4 actions to achieve the objective, main partners or entities to be involved, a place or places where the actions could be carried out, and the approximate amount of money they thought would be needed.

When the time was up, each team had 5 minutes to explain their idea. Each team then had to move to another team's flipchart to review, suggest and add to the other team's ideas within 10 minutes, and then rotate back to another flipchart so that the three flipcharts were completed by the three teams.

Afterwards, each team was given 10 minutes to analyse their initial flipchart and, based on the suggestions from all teams, prepare a final project idea to present to everyone.

Preliminary list of topics: 1) how to change the existing narrative among young people, 2) dynamising the local economy, 3) local technical and administrative support for project preparation for funding calls and their implementation, 4) reskilling of (ex-)workers, 5) local action groups to identify and help people at risk of poverty, 6) shared or most sustainable mobility among the "mancomunidad", 7) local energy communities.

What went well and what did not

In general, the co-creation workshop went quite well, with each attendee actively participating and proposing ideas to the groups.

The selected topics and elaborated project ideas by the three groups were as follows: Group 1) local action groups to identify and help people in risk of poverty; Group 2) how to change the existing narrative in young people; and Group 3) local energy communities.

Citizens' survey

Number of collected surveys: 53

Survey objectives

The purpose of this survey, in addition to gauging the attendees' opinions on the workshops' performance, was twofold: firstly, to try to understand how close citizens are to the implications and relevance of the decarbonisation process and the green transition, and secondly, to try to better understand their main worries and concerns about the transition and how they envisage addressing these challenges to overcome them and create a new and better life in their communities and municipalities.

Survey questions:

The same questionnaire was used for all post-workshop surveys, with modified headers including date and venue information.

The questions used in the survey were:

1. Do you find this workshop useful? (*Likert scale; from 1 not useful to 5 very useful*)
2. Do you agree with the following statements? (*Likert scale; from 1 strongly disagree to 5 strongly agree*)
 - I feel better informed about what a just transition is,
 - I have a better understanding of what is being done in Asturias to ensure that the energy transition is just,
 - I feel that I can influence how Asturias implements the energy transition,
3. How important to you are the following aspects of the energy transition? *Sort in order of importance (1 being most important, 6 being least important):*
 - Ensuring that the new green economy provides opportunities for all.
 - Supporting workers to gain new skills and adapt to the new labour market.
 - Implementing social policies that support families during the transition.
 - Ensuring that the transition does not endanger access to energy (domestic, industries).
 - Ensuring efficient solutions to replace old services (e.g. more and better public transport).
 - Helping citizens produce their own green energy.
4. What topic/challenge/need would you like to see discussed in the second workshop? (*We include some topics as examples, cross out those you do not consider, add new ones*)

i. Training and reskilling ex-workers	vi. ...
ii. Measures aimed to support households	vii. ...
iii. Energy poverty	viii. ...
iv. Efficient mobility	ix. ...
v. Local energy communities	x. ...

Survey methodology

The questionnaires were distributed before the start of each workshop and their purpose was explained during the workshops. An essential part of the workshops was dedicated to the joint analysis of ideas for new projects or actions to be co-created, and we tried to motivate the people to share their ideas, topics or concerns, and in addition to collecting this information during the workshop, they were invited to include and write these ideas in the surveys.

The survey contained three types of questions, two of which were based on the Likert scale, the third was prepared to prioritise the answers previously suggested, and the last provided an open space to propose and collect ideas, topics or concerns.

The surveys were collected at the end of each workshop and processed by FAEN to draw the main conclusions. FAEN used an Excel file to collect and process all the responses in different tables. The results are presented in aggregate, but also broken down by location.

What went well and what did not

The information gathered through the surveys is useful, as it is relevant and comprehensive, but the surveys may not have been well received by people, as only 35,33% of the participants completed the questionnaires.

Citizens' interviews

Number of interviews: 12

Interview objectives

The objective and rationale of the questionnaire were as follows: first, it tried to find out how close citizens are to the green transition and how much they support it. Then the questionnaire tried to find out if citizens would like to participate in the process and if so, how open they thought the process was to them, and finally to analyse how they would like to contribute and what ideas they would like to propose. The questionnaire also tried to analyse in depth the direct impact on people of losing their jobs or creating situations of energy poverty in their immediate family and friends' circles.

Interview questions

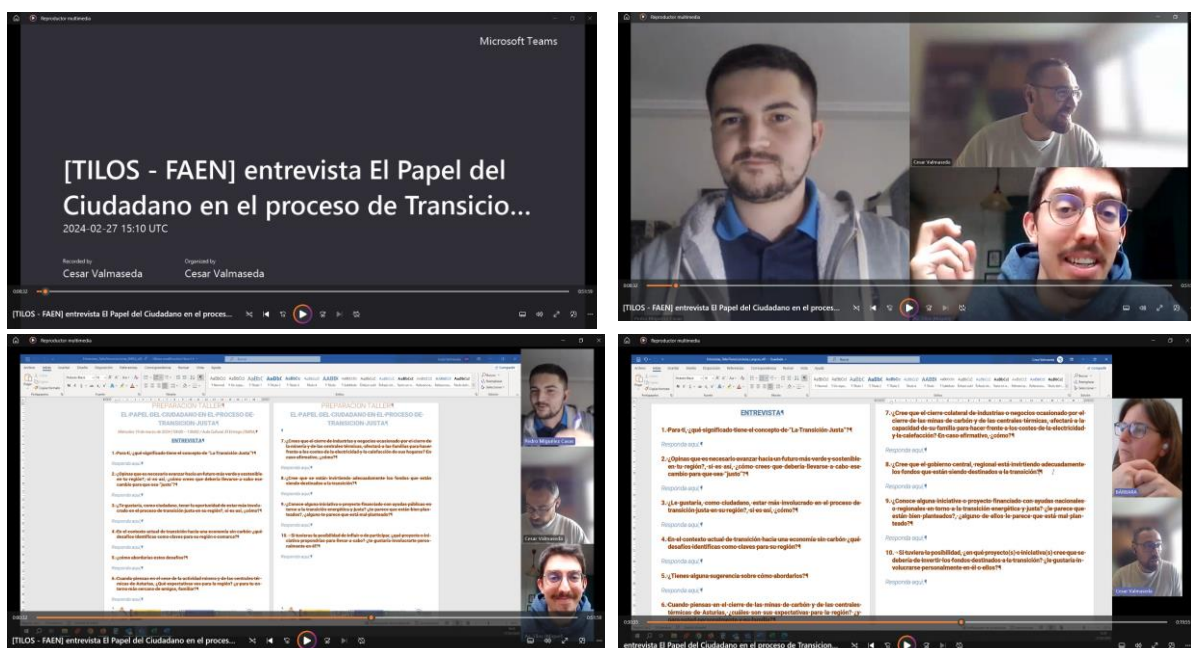
The same questionnaire was used for all interviews. The questions used in the interviews were:

1. What does the concept of "The Just Transition" mean to you?
2. Do you think it is necessary for the society in your region to move towards a greener and more sustainable future? If so, how do you think this transition should be carried out in order to be "just"?

3. As a citizen, would you like to be more involved in the just transition process in your region? If so, how?
4. In the current context of the transition towards a carbon-free economy, what do you see as the key challenges for your region?
5. How would you address these challenges?
6. When you think about the closure of mining activity and thermal power plants in Asturias, what expectations do you have for the region? And for your closest circle of friends and family?
7. Do you think that the closure of industries and businesses caused by the cessation of mining and thermal power plants will affect families in meeting the cost of electricity and heating their homes? If yes, how?
8. Are you aware of any initiative that is being carried out in relation to “energy poverty” to help families meet the cost of electricity and heating?
9. If you have the opportunity to participate, what initiative would you propose to try to reduce “energy poverty” in your area?
10. Do you know of any publicly funded initiative or project related to energy and just transition? Do you think they are well presented? Do you think they are poorly presented?
11. If you had the opportunity to influence or participate, what project or initiative would you propose? Would you like to get personally involved?

Interview methodology

All interviews were envisaged to be conducted individually. In one exceptional case, two people were interviewed at the same time due to time constraints and similar profiles. Five interviews were conducted by videoconference, three by telephone and four in person at the FAEN and workshops premises, with all interviews lasting approximately 60 minutes. Twelve citizen interviews were reported.



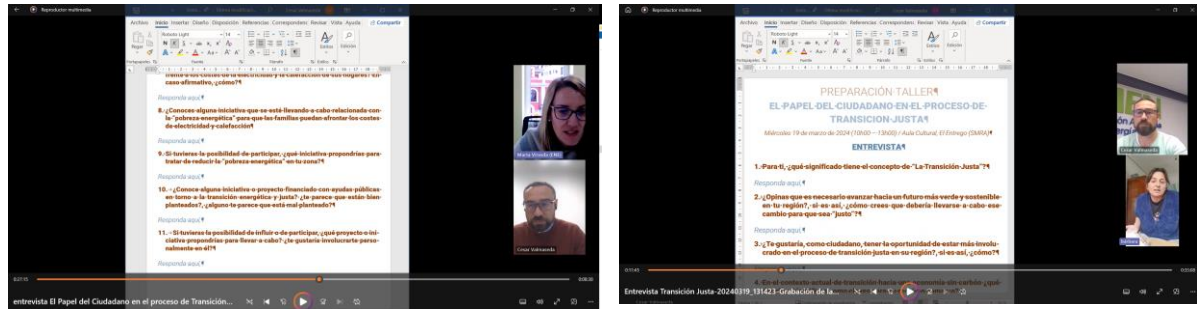


Figure 8: Conducting interviews via video conferencing

What went well and what did not

People were relaxed and open to talk, but when the conversation turned to criticising another actor or previously funded projects or actions, people started to feel slightly uncomfortable. So, people were more relaxed when they contributed with ideas than when they criticised actions or actors, which is good.

People, based on their profiles, young people or entrepreneurs, relatives or professionals in the energy sector, talked about their ideas on how to set up new personal or local projects, or identified the main barriers or difficulties they had encountered, with not too many references to energy poverty or the issue of poverty risk.

Citizens' findings and recommendations

Citizens' survey findings

In total, 53 surveys have been collected and analysed.

	Number of surveys and answers			
	all	Tineo	Aller	Langreo
Surveys	53	22	15	16
Do you consider this workshop useful to you? <i>(Likert scale; from 1 not useful to 5 very useful)</i>	50	21	14	15
Do you agree with the following statements? <i>(Likert scale; from 1 totally disagree to 5 totally agree)</i>				
• I feel better informed about what a just transition is	50	21	14	15
• I better understand what is being done in Asturias to ensure that the energy transition is fair	50	21	14	15
• I perceive that I can influence how Asturias implements the energy transition	50	21	14	15
How important are the following aspects of the energy transition to you? <i>Sort by preference (1 being most important, 6 being least important):</i>				
• Ensure that the new green economy has opportunities for all	45	20	13	12
• Support workers to learn new skills and adapt to the new labour market	45	20	13	12
• Implement social policies that support families during the transition	45	20	13	12
• Ensure that the transition does not endanger access to energy (domestic, industries)	45	20	13	12
• Ensure efficient solutions to replace old services (e.g. more and better public transport)	45	20	13	12
• Help citizens produce their own green energy	45	20	13	12

JORNADA DE TRABAJO
EL PAPEL DEL CIUDADANO EN EL PROCESO DE TRANSICIÓN JUSTA
Miércoles 22 de noviembre de 2023 / Casa de la Cultura, Tineo

ENCUESTA

¿Le ha resultado útil esta jornada?
(siendo 1 muy poco útil, siendo 5 muy útil)

1	2	3	4	5
			X	

¿Estás de acuerdo con las siguientes afirmaciones?
(desde 1 si estás totalmente en desacuerdo a 5 si estás totalmente de acuerdo)

1	2	3	4	5
				X

Me siento mejor informado sobre lo que es una transición justa.

			X	
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Entiendo mejor lo que se está haciendo en Asturias para que la transición energética sea justa.

			X	
--	--	--	---	--

Percebo que puedo influir en cómo Asturias implementa la transición energética.

¿Qué importancia tienen para usted los siguientes aspectos de la transición energética?
Ordene por preferencia (siendo 1 el más importante, siendo 6 el menos importante)

3	Garantizar que la nueva economía verde tenga oportunidades para todos.
4	Apoyar a los trabajadores para que aprendan nuevas habilidades y se adapten al nuevo mercado laboral.
4	Implementar políticas sociales que apoyen a las familias durante la transición.
5	Garantizar que la transición no ponga en peligro el acceso a la energía (doméstica, industrias).
6	Garantizar soluciones eficientes para reemplazar servicios antiguos (por ejemplo, más y mejor transporte público).
1	Ayudar a los ciudadanos a producir su propia energía verde.

JORNADA DE TRABAJO
EL PAPEL DEL CIUDADANO EN EL PROCESO DE TRANSICIÓN JUSTA
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ENCUESTA

¿Qué tema/desafío/necesidad le gustaría que se discutiera en el segundo taller?
Incluímos algunos temas a modo de ejemplo, tacha los que no consideres, añade otros nuevos:

1. Recapitación y apoyo a los trabajadores
2. Medidas dirigidas a los hogares
3. Pobreza energética
4. Transporte eficiente
- X 5. Comunidades energéticas locales
6. ELIMINAR TRABAS ADMINISTRATIVAS
7. FACILITAR APOYO A COMUNIDADES ENERGÉTICAS
8. IMPLICACIÓN DE LAS DIFERENTES CONSEJERÍAS
- 9.
- 10.

¡Gracias!

Figure 9: An example of a filled-in questionnaire

When analysing the information gathered, the main results, as shown below, indicate that the workshops were considered useful by the participants, who felt well informed about the just transition process in Asturias and also about the actions being taken to ensure that the energy transition is just. However, when asked how their opinions were taken into account, their answers went down. This reaction shows that they feel that their opinions are not being considered and that they do not have too much influence on the process. There are no significant differences between locations.

	Average answers			
	all	Tineo	Aller	Langreo
Do you consider this workshop useful to you? <i>(Likert scale; from 1 not useful to 5 very useful)</i>	4,0	4,1	3,9	3,8
Do you agree with the following statements? <i>(Likert scale; from 1 totally disagree to 5 totally agree)</i>				
• I feel better informed about what a just transition is	3,9	4,1	3,9	3,7
• I better understand what is being done in Asturias to ensure that the energy transition is fair	3,8	4,0	3,6	3,9
• I perceive that I can influence how Asturias implements the energy transition	3,1	3,3	3,1	2,9

Figure 10: Survey results on citizens' feelings about the Just Transition process

Moving on to the third question, "How relevant are the following statements?", the heatmap below clearly shows a similar pattern across all locations.

	Answers						Answers						Answers						Answers											
	all						Tineo						Aller						Langreo											
How important are the following aspects of the energy transition to you?	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6						
Sort by preference (1 being most important, 6 being least important):																														
· Ensure that the new green economy has opportunities for all	19	15	7	6	2	1	5	4	4	5	2	1	8	3	2	1	1	1	1	1	1	1	1	1	6	4	2	1	1	1
· Support workers to learn new skills and adapt to the new labour market	10	18	9	5	2	1	7	8	3	2	1	1	2	6	2	2	1	1	1	1	1	1	1	1	1	4	4	1	1	1
· Implement social policies that support families during the transition	2	5	11	11	8	8	2	1	7	5	2	3	3	4	3	3	1	1	1	1	1	1	1	1	1	4	2	3	2	2
· Ensure that the transition does not endanger access to energy (domestic, industries)	7	6	8	9	8	7	3	4	3	6	3	1	2	4	1	2	2	2	2	2	2	2	2	2	2	2	1	2	3	2
· Ensure efficient solutions to replace old services (e.g. more and better public transport)	4	1	12	#	1	2	2	2	1	9	1	1	1	5	1	3	1	1	1	1	1	1	1	1	2	6	1	1	1	1
· Help citizens produce their own green energy	3	3	3	2	#	20	1	2	1	1	5	10	1	2	1	6	3	1	1	1	1	1	1	1	3	7	1	1	1	1

The preferred order is therefore:

1. Ensure that the new green economy provides opportunities for all.
2. Support workers to acquire new skills and adapt to the new labour market.
3. Implement social policies that support families through the transition.
4. Ensure that the transition does not endanger access to energy (domestic, industrial).
5. Ensure efficient solutions to replace old services (e.g. more and better public transport).
6. Help citizens produce their own green energy.

Finally, a large number of new ideas for actions, projects or recommendations were collected through the surveys, some of which are summarised in the figure below.

¿Qué tema/desafío/necesidad le gustaría que se discutiera en el segundo taller?			
Examples	Tineo	Aller	Langreo
1. Recapitación y apoyo a los trabajadores	Mejorar red de infraestructuras publicas de comunicaciones para movilidad de personas y transporte	Generar nuevas oportunidades de empleo, de calidad, en el marco de TJ	reducir gasto energetico en edificios publicos
2. Medidas dirigidas a los hogares	Reducir la complejidad administrativa en la gestión de ayudas	incorporacion social a la transicion	gestion espacios naturales (TMO)
3. Pobreza energética	Apoyar a las comunidades energeticas	reto demografico	ayudas vinculadas al mantenimiento de trabajo
4. Transporte eficiente	Mejorar la oferta y calidad formativa para los jovenes	motivación tangible de futuro: nuevas profesiones	el impacto de las redes sociales en aproximar las oportunidades de la energia verde
5. Comunidades energéticas locales	Mejorar la oferta y calidad formativa para los jovenes	recursos laborales que generan las nuevas energias renovables	generacion y difusion de iniciativas de emprendimiento o aprendizaje del emprendimiento relacionado con la transicion dirigido a los jovenes
6.	implicación de las diferentes consejerias	Generar nuevas oportunidades de empleo en el marco de TJ	reforzar el desarrollo economico como involucrar a las empresas en la transicion justa
7.	Generar nuevas oportunidades de empleo, de calidad, en el marco de TJ	facilidad para el acceso	
8.	la generación de energía como actividad económica a efectos desde una micropyme	influencia de la "silver economy" en la economía verde	cumplimiento acuerdos de las empresas electricas
9.	seguridad energetica (garantizar suministro fiable)	emprendimiento, espacios de desarrollo tecnologico-industrial	Generar nuevas oportunidades de empleo, de calidad, en el marco de TJ
10.	estandarización funcionamiento puntos de carga desarrollo de hidrogeno en pymes		como agilizar la ejecucion de los proyectos
	iniciativa de las administraciones en el uso de energias limpias		concienciar a la sociedad del cambio de modelo
	Apoyo tecnico solicitud subvenciones para la administracion publica, empresas e individual		evaluar los canales de comunicación con los vecinos de zonas afectadas
	identificación de agentes concretos para proyectos propuestos en participación publica		adaptarse al lenguaje de la juventud para mejorar comunicación
	exigir a las empresas que cierren otros proyectos para recuperar proyectos		regeneracion barrios industriales
			procesos participativos que impliquen a personas jovenes
			apoyo al autoempleo/emprendedores
			Reducir la complejidad administrativa en la gestión de ayudas
			tener convocatorias abiertas permanentemente, no de año en año
			tener convocatorias abiertas permanentemente, no de año en año

Figure 11: Ideas, actions, projects and policy recommendations collected through the surveys

Interviews' findings

In general, people are not familiar with the specific just transition mechanism, but fully understood and supported the idea behind the concept of a just transition. Most of them considered a project funded by former mining funds in the region unlikely, and therefore suggested new ideas to avoid past mistakes or underperformances.

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The main ideas can be summarised in two; first, it is needed to collaborate to change the popular and local (negative and pessimistic) narrative from “we are suffering from an unfair and unjust situation” to “we have plenty of opportunities and resources to build what we want”. And second, to fully support young people and entrepreneurs.

Summary of the main findings and recommendations from the workshops, surveys and interviews

In most cases, the whole community in these areas is affected by the closure of mining activities and the phasing-out of thermal power plants. **There is an established “narrative” in the region** that the transition is not as just and fair as it should be. Some of the coal-fired thermal power plants have closed abruptly, without proper and fair plans to relocate the workers. Also, due to unequal retirement conditions, former workers from the public entity in charge of the activities and assets of the coal-fired power plants in Asturias are much more favoured than the former workers from other entities.

Despite the efforts of **local and regional authorities (LRAs)** to implement action plans and programmes to promote the **development of new businesses** or to improve **municipal services** with the support of the national Just Transition Institute (ITJ), this narrative not only persists, but also permeates young people, making the situation even more alarming, especially as most of these municipalities are affected by a continuing demographic drain.

In fact, the three former coal basins (the Caudal and Nalon valleys, and the south-west region) can also be considered as regional areas affected by the demographic challenge, characterised by an older population, fewer opportunities and leaving of young people. Specific measures should therefore be taken to create opportunities that motivate young people to stay in these areas.

Despite knowledge of the problems, project ideas and funding opportunities, **local authorities sometimes lack the resources and manpower** to prepare projects, apply for funding or implement actions. Therefore, a support structure, similar to the idea behind the concept of one-stop-shops can help a municipality or an association of municipalities. In Spain today, there are “mancomunidades” (English: municipal association), which are associations of municipalities voluntarily established by a number of municipalities with the aim of carrying out joint projects or providing joint services. A “mancomunidad” is one of the local entities defined for the purposes of local government, to which these municipalities may voluntarily delegate some of their functions and powers.

Another important aspect that has been highlighted is the **population at risk of poverty or social exclusion**. National and regional statistics show that these levels are increasing in Spain, Asturias and the three coal basins. The elderly people, the

unemployed and single-parent families are the groups most affected. It has also been pointed out that the situation is probably more dramatic than the statistics show due to “hidden poverty”. Indicators for analysing this issue are sometimes difficult to identify, or stem from the underlying sense of shame. In general, action plans based mainly on subsidies, are not considered to be well targeted. It is argued that **local communities**, because of their proximity to people, could probably be a good tool for identifying and eradicating hidden poverty, but also for defining more targeted and better implemented programmes to alleviate the situation of the population living in poverty.

SWOT analysis and final recommendations

Based on the outcomes, findings and issues highlighted by the citizens during the workshops, surveys and interviews, and with the support of the policy maker (Regional DG ENER), the national Just Transition Institute (ITJ) and some local authorities (Langreo, Mieres, Ibias and Tineo), a SWOT analysis was carried out, focusing on “How to decarbonise the region?” The main results are summarised in the following table.

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Uni-province region (NUT2=NUT3) • Well-connected ecosystems (social agents, policy makers, business associations, academia) • Economy based on strong and diversified economic sectors: i.e.: 1-primary (fishing, livestock, agriculture); 2-industry (electro-intensive, steel, chemicals, cement, paper); 3-tourism • Strong social actors • Good tradition, culture and background for energy and industrial projects, facilities • 2 sea ports, 1 airport 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Establishing the culture of subsidies • Previous experience with former European miner’s funds. • Communication infrastructure (roads, especially in the south-west region) • Older population • Population concentrated in the centre of the region, while the wings are depopulated • Low level of citizen engagement in decision making process. • Policy makers focus on flagship projects and key players
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Funding opportunities (Just Transition Funds, regional and national funds, National Recovery and Resilience Plan (NRRP)) • Support, alignment and good collaboration with public institutions like LRAs, ITJ, FAEN. 	<p style="text-align: center;">Threads</p> <ul style="list-style-type: none"> • The demographic challenge • Demotivation of young people • Existence of a negative and well “entrenched” popular narrative • Impact of climate change • Increasing numbers of people at risk of poverty

<ul style="list-style-type: none"> • Closure of mining activities and phasing out of TPPs, forcing a change in the regional energy model • Relevant industrial decarbonisation and renewable energy generation and storage project • Existence of Pol to be allocated • Attractive region thanks to local weather conditions and natural ecosystems • Popular culture for local communities in rural areas 	<ul style="list-style-type: none"> • Inappropriate growth (too much, too fast, without proper regulation) of tourism activity • Inappropriate behaviour of political parties, polarising positions, mobilisation of associations and citizens against “proposed projects” without justified assessment
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Following the SWOT analysis and the previous findings and recommendations from the citizens workshops, surveys and interviews, a list of topics was identified. These topics are presented as a summary of potential actions, proposed by the citizens affected by the coal transition in Asturias, which can be structured and implemented as local actions and can reduce the public perceptions in coal regions of demotivation, lack of participation in the decision-making cycle and, above all, lack of justice in the green transition process.

- Change the existing **popular (negative) narrative** of “green” and “just” transition in Asturias and progress in the three coal regions. In particular, mitigate the impact of this narrative on youth and the most vulnerable groups.
- Reveal the **hidden poverty** in **local communities** and local action groups. Rethinking indicators and measures. A new action plan aimed at reducing the risk of exclusion and ensuring that no-one is left behind.
- Establish multi-level governance and **monitoring approaches and structures, such as a Regional Just Transition Observatory**, to identify and address structural malfunctioning on key topics (energy poverty, EE first principle, energy security).
- Support structures at the “mancomunidad” level, acting as **One-stop-shops**, to help local authorities to design, prepare and implement well-coordinated actions leading to a green-digital-climate-just- transition.

8. Summary of recommendations and next steps

We got valuable insights about the opinions of citizens from the JUSTEM pilot regions in Bulgaria, Croatia, Greece, Poland, Romania, and Spain by approaching many individuals through workshops, interviews, and surveys. Next, we evaluated and further elaborated their suggestions based on our SWOT analysis. In that way we came up with a number of **policy recommendations** for the just transition (JT) of the pilot regions. The common recommendations are summarized below.

Citizens need to be better **informed** about the JT process and their potential role in it to enable them to participate in the decision-making processes and prepare for the future. In addition to information, public authorities need to offer **advice** about available opportunities (e.g. about jobs, reskilling, energy cost reduction), including establishments of **one-stop-shops** to support their initiatives. In this relation, it is important to encourage people's **entrepreneurship**.

Citizens must be more actively **involved in the policy design and monitoring** of implementation of policies and projects. Public bodies need to make sure that their representatives are involved in public consultations and working groups for new policies. Additionally, a regional JT Observatory may be established with their participation.

Education aligned with the expected needs of the economy is necessary to prepare citizens to face the new challenges. Similarly, it is important to offer adequate **reskilling** opportunities for the workers employed in coal-related fields. Additionally, **research** is seen as a promising field for employment, potentially opening new opportunities.

Energy poverty need to be tackled mainly through measures supporting energy renovation of the building stock, but also through efficient and clean transport. Governments need to upscale supportive frameworks and expand effective mechanisms to protect citizens against the expected increase in energy poverty.

Energy communities need to be promoted as an instrument to combat energy poverty and decarbonize energy production. Other common recommendations include **economy diversification, development of economic zones, and promotion of tourism**.

The next steps are to translate the JT policy recommendations described in this report into the following concrete JUSTEM outputs: **policy briefs** addressing specific policy documents; measures laid down into the regional energy poverty alleviation plans; and **pipelines of JT projects**.

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