



European Commission
Research Programme of the Research Fund for Coal and Steel
Technical Group: TGK1

Web INTERactive management tool for coal Re- gions in transition



WINTER

Deliverable 3.4

Report on the social acceptance and community participation

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Grant Agreement number: 101057228-WINTER-RFCS-2021	

Document Control Page

Deliverable name:	Report on the social acceptance and community participation
Deliverable / Milestone number:	D3.4
Work-Package no and title:	WP3: Socioeconomic and management aspects of coal regions in transition
Work Package Leader:	DMT-THGA
Deliverable:	DMT-THGA
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Due date of deliverable:	31/12/2023
Actual delivery date:	31/12/2023
Language:	English
Dissemination Level ¹ :	PU
Audience:	public
Status:	final

Dissemination level:

PU = Public

PP = Distribution restricted to other programme participants

RE = Distribution restricted to a group specified by the consortium

CO = Confidential, only allowed for members of the consortium

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EXECUTIVE SUMMARY

The present report provides a comprehensive overview of social acceptance of the public, stakeholders and experts and their opinions of and attitudes towards the management of coal regions in transition in Germany, Greece and Poland. This report thus identifies the main challenges and opportunities of respondents' knowledge and support regarding the main transition challenges in each of the regions (Ruhr area, Western Macedonia and Konin area) representing different stages of the transition process (initial stage for Western Macedonia and Konin area and mature stage for Ruhr area). Purpose of this is to assess the societal perceptions and acceptance of the coal transition in these case study regions and compare the results to identify patterns and causes of resistance and how these causes impact regional politics and policy. Within the scope of this project, three groups of respondents are addressed in each of the above-mentioned coal regions under discussion:

1. The broad public and citizens of the discussed regions
2. Stakeholders of the discussed regions
3. Expert stakeholders that are directly and actively involved in the transition process

After a brief introduction on energy transition and the importance of social acceptance, the applied methodology in this report is explained. While briefly evaluating various types of surveys (online, telephone, face-to-face and paper surveys), the online survey method was found to be the right instrument. The surveys were designed and accessible via the survey platform Survio. For this consultation, a general online questionnaire is designed in the three languages.

The public online questionnaire, divided into 14 questions, yields information on:

- Screening of the population
- Knowledge, perception and engagement for transition processes
- Trust in government and responsible institutions
- Expectations for the future

Individually addressed stakeholders, regarding their engagement and activity level in the process, are posed 9 questions equally designed as in the online public survey, in order to allow direct comparison of opinions. Personal expert stakeholder interviews yield more precise information from stakeholder who are actively in charge of the process and complement the questionnaire results.

Data analysis and discussion of results of each of the regions is illustrated in Chapter 3. Firstly, the perceptions of public, stakeholders and expert stakeholders in the Ruhr area (Chapter 3.1), followed by these group respondents' perspectives of Western Macedonia (Chapter 3.2), and subsequently, these groups' social acceptance in the Konin region (Chapter 3.3) is discussed. The last part of this chapter finishes with a comparative representation of public, stakeholders and expert stakeholders in all three regions (Chapter 3.4).

Chapter 4 contains an in-depth analysis of the regions' community involvement in the transition processes. The analysis of community participation in the Ruhr area, Western Macedonia and Konin region gives a general overview of the methods and strategies shown in these regions and handle to transition processes and end up with important lessons learnt.

Overall, stakeholder interests in participating in transition processes in coal regions are diverse, encompassing economic, environmental, social, and policy-driven motives. Effective engagement and collaboration among these stakeholders are crucial for ensuring a successful and sustainable transition that balances the interests of all parties involved.

PROJECT OVERVIEW

SECTOR (COAL /STEEL):	COAL
TECHNICAL GROUP:	TGK 1
GRANT AGREEMENT N°:	101057228-WINTER-RFCS-2021
TITLE:	Web INTERactive management tool for coal Regions in transition
ACRONYM	WINTER
BENEFICIARIES:	<p>Centre for Research and Technology Hellas – CERTH Thessaloniki, Greece</p> <p>DMT-Gesellschaft für Lehre und Bildung mbH, Bochum, Germany</p> <p>Poltegor Instytut Gornictwa Odkrywkowego-Poltegor Institute of Opencast Mining – Poltegor, Wroclaw, Poland</p>
START DATE:	01/07/2022
END DATE:	30/06/2024
PERIOD COVERED BY THIS REPORT:	01/07/2022 to 31/12/2023
MAIN RESULTS:	
ON SCHEDULE (YES /NO):	Yes
MAIN PROBLEMS ENCOUNTERED:	None
CORRECTION – ACTIONS:	None
PUBLICATIONS, PATENTS:	None

1 Introduction

Many citizens lack a direct and personal connection to the energy transition. In order to make this so-called “Energiewende” truly accessible to citizens in practice, the development of science-based participation strategies and concepts is beneficial.

In the last years, the public is more engaged and local communities and other stakeholders need to be included in the transition process. Participation can take many forms and ranges from simple consultations to giving citizens the authority to influence decisions. Participation should be rigorous, high quality, and gender sensitive and have a demonstrable impact on outcomes. Some interventions focus only on transparency that is, working to make information available and accessible. Others focus on ensuring that there are forums and mechanisms to facilitate demands for accountability. Nevertheless, without encouragement and protection for participation, the effectiveness of transparency and accountability to lead to changes in governance will be limited. The aim of this report is to develop transferable methods for engaging communities in transition conversations. Emphasis will be put on how transparent and inclusive communication concerning mine closure can best be conducted and what kind of mistakes have to be avoided.

2 Methodology

The transition away from coal in regions heavily reliant on this industry necessitates a thorough analysis of social acceptance.

A **survey** plays a decisive role in many areas of life: in market research, in political surveys or in scientific surveys. Surveys can be conducted in different forms. The best-known survey types include:

- Online survey (respondents receive a link to the online survey).
- Telephone survey (people are called and interviewed)
- Face-to-face survey (respondents are interviewed individually or in groups, e.g. guided interview or group discussion)
- Paper survey (respondents receive a printed questionnaire)

The advantages and disadvantages of these methods are summarized in Table 1.

Online surveys are efficient and objective. Multiple-choice questions allow collecting data quickly and efficiently. They are simple to answer, easy to process and allow covering a wide range of topics in a short time. They are free from subjective interpretation, which makes scoring easier and more objective. However, Multiple-choice questions limit the answer options to the given options. They do not allow for nuanced answers or additional explanations, which is possible with open-ended questions.

Unlike written surveys, **telephone surveys** allow for direct interaction that can lead to high quality responses and the ability to respond to answers in real time allows interviewers to guide the interview and follow up as needed. However not all target groups are equally accessible by phone, which can lead to sample bias. Beyond this, many people dislike telephone surveys, which can affect the response rate and the representativeness of the results.

Through direct interaction between interviewer and respondent in **Face-to-Face interviews** a high quality of data can be generated. The interviewer can respond to the respondent's reactions, ask follow-up questions and clarify misunderstandings immediately. Body language, facial expressions and gestures of the interviewee can provide additional information and contribute to the interpretation of the answers. However, face-to-face interviews can be expensive and time-consuming as they require a direct encounter. It is difficult to conduct face-to-face surveys on a large scale as they require individual interaction.

Written **Paper surveys**, especially digital ones, are usually less expensive than face-to-face interviews or telephone surveys. Respondents can complete the survey anonymous at a time that is convenient for them, which can lead to higher response rates. However, there is a risk that respondents may not understand the questions correctly or give random answers. Written surveys are often limited to closed questions and offer less room for detailed, open responses. Not all target groups are equally accessible, which can lead to distortions in the results.

Table 1: Comparative view of survey methods.

Type of survey	Pros	Cons
Online	Efficiency	Limitation of answer options
	Objectivity	Risk of guessing
	Anonymity	Design effort
Telephone	Personal contact	Costs
	Speed	Accessibility
	Flexibility	Response rate
Face-to-Face	High quality data	Cost and time
	Adaptivity	Possible biases
	Non-verbal signals	Scalability
Paper	Cost-effectiveness	Less control
	Flexibility	Limited depth
	Anonymity	Representativeness

Within the scope of this project, three groups of respondents should be addressed in each of the coal regions under discussion (Ruhr area - Germany, Western Macedonia - Greece and Konin - Poland):

1. The broad **public** and citizens of the discussed regions
2. **Stakeholders** of the discussed regions
3. **Expert stakeholders** that are directly and actively involved in the transition process

For the first two groups the online survey method was chosen. Online surveys stand out as a valuable tool for comprehensively understanding public sentiment and attitudes towards these transition processes. They offer several distinct advantages in assessing social acceptance within coal regions undergoing transition:

Accessibility and Reach: Online surveys transcend geographical barriers, enabling participation from a wide array of stakeholders, including residents, workers, policymakers, and community groups. This broad reach ensures diverse perspectives are captured.

Cost-Effectiveness: Conducting online surveys is a cost-effective method compared to traditional approaches like face-to-face interviews or focus groups. It reduces expenses related to data collection, transportation, and personnel.

Anonymity and Honesty: Respondents often feel more comfortable expressing their opinions candidly through online surveys due to the anonymity they provide. This anonymity encourages honest responses, leading to a more accurate portrayal of community sentiments.

Timeliness and Efficiency: Online surveys yield rapid results, allowing for quick data collection and analysis. This efficiency is particularly advantageous in dynamic transition processes where timely insights are crucial for decision-making.

Quantifiable Data Analysis: Surveys generate quantitative data that can be easily analyzed using statistical methods. This facilitates the identification of trends, correlations, and patterns in public perceptions regarding transition processes.

The online surveys were designed and accessible via the survey platform **Survio**¹ between 17th of November 2023 and 4th of December 2023 (17 days). Survio is an online platform for creating surveys that is available in 15 languages worldwide. It operates as an online service (SaaS) and also includes tools for distributing and analysing responses to questions in detail. The platform is certified to ISO 27001, which is an internationally recognised standard for information security management systems. When processing and handling personal data, it complies with the German GDPR, the strictest standard in the EU and the storage location for the data from the surveys is the EU. The question-types were single or multiple choice. The multiple-choice answers were limited to a maximum of three choices. In this way, only the points that are most important to the respondent should be ticked.

The three surveys were translated into the languages of the three case study regions by native speakers of the WINTER consortium and implemented as single survey on the online platform survio.

2.1 Public online questionnaire

For this consultation, a general online questionnaire is designed in the three languages (Appendix I Public Online Questionnaire).

The online questionnaire was divided into 14 questions which yield information on:

- Screening of the population
- Knowledge, perception and engagement for transition processes
- Trust in government and responsible institutions
- Expectations for the future

The links for assessing the public questionnaires were distributed via the available social media channels of the WINTER project and the consortiums institutes (CERTH, POLTEGOR, DMT-THGA) and in the best case spread further by the respective followers.

2.2 Stakeholder questionnaire

Within the scope of the task the stakeholders were addressed individually regarding their engagement and activity level in the process. The 9 questions (Appendix II Stakeholder Questionnaire) were equally designed as the public ones in order to allow direct comparison of opinions.

¹ <https://www.survio.com/en/>

2.2.1 Online Stakeholder questionnaire

The Stakeholder Online survey was distributed among all known stakeholders via e-mail. The respondents received an online link. Stakeholders in coal regions have diverse and multifaceted interests in participating in transition processes. These interests stem from various perspectives and motivations, shaping their involvement in the transition.

2.2.2 Expert Stakeholder interviews

Personal interviews were conducted with a few experts. They yield more precise information from stakeholders who are actively in charge of the process. The results are displayed in Appendix IV.

3 Data Analysis and Discussion of Results

3.1 Germany

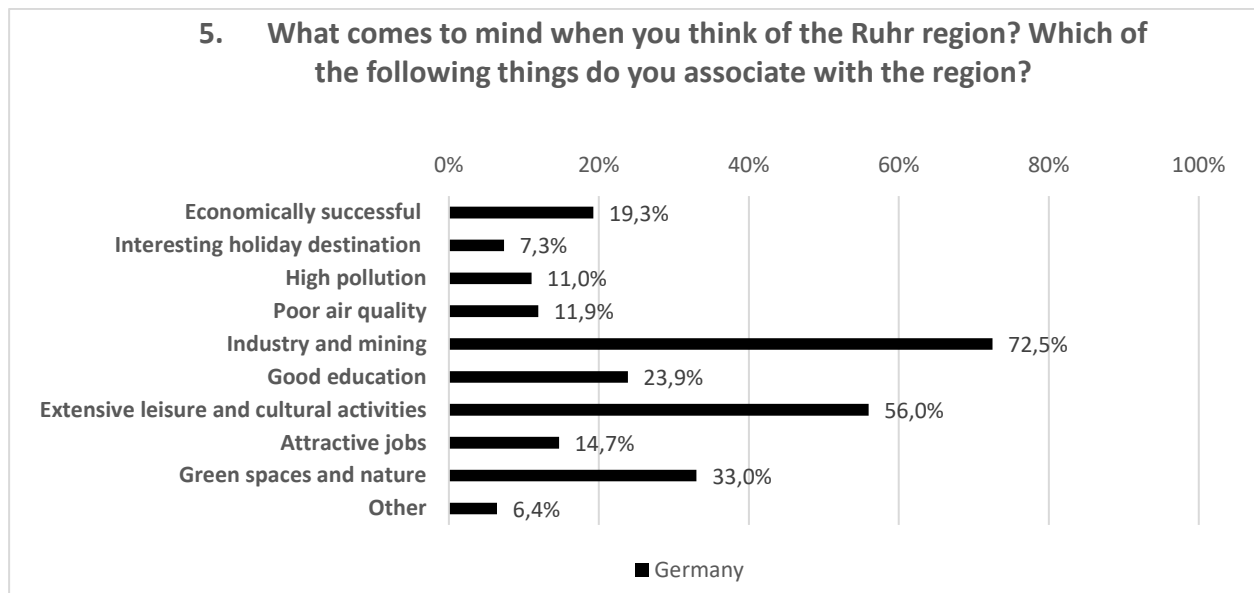
The online survey by the THGA Research Center of Post-Mining (FZN) is conducted to gain knowledge of the community's opinion and experience, in the sense of challenges and opportunities of the transformation process in the region. Of importance also is to acquire an understanding to which extent participants are involved. The results are to support an improvement of future structural change for the Ruhr region and elsewhere.

3.1.1 Public perception

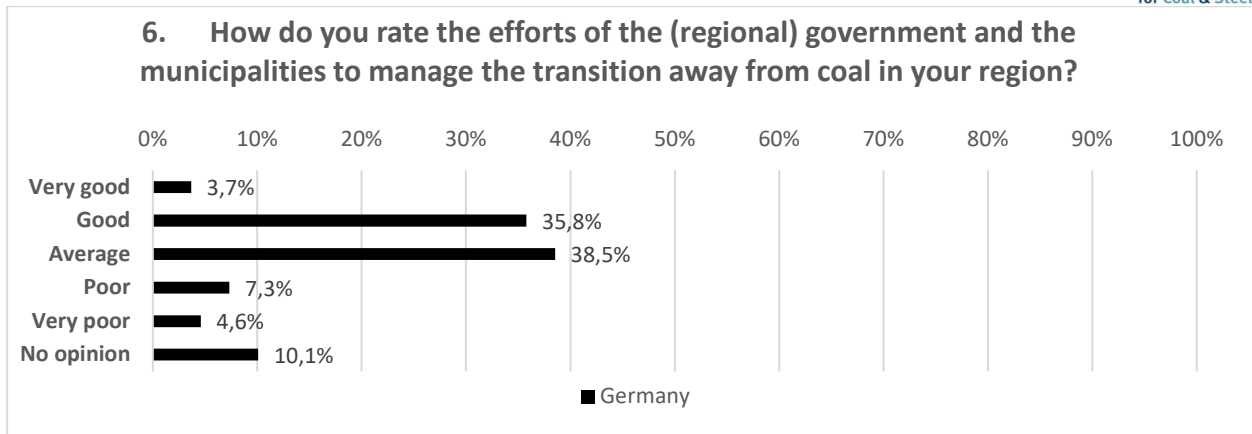
The online survey conducted for German respondents lasted from 17.11.2023 until 30.11. 2023. Out of a total of 123 online visitors, 108 persons participated. The percentage of people who completed the questionnaire was 87,8% and the way of participation was 99,1% via direct link. The majority of respondents (73,1%) completed the questionnaire in 2-5 minutes.

Regarding socio-demographic characteristics of the survey, respondents answer four questions concerning place of residence, gender, age and employment status. For a large majority of respondents (82,6%) place of residence is the Ruhr region, whereas a small group of survey participants (17,4%) come from outside this region. More male (63,3%) than female (36,7%) respondents are part of the survey, with an almost equal division regarding the age groups of 21 to 40 years old (41,28%) and the 41 to 60 years old (43,12%). A minority of the age groups at both ends of this spectrum, the respondents over 60 years (14,68%) and those younger than 20 years (0,92%) are, in comparison, less represented in the survey. The majority of survey participants are in employment (73,4%), or self-employed (7,3%). Other participants covering the categories of current employment status are pensioners (9,2%), civil servants (5,5%), housewife/houseman (1,8%) or pupil (0,9%). Remaining participants (1,8%) are in the category "other".

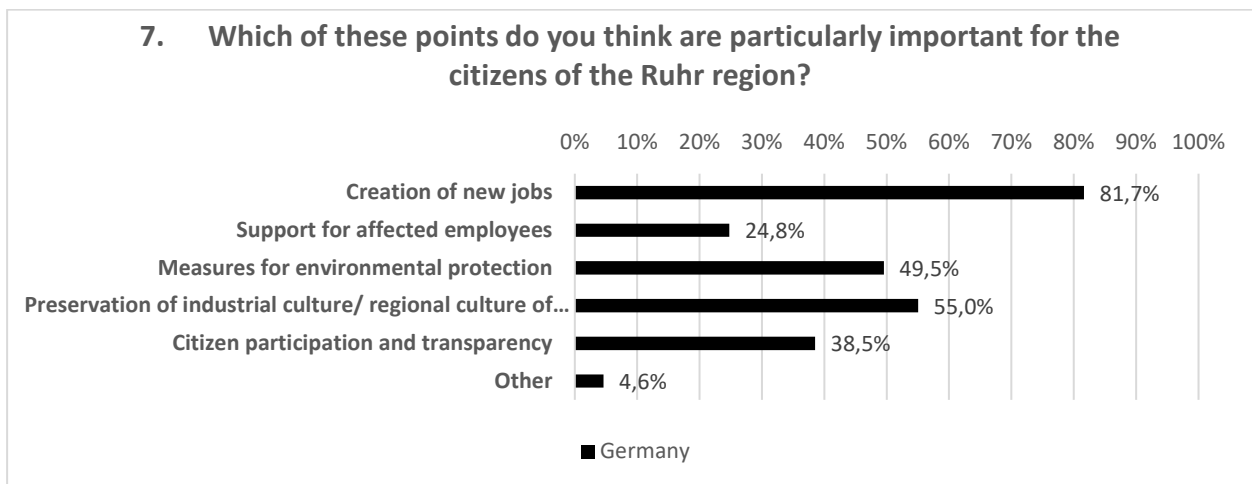
In the remaining questions 5-14, respondents are asked about their perceptions and knowledge on post-mining landscapes, and their engagement level to support the development of post-mining areas.



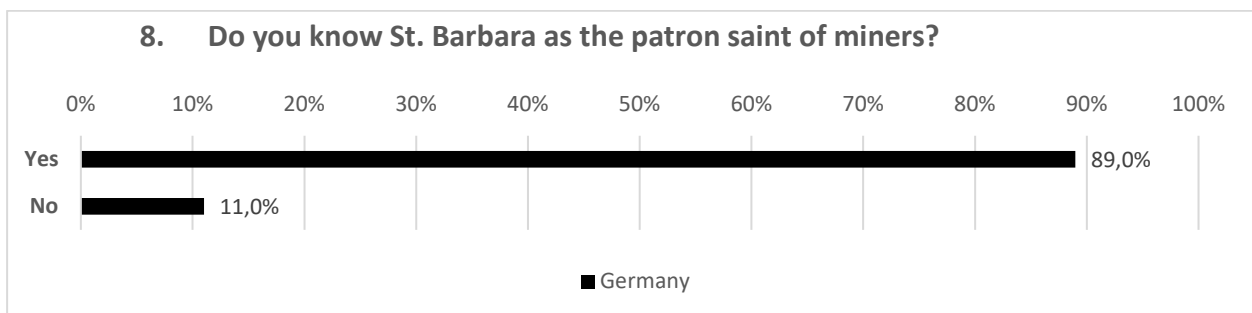
In question 5, regarding the options given what respondents (max. 3 answers; 256% total number of responses) associate with the Ruhr region, the majority identify themselves first and foremost with industry and mining (72,5%), as well as with the vast leisure and cultural activities (56%) the region offers. This is followed by respondents thinking of green spaces and nature (33%), good education (23,9%) and the region being economically successful (19,3%).



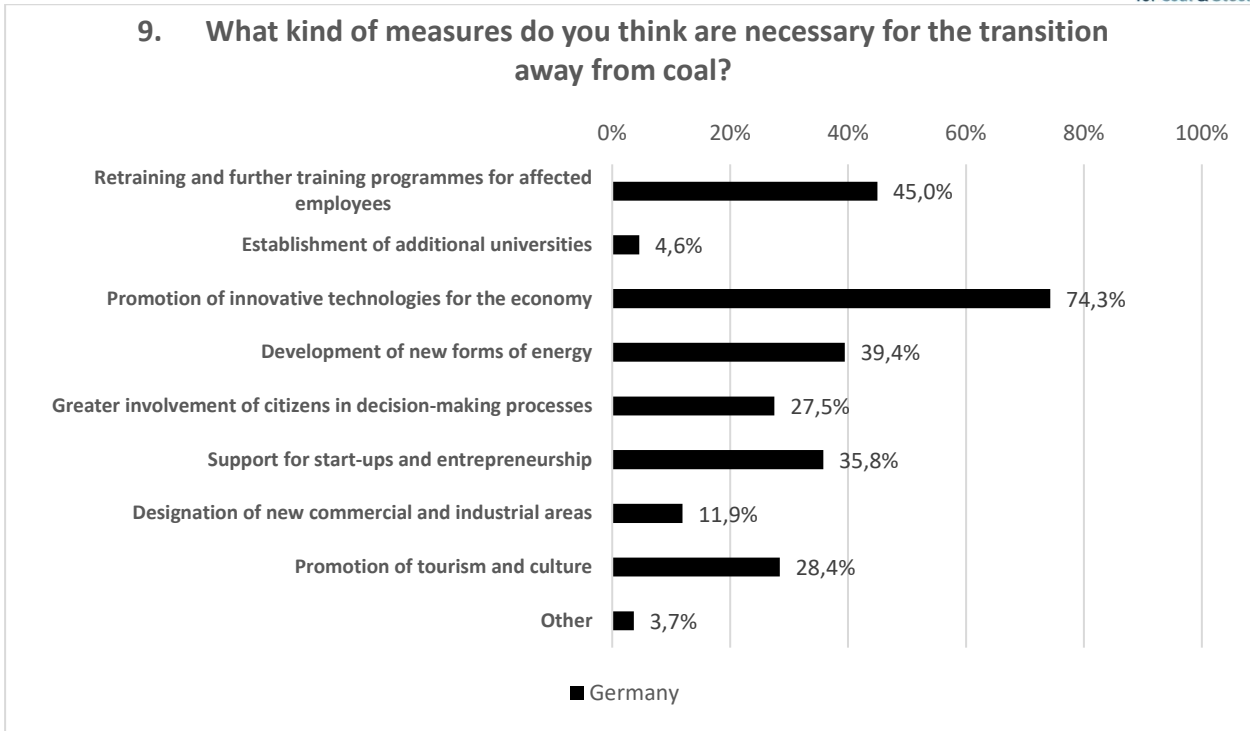
Efforts of the respective (regional) government and municipalities in managing post-mining transition, as posed in question 6, are overall rated positively by German respondents, as a relatively equal division of respondents choose very good/good (total 39,5%) or average (38,5%). In turn, a minority of respondents think this management is poor (7,3%) or very poor (4,6%). Notable is that roughly the same percentage of respondents had no opinion towards this question (10,1%).



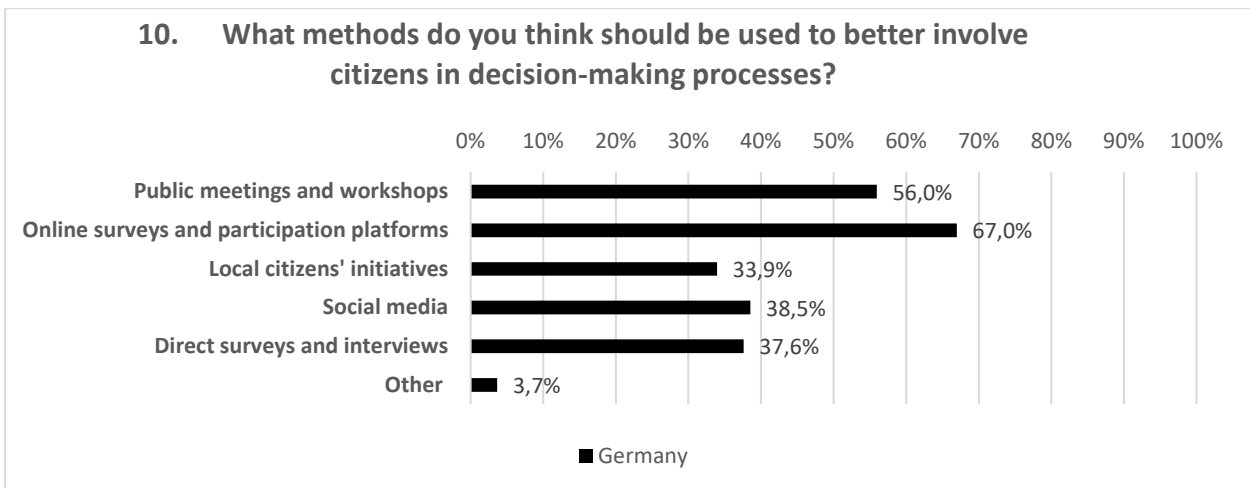
Particularly important for citizens of the Ruhr region, according to the survey participants' responses to question 7 (max. 3 answers; 254,1% total number of responses), is the creation of new jobs (81,7%), while preservation of industrial/regional culture of remembrance (55%) and measures for environmental protection is also of importance (49,5%). These three particularly important points are subsequently followed by citizen participation and transparency (38,5%) and support for affected employees (24,8%).



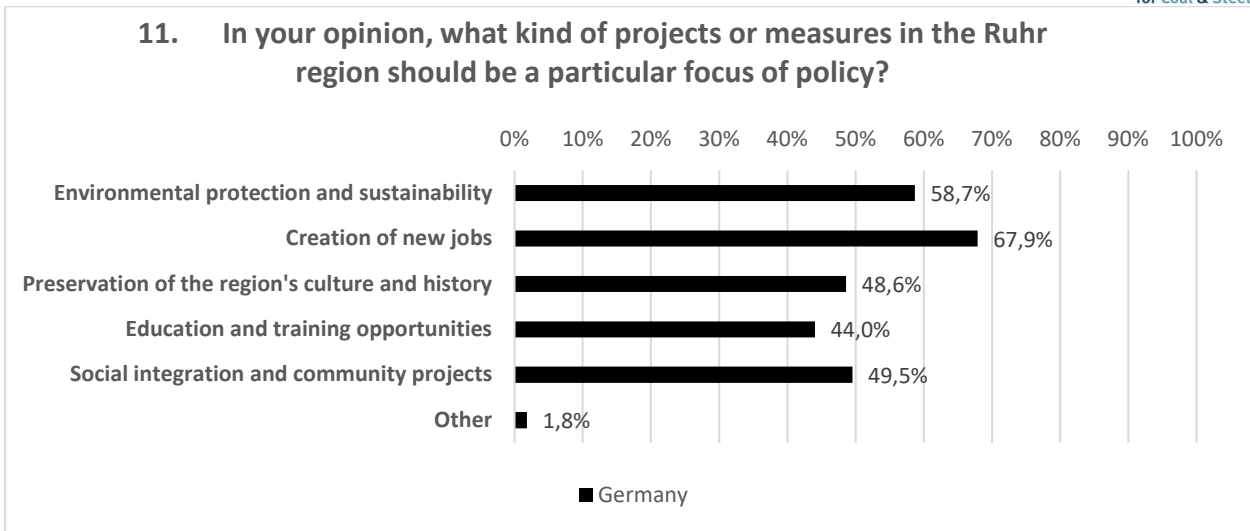
Question 8 reveals that almost all respondents (89%) are familiar with the patron saint of miners, St. Barbara, whereas a small percentage (11%) have no knowledge of this.



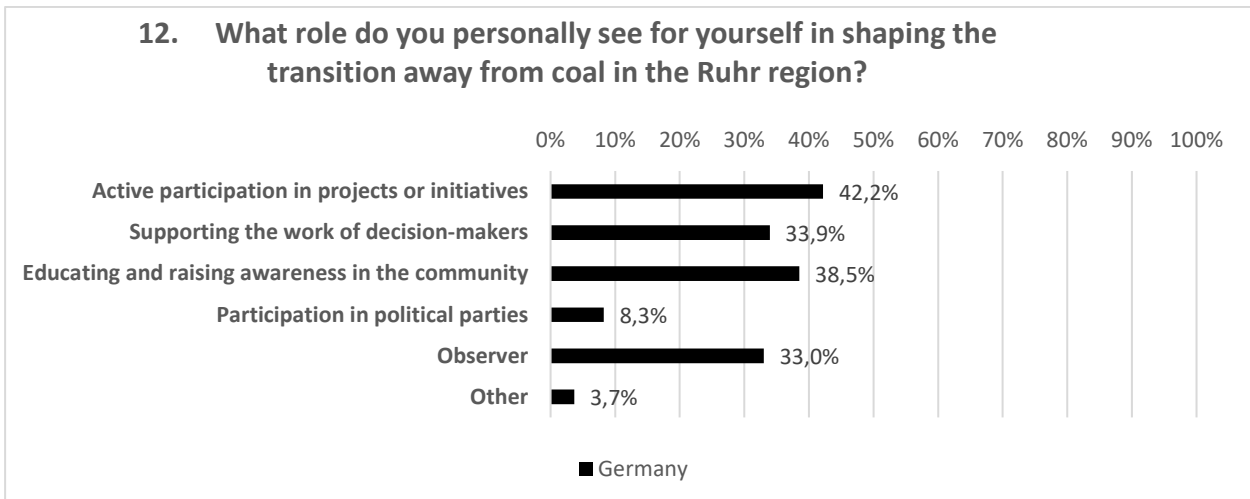
Concerning question 9, the four most significant measures necessary for the transition away from coal (max. 3 answers; 270,6% total number of responses) are ranked in the following order: (1) promotion of innovative technologies for the economy (74,3%); (2) retraining and further training programmes of affected employees (45%); (3) development of new forms of energy (39,4%), and; (4) support for start-ups and entrepreneurship (35,8%). Less respondents chose the options promotion of tourism and culture (28,4%) and designation of new commercial and industrial areas (11,9%).



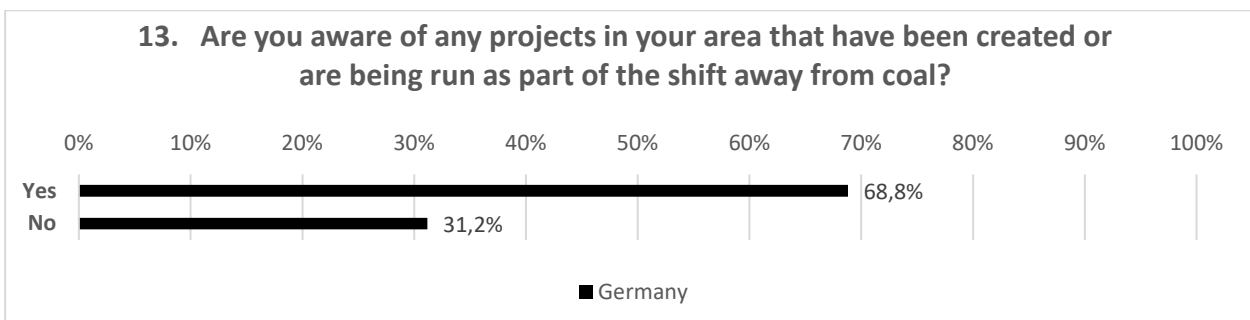
Online surveys and participation platforms (67%), public meetings and workshops (56%), direct surveys and interviews (37,6%), as well as social media usage (38,5%) are viewed by the respondents (max. three answers; 236,7% total number of responses) as the four most important measures to improve citizen participation in the decision-making process regarding coal transition (Question 10).

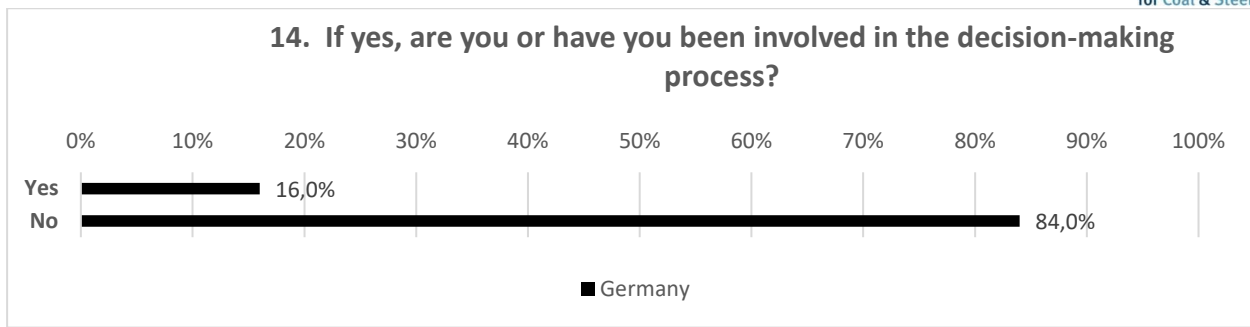


Question 11 asks respondents (max. 3 answers; 270,6% total number of responses) about a particular policy focus on the following projects or measures to be taken: (1) creation of new jobs (67,9%); (2) environmental protection and sustainability (58,7%); (3) social integration and community projects (49,5%), and; (4) preservation of the region's culture and history (48,6%).



Concerning question 12, active participation in projects or initiatives (42,2%) is ranked highest among respondent's view towards personal involvement in shaping the transition away from coal. This is followed by the answers educating and raising awareness in the community (38,5%), support the work of decision-makers (33,9%), while a minority of respondents prefer to act as an observer (33%).





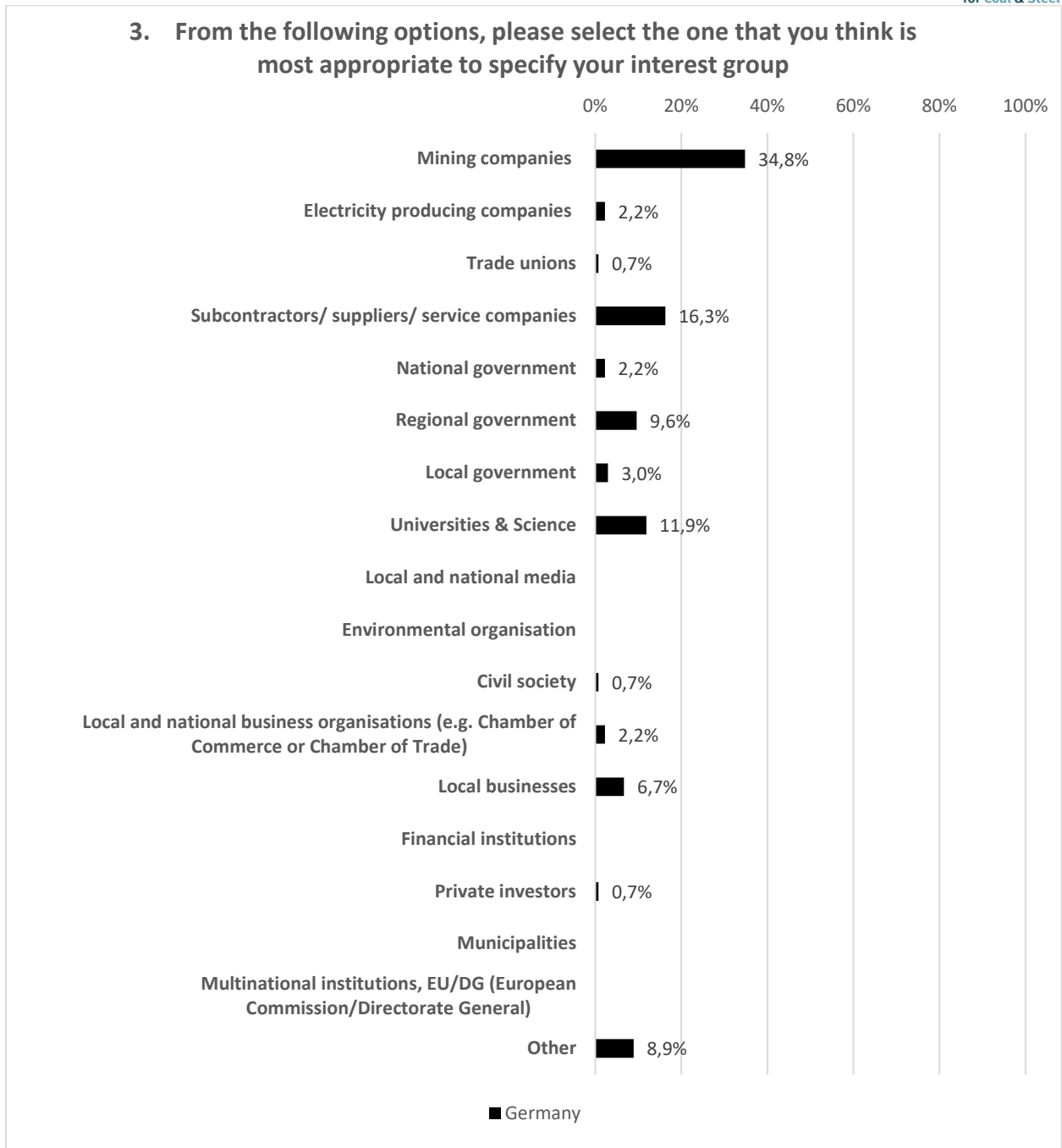
Question 13 and 14 illustrate that most respondents (68%) have knowledge of projects being created or run as part of the transmission of coal in the Ruhr region, whereby a mere small number (16%) have been involved in the decision-making process.

In the field “Other” the survey’s participants had the possibility to name individual answers (Appendix III). It becomes apparent that the bureaucracy in the governmental system of Germany is a major concern, as this was named more frequently. Beyond this, the perception of the Ruhr region is obviously very positive. Several entries refer to the diverse and lively character of the region and its inhabitants, a finding that was already confirmed in the Media Analysis (Deliverable 3.3).

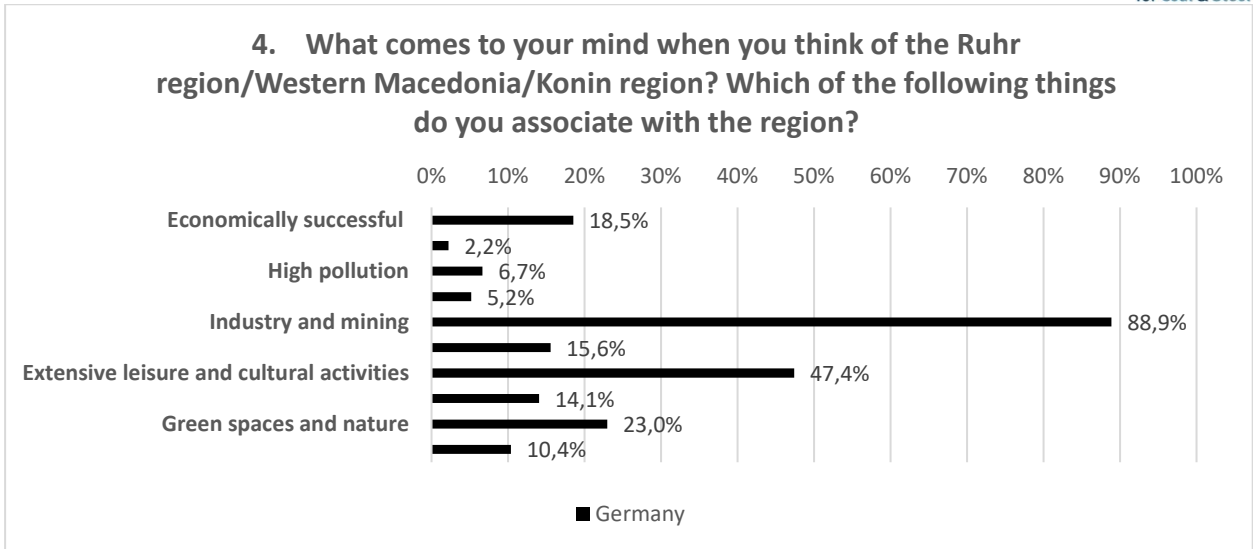
3.1.2 Stakeholder perception

The online survey conducted for the stakeholders lasted 13 days, from 21.11.2023 to 04.12.2023. 135 persons participated and completed the questionnaire out of a total of 146 visitors, while the notification hyperlinks with a rate of 92,5%. Visit sources were the direct links shared (99,3%) while most of the respondents (65,9%) completed the questions within 2-5 minutes.

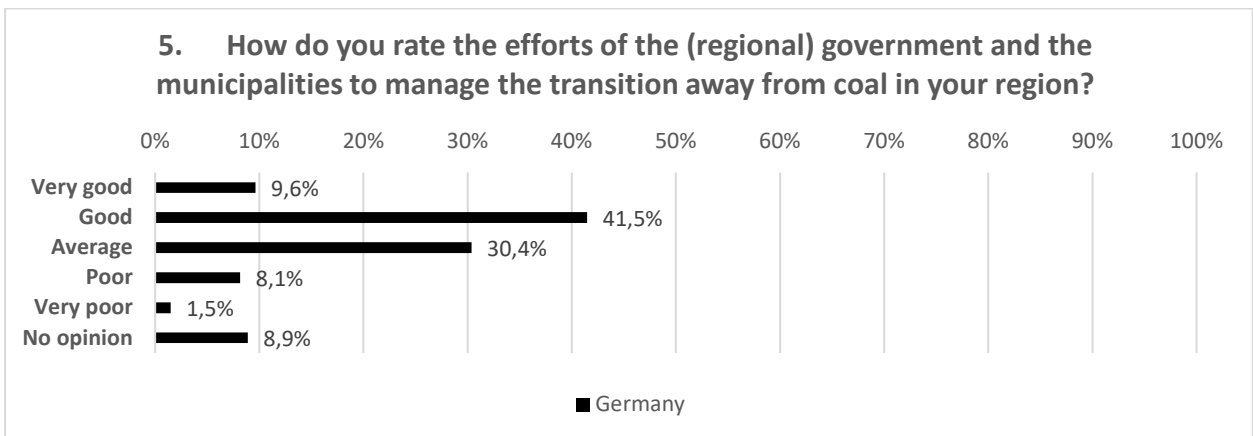
Regarding the socio-demographic characteristics of the stakeholder survey, a slight majority of these respondents (51,9%) come from outside the Ruhr region, while the remaining respondents (48,1%) come from outside. The age group 41 to 60 year is covered by most respondents (42,2%), followed by the 21 to 40 years old (37,8%). A minority of respondents are over 60 years (20%). The age group younger than 20 years is not represented.



The majority of stakeholders (Question 3) represent interest groups from mining companies (34,8%), subcontractors/suppliers/service companies (16,3%) or universities and science (11,9%).

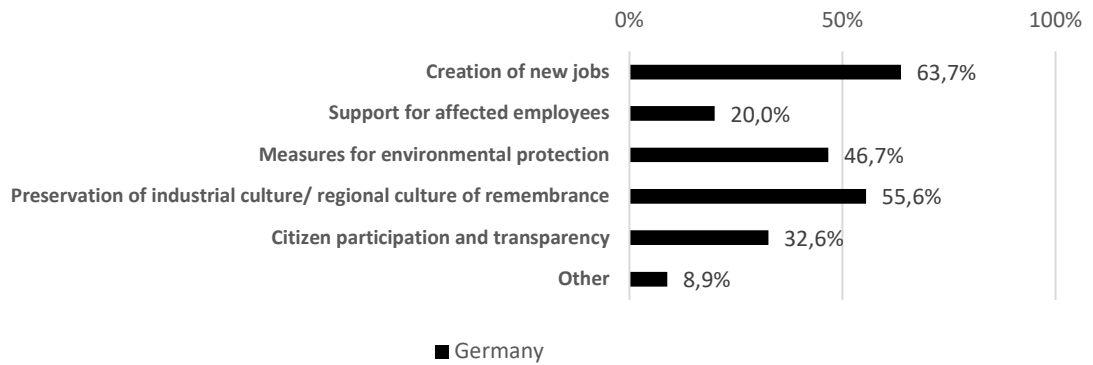


Regarding the options given what stakeholders associate with the Ruhr region (Question 4), similar to public survey results (max. 3 answers; 231,9% total number of responses), the majority identify themselves first and foremost with industry and mining (88,9%), as well as with the vast leisure and cultural activities (47,4%) the region offers. This is followed by respondents thinking of green spaces and nature (23%), economically successful (18,5%) good education (15,6%) and the region offering attractive jobs (14,1%).



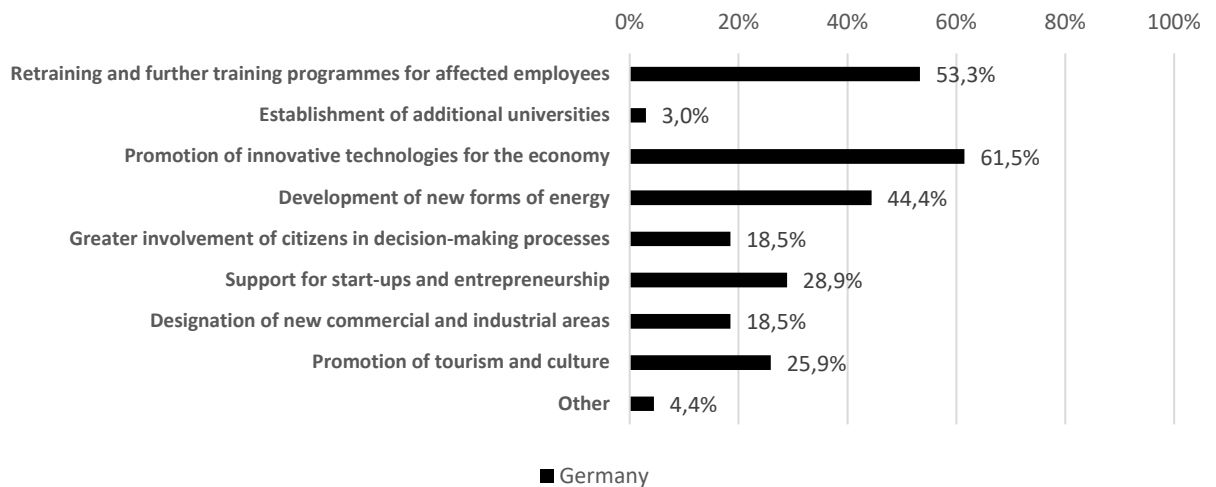
Efforts of the (regional) government and municipalities in managing post-mining transition (Question 5) are overall rated positively, as a large number of respondents choose good (41,5%) or average (30,4%). In turn, a minority of respondents think this management is poor (8,1%) or very poor (1,5%). Notable is that roughly the same percentage of respondents had no opinion towards this question (8,9%).

6. Which of these points do you think are particularly important for the citizens of the Ruhr region /Western Macedonia/Konin region?

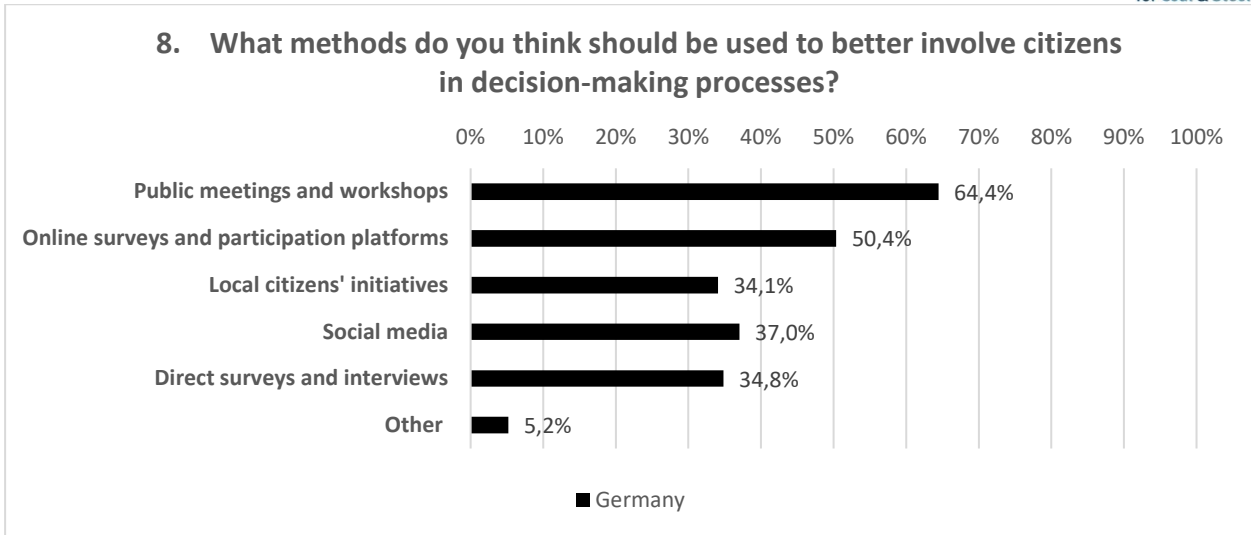


Particularly important for citizens of the Ruhr region (Question 6), according to the stakeholder participants (max. 3 answers; 227,4% total number of responses), is the creation of new jobs (63,7%), while preservation of industrial and regional culture (55,6%) and measures for environmental protection is also of importance (46,7%). These three particularly important points are subsequently followed by citizen participation and transparency (32,6%) and support for affected employees (20%).

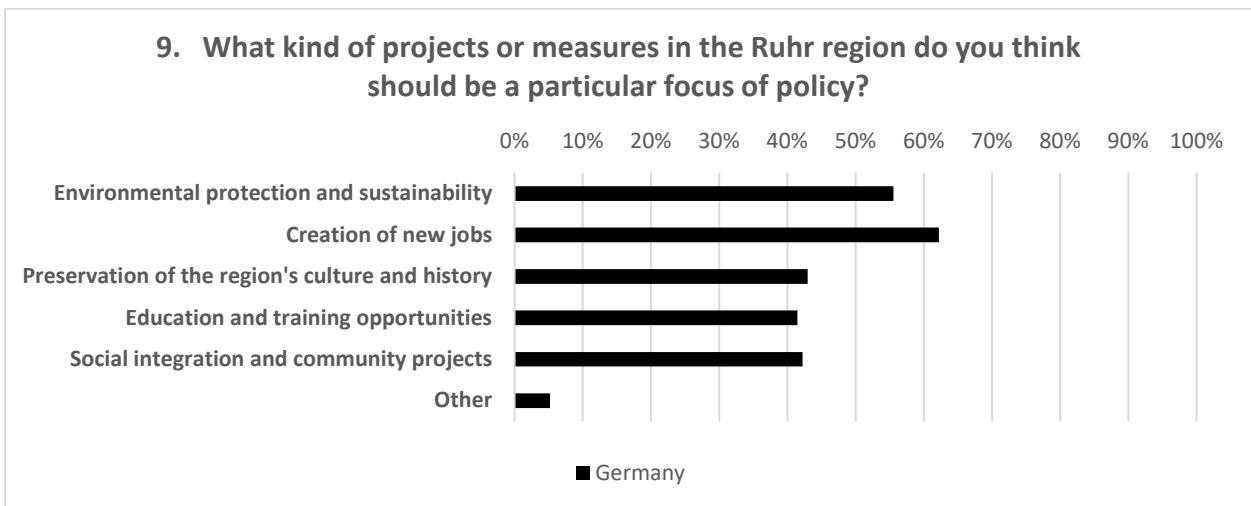
7. What kind of measures do you think are necessary for structural change?



Question 7 asks about the opinion towards the kind of measures necessary for the transmission away from coal (max. 3 answers; 258,5% total number of responses) are ranked in the following order: (1) promotion of innovative technologies for the economy (61,5%); (2) retraining and further training programmes of affected employees (53,3%); (3) development of new forms of energy (44,4%), and; (4) support for start-ups and entrepreneurship (28,9%).



Public meetings and workshops (64,4%), online surveys and participation platforms (50,4%), social media usage (37%), as well as direct surveys and interviews (34,8%) are viewed by the respondents (max. three answers; 225,9% total number of responses) as the most important measures to improve citizen participation in the decision-making process regarding coal transmission (Question 8). These are followed by local citizens' initiatives (34,1%).



Regarding question 9, stakeholder respondents (max. 3 answers; 249,6% total number of responses) wish the following projects or measures to be taken: (1) creation of new jobs (62,2%); (2) environmental protection and sustainability (55,6%); (3) preservation of the region's culture and history (43%); (4) social integration and community projects (42,2%), and; (5) education and training opportunities (41,5%).

3.1.3 Expert Stakeholder perception

In total, four expert stakeholders were interviewed that were or are directly involved in projects realized within the transformation process of the Ruhr area. During a series of insightful personal interviews (Appendix IV), lasting approximately 45 minutes each, we engaged with individuals holding pivotal roles within regional and municipal development spheres. The interviewees comprised a diverse panel:

Stakeholder 1: Head of Regional Planning at RVR.

Stakeholder 2: Managing Director of an intermunicipal regional development company.

Stakeholder 3: Managing Director of a municipal brownfield development company.

Stakeholder 4: Advisor to management of conversion sites from an esteemed international consulting firm.

One resounding observation across these interviews was the palpable enthusiasm and genuine interest displayed by all participants. Despite their diverse roles, a common thread emerged, shedding light on pivotal aspects within the realm of regional and municipal development. Central to these discussions was the **critical role of communication as an indispensable element** in fostering growth and progress at both regional and municipal levels.

This vital communication was observed to occur through multiple channels:

Direct Approach: A personal and face-to-face mode of interaction emerged as a cornerstone of communication strategies.

Web Presentations: Utilized as a powerful information and marketing tool, web presentations played a pivotal role in disseminating information effectively.

Interestingly, the primary focus of these communication strategies appeared to be direct contact via organized events. It was noted that the participants in these **direct communication avenues** comprised both genders, albeit with a slight dominance of men. The age range of these engaged individuals typically fell between **50 and 75 years old**.

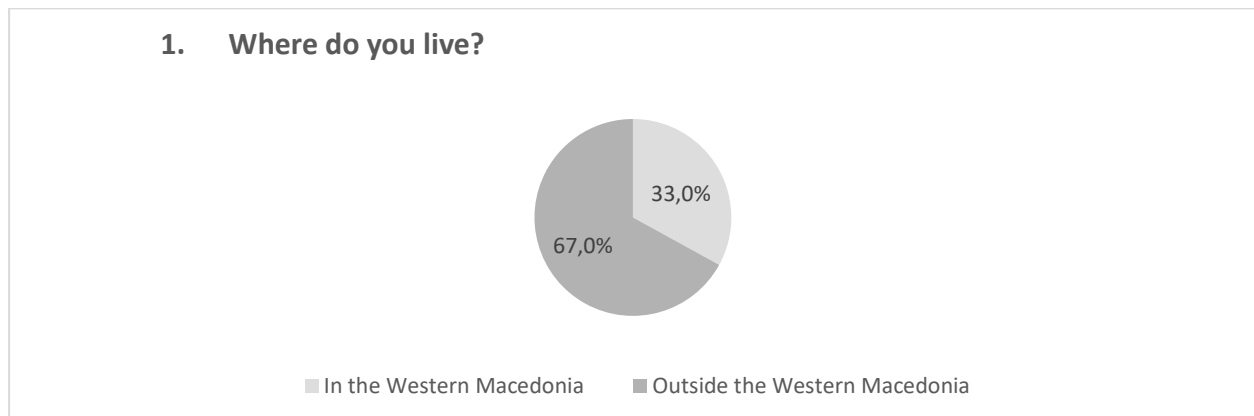
Moreover, the discussions were characterized by a constructive atmosphere, with participants demonstrating a strong focus on the matters at hand. This constructive engagement underscored a commitment to productive discourse and action-oriented outcomes, further enhancing the efficacy of the communication strategies.

In summary, these interviews highlighted the paramount importance of communication in the realm of regional and municipal development. Whether through direct engagements or leveraging digital platforms, effective communication strategies emerged as the linchpin for progress, fostering engagement, and driving meaningful development initiatives forward.

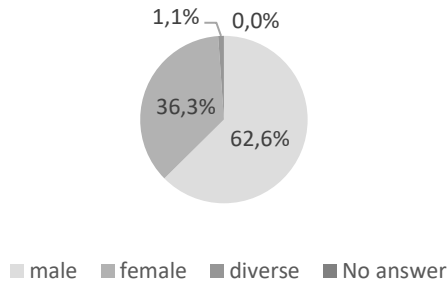
3.2 Greece

3.2.1 Public perception

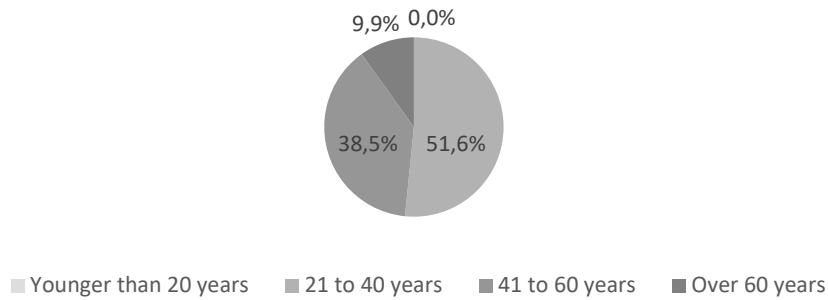
For the online survey conducted among the general population of Greece, the duration was 17 days from 17/11/23 to 4/12/23, and 91 people participated and completed the questionnaires out of a total of 117 visitors to the hyperlinks that were notified. The date of the first recorded participation is on 17/11 and the date of the last is on 02/12. The percentage of people who completed the questionnaire was 77.8% and the way of participation was 98.9% via direct link. The majority of respondents completed the questionnaire in 2-5 minutes while there were people who completed it in more than 10 minutes (5.5%).



2. Please indicate your gender.

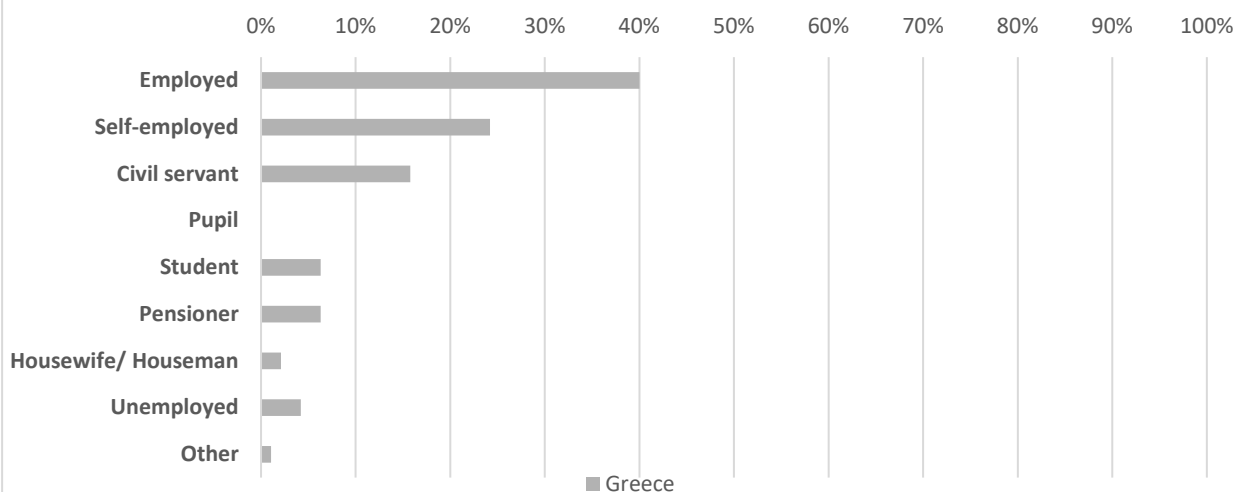


3. How old are you?

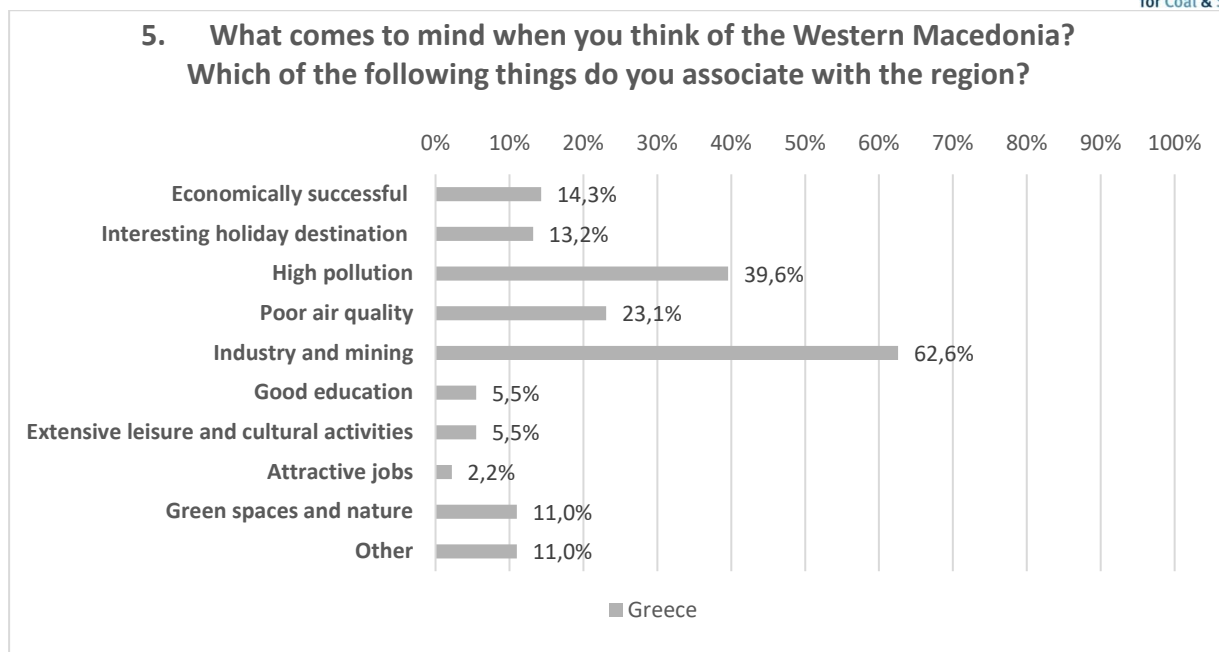


Of the respondents, 33% are residents of the Region of Western Macedonia while the remaining 67% are from other regions (Question 1). This fact reflects a diversity in the survey sample and was legitimate regarding the gender and age of the participants (Question 2 and 3, respectively).

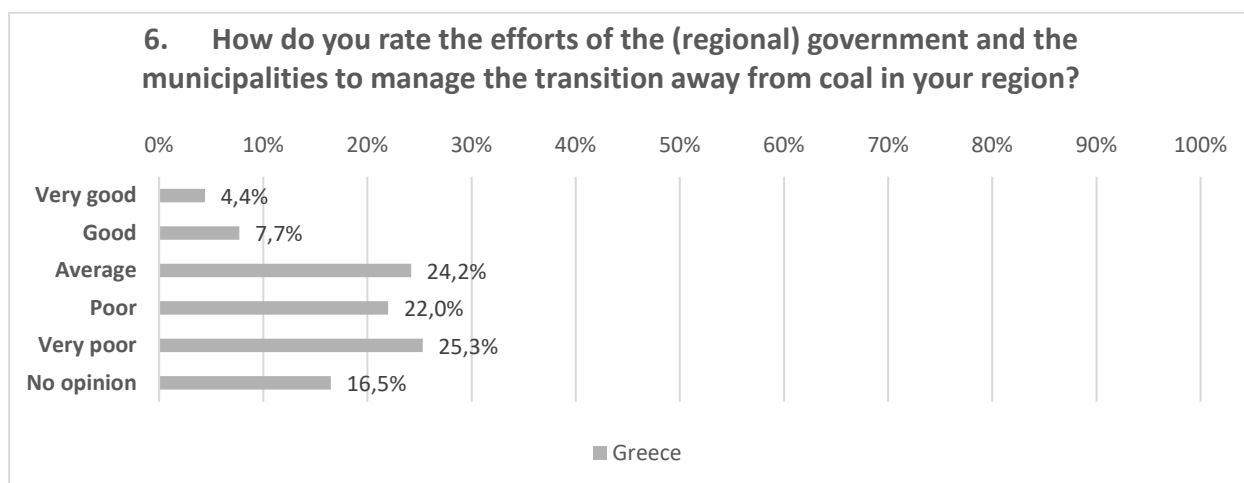
4. Which of the following categories best describes your current employment status?



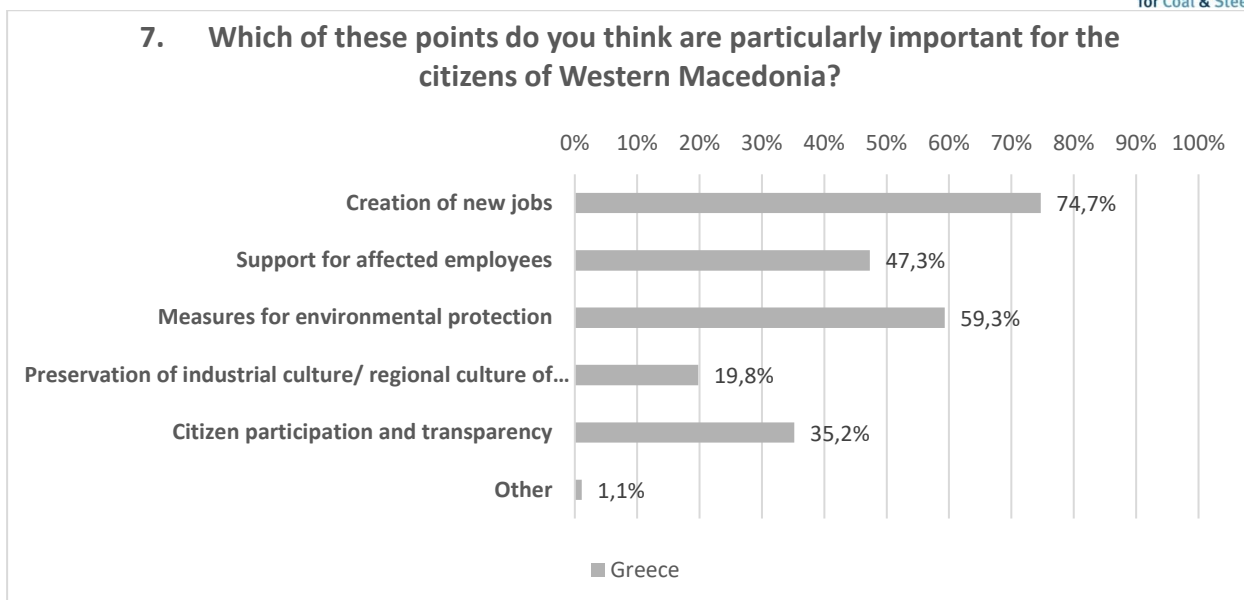
The percentages were satisfactory and the objectives were gender equality and the non-exclusion of any age group. The majority of respondents according to their answers work in private or public institutions (Question 4).



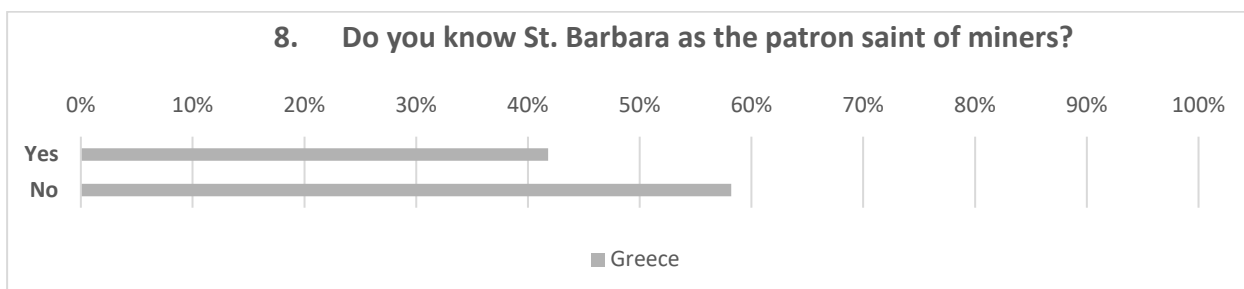
In the multiple-choice question on the identity of Western Macedonia (Question 5), most people consider the region to be an industrial and mining area, while the 2nd and 3rd most popular option was that they associate the region with high pollution and poor air quality (max. 3 answers; 188% number of responses). The fourth option was economically developed as illustrated in the graph below.



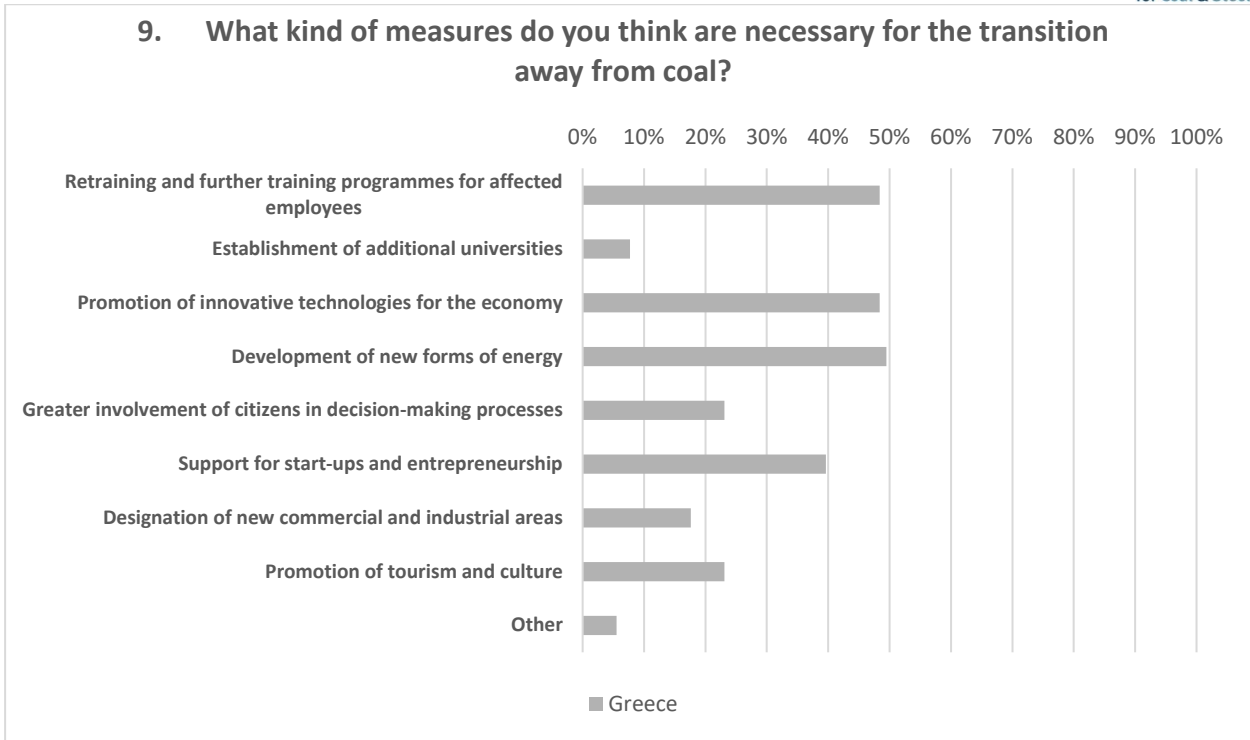
Regarding the efforts of local governments to manage the transition away from coal (Question 6), the most popular responses that garnered the highest percentages were very poor (25.3%), average (24.2%), and poor (22%). In contrast, only a small percentage considered the response of local leaders to be very good (4.4%) or good (7.7%). This highlights overall the lack of trust to the governmental plan and its current implementation.



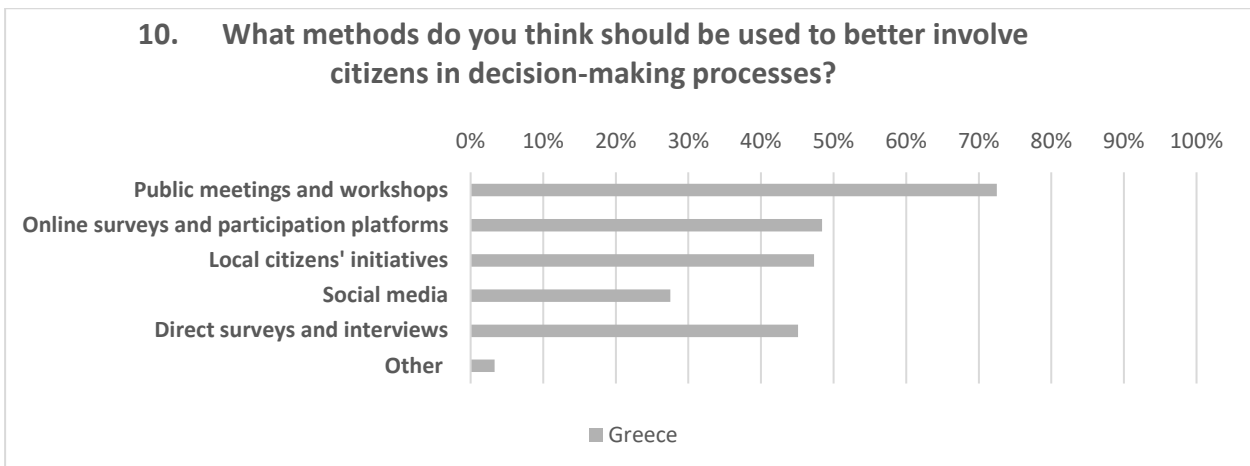
The respondents' judgment on the most important points for the residents of Western Macedonia (Question 7; max. 3 answers; 237,4% total number of responses) includes the creation of new jobs (74.47%), the protection of the environment (59.3%), the empowerment of workers (47.3%), and public participation in decision-making bodies in transparent procedures (35.2%). Finally, a smaller percentage chose the preservation of industrial heritage (19.8%).



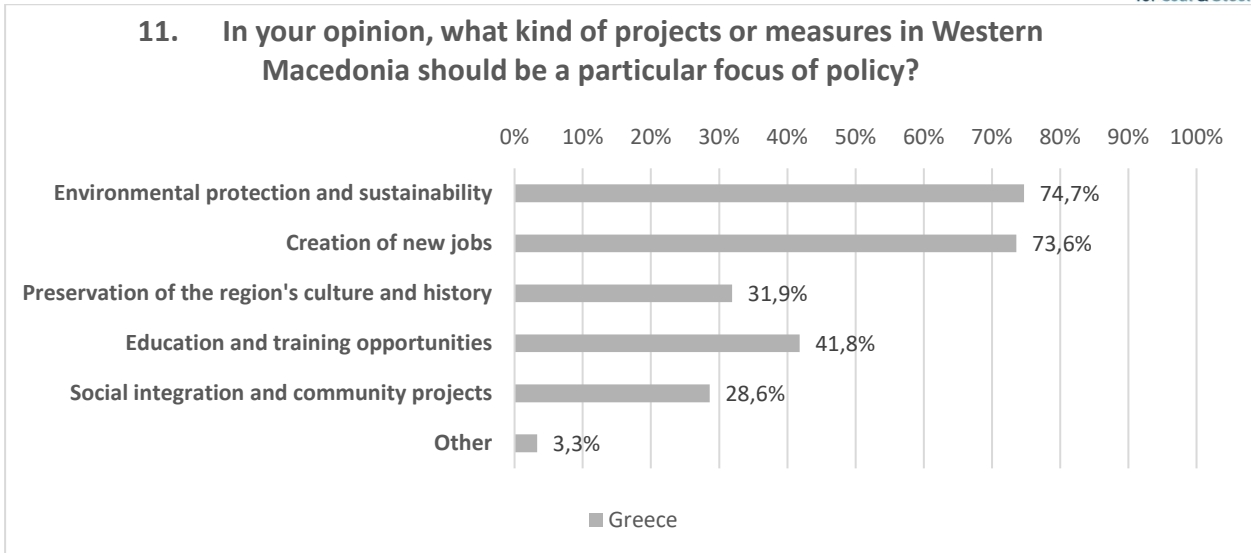
Question 8 reveals that more respondents (58.2%) are familiar with the patron saint of miners, St. Barbara, than those (41.8%) who have no knowledge of this.



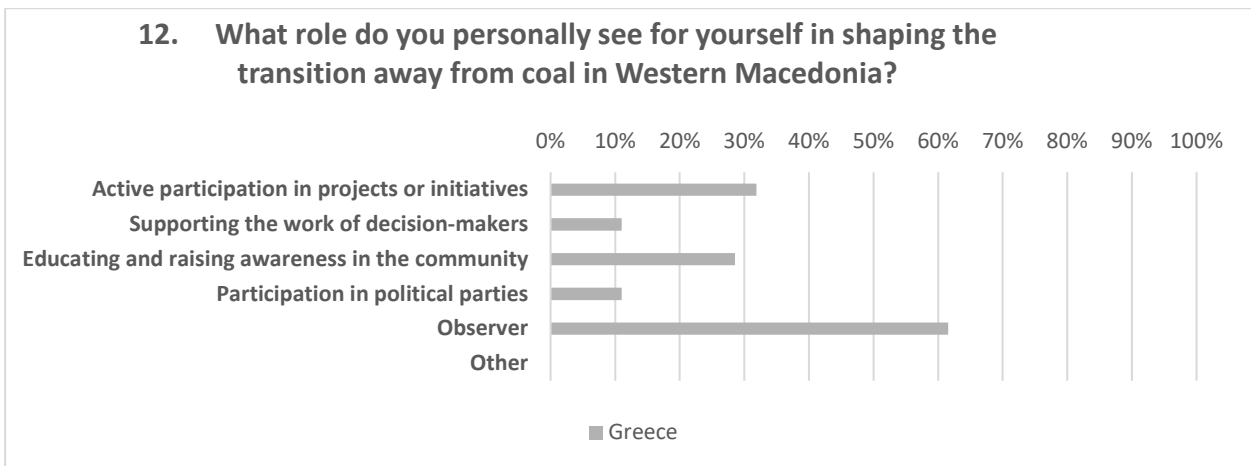
Furthermore, when asked about the important measures to recover from the current situation (Question 9; max. 3 answers; 262,9% total number of responses), the 3 most popular answers are creating training programs for affected workers (48.4%), promoting innovative technologies (48.4%), and developing new forms of energy (49.5%), followed by the creation of start-ups (39.6%). The participation of citizens in decision-making bodies (23.1%), the promotion of tourism and culture (23.1%), the definition of new commercial and industrial areas (17.6%), and the establishment of new universities (7.7%) scored lower percentages.



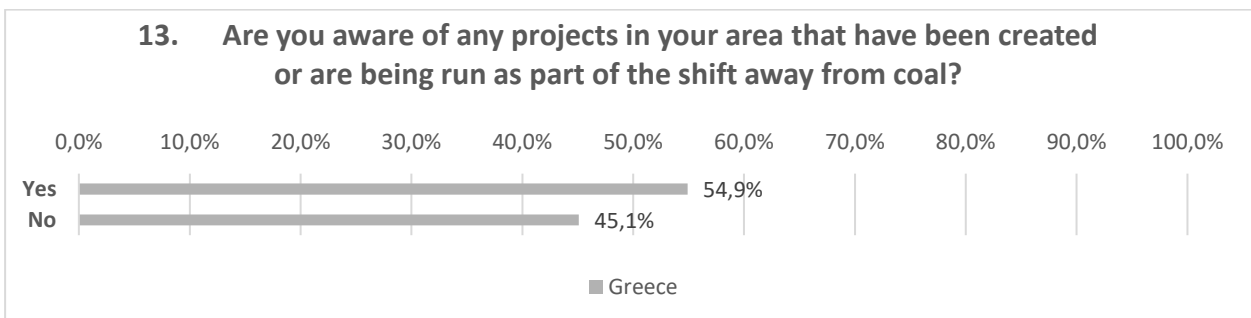
Public meetings and workshops are the method preferred by most survey participants for citizen participation in decision-making processes (Question 10; max. 3 answers; 244,1% total number of responses) and garnered 72.5%, while online surveys were close behind with 48.4%, citizens' initiatives with 47.3%, and direct surveys and interviews with 45.1%. Social media ranked last with 27.5%.

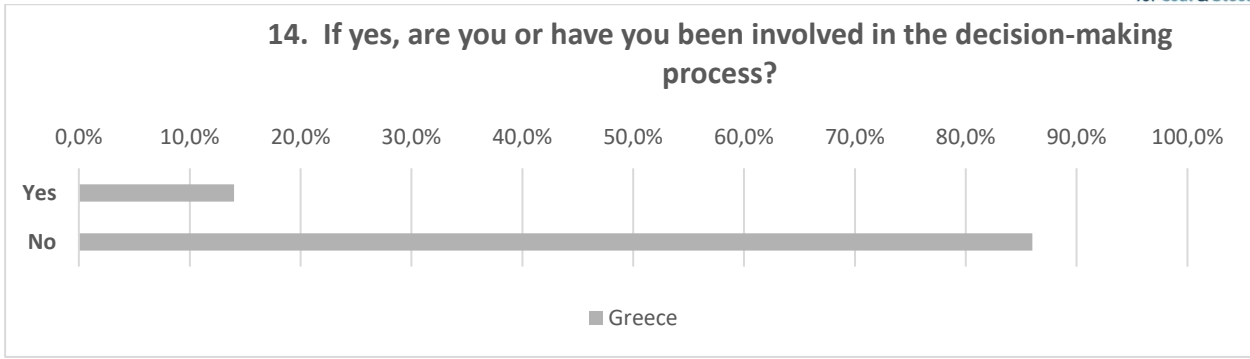


For the general population (Question 11; max. 3 answers; 253,9% total number of responses), protecting the environment (74.7%) and creating new jobs (73.6%) are the two most popular options where political leaders should focus their efforts.



In addition, for the role of respondents during the coal transition period (Question 12; max. 3 answers; 144% total number of responses), as illustrated below, the most popular option is observer with 61.5%, while the options of active participation (31.9%) and education (28.6%) are placed second and third.

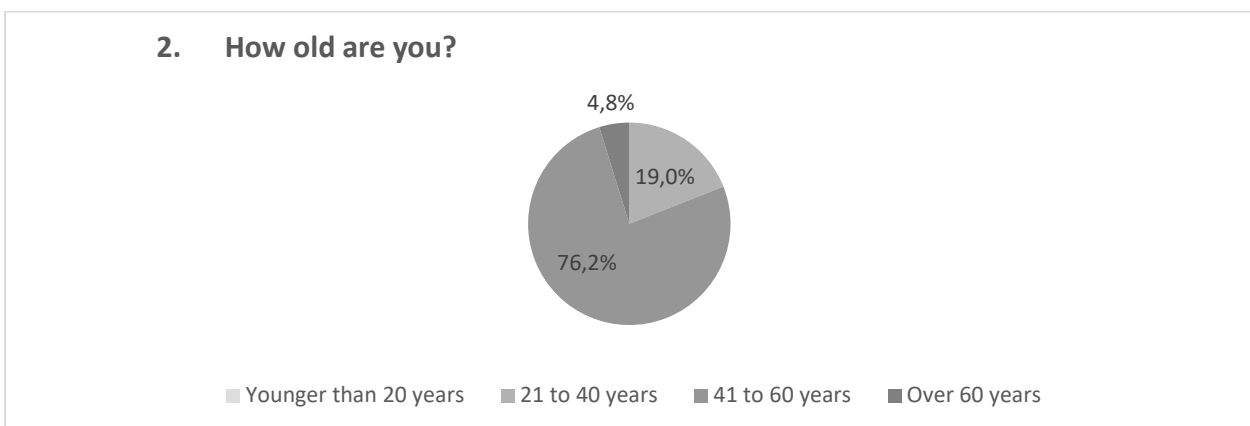
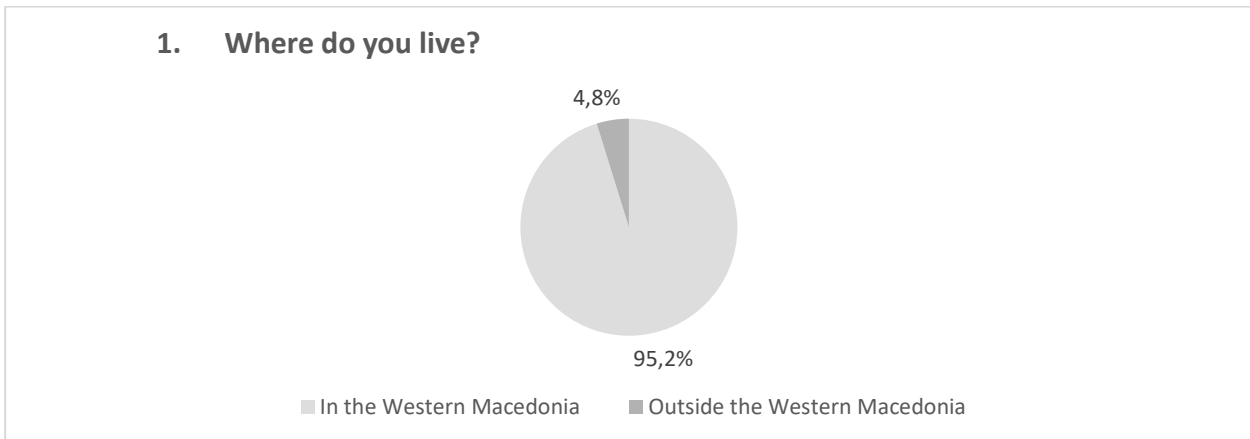


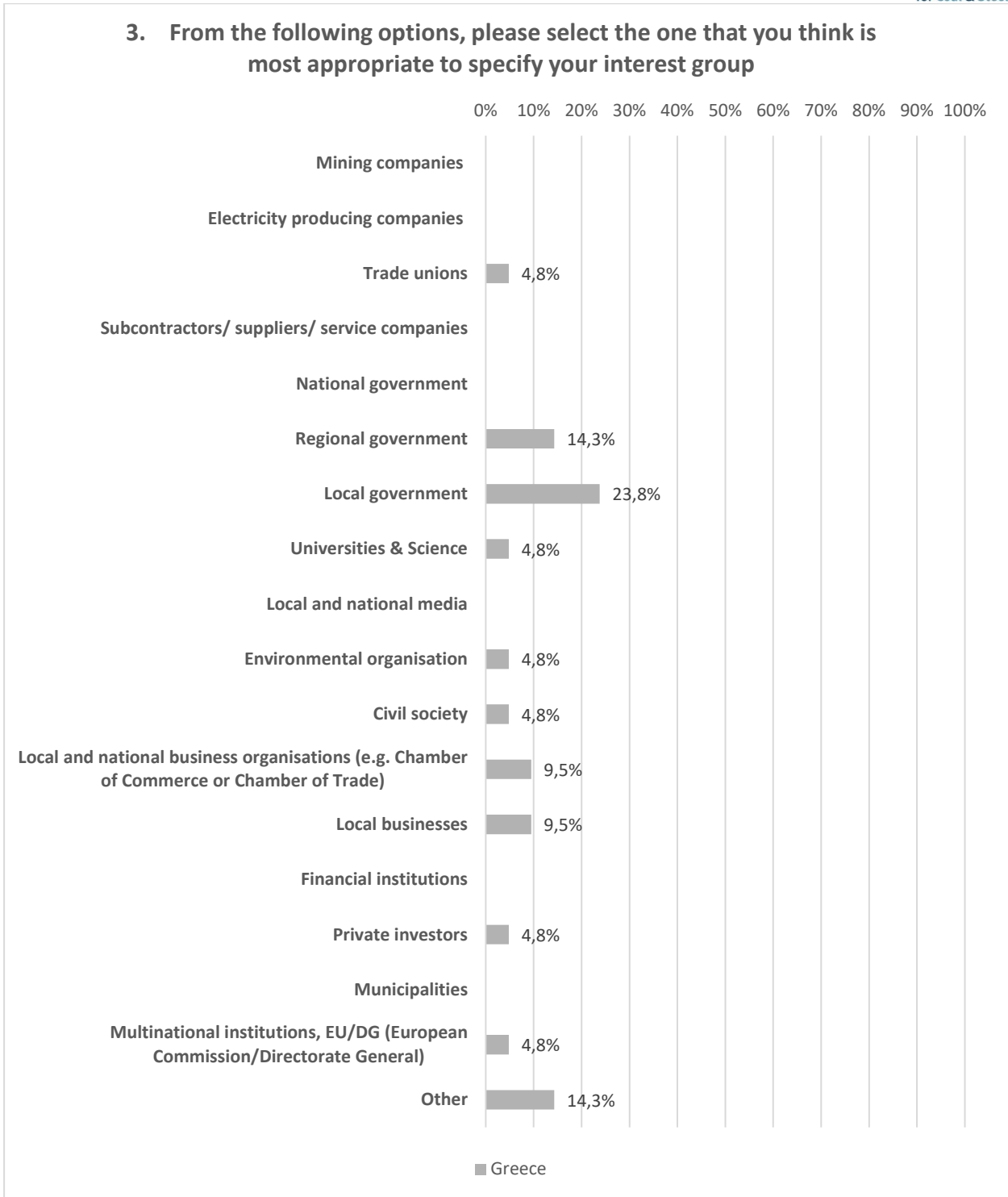


Finally, on the question of whether they are aware of projects initiated as part of the transition (Question 13), participants are split down the middle. While a few have been involved in them in some way the highest percentage is negative (Question 14).

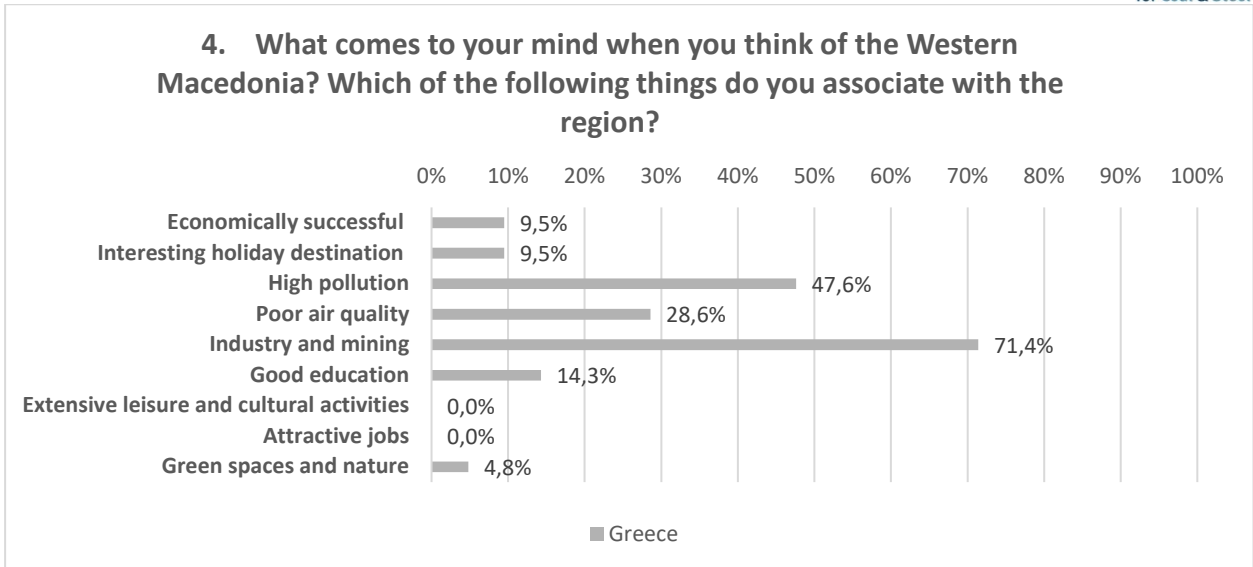
3.2.2 Stakeholder perception

The online survey conducted for the stakeholders lasted 13 days, from 21/11/23 to 04/12/23. 21 people participated and completed the questionnaire out of a total of 25 people who visited the notification hyperlinks with a rate of 84.0%. The date of the first recorded response was on 11/21/11 while the date of the last was on 12/01/12. Visit sources were the direct links shared while most of the respondents (71.4%) completed the questions in between 2-5 minutes. Of the 21 respondents, 20 are residents of Western Macedonia and the majority of them belong to the age group 41-60 years old (76.2%).

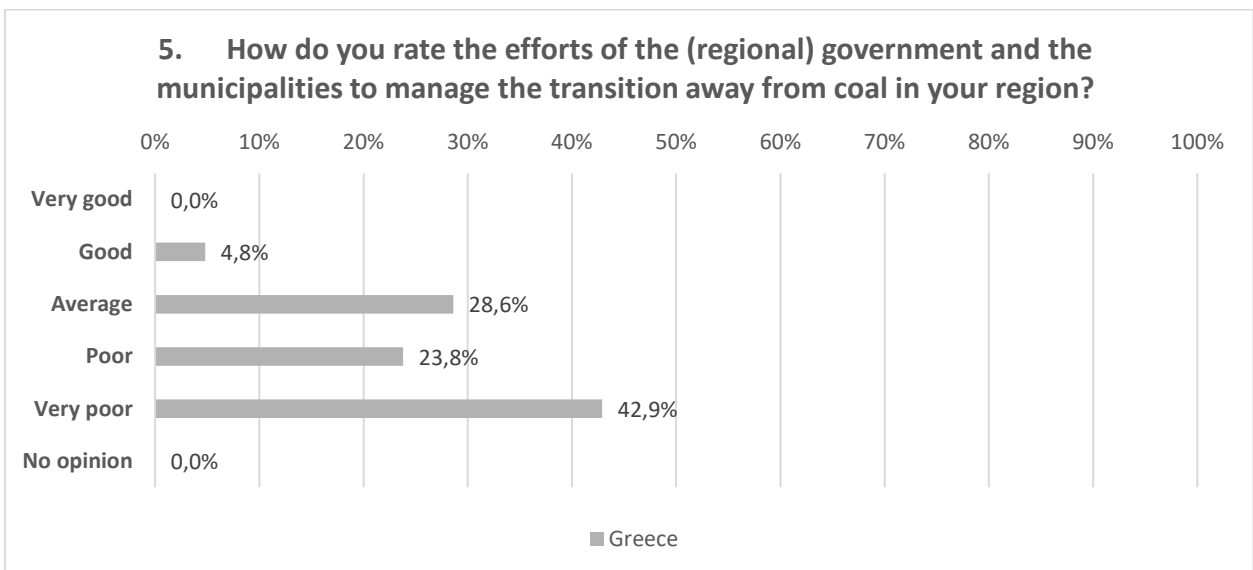




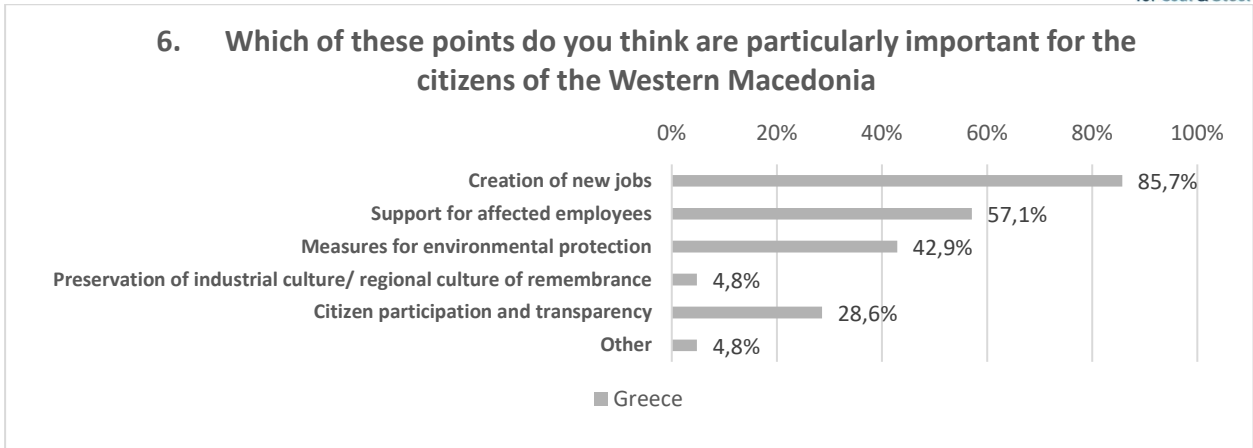
Among the stakeholders, most belong to local or national governments with 23.8% and 14.3% respectively (Question 3). The other categories follow as reflected in the graph below. A strong percentage of them was also categorized in the other option where they described their interest group as N.G.O. or other development organizations and entities. These results depict that the Greek stakeholders' sample had increased diversity.



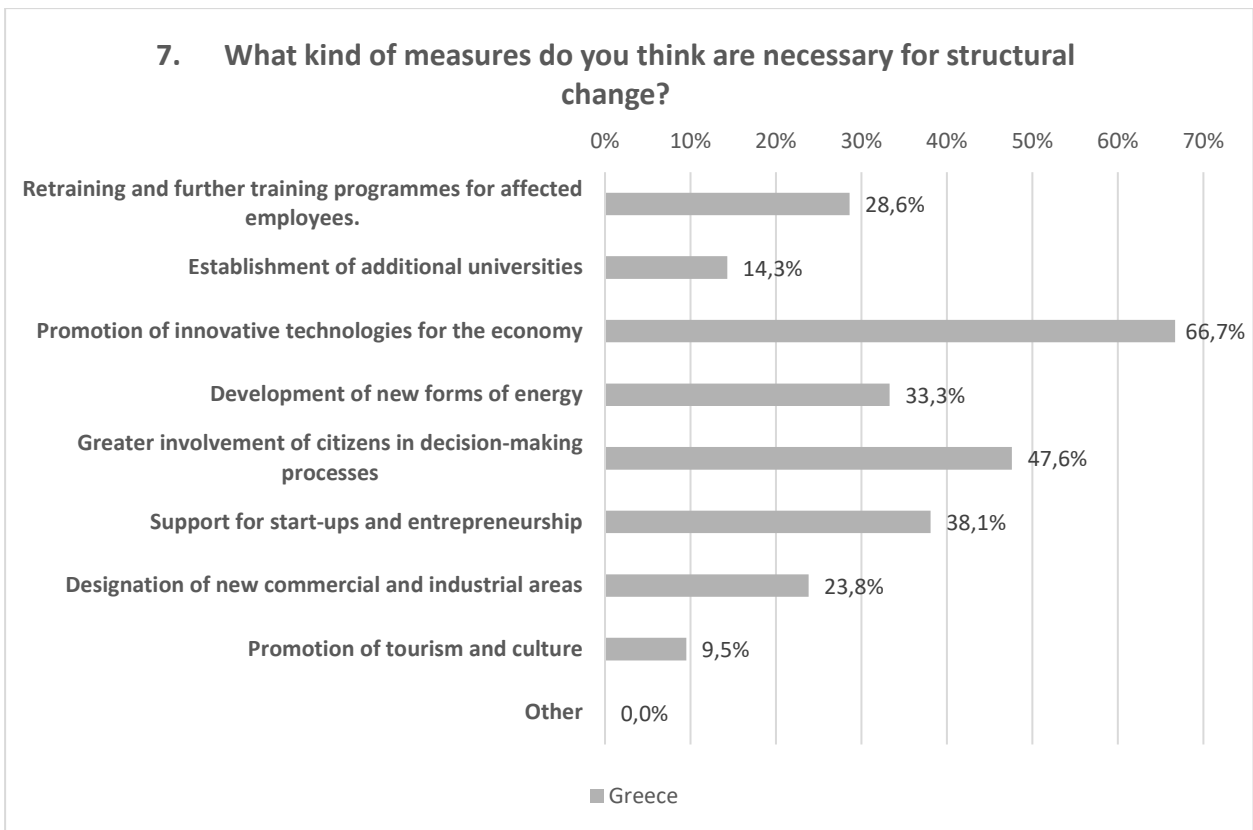
In a similar question asked to the public (Question 4; max. 3 answers; 195,2% total number of responses), regarding the characteristics of the Western Macedonia region, stakeholders' answers were similar with those of the public survey. Industry and mining were the most popular option with 71.4% followed by high pollution at 47.6% and poor air quality at 28.6%.



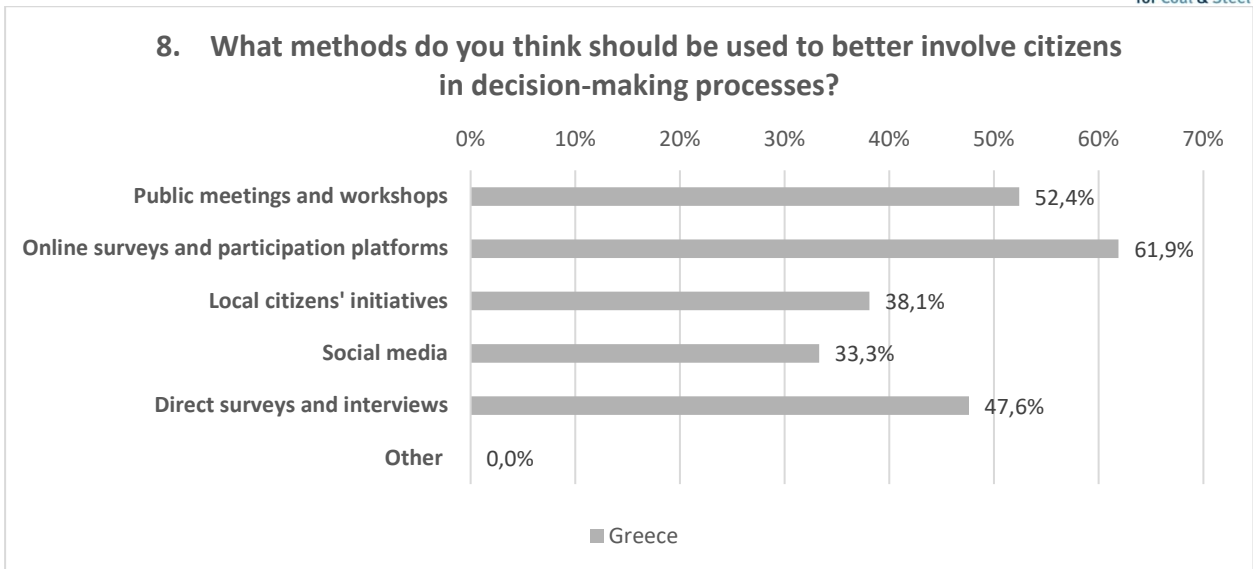
In addition, in question 5 which was, also, the same for the public and stakeholders survey, the results were the same, although the majority of stakeholders have an interest in local or national governments. Stakeholders feel that the efforts were very poor (42.9%), average (28.6%), or poor (23.8%) at most. These results indicate a high dissatisfaction rate with the ways regional governments addressed the transition away from coal in Western Macedonia.



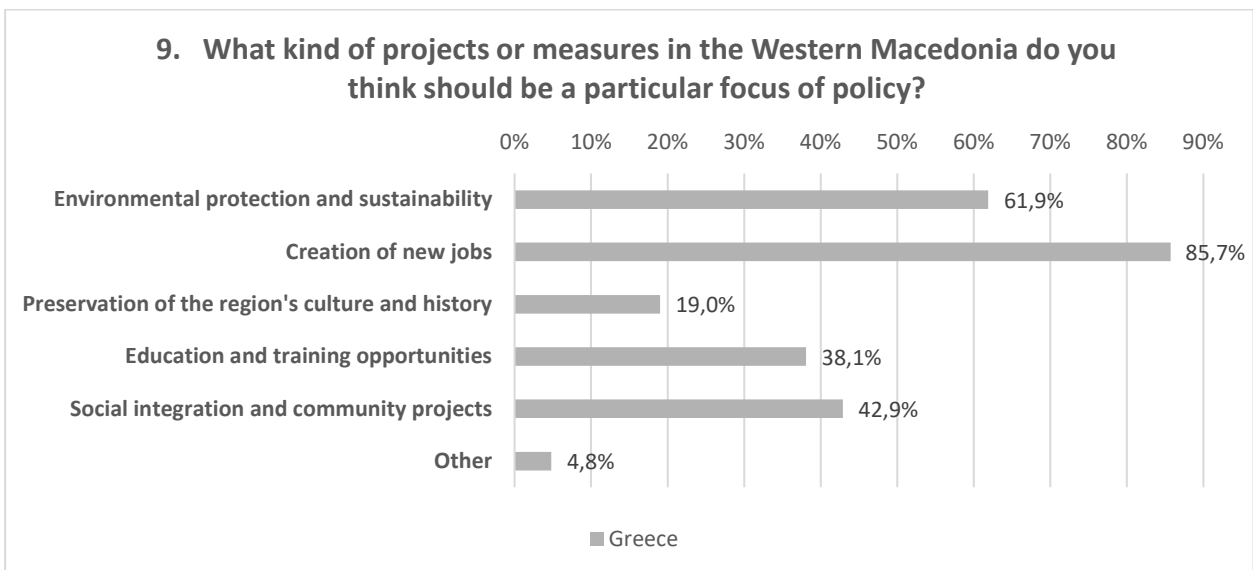
Moreover, on the question (Question 6; max. 3 answers; 223,9% total number of responses) of the most important points for the citizens of Western Macedonia, stakeholders believe that the creation of new jobs is of the highest importance at 85.7%. Support for affected employees is second most important, at 57.1%, and measures for environmental protection third, at 42.9%. Citizen participation and transparency follow at 28.6% and last is the option for preservation of industrial culture. These results, as with the previous two questions, have many similarities with the public survey results.



The necessary measures option for structural change (Question 7; max. 3 answers; 261,9% total number of responses) that concentrated the highest score was the promotion of innovative technologies for the economy at 66.7%, followed by citizen’s participation at 47.6%, start-up support at 38.1%, development of new forms of energy at 33.3%, and retraining of affected employees at 28.6%. Designation of new commercial and industrial areas was next at 23.8%, establishment of new universities at 14.3%, and promotion of tourism at the end with the lowest score at 9.5%. For stakeholders, universities can play a vital role for Western Macedonia whereas the public believes it is not as important.



Furthermore, on the methods that should be used to better involve citizens in decision-making processes (Question 8; max. 3 answers; 233,3% total number of responses), stakeholders think that online surveys are the best way at 61.9%, public meetings at 52.4%, direct surveys at 47.6%, citizens' initiatives at 38.1%, followed by social media at 33.3%. Similar results were yielded also from the public survey with the only difference being the first choice for the two groups. Public respondents believe that public meetings are a better approach on this occasion.



Finally, the majority of stakeholders are in favor of the creation of new jobs (Question 9; max. 3 answers; 252,4% total number of responses) in Western Macedonia and should be the measure that should be a particular focus of policy makers (85.7%). Second to this is environmental protection as a crucial and of high importance matter at 61.9% followed by social integration at 42.9%, education and training at 38.1%, and preservation of the region's culture (19.0%) at the end.

3.2.3 Expert Stakeholder perception

According to the stakeholder interviews, the participation of the local community in the planning of the just transition program is inadequate. The views are unanimously that the planning is done centrally by the Government, while the manner of requesting opinions from the local community, and the time spent for such activities, appear to have been ineffective. The **low engagement of**

local community has led to misconceptions about the identity of the region causing further frustration to the public.

According to Mr. Ioannidis who is the former Mayor of Kozani city in Western Macedonia: The government presented a plan only after an announcement by the prime minister to the United Nations. Unfortunately, **the plan, and its preparation, exhibit top-down characteristics**, formulated at a high echelon with minimal participation from lower administrative levels, local agencies, unions, or the community itself. COVID-19 appeared shortly after, significantly hindering procedures. These changes cannot be executed without the involvement of society. When this is lacking, it fosters apathy, disenchantment, pessimism, and the withdrawal of people from the community. In conclusion, there has been minimal participation from society, and **no comprehensive information program accessible to the general public has been executed**.

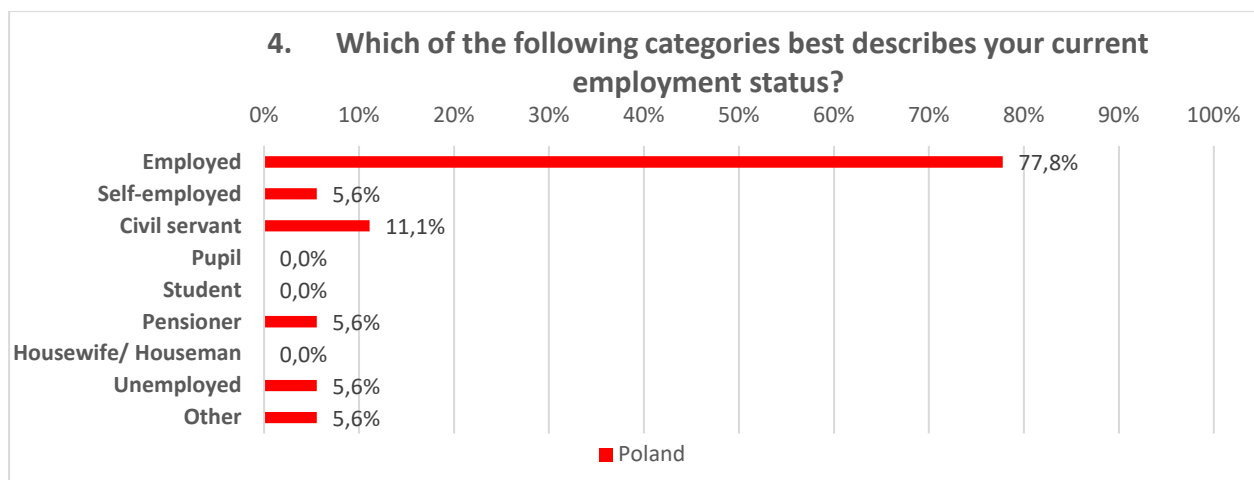
According to Mr. Sidiropoulos, who is the Transition Development Director of ANKO Western Macedonia S.A., Organization for Local Development: The involvement of local community in the planning of just transition program was not satisfactory enough, increasing the risk that its implementation would be ineffective. Taking into account the importance of the radical change of the region’s production model, the **consultation procedures were extremely few and time limited**. As a result, the majority of the citizens do not know the objectives of the program, its priorities and of course the expected results, in order to be active during the implementation phase. The required information to the general public of the region was absent and continues to be absent during the implementation phase.

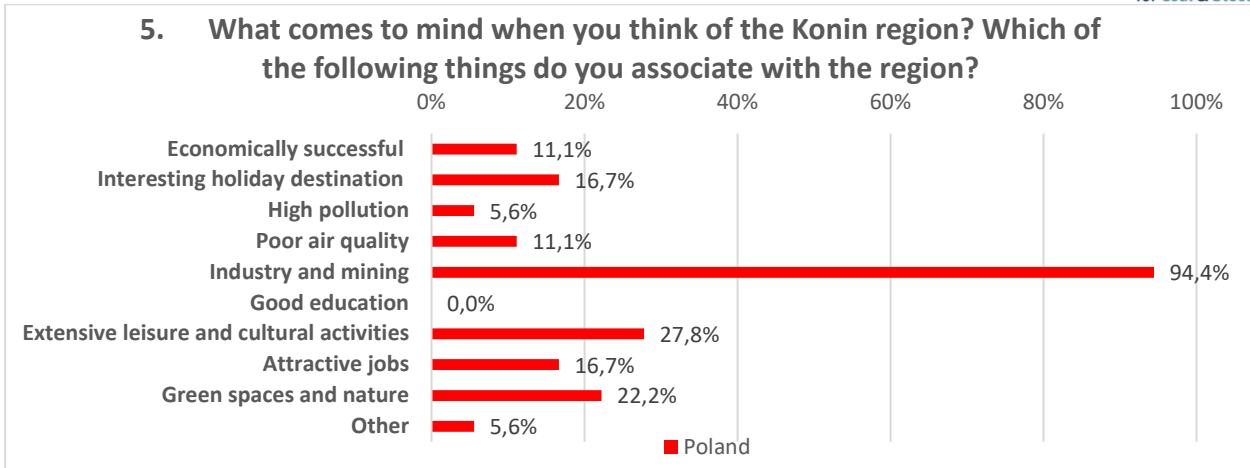
3.3 Poland

3.3.1 Public perception

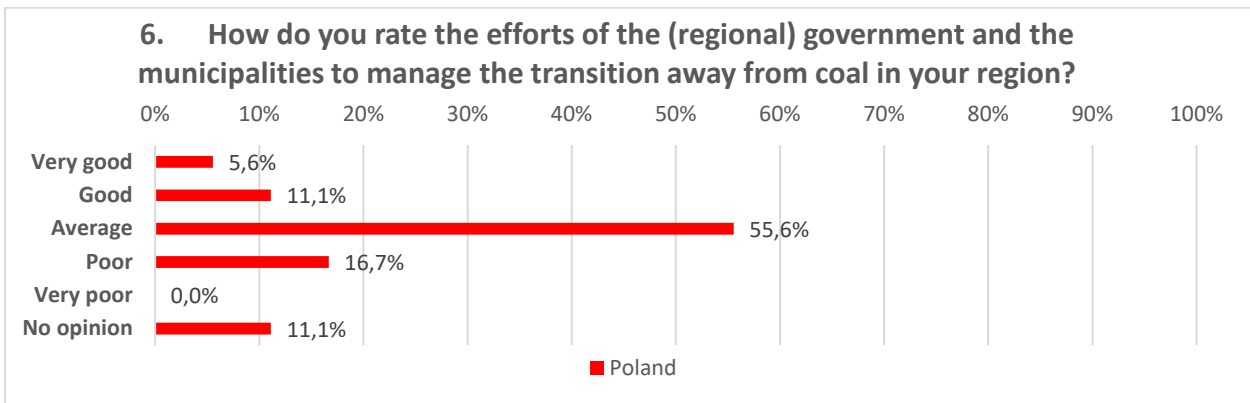
Out of a total of 21 online visitors, 18 persons participated. The percentage of people who completed the questionnaire was 85.7% and the way of participation was 100% via direct link. The majority of respondents (72.2 %) completed the questionnaire in 2-5 minutes.

The survey on public perception in the Konin region regarding the transition away from coal reveals insights from a small yet diverse group of 18 respondents, 61.1% of whom reside outside the Konin region. This distribution indicates an interest in the topic beyond the immediate geographical area. The majority of respondents are female (66.7%), and the age group most represented is 21 to 40 years (72.2%). In terms of employment (Question 4), the predominant status is 'employed' (77.8%). All respondents associate with Saint Barbara (Question 8), the patron saint of miners, with the mining industry, indicating a strong connection or awareness of the mining sector among respondents.

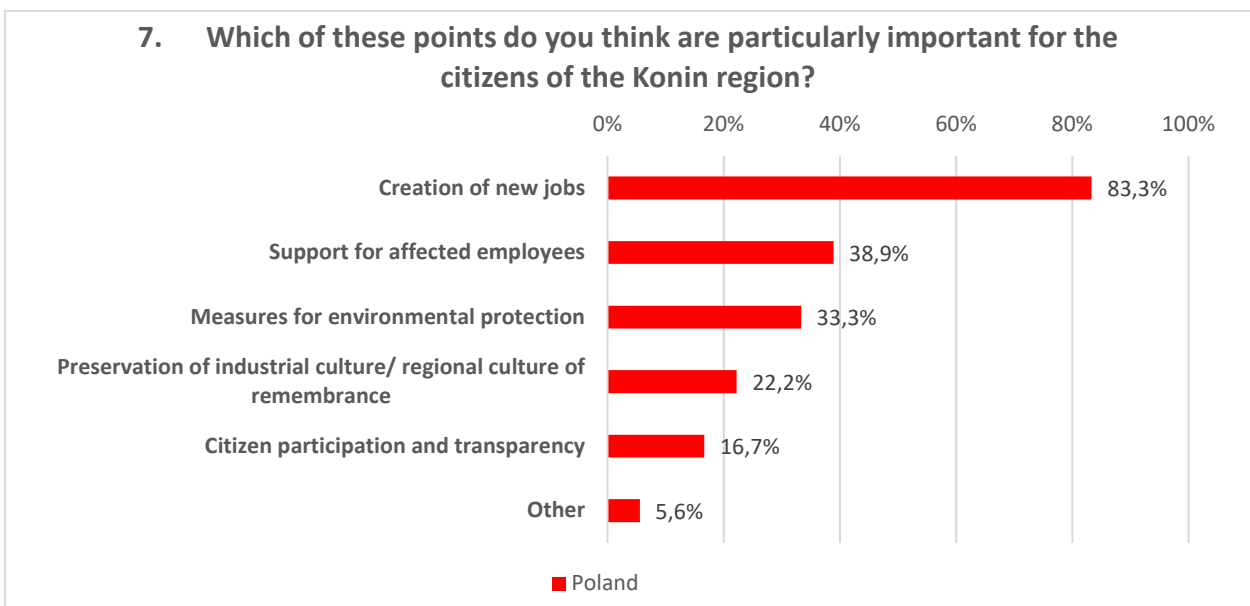




Regarding respondents' associative characters with the Konin region (Question 5; max. 3 answers; 211.1% total number of responses), the region itself is predominantly associated with industry and mining (94.4%), with some respondents also recognizing its potential in recreation and culture (27.8%), and green areas (22.2%). However, none of the respondents associate the region with high-quality education.

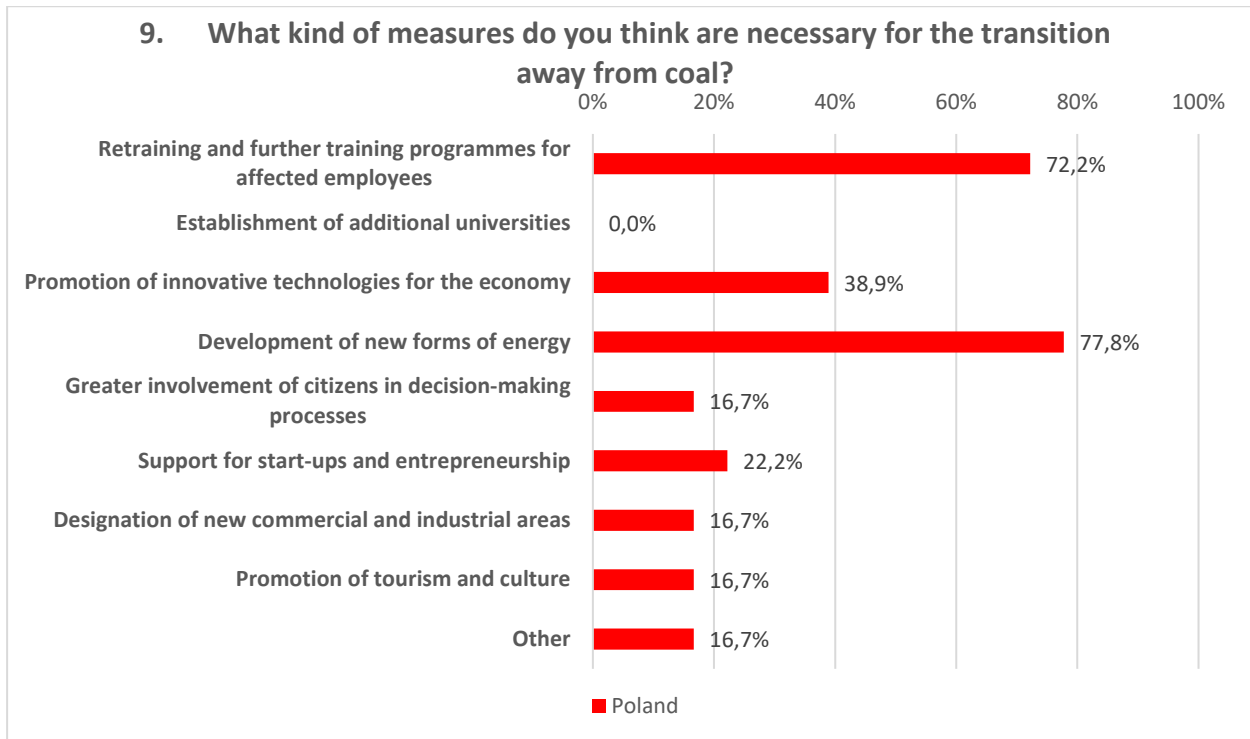


The efforts of regional authorities and local governments in managing the coal transition receive mixed reviews (Question 6), with the majority (55.6%) rating these efforts as average.

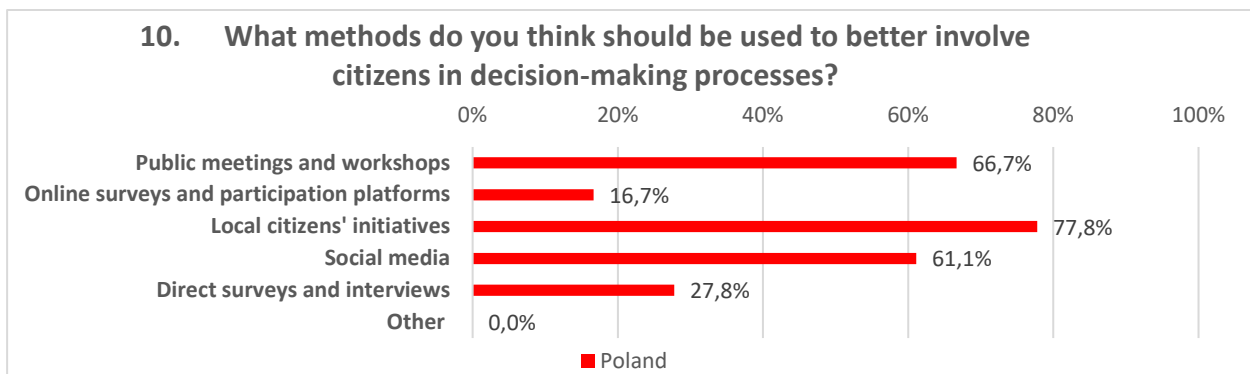


Concerning points of particular importance for the citizens of the Konin region (Question 7; max. 3 answers; 200% total number of responses), the creation of new jobs emerges as the most

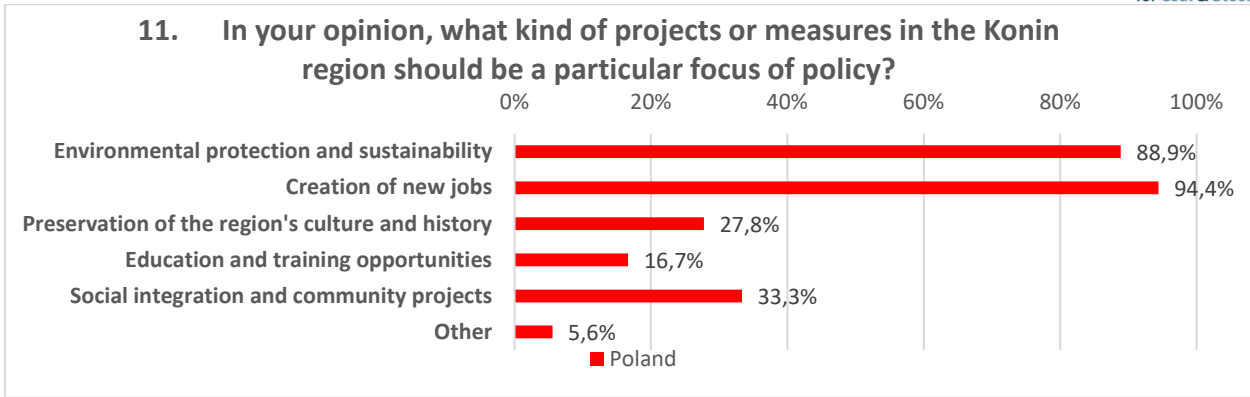
important issue for the Konin region, as identified by 83.3% of respondents, while citizen engagement and transparency are considered less critical (16.7%). Further areas that are particularly important for citizens of the Konin region are presented above.



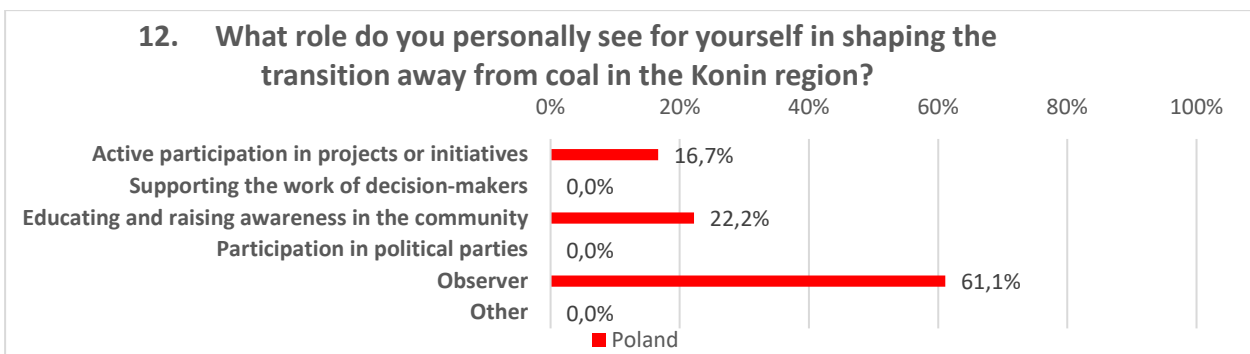
Regarding specific areas of focus for the coal transition (Question 9; max. 3 answers; 277,8% total number of responses), the development of new forms of energy is a priority for 77.8% of respondents, followed closely by retraining and education programs for affected workers (72.2%). The promotion of innovative technologies for the economy is also a concern (38.9%).



Methods for engaging citizens in decision-making processes vary (Question 10; max. 3 answers; 250% total number of respondents), with local citizen initiatives (77.8%), public meetings, and workshops (66.7%) being the most favored, and social media recognized as a viable tool (61.1%).



In terms of policy focus (Question 11; max. 3 answers; 266.7% total number of responses), respondents emphasize the importance of environmental protection, job creation (94.4%), and sustainable development (88.9%).



The majority of respondents view their role in the transformation process as observers (61.10%) rather than active participants (Question 12; max. 3 answers; 100% of total number of responses).

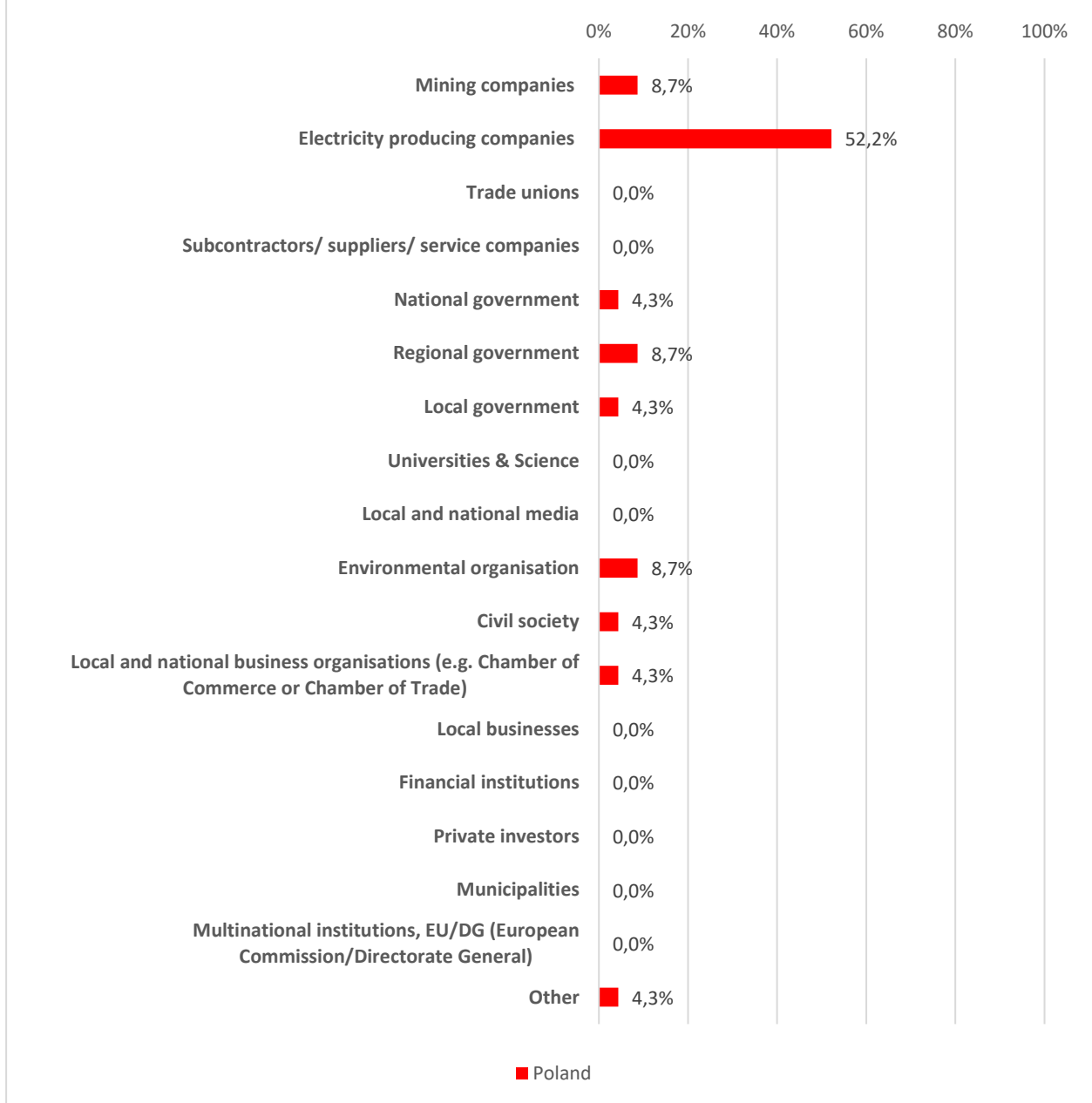
Awareness of existing projects related to the coal transition (Question 13) is relatively high, with 12 out of 18 respondents being aware of such initiatives. Nevertheless, only two respondents participate in the decision-making process of these projects (Question 14), indicating a disparity between awareness and active involvement in the region's transition efforts.

3.3.2 Stakeholder perception

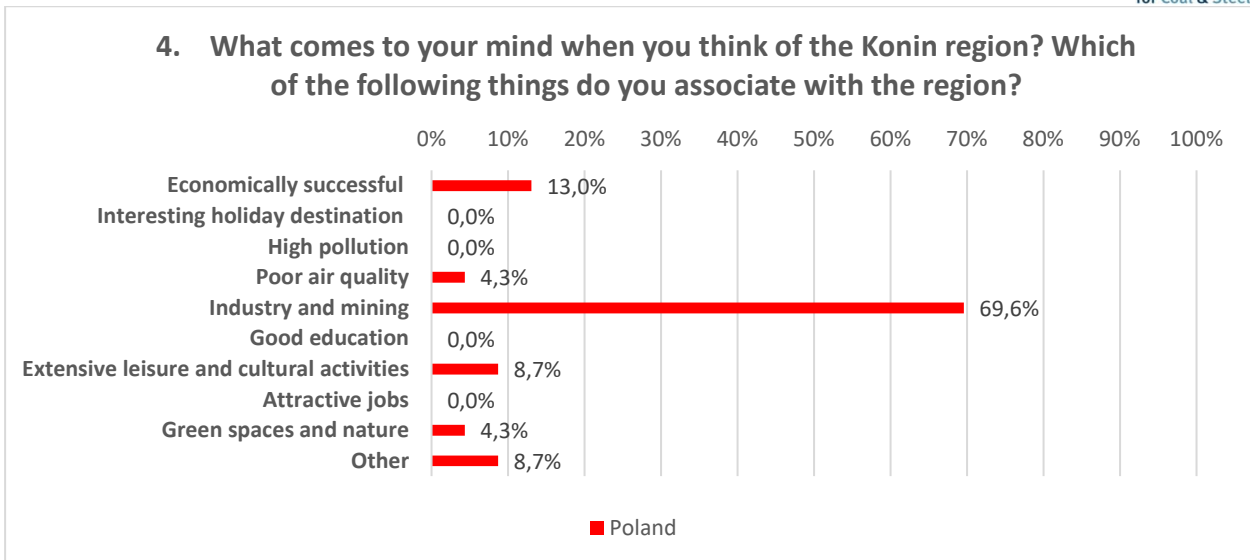
The participation in the online survey conducted for the stakeholders lasted 5 days, from 29.11.2023 to 04.12.2023. 23 persons participated and completed the questionnaire out of a total of 27 visitors (overall completion rate of 85.2%). Visit sources were the direct links shared (100%) while the majority of the respondents (56.5%) completed the questions within 2-5 minutes.

The participants are predominantly local (56.5% from within the region), with a majority falling into the mature age categories (26.1% between 21 to 40 years, 56.5% between 41 to 60 years, and 17.4% over 60).

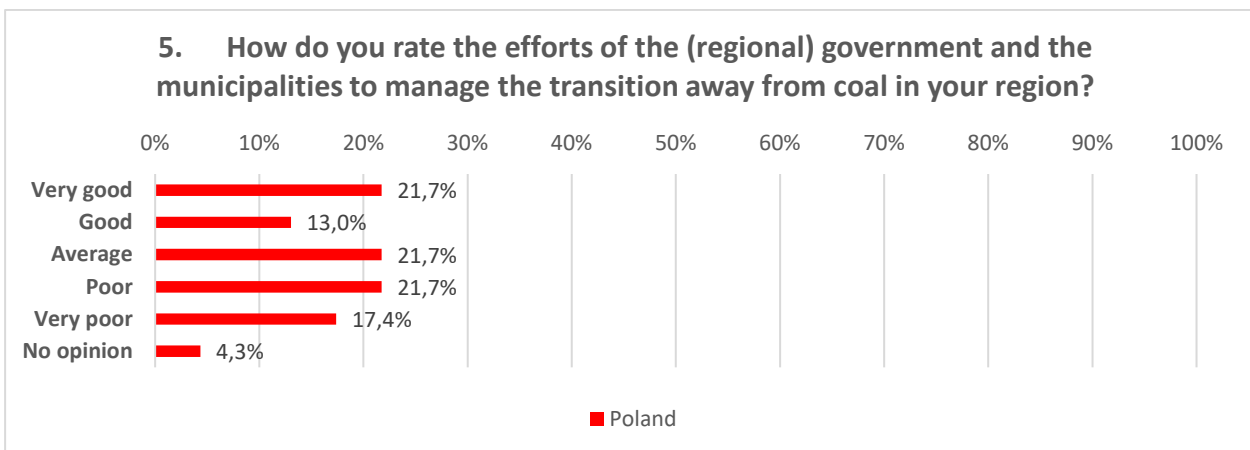
3. From the following options, please select the one that you think is most appropriate to specify your interest group



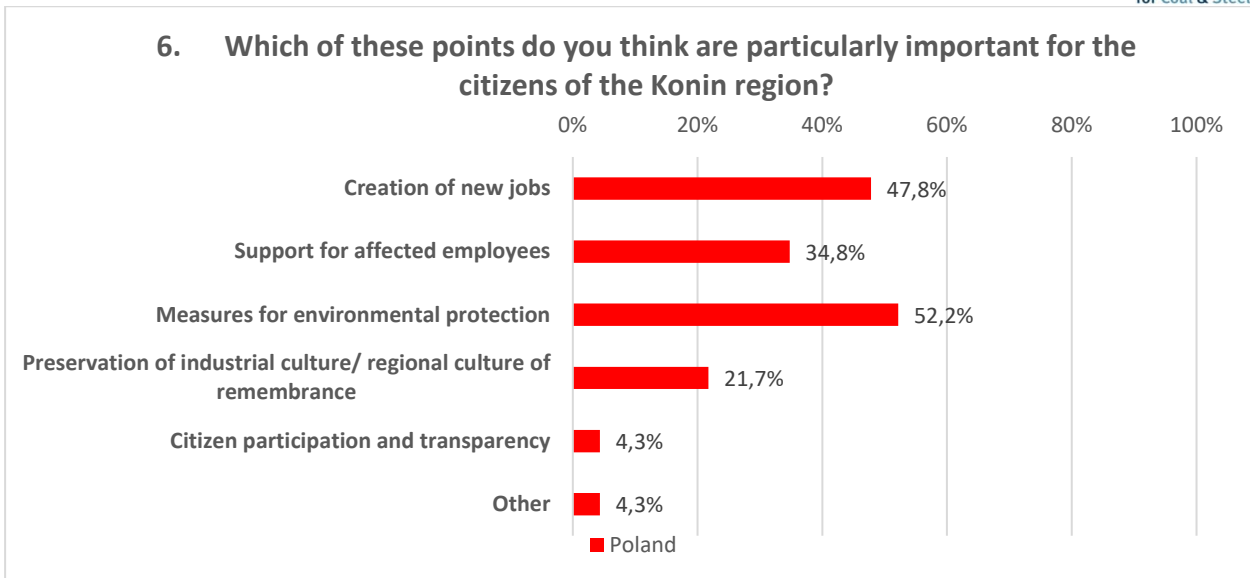
The stakeholder groups are diverse (Question 3): 52.2% from electricity-producing companies, 8.7% each from mining companies and regional authorities, with national authorities, local governments, ecological organizations, civil society, and local/national business organizations each representing 4.3%. This demographic and stakeholder makeup reflects a wide range of perspectives, emphasizing significant representation from the energy sector and varied involvement from governmental and non-governmental entities.



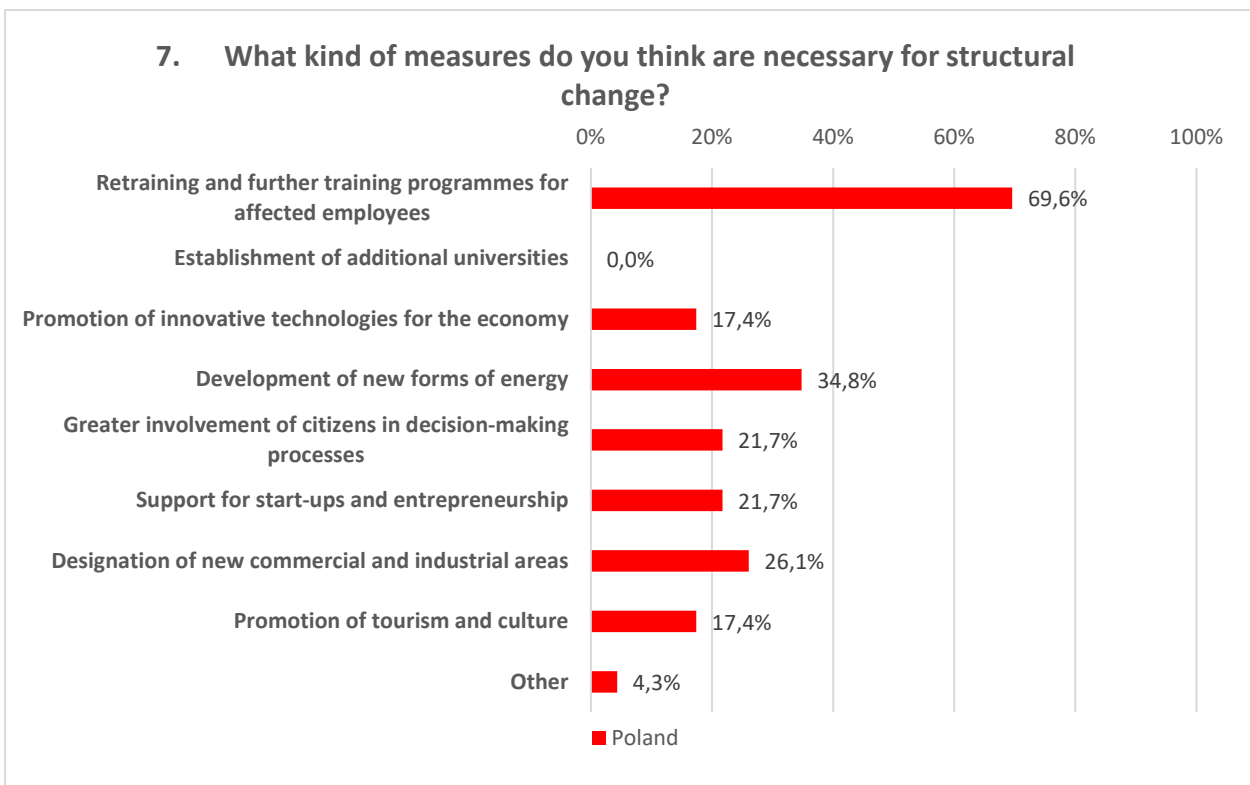
In the stakeholder survey, associations with the Konin region vary (Question 4; max 3 answers; 108,7% total number of responses): 69.6% identify with industry and mining, while economic success, cultural and recreational opportunities are noted by 13% and 8.7% respectively. Other associations include energy transition (8.7%) and air quality concerns (4.3%).



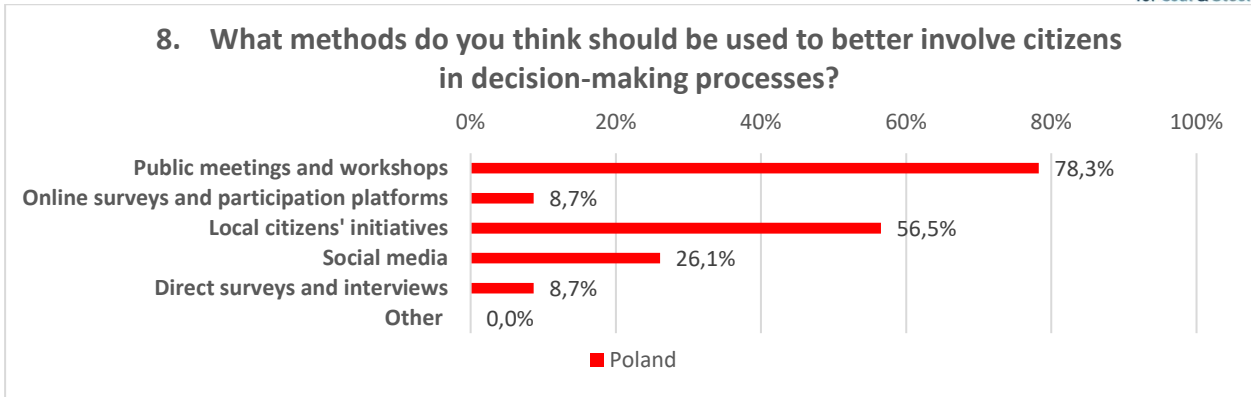
In assessing regional and local authorities' management of the coal transition, stakeholders' opinions vary (Question 5). National, regional, local authorities, and business organizations mostly rated them very positively, while other groups were more critical.



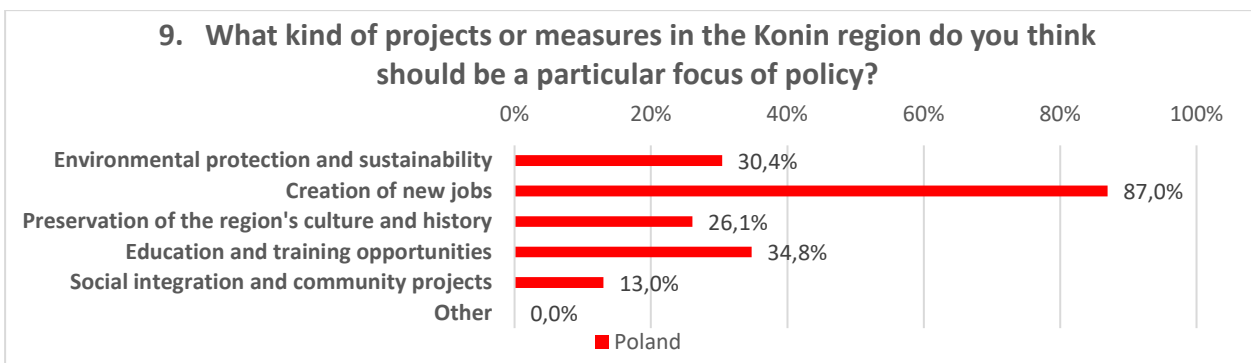
Concerning which points are particularly important for the citizens of the Konin region (Question 6; max. 3 answers; 165.2% total number of responses), stakeholders prioritize mainly environmental protection (52.2%), job creation (47.8%), and supporting affected workers (34.8%), with lower emphasis on industrial cultural preservation (21.7%).



In the context of structural transformation (Question 7; max. 3 answers; 213% total number of responses), stakeholders prioritize retraining and education programmes for workers (69.6%) as the most urgent issue. Development of new energy forms (34.8%) and designation of new commercial and industrial areas (26.1%) are also seen as crucial.



For better citizen engagement in decision-making (Question 8; max. 3 answers; 178.3% total number of responses), public meetings and workshops (78.3%) are favored, along with local civic initiatives (56.5%), recognizing the role of social media in this process.



Concerning stakeholders' preferences for policy focus areas in the Konin region (Question 9; max. 3 answers; 191.3% total number of responses), a strong emphasis is on the creation of new jobs (87%), followed by education and training opportunities (34.8%), indicating a notable interest in developing human capital. Environmental protection and sustainability as an option is highlighted by 30.4% of the respondents as a key focus. Preservation of the region's culture and history is deemed important by less participants (26.1%) prioritizing it. Social integration and community projects is seen as less critical, receiving (13.1%) of stakeholder interest.

3.3.3 Expert Stakeholder perception

In the Konin region, as part of the ongoing coal transition, an Expert Stakeholder Perception Survey was conducted to capture diverse perspectives essential for this transformative period. A comprehensive questionnaire was distributed to three key organizations, representing critical sectors: the mining industry, business environment institutions and scientific and technical association. The involvement of these organizations is key, as they are not only integral to the operational aspects of the coal transition but also hold strong connections with the community.

The survey conducted among expert stakeholders in the Konin region has revealed a unanimous agreement on the existence of a unified regional development plan. This integrated approach encompasses a variety of projects and initiatives, all coordinated within a single, comprehensive strategic framework aimed at facilitating extensive transformation across the region.

The community was engaged predominantly through personal selection methods during various events such as citizen information sessions, open-space conferences, and future workshops. Additionally, special involvement was indicated in information meetings in municipalities (almost 30) as part of the "EU funds without secrets" series and training for potential beneficiaries of the Just Transition Fund under the European Funds for Greater Poland 2021-2027 Program. The mining industry stakeholder replied that his involvement in information meetings was based on disseminating information among ZE PAK Group employees.

On average, events saw participation ranging from 10 to 50 individuals, primarily engaged at the regional level. The composition of participants at these meetings indicated an equal distribution among business environment stakeholders and scientific associations, while mining companies reported a male-dominated attendance. The age distribution was mainly among the mature population, with the oldest participants identified by mining industry stakeholders.

The reception of these events varied. Among the workforce community, there was a tendency towards a negative attitude towards the transition. Other groups displayed reactions ranging from neutral to positive.

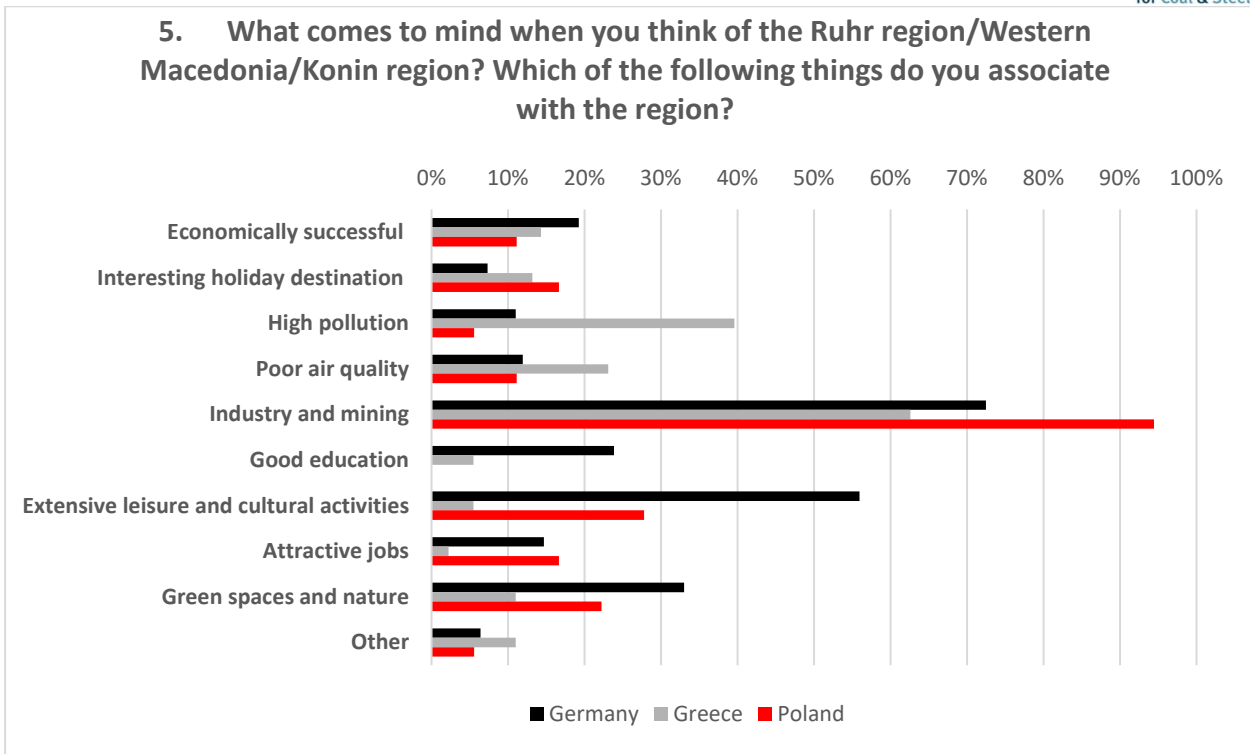
3.4 Comparative Representation

3.4.1 Public perception

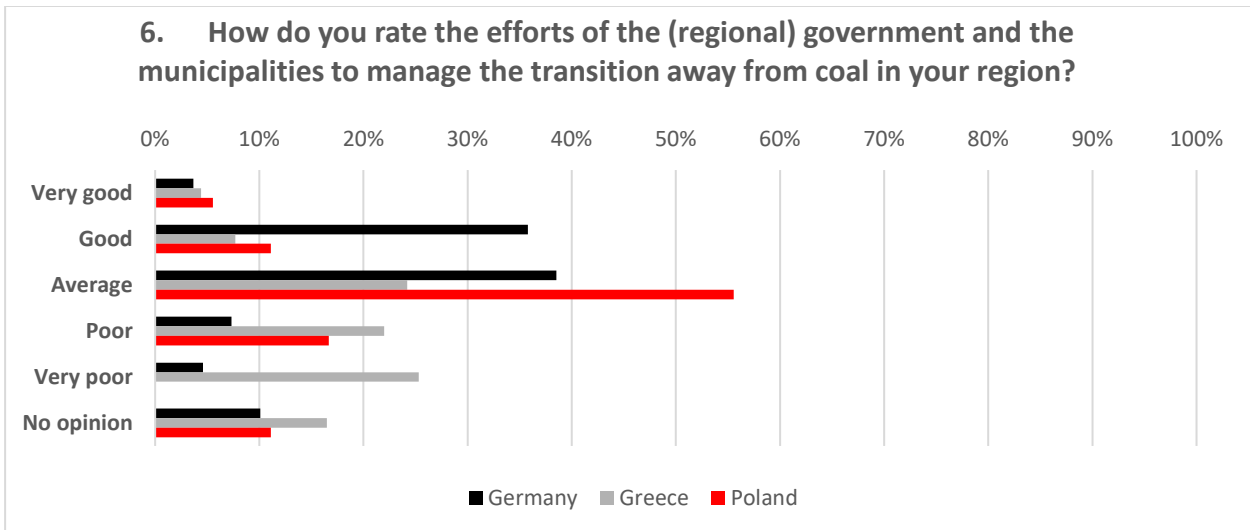
The socio-demographic characteristics of the public perception in Germany, Greece and Poland are compared regarding respondents the four questions concerning place of residence, gender, age and employment status. The German survey illustrates that for a large majority of respondents (82,6%) place of residence is the Ruhr region, whereas a small group of survey participants (17,4%) come from outside this region. In contrast, the Polish and Greek surveys highlight that more respondents come from outside the Konin (61,1%) and Western Macedonia (67%) regions, than from within these regions (38,9% and 33% respectively).

In both the German and Greek surveys, more male (63,3% and 62,6%) than female (36,7% and 36,3%) respondents are part of the survey. Notable in the Polish survey is that more female (66,7%) than male (27,8%) respondents participate in the survey. Whereas in the German case an almost equal division regarding the age groups of 21 to 40 years old (41,28%) and the 41 to 60 years old (43,12%) exists, in Greece the former age group is presented with a slight majority (51,6%) and the latter age group with less respondents (38,5%) compared to the German survey. Again, the Polish survey illustrates that, apart from the majority of respondents being female, a high majority of these covered the age group 21 to 40 years old (72,2%), while the 41 to 60 years old (22,2%) are much less represented compared to the German and Greek survey. What all three surveys have in common is that the age groups at both ends of this spectrum, the respondents over 60 years (Germany 14,68%; Greece 9,9%; Poland 5,6%) and those younger than 20 years (Germany 0,92%; Greece 0%; Poland 0%) are, in comparison, much less (Germany) represented, or not represented at all (Greece and Poland). The majority of German (73,4%) and Polish (77,8%) respondents are in employment while, in comparison, less Greek respondents (40%) are employed. While no German respondent is unemployed, a small number of Polish (5,6%) and Greek (4,2%) respondents are unemployed. In turn, more Greek respondents (24,2%) enjoy self-employment than their German (7,3%) and Polish (5,6%) counterparts. More Greek (15,8%) than Polish (11,1%) and German (5,5%) civil servants participate, while in the German survey more respondents (9,2%) are in pension than in the Greek (6,3%) and Polish case (5,6%).

A systematic comparison of the remaining questions 5-14 of the surveys is conducted in which respondents are asked about their perceptions and knowledge on post-mining landscapes, and their engagement level to support the development of post-mining areas.

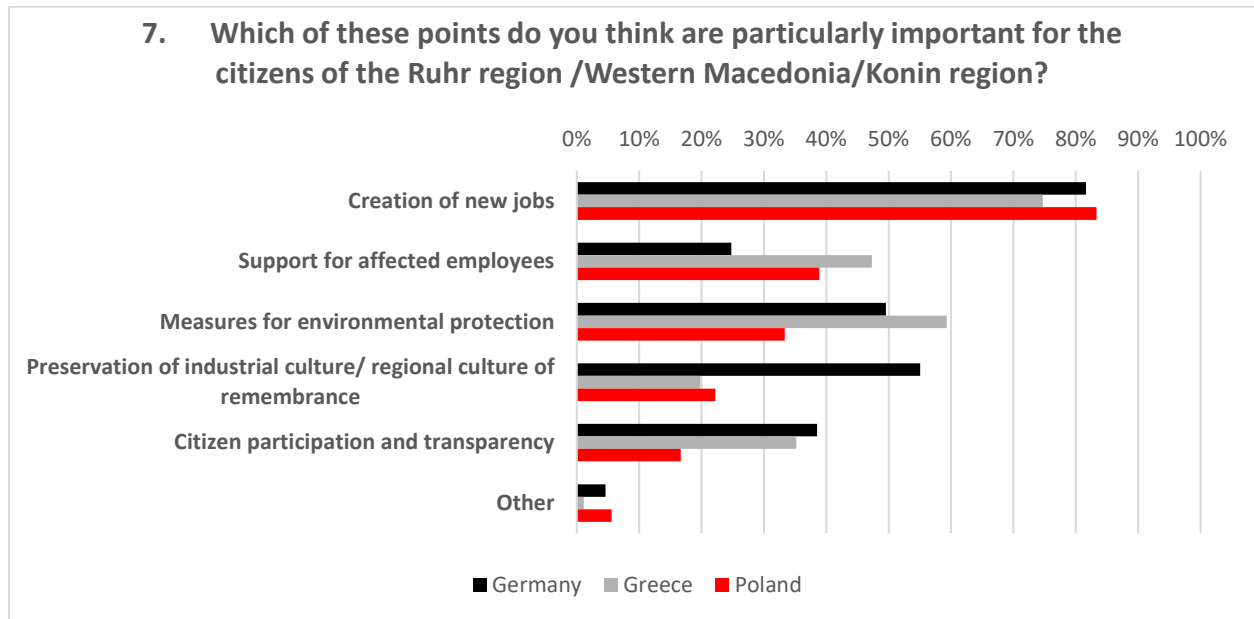


Regarding the various options given what German, Greek and Polish respondents (max. 3 answers) associate with the Ruhr, Western Macedonia and Konin region respectively (Question 5), a high majority identify themselves first and foremost with **industry and mining** (Germany 72,5%; Greece 62,6%; Poland 94,4%). While German (56%) and Polish (27,8%) respondents opt for the vast leisure and cultural activities of their regions, Greek respondents' second option (39,6%) concerns high pollution (compared to Germany 11%; Poland 5,6%). Again, both German (33%) and Polish (22,2%) respondents choose green spaces and nature as the third highest association with their respective region, while the Greek respondents view this differently (11%).

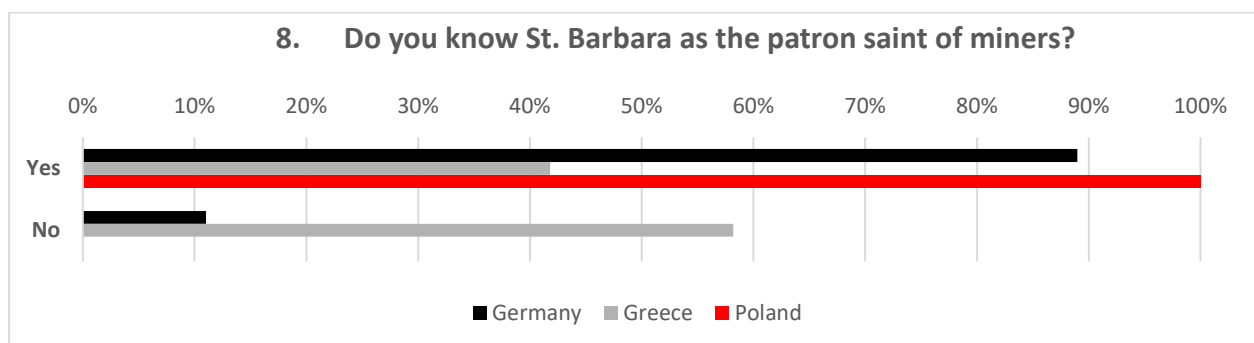


Efforts of the respective (regional) government and municipalities in managing post-mining transition (Question 6) are overall rated positively by German respondents, as a relatively equal division of respondents choose very good/good (total 39,5%) or average (38,5%). Compared to these results, a small number of respondents find these efforts poor/very poor (total 11,9%). Polish respondents are also divided in their opinion with a slight majority of the respondents (55,6%) viewing the efforts to manage coal transition in the Konin region as average, while the opinion towards these efforts being very good/good (total 16,7%) or poor (16,7%) are respectively identi-

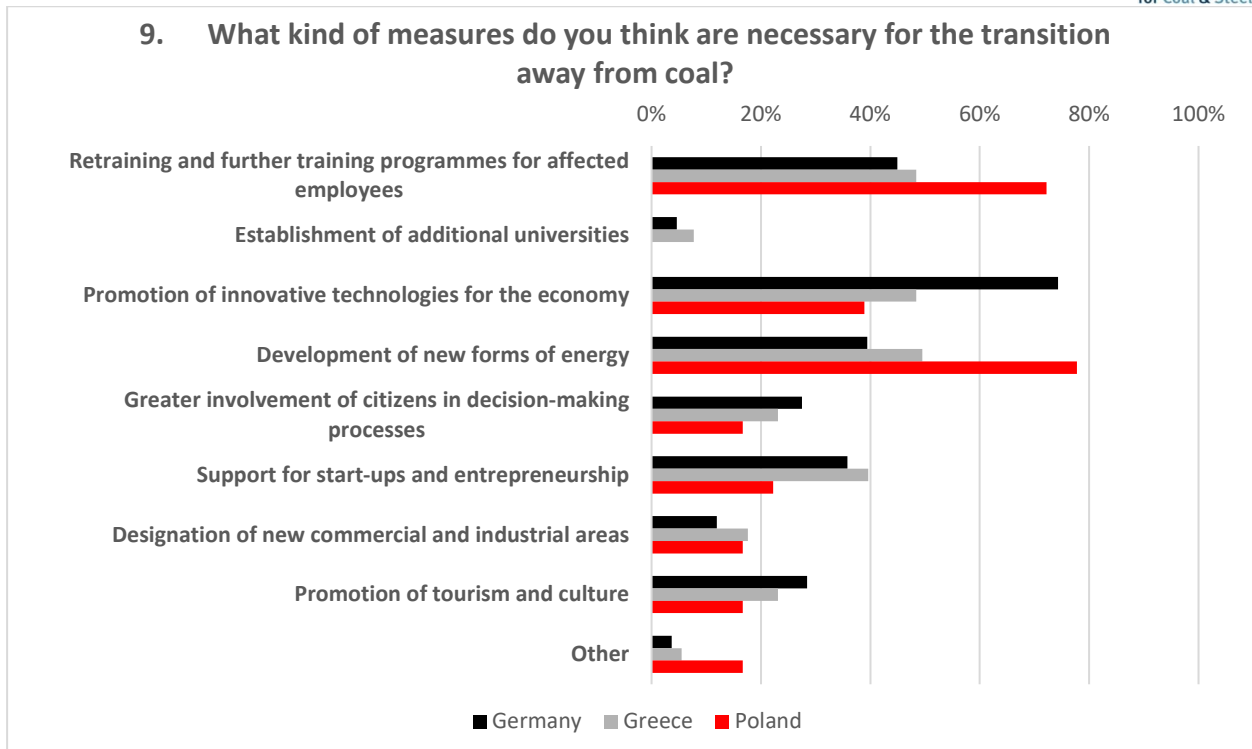
cal. Greek respondents, on the other hand, are less optimistic this regarding and view these efforts as poor/very poor (total 47,3%), followed by thinking of (regional) government and municipalities in managing post-mining transition in the Western Macedonia region as very good/good (total 12,1%) or average (24%). Notable is that roughly the same percentage of Greek (16,5%), Polish (11,5%) and German (10,1%) respondents had no opinion towards this question.



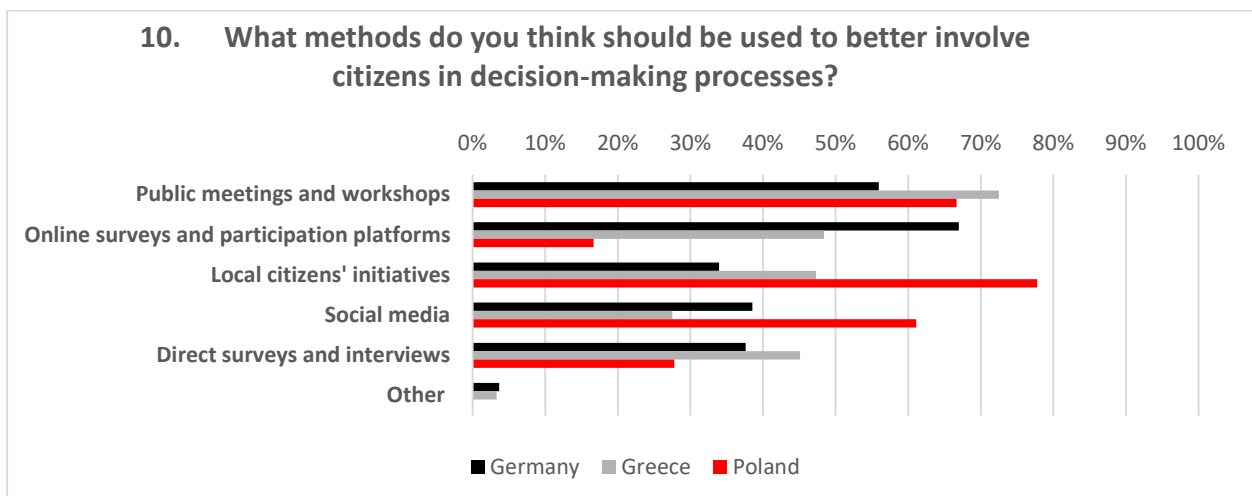
Particularly important for citizens of all three regions (Question 7), according to the survey participants (max. 3 answers), is the **creation of new jobs** (Poland; 83,3%; Germany 81,7%; Greece 74,7%). The second and third most important aspect respondents choose from the given options vary; while German respondents (55%) rate the preservation of industrial/regional culture of remembrance higher and measures for environmental protection also of importance (49,5%), Greek respondents (59,3%) view environmental protection as significant, followed by support for affected employees (47,3%). Polish respondents turn this around, with support for affected employees (38,9%) being slightly more important than measures for environmental protection (33,3%).



While all Polish respondents (100%) and almost all German respondents (89%) are familiar with the patron saint of miners, St. Barbara (Question 8), slightly more than the majority of Greek respondents (58,2%) have no knowledge of this.

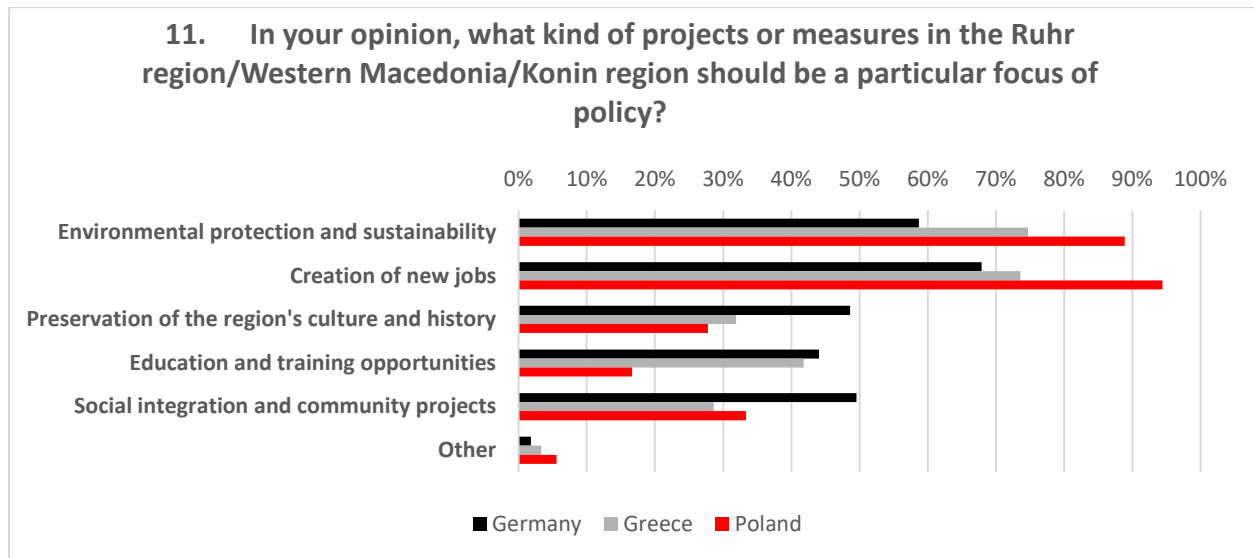


German, Greek and Polish respondents' views towards the measures necessary for the transition away from coal (Question 9) are similar, while the ranking of the German survey towards this varies from the Greek and Polish cases. For German respondents, the most significant measures necessary for the transmission away from coal (max. 3 answers) are ranked in the following order: (1) promotion of **innovative technologies** for the economy (74,3%); (2) **retraining** and further training programmes of affected employees (45%); (3) development of **new forms of energy** (39,4%), and; (4) support for start-ups and entrepreneurship (35,8%). Greek respondents view the following answer options as identically important: (1) the development of new forms of energy (49,5%); (2) retraining and further training programmes of affected employees (48,4%); (3) promotion of innovative technologies for the economy (48,4%), and; (4) support for start-ups and entrepreneurship (39,6%). Again, Polish respondents viewed the same measures of importance: (1) development of new forms of energy (77,8%); (2) retraining and further training programmes of affected employees (72,2%); (3) promotion of innovate technologies for the economy (38,9%), and: (4); support for start-ups and entrepreneurship (22,2%).

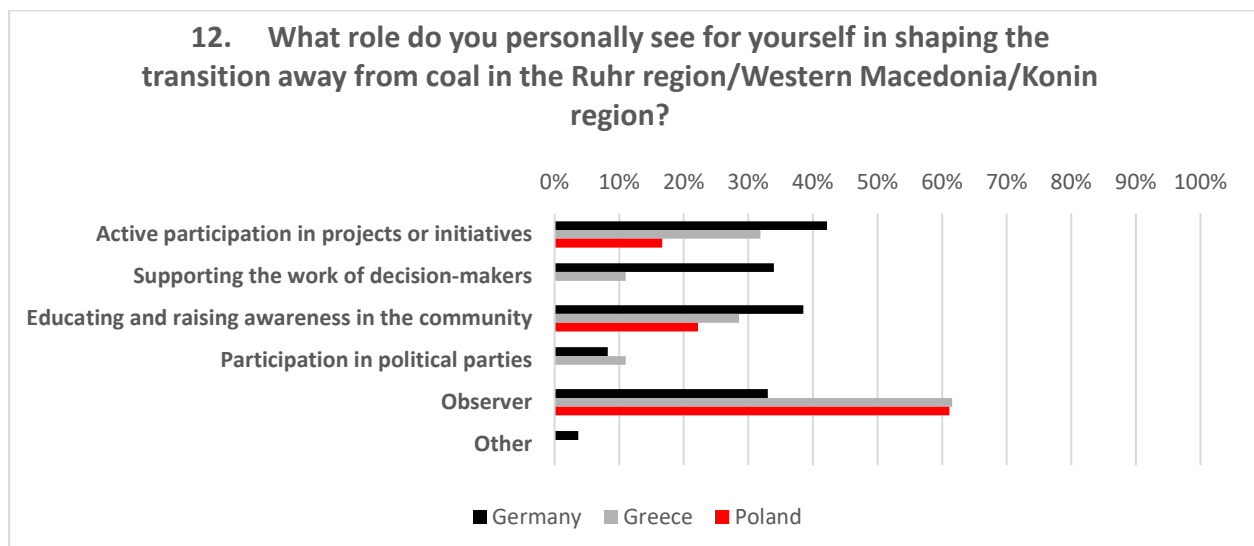


Concerning the five methods as an option to be applied to improve involvement of citizens in decision-making processes (Question 10), the German, Greek and Polish responses largely vary (max. three answers). While Polish respondents rank local citizens' initiatives (77,8%) on first

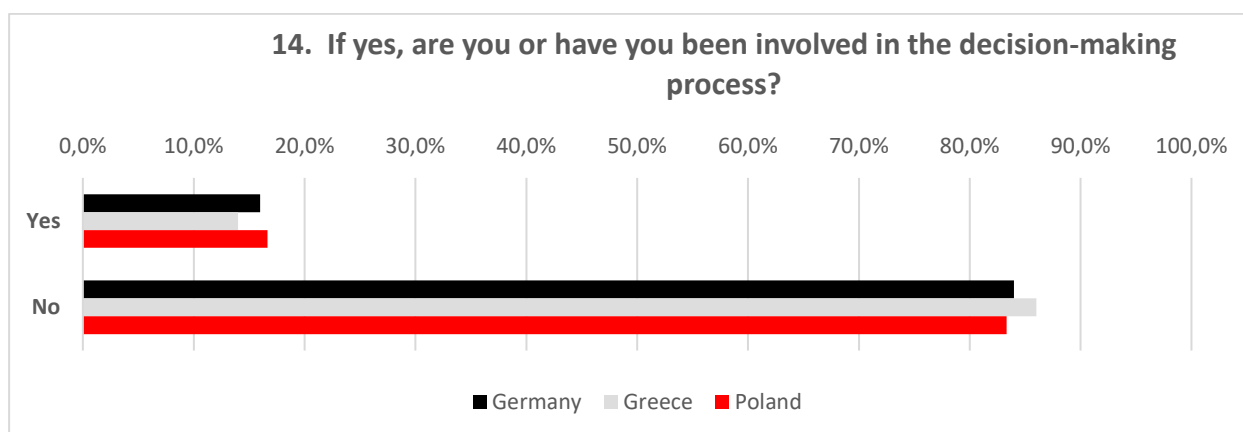
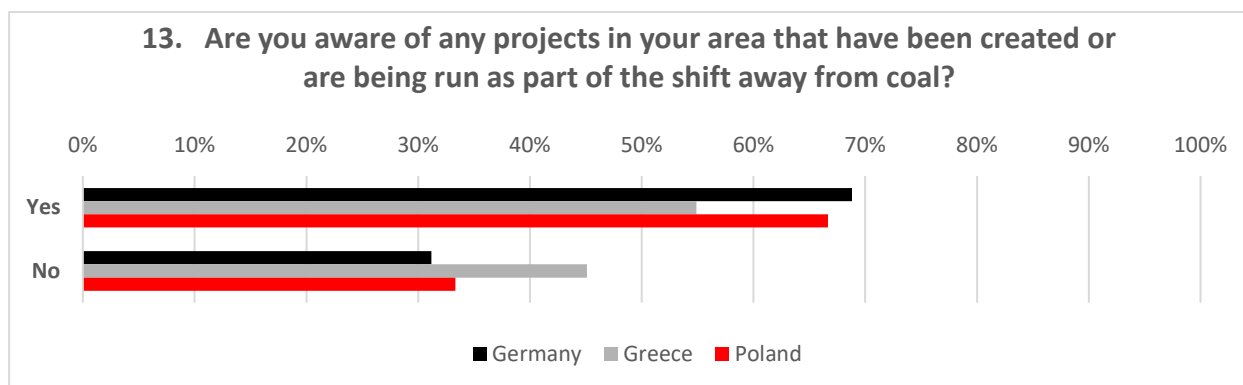
place, this is shared by almost a majority of Greek respondents (47,3%, rank 3) and less German respondents (33,9%, rank 5). Greek respondents (72,5%) rank public meetings and workshops on number one, while Polish (66,7%) and German respondents (56%) share this view on rank 2. The German survey illustrates that its respondents find online surveys and participation platforms (67%) of most importance to involve its citizens better in decision-making process. This is shared by almost a majority of Greek respondents (48,4%, rank 2) and a small number of Polish respondents (16,7%, rank 5). Concerning the remaining two options to improve citizen participation in decision-making process, social media and direct surveys and interviews, the former ranks on third place both in the Polish (61,1%) and German survey (38,5%), and is ranked as least preferable method in the Greek survey (27,5%). The latter, direct surveys and interviews, ranks on fourth place for all respondents of Greece (45,1%), Germany (37,6%) and Poland (27,8%).



German and Polish respondents (max. 3 answers) are identical in their ranking on a particular policy focus on the following projects or measures to be taken (Question 11): (1) creation of new jobs (Germany 67,9%; Poland 94,4%); (2) environmental protection and sustainability (Germany 58,7%; Poland 88,9%); (3) social integration and community projects (Germany 49,5%; Poland 33,3%); (4) preservation of the region’s culture and history (Germany 48,6%; Poland 27,8%), and; (5) education and training opportunities (Germany 44%; Poland 16,7%). Greek responses varied in ranking as they viewed both environmental protection and sustainability (74,7%) and the creation of new jobs (73,6%) of similar importance (rank 1 and 2). Education and training opportunities (41,8%), preservation of the region’s culture and history (31,9%) and social integration and community projects (28,6%) ranked on position 3, 4 and 5, respectively.



Concerning question 12 about personally shaping the transition away from coal in the three regions (max. three answers), notable is that German respondents (42,2%) see themselves first and foremost active participation in projects or initiatives. In turn, both Greek (61,5%) and Polish (61,1%) respondents prefer to act as observers, in comparison to a smaller number of German respondents (33%). Personal involvement through active participation in projects or initiatives is rank 2 for Greek (31,9%) and rank 3 for Polish (16,7%) respondents. In the German survey, the answers educating and raising awareness in the community (38,5%), and support the work of decision-makers (33,9%) are on rank 2 and 3, respectively. In the Greek case, these options, educating and raising awareness (28,6%) and supporting the work of decision-makers (11%) are viewed by respondents as less important, while in the Polish case, the former is viewed similar by respondents (22,2%), while the latter did not receive any response.



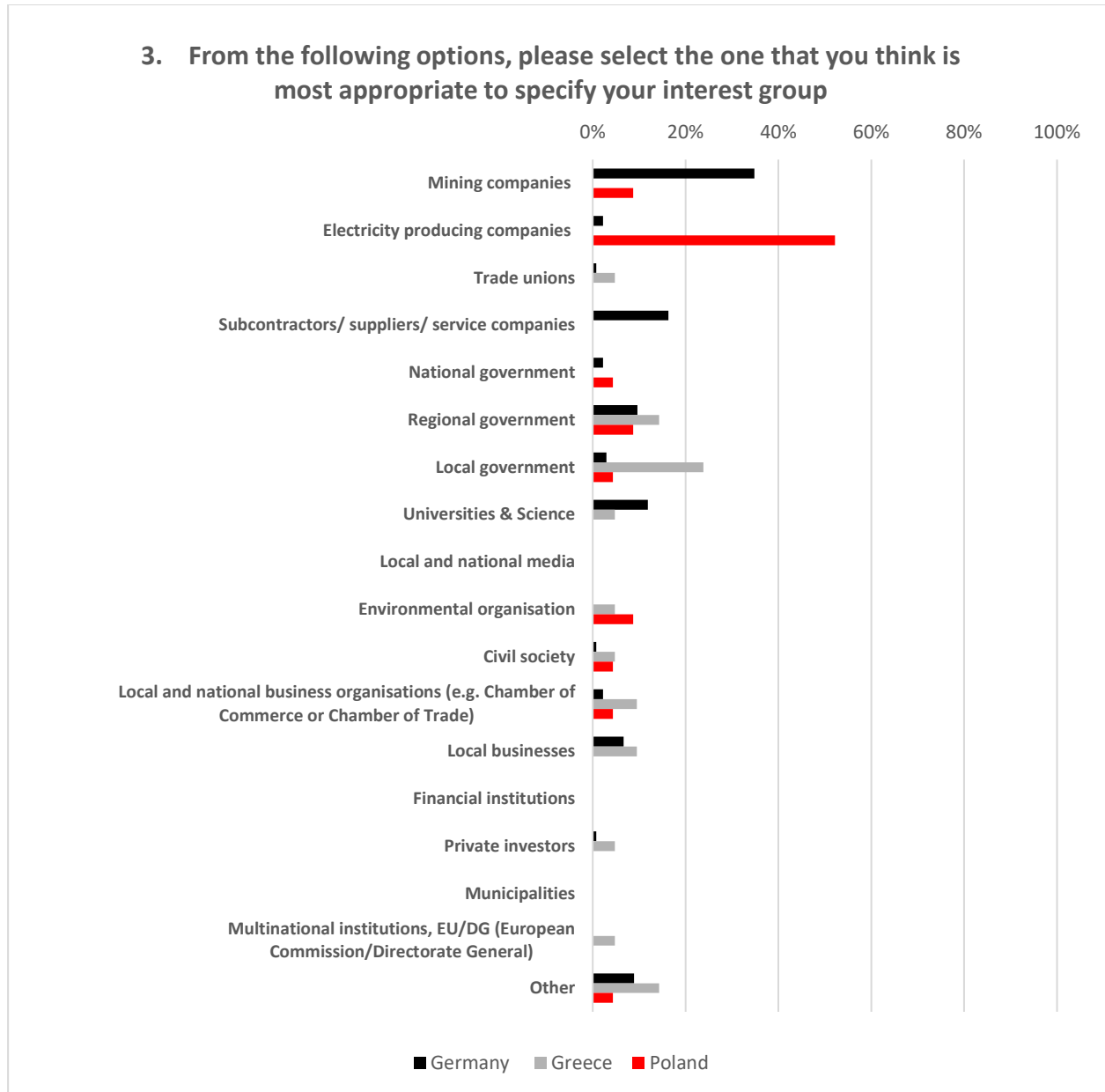
Most respondents in Germany (68%), Greece (54,9%) and Poland (66,7%) have knowledge of projects being created or run as part of the transmission of coal in their respective regions (Question 13), whereby a mere small number of German (16%), Greek (14%) and Polish (16,7%) have been involved in the decision-making process (Question 14).

3.4.2 Stakeholder perception

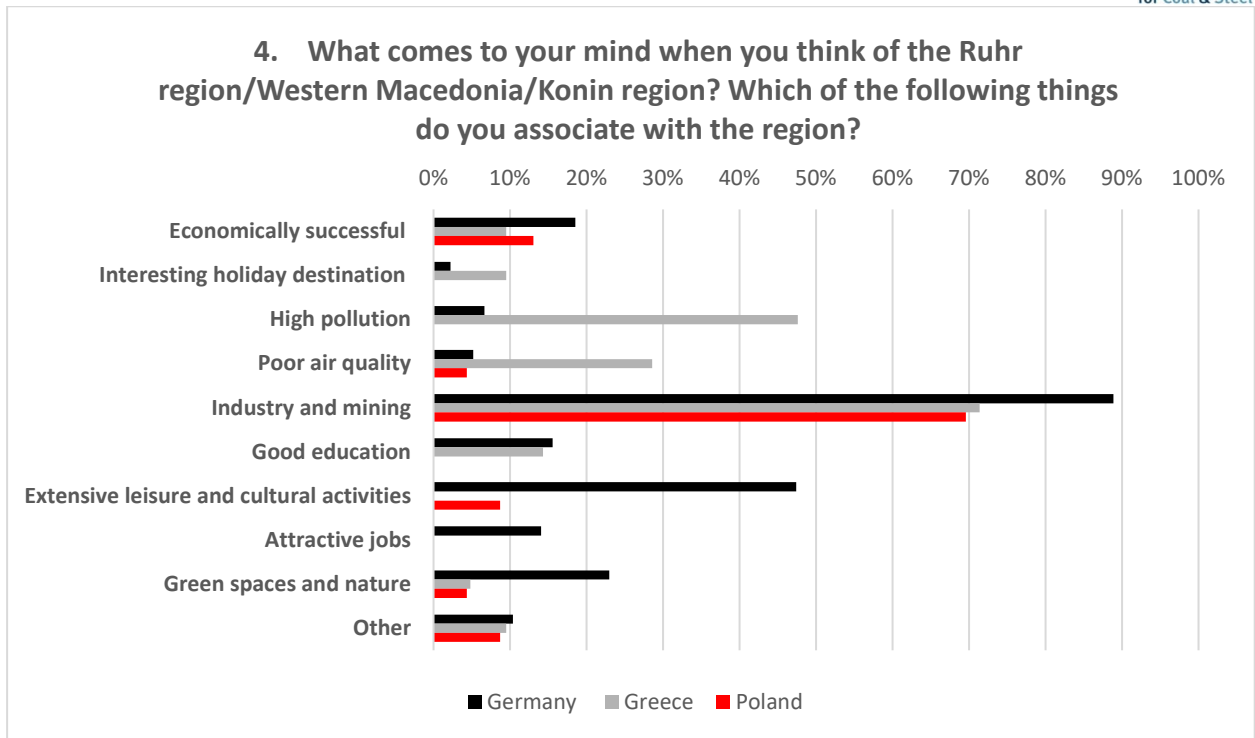
Regarding the socio-demographic characteristics of the three stakeholder surveys in Germany, Greece and Poland, a slight majority of the German respondents (51,9%) come from outside the Ruhr region, with the remaining respondents (48,1%) residing inside the region. Greek stakeholders (95,2%) largely reside within the Western Macedonia region, while a minority (4,8%) stem from elsewhere. Polish stakeholders are divided with a good portion of respondents (56,5%) from within the Konin region, and the remaining (43,5%) coming from outside.

The German stakeholder survey illustrates that the age group 41 to 60 years is covered by most respondents (42,2%), followed by the 21 to 40 years old (37,8%). A minority of respondents are over 60 years (20%). Greek stakeholders equally cover the age group 41 to 60 years with most respondents (76,2%), followed by the 21 to 40 years old (19%). A small minority of respondents

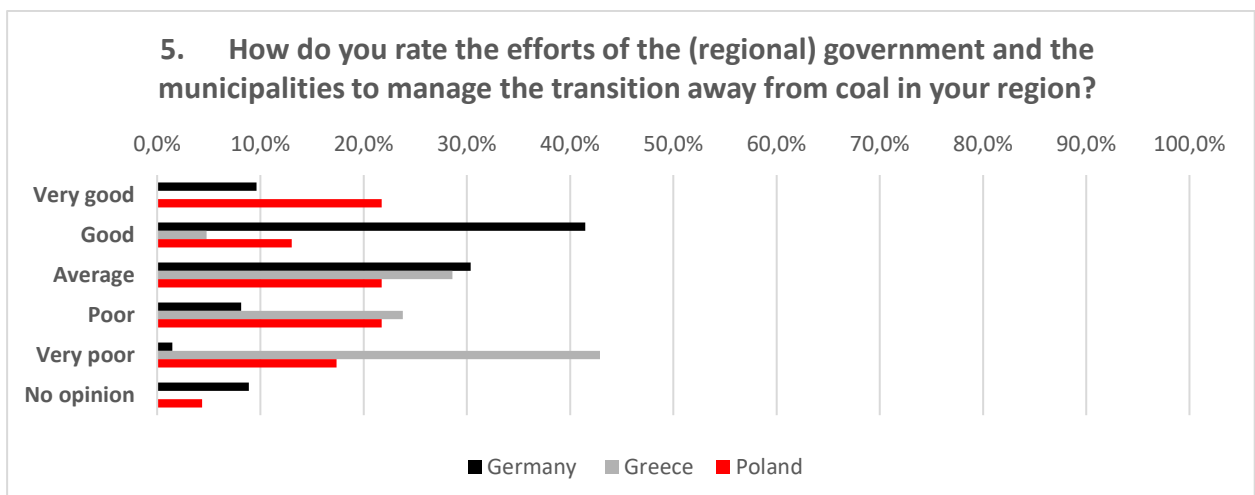
are over 60 years (4,8%). Equally, in the Polish case, stakeholders mostly cover the age group of 41 to 60 years old (56,5%), followed by the 21 to 40 years old (26,1%). Similar to the German and Greek survey, here also a minority of stakeholders (17,4%) cover the over 60 years old age group. Notable is that in neither survey, the age group younger than 20 years is not represented.



The majority of German stakeholders (Question 3) represented interest groups from mining companies (34,8%), subcontractors/suppliers/service companies (16,3%), universities and science (11,9%), or local businesses (6,7%). A small minority of stakeholders opt for an interest group “other” (8,9%). Greek stakeholders mostly represent local (23,8%) or regional government (14,3%), local businesses (9,5%) or local and national business organisations (9,5%). Various stakeholders (14,3%) are not represented by the given options of interest groups. The majority of Polish stakeholders (52,2%) are mainly represented by electricity producing companies, followed by stakeholders from mining companies (8,7%) and local government (4,3%). A small number of stakeholders (4,3%) selected the option “other”.

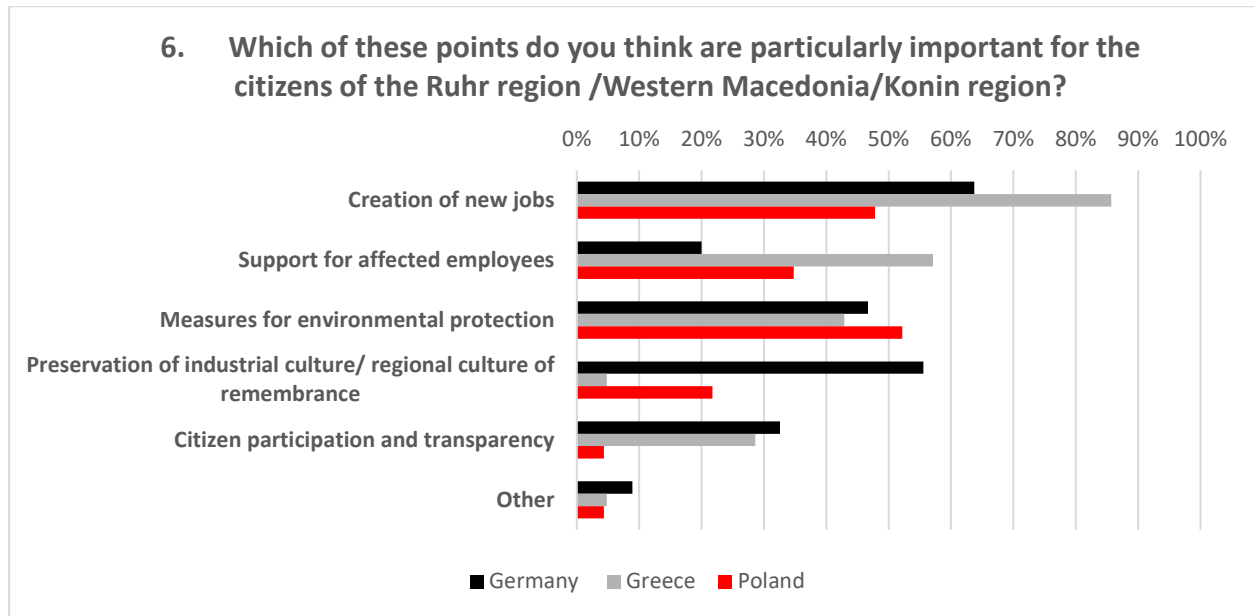


Regarding the various options given what German, Greek and Polish stakeholders (max. 3 answers) associate with the Ruhr, Western Macedonia and Konin region respectively (Question 4), a high majority identify themselves first and foremost with industry and mining (Germany 88,9%; Greece 71,4%; Poland 69,6%). While German respondents choose extensive leisure and cultural activities (47,4%) and green spaces and nature (23%) as their second and third option, Greek respondents' second option (47,6%) concerns high pollution (compared to Germany 6,7%; Poland 0%), while the third option concerns poor air quality (28,6%) (compared to Germany 5,2%; Poland 4,3%). Polish stakeholders associate themselves with the region, apart from industry and mining, as being economically successful (13%), while this largely corresponds to the German and Greek responses (18,5% and 9,5% respectively). While German and Greek stakeholders find good education offered in the regions of relevance (15,6% and 14,3% respectively), Polish stakeholders do not respond to this.

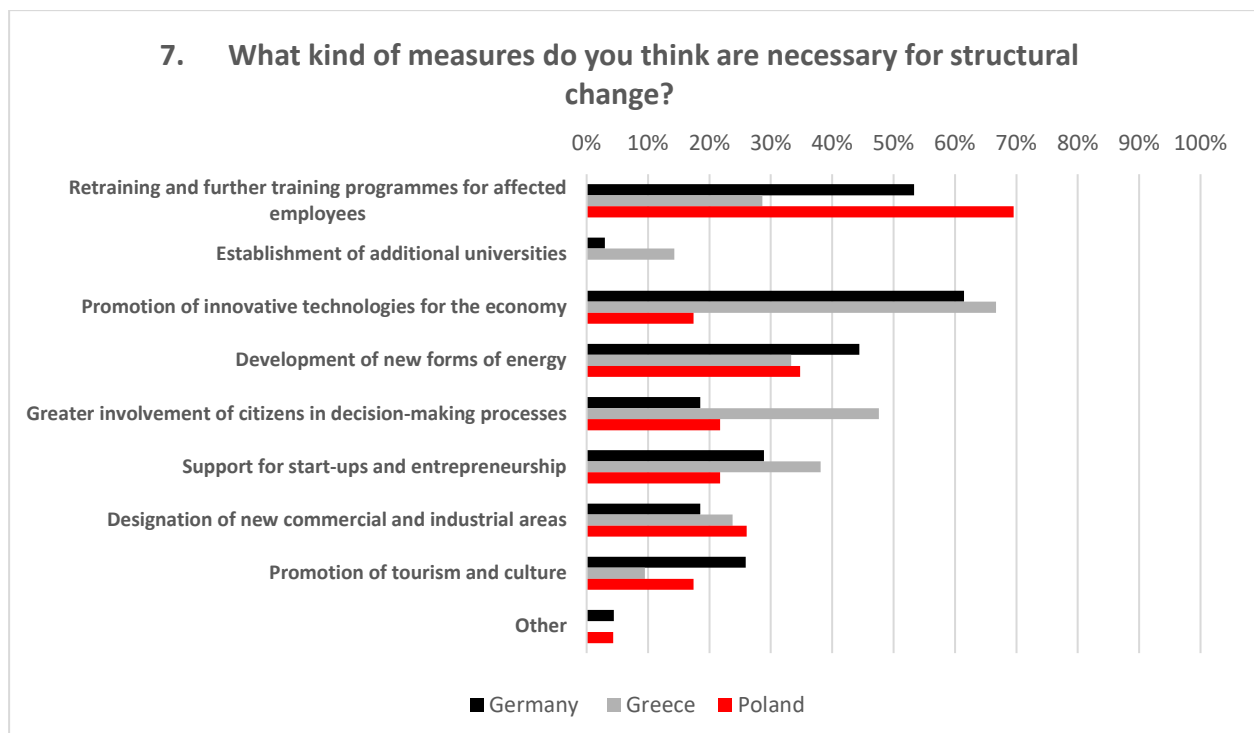


Efforts of the respective (regional) government and municipalities in managing post-mining transition (Question 5) are overall rated positively by German stakeholders, as stakeholders choose very good/good (total 51.1%) or average (30,4%). Compared to these results, a small number of respondents find these efforts poor/very poor (total 9,6%). Polish respondents are more divided in their opinion concerning the efforts to manage coal transition in the Konin region: good/very good (total (34,7%), average (21,7%) and poor/very poor (39,1%). Greek stakeholders, on the other hand, are less optimistic this regarding and view these efforts mainly as poor/very poor (total

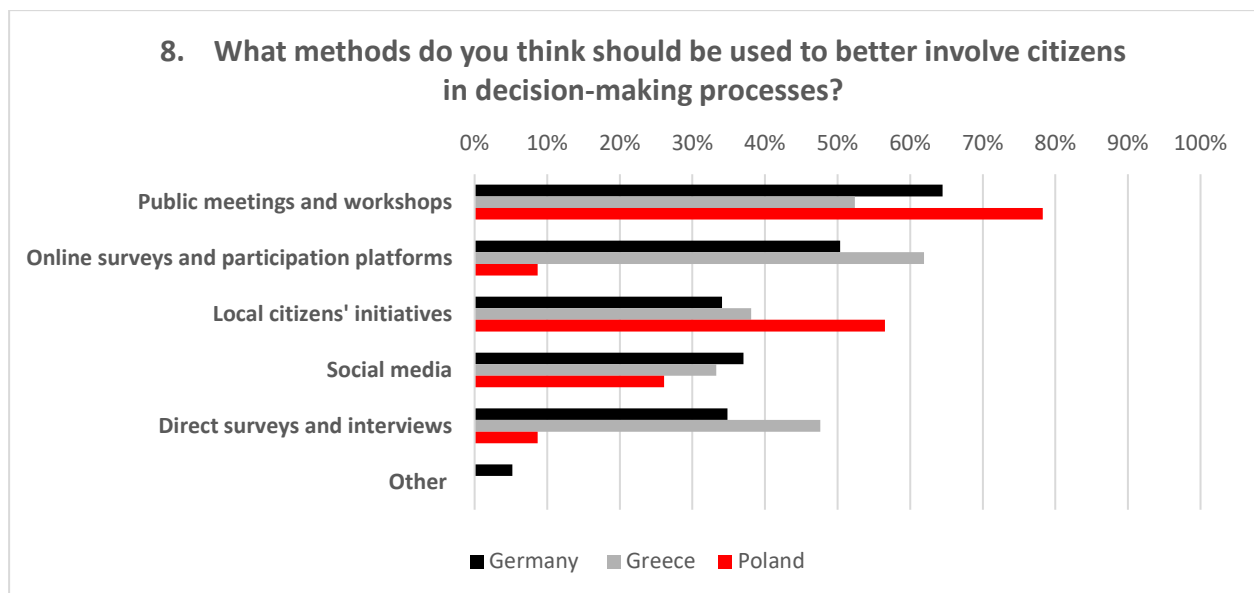
66,7%), followed by thinking of the efforts of (regional) government and municipalities in managing post-mining transition in the Western Macedonia region as average (28,6%) or very good/good (total 4,8%)



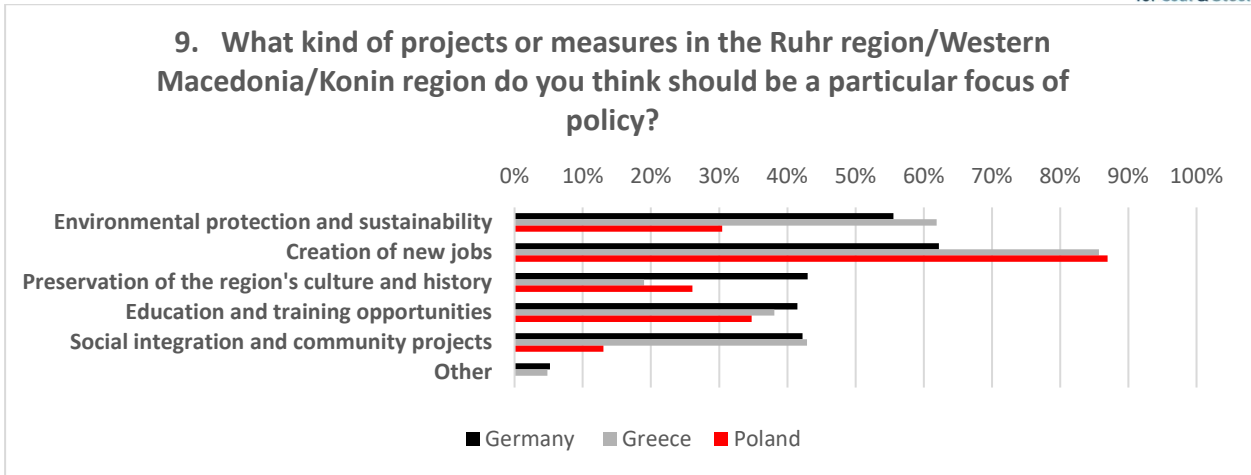
Particularly important for citizens of the Ruhr and Western Macedonia regions (Question 6), according to the stakeholders (max. 3 answers), is the creation of new jobs (Greece; 85,7%; Germany 63,7%). Polish stakeholders view measures for environmental protection (52,2%) to be slightly more important than the creation of new jobs (47,8%). Stakeholders vary in their choice from the given options: German stakeholders rate the preservation of industrial/regional culture of remembrance higher (Germany 55,6%; Greece 4,8%; Poland 21,7%) and, similar to the Greek stakeholders view measures for environmental protection as important (Germany 46,7%; Greece 42,9%), although these stakeholders view support for affected employees as more relevant (Greece 57,1%; Poland 34,8%; Germany 20%). Concerning citizen participation and transparency, this is more relevant to German stakeholders (32,6%) than to the Greek (28,6%) and Polish (4,3%) stakeholders.



German, Greek and Polish stakeholders' views (max. 3 answers) towards the measures necessary for the transmission away from coal (Question 7) vary. For German respondents, the four most significant measures necessary for the transmission away from coal (max. 3 answers) are ranked in the following order: (1) promotion of innovative technologies for the economy (61,5%); (2) retraining and further training programmes of affected employees (53,3%); (3) development of new forms of energy (44,4%), and; (4) support for start-ups and entrepreneurship (28,9%). Greek stakeholders view the following measures of importance: (1) promotion of innovative technologies for the economy (66,7%); (2) greater involvement of citizens in the decision-making processes (47,6%); (3) support for start-ups and entrepreneurship (38,1%), and; (4) retraining and further training programmes of affected employees (28,6%). The latter is of most importance for the Polish stakeholders (69,9%), followed by: (2) development of new forms of energy (34,8%); (3) designation of new commercial and industrial areas (26,1%), and; (4) greater involvement of citizens in decision-making processes, as well as support for start-ups and entrepreneurship (both 21,7%).



Concerning the five methods as an option to be applied to improve involvement of citizens in decision-making process (Question 8), the German, Greek and Polish stakeholders' responses largely vary (max. three answers). While Polish and German stakeholders rank public meetings and workshops (78,3 and 64,4%, respectively) on rank 1, this is shared by a slight majority of Greek respondents (52,4%, rank 2). Greek stakeholders (61,9%) rank online surveys and participation platforms on number one, while German (50,4%) and Polish stakeholders (8,7%) share this view on rank 2 and 4 respectively. Concerning the remaining three options to improve citizen participation in decision-making process, local citizens' initiatives, social media and direct surveys and interviews, Polish stakeholders (56,5%) hold a higher opinion of local citizens' initiatives than its Greek (38,1%) and German (34,1%) counterparts. German stakeholders (37%) find the usage of social media more slightly preferable than Greek (33,3%) and Polish (21,6%) stakeholders. Direct surveys and interviews received more positive responses from Greek stakeholders (47,6%) than from German (34,8%) and Polish (8,7%) stakeholders.



German, Greek and Polish respondents (max. 3 answers) are identical in their view on the most important particular policy focus or measures to be taken (Question 9), as all stakeholders choose creation of new jobs on rank 1: (Germany 62,2%; Greece 85,7%; Poland (87%). German stakeholders (55,6%) find environmental protection and sustainability the second most important measure to be undertaken in the Ruhr region, while preservation of the region’s culture and history (43%), social integration and community projects (42,2%) and education and training opportunities 41,5%) all seem to be all of equal importance. The Greek stakeholders, identical to their German counterparts, choose environmental protection and sustainability (61,9%) on rank 2, while social integration and community projects (42,9%), education and training opportunities (38,1%) and preservation of the region’s culture and history (19%) follow in this respective order. Polish stakeholders (34,8%) find education and training opportunities to be slightly more important than environmental protection and sustainability (30,4%), while preservation of the region’s culture and history (26,1%) and social integration and community projects (13%) are viewed as possible measures in the Western Macedonia region to be applied.

3.4.3 Expert perception

It is clear from all the expert interviews conducted how important communication is. In Greece, it is vibrant that the public was involved far too little in the initial planning phase, as a result of which interest generally appears to be very low.

The majority of the German experts have already gained a lot of experience in this area and are of the opinion that the exchange must take place through direct contact in order to maintain the quality of the aspects communicated. In Germany, however, it is also clear that this direct contact is only sought by people over the age of 50.

4 Analysis of community involvement in the transition process

4.1 Ruhr region

This section identifies the different types of engagement and participation in the process during the last decades of coal phase-out in the Ruhr area and pinpoints best practices.

4.1.1 The change away from the coal industry in the Ruhr region

The Ruhr region in Germany has historically got long-term and special experiences with the attempt of a socially acceptable phasing out process for coal mining – once one of the largest pillars of the regional economy and the national energy supply. These experiences include different challenges on the levels of the private sector, the governments, the trade unions and the civil society to manage a socially acceptable phasing out process but it centered for a long time on the question how to achieve a “socially responsible staff adjustment”. The question of community involvement in the transition process has become more important in the later phases of the transition process.

In the first stages, a top-down approach had been predominant. For example, the *Ruhr Development Program* of the State Government of North Rhine Westphalia was adopted in 1968 to support infrastructure development. The *Future Initiative for Coal and Steel Regions*, launched in 1987, took a technology-led approach to increasing the competitiveness of the coal and steel industries, and supported the expansion of road networks, public transport and higher education institutions. [WRI 2021) Though Germany has a strong history of organized labor and social dialogue, especially in the Ruhr region, those first phases of the region’s transition from coal were characterized by limited consultation with local actors. During that period, despite the government’s support for economic diversification, the coal and other large industries of the Ruhr region were partially reluctant to recognize the decline of coal mining and kept investing in the industry. Similarly, trade unions were - successfully and based on some valid arguments - asking the government to maintain coal subsidies for energy and regional policy reasons and for a socially acceptable adaptation process. For some commentators of later times this resistance delayed the transition and led to lock-in that hampered the growth of new industries. Other commentators referred to the need of sufficient time for the transition and the importance of the coal industry also for related industries as for example the internationally competitive, high-developed German mining supplier industry. In this period, most former miners found new work nearby in the metal and other industries. Others were offered early retirement and retraining by specialized agencies. Nevertheless, there had been a relatively narrow focus on large mining companies. The Ruhr region’s model in this time has been criticized for overlooking middle-size companies and startups that were also indirectly dependent on the coal industry and needed support to transition towards other sectors or business models. In the late 1980s and 1990s, a more bottom-up approach (referred to as regionalized structural policy and community involvement) empowered local actors to implement projects designed in cooperation with national and state authorities. For example, the IBA (Internationale Bau-Ausstellung - International Building Exhibition) Emscher Park, along the Emscher River across the Ruhr region, included local initiatives within a larger framework of programs, and combined public and private sources; IBA Emscher Park led to the creation of around 5,000 jobs as well as 7,500 new homes. For more detailed information refer to the Deliverable 2.1 (WRI 2021)

As Mavropanis (2019) - from not a German, but a Greek perspective - has stated, coal phase-out in the Ruhr region “did not happen by accident. On the contrary, it [has been] the end of a long-term planning process that took decades to implement and received huge support from the national and regional budgets. It is worth mentioning that in the 1950s more than 500,000 people were employed in the coal mine industry in the whole region. However, after the 1957/1958 coal/steel crisis and the 1968 consolidation of the mining industries in the RAG (Ruhrkohle AG – the dominant German coal mining company), the number of employees plummeted to 180,000. In the mid-1980s this number further decreased from 80,000 to less than 5,000 in 2018 (Statistik

der Kohlenwirtschaft 2020), and less than 1000 today in post-mining. At the same time, and according to the German trade unions of miners (IG BCE), during the 1960-2015 period the coal industry received €126.6 billion in subsidies, once again reminding us of the constant support the federal government has provided to the coal industry. 2007 was a landmark year, as the state decided to phase out coal in a socially acceptable way by the end of 2018. In order to ensure that none of the approximately 37,000 coal miners would be left behind in this 11-year process, €17 billion were spent in establishing early pension schemes for the oldest, career change opportunities for the younger employees and in covering the so-called “eternal” costs, which amount to approximately €220 million per year.” (These eternal costs mainly cover the expenses for the mine water management, groundwater purification and polder measures and are financed by the RAG Foundation created by the capital assets of the white (non-mining) businesses of the mining company RAG AG). The eternal costs are permanent liabilities necessary to solve the central environmental problem of the determination of the regional coal mining, the mine water problem, and their private financing by the RAG Foundation (with some government backings for emergency cases) got broad support by German policy makers and the public.

One of the obstacles of the regional coal transition had been that not only the German and Ruhr coal miners but also the people in the coal regions had developed over the years a strong attachment to a “coal industry culture”, based on the retrospective experience that the part of the coal industry in reconstructing Germany and its economy after the Second World War, above all the economy in the German coal regions as the Ruhr region, was crucial. Moreover, domestic coal played an important role in the energy crises of the 1970s and 1980s. A turning point had been the German reunification 1990 with the consequence of a declining support for coal mining in Western Germany and adaptations step by step, but the decision to phase-out coal mining in a socially acceptable manner took place no later than 2007. This transition did not only take almost three decades and considerable state aids, but also a lot of negotiations among different stakeholders and more and more community involvement. The most challenging and difficult part of the transition until the final phase-out decision and its timing was the negotiation process. “Stakeholder engagement means that all key players are sitting at the same table taking decisions about their common future. In other words, stakeholder engagement lays the foundation for a more secure and inclusive future that leaves no one behind.” (Mavropanis 2019)

Under these conditions, also the trade unions and the regions, for the most part, accepted the coal phase-out in a socially acceptable manner meaning that no mine worker had to become unemployed. Though initially driven by market forces, it also dovetailed with EU and German goals to reduce carbon emissions. This led the federal government to decide and accelerate the phase-out by announcing in 2007 that subsidies for hard coal production in Germany would end in 2018, which would force the closure of the Ruhr’s remaining mines. In 2007, there were approximately 24,000 coal workers in the Ruhr, representing three-quarters of Germany’s mining workforce. In 2007, after the announcement of the end of coal subsidies, a tripartite agreement was signed between coal companies, the representative trade unions and the federal and state governments to manage the last phase of the coal phase-out. (Pao-Yu, Oei, Brauers, Hanna, and Herpich, Philipp, 2019) This agreement aimed to achieve a just transition through a slow, gradual phase-out of subsidized coal, socially acceptable staff reduction and a comprehensive package for affected miners. This set of measures - based on a public consensus in the region, too - included:

- Voluntary (or better: agreed) renunciation of wage increases and redistribution of work shifts to avoid layoffs.
- Early retirement for miners who had worked for at least 20 years and have reached the age of 49, consisting of a monthly stipend until they qualified for a pension, and a more generous scheme for underground miners.
- Relocation of about 10,600 workers within coal-producing activities.
- Employer commitments to transfer workers to other energy jobs within the company, with re-training and decent pay.
- Opportunities to join trainings and earn on-the-job certification.
- Support for workers transitioning into the service sector.

Germany's last hard coal mine, Prosper-Haniel in Bottrop, closed in late 2018. Overall, the region's transition efforts were relatively successful due to the synergy of these worker-focused policies with decades of region-wide, forward-looking structural policies and massive public investments supporting economic diversification. Many initiatives built on the region's heritage and existing industrial assets, focusing on environmental technology, engineering, commodity transport and large-scale prestigious sociocultural projects, which helped preserve regional identity. (WRI 2021)

According to Mavropanis, there are some lessons learned from the Ruhr region for a just transition that could be transferred across scales in other European coal/lignite-dependent regions and applied to similar cases, even by taking into consideration that other Member States of the EU cannot be compared to Germany in terms of resources, budget, the flexibility of the education system and to some extent the culture of social dialogue between the state and the trade unions. (Mavropanis 2019)

Lesson one: strategic planning. Change cannot happen from one day to the next. Certainly not between elections cycles of only five or four years or less. There must be long-term perspectives for all stakeholders.

Lesson two: stakeholder engagement. Unilateral decisions in such a long-term process mean no decisions. All stakeholders should sit around the same table, discuss, suggest solutions, confront each other but in the end, achieve consensus. If necessary, more than one time, also in re-adaptations.

Lesson three: resources. The transition process requires adequate funds. Most countries rely on restricted budgets due to the economic crisis, and therefore they are not able to fund large early retirement schemes or the retraining of large numbers of employees for long periods of time. The European Union must step in to cover the extra funding needed for such actions. The establishment of the Just Transition Fund is a sine qua non prerequisite for a more equitable allocation of resources in the countries with poor coal-dependent regions in transition.

Lesson four: sustainability. Coal/lignite phase out means more than energy transition. It also involves planning of new sustainable economic activities, for example with a focus on new and renewable technologies, research and innovation, startups' ecosystems, ecotourism and other. Two examples of the Ruhr region: In Duisburg this resulted in the transformation of its previous industrial port (Innenhafen), the biggest inland port of Europe, to an area that hosts commercial and recreational activities and cutting-edge technology firms. In Essen, the Zollverein Coal Mine became part of the UNESCO World Heritage as part of the transition process. Since 2001 it hosts cultural and other outdoor activities with more than one million visitors annually. In the meantime, it is developing also to location of different commercial activities including the headquarter of the former mining and now post-mining company RAG AG, of the RAG Foundation and of the association BSN (Branchenverband Steinkohle und Nachbergbau e.V.), the industry association of coal and post-mining.

Mavropanis has concluded that there is no "one size fits all" strategy for the Just Transition to the post-coal era. Every country and every coal-dependent region has its strengths and weaknesses, but they can all learn from each other and realize that there are alternative future pathways which lead to sustainable and equitable growth. The successes of the Just Transition in the Ruhr region in Germany have demonstrated to everyone that coal phase-out is a window of opportunity for change into a brighter future, so Mavropanis (2019). – Together with the fore-mentioned lessons learned, community involvement is a prerequisite for this result.

However, these efforts were unable to achieve full employment and full equity among companies and districts. Government support has long focused on large companies and overlooked the complications to free up land for other industries and businesses, which has prevented areas from being converted to other uses. Longer-serving workers benefitted more than those with shorter tenure or less consistent employment. Some job losses in the coal and steel sectors were balanced by an increase in service sector jobs, especially in the health sector or logistics, but these tended to pay lower wages. The Northern Ruhr valley is relatively underserved and experiences quite above-average unemployment rates, lower levels of income and education and high rates

of child poverty. As of the beginning of the 2020s, this division in the Ruhr region is still growing, and poorer districts would benefit from more targeted action. (WRI 2021) This is not possible without community involvement.

4.1.2 The experiences with community involvement by IBA Emscher Park and the regional initiative “Wandel als Chance” (Transformation as an Opportunity)

First experiences of the Ruhr region with community involvement for the coal transition were made by the IBA Emscherpark (see above) in the period 1989 to 1999. The IBA Emscherpark was not a direct regional economic program but included projects for area and city development along the Emscher river in the centre of the Ruhr region where coal mining had been already closed and left behind a lot of wasteland, urban planning deficits and ecological damage – some prominent people called these areas as the “Hinterhof” (backyard) of the Ruhr. The IBA Emscherpark had been initiated by the regional Government of North Rhine Westphalia, got financial aid by the regional and Federal government and the EU and installed an own coordination body for the different projects in the responsibility of the perspective planning institutions as the participating cities and communities, the Ruhr Regional Association and the owners of the included locations, above all the mining and steel companies. Main points of the activities had been the ecological restoration of the areas and innovative stimuli for urban and social development, living in the cities, industry culture and even tourism. IBA Emscherpark was also the starting point for a special longer project until the 2020s, the renaturation of the Emscher river, until then the main sewer of the Ruhr region. (Brüggemann/Melchers 2017)

By the way, IBA Emscherpark developed systematic instruments for the so-called land recycling which was transferred later to other parts of the Ruhr region and other German regions and moreover established as model also for the Polish Woywodship Silesia in the course of its European regional partnership to North Rhine Westphalia. Part of the results of IBA Emscherpark were and are some established and meanwhile also on a national level well known “lighthouse projects” as the industrial heritage mine and cookery Zollverein in Essen, the Landschaftspark (landscape park) Duisburg-Nord or the Academy Mont-Cenis, Herne. (Brüggemann/Melchers 2017)

In the aftermath of IBA Emscher Park, several further visions for the Ruhr region were developed and discussed but did not fit with the political reality and disappeared in the archives, but a sign had been set by the regional planning community of the six Ruhr cities Bochum, Essen, Gelsenkirchen, Herne, Mülheim/Ruhr and Oberhausen in 2005 to set up a common land use plan. This plan was then decided and approved 2009 as a forerunner for common land use plans of regions in Germany and especially the Ruhr region as a whole. Intra-regional community cooperation did happen as well for the successful application and implementation of the Ruhr region as European cultural capital in 2010.

This intra-regional community cooperation has been forced after the political decision in 2007 to phase out subsidized coal mining in Germany and its affirmation in July 2011 by the deletion of the review clause in the national Coal Financing Act after the EU council decision on state aids for the closure of non-competitive coal mines at the end of 2010. The cities and communities of the Ruhr region agreed in 2007/2008 as a consequence of the phase-out of its coal mining industry to develop a common Ruhr Plan (“Konzept Ruhr”) and to cooperate in the initiative “Transformation as an Opportunity” (“Wandel als Chance”) together with all communities affected by the coal mining phase out in North Rhine Westphalia as explicitly Ibbenbüren outside the Ruhr region. (Brüggemann/Melchers 2017)

The cooperative city initiative “Transformation by Opportunity” concentrated its projects and measures in three fields of action:

1. „Promotion and Support (Education)“
2. „New Use and Development (Commercial Land Development and Marketing)“
3. „Renew and Invent (Industrial Innovation and Research)“

A priority of the “Transformation as an Opportunity” initiative had been the question of the land

development on former mine sites because of the scarcity of free land for commercial and other urban purposes in the Ruhr region. Therefore, it had been negotiated and concluded in 2014 a mine site agreement (“Bergbau-Flächenvereinbarung”) between the company RAG AG (as owner of the mine sites), the state of North Rhine Westphalia, the RVR (Regionalverband Ruhr – the Ruhr regional association) and the involved municipalities and cities. The purpose of the mine site agreement has been the proactive revitalization of major mine sites with the objective of producing concrete contributions to a successful transformation of the former mining areas. This model of cooperation and coordinated public and public-private action has been rigorously implemented. 20 closed mine sites had been selected and appropriate conditions formulated for cooperative land development, 20 further mine sites were identified for the next steps. (Brüggemann/van de Loo 2021, Brüggemann 2021)

4.1.3 The Ruhr Regional Plan

Based on these preconditions the RVR could on work on a Regional Plan Ruhr laying down the targets spatial planning in the Ruhr region after the State Government of North Rhine Westphalia transferred the responsibility for this planning competence to the RVR effective from 2009. (Brüggemann/Melchers 2017) The Ruhr region defined by the frontiers of the RVR comprehends the 11 cities Bochum, Bottrop, Dortmund, Duisburg, Essen, Gelsenkirchen, Hagen, Hamm, Herne, Mülheim/Ruhr, Oberhausen and the 4 municipalities Recklinghausen, Unna, Wesel and Ennepe-Ruhr.

The concept for the Regional Plan Ruhr has been a perennial, multi-layered open process. One central element was a “competition of ideas” of the Metropolitan Ruhr area (“Ideenwettbewerb Zukunft Metropole Ruhr”) organized by RVR around the questions of future living and working, the transport system, energy supply and protection of the environment in the Ruhr region and its competitiveness with other regions. Participants were five international planning teams, regional and social associations and scientific institutions. After the determination of the special process, offering of the competition and a kick-off meeting, RVR organized three future fora (“Zukunftsforen”) for the public sampling and discussing the different ideas without a material selection. The results were published with the title “1,000 ideas for The Ruhr region” (“1000 Ruhrideen”) in 2013/2014. (RVR 2013)

Around the competition of ideas, before, meanwhile and after it, there had been a lot of informal and formal planning activities. (Brüggemann/Melchers 2017) On the informal side, working groups and networks of the RVR were established centered on regional analysis, geoinformations (ruhrFis), climate analysis, inter-city cooperation for the commercial development of land and an open space planning concept. On behalf of the formal provisions of the planning process working out the Regional Plan, RVR organized different regional fora (“Regionalforen”) after an official kick-off on the topics of “challenges” (“Herausforderungen”) in 2011, “future” (“Zukunft”) in 2014 and “ways” (“Wege”), especially about the ways of cooperation between the communities, in 2017. This formal planning process was occasionally accompanied by kinds of townhall meetings, regional conferences and official specialist dialogues. Additionally, the RVR requested and got written expert contributions to the fields of agriculture, woodlands, cultural landscape, green spaces and climate adjustment.

After all this preparing work, the decisive body of the RVR, the “*Verbandsversammlung*”, where all cities and municipalities of the region are represented, decided in 2018 to instruct the specialist units of RVR to set up the draft for the Ruhr Regional Plan. This plan has to determine the regional targets of spatial planning for the development of the region as well as for all regionally relevant projects and measures in the next 20 years. It will contain written declarations and requirements, illustrating maps and explanations, background information and additional rules on dissemination together with an environmental report.

To be clear, the Ruhr Regional Plan is not an EU just transition plan, but a spatial plan laying down the foundations for the transition of the region in a literal, space-related sense. Until today, there is no just transition plan for the Ruhr region as a whole, only a just transition plan for the Northern part of the Ruhr region; this just transition plan for the Northern part of the Ruhr region

including its community involvement has been exemplary described and analyzed in the RFCS POTENTIALS Project.

The time target had been to adopt the Ruhr Regional Plan after the first regional elections to the Ruhr parliament in 2020. Unfortunately, the first draft of the Ruhr Regional Plan was not accepted by the *Verbandsversammlung* because of opposite opinions of some members to certain points. Therefore, the procedure had to start again with de novo participation. Until spring 2023 the RVR has managed three new rounds of public participation. The final validation decision and the official announcement has not been taken until December 2023. (RVR 2023) The following chart shows setting of the Ruhr Regional Plan in one picture.

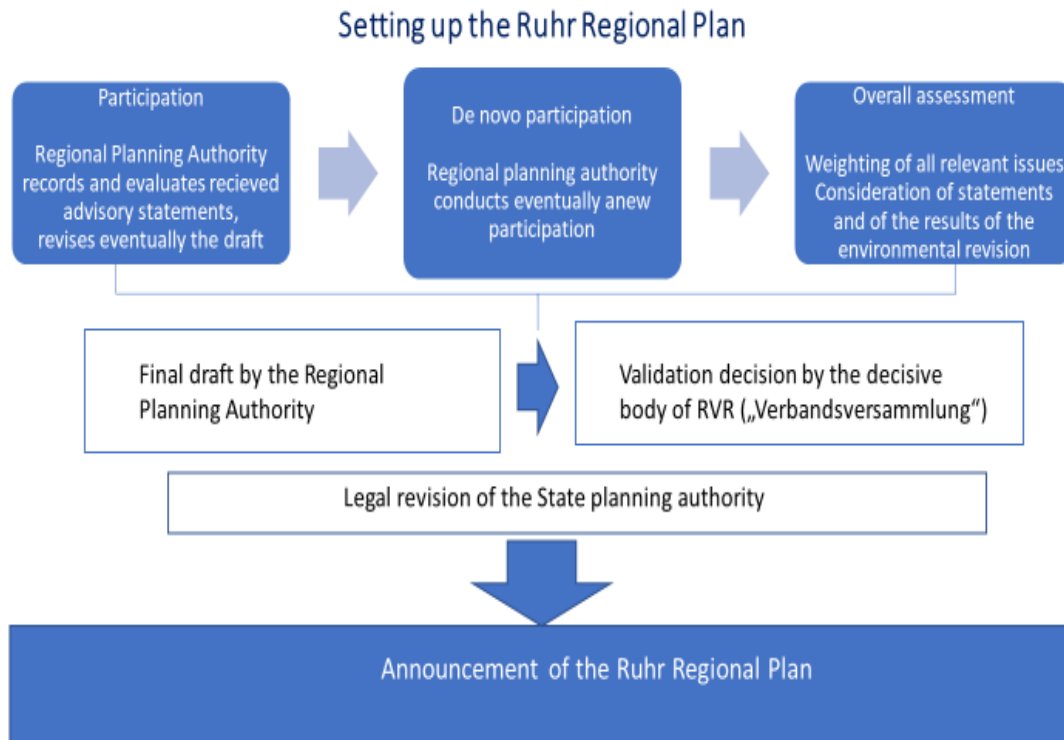


Figure 1: Concept of the Ruhr Regional Plan

Corresponding to the principle of “no one left behind” for the EU just transition mechanism, official regional plans in Germany have to follow the principle of “no relevant fact left behind”. For the overall assessment in spatial planning processes according to German law has to follow the principle of a “just” decision. The principal of a just decision for the determination of a Regional Plan I Germany is a form of appearance of the general principle of proportionality. That means an assessment is necessary for all relevant opposite, competing issues. The assessment process has therefore to take into consideration all such issues that are recognizable on the level of the Regional Plan and have importance to it. Ipso facto, this process requires to investigate and assess a lot of relevant facts by public participation including community involvement.

Because of the intensive regional discourse about the Ruhr Regional Plan, the RVR has committed itself also to another principle, the principle of “nothing is lost”. Alongside of the formal planning process an informal Action Program (“*Handlungsprogramm*”) for the future development of the Ruhr region has been set up, newly drafted in 2021 and finalized already in 2022. This Action Program is not legally binding but offers the possibility to secure fruitful ideas that could not be included in the formal plan (“theme storage”) and to have flexible and participatory answers to new more complex questions of the regional management. While the Ruhr Regional Plan gives answers to questions of “What” and “Where”, focused on quantities, the Action Program tries to

answer the questions of “How”, “Who” and the “Quality” of actions. The Action Program Ruhr will be a dynamic program that has continually be evaluated and adjusted. Status quo, perspectives, ideas, approaches to action as well as future subjects on the regional level have to be regularly revised, adapted and re-developed. Proofed formats of community involvement as the regional fora could and should be used gain for these purposes. (RVR 2022)

The elements of the Action Program are an introduction with a general description of the regional situation, a chapter on the themes to deal with, specific perspectives, the theme storage and an overview of approaches to action with a listing of intended future actions. The themes of the Action Program are corresponding to the Ruhr Regional Plan as defined as living, retail trade, economy, mobility, open space and landscape development, tourism and recreational opportunities, cultural landscape, climate protection and climate adaptation, education and science as well as regional governance/network management. (RVR 2022)

For each theme of the Action Program Ruhr there is a common structure defining

- Status quo (condensing the specific decisions and actions already made)
- Perspectives of regional development in the Ruhr region (goal statements)
- “We are working on...” (current projects, instruments, concepts, formats)
- Ruhr Regional Plan (formal contribution of the official Regional Plan)
- “On the way to future...” (informal contributions of community involvement)
- Recommendations of the advisory board (additional professional proposals)
- Profiles (selection of central projects, instrument, formats with a short description of actors, measures, targets, timeline, affected areas, linkages to Ruhr Regional Plan).

The Action Program contains 54 current projects (“We are working on ...”), 29 intended projects (“On the way to future”) and a theme storage of 41 projects. (RVR 2022)

Three examples of the profiles of current projects are the regional mine heap concept, the Knowledge Metropolis Ruhr (“*Wissensmetropole Ruhr*”) and Europa.RUHR.

The regional mine heap concept is part of the thematic field open space and landscape development. Defined Actors are the RVR and the RAG company and the cities and municipalities in the Ruhr region with mine heap locations. There are around 70 mine heaps in the region, mostly owned by RAG or meanwhile taken over by RVR. The target of the concept is the optimal inclusion of the mine heaps in their urban environment and the regional open space system as well as a preferably conflict-free nexus of several utilizations by an integrated approach. Each mine heap should be used in the most adequate manner. Some mine heaps are more fit for purposes of tourism and leisure activities, other heaps for being locations of renewable energies as wind and solar power, partially it can be combined.

Knowledge Metropolis Ruhr is an action in the thematic field education and science and has been started in 2017. Actors are the RVR and its economic development company BMR (“Business Metropole Ruhr”), the alliance of the universities of the Ruhr region (UAR - “*Universitätsallianz Ruhr*”), the Scientific Forum Ruhr (a regional working group of research institutions), the *Mercator* Foundation and its regional education initiative *RuhrFutur*, the regional business community organization “*Initiativkreis Ruhr*”, the Ruhr industry and trade chambers and the cities and municipalities in the region having universities and research institutes. The main target of this action is to strengthen the Ruhr region as a region of knowledge and innovation and to positioning it at the international level by coordination, strategic development, sharpening the profile and more intensive public communication. Starting point had been a big study mandated by RVR about the Ruhr region as a region of science and their regional importance. An insight of this study has been the urgent need for the region, also stressed by the advisory board of RVR for this action, to transfer increasingly and more successfully its richness of scientific knowledge and innovations in competitive products on the markets and startups by better linkages to and partnerships with business and entrepreneurs. In this case, there had been already support by EFRE for the project Innovation Center Ruhr to promote quality and profile of the technology and startup centers in the region.

Another goal of this action is the strengthening of the regional research beyond the universities and its connection with companies and civil society as well as the presentation and the visibility of the fruitfulness and diversity of the science in the Ruhr region especially by and at international conferences. At the same time, the Knowledge Metropolis Ruhr is organizing public visiting events

for the people in the region to make research work and performance more transparent, for example the “Knowledge Night Ruhr” (“*Wissensnacht Ruhr*”). Furthermore, the Ruhr region tries to be attractive for excellent scientists and researchers by the special program Dual Career Network helping partners and spouses to find also a suitable job in the region. To strengthen the culture of welcome of the Knowledge Metropolis it has been established the project welcome.RUHR providing welcome guides, an online welcome portal and a listed network of contact persons in the community for people interested in scientific jobs in the Ruhr region.

Europa.RUHR, started in 2012 by extension of the European department of RVR, aims to initiate and concentrate activities of the Ruhr region on the European level. That means to promote the varied engagement for Europe and by Europe in the region. This action belongs to the thematic field Regional Governance/Network Management. Actors are the RVR and especially its European department, all the cities and municipalities of the region interested in European affairs, competent partners and persons in charge in the European institutions and “multipliers” in the community. Goals are supporting the European affairs of the cities and municipalities in the Ruhr region with view to European programs and the EU regional funds by information services (also digitalized on www.europa.ruhr), consultation or even Roadshows, lobbying and making the Ruhr region more visible in the European Union and promoting cooperation with other European regions as well as co-working in European networks as the EU Coal Region in Transition (now: Just Transition) Initiative.

An example of an action “on the way to future...” is the long-term project of an integrated planning of public transport for the whole Ruhr region (thematic field mobility). An example of a project in the theme storage - not started until today, but not forgotten and possible in the future - is a certain monitoring instrument for the development of regional cooperation locations and their common marketing by BMR (thematic field economy).

Of course, these examples are only excerpts of the totality of the Action Program Ruhr. But they make clear the diversity of the challenges and approaches to the playing fields for the regional transition of the former coal region Ruhr.

4.1.4 The Ruhr Conference

For supporting the own actions of the region to master the transition from the supra-regional level, the State Government of North Rhine Westphalia started in autumn 2018 - simultaneously to the closure of the last coal mine in the Ruhr region (and nation-wide) - the so called Ruhr Conference. The designation “Ruhr Conference” connects notionally to former Ruhr Conferences in the 1970s and 1980s formed by the back then State Government of North Rhine Westphalia and the Federal Government of (Western) Germany to solve the problems of structural change in the Ruhr region triggered by the coal and the steel industry. But now another approach has been started without the Federal Government. Instead of a certain kind of conference or a series of that on a high public level with a political top-down approach, the Ruhr Conference 2018 has expressly intended to include the civil society and to involve the community to create a bottom-up approach for defining transition projects.

On behalf of this purpose the State Government of North Rhine Westphalia organized in 2018 und 2019 not less than 20 topic-centered events with interested citizens and members of the civil society in a kind of townhall meetings (several hundred participants respectively) to generate and discuss transition project ideas. Each event was presided by a member of the State Government of North Rhine Westphalia and one or two selected representatives of the civil society together with a special staff and a bureau for the Ruhr Conference provided by the State Government. Their task had been to make a preselection of the collected ideas and to present them later to the college of State Government which should decide on special support. At the very beginning the Ruhr Conference was not determined to be a one-time event or a series of that but it should be an ongoing, long-term process. (Landesregierung NRW 2018)

As result of these preparing activities with community involvement, the State Government of North Rhine Westphalia selected 73 projects assigned to five fields of action covering not only the economy, but all areas of life in the Ruhr region:

- Connected mobility – short ways (“Vernetzte Mobilität – kurze Wege”)

- Successful economy – good work (“Erfolgreiche Wirtschaft – gute Arbeit”)
- Living diversity – strong cohesion (“Gelebte Vielfalt – starker Zusammenhalt”)
- Energy security – sound environment (“Sichere Energie – gesunde Umwelt”)
- Best education – excellent research (“Beste Bildung – exzellente Forschung”)

Meanwhile, after the State election of 2021, the leadership and guidance of the Ruhr conference has been transferred from the Prime Minister and the ministry of economy, industry, climate protection and energy to the ministry of home, communities, construction and digitalization of North Rhine Westphalia. Every year since 2020 a progress report is published, the last one for 2022 constating progress in all fields of action and the finishment of the first smaller project while 55 projects are in implementation and 27 projects are in revision. (MHKBD - Ministerium für Heimat, Kommunales, Bau und Digitalisierung NRW 2023)

The spectrum of the 73 projects is very broad, reaching from combating clan crime to a better connected intra-regional mobility or making possibilities of financial support more transparent. The declared aim is to provide additional or value-added measures compared to the own actions of the region as described in the Action Program Ruhr of RVR but there are also overlaps, for example in relation to the project *Green Infrastructure Ruhr*. Some projects are completely new, other projects of the Ruhr Conference are factually the prolongation of already planned or initiated projects as for example certain regional infrastructure projects.

The concept of the Ruhr Conference includes after the starting phase with the selection of the 73 regional projects (first stage) and their fulfillment (second stage) to passing over in a third stage with an inventory of successes and failures, public conclusions and further actions – again with community involvement.

It is underlined in the progress report 2022 that some current projects will be bundled up and for the third stage new main points have to be taken in consideration as the challenges of climate change and biodiversity, industry transformation, general and professional education, the relations of living and working and especially the mobilization of land reserves by using and reactivation of waste land for housing and commercial activities. (MHKBD 2023)

How much and how effective the support will be which the regional transition get by the Ruhr Conference is to be awaited and – at the end of 2023 - too early to evaluate. Of course, the Ruhr Conference gives at least a valuable impetus and more or less pronounced help for certain projects otherwise not feasible. However, it is sample of supported ideas and projects based on community involvement, but not a targeted transition fund or mechanism.

There has also been also some criticism for example by the Trade and Industry Chambers of the Ruhr region. They have commented the selected projects in the first phase as “pale” and “small-scale”. A central transition problem of the region that can only be solved by engaged Government support has not been addressed until now: the inherited financial burdens of the budgets of the cities and municipalities in the Ruhr region caused by the far-reaching structural change in the times before. (WAZ 2020, Brüggemann/van de Loo 2021)

Another regional project with community involvement that is not part of the Ruhr regional Plan or the Ruhr Conference but is supported und supplemented by these and has got a lot of national and international attention is the special project *Innovation City Ruhr* started already 2010 in Bottrop, the last coal mining city of the Ruhr region. Innovation City Ruhr had been started by *Initiativkreis Ruhr* through organizing a competition for all cities and municipalities in the Ruhr region larger than 50,000 inhabitants for the “climate city of the future”. Bottrop (with around 70,000 inhabitants) has won and become the pilot area and model city of *Innovation City Ruhr*. The core concept of Innovation City Ruhr has been to become an European ad even world-wide a forerunner as a climate-friendly city by creating an energy transition “from the bottom” in an urban area by participation and activation of the citizens there. The approach of this project has aimed mainly to reduce CO₂ emissions and energy consumption by the energetic renovation of existing buildings and to switch the supply of energy for electricity and heating purposes in the buildings from fossil fuels to combined sustainable solutions as solar energy, heat pumps and battery storage.

By searching and finding innovative ideas and solutions for these issues Innovation City Ruhr aimed to cope with both challenges simultaneously, the challenge of climate change and the challenge of structural change after the end of coal mining in the Ruhr region. The climate-friendly transition of the city should be promoted while safeguarding the city as a location for (other than coal) industry and modern business. (Initiativkreis Ruhr 2023)

To reach these aims, the Innovation City Management company was established by *Initiativkreis Ruhr* as a pure service company with a team of energy service consultants of the company, supported by competent representatives of the city. For using synergies and following a systematic, well-structured roadmap, a city masterplan and an urban innovation handbook have been set up. And the city community has been involved by different events and consultation talks to get locally based proposals and to exchange information and findings relevant for the project. In 2021 the City of Bottrop and the Innovation City Management Company presented the results. The CO₂ emissions of target area in Bottrop (without transport and outside power generation) could be reduced by almost 50% in the period 2009 to 2020 (for comparison Germany: -19%). 3657 residential buildings had been renovated (36% of the stock) which implies a renovation rate of 3,3% p.a. (more than twice compared to the German average). In Bottrop, there is now the highest density of PV capacity per inhabitant in all cities of North Rhine Westphalia. On the way to this impressive result 11,355 persons participated in 437 information events, and 3,954 energy consultations were carried out covering 30% of all homeowners. (Bottrop 2021)

Against this successful background of experience, and incentivized by suggestions of the Ruhr Conference, *Initiativkreis Ruhrgebiet* decided to roll out in the next years the Innovation City approach step by step to other cities in the Ruhr region managed by the Innovation City Management Company together with the new partner organization Green Zero. (Initiativkreis Ruhr 2023)

4.1.5 Lessons learned for community involvement by the experience of the Ruhr region

The collection of tools for a just transition, compiled at the request of the EU Commission by the Secretariat of the Coal Regions in Transition/now: Just Transition Initiative contains a number of useful aids and suggestions for dealing with the ongoing and still pending structural transformation away from coal - also on behalf of community involvement. (Wuppertal Institut 2022; van de Loo 2021) Parts of it can be confirmed by the lessons learned for community involvement by the experience of the Ruhr region, but other parts not so or have to be modified.

In comparison to other coal transitions strategies in the EU - here borne in mind, but not illustrated in this chapter - the Ruhr experience confirms what has been stated by the EU toolkit from the outset: There is no patent strategic solution, no “one size fits all” strategy for different coal regions and that includes the different kinds of community involvement. There is no alternative to giving due consideration to the specific circumstances of each region and locality, and all actors must go through a learning process, a learning journey. So, in the Ruhr region community involvement was tried out and practiced in different ways in the course of time.

The significance and legitimacy of inclusive processes and social dialogue with all relevant stakeholders, civil society organizations and interested citizens engaged in this field must generally be recognized, their involvement and participation can play an important and effective role for a successful transition. But each transition strategy must always take into account a multitude of decision-making levels and actors with different viewpoints. A general insight is the requirement to grasp the involvement of stakeholders as an ongoing process that should start very early but demands leadership and organization. This must be linked to an active communication strategy that informs not only the current participants, but the public about the workings of the process, how meaningful participation is possible and what will happen next. (van de Loo 2021)

As far as participation of and partnership with non-government stakeholders is concerned, the difficult political task is to find the right balance between information only, advisory role/consultation and active cooperation in decision-making. If the right balance has been found, the advantages of community involvement is obvious and confirmed largely by the experiences at the Ruhr. It enables the development of trust and legitimacy, the heightening of awareness and acceptance, an increase in the effectiveness and speed of process step by step, eventually long-

term savings in the use of resources, the broadening of the knowledge base of decision-makers and the stimulation of crucial innovation. Especially for the coal transition it is advantageous to include the know-how as well as the user rights of the regional coal companies as it is demonstrated in the Ruhr region by the mine site agreement.

Of course, there are typical obstacles and problems. These processes are often time-consuming and consume in any case financial and other resources. It is difficult to obtain significant contributions of some groups. It is not uncommon for those cases to have a lack of agreement on what information is needed for decisions and which needs should be taken into account and in what forms. But the failure to involve major stakeholders or the community as a whole or even ignoring their concerns carries on the other hand significant risks for the success of the transition. These risks are a lack of trust and enhanced uncertainty about the acceptance of the results, perpetuation of “silo thinking”, division of the community into divergent and struggling factions and particular groups, ethical problems, compliance problems and inefficient use of funds. Mastering these risks by community involvement has to focus on long-term commitment of stakeholder participation that continues beyond the decision-making phase in conjunction with clear expectations. Moreover, the active generation of awareness of the need for decisions, prompting greater willingness of certain stakeholders to become involved or to secure the commitment of those already “on board”, the targeted support or facilitation of the participation of those voices that are not usually involved in decision-making processes or who have fewer opportunities to join in. Last but not least it is necessary to have a joint fact-finding process and joint evidence as a basis for more objective and constructive debates with all stakeholders and the public. (van de Loo 2021, Wuppertal Institut 2022)

Another principal problem is the complexity and especially the long duration of setting up and implementing a transition strategy (not only) in coal regions exemplified by the Ruhr Regional Plan and the Ruhr Conference - looking back from the end of 2023, the former is in the being since 14 years, the latter is an open process since 5 years. There is one fundamental advantage of those long-term processes: Acceptance typically needs enough maturation time and can be created or be improved in the course of a process. (van de Loo/Haske 2023) The disadvantage is evident: Regional structural change does not stop and wait, but is running further and generating new challenges on its route, sometimes very quick and often and by that undermining more or less original planning foundations for the transition and in any case requesting adaptation and re-adjustments. In the passage of time, also concerns, actors, responsibilities and stakeholders may change what is even able to cause a complete new start of community involvement and an unproductive repetition of the learning journey.

Therefore, it is of utmost importance to have a competent planning and management authority with a sufficient budget and standing not only for systematic coordination but also for continuity in the transition process and its community involvement. The experience of the Ruhr region shows several good examples for working out this needed approach by the roles of RVR in the Ruhr Regional Plan, of *Initiativkreis Ruhr* for the project InnovationCity Ruhr and of the State Government of North Rhine Westphalia in the Ruhr Conference as a supporting process for the transition as it has been started in 2018.

4.2 Western Macedonia

4.2.1 Just Transition Development Plan and Stakeholder Engagement Plan

The *Just Transition Development Plan (JTDP)* was issued in 2020 (JTDP Government Committee, 2020) and followed the issuing of the Greek National Energy Climate Plan (NECP) in 2019 (Ministerial Decision 4/2019). The JTDP was issued after an institutional public consultation with stakeholders in Western Macedonia, before it was submitted to the Greek Ministerial Council and the European Commission. An open and continuous dialogue was officially established during that period, as it is mentioned in the Plan. Official communication was also established with the Western Macedonia Region, as the Regional Governor is a member of the JTDP Steering Committee. The Committee also consulted the Regional administration, the affected Municipalities, unions and other local bodies (JTDP Government Committee, 2020).

Public Power Corporation (PPC), the sole operator of the Greek lignite mining areas including Western Macedonia, participated both in the consultation and the preparation of the JTDP. PPC contributed to the mapping of the situation in Western Macedonia as it was at the time and their future investments within the mining areas. Other important contributors were the National Technical University of Athens, the University of Western Macedonia and University of Peloponnese, all academic stakeholders. The University of Western Macedonia will play an important role in the reskilling of the workforce and the development of the region. Other stakeholders that contributed to the JTDP, via the preparation of studies were the European Commission, the World Bank, the Academy of Athens, the Foundation for Economic and Industrial Research and the Institute of Energy of South East Europe (JTDP Government Committee, 2020).

Various conclusions were drawn from the public consultation for the JTDP and taken into consideration. The majority of stakeholders agreed on most transition issues, such as the vast economic importance of the mining activities in the areas of Western Macedonia, the need for the reskilling of the workforce, the rehabilitation of depleted lignite mines, the creation of local energy communities, development investments etc. (Ziouzios et al., 2021).

The World Bank, as a stakeholder itself, prepared a very important study, the *Stakeholder Engagement Plan (SEP) for Western Macedonia*, in the scope of which, stakeholder analysis was conducted and strategies were proposed (The World Bank, 2020). This study identified and described the involvement of even more stakeholders from 2014 until 2020. For example, prior to the issuing of the JTDP in 2020, the Region of Western Macedonia had organized many public workshops about Just Transition over the years. Workshops had been organized featuring among others the Municipality of Kozani, the Regional Development Agency of West Macedonia, World Wildlife Foundation (WWF) Greece, the Central Union of Greek Chambers etc. The same study proposed a Stakeholder Engagement Program in two phases, 2020-2023 and 2023-2028 (The World Bank, 2020).

4.2.2 Public acceptance and stakeholder involvement in Just Transition

The energy municipalities of Western Macedonia seem to be amongst the first *institutional stakeholders* which had an active role in the shaping of the transition. In the period from 2016 to 2019, even before the transition was officially announced, a number of actions played an important role in transition policy in Greece:

- a) the demand to the Government to establish the National Just Transition Fund
- b) the successful nomination of Western Macedonia as one of the first three lignite regions to join the Coal Regions in Transition platform
- c) the mobilisation of professional and scientific bodies to prepare reports for the future of the region
- d) the forming of alliances and initiation of public dialogue
- e) the demand to the European Commission, the European Parliament and the Council to establish the of the European Just Transition Fund (Theodosiou & Mantzaris, 2020).

After the transition from lignite was announced in Greece in 2019, a number of studies have investigated the *public acceptance* of transition or its lack, utilising the *involvement of local stakeholders*, such as the general public, which includes residents, employees of the mines and local entrepreneurs. An earlier example is the study by Karasmanaki et al. (2020), which assessed the attitudes of residents in the municipalities of Kozani and Eordea (Kozani regional unit, Western Macedonia Region) towards new investments in lignite mining in the area of the Lignite Centre of Western Macedonia (LCWM). It is important to note that this study was conducted after the decision for transition was made, but before any transition policies were implemented. This study included personal interviews with members from almost 300 households in the above municipalities, covering a variety of issues, such as quality of life, young residents' retainment, environmental problems and measures and impacts of lignite-based electricity production. According to this study, in 2020 the majority of residents of Kozani were in favour of new lignite mining projects in the region. This notion was linked to the employment opportunities of the mining sector. Any negative attitude towards new projects was linked to the quality of life that may be affected by mining in the area. However, all participants valued the economic growth and employment opportunities that lignite mining offered to the region and deemed stakeholder involvement in the then future decommissioning plan, vital.

Another study assessed Western Macedonia citizens' perception of energy transition in late 2021 (Spyraki et al., 2022), using a plethora of questionnaires and a large sample of various ages and backgrounds. One of the most interesting results of the study was that more than 40% of the respondents were not familiar with the concept of energy transition, with various conceptions about the stakeholders which transition actually concerns. A similar percent was aware of the concept of transition. Also, a large percentage required more information on the concept at the time. Renewable energy investments were considered advantageous amongst the residents. The study showed that in 2021 the majority of the citizens of Western Macedonia required more information about Just Transition and its advantages but also encouraged the cooperation of the local governments with the University of Western Macedonia, now key stakeholders in the energy transition of the region (Spyraki et al., 2022).

In an attempt to assess current stakeholder involvement in the transition of Western Macedonia, Topaloglou et al. (2023) produced a study utilising questionnaires and personal interviews with stakeholders in the region. According to the answers from the stakeholders, insufficient stakeholder involvement in Western Macedonia entails various risks. The most important risks are the loss of trust due to insufficient use of resources, insufficient perception of the real socioeconomic needs, lack of participation in decision making and eventually, the severe lack of public acceptance of the transition. This study also measured stakeholder engagement in partnerships during the planning and monitoring of the JTDP in the region, in three levels, information, consultation and involvement. According to the stakeholders, they are much more involved in providing information, rather than participating in consultations or even be directed involved in the transition processes, with energy municipalities not participating in decision making processes.

Another recent study Kaldellis by et al. (2023) focused on energy sector young scientists that reside in Western Macedonia, and particularly on their attitude towards the energy decarbonisation and the Just Transition of the region. Amongst the issues that were covered were the JTDP and the participants proposed ideas for this concept. The vast majority of participants is aware of the environmental, social and economic aspects of both lignite mining and the transition. This study showed a similar issue at the previous ones, the requirement by the residents and local communities to be involved in decision making processes. It also suggested that young scientists are concerned with the swiftness and practicality of the JTDP and the changes it introduced, such as the rapid closing of the lignite mines, suggesting that lignite should continue to have a 10–15% in the Greek energy mix. It seems that a synergy between the universities/research centers and the State is even more necessary now than ever before (Kaldellis by et al., 2023).

4.3 Konin region

The transformation in the Konin region, located in Eastern Wielkopolska, is a process of striving

for a just transition, aimed at implementing structural changes that bring both economic and environmental benefits. This process is not just an infrastructural change, but a holistic movement towards improving living standards and supporting the development opportunities of the community. The most important element of this transformation is its social acceptance, emphasizing the importance of involvement and adaptation to the needs and aspirations of the local population. This initiative represents a critical step towards sustainable progress, balancing ecological responsibilities with economic aspirations.

4.3.1 Initiating Community Involvement

Recognizing the importance of this grassroots initiative, the Wielkopolska Regional Government expressed its commitment to achieving a zero-emission economy while adhering to the principles of fair transformation. This commitment was further solidified with the establishment in March 2018 of a dedicated **Working Group for the Restructuring of the Economic Potential** of the Konin Subregion under the Department of Economy of the Marshal's Office of the Wielkopolska Region in Poznan. In February 2019, Maciej Sytek was appointed as the **Representative of the Board of the Wielkopolska Region** for the Restructuring of Eastern Wielkopolska. His role was pivotal, focusing on coordinating the transformation process directly from the region, with a particular emphasis on addressing issues related to the subregion's transformation.

This approach signified to the residents that their concerns and the transformation of their region were being treated as a priority. The Representative's duties were comprehensive and multifaceted: representing the Wielkopolska Region before governmental and self-governmental bodies, EU institutions, national and international organizations, including associations and foundations, in matters related to the restructuring of post-mining areas threatened with economic, social, and cultural exclusion; representing the Region at conferences, symposiums, workshops, and other meetings related to the transition from a coal-based to a modern, emission-free energy economy; initiating actions on behalf of the Wielkopolska Region aimed at restructuring the areas of Eastern Wielkopolska affected by brown coal mining; negotiating agreements and letters of intent for the restructuring of Eastern Wielkopolska; and coordinating efforts to secure funding for the region's restructuring.

This holistic approach marked a significant step in ensuring that the transition process was inclusive, community-driven, and responsive to the unique challenges and opportunities of the Konin region.

4.3.2 Working Groups

In April 2019, the Eastern Wielkopolska region's commitment to fair energy transformation was formalized through an agreement signed by over 70 entities. This collaboration fostered initiatives and investments for sustainable transformation. It emphasized mutual support in fair transformation, involvement in mining region support platforms, and funding for regional projects, focusing on new job creation in the energy sector and beyond. The agreement, supported by governments, local businesses, and key partners like ZE PAK, was presented to the European Commission, showcasing the region's unified approach to socio-economic transformation. This foundational agreement led to the creation of thematic **Working Groups** in June 2020, involving around 200 diverse stakeholders. These groups focused on environment, energy, infrastructure, and social challenges, aiming to define key regional issues and challenges, and develop documents for Eastern Wielkopolska's transformation, including the Concept of the Just Transition of Eastern Wielkopolska, the Territorial Just Transition Plan of Eastern Wielkopolska and the long-term and comprehensive Development Strategy of Eastern Wielkopolska. The working groups included representatives from territorial self-government units, central authorities, legislative bodies, communal companies, businesses, academia, and NGOs. This inclusive, multi-stakeholder approach facilitated a comprehensive perspective on the region's transition, enhancing social, economic, legal, and cultural understanding and cooperation.

The social consultation process in Eastern Wielkopolska, based on thematic working groups, was notably transparent and open. This approach allowed all interested stakeholders to participate, facilitating a broad exchange of knowledge and opinions across various groups. This diversity enriched the discussions, enabling a comprehensive view of the issues in a broader social, economic, legal, and cultural context. Such inclusivity and openness were key strengths of this consultative process, contributing to a more holistic and collaborative approach to the region's transformation challenges.

In 2020, the Board Representative for the Eastern Wielkopolska region initiated a call for strategic project proposals from the Working Groups, aiming to identify regional development priorities and program public intervention directions. This initiative saw considerable engagement, with approximately 170 project proposals submitted. These proposals were reflected in the Concept for Fair Transformation of Eastern Wielkopolska and in the draft Territorial Just Transformation Plan, influencing its goals, priorities, and intervention directions. The below figure illustrates the project submissions, with the majority focused on energy (39%), human and social capital (17%), and entrepreneurship and economy (15%), followed by environment, transport, and R&D. Digitalization and other areas received less emphasis, indicating strategic focus areas for the region's transformation.

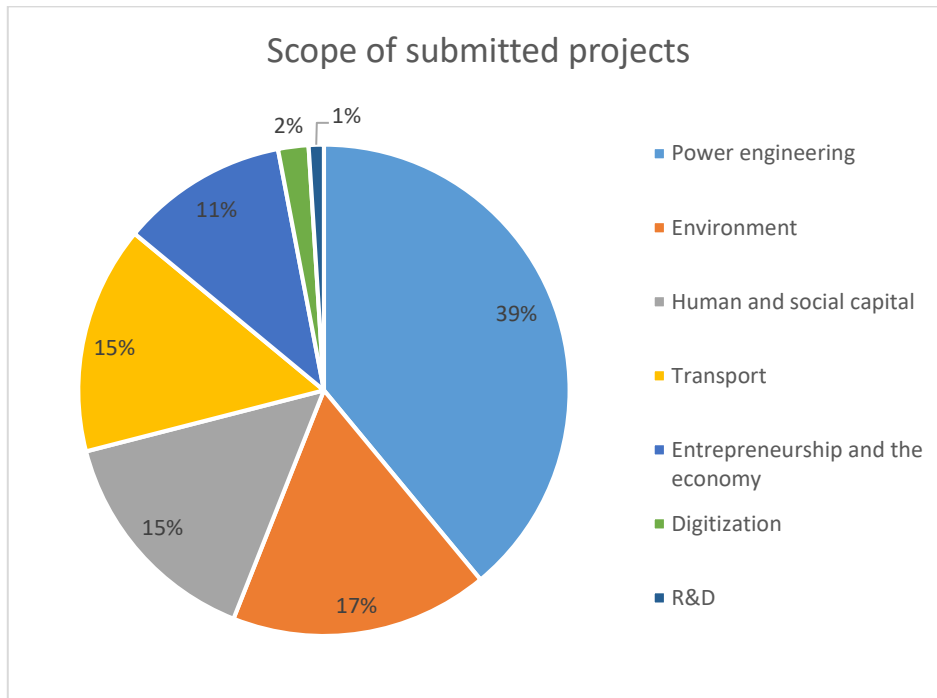


Figure 2: Strategic Initiatives by Sector for Eastern Wielkopolska Transition (Agencja Rozwoju Regionalne-go S.A, 2021)

During the works of the four primary Working Groups, the need for new groups focusing on narrower issues became apparent:

- Notably, during the environmental group's discussions, non-governmental organizations highlighted the absence of exhaustive debate on environmental protection, especially concerning hydrological issues and the impact of mining areas on water resources. This led to the formation of a specialized hydrological meeting.
- In the labor market and education group, the underrepresented voice of the youth, crucial for the region's future, was recognized, prompting a youth meeting with activists, students, and pupils.
- To broaden worker and entrepreneur involvement in the Concept and Plan, in 2021, meetings were organized with ZE PAK Group employees, including trade unions and management, with additional participation from the local employment office and regional social policy center.

4.3.3 The role of non-governmental organization

Key non-governmental organizations recognized as pioneers in conceptualizing fair transformation in the Konin subregion include Akcja Konin, ZmieniaMy Konin, and the Miasto Prowincjonalne Foundation. Since 2017, these entities have been actively involved in the region's just transition efforts, including participation in the initial working meetings of the Platform for Coal Regions in Transition, established by the European Commission in December 2017. These NGOs have organized or co-organized various conferences and events dedicated to fair transformation, especially initiating activities prior to the appointment of the Wielkopolska Region's restructuring representative. Other NGOs, such as the Green Future Institute, the Polish Green Network Association, the InStrat Foundation, and the Association for Social Cooperatives, have also contributed significantly to the fair transformation efforts.

4.3.4 Platform for Coal Regions in Transition

The commitment of Eastern Wielkopolska to fair transformation is exemplified by its proactive involvement in the Platform for Coal Regions in Transition. This EU initiative, joined in 2019 through efforts by the regional government and the support of the Polish government, facilitates the economic and energy transition towards low-emission economies. As a member, Eastern Wielkopolska accessed vital expertise, enabling the launch of strategic project planning. In 2019, 21 strategic project proposals were submitted to the European Commission, with 10 being recognized as highly promising. Projects ranged from branding strategies and skills development to green financial support and renewable energy infrastructure, with some already underway and others poised to commence shortly.

4.3.5 Developing of Territorial Just Transition Plan for Eastern Wielkopolska

The extensive process of consulting and developing the Territorial Just Transition Plan (TJTP) for Eastern Wielkopolska included a robust dialogue among the Working Groups. This collaborative phase commenced on February 18, 2021, with the presentation of the working scope of TJTP for stakeholder review. Based on the EU Parliament and Council's Regulation (EU) 2021/1056 of June 24, 2021, the draft document provided a comprehensive framework for the anticipated economic transformation.

The document was thoroughly examined in a series of consultative sessions, where members of the Working Groups, including representatives from local and national governments, social partners, economic stakeholders, and the European Commission, actively participated. Recognizing the need for a wide array of inputs, the draft TJTP was also made available on the www.arrtransformacja.org.pl portal, inviting public scrutiny and engagement. Further, the Polish Green Network's website hosted the document, widening the consultation net.

In-depth workshops with various stakeholders, such as entrepreneurs in February 2021 and ZE PAK Group's employee representatives, were instrumental in gathering a broader spectrum of insights. Feedback was meticulously collected via an online form and through direct interactions, revealing that NGOs were particularly active, contributing 42% of all comments. Businesses and local government units also provided substantial input, demonstrating the engagement's multi-sectoral nature.

The "official" public consultations of the TJTP draft commenced on April 23, 2021, announced on the regional development portal and the Wielkopolska Marshal's Office's public information bulletin. This phase saw the distribution of the TJTP draft to Working Group members, with a call for feedback published on the websites of District Offices and the four main cities of Eastern Wielkopolska, achieving positive response and engagement.

To ensure the plan's inclusivity and adherence to broader societal values, solicitation for feedback

extended to entities responsible for promoting social inclusion, fundamental rights, rights of persons with disabilities, and gender equality. Appeals were made to government-appointed representatives for equal treatment, for persons with disabilities, the Human Rights Ombudsman, the Chairman of the Wielkopolska Council for Non-Governmental Organizations, and the Chairman of the Regional Social Dialogue Council.

The culmination of these consultations was the assimilation of 86 formal remarks and numerous additional contributions throughout stakeholder meetings. The majority of the feedback concentrated on section 2.4 of the TJTP, reflecting the need for more detailed and expanded interventions. This participatory and analytical process underscored the community's vested interest in a just and equitable transition, ultimately shaping the final strategic document that would guide Eastern Wielkopolska's path forward.

5 Conclusions and Recommendations

The social acceptance was analysed via online surveys, which offer remarkable advantages in capturing widespread opinions and quantifiable data regarding social acceptance of transition processes in coal regions. However, they might lack the depth required to fully comprehend the underlying reasons behind certain attitudes. Qualitative methods like interviews and focus groups provide deeper insights into motivations, emotions, and nuanced opinions. The data shows that communication through direct contact is desired but according to the German data those events are attended by mostly older citizens. The online survey method however also reached the younger generation and also people who are not very familiar with the discussed subject.

The majority of participants in the public online survey associate industry and mining the most with their region. It becomes clear that this association is not dependent on the maturity of the phase-out. The Polish and German participants also emphasize leisure and cultural activities whereas the Greek connect high pollution with western Macedonia. Satisfaction with the government is higher in Germany than in the other regions. The creation of new jobs is most important for all regions, whereas the innovative technologies and new forms of energy are wished for the future.

Surveys should be complemented by qualitative methodologies to attain a comprehensive understanding of the transition. Combining online surveys with qualitative approaches like interviews, focus groups, and community engagement activities allows for a more holistic assessment, ensuring a nuanced understanding of community sentiments and enhancing the effectiveness of decision-making in transitioning coal regions.

Stakeholders in coal regions have diverse and multifaceted interests in participating in transition processes. These interests stem from various perspectives and motivations, shaping their involvement in the transition away from coal. Workers, unions, and local businesses hold a significant interest in transitioning industries. While there might be concerns about job losses in the coal sector, there is also a recognition of potential new economic opportunities arising from renewable energy, infrastructure development, and diversified industries. They seek active involvement to ensure a just transition that safeguards livelihoods and creates sustainable employment alternatives. Environmental groups and activists are driven by the need to mitigate climate change impacts. They advocate for transitioning away from coal to cleaner energy sources, emphasizing the importance of reducing carbon emissions and preserving ecosystems. Their interest lies in ensuring environmentally responsible transitions that prioritize sustainability and reduced environmental degradation. Residents and community representatives have a vested interest in the overall well-being of their communities. Their participation focuses on ensuring that transition processes address social justice, health concerns, and community resilience. They aim for inclusive decision-making processes that consider the needs of marginalized groups, support community development, and maintain social cohesion during the transition. Government entities and policymakers aim to drive policy changes that support the transition while maintaining economic stability and social welfare. Their participation involves crafting policies, providing financial support, and creating regulatory frameworks that facilitate a smooth and equitable transition. Investors and industries, including renewable energy companies, see opportunities for growth and investment in transitioning regions. Their interest lies in exploring profitable ventures aligned with the transition agenda, investing in innovation, and contributing to economic diversification.

Overall, stakeholder interests in participating in transition processes in coal regions are diverse, encompassing economic, environmental, social, and policy-driven motives. Effective engagement and collaboration among these stakeholders are crucial for ensuring a successful and sustainable transition that balances the interests of all parties involved.

Each transition strategy must always take into account a multitude of decision-making levels and actors with different viewpoints. In the Ruhr region community involvement was tried out and practiced in different ways in the course of time. There is no patent strategic solution, no “one size fits all” strategy for different coal regions and that includes the different kinds of community involvement. It is necessary to have a joint fact-finding process and joint evidence as a basis for more objective and constructive debates with all stakeholders and the public. Therefore, it is of utmost importance to have a competent planning and management authority, which we already recommended in Deliverable 3.1, i.e. a regional cooperation.

6 References

- Bottrop Leitprojekt Innovation City, Presseinformation vom 15.6.2021: Bottrop hat die CO₂-Emissionen im Pilot gebiet halbiert. Download: <https://www.bottrop.de/innovationcity/aktuelles/bottrop-hat-co2-emissionen-halbiert.php>
- Brüggemann, Jürgen/Melchers, Christian 2017: Montanindustrielle Raumnutzung verstehen – Folgen und Perspektiven für das postmontane Zeitalter, in: Polivka, Jan/Reicher, Christa/ Zöpel, Christoph (eds.): Raumstrategien Ruhr 2035+, pp. 37-58.
- Brüggemann, Jürgen 2021: Mining Area Agreement (BBFV) RUHR – Study Regarding the Effectiveness of a New Form of Cooperation. In: Mining Report Glückauf 157 No. 5, pp. 441-449. Online: <https://doi.org/10.48771/5srt-y672>
- Brüggemann, Jürgen/van de Loo, Kai 2021: Post-Mining research on Reactivation and Transition, in: Mining Report Glückauf 157 No. 2, pp. 127-139. Online: <https://doi.org/10.48771/qyw1-vn40>
- Galgóczy, Bela (ILO Geneva) 2014, in: International Journal of Labour Research, Vol. 6 No. 2: *The long and winding road from black to green: Decades of structural change in the Ruhr region*
- Initiativkreis Ruhr: Innovation City Ruhr 2023, online: <https://initiativkreis-ruhr.de/projekte-events/#innovationCityRuhr>
- JTDP Government Committee. Just Transition Development Plan—Current Situation and Prospect for Areas in Energy Transition in Greece. 2020. Online: https://www.sdham.gr/sites/default/files/consultation/Current_situation_and_prospects_for_areas_in_energy_transition_in_greece_EN.pdf
- Landesregierung NRW 2018: Starke Stimmen für das Ruhrgebiet – Pressemitteilung vom 31.8.2018, online: https://www.wirtschaft.nrw/sites/default/files/documents/2018-08-31_anlage_pm_ruhr-konferenz-final_0.pdf
- van de Loo, Kai 2021: Tools for Change – How the EU Wants to Achieve the Coal Transition, in: Mining Report Glückauf 157 No.6, pp. 528-550
- van de Loo, Kai/Haske, Julia 2023: Basis für eine breitere Akzeptanz von Infrastrukturprojekten im öffentlichen Diskurs - Beispiele im Energiesektor, in: EEK Energy (Oil Gas European Magazine), forthcoming
- Kaldellis, J. K., Boulogiorgou, D., Kondili, E. M., & Triantafyllou, A. G. (2023). Green Transition and Electricity Sector Decarbonization: The Case of West Macedonia. *Energies*, 16(16), 5970. Online: <https://doi.org/10.3390/en16165970>
- Karasmanaki, E., Ioannou, K., Katsaounis, K., & Tsantopoulos, G. (2020). The attitude of the local community towards investments in lignite before transitioning to the post-lignite era: The case of Western Macedonia, Greece. *Resources Policy*, 68, 101781. Online: <https://doi.org/10.1016/j.resourpol.2020.101781>
- Mavrogenis, Stavros, WWF Blog regionsbeyondcoal, 13.2.2019: Just transition is possible. The Case of Ruhr (Germany), download: <https://regionsbeyondcoal.eu/just-transition-is-possible-the-case-of-ruhr-germany/>
- MHKBD - Ministerium für Heimat, Kommunales, Bau und Digitalisierung NRW 2023: Ruhr-Konferenz, online: <https://www.mhkbd.nrw/themenportal/ruhr-konferenz>
- Ministerial Decision 4/2019. Ratification of the National Energy and Climate Plan (NECP). (Government Gazette Issue 4893/B` 31.12.2019). Available online: https://www.et.gr/api/DownloadFeksApi/?fek_pdf=20190204893
- Pao-Yu, Oei, Brauers, Hanna, and Herpich, Philipp, 2019, in: *Climate Policy*, 20(8), 963–979: *Lessons from Germany's hard coal mining phase-out: policies and transition from 1950 to 2018*
- Raport z partycypacji społecznej w ramach procesu sprawiedliwej transformacji w Wielkopolsce Wschodniej [Report on social participation in the just transformation process in Eastern Greater Poland], 2021, Agencja Rozwoju Regionalnego S.A, Konin <https://arrtransformacja.org.pl/kalendarium/>
- RVR 2013: ideenwettbewerb zukunft metropoleruhr, Essen, download: www.ideenwettbewerb.metropoleruhr.de
- RVR 2022: Handlungsprogramm zur räumlichen Entwicklung der Metropole Ruhr, Essen

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- RVR 2023: Aufstellung des Regionalplans Ruhr, Download: [https://www.rvr.ruhr/themen/staatliche-regionalplanung/Regionalplanung & Regionalentwicklung \(rvr.ruhr\)](https://www.rvr.ruhr/themen/staatliche-regionalplanung/Regionalplanung-&-Regionalentwicklung), last access 30.11.2023
- Topaloglou, L., Kouskoura, A., Janikowska, O., Grozeva, R., Nikolaidou, K., Karagiannis, I. & Kulczycka, J. (2023). Stakeholder Involvement in Just Transition Process: Myth or Reality? Online: <https://dx.doi.org/10.2139/ssrn.4510270>
- Theodosiou, I. & Mantzaris, N. (2020). Just Transition: History, Development and Challenges in Greece and Europe. Online: https://thegreentank.gr/wp-content/uploads/2020/09/202007_TheGreenTank_JustTransitionReport_EN.pdf
- The World Bank (2020). Stakeholder Engagement Plan (SEP) for Western Macedonia. Report. Online: [https://www.sdam.gr/sites/default/files/consultation/Greece - Stakeholder Engagement Plan \(SEP\) for WM June 2020 Final.pdf](https://www.sdam.gr/sites/default/files/consultation/Greece-Stakeholder-Engagement-Plan-SEP-for-WM-June-2020-Final.pdf)
- Spyraki, M., Mellios, C., Andriosopoulos, K., Papadopoulos, N. & Boemi, S. N. (2022). Investigation of Citizens' Attitudes towards Energy Transition. Evidence from the Region of Western Macedonia-Greece. Online: https://www.haee.gr/media/4679/spyraki2022abstract_1.pdf
- Statistik der Kohlenwirtschaft 2020, online: <https://kohlenstatistik.de/>
- WAZ 2020 – Westdeutsche Allgemeine Zeitung vom 7.9.2020: Revier-IHKs kritisieren: Die Ruhrkonferenz bleibt blass, download: <https://www.waz.de/wirtschaft/wirtschaft-in-nrw/revier-ihk-kritisieren-die-ruhrkonferenz-bleibt-blass-id230345598.html>
- WRI (World Resources Institute) 2021: Germany: The Ruhr region's pivot coal mining hub to green industry and expertise, download: <https://www.wri.org/update/germany-ruhr-regions-pivot-coal-mining-hub-green-industry-and-expertise#>
- Wuppertal Institut 2022: Just Transition Toolbox, download: <https://www.coaltransitions-toolbox.org/>

APPENDIX

I Public Online Questionnaire

1. Where do you live?

- In the Ruhr region /Konin region/ Western Macedonia
- Outside the Ruhr region /Konin region/ Western Macedonia

2. Please indicate your gender.

- male
- female
- diverse
- No answer

3. How old are you?

- Younger than 20 years
- 21 to 40 years
- 41 to 60 years
- Over 60 years

4. Which of the following categories best describes your current employment status?

- Employed
- Self-employed
- Civil servant
- Pupil
- Student
- Pensioner
- Housewife/ Houseman
- Unemployed
- Other (Please specify)_____

5. What comes to mind when you think of the Ruhr region /Western Macedonia/Konin region? Which of the following things do you associate with the region? [Please select max. 3 answers]

- Economically successful
- Interesting holiday destination
- High pollution
- Poor air quality
- Industry and mining
- Good education
- Extensive leisure and cultural activities
- Attractive jobs
- Green spaces and nature
- Other (Please specify)_____

6. How do you rate the efforts of the (regional) government and the municipalities to manage the transition away from coal in your region?

- Very good
- Good
- Average
- Poor
- Very poor
- No opinion

- 7. Which of these points do you think are particularly important for the citizens of the Ruhr region /Western Macedonia/Konin region? [Please select max. 3 answers]**
- Creation of new jobs
 - Support for affected employees
 - Measures for environmental protection
 - Preservation of industrial culture/ regional culture of remembrance
 - Citizen participation and transparency
 - Other (Please specify)_____
- 8. Do you know St. Barbara as the patron saint of miners?**
- Yes
 - No
- 9. What kind of measures do you think are necessary for the transition away from coal? [Please select max. 3 answers]**
- Retraining and further training programmes for affected employees.
 - Establishment of additional universities
 - Promotion of innovative technologies for the economy
 - Development of new forms of energy
 - Greater involvement of citizens in decision-making processes
 - Support for start-ups and entrepreneurship
 - Designation of new commercial and industrial areas
 - Promotion of tourism and culture
 - Other (Please specify)_____
- 10. What methods do you think should be used to better involve citizens in decision-making processes? [Please select max. 3 answers]**
- Public meetings and workshops
 - Online surveys and participation platforms
 - Local citizens' initiatives
 - Social media
 - Direct surveys and interviews
 - Other (Please specify)_____
- 11. In your opinion, what kind of projects or measures in the Ruhr region should be a particular focus of policy? [Please select max. 3 answers]**
- Environmental protection and sustainability
 - Creation of new jobs
 - Preservation of the region's culture and history
 - Education and training opportunities
 - Social integration and community projects
 - Other (Please specify)_____
- 12. What role do you personally see for yourself in shaping the transition away from coal in the Ruhr region /Western Macedonia/Konin region?**
- Active participation in projects or initiatives
 - Supporting the work of decision-makers
 - Educating and raising awareness in the community
 - Participation in political parties
 - Observer
 - Other (Please specify)_____

13. Are you aware of any projects in your area that have been created or are being run as part of the shift away from coal?

- Yes
- No

14. If yes, are you or have you been involved in the decision-making process?

- Yes
- No

Thank you for taking the time to participate in our survey! Your opinion is important to us and helps to understand and promote social acceptance of transformation processes in coal regions. Please also share this survey with your friends and in your social networks to motivate more people to participate.

II Stakeholder Questionnaire

1. Where do you live?

- In the Ruhr region /Konin region/ Western Macedonia
- Outside the Ruhr region /Konin region/ Western Macedonia

2. How old are you?

- Younger than 20 years
- 21 to 40 years
- 41 to 60 years
- Over 60 years

3. From the following options, please select the one that you think is most appropriate to specify your interest group

- Mining companies
- Electricity producing companies
- Trade unions
- Subcontractors/ suppliers/ service companies
- National government
- Regional government
- Local government
- Universities & Science
- Local and national media
- Environmental organisation
- Civil society
- Local and national business organisations (e.g. Chamber of Commerce or Chamber of Trade)
- Local businesses
- Financial institutions
- Private investors
- Municipalities
- Multinational institutions, EU/DG (European Commission/Directorate General)
- Other (Please specify): _____

4. What comes to your mind when you think of the Ruhr region/Western Macedonia/Konin region? Which of the following things do you associate with the region?

[Please select max. 3 answers]

- Economically successful
- Interesting holiday destination
- High pollution
- Poor air quality
- Industry and mining
- Good education
- Extensive leisure and cultural activities
- Attractive jobs
- Green spaces and nature
- Other (Please specify): _____

5. How do you rate the efforts of the (regional) government and the municipalities to manage the coal transition in your region?

- Very good
- Good
- Average

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- Poor
- Very poor
- No opinion

6. Which of these points would you actively address or have you addressed?

- Creation of new jobs
- Support for affected workers
- Measures for environmental protection
- Preservation of industrial culture/ regional culture of remembrance
- Citizen participation and transparency
- Other (Please specify): _____

7. What kind of measures do you think are necessary for structural change? [Please select max. 3 answers]

- Retraining and further education programmes for affected employees
- Establishment of additional universities
- Promotion of innovative technologies for the economy
- Development of new forms of energy
- Greater involvement of citizens in decision-making processes
- Support for start-ups and entrepreneurship
- Designation of new commercial and industrial areas
- Promotion of tourism and culture
- Other (Please specify): _____

8. What methods do you think should be used to better involve citizens in decision-making processes?

- Public meetings and workshops
- Online surveys and participation platforms
- Local citizens' initiatives
- Social media
- Direct surveys and interviews
- Other (Please specify): _____

9. What kind of projects or measures in the Ruhr region/Western Macedonia/Konin region do you think should be a particular focus of policy?

- Environmental protection and sustainability
- Creation of new jobs
- Preservation of culture and history of the region
- Education and training opportunities
- Social integration and community projects
- Other (Please specify): _____

III Individual Results Public and Stakeholder Perception - Germany

Public perception

Individual answers provided by public respondents concerning the option "other":

Question 5: What comes to mind when you think of the Ruhr region? Which of the following things do you associate with the region?

- Densely built up – social problems
- Poor traffic routes (car, public transport, non-motorized)
- Many missed opportunities due to parochial thinking, but huge praise for the Emscher conversion!
- Transformation
- Unemployment

Question 7: Which of these points do you think are particularly important for the citizens of the Ruhr region?

- Traffic concept
- Let's all work together properly instead of against each other
- Infrastructure, public transport and traffic
- Investments in infrastructure
- Stronger cooperation between cities and districts

Question 9: What kind of measures do you think are necessary for the transition away from coal?

- Less bureaucracy
- Faster processes / settlements, fewer bureaucratic hurdles. 100% coverage with fast Internet and mobile communications
- Renewable energies
- Creating jobs that do not require a high school diploma or university degree

Question 10: What methods do you think should be used to better involve citizens in decision-making processes?

- This can only be achieved through a direct "confrontation" with a personal approach
- Municipal development councils
- Due to the lack of media literacy, the public is always looking for a quick and easy solution, participation is not necessary
- Party political involvement, trade unions, initiatives

Question 11: In your opinion, what kind of projects or measures in the Ruhr region should be a particular focus of policy?

- Mandatory participation of heads of offices and associations (RVR, cities & municipalities, state, EGLV, ...) to get along with each other.
- Creation of new key projects that enable major investments (especially in transport infrastructure)

Question 12: What role do you personally see for yourself in shaping the transition away from coal in the Ruhr region / Western Macedonia / Konin region?

- Don't stand in the way and move away as soon as possible!
- Actively advancing my specialist area for the common good
- I have just written a new tourist guide to the Ruhr region for a publishing house in the Netherlands.
- Visits to the region, vacation in the region

Stakeholder perception

Individual answers provided by public respondents concerning the option “other”:

Question 4: What comes to your mind when you think of the Ruhr region? Which of the following things do you associate with the region?

- Home
- My home
- Experienced in integration
- Many people
- Many cities in a confined space
- Very unfavorable traffic conditions
- Diversity
- Hellweg
- Strong social disparities
- Old mining industry
- Conurbation with a high proportion of migrants
- High population density

Question 6: Which of these points do you think are particularly important for the citizens of the Ruhr region?

- Near-natural expansion/conversion of local recreation areas
- Reactivation
- Strengthening the RVR and expanding its competencies
- Modernizing real estate
- Alternative value creation processes
- Environmental risk management aftercare effects
- New energies
- Support for local authorities
- Significantly improve public transport (supra-regional and not just city-related)
- Investment in promising technologies (e.g. hydrogen)
- Balanced energy supply with measures to save energy
- Return to active mining and revive the coal and steel industry

Question 7: What kind of measures do you think are necessary for structural change?

- Reducing unemployment through labor market policy measures
- Land recycling / conversion of former mining / industrial sites
- Indications as to where structural change should go
- Administrative structural reform
- This structural change is a disaster and has destroyed a leading economic region
- None of it

Question 8: What methods do you think should be used to better involve citizens in decision-making processes?

- Attractive and easily accessible online presence
- None
- Larger scale - scientifically based!!! - Advertising for upcoming events
- Existing opportunities for political decision-making
- A conservative state and federal government should have campaigned for the general preservation of this economic region!
- Further development of democracy in the FRG (see Switzerland)
- Nothing, institutional democracy has to ensure that the will of the people is adequately taken into account.

Question 9: What kind of projects or measures in the Ruhr region do you think should be a particular focus of policy?

- Preservation / expansion of near-natural recreational areas
- Intensification of municipal cooperation, strengthening of the RVR
- New institutions with attention-grabbing effects
- Reducing bureaucracy
- Unbureaucratic financial support for struggling municipalities
- The revitalization of a sustainable coal and mining location, taking environmental protection into account
- Electron reactor, nuclear fusion, space technology

IV Results Expert Stakeholder

Germany

Stakeholder 1: Regional government

Stakeholder 2: Urban area development

Stakeholder 3: Mining Company

Stakeholder 4: Communal development projects

1. Does the transition process involve one or more development projects or a regional development plan/ master plan?

- One regional development plan/ master plan X
- Many projects XX
- A single Project X

2. How was the population integrated in the citizen information events during the transition process process?

- Not at all
- Citizen information events XXX
- (Online-)surveys X
- Citizen forum XX
- Scenario techniques
- Open-Space-conference
- Round table X
- Future Workshop XX
- Other (please specify): _____

These questions are only relevant if the question above was answered with at least one choice, otherwise the interview can be ended here.

3. At what level was the population involved?

- More at a neighborhood level
- More at the communal level XXX
- More at the regional level X

4. How many citizen information events were carried out?

- One
- Two to three X
- Four to five XX
- More than five X

5. How many participants took part in the citizen information event(s)

- Less than 10
- 10 to 50
- 50 to 100 X
- More than 100 XXX

6. How was the combination of the participants in the citizen information event(s)

- Mostly male
- Equally distributed XXXX
- Mostly female

7. How was the age distribution of the participants in the citizen information event(s)

- under 30 years

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- between 30 and 50 years
- 50 years and older **XXXX**
- That is not known

8. How was the reaction of the participants after the event in your opinion?

- mostly positive (convinced) **XX**
- neutral **XX**
- mostly negative (not convinced)
- I am not sure about that

Poland

Stakeholder 1: scientific and technical association

Stakeholder 2: business environment institutions

Stakeholder 3: mining industry

1. Does the transition/structural change process involve one or more development projects or a regional development plan / masterplan?

- A regional development plan / masterplan
- Multiple projects
- Single Project

2. How was the population involved in the transition process/structural change process in the citizen information events?

- not at all
- citizen information events
- (on-line-) surveys
- planning cells, citizens' forum
- scenario techniques
- open-space-conference
- round table
- future workshop
- Other (Please specify): information meetings in municipalities (almost 30) as part of the "EU funds without secrets" series, training for potential beneficiaries of the Just Transition Fund under the European Funds for Wielkopolska 2021-2027 Program including a broad representation of employees in the transformation process including the above-mentioned sub-points, but only in relation to employees of the ZE PAK Group

These questions are only relevant if the question above has been answered with at least one event, otherwise the interview can be stopped here.

3. At what level was the population involved?

- Rather neighbourhood level
- Rather communal level
- Rather regional level:

4. How many citizen information events were held?

- One
- Two to three
- Four to five
- More than five

5. How many participants attended the citizens' information event(s)?

- Less than 10
- 10 to 50
- 50 to 100
- More than 100

6. What was the composition of the participants in the citizens' information event(s)?

- Predominantly male
- Equally distributed
- Predominantly female

7. What was the age distribution of participants in the citizens' information event(s)?

- Under 30 years
- between 30 and 50 years
- 50 years and older
- I am not aware of this

8. What was the reaction of the participants after the event?

- Predominantly positive (convinced)
- Neutral
- Predominantly negative (not convinced)
- I am not aware of this

Greece

Stakeholder 1: Lefteris Ioannidis, Former Mayor of Kozani Township / Municipal councilor

Stakeholder 2: Anastasios Sidiropoulos, ANKO Western Macedonia S.A., Organization for Local Development

1. Does the transition/structural change process involve one or more development projects or a regional development plan / masterplan?
 - A regional development plan / masterplan (It is a regional development plan including also several flagship projects)
 - Multiple projects (Compound process—deep structural change, with economic and social features, encompassing multilevel projects. At the level of infrastructure, support for entrepreneurship, environmental protection, professional staff training)
 - Single Project

2. How was the population involved in the transition process/structural change process in the citizen information events?
 - not at all
 - citizen information events
 - (on-line-) surveys
 - planning cells, citizens' forum
 - scenario techniques
 - open-space-conference
 - round table
 - future workshop
 - Other (Please specify): _____

These questions are only relevant if the question above has been answered with at least one event, otherwise the interview can be stopped here.

3. At what level was the population involved?
 - Rather neighbourhood level
 - Rather communal level
 - Rather regional level

4. How many citizen information events were held?
 - One
 - Two to three
 - Four to five
 - More than five

5. How many participants attended the citizens' information event(s)?
 - Less than 10
 - 10 to 50
 - 50 to 100
 - More than 100

6. What was the composition of the participants in the citizens' information event(s)?
 - Predominantly male
 - Equally distributed
 - Predominantly female

7. What was the age distribution of participants in the citizens' information event(s)?
 - Under 30 years
 - between 30 and 50 years

WINTER: Report on the social acceptance and community participation

- 50 years and older
- I am not aware of this

8. What was the reaction of the participants after the event?

- Predominantly positive (convinced)
- Neutral Neutral (The neutral reactions is transformed to negative during the implementation phase of the programme due to insufficient information and communication procedures)
- Predominantly negative (not convinced)
- I am not aware of this