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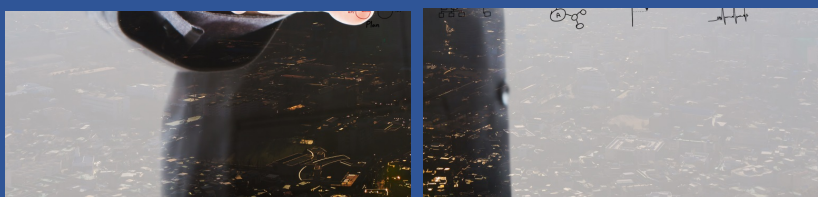
Project: Profiling the Labor Force affected by
Mines Closure in Western Macedonia

Contracting Authority: World Bank



PLAS
Human Resources

2020



**Deliverable 2.2: Focus Groups of subcontractors and PPC staff
in the mining and power sectors**

- i. Preparation
- ii. Carry out the survey in the field, including FGDs and individual questionnaire
- iii. Summary of findings
- iv. Submission of final report containing a more elaborated and detailed written description and assessment of findings and conclusions.

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Abstract

Change is a hot topic in the Region of Western Macedonia since July 2019, when the government announced its decision for a coal phase-out and introduced the inevitable “**transition to the postlignite era**”.

What has changed in the past 10 years, *what needs to change* and *what needs to be preserved and defended from change* articulate in a nutshell the main axes of the **15 Focus Groups Discussions** (FGDs) carried out with employers and employees involved in the lignite mines activities in the Region of Western Macedonia.

The past, the present and the future tense of “**change**” encompass the opinions and thoughts, the proposals and suggestions, but also the fears and considerations both of the employers and the employees who are active in the mines and power production activities in the Region of Western Macedonia.

There has always been in the area a discussion about closing the lignite coal power plants and the lignite mines, but the recent announcement surprised the regional actors involved in the lignite economy. A radical change in the structure of the regional economy and labour market is thus expected, however changes have been already addressed and the real consequences of the shrinking lignite-based economy impact companies and the labour force.

It sounds paradox, but one might imagine and point out, that an economic activity surrounding lignite operations is unhealthy for workers and the general population, environmental dangerous and polluting, but also old fashioned and therefore costly in terms of producing energy. A resistant behavior to any change in a more “green energy” direction would be estimated as close to zero. However, the participants of the FGDs, make clear that any rapid and violent change to a “green energy” era without a concrete plan and identified investment priorities would be equal to a “sudden death”, a “burning out of the economy”, encompassing unpredictable negative consequences for the regional economy and society.

In general, the results of the FGDs validated in a comprehensive way the main findings of the census, while they differentiated the robust picture of the regional economy, by addressing a dynamic ecosystem of PPC-driven economic activities.

From that point of view, one might say that the regional economy of Western Macedonia is since the 1960’s a **monocultural PPC-driven industrial economy** that involves directly and indirectly more than **20.000 people**. The lignite economy surrounds specialized and very experienced technicians and engineers, but also other professions, such as traders

of big vehicles and spare parts, drivers, transportation officers, etc., who created their own business and invested money, efforts and dreams in the lignite economy.

Having the opportunity to discuss in depth with the main actors of this coherent **mine-centered economy** we realized that the heart of the business is without any doubt **PPC and its Power Plants**, while the backbone is consisted of a **three – level collaboration** between local companies. Most of the local companies are acting as a) direct contractors of PPC, b) subcontractors of PPC contractors as well as c) sub-subcontractors, creating a dynamic environment of mutually interchanging roles which offers job opportunities for the local labour force, especially for people with technical qualifications and professional experience. Even the big local companies might play the role of a sub-subcontractor within a specific project. The flexibility of moving carefully across a complex field of mines-centered business underlines a dynamic system of manageable complexity, but it indicated also a strong and rigid financial dependency on PPC activities. Using the words of an interviewee *“the monoculture of PPC was wish and curse for the Region”*.

Today many companies are managed and led by the **second generation** and therefore it is valid to characterize them as **family business**. Such companies have a successive experience in implementing projects in the field of mines and power production and involve experienced staff, that by **99%** derives from the Region. Not only technical companies, but also trade stores specialized in selling spare parts for big vehicles and other mines-related operations are acting for many years, creating powerful and long-term bonds with other companies within and outside the Region.

For all those years of the booming PPC-driven lignite economy people in Western Macedonia tried to study and acquire skills in **technical professions**, by enrolling VET secondary schools (Epaggelmatiko Lykeio, EPAL), Apprenticeships Schools of the National Employment Services (EPAS OAED) as well as Technical Universities. Mechanical engineers, electrical engineers, civil engineers, electrical technicians, heavy machine operators, lignite workers, welding technicians, drivers of heavy trucks, but also support and administrative staff are the common professions in the area. It is a commonplace issue in the Region of Western Macedonia that despite any formal qualification a professional might have, the Region functions as an **open learning venue** for acquiring professional experience and developing professional skills under hard working conditions.

The transition to the postlignite era is interpreted by the participants as a **radical, violent change**, that has to be carefully designed and implemented with the active participation of the main actor, e.g. PPC, but also with the employers and employees organizations (Chambers, Social Partners and other Initiatives), so as to ensure the continuity of industrial business and avoiding a massive shut down of local companies that will

inevitably lead to massive unemployment and migration of the labour force to other Regions of Greece or abroad. A desperate request for a **concise, comprehensive and region-specific transition plan** is asked by the regional actors.

Nevertheless, it seems that epistemologically a **systemic approach** has to be embraced and adhered by the decision makers so as to apply a region-specific set of **Labour Market Policies** aiming at promoting employment and tackling unemployment, with focus on the low and medium skilled employees. Such an approach fosters the thinking of the regional economy as a living organism which creates an emergent entity in its own right, with developmental, structural and financial essential features that cannot be easily analyzed and thought as isolated actors.

1. Introduction

1.1 Background

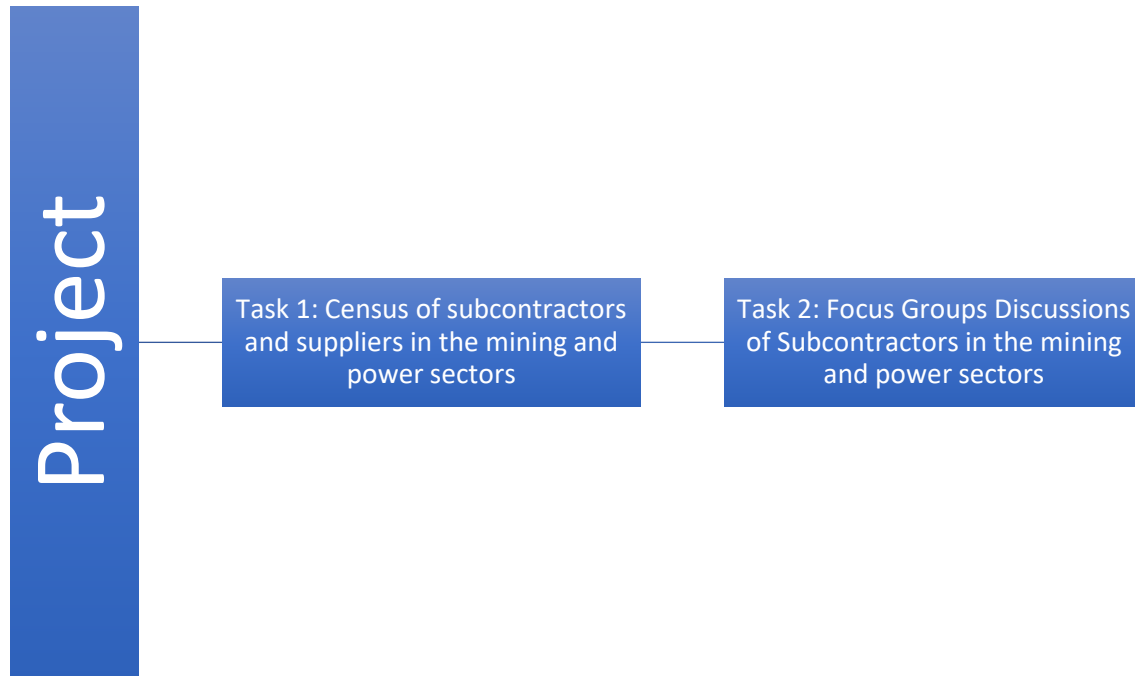
Based on the new agreed 2030 Framework on Climate and Energy regarding the reduction in coal-derived energy for EU member states by 2030, World Bank is assisting Regional Government of Western Macedonia, that sought to develop a Road Map for a Managed Transition of Coal-Dependent Regions in Western Macedonia (hitherto referred to as the Road Map) as well as the identification of concrete investment projects that can be financed by other branches of the European Commission, such as the Structural Reform Support Service (SRSS).

The Road Map has three pillars of intervention: a) a governance framework for managing the transition; b) assisting people and communities; and c) repurposing land and assets. This consultancy concerns the second pillar. More particularly, it will examine the labor impacts from the decommissioning/repurposing of the coal/energy plants' land and assets in Western Macedonia to inform the reallocation and reskilling of the affected workers. How many workers will be affected in Western Macedonia (directly and indirectly)? What is their demographic and skills profile? What are their expectations? These are the three questions at the heart of this consultancy.

In part of this large scale project PLAS SA, a privately owned Business Development and Human Resources Services company to private enterprises and public institutions operating in South-Eastern Europe and the Eastern Mediterranean, has been awarded with a contract from World Bank aiming at addressing the profile and estimating the number of workers in the Region of Western Macedonia.

1.2 Objective and Tasks of the Contract

According to the ToR, the overall objective of this contract was *“to contribute to a smooth transition out of the coal value chain in Western Macedonia with a focus on documenting the anticipated labor and social impacts from closure of lignite mines and decommissioning of plants and a view on managing reallocation and reskilling of workers”*. The implementation of the contract consisted in principle from two major tasks, namely:



1.2.1 Task 1: Census of subcontractors and suppliers

More specifically, the objective of Task 1, which is also the subject of this deliverable, is to estimate the number of workers who are indirectly involved in mining and energy production in Western Macedonia. The total number of workers employed by the Public Power Corporation (PPC) is already known, and constitutes the workforce directly involved in mining and energy. To gauge the total number of indirect workers in mining and energy production, the Consultant was to:

- Secure the final list of:
 - Contractors employed by PPC in Western Macedonia (manufacturing, erection, excavation, construction, welding, etc.).
 - Other contractors in sectors outside of mining and power generation (construction, transport, services, etc.).
 - Other PPC suppliers (spare parts, etc.). The Consultant will be supported by the World Bank in getting access to that information.¹
- Reach out to every contractor and supplier to obtain the following information:

¹ In the short-term, the list of members of the association of contractors, can be used to reach out to a subset of actors in the sectors of mining and power generation.

Total number of employees	_ _ _ _ people					
Total number of employees from subcontractors	_ _ _ _ people					
Share of activity dependent on PPC	_ _ _ %					
Number of men	Direct employees			Indirect employees through sub-subcontractors		
Age range	15-34	35-54	>55	15-34	35-54	>55
Low-skilled technicians	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Skilled technicians	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Engineers and managers	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Support staff (accountants, clerks, etc.)	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Number of women	Direct employees			Indirect employees through sub-subcontractors		
Age range	15-34	35-54	>55	15-34	35-54	>55
Low-skilled technicians	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Skilled technicians	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Engineers and managers	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _
Support staff (accountants, clerks, etc.)	_ _ 	_ _ 	_ _ 	_ _ 	_ _ 	_ _

- Compile the information into an excel data set, or any other format that can be easily manipulated for data analysis

Provide a summary report profiling the labor force indirectly affected (total numbers by, age groups and skills).

The final output / deliverable of Task 1 includes:

- a. Final census in consolidated database
- b. Final report presenting profile and documentation of difficulties carrying out the task (sectors that could not be identified, firms that could not be reached/refused to participate, etc.).

1.2.2 Task 2: Focus Groups Discussions with subcontractors

While Task 1 focuses on the implementation of a survey with a questionnaire, Task 2 aims at conducting Focus Groups Discussions with subcontractors, suppliers, PPC technicians and engineers and sub-subcontractors who are active in the field of the mining and power energy economy.

To this regard, objective of Task 2 is to understand the skills and aspirations of the labor force that will be indirectly affected by the transition out of coal through in-depth Focus Group Discussions (FGDs). In addition to the group identified above, this would also include PPC employees on full time and 8-month contracts.

Thirteen focus group discussions (FDGs) should be organized, drawn from the final roster from Deliverable 2.1 and PPC employees (full time employees and 8-month contractor). Where possible, FDGs should include at least 5 members from the same company.

13 FDGs by different occupations (technicians, engineers) should be taken from different companies as follows:

- **6** FDGs with technicians, including 2 FDGs with direct subcontractors of PPC, and 2 FGD with a sub-subcontractor, 1 FGD with PPC full-time technicians, 1 FGD with PPC 8-month technicians.
- **4** FDGs with engineers, including two with subcontractors, one with PPC full time, one with PPC 8-month.
- **1** FGD with support staff.
- **2** FGD with goods/service providers (1 with a goods provider; 1 with a service provider)

To complement the FDGs, an individual questionnaire will be distributed to participants (at least 100 in total). The objective of this questionnaire is to gather additional information that may not be shared through group discussions.

The final output of Task 2 will be Deliverable 2.2, which will include the following sections:

A. Preparation

- Finalized guiding questions for FDGs

- Strategy for selecting FGD participants
- Specific firms and physical location for conducting the FGDs
- Calendar of FGDs

B. Carry out the survey in the field, including FGDs and individual questionnaire

C. Summary of findings

- Each FGD and interview (detailed written documentation plus recordings)
- Individual questionnaires

D. Submission of final report containing a more elaborated and detailed written description and assessment of findings and conclusions.

1.3 Structure of the Deliverable

The structure of Deliverable 2.2: Focus Groups of subcontractors and PPC staff in the mining and power sectors is consisted of **five Modules** as following:

- Module 1: Introduction,
- Module 2: Preparation,
- Module 3: Carry out the survey in the field,
- Module 4: Summary of Findings and finally
- Module 5: Detailed description and assessment of findings and conclusions.

Module 1 is the Introduction of the deliverable in which we provide in a nutshell the background of the survey, the overall objective and the main tasks to be undertaken as foreseen in the contract.

In **Module 2** we present the preparation of the FGD, including the methodology that was developed and selected for the Focus Groups Discussions. In addition in this topic we include the objectives of the FGDs, the finalized FGDs guiding interview questions, the strategy for selecting FGD participants, the calendar of FGDs encompassing information of participating firms, but also the links between Focus Groups and Phone Survey.

Then, in **Module 3** we demonstrate the methodological framework and the process of carrying out the FGDs in the field. Main topics of this Module include the time period of the implementation, feedback on the duration of the FGDs, details about the target groups appointed and recruited, as well as comments on the reacting behaviors and paradoxes during the research in the field. According to the experience we provide concrete recommendations on the improvement of the Interview Guide and the

Individual Questionnaire. Finally, we discuss the main difficulties we have faced during the implementation of the FGDs and we explain the mitigation strategy applied.

After that, in **Module 3** we present in detail the individual summary findings of the **15** completed FGDs with their detailed written documentation plus the recordings. The data are presented in the order of the calendar planning.

Finally, in **Module 4**, based on the summary of the previous data and information such as the objectives, the preparation, the completed FGDs process and the research findings collected the consultant presents a more detailed and elaborated written description and assessment of the results and the conclusions that derive from them. Additionally, the consultant arises recommendations and hypothesis that are supported by the findings of the research.

In addition, we include the following Annexes in which we present thoroughly information and supporting tools that were vital for the completion of the Focus Groups process. In more details:

Annex 1: Informed consent

Annex 2: Focus Groups Discussion Questionnaire

Annex 3: Individual Questionnaires (attached Excel files)

Annex 4: Recordings (attached files)

2. Preparation

2.1 Overall objective

The overall objective of this task was to understand the skills and aspirations of the labor force that will be indirectly affected by the transition out of coal through the implementation of Focus Groups discussions with representatives from subcontractors and PPC staff on full time and 8-month contracts.

2.2 Focus Groups and links to the Phone Survey

In general, Focus Groups provide insights into how people think while they provide a deeper understanding of the phenomena being studied. While a valuable research tool, surveys generally ask closed-ended questions that may limit the feedback that can be gained from a respondent. A method to gain more in-depth information to supplement surveys is interviews; conducting interviews, however, can be an expensive proposition that can exceed the available resources. Focus groups discussions are group interviews that give the researcher the ability to capture deeper information more economically than individual interviews and the dynamic of group discussion can also bring up topics and views which may not have appeared in individual interviews.

To this regard the design of the Focus Groups considered the intermediate results and the real-time responses of the Phone Survey, carried out under Task 1.

An important feedback resulted from the Phone Survey stresses that bigger companies **hire in principle local subcontractors** to respond to the different tasks of their projects. These subcontractors are legal entities, mainly located in the Region of Western Macedonia and consequently they recruit local labor staff. They might also hire for specific technical tasks other subcontractors (sub-subcontractors).

From this point of view, It was easy to understand that high value and long lasting contracts awarded by construction and technical companies shape a **dynamic ecosystem of subcontractors and sub-subcontractors**, who employee staff in Western Macedonia and are strongly dependent on the current operations of PPC in the area. An estimation about the number and the core demographics of these subcontractors was already obtained through the phone survey. However, contractors did not know exactly the number of staff deployed by their subcontractors, not to mention information about any sub-subcontractors.

Having already reached out to the contractors of PPC in the different Regions of Greece, it was important **to narrow the focus of the scope of the FGs on the level of**

subcontractors and sub-subcontractors, so as to estimate the volume of working staff, the skills level, the thoughts and considerations about the future, career alternatives and options, etc.

Another useful guide component for defining FGs was the **response rate** to the survey. From this point of view, one might say based on the empirical evidence, that the highest response rates are in WM. This profound statement reflects not only an honest and real interest of contractors in what will happen next to the local economy, but also the reality of concentrated labor force in the area.

2.3 Finalized guiding questions for FGDs – Interview guide

The moderator of the FGs followed a structured **interview guide**, which was structured in three parts:

- Opening questions
- Core questions
- Ending questions / summary

At the beginning the moderator deployed a standard introduction in the following sense to create an easy and comfortable group atmosphere and to make a smooth passage to the core questions:

1. Welcome
2. Overview of topic
3. Ground rules
4. First question

In more details the FGDs interview structure is as follows:

A. Opening questions

1. What is your job title? How does it relate to PPC's core business?

Objective: to introduce participants smoothly in the conversation with an easy to answer question, like short self-presentation, but also to obtain information about different jobs and professions related to PPC core business.

2. We would like to understand more your job and current skills by the following three short questions: A) How easy is for you to find job opportunities in your field? B) While being in a job do you can apply your knowledge and skills? Are there any difficulties? Furthermore, do you find your job interesting? C) Have you already gone through

upskilling trainings so far during your careers, and how did it go? Who paid for that? You, your employer, your professional body? Someone else?

Objective: to contextualize the skill levels associated with the different occupations and their potential for reskilling. The rationale is based on CEDEFOP's concept in Panorama Skills Index, which stresses the understanding of skills in the three following interdependent dimensions, where hereby each dimension is equivalent to the three short questions of this Opening Question: A) Skills activation, B) Skills mismatch and C) Skills development.²

B. Core Questions

3. What have you heard about the “transition to the post-lignite era”? From where / which sources have you heard about it? Did you already express your views on this in any forum, association, or other initiative? How do you believe you can participate in the discussion around the post-lignite era, so that you can influence the development of the transition?

Objective: to understand in the first line if participants are aware of the “transition to the post-lignite era” and how do they think about it. Furthermore, to address how they think they can contribute to the discussions. How can they be included in the process of designing the masterplan? Do the participants believe that they will be able to influence the development of the post-lignite transition plan? To understand furthermore if the participants expect that their views and concerns will be reflected in the design of the transition strategy?

4. What would be your ‘personal transition strategy’, ‘your individual action plan’ should your job be lost when the mines and plants close? What occupations and sectors of activity would be most preferred for you? Do you think that opportunities outside of your current professional position will necessarily imply a pay cut? Small or large? Is that a big issue/constraint for you? Do you have (i) former colleagues who have transitioned out of coal? If yes, what are the experiences?

Objective: to understand if participants have very strong preferences for remaining in the same occupation and sector, or if they have ideas of other opportunities that they would be interested in, including the type of work arrangements (self- or wage employed). In addition, how do they assess a potential pay cut in their fees if they decide for another profession or another economic sector?

² CEDEFOP (2020): 2020 European Skills Index. Technical Report.
https://www.cedefop.europa.eu/files/esi_-_technical_report_2020.pdf

5. How does it sound for you to explore job and career opportunities outside your living city or even outside the Region of WM? How flexible would you be to undertake a job outside your area? And, what are for you the main obstacles for not seeing opportunities outside your living city, the Region or even the country? (family, skills shortages, uncertainty, etc.)

Objective of this question is to understand if the participants have given thoughts on existing opportunities outside of current work, would they consider self-employment, informal work, or working for extended family? If participants were unable to identify work opportunities in WM, would they be willing to move elsewhere for work? The objective of this question is to understand how mobile the participants are. Would they move alone, temporarily or for good, with or without their family, elsewhere in Greece or abroad, etc....

6. Adapting ourselves to change, especially in times of uncertainty, requires a competitive skillset. How possible is it for you to attend continuing vocational and education (CVET) programs for upgrading, developing, or even obtaining new skills in your current profession or in another profession? In which fields and sectors? Who would pay for that? And by the way, do you know anybody who has attended e.g. CVET programs and by upgrading his/her skills managed to get a new job in mid-career?

Objective: If participants were unable to identify work opportunities, would they be willing to attend trainings, for how long, and in which fields? The objective of this question is to understand the willingness of participants to switch to other sectors of activity that require retraining/upskilling.

7. Just imagine you are a parent of a youngster living in the Region of WM. What would you suggest him to do for living? What career options would be more attractive for him? Would you also think to propose to him options outside the Region?

Objective: What do the participants think the prospects are for their children? The objective of this question is to understand what the future looks like for youth/younger generations. One underlying element here is to understand if participants see a future in Western Macedonia, or only see prospects through migration.

8. Which options sound to you efficient to ensure the employment status or even to face unemployment? Reskilling programs, workplace training, subsidized contributions to employers for new jobs, Start-up incentives to become entrepreneur, programs for companies' structural adaptations, including training of workers? Unemployment allowance and other benefits from public employment services? Do you know which public authority is running such initiatives and Programs? Has your company or your

professional association thoughts and plans to deal with the challenges of mines closure?

Objective: What options do they anticipate coping with ensuring employment or facing job loss, whereby alternatives from available and country-specific Active and Passive Labor Market Policies are listed, but also options beyond employment. Additionally, we ask for their knowledge of KPA2 (PES Branch Offices) and its services, programs, etc.

C. Ending Question

1. Where do see yourself in 5 years from now? How do you think about your professional careers and perspectives?

2.4 Individual questionnaire

To complement the FGDs, an individual questionnaire was distributed to participants. The objective of this questionnaire was to gather additional information that was not shared through group discussions. It was proposed that participants after the introductory part received the individual questionnaire to complete it.

Once the questions and the content developed and agreed with the Team of the World Bank the individual questionnaire was created in the SurveyMonkey platform as an online questionnaire in which participants needed to complete after the end of each FGD.

The English and Greek versions of the Individual Questionnaire are presented in Annex 2, while the completed questionnaires are demonstrated in Annex 3.

2.5 Strategy for selecting participants

Once the study purpose has been clearly addressed, the study population and sample were defined. The population represents the individuals that were analyzed. The sample was a subset of the population. Focus groups do not use probability or random samples. Focus groups generally utilize convenience sampling. The sample for a focus group has individuals with characteristics of the overall population and can contribute to helping the research gain a greater understanding of the topic.

As above discussed, the population of the FGs was consisted of subcontractors and PPC staff located in WM covering the following professional groups:

- a) Technicians

- b) Engineers
- c) Support Staff, for example accountants, IT staff, administrative staff, etc.
- d) Goods / Service Providers

The initial planning was the following:

Professional Group	Number of FGs
<i>Technicians</i>	<i>6</i>
<i>Subcontractors</i>	<i>2</i>
<i>Sub-subcontractors</i>	<i>2</i>
<i>PPC-full time</i>	<i>1</i>
<i>PPC 8-months contract</i>	<i>1</i>
<i>Engineers</i>	<i>4</i>
<i>Subcontractors</i>	<i>2</i>
<i>PPC-full time</i>	<i>1</i>
<i>PPC 8-months contract</i>	<i>1</i>
<i>Support staff</i>	<i>1</i>
<i>Support staff / subcontractors (accountants, administrative staff, IT, etc.)</i>	<i>1</i>
<i>Goods/Services Provider</i>	<i>2</i>
<i>Goods Providers / subcontractors</i>	<i>1</i>
<i>Service Provider / subcontractors</i>	<i>1</i>
TOTAL	13

In addition, taking into consideration the results of the survey and the overall scope of the FGDs we tried to focus our selection of companies on the following economic sectors:

B. MINING AND QUARRYING

9. Mining support service activities

C. MANUFACTURING

22. Manufacture of rubber and plastic products

D. ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY

35. Electricity, gas, steam and air conditioning supply

F. CONSTRUCTION

43. Specialised construction activities

G. WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES

45. Wholesale and retail trade and repair of motor vehicles and motorcycles

H. TRANSPORTATION AND STORAGE

49. Land transport and transport via pipelines

Another differentiation criterion related to the selection strategy of companies considered the different types of contracts, that PPC organization usually procures. In this context we tried to select companies covering contractual terms as subcontractors or sub-subcontractors in the areas of “**projects**”, “**materials**”, “**consumable goods**” and d) “**services**”.

For reaching out companies we utilized the Contractor’s list gained from PPC and we also contacted big contractors asking them to propose companies with which they have a collaboration under the scope of subcontractors.

3. Carry out the survey in the field, including FGDs and individual questionnaire

3.1 Implementation

3.1.1 Time period of implementation

The FGD process lasted approximately **5 weeks**, starting from **18th** June with the first FGD and finishing on July **23rd** with the last one. The initial plan according to the ToR was very tight and therefore we had mentioned in our technical proposal that such a time line might jeopardize the task.

3.1.2 Duration of FGDs

The duration of each FG was in average **70 - 90 minutes**. Approximately **10'** were distributed for the introduction (welcome, overview, ground rules, first questions) and **10'** for closing and summarizing. Considering also that each topic / question needed appr. **10'** to be discussed by the participants, the proposed interview guide did not contain more than **8** questions (see Annex 1).

3.1.3 Target groups: number of participants

The **initial plan** was to address the following target groups: a) Technicians, b) Engineers, c) Support staff and d) Goods and Services Providers. Where possible, FDGs included at least 5 members from the same company. However, due to several reasons, which are going to be explained below, the number of participants varied between **1 and 7 persons**.

The most obvious reason relies on the COVID-19 pandemic and the governmental measures in Greece for restricted transportation and strong recommendations for social distancing, a reality that pushed us to the decision to carry out the task of FGDs remotely and not face to face. Computer mediated FGDs resulted a comparative lower number of participants, either because of lack of the required digital skills or due to limited IT resources of the companies. For the majority of interviewed employees the FGDs setting was launched and guided by the company' s owner or their manager. Of course there were cases, where more employees were connected via their personal PCs or other technological devices.

3.1.4 Re-defined target groups

Based on the findings of the census we already were aware, that the subcontractors and more likely the sub-subcontractors located in WM were small – medium companies, which employee a minimum staff at times with no active projects and a more extended staff number at times of project implementation. In both cases the availability of staff, especially when the discussion is about technicians, was very limited. Due to this evidence we had to adjust our target groups by creating a new mixed category of participants, consisting mainly from engineers, support staff and technicians. It was easier for the company to appoint one technician for the FGDs, given that such a professional group is normally working in the work field. This new target group was titled with the name “Technicians, Engineers and Support Staff” (see Chapter 3.2) and its dynamic in terms of interaction was significantly higher than in other groups, where a unconscious agreement on common thoughts and proposals prevailed. So, the **finalized target groups** we researched are consisted of the categories a) Technicians, b) Engineers, c) Goods and Services Providers and d) Technicians, Engineers and Support Staff.

Another adjustment refers to the target group of **PPC engineers with 8 months contracts**. Following our communication with PPC in the time of the research there were only a few engineers recruited with 8 months contracts who were also not available to participate.

3.1.5 Reacting behaviors and paradoxes

Strong related with the context and meaning of the observers’ paradox, a common phenomenon in the social sciences in which the phenomenon being observed is unwittingly influenced by the presence of the observer/investigator, we had to face the influence of the owner or the general manager of the company in the says and narratives of the participants.

In the view, that the first contact with the company was in principle with the owner or the director of the company, we had to contain the real presence of the “boss”, “owner” or “manager” in our discussion. The big interest of company’s owners for expressing their opinions and proposals in such a survey shaped a coherent and rigid personal motive for self-invitation. What was observed during the FGDs indicated a strong engagement of the participants in the company and a massive deny of the coming mines closure.

The “owners’ paradox” resulted in an inherent difficulty for participants to imagine their own career future and to speak about themselves as individuals without the fear that such statements will indicate a loose bond with the company as a whole or even worse an “attack to the links” with their boss. However, such an evolution in the discussion gave us the opportunity to gain more information about future plans of the companies as a

whole and to escalate negative questions. In addition, our mitigation strategy consisted of asking interviewees the same content rephrased by using other questions of the interview guide.

Most relevant questions to extract individual opinions on any future personal action plans are questions #7 and question #1 – Part C. Ending Questions.

3.2 Recommendations on FGDs plan

3.2.1 Recommendations on the Interview Guide

The developed interview guide covered in a successive manner the research topics. Having already applied it in the field, we hereby provide some recommendations for improvement.

1. The size and content of the interview guide is optimal for a group of **4-5** participants. For such a group we estimate a total duration of appr. **90'**, which responds fully to the overall FGDs practice.
2. Question #2 stresses the skills set of participants while also asks about the difficulties of job seeking. We propose an extra question that might be **“Which economic sectors and professions are today in a decreasing trend?”**
3. Questions #4 and #5 seems to focus on the same topic. When participants speak about their individual transition plan it is likely that they also comment on job seeking opportunities outside the Region or in other economic sectors. So, the proposal is to merge these two questions into one solid.
4. A very difficult question was #6, which refers to training, reskilling and upskilling programmes. In the absence of a detailed and comprehensive overall Transition Plan participants couldn't think any relevant topics for upskilling or reskilling programmes. More difficult to manage were the answers of managers and companies' owners who declared that such measures don't respond to the actual negative tensions of the regional economy. However, we saw that the content of this question might be integrated with question #8, where one might put more emphasis on trainings and topics.
5. Question #1 of part C. Ending Questions is strongly related to the answers already gained from #4 and #5. A recommendation here is to recap says from #4 and #5 as a sort of bringing the memory back for the participants.

3.2.2 Recommendations on Individual questionnaire

The re-compiled target groups and the fact that a lower number of interviewees participated in the FGDs, resulted in a decreased response on completion of the individual questionnaire. Although in total 15 FGDs were carried out by the Research Team with appr. 50 interviewees, we observed several difficulties for the participants to complete the questionnaire. These difficulties are mainly grounded on the characteristics of the research population. Main reasons for non-response:

- Directors, companies' owners and other general managers did participate in the FGDs, but the questionnaire didn't reflect on their needs and future plans.
- Higher skilled staff, such as engineers, have already imagined their transition plans and they thought that this questionnaire does not have any value for them.
- Technicians and other medium skilled staff faced also the difficulty to complete the questionnaire online, either due of limited digital competences or of limited access to PCs and similar technological devices. In such cases we proposed to print the questionnaire for them so as to complete it by paper and pencil method and then send it back to us. Unfortunately, such a method didn't succeed.
- PPC staff on full time basis does not face the risk of unemployment.

It is **strongly recommended** to extract the questions from the individual questionnaire that are not sensitive and include them in the Interview Guide under Section A. Opening Questions, by modifying questions #1 and #2.

The sensitive questions of the individual questionnaire that cannot be part of the Interview Guide are mainly #10, #11, #15 and #16. These questions, if really needed, one could ask them in a shorter individual questionnaire adding a few more questions (Lickert scale) for assessing different Labour Market Policies, both passive and active.

3.3 Calendar of FGDs, including information of participating firms

In this section we provide the detailed information of the FGDs calendar alongside with the information of the specific firms that participated.

Based on the initial planning of currying out the process and despite the challenges that occurred during this period the FGDs were managed to be completed. In more details there have been **15 completed FGDs** in total (2 more than initial planed) categorized based on their professional group as following:

Professional Group	# of FGs	Type	Code / Nr	Economic Activity NACE REV.2 2005	Date
A. Technicians	4				
Subcontractors	2	FG "Projects"	14	B. MINING AND QUARRYING 9. Mining support service activities	24/7/2020
		FG "services"	10	G. WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES 45. Wholesale and retail trade and repair of motor vehicles and motorcycles	14/7/2020
PPC-full time	1	FG "services"	5	D. ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY 35. Electricity, gas, steam and air conditioning supply	24/6/2020
PPC 8-months contract	1	FG "services"	8	D. ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY 35. Electricity, gas, steam and air conditioning supply	1/7/2020
B. Engineers	3				
Subcontractors	1	FG "materials"	11	F. CONSTRUCTION 43. Specialised construction activities	15/7/2020
	1	FG "Projects"	3	F. CONSTRUCTION 43. Specialised construction activities	22/6/2020
PPC-full time	1	FG "services"	4	D. ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY 35. Electricity, gas, steam and air conditioning supply	23/6/2020
C. Goods/Services Provider	5				
Goods Providers / subcontractors	2	FG "Consumable goods"	6	G. WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES 45. Wholesale and retail trade and repair of motor vehicles and motorcycles	29/6/2020
			7	G. WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES 45. Wholesale and retail trade and repair of motor vehicles and motorcycles	30/6/2020
	1	FG "materials"	12	C. MANUFACTURING 22. Manufacture of rubber and plastic products	16/7/2020
Support staff / subcontractors (sales, administrative staff, etc.)	1	FG "Consumable goods"	13	G. WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES 45. Wholesale and retail trade and repair of motor vehicles and motorcycles	16/7/2020

Deliverable 2.2

Professional Group	# of FGs	Type	Code / Nr	Economic Activity NACE REV.2 2005	Date
Service Provider / subcontractors	1	FG "Services"	2	H. TRANSPORTATION AND STORAGE 49. Land transport and transport via pipelines	19/6/2020
D. Technicians, Engineers and Support Staff	3				
Sub-subcontractors	2	FG "Projects"	9	C. MANUFACTURING 33. Repair and installation of machinery and equipment	9/7/2020
		FG "Projects"	1	F. CONSTRUCTION 43. Specialised construction activities	18/6/2020
Subcontractors	1	FG "Projects"	15	F. CONSTRUCTION 43. Specialised construction activities	24/7/2020
TOTAL	15				

3.4 Difficulties Carrying out the tasks

Based on the initial planning the FGDs were supposed to end in March 2020, however there were many great challenges faced during the past period that postponed the execution and implementation of the FGDs. Having already discussed under 3.1 the Implementation process of the FGDs we hereby address the main difficulties carrying out the tasks of the Project.

3.4.1 Covid-19 Challenges

To begin with, since February 2020 the world faced the pandemic of coronavirus disease 2019 (COVID-19) which was an unprecedented event that created many difficulties of carrying out this task. More specifically, after the lockout that was enforced by the Greek government throughout the whole country companies including the population of the researched companies were affected, while also PLAS S.A had to adjust to the radical changes that had to be performed to ensure the smooth operation of the company. As a result, the Focus Groups Discussion interviews began taking place on June 17th of 2020. In addition, many of the companies that were communicated were on work from home status, thus stating that it is impossible for them to participate. Furthermore, in some cases, companies had been negatively affected and were in suspension of operation, while others had deactivated their phone numbers and they could not be reached.

3.4.2 Video Conference Challenges

Due to Covid-19, it was not possible for the consultant to travel in the region of Western Macedonia for the completion of the Focus Groups Discussion process. The Greek government launched restrictions for transportation and there strong recommendations for avoiding face to face interactions especially indoor places. Therefore, all the interviews took place from distance video calls through browser applications (Zoom or Microsoft Teams).

As a result, this unique situation created challenges for the completion of the focus groups discussion process. To begin with, many of the contacted companies refused to participate because they were not digital competent with the process that was required. That resulted because they were lacking the digital knowledge or the equipment to participate. As already above mentioned the remoted FGDs, resulted in a decreased number of participants, given than many employees, especially technicians, did have the opportunity and the capability of connecting with the PC and participating in the FGD. In addition to the previous, in many of the 15 completed interviews there were many

technical difficulties that occurred in connection problems and overtime interviews. Finally, the consultant identified difficulties in a) the non-task communication with the participants, given that the computer mediated communication pushes in an invisible way to stay focused on the manner without chatting for other topics and b) the creation of a discussion group atmosphere when they were different connections.

3.4.3 Participants Challenges

Finally, during the 14 interviews some conclusion were derived on the nature of the participant that resulted from the previous topics. Firstly, in most of the completed interviews the company owners were present in the discussion even though they were not supposed to, which would be avoided if the interview were completed via physical presence in the company's headquarters. Moreover, there was a significant low participation of technicians, which were in the mines/plants of the local area, in contrast with engineers or the top-level management that participated. That resulted in better and more accurate information of the local labor market, the current situation in the market and the potential solution to the post lignite-era. Finally, it was unable to complete an interview with the PPC engineers that had an 8-month contract as they were only 3 and they were unavailable to participate.

4. Summary of Findings

In this module we present the detailed written documentation of each FGD and Interview plus the attached recordings (See Annex 3). The collected data are presented based on the professional group and the type of the 15 participants.

4.1 Technicians

4.1.1 Subcontractors “Projects”

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida, is the following:

Focus Group Nr.	14
Professional Group:	A. Technicians / Subcontractors
Implementation date:	24/07/2020
Number of participants:	4
Implementation modus:	Zoom
Conductors	Konstantinos Giannakopoulos

Key findings

Company profile and information

- The company is active in the city of Ptolemaida since the 1990's as a family business. Today the sons of the founder have the lead and general management of the company.
- Main economic activity is related to the sector of lignite mines, including underground earthworks and transportation of lignite.
- 60 people permanent staff and 60 subcontractors (physical and legal entities) deriving from the Region of Western Macedonia.
- They are operating as Contractors of PPC and as Subcontractors of other Contractors.

Jobs and skills

- The participants are men, 38-49 years old, medium skilled staff - upper secondary technical education, Vocational Secondary School. They don't have any further qualifications nor specializations, but they are working for several years in the field and are experienced staff dealing with mines business.
- Main specializations in the company staff refer to machine operators for big vehicles and technicians for repair and fix of vehicles and machines operating in the mines.
- Especially the technicians tasked with the responsibility for repairing machines and big vehicles have extra professional licenses and sufficient professional experience.
- Technicians responsible for the operation of the big machines provide extra skills of acting and working with great attention and responsibility, given that any mistakes while using the machines might occur big damages. Such technicians are well trained, specialized and therefore well paid.
- Very difficult to find a job responding to the profile of a specialized and experienced mines technician.
- Technical companies are in a trend of terminating contracts with staff, given that the projects from PPC decrease.

Transition to the post lignite era

- The term is popular in the last one year – the content and the plan are not specified and therefore people cannot easily understand what this term really means.
- They speak about a rapid and violent transition with a tight time plan that doesn't leave room for adjusting the local economy in the new reality.
- The company and the staff are trying to express their interests, proposals and thoughts through their participation in the "De-lignitization Centre", a private initiative that consists of the main contractors of PPC in WM. Proposals are circulated to the regional members of the parliament.
- Many workers and technicians are trying to change job in order to find a job. This refers mostly to machine operators and drivers working in the mines.
- These technicians are specialized and very well trained for undertaking mines related tasks - their employers have invested a lot of money for training them and letting them use the machines.
- Germany, Netherlands and Cyprus are the main destinations for technicians who decide to migrate.
- In general, the transition to the post lignite era means a hard to mitigate risk for technicians and other staff strongly dependent on the mines works.

Personal transition strategy / personal action plan

- They don't have any ideas for individual transition plans.
- Main obstacle for drafting a personal transition plan is the absence of a particular and clear action plan that prescribes and ensures a smooth transition in the post lignite era.
- Main objective is job seeking in the same field of work, same profession. Such technicians with specializations and successive professional experience earn bigger salaries than non-specialized workers or other technicians.
- Any job change would mean for them a significant decrease of revenues.

Seeking job opportunities

- In the unhappy situation of being unemployed they are thinking seriously to migrate to other Regions of Greece or abroad. In the first line, they are going to seek a similar job. Of course, they are open to undertake other job offers from similar or incapable jobs.
- A big question and challenge remain for them the ability of their family to follow them in other places within the country or abroad. One might say that this is an inevitable obstacle for taking the decision to migrate.

Developing skills for jobs

- For undertaking the same or similar tasks they do not identify any needs for upskilling or gaining new qualifications, given that for these technical professions the experience prevails any theoretical trainings.
- In the case of changing job technicians would attend intensive trainings for developing new qualifications.
- So far, no concrete proposals are in place for addressing the jobs and skills that are going to be from demand in the coming years, technicians cannot imagine or assume any training topics.

Suggestions to the young generation

- The commonplace suggestion surrounds the idea of leaving the country for a better job career.
- Young generation has better technical qualifications but less professional experience – this combination underlines a high risk for employment, given that most employers require experienced staff.

- Competition between young generation that enters the labour market and the unemployed specialized and experienced technicians.

Labour market policies for ensuring employment

- Labour market policies should target at enabling investors to think seriously and in the long term in the Region – selected economic sectors should focus on industrial production.

Projections in the future – other proposals

- The 5 years period is too long for making any future projections. In the absence of a comprehensive, well-structured and pointed transition plan any assumption considering the personal career future seems to hit on the wall of the next day.
- Technicians are uncertain and therefore anxious for the future of the company they work for, for the local economy and for the regional labour market. What they plan is related to a very short-term perspective.
- Pushing the thoughts further, the commonplace projections is that in five years from today they will be outside the Region, probably in another big city or abroad.

4.1.2 Subcontractors “Services”

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida, is the following:

Focus Group Nr.	10
Professional Group:	A. Technicians / subcontractors
Implementation date:	14/07/2020
Number of participants:	2
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- Company is located close to the mines in the wide area of Ptolemaida.
- Specialized in repairing wheels of heavy trucks operating in the mines.
- 4 people are working in the company as technicians – at times they are fixing tires in the mines for contractors of PPC.
- The clients of the company are companies and drivers who are working on a free-lance basis. According to their knowledge of the regional market most of the drivers are free lancers / physical persons:
 - 300 trucks in mines close to Kozani
 - 100 trucks at Power Plant Kardias
 - 150 trucks in the mines of Mavropigis
 - 150 trucks in Florina – Melitis

Jobs and skills

- Technicians of the company are medium skilled staff.
- The manager of the company (55 years old) is active in the field for more than 20 years. He has completed technical school and he attended several seminars in Germany and Greece for fixing tires of big and heavy trucks. This experience has been transferred to the other staff.

- Other staff are young technicians 25-30 years old with technical qualifications and professional experience not only from this field but also from similar companies (for example car repair garage).
- No jobs, very difficult for technicians to find a job in the Region.
- Easier to find a job outside the Region of WM
- 1.500 people working under the Project Ptolemaida V Unit.
- While a big project is running every company and technicians surrounded by PPC activities are active and operational.

Transition to the post lignite era

- Nobody is ready to face the transition, especially companies like this one, which is 100% dependent on the mines.
- The alternatives are limited for every technician in the company.
- The presence of the Greek Minister for Energy and Environment in the area was not sufficient – no time for people to express their thoughts and proposals.
- There is an active organization in the Region for collecting and representing the interests of the driver's of heavy trucks.
- It is a powerful organization trying to express a strong voice against a rapid closure of the mines.

Personal transition strategy / personal action plan

- Decreasing economic activity in terms of revenues and increasing uncertainty for technicians – if companies face further decrease of their total revenues, then they will have to reduce staff.
- Technicians have no specific plan for the transition.
- Their profession is very specialized and strongly dependent on the mine's excavation activities and more specific on the heavy trucks. Any other thought for career shift is not well developed. They fear a negative evolution in the business, but they are not so agile to
- Many friends and other familiar people between 25-40 years old are planning to leave the region or the country. These are mostly people with medium skills,

but also people with high skills and qualifications not responding to the actual needs of the regional labor market (for example teachers).

Seeking job opportunities

- Seeking job opportunities in similar or other professions is an open challenge.
- Under pressure and facing the risk or the reality of being unemployed technicians are willing to change job or even to move out of the Region for better job opportunities.
- However, the national myth of the Greek migrant who lives now well and healthy abroad seems to be collapsed. Technicians hear from friends living abroad that job opportunities in competitive labor markets are open, but not always well paid.
- Financial reasons might play a negative role for deciding to migrate.
- The transformation of the business objective from repairing truck wheels to repairing wheels of vehicles and motorcycles might be a good option for technicians, but not for the company per se, given that in Prolemaida there are today 8 such garages competing to each other.

Developing skills for jobs

- Training programs and reskilling programs are not so efficient as the on the job training when the discussion topic is about technicians.

Suggestions to the young generation

- Move to other regions or countries, because of the very limited and PPC-centered professional activities.
- The owner of the company has a son who is completing bachelor's degree with distinction in the field of mines management. The thought was initially to acquire specialized University education to get a well-paid job in the Region. Nowadays, the father is regretting for this decision and is thinking to tell his son to migrate abroad.

- The struggling economy and the low wages for technicians' impact in the long-term the family planning – restricted wages and uncertainty reflect on the postponement of getting married and to create own household.

Labor market policies for ensuring employment

- To establish scientific committees consisted of famous and specialized experts and not politicians who will map the needs of the Region and propose a long term plan for Energy and Power.
- The state to retain employability and defend the labor market from mass unemployment must think plans for upgrading current Power Plants, aiming at functioning with lower costs and not contributing to the air pollution.
- Given that the Region is traditionally an industrial economy the upgrade of PPC and its Power Plants would be a solution from the total disaster of mines closure.
- The popular topic about Green Economy and its related photovoltaic panels, wind turbines and other renewable energy sources cannot create employment in an area with long tradition in mines excavation and lignite

Projections in the future – other proposals

- The older technicians think that in five years they will be retired. However, the next generation will have to implement the transition.
- The younger technicians are living every day hearing rumors about PPC and the future of PPC. It is very difficult for them to decide what to do when the fluidity of the entrepreneurial environment is very high.

4.1.3 PPC Full-time staff

The detailed written documentation of the FGD and interview with “PPC”, located in Ptolemaida, for their full-time technicians is the following:

Focus Group Nr.	05
Professional Group:	A. Technicians / PPC full-time
Implementation date:	24/06/2020
Number of participants:	6
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

I. Company profile and information

- In the Region of WM, PPC is the biggest and most reliable employer for technicians, providing not only secured work placements, but also well paid wages, on time payments and opportunities for further on the job learning by mobilizing permanent staff with experience to demonstrate and guide in an informal way the recently recruited technicians.
- According to the Technical Chamber of Greece 1 permanent staff of PPC is equal to 3,8 workplaces in the labor market.
- In the previous years, approx. 1.200 technicians were employed with 8-months contracts every year.
- In 2020 no more than 250 technicians will be employed as 8-months contracted staff.
- 1.000 people submitted their request and legal documents for 250 workplaces – technicians.

Jobs and skills

- The full-time technicians participated in the FG cover a wide spectrum of job specializations: Drivers, machine operators, mechanics, maintenance services, forepersons, and electricians.

- They are graduates from VET secondary schools or Apprenticeship Schools of NES.
- The majority is working for more than 10 years at PPC. Some of them are working for PPC more than 20 years, holding today middle management position.
- It is impressive that during their professional career in PPC they have attended several seminars for professional development according to their skills level and job profile but also for horizontal topics such as Health and Safety.
- The job offers for technicians are not easy in the Region – most recruited profession is electrician.
- The job seeking process takes a lot of time and it is based in most of the cases on the informal structure of social connections and links. This means that a job seeker must know someone who has access to the employer or to managers to forward his CV and candidacy.
- The regional labor market seeks for technicians who are available
- Every business area is going to be directly or indirectly affected by the closure of Power Plants.

Transition to the post lignite era

- The term and concept of the post lignite era is not new. They experience in their everyday life such structural changes. Set up of wind turbines, launching photovoltaic panels and progressively decrease of the lignite production.
- Technicians of PPC are facing already the consequences of this transition – they move to other workplaces and cities within the Region of WM to provide their services.
- Older technicians face more difficulties for adjusting themselves in new fields of work. They declare a limited flexibility.
- The internal rotation and transfers do not require new skills or knowledge for the technicians.
- *“Post lignite era means unemployment for the Region of WM”.*
- Renewable Energy Sources is today a growing picture that cannot offer work placements that can employ the current staff in the Region.

- The population of the Region seems to be decreasing – a migration flow to West Europe, mostly to Germany.

Personal transition strategy / personal action plan

- The older technicians have in mind to take the advantage of a retirement plan.
- The average age of PPC permanent staff is 50 years old. This means that many engineers round 55 years old will accept voluntary redundancy programs, if such an option is offered.
- Younger technicians do not have any concrete individual transition strategy. They wish not to close the Power Plants and keep working in the mines and Power Plants.
- Younger technicians have lower salaries and any plans for moving out of the Region is understood as damage or very risky. In addition, the unknown labor market and the competition to other technicians is another enduring bottleneck.
- Family status is also a big obstacle for technicians to leave their city and move to another.

Seeking job opportunities

- No one expressed thoughts or plans that do not include PPC as their employer, validating the finding that PPC is an attractive employer for many professionals living in the Region.

Developing skills for jobs

- They are open to attend reskilling programs or trainings for skills improvement, if such a need arises.
- Technical specializations must be aligned with the overall transition plan.
- Based on the capitalized knowhow and experience of the PPC technicians the design and development of reskilling programs in new topics would not be an issue.
- PPC has not yet designed new training programs for reskilling technicians. The structural changes and the overall transformation plan of the organizational structure of PPC will indicate in the coming future which professional areas,

jobs and skills must be reconsidered. At the end, which jobs must merge with other, and which jobs or specializations must be created.

Suggestions to the young generation

- For young technicians, the suggestion is to move to other Regions of Greece. The main reasons for such a suggestion are:
 - Risk of undeclared work in technical companies
 - delays in the payroll per month
 - noncompliance of the private technical companies to the health and safety framework –bad working situations for technicians.
 - Monoculture of PPC business in the Region promoted the reality of industrial workers, avoiding the further differentiation of the regional labor market in terms of jobs, professions, and skills. This results in an oversupply of finite professions in a progressively decreasing labor market, that tends to closeness.

Labor market policies for ensuring employment

- Fostering investments for industrial production that can recruit current technicians.
- Single targeted labor market policies such as trainings, reskilling programs, unemployment fees etc. are not accepted as sufficient.
- Public policy must look in private investments by offering attractive measures to foreign companies that plan to set up production lines in the Region.

Projections in the future – other proposals

- Older technicians think that in the coming years they will be retired.
- Younger technicians estimate that they will work in other PPC Power Plants, probably at the new Ptolemaida Unit 5.
- PPC is an organization with experienced staff, knowhow, robust machines, and infrastructure and is well prepared and capable to host investments for industrial production.

- However, PPC points out that timing is of vital importance. If the time flies, while everyone pays attention in preparing feasibility studies and funding sources, then it is likely that staff migrates out of the Region, technical companies shut down and PPC infrastructure becomes a ghost machine.
- So, it is profound important to consider the time parameter in the design of a mid-term transition plan, involving PPC as key player. Any design for the post lignite era must consider and involve PPC and not thinking a new regional economy without PPC.
- Investment proposals with the involvement of PPC:
 - District heating and agriculture. To expand district heating in the Region and transform the current fields in greenhouses utilizing district heating.
 - Environmental recovery is a top priority for the society and the economy. To transform the current mines in lakes that can create green parks.
- Investments in photovoltaic panels close to urban areas will produce several problems – the consideration in the long-term stresses that such an area will look like a cemetery of photovoltaic panels after a concrete period.

4.1.4 PPC 8-months contract

The detailed written documentation of the FGD and interview with “PPC” , located in Ptolemaida, for their 8-months technicians is the following:

Focus Group Nr.	08
Professional Group:	A. Technicians / PPC 8-months contract
Implementation date:	01/07/2020
Number of participants:	5
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- In the Region of WM, PPC is the biggest and most reliable employer for technicians, providing not only secured work placements, but also well paid wages, on time payments and opportunities for further on the job learning by mobilizing permanent staff with experience to demonstrate and guide in an informal way the recently recruited technicians.
- According to the Technical Chamber of Greece 1 permanent staff of PPC is equal to 3,8 workplaces in the labor market.
- In the previous years, approx. 1.200 technicians were employed with 8-months contracts every year.
- In 2020 no more than 250 technicians will be employed as 8-months contracted staff.
- 1.000 people submitted their request and legal documents for 250 workplaces – technicians.

Jobs and skills

- Compared to the Focus Group with the full-time technicians the 8-months contracted technicians included women as well (2 women and 3 men).
- Age range: 26 – 40 years old.
- Graduates from Universities, VET secondary schools and Apprenticeship Schools of NES.
- One interviewee is graduate from the Philosophical School of the Aristotle University – she decided to enroll in a VET school to acquire a technical qualification.
- In the Region young people, even if they hold a University degree, they enroll in VET schools aiming at acquiring technical qualifications. By this way they increase the likelihood to get a job, especially in PPC for a short-term contract.
- Technical skills and qualifications are from high demand in the Region, but they are interpreted by people as a flexible passport for migrating abroad and working in the industrial production. Administrative and other supporting related skills lead people to unemployment, then the services sector is underdeveloped.
- Participants recognize the value and the significance of PPC as employer – one of the participants has already worked eight times as 8-months contracted technicians.
- Women are working in the retention services, while men undertake more technical responsibilities, for example tasks for electricians.
- They develop further their knowledge and skills while working at PPC. Older and more experienced technicians support and guide them, functioning informally as their mentors. This is something that a technician in a private company cannot easily meet.
- All of them have also worked in the private sector in several and different fields, not always related to their qualifications.
- Working for PPC, even for the period of 8 months, encourages and offers them a sense of being active and secured in the labor market.
- Furthermore, PPC is most preferred by the local labor force because the allowances are higher than in the private companies and everyone is sure that he/she will get paid monthly.

- Finally, PPC promotes on the job learning and offers the opportunity to improve skills. In private companies' knowledge and skills are prerequisites for taking the job – lack of skills means layoff.
- For young people, job seeking in the Region is a very hard task. Companies require a lot of technical skills and professional experience.
- In the recent years, participants observe the shutdown of many technical companies.
- Job salaries are decreasing for technicians. They recognize a significant reduce of their income, while periods of unemployment prevail.

Transition to the post lignite era

- The term and concept are not new for the technicians. They observe and experience in their life the progressively shut down of the Power Plants and the decreasing income of many people and professionals. Limited job opportunities and low paid wages indicate that the transition is already there.
- What they hear today comes mainly from local papers and mass media – it is about the “smooth transition to the post lignite era”. Testing this message against the reality shows them that the transition is not going so smoothly. They address this rapid process of a “violent transition”.
- Proposal to convey the message of the importance of PPC not only in the Region but also across Greece. People outside the Region cannot understand the crucial role of PPC in the regional labor market.
- Informal discussions within the technicians of PPC indicates evolutions such as shut down of Power Plants and furthermore conceptualizes the so-called transition to the post lignite era.
- There are options to express their opinions and proposals, but they are not convinced that decision makers will consider these voices – mistrust against institutions.

Personal transition strategy / personal action plan

- Once the 8 months contracts have expired, technicians register in NES as unemployed and receive unemployment benefits and allowances. This is a

common practice for them until the next public procurement for 8 months contracts are published by PPC.

- Taking this practice into account, one might say that long term planning is not a reality for technicians.
- According to their plans they are going to submit another expression of interest to PPC for another 8 months contract.
- One participant is going to invest more in beekeeping, a small family business established by his father. Such a plan derives as second-best solution against the risk of unemployment.
- One young technician is studying Engineering at the Technical University and has already planned to migrate to a European country.
- Everyone is related to people who already left the Region or the country for seeking job opportunities. People who migrated have medium skills in technical professions and were unemployed or at risk of unemployment. Also, people with high skills migrated to Europe because their skills did not match to the needs of the regional labor market. And a last category of young migrants consists of those with high skills who do not believe that a long-term employment status is guaranteed in the Region, given the inevitable de-lignitization.

Seeking job opportunities

- Such a question was not a topic nor a consideration 20 years ago, cause of the booming projects procured by PPC.
- For technicians and other people with medium skills and fragmented professional experience, e.g. different and not correlating jobs, the attempt to seek job opportunities in other fields might be an option within the Region.
- Discussing options for migrating abroad assume a guaranteed work placement, especially if the migrant has already a family.
- Specifically, for technicians with a technical qualification and coherent career job seeking within the Region seems very difficult. Migrating out of the Region or even out of the country is understood as a more promising option.

Developing skills for jobs

- Trainings and professional development are understood as a necessary condition for people who have already decided to migrate abroad. Otherwise trainings for upskilling or reskilling are not well accepted because the future in the regional labor market is highly uncertain.
- In this context trainings are interpreted as a risky investment.
- The training costs are too high for a technician or other low paid staff. Although training and reskilling programs might lead to career shift or career advancement technicians working at PPC or private companies cannot afford the costs.
- Having the cost issue solved, the absence of a concrete transition plan still functions as an obstacle for deciding which skills and knowledge to develop.

Suggestions to the young generation

- Most of the participants believes that migrating abroad is a very promising perspective for a young person who lives in the Region of WM.
- The higher the qualifications are the more intense is the decision for migrating abroad.

Labor market policies for ensuring employment

- Most of the technicians proposes a coherent and targeted set of labor market policies that can respond to the needs of the labor staff, considering not only their employment status, but also their social and economic status.
- Especially for medium and low skilled technicians financing programs for startups and developing entrepreneurship competences are from low importance and acceptance.

Projections in the future – other proposals

- The trend of young people is to take the decision of migrating abroad, given that the regional economy and local labor market do not offer work placements.

- However, some technicians strongly believe that in the coming years they will still have a job at PPC.
- The PPC-driven monocultural labor market anti-relates today to the oversupply of technical skills indicating on the regional and local level a disappointed, frustrated, and discouraged labor force of technicians.

4.2 Engineers

4.2.1 Subcontractors “Materials”

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida, is the following:

Focus Group Nr.	11
Professional Group:	B. Engineers / subcontractors
Implementation date:	15/07/2020
Number of participants:	1
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- One-person company established in 2010 with two parallel activities.
- Specialized in reselling mechanical parts (PLC, inverter, automation cards) of PPC engines – upon request by PPC or other Contractors of PPC the company.
- The company imports specific spare parts for mechanical engineering and resells them to PPC.
- The owner assessed that PPC and the lignite economy in WM cannot secure a great future for his business. He decided not to get involved with big projects or suppliers, so he declined any heavy economic dependency from PPC.
- So, he did not start to work as engineer for PPC nor he set up a technical company for operating as contractor or subcontractor.
- In addition, he took the initiative to begin a secondary activity of his company, namely building photovoltaic panels in the area. He saw this alternative as a challenging business opportunity and he is still working as engineer in drafting studies of feasibility for investments in Renewable Energy Sources, but also in building photovoltaic panels.
- For such projects he is recruiting local technicians.

Jobs and skills

- Mechanical Engineer, MBA, Masters in Oil Management.
- The labor market in WM offers job opportunities responding to the actual needs of PPC, avoiding any other career options.
- Most people living in WM plan their professional career having in mind that the best option for them is to work as permanent staff in PPC or to get employed even with 8-months contracts. Other alternatives for professional career are directed by the lignite economy and the activities of PPC.
- There is a big skills gaps in the market. People, especially the new generation has a variety of qualifications and specializations awarded by upper technical secondary education or from tertiary education, but the real options to work are surrounded only by the actual needs of PPC.
- The labor supply in terms of qualifications is overwhelming against the labor demand of PPC. This asymmetry, imbalance of offer and demand of skills between labor staff and PPC creates a state of mind that is one-directed and monolithic. In consequence, many people who do not get employed by PPC decide not to work for others and prefer to wait and see if they get an 8-months contract.
- PPC is a very generous employer for the regional economy and therefore there is an enormous resistance against closure of Power Plants and shutting down the lignite activities.

Transition to the post lignite era

- The term of post lignite era is very famous in the public discussion since the last year.
- For those companies and for those people who on early stages decided rationally to move on with other activities beyond PPC the transition will not affect them so heavy.
- Of course, there is a critical mass of employees and technicians who will face big challenges.
- It is not reasonable why European Commission and the state have to finance such a transition. Companies and employers must spot opportunities to invest in new business and so to create new dynamics in the market.

- However, it must be stressed that there is no clear and secured transition plan. They just announced the transition, without proposing something realistic and region-specific.

Personal transition strategy / personal action plan

- Switch to photovoltaic panels and shut down the import of mechanical spares.
- Such a switch, transition is estimated to Increase the revenues of the company.
- Many people left the Region for seeking other job opportunities. In addition, there are professionals who have already shut down their companies or activities because the transition is already a cruel reality for them.
- Estimation of most affected labor staff: technicians, not engineers.
- Engineers and high skilled professional have earned all these years a lot of money, so they have the advantage to change economic activity to something like what they were doing for all these years.
- On the other side technicians and low skilled workers will face critical challenges of being longtime unemployed.

Seeking job opportunities

- The plan is to invest more in the Region of WM building photovoltaic panels.
- No thoughts for expanding the business outside the Region.

Developing skills for jobs

- Good enough and competent qualifications for engineers based on their successive professional experience.
- Training programs are outdated as measures for developing skills for the people.
- Professional and personal development is strongly linked to the personality features and the personal incentives of each person. No discussion for implementing training reskilling programs, because people are used to easy solutions and non-working conditions.

- It sounds better to invest more on new jobs and economic activities nonrelated to PPC and lignite – selected jobs and skills that all these years were underdeveloped, underestimated and with low social value.
- For example, to promote arts and culture, agriculture business like apples, cherries, etc.
- For technicians it would be an opportunity to develop new skills on the job – in company trainings and not school based.

Suggestions to the young generation

- To invest in new Renewable Energy Sources and stay in the Region.

Labor market policies for ensuring employment

- State support for fostering investment in Renewable Energy Sources and photovoltaic panels.
- Support of employment and not financing unemployment.
- Incentives to investors and big companies for developing the Natural Gas to be used as a source of energy for heating, cooking, and electricity generation.
- This would create immediately a big interest for engineers and for technicians who will be employed for building the relevant infrastructure.
- Contrary to photovoltaic panels, Natural Gas investments might create more job placements, because such projects last longer.

Projections in the future – other proposals

- Investments in Renewable Energy Sources, with focus on photovoltaic panels and Natural Gas.

4.2.2 Subcontractors “Projects”

The detailed written documentation of the FGD and interview with the located in Kozani is the following:

Focus Group Nr.	03
Professional Group:	B. Engineers / Subcontractors
Implementation date:	22/06/2020
Number of participants:	3
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- The company is active in the field of construction projects to produce electric power.
- Established in 1980' s in Kozani and ever since active in the Region of WM but also in Megelopoli (Peloponnese).
- Company is Contractor, Sub-contractor but also Sub-subcontractor.
- 35 permanent staff: civil engineers, mechanical engineers, electrical engineers, economist expert, administrative staff, medium skilled technicians mainly for welding and montage of machines and low skilled technicians.
- PPC is from vital importance for their business, appr. 70% of the 2019 revenues are dependent on PPC.

Jobs and skills

- The participants are engineers from Technical Universities, covering civil engineering, mechanical engineering, and electrical engineering.
- They do not have any post graduate degrees – the professional experience in several fields gives them the advantage of having up to date skills from the field.

- Their total professional experience derives from PPC related projects and contracts and other power generated tasks as subcontractors.
- Civil engineers in the company are mostly tasked with the responsibility of managing teams in several projects, supervising projects in terms of HR and financial resources, environmental design of construction and conduction of techno-economic studies.
- They believe that specializations in the profession of an engineer is interpreted as obstacle in the area, because the economy in the Region is small and the opportunities limited. Engineers with experience in several fields have the flexibility to better seek job opportunities.
- It is very difficult for an engineer to find a new job in WM. This is now obvious given that the lignite phase out has already started.
- Once an engineer is appointed to a project, he can apply his knowledge and skills.
- Trainings for engineers are not so usual.

Transition to the post lignite era

- This term has a long history in the area, but the whole story embeds uncertainty.
- Since 2019 they address the fast, “sudden death” of the lignite economy. Although, no concrete plan is in place, the consequences are real, and it impacts strongly on the business.
- Paradox messages: PPC Power Plants are closing, while new projects for the upgrade of current PPC Power Plants are announced.
- They don’t see any concrete transition plan, no strategy, no proposals for new business activities – they are willing to participate in the public discussion and to express their proposals and experiences for the next day of the post lignite era.
- They believe that engineers have a strong knowhow and professional experience that might be useful for appointing them as advisors for the transition plan or even more to give them the chance to export this knowhow in other countries.

- The WM economy is strongly dependent on PPC – the social impact of closure will be dramatic, producing unstable situations.
- The discussion of the transition came up to the news as a hot issue last year, producing anxiety to the professionals.
- There are no big production companies, no developed manufacturing, no tourism in WM. So, the question about what the next economy in the area will be remains still unanswered.
- They propose a smooth transition addressing real and effective alternatives. Expectations from policy makers to identify comparative advantages of the labor force and design new investments priorities.
- Until today engineers realize that policy makers make fast decisions without any planning, they cannot copy the “sudden death” of the lignite economy.

Personal transition strategy / personal action plan

- They think to redirect their professional activities in implementing public construction projects in the Region of WM, but also out of the Region.
- However, such public projects refer to tenders where competitors offer low financial offers to win the contract. They expect reduce of their income in the coming period.
- Even big companies submit proposals with low financial offers to win the contracts, so the competition is getting tougher for small and medium companies.
- Engineers are used to travel around to different building areas, so such a mobility requirement would be accepted.
- At the end of the day any individual transition plan is strongly dependent on the policy makers and the new priorities of investment.
- They know a lot of engineers who used to work in the WM, but now they stopped the professional activity. One major obstacle is that engineers have in the last years decreased revenues, while they must pay by their own social insurance. In addition, at times of not being employed, they are not eligible by NES as unemployed, no unemployment fees.
- Engineers in the area changed profession, for example set up of restaurants or other small stores. A lot of engineers moved out of the Region to seek job

opportunities in the same profession and others migrated to European countries.

Seeking job opportunities

- Migration to other counties is interpreted as more unlikely, given the lack of information of the host country, the competition in the labor market and the real job opportunities.
- They are willing to seek opportunities in other Regions of Greece, but new projects in the field of construction are not so many and not so large scaled so that a long-term employment is guaranteed.
- More likely for them is to stay in the Region and either to explore new business opportunities utilizing their knowhow and professional experience or to adjust themselves in the unknown post-lignite era if the qualification of engineering fosters professional flexibility.
- They fear an “over-concentration of companies and engineers” in construction spots of the different Regions of Greece – the competition between engineers will consequently increase and produce lower fees.
- Another fear and consideration of seeking jobs in the same profession but in another area is that nowadays there are no new public projects that would foster employment. New tenders require a lot of time for evaluation of proposals, awarding process, etc. So, the official beginning of a new project will shift the time where engineers will be unemployed.

Developing skills for jobs

- They do not address any needs for upskilling or reskilling training programs because there no identified, labor market responding training objects.
- If the transition plan sets clear goals and alternative economic sectors and activities, then it would be more effective for engineers to participate in trainings that are market specific.
- In contradiction, they believe that CVET programs do not respond really to the actual needs.

- Specialization courses require a wide and open market, like Athens and Thessaloniki. For example, civil engineers with specialization in hospital construction are competitive in their field but only in big cities.

Suggestions to the young generation

- For civil engineers, the job opportunities for a youngster might be still attractive in the Region of WM, given that this profession is “multidimensional” and can be adjusted to the needs related to construction.
- Electrical engineers and mechanical engineers are likely to face the risk of unemployment or under-employment in the Region, so the proposal to a young person would show the way out of the Region. Big cities in Greece demonstrate more job options for young engineers, for example PC, IT related projects, etc.

Labor market policies for ensuring employment

- Incentives to engineers as free lancers and companies in the construction sector for reduced taxes.
- State loans to companies usually provide specific restrictions in terms of not allowing staff decrease for the next 1 or two years. Under conditions of uncertainty and decreasing revenues engineers who are leading small or medium companies in the area are not willing to bind themselves in such an unpredictable contract. This of the state loan impacts in a paradox way in the reducing fluidity of companies which leads further to underemployment or unemployment of engineers.

Projections in the future – other proposals

- They mentioned the example of Bansko – Bulgaria, where people gave for free their land properties with the liability of investors to build a new snow center. This investment is a win-win situation (new attractive snow center, infrastructure, services and development of new job positions and a supporting ecosystem of small companies, free lancers, etc.
- If the transition plan is concrete, real, and targeted to alternatives, then the employment will be ensured.

- Their future projections are strongly dependent on the public policy – the uncertain plan of the state does not allow them to make concrete plans for their employment.
- They believe that in the Region of WM there will be still job opportunities for engineers and other scientific staff. The sooner the state announces new investment priorities, the better for them to adjust themselves in the new reality and to utilize their experience and knowhow for mutual profit.

4.2.3 PPC Full-time staff

The detailed written documentation of the FGD and interview with “PPC”, located in Ptolemaida, for their full-time engineers is the following:

Focus Group Nr.	04
Professional Group:	B. Engineers / PPC full-time
Implementation date:	23/06/2020
Number of participants:	7
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- In the Region of WM, PPC is the biggest and most reliable employer for technicians, providing not only secured work placements, but also well paid wages, on time payments and opportunities for further on the job learning by mobilizing permanent staff with experience to demonstrate and guide in an informal way the recently recruited technicians.
- According to the Technical Chamber of Greece 1 permanent staff of PPC is equal to 3,8 workplaces in the labor market.
- In the previous years, approx. 1.200 technicians were employed with 8-months contracts every year.
- In 2020 no more than 250 technicians will be employed as 8-months contracted staff.
- 1.000 people submitted their request and legal documents for 250 workplaces – technicians.

Jobs and skills

- All interviewees in the focus group discussion hold a degree in Engineering (Electrical, Mechanical, Mining and Civil Engineering) as far as their educational background is concerned.

- Out of the 7 interviewees most of them hold a master's degree on business or engineering related field or an MBA degree in their postgraduate studies plus job-related certifications.
- Among interviewees, most of them have managerial position and role in PPC, so they oversee operations within the company in areas such as maintenance, equipment, transportation, plants operations etc. They all have senior status and they are above 45 years old.
- All interviewees have a great depth in-job experience in PPC, as they have been working in the company for many years and they have managed to establish themselves within the company. All of them are included in the high-level job skills categorization.
- Most of the interviewees have a position which is related to the Power Plants.
- They all have managerial positions and top-level management responsibility tasks; however, they also have a great priority to ensure the smooth day by day operation of the workers in the field based on their job areas.
- A current goal within the company, that is communicated to these people with managerial position, is the digital transformation and improvement of the company through modernization of both operations and people. This goal is established the past years and is considered rather important.
- Among job workers within PPC there is a great concern regarding the post-lignite era and the consequences they will face both individually and collectively.
- As far as it comes to the gender distribution of the interviewees there was 1 woman among them, and as she stated there are very few women that are currently employed by PPC in the region of WM and even fewer that have a managerial position.

Transition to the post lignite era

- One of the interviewees is elected in the body of the Technical Chamber in the Region of WM as a representative of the team for the post-lignite period.
- The local working dynamic and PPC employees more specifically have great concerns and anxiety regarding the next day that will follow in the post-lignite era, especially people of lower age and lower job skills level that they now understand that they will be the ones that will be affected the most.

- The past years in PPC they were aware that at some point there would a reduce or even a termination of lignite plants and production, but they were surprised last July after the announcement of the Greek PM.
- The period of the transition to the post-lignite period is too short and it creates too many difficulties for all the parties that are involved - every stakeholder and company will be directly or indirectly affected.
- The decision of July 2019 by the Greek PM is too radical and irrational for those people with deep knowledge of the matter. For example, it is awkward to announce such a decision and then proceed with the creation of a new unit in the area that will operate in 2 years from now costing 2\$billion euros and will shut down after 5 years.
- PPC affects the whole area region of WM almost exclusively. If PPC shuts down, then, there will be no subcontractors in the area while permanent employers and employees will be forced to leave. Therefore, the whole society will be affected severely.
- They have already started noticing from the mid-2000s that there will be a shift in lignite plants, but they expected the change many years later.
- Since there is not a clear plan for the post-lignite era and the energy resources of the country it won't be a great surprise if in a few years a new decision will be made regarding the timeline of the transition (by the same or another government).
- There is skepticism among them regarding the implementation of the timeline decision and the next day, which re-enforced by some decisions that are currently taking place by the government.
- Some believe that the lignite power plants will not close.

Personal transition strategy / personal action plan

- Two of the interviewees believe that when the implementation plan will be enforced, they will be in the age of retirement, until then there will be plant operations.
- All agree that if PPC leaves WM, there will be no equivalent activities to support current employees and especially engineers. As a result, leaving will be a solution even though all of them have families and want to remain there.

- All agree that the decision varies on what will be the on the different alternative options that will come up and substitute or maintain the PPC activities in the area.
- Engineers have learned to adapt easily and to have a large variety of knowledge and skills to support different activities.
- The female participant of the group mentioned that she would focus on postgraduate studies in WM with a scope of future employment in the research department of the university.
- One of the interviewees argued that a transition from PPC to the public sector could be a feasible option.
- An internal transition to another PPC service in different regions or to another subsidiary company of PPC based on skills and experience.
- They believe that there should be PPC activities in the region as in they are employed more than 350 engineers with degree or with a diploma that could be further utilized.

Seeking job opportunities

- The most important restraint factors for not seeking job opportunities in other regions are: 1. Family, 2. Age. And 3. Years left for retirement.
- They all seemed negative and annoyed toward that option especially for those that exceed the age of 40. Their top priority is to remain in WM.
- They all seem to believe that based on their skills and experience they will be able to find alternatives in WM (not in the same volume with PPC).
- A decision on the future for the younger employees is difficult though to be determined while now there is no clear picture on what the post lignite era will be.
- They all agree that most of the employees of PPC will select to remain in WM region rather than immigrate to another Region.

Developing skills for jobs

- Deep training and better holistic understanding on the aspect of energy renewable sources.

- The workforce of PPC engineers have the knowledge, the skills, and the positive predisposition for retraining in different aspects regarding their profession.
- There could be a potential partnership with the university of Western Macedonia for such matters.
- The skills and knowledge based on the job that the engineers of PPC in WM possess could be a great asset for the post-lignite era.
- Based on the existing knowledge and the technology that PPC has there could be a retraining in the modernization of the equipment, production, and managerial areas.
- Reskilling of engineers based on what the next day will be either it is a turn on renewable sources, manufacturing of batteries, PPC activities, other heavy industries, etc.
- There is great experience in the engineering PPC workforce in Health & Safety issues that could be further utilized.

Suggestions to the young generation

- They believe that in the next 10-15 years there will be a transitional period in which younger generation will be forced to leave WM for better employment opportunities.
- They will have to make their own choices based on what are the priorities regarding family, expectations, employment,
- They will have to focus on areas and fields that are considered sustainable in the foreseeable future and can boost their employability in the market inside or outside WM (like renewable sources, robotics, it).
- They all agree that they would advise that the best option for the younger generation is to leave the region of WM.
- Some argue that it could be even better for them to go work in other countries rather than stay as engineers in Greece.

Projections in the future – other proposals

- They want to project themselves in Western Macedonia with no significant changes to the existing situation.
- They picture themselves in Western Macedonia with a clear preference to still be employed by PPC even if it means adjusting to new reality.
- They trust the PPC brand and they want it to remain active in the region in WM in the foreseeable future no matter if they retain their current activities or they establish new ones.
- They believe that the future of solar panel parks is not a sustainable future solution or alternative for the region of WM.
- In the scenario of a new replacing industry/company in the region of WM with alternative or similar activities to the current ones of PCC would be happily accepted by them.

4.3 Goods/Services Provider

4.3.1 Goods Providers / subcontractors “Consumable goods” Nr.1

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida is the following:

Focus Group Nr.	06
Target Group:	C. Goods/Services Provider / subcontractors
Implementation date:	29/06/2020
Number of participants:	1
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- The company is active in the field of retail of big vehicles and spare parts for vehicles.
- They are operating as subcontractors for PPC Contractors, selling spare parts for their trucks and vehicles, but they also sell trucks for the mines.
- 95% of the revenues is dependent on PPC Contractors.
- Today they employ three people – they used to employ six people, but the decreasing revenues obligated them to reduce staff.
- They used to outsource operations to drivers, salesman and staff tasked with logistics.
- Competition between retail stores for trucks is strong in the regional economy.

Jobs and skills

- The owner of the company is high skilled – graduate of University and holder of an MBA.
- The other staff have medium skills – graduates of technical schools on upper secondary education (VET schools and Apprenticeships schools of NES).

- Especially for young people job seeking regardless skills level is nowadays very difficult, given that the job supply is strongly surrounded by the PPC activity.
- *“The monoculture of PPC was wish and curse for the Region”.*
- Most affected economic sectors and professions are technical companies and supplies stores, drivers, and machine operators.

Transition to the post lignite era

- More than 30 years, people living in the area hear about the transition to the post lignite era. There has always been a discussion for the post lignite area, but people never got a concrete plan for this transition, so they were not able to prepare themselves for the adaptation to the new reality.
- Rumors and by word to mouth, without any central and official information for the professionals.
- Participation in the discussion requires a concrete Master Plan that involves stakeholders, employers, companies, and employees and promotes the mutual submission of proposals for the next day.
- They are not willing to participate in a process that does not refer to a comprehensive Investment Plan. Without having a central design or plan it sounds very difficult for employers and employees to spot opportunities and to project their professional career in the future.
- According to the previous experience, the state designed in the 1960's a very comprehensive plan for transforming the Region to an industrial, lignite-centered economy. This plan mobilized the local economy and investors to explore business opportunities in this field and to create a robust ecosystem, consisting mainly of several technical companies and jobs. Such a transition plan is now expected by the local society.

Personal transition strategy / personal action plan

- They will freeze their business activity in a way if they do not get concrete information about what the investment priorities will be.
- Their personal transition plans refer to investments in real estate and setting up a coffee shop in another city outside the Region.
- Estimation of decreasing revenues in the future.

- They know many people who have already left the Region to find better job opportunities abroad.
- The economic crisis in 2010 played a crucial role in increasing the migration flows to Germany and other West European countries.

Seeking job opportunities

- The two main shareholders of the company are going to set up a coffee shop in another city outside of WM. They believe that other investment in the Region of WM are very risky cause of the fluidity and the absence of a transition plan.
- Investment in real estate outside the Region.
- There are also plans for relocating the company in another Region.

Developing skills for jobs

- No specific trainings proposed.
- They believe that current knowledge and skills are sufficient and relevant for their planning activities.

Suggestions to the young generation

- Suggestion to leave the country at least for acquiring professional experience and skills.
- Working as young professional in a foreign country that has a tradition in industry or expertise in other fields of interest shapes a valuable skill set for young people.
- Such opportunities are not available in the Region.

Labor market policies for ensuring employment

- Subsidizing investments for establishing industrial production related to power energy production.
- The state must give incentives to industrial companies to create new units for battery production, energy savers, etc.

- Single labor market policies targeting at facing unemployment for technicians, drivers and other labor staff should only then be introduced once such investments fail.
- However, it is still very critical to launch a Master plan for the transition to the post lignite era, that makes easy for the labor staff and the companies

Projections in the future – other proposals

- Environmental recovery projects are a promising solution for retaining employment and utilizing experienced staff, machines, and technical infrastructure.
- Companies and physical persons who have properties may also invest in Renewable Energy Sources, such as photovoltaic panels. Such an approach requires in the first line clarifications about any investment friendly bank loans, but also the price lists for selling the produced power

4.3.2 Goods Providers / subcontractors “Consumable goods” Nr. 2

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida, is the following:

Focus Group Nr.	07
Target Group:	C. Goods/Services Provider / subcontractors
Implementation date:	30/06/2020
Number of participants:	2
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos
Video URL:	https://web.microsoftstream.com/video/857c6e52-a17c-44b5-9415-cd1d2ab067ff

Company profile and information

- The company was established in 1980's in Ptolemaida and ever since active in the field of retail of big vehicles and spare parts for vehicles, but also technical services and repair of big vehicles in the garage and in situ (two different companies operating with the same partners).
- They also import and export spare parts to and from many countries. Used to sell secondhand trucks and spare parts to developing countries such as Afghanistan, Syria, etc.
- They are operating as subcontractors for PPC Contractors, selling spare parts for their trucks and vehicles and offering repair services, not only in their garage, but also in the mines or in other open working fields – mobile garage.
- They also are direct Contractors of PPC.
- Today they employ four people and at times they employee three more technicians who are specialized in repairing tasks.

Jobs and skills

- Working staff are mainly technicians, graduates from VET secondary schools, with focus on vehicles engineering. They have sufficient professional experience as spare parts dealers, drivers, and engineers for vehicles.
- They also deploy an engineer from Technical University, who is professional licensed engineer for mobile garage services.
- Administrative staff employed by the company has medium skills and is tasked with contract management, invoicing issues, accounting, etc.
- They attend professional development programs offered by their suppliers – these trainings are specialized in technical issues and are financed by the suppliers.
- Professional experience is a critical factor for technicians to get a job in the regional labor market.
- They estimate 2.000 drivers who are still active in the mines and power sector in the Region. Used to be 8.000 drivers 5 years ago.
- The last 5 years the regional labor market faces big challenges cause of the shutdown of many small medium enterprises, an early symptom of the coming de-lignitization process.

Transition to the post lignite era

- They are aware of the transition to the post lignite era, but they complain about the lack of targeted information and sensitization as well as about the absence of a transition plan addressing objectives, investment priorities and timelines.
- One might speak likely about a “Violent de-lignitization”, a non-reasonable decision especially for a Region that produced with high financial, health and environmental costs and for many years power that was and is still distributed across Greece.
- Employers put the brakes on their investments and try to retain the staff, although they address 80% reduce of revenues an annual basis.
- Chamber of Commerce is a reliable organization representing the proposals, considerations and thoughts of the employers and employees. However, the last visit of the responsible Greek Ministers did not give them the chance to

directly express their opinion and ask questions about the content and the rationale of the transition plan.

Personal transition strategy / personal action plan

- Staff has no transition plans – they are stuck in the presence waiting for announcements from the central public administration. Family and financial reasons keep them away of thinking other options.
- Two people of the company own some fields and think to build and launch photovoltaic panels as a measure to increase their income. They do not believe that this action justifies a long-term investment – a bank loan is indeed an important support to build this solar park.
- Many people already migrated abroad, a phenomenon that is getting more intensive the last five years. People who migrate are usually workers, technicians, or high skilled young persons. Usually they were unemployed or temporary employed in an unsecured environment. Less often are people who used to be entrepreneurs or employers.

Seeking job opportunities

- Under the absence of a concrete and targeted transition plan seeking job opportunities in other sectors or professions is out of discussion.
- However, there are some plans for moving the company to another region remaining of course in the same industry. Main obstacles for not moving to another Region are a) financial reasons, b) difficulties to find a non-expensive building for housing the current spare parts, machines etc., and c) uncertainty of the regional market.

Developing skills for jobs

- No training programs were proposed – current staff is competent for successfully undertaking the demanded tasks.
- Any radical changes in the business would create a need for re-skilling or upskilling.

- Training programs must be aligned with any addressed development plans of the Region; no specific topics can be proposed while a comprehensive transition plan is not available.

Suggestions to the young generation

- Young people with medium or high skills are suggested to explore opportunities for Startup business promoting innovation in ICT or similar technological fields - in any case out of the Region of WM.
- The younger son of one participant is working in this family business for more than 10 years. It is very difficult and disappointing to suggest to this young guy to make a career shift or even worse to leave the city, the Region, or the country. It seems that young people working in family business have the emotional experience of an intergenerational engagement and therefore it is more unlikely to take any radical decision.

Labor market policies for ensuring employment

- The general idea is to design and promote long term labor market policies that enable companies and employers to remain in the Region and operate their business.
- ALMP programs for subsidizing the labor or insurance costs have a duration of some months (6,8 or 12). Other similar programs, like financing work placements for the unemployed lack of continuity and do not value return on investment. It is preferable to ensure the continuity of business for the companies without applying wage or insurance subsidies. In such a way employer can ensure employment on the regional and local level.
- Any training programs for the labor staff will then be from value when the transition plan identifies in a clear way the selected sectors and professions. Trainings per se and upon request of organizations or other stakeholders do not have any productive scope. If the decision is to make a new industrial unit in the Region, then NES can design and offer specific training programs responding to the needs of the new industry. Unless the current labor staff is enough competent for undertaking such tasks.
- Subsidizing affected companies for changing economic activity under the assumption of remaining operational within the Region.

- Measures for reduced taxes and lower insurance costs for investors or entrepreneurs who wish to set up business in the Region.

Projections in the future – other proposals

- People aged at mid-50's think about retirement. However, they have big considerations about the next generation and their children.
- Younger staff believes that small medium family enterprises will be shrined in the coming years, an evolution that will lead to layoff.
- A proposal for making the Region more competitive and capable is to promote investments for industrial production to create a “Balkan Industrial park”, consisted of local Greek companies and other companies from Bulgaria, Albania, North Macedonia, etc.

4.3.3 Goods Providers / subcontractors “materials”

The detailed written documentation of the FGD and interview with the firm located in Florina, is the following:

Focus Group Nr.	12
Professional Group:	C. Goods/Services Provider / subcontractors
Implementation date:	16/07/2020
Number of participants:	1
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- The company is active in the field of manufacture of rubber and plastic products since the 80's as a family business.
- They produce plastic parts for pipelines and machines on demand according to specific technical requirements and standards set by PPC.
- 70% of the revenues are dependent on PPC – since the 90s' they collaborate with PPC in WM and in Megalopolis.
- There are only a few competitors in the Region – they compete for PPC tenders and offers.
- The company serves mainly PPC but also contractors of PPC (subcontractor and supplier for specific projects).
- Located in the city of Florina.
- The company employed five persons – three technicians and two managers.
- In the recent two years the staff is decreased to three people.

Jobs and skills

- The staff is very experienced in this field – knowledge and skills acquired through professional experience.

- They have completed upper secondary schools, without any further qualifications and specializations.
- The owner of the business stresses that today there are still job opportunities for welder technicians and other technical specializations under the ongoing project of Ptolemaida Unit 5.
- The job offer does not mismatch the available skills of the labor force.
- There will be an unemployment problem when in the coming years the Ptolemaida Unit 5 project is completed.
- Business sectors and staff affected: garage services and repair of machines and vehicles, small technical companies, trade stores with spare parts for trucks, welder technicians, engineers.
- The PPC payments based on invoices show significant delays, which impacts on delays of monthly salaries and fees for the staff.

Transition to the post lignite era

- The term “post lignite era” and “de – carbonization” is not new, but they did not expect that this would be introduced so rapid – the initial expectation was that such a transition would look up to 2030.
- They believe that this transition will be a disaster for the Region and following that there is a strong belief that the transition will not succeed, mainly because there is now prior experience in the country for such a big transition project.
- In addition, the challenge of fostering dependency for the regional economy and companies out of the current activity of lignite, is very big.
- They do not participate in any initiative for representing their own opinions and proposals in the public discussion.
- The public discussion with Mr Mousouroulis in Florina was not sufficient.

Personal transition strategy / personal action plan

- They have already designed new plastic products for markets beyond PPC.
- The idea is to produce plastic parts for cables utilizing the successive experience and knowhow from the PPC projects.

- The owner of the company thanks PPC for acquiring for so many years know how that today is from vital importance in terms of survival. The personal transition strategy refers to the redirection of the business activity in a sector that is like the current one, without having the fear of an unknown production process.
- The company and the staff are used to work according to predefined quality standards and product requirements – PPC auditing was very demanding, but at the same time from high professional value. This offers the advantage of being competitive for others.

Seeking job opportunities

- Not any further thoughts for changing job, economic activity or moving to other city.
- In the beginning there were dreams for expanding activities and growing the business, but the negativity of the 10 recent years does not create a strong commitment with the future.

Developing skills for jobs

- The programs for skills development are offered mainly by NES, not so often by Chambers or other organizations.
- For technicians, programs for skills development must be more company based and not school based. Therefore, it is proposed to launch programs for apprenticeships, on the job training and internships to improve current or to develop new skills.

Suggestions to the young generation

- It is difficult to say to a young person with high skills to stay in the Region.
- According to the professional experience of the oldest it is very tough to fight in this environment.

Labor market policies for ensuring employment

- Subsidizing employment and not unemployment.

- The state must support companies in the manufacturing and construction sector.
- Having in mind that these companies have the experienced and specialized staff, the know-how and the required machines, it will be easy to shift to the manufacture or construction of similar products.

Projections in the future – other proposals

- Investment in agriculture, for example cherries and apples, which are popular in the Region.
- The submitted proposals and requests for photovoltaic panels are more than 400. This shows that people do not really want to invest in something, given that such an investment is in a big extent financed by the banks and furthermore such as business does not produce new workplaces. “Easy money”.
- They do not believe that big investments in construction or manufacturing are realistic, given that the administrative environment in Greece is not investment friendly.

4.3.4 Support staff / subcontractors “Consumable goods”

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida, is the following:

Focus Group Nr.	13
Professional Group:	C. Goods/Services Provider / Support staff / subcontractors (sales, administrative staff, etc.)
Implementation date:	16/07/2020
Number of participants:	3
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos

Company profile and information

- The company is active in the field of trade, specialized in spare parts for machines working in the mines. They sell mostly spare parts to technical companies which are implementing projects in the mines.
- They also give advice to technicians and engineers for machines that are not functioning so well or for machines with destroyed parts.
- The company is also operating a manufacturing unit to produce pipelines of high pressure. These pipelines are usually sold to technical companies, contractors of PPC in the mines.
- Established in the 1970's in Ptolemaida and ever since active in the Region of WM.
- In early 90's the two sons took the lead of the company and they are still working and trying to growth further the business.
- The spare parts are bought mainly from Athens and Thessaloniki from specialized companies.
- Three people are permanent staff tasked with the responsibilities of financial management, administration, sales, warehouse and logistics and technical advice for addressing the problems in machines.

Jobs and skills

- The participants are medium skilled staff - upper secondary technical education, Vocational Secondary School. They do not have any further qualifications nor specializations, but they are working for several years in the field and are experienced staff dealing with mines business.
- The oldest brother is in charge for the general management of the company, financial and contract management, but also business development.
- The youngest brother is responsible for the Technical Department – he addresses the functioning problem of the machines, communicated with the clients and is trying to find and propose the relevant spare parts. His technical qualification as vehicle engineer offers him the advantage of understanding better the needs of the clients.
- The third interviewee is 60 years old – he has worked for many years as technicians in the mines, recruited and employed by several companies.
- He is very experienced in modifying machines and understanding the problems. He is responsible for the warehouse, logistics and sales.
- They declared that today is very difficult to find a new job in Ptolemaida. The economy was and still is strongly dependent from PPC and secondly from agriculture.
- From their point of view, they see a steadily decreasing activity related to the mines business. Last week they say, about 80 heavy trucks shut down their operations.
- For technicians as professionals the chances for job finding today is very low. Many technical companies are not active anymore, because the mines projects procured by PPC are limited.
- Professions affected: Drivers, oilers and greasers, machinists and PPC technicians contracted for 8-months are mostly affected by the decreasing activity of PPC.
- Business sectors affected: Trade stores with spare parts, transportation services, garage services for trucks and vehicles.

Transition to the post lignite era

- The term “post lignite era” and “de – carbonization” is very popular in the Region, but also for them. They hear about it more than 10 years.

- They expected that this transition would last more than three years, giving them the time to adjust their professional and economic activity to the new reality.
- They participated in the public discussion with the Greek Ministers of Economy and Energy and the representatives from the World Bank, but they were disappointed hearing the short notice – 3 years period.
- They also join the Initiative for Post Lignite Era, discussing ideas and proposals for the coming period.
- They were told that the Greek Government will share with them a transition plan so as for them to drive their activities in the new proposed directions. Until today they have not received any concrete transition plan, so consequently any further public discussion with the Chamber or the Initiative for the Post Lignite Era is not well grounded on a common shared vision.
- The official governmental announcement for a rapid transition has already created uncertainty and anxiety, however the reality of the steadily decreasing revenues and increasing rates of unemployment indicates that the transition has already started.
- A common observation indicates the closure of commercial stores in the city of Ptolemaida.
- 4.500 people are permanent staff of PPC
- 350 people are PPC technicians with 8-months contracts.
- They estimate that appr. 1.500 trucks have left the city of Ptolemaida (drivers – free lancers and payroll staff).
- 10.000 technicians and engineers are occupied in the mines.
- They recognize the paradox of announcing the transition to the post lignite era, without having ensured for potential investors a well-developed and investors friendly infrastructure, for example a modern railway commercial, an industry area, etc.

Personal transition strategy / personal action plan

- They do not have any ideas for individual transition plans.
- Main consideration is the political will for investing in the Region and showing the interest of avoiding the collapse.

- Everyone has invested for many years in his career and professional development and it seems very hard to change job, market or even worse, city.

Seeking job opportunities

- The 60 years old salesman and warehouse keeper is very anxious for the future. “If the store here closes then I will lose my job. Being 60 years old it is unlikely to find a job”.
- Job opportunities: “many different things and nothing”.
- They know many friends, clients and colleagues who left the city or the country, trying to seek job opportunities in other sectors and professions. This migration flow is observed for many years now, validating the assumption that especially young people do not have a variety of professional careers paths in the Region.
- Retired parents are supporting financially the unemployed children. “It is a city of retired people”.
- To find job opportunities or to invest in another place is out of discussion for the interviewees. They plan to adjust themselves in the new reality by taking the chance of having a strong professional experience and knowhow in the field.
- A major obstacle for seeking job and business opportunities within or even outside the Region is bureaucracy. A professional who wishes for example to set up a new company or to modernize the current one faces the iron cages of the Greek bureaucracy. Two of the participants had already in the past such negative experiences.
- Proposal for developing one stop shops for new entrepreneurs – supportive services for fostering companies and employers.
- Another obstacle to move and to find another job is related to financial resources.

Developing skills for jobs

- They do not address any needs for upskilling or reskilling training programs because there no identified, labor market responding training objects.

- In the current time they do not know about any running training programs. Such initiatives are more relevant for unemployed people or people at risk of unemployment.
- They think that once a concrete direction is available, then reskilling programs might be from value. But not for every unemployed person.
- For unemployed technicians with successive professional experience sounds very uneasy to offer reskilling programs, given that a) the technician is specialized in a specific field and is used to behave and operate in a concrete way and b) there is still an ambiguous debate about which investing priorities are going to be launched.

Suggestions to the young generation

- For young people with medium or high skills the proposal is to seek job opportunities outside the Region.
- Especially for youngsters who do not show a deep interest in career the Region does not offer attractive job opportunities. On contrary, youngsters more engaged in professional development and career have good opportunities.
- Interviewees expressed their disappointment, saying that when they were young, they believed in the business opportunities of the Region and the PPC related activities and therefore they invested a lot of time, efforts, and money. Today, they see that these efforts and investments are at risk of loss.

Labor market policies for ensuring employment

- Incentives to big industrial companies to invest in the Region and to create new manufacturing and industrial units, that can make use of the capitalized knowhow of the local labor force, the machines, trucks and other technical materials that are available in the area.
- They do not see, and they will not discuss for any other passive labor market policies – the motor of enhancing employability is to make the area more investment attractive for big companies.

Projections in the future – other proposals

- They agree in principle on the decision for the transition to the post lignite era. However, they ask for more time to adjust in the new environment.

- A first step and initial proposal for keeping warm the labor market and defending labor staff from the risk of unemployment is the immediate launch of projects aiming at the Recovery of the Environment in the mines or plant areas.
- A specific attention must be put in the selection of contractors and subcontractors – giving priority to local companies who have the technical and professional capacity to implement such projects.
- They believe that such projects will retain the current employability, perhaps they will create some new job placements and will extend the business for more than five years, a critical time period for preparing the local economy and society to adapt itself in the post lignite era.
- Another proposal that must be implemented in the same period is the improvement of the industrial infrastructure, with priority of constructing a modern railway commercial and building a modern and well structure industrial area. This evolution will create a more investment friendly environment for companies.
- At the end they believe that the options for the post lignite era must be focused on the industrial production and manufacturing.

4.3.5 Service Provider / subcontractors “Services”

The detailed written documentation of the FGD and interview with the firm located in Kozani, is the following:

Focus Group Nr.	02
Professional Group:	C. Goods / Services Provider / Subcontractor
Implementation date:	19/06/2020
Number of participants:	2
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos
Video URL:	https://web.microsoftstream.com/video/8ff9dcf3-8c32-419d-8c59-eb4d3b9fd3

Company profile and information

- The company is active in the field of heavy transportation services. They transfer heavy machines, heavy trucks, and other vehicles mostly from mines and building areas to other destinations within the Region of WM, but also in other Regions of Greece and abroad.
- 6 permanent staff: drivers, truck operators and administrative staff.
- Localized in Ptolemaida.
- Company is Contractor, Sub-contractor but also Sub-subcontractor.
- PPC is from vital importance for their business, appr. 80% of revenues are dependent on PPC.
- However, in the recent years they have tried to expand the activity in other Regions of Greece and abroad so as to stay in the business, but also to explore if there are other opportunities for heavy transportation services within Greece.
- The lignite phase out has already a significant impact in their revenues, they address an important decrease in revenues and decrease in new requests from

PPC to private companies. This negative evolution has been recently enhanced by the lockdown cause of the COVID-19 pandemic.

Jobs and skills

- The owner of the company has medium skills (secondary education) - in the current time she is enrolled in a public Initial Vocational Education & Training Institute (IEK) attending Journalism studies.
- She is managing the company - she is in charge for business development, public relations, and financials.
- The second interviewee is IT expert – Higher Education, today he is attending a master’s degree in IT at the Hellenic Open University and he is working on the establishment of his own IT company in the city. He has also many professional diplomas and certifications.
- His role in the company is the supervision of the projects, invoices, and IT support. He is also preparing technical and financial offers to PPC and to other private companies.
- The other staff of the company have medium skills (secondary education) - they are members of the team for many years – “they are in our family”
- Not easy to find jobs in the Region today. They have many friends and neighbors who came years ago to WM from different cities of Greece to transfer their business activity or to work as technicians or engineers. Today, these people either moved to their birth cities back or migrated abroad.
- There is a skills mismatch in the market while the unemployment rate is very high (27%).
- Higher skilled adults, for example engineers, do not have many work opportunities in WM, unless they want to work as free lancers.
- On the other side people who attended secondary or postsecondary- non tertiary technical education (technicians) have more chances to work. However, they must attend specific training courses to be specialized in a technical qualification that is demanded by PPC.
- The paradox is that higher skilled people attend secondary or postsecondary VET schools for acquiring a specialization that guides them in the labor market.
- Ptolemaida has a big apprenticeship school managed by PES that offers many technical courses. Public Technical Schools on Secondary level offer training

programs for adults. The most demanded specializations are in the field of Renewable Energy Sources, whereby Natural Gas Technician is very famous.

- PPC is a big employer which influences the design and offer of training programs in the area.

Transition to the post lignite era

- This term has a long history in the area (“since I was a school student”). Everyone is aware that one day PPC mines and power plants will close.
- However, no one has established other business, no one thought to set up a manufacturing factory or develop new activities. On the opposite they invested more and more in the economic activities related to the lignite economy and PPC business, denying the upcoming reality of closure.
- The Construction sector is strong decreased, no construction projects, no new buildings, homes, etc.
- This transition will affect also commercial stores and local enterprises. They fear a “ghost city”.
- They are participating in the public dialogue through the Technical Chamber of Kozani by submitting their ideas and proposals. The Technical Chamber is collecting ideas and proposals from all company members and is going to submit a paper to the Ministry of Energy.
- “Violent adaptation” in the post lignite area
- However, they do not think that such a transition will ever happen in an absolute way. They say that some mine and power plants might stay functional and open. On the other side they fear that one day the other power plants will close suddenly together.

Personal transition strategy / personal action plan

- They have already invested in developing transportation services in other cities and in other sectors. For example, they transport agricultural machines in Central Greece (city of Larisa, famous for agriculture). This is nevertheless a season specific activity and not a permanent one.
- They submit proposals in other cities (Athens, Volos, etc.) for winning projects from big contractors, however this is a common strategy for other similar

companies from WM, which results on strong competition and reduced financial offers.

- The owner of the company has thought of starting a business in tourism in another Region.
- The IT expert has a specialization that could be from demand in other economic sectors. He is planning to set up his own company in Ptolemaida.

Seeking job opportunities

- They are willing to seek opportunities in other Regions of Greece.
- Once they realize that the current job is not valuable and profitable anymore, they will look for other opportunities outside the Region.
- The owner of the company has thought of starting a business in tourism in another Region. Main obstacle for her are the limited financial resources, but also family reasons (two youngsters, students in different cities).

Developing skills for jobs

- For their current job they do not think that lack of skills in terms of upgrading.
- For a new job they agree that vocational trainings would be from value, but it should be linked to the current demand of the labor market needs.
- The training programs in the city are mainly offered by public technical schools (IVET, CVET and Secondary VET schools) and people have many different certifications.
- There is an over-inflation of qualifications while job opportunities are limited and surrounded by the lignite economy of PPC.
- They think that to gain more qualifications gives them more flexibility and responsiveness to the local needs.

Suggestions to the young generation

- The owner of the company would suggest a youngster to change the current job and look for other job opportunities in other Regions.
- The IT expert would suggest a youngster to exit the Region and look for transportation business abroad. He and his wife decided to stay in Ptolemaida, although a lot of his friends have already migrated to European countries.

Labor market policies for ensuring employment

- Current ALMPs have constraints for the employers because they foresee that reducing the staff is not allowed if the company benefits from a running program. In any case common ALPMs are not so well targeted for the case of the transition to the post-lignite era.
- Financing selected economic activities of companies that are affected by the closure of PPC. The selected economic activities and sectors (NACE codes) must promote economic development in the Region. Not to finance companies or employers to move out of the Region, because the economy will automatically collapse.
- Trainings in specializations related to Renewable Energy Sources, for example Natural Gas Technician, will gradually create a society of pay roll staff, given that in Greece are authorized 5-6 Natural Gas companies. Training the unemployed must include several specializations and not only a few RES courses, otherwise it will delete entrepreneurship.

Projections in the future – other proposals

- Agriculture economy, livestock farming and manufacturing might be alternatives for the post lignite area.
- Uncertainty prevails – they see that their income is decreasing, an early symptom of the lignite phase out.
- Power Energy must be a public good, provided by public organization by a low price.
- They are not sure about what will happen, they have the fear of the sudden death, just like that one day the lights of PPC will turn off.

4.4 Technicians, Engineers and Support Staff

4.4.1 Sub-subcontractors “Projects” Nr. 1

The detailed written documentation of the FGD and interview with the firm located in Ptolemaida is the following:

Focus Group Nr.	09
Target Group:	D. Technicians, Engineers and Support Staff / Sub-subcontractors
Implementation date:	09/07/2020
Number of participants:	4
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos
Video URL:	https://web.microsoftstream.com/video/23d40227-8bc2-4394-af77-5314e998b5d1

Company profile and information

- The company is a small medium enterprise and was established in the 1980's in Kozani as a daughter company of a bigger construction company. The rationale of establishing a new company was to undertake the implementation of technical projects that are labor intensive (mainly technicians).
- The aim was also to create a more flexible company to make a distribution of operational and financial risks.
- The company today is active in the field of mechanical and electrical projects related to PPC.
- They mainly employ technicians as electricians and metal technicians.
- The variance in the volume of staff is very high. While they implement a project, they hire local staff - from 3-5 people to 30 people per project. It might be a period with more than 70 employed staff.

- However, there are periods of 3-4 months without active projects. During these periods, the staff is decreased to the lowest number of support and administrative staff.
- PPC is a big contracting authority for the company, but also for most small medium enterprises in the area for example, today more than 1.300 people are working under the Project of Ptolemaida V Unit.
- The economic cycles and total revenues of the company are strongly dependent from the activity of PPC.
- The company is Contractor of PPC, but also Sub-contractor and Sub-subcontractor of other Contractors of PPC. It is very common in the area that local companies exchange roles within the context of PPC projects.
- PPC projects did not really promote innovation in the regional economy. Interviewees stressed that PPC projects retained for a long period of time the sustainability and the reason to live for many companies.
- The implementation of PPC projects was taking place under critical health and safety conditions. In addition, in many projects the technical requirements of the projects were not so clear to contractors, which produced at times surprising results for contractors.

Jobs and skills

- The General Director provides high skills and qualifications. He is Mining Engineer (Technical University) and he also holds a master's degree in the field of Entrepreneurship. He has the overall responsibility for the smooth running of the company. Spotting opportunities, monitoring technical projects, business development and creating synergies with others.
- One interviewee is a woman 40 years old with two children. She has medium skills (upper secondary education) she speaks English and German. She has attained training programs for professional development mainly in the field of accountant services. She is working in the administrative department of the company, dealing with contract management, invoicing issues, suppliers support, preparation of proposals and legal documents for tenders.
- One interviewee is appr. 60 years old, high skills and qualifications from the School of Servant Marine, worked for many years as engineer in big servant ships, but also as technical advisor and supervisor in the mines. He is working

in the company since 1983. Today he is responsible for the company's contract-subcontractors under the big project of Ptolemaida Unit 5.

- The last interviewee is 30 years old with medium skills (upper secondary technical school), high digital competence and two foreign languages – he is dealing with technical supervision of project areas and with people management.
- Today the major current employment for local staff is the Project Ptolemaida Unit 5.
- There is a big trend involving mainly young people with medium skills (technical schools) that indicates significant migration flows to Germany and France, because the future is uncertain, and it is obvious that revenues are decreasing.
- For someone to work as administrative staff in a company is today very difficult – companies are shutting down and others are struggling with financial sources.
- In recent years: high “voluntary unemployment” for high skilled staff – the family used to support young engineers for many months until he/she find a well-paid job. Salaries of permanent PPC staff, engineers and other people involved in the project management were high compared to others.
- Even in good times it was not a comparative advantage for a company to employ many people, because there were periods of time (3-4 months) in which the company did not have active projects.

Transition to the post lignite era

- The term is not new to them, however the last year it became a hot discussion for every worker, employee, employer, and citizen of WM.
- The public announcement was understood more as a political act and not as an economic initiative.
- It would be better if such a transition would have been already completed.
- Chambers are active in representing employers and employees.
- “Horizon 2028” is another initiative in which the company and the staff participate and express their interests and proposals.

- The reality of the transition is present since the last 10 years – so no surprise.
- The transition management lacks concrete communication and sensitization of the general population, employers, and employees.
- A bad structured and violent transition will delete the valuable knowhow of many companies which are active in the field for many years (2 or 3 generations).
- Request for publishing a comprehensive and realistic transition plan that also considers the operation of selected Power Plants using alternative combustible material (garbage, natural gas, etc.).

Personal transition strategy / personal action plan

- Administrative staff wish to develop a transition plan, however personal and financial restrictions cannot admit them for carrying out a successful individual plan.
- The young lady is planning to set up a Centre of Creative Activities for Children together with her husband.
- The older interviewee is planning his retirement investment, but he has deep consideration about the social impacts of the mines closure.
- The owner of the company decided in the recent years to reduce his collaboration with PPC and to invest more in private projects and other public projects beyond PPC.
- He believes that for an industrial investor the Region is very attractive for the following reasons:
 - Sufficient, well trained, and experienced labor force
 - Acceptance and low resistance of the people and the local society to new industrial investments
 - Technical infrastructure
- The shift to private and other public projects is assumed to contribute to a revenues increase.

Seeking job opportunities

- The company has already expanded its activities in other regions of Greece, aiming at being unhooked from the PPC projects.
- The young lady said that family and financial reasons would keep her away from her dream to escape to another country.

Developing skills for jobs

- Companies are in principle the main vehicle for developing skills to the people. Especially, for the industrial sector, technicians and workers coming directly from technical schools and Universities have the minimum of knowledge and lack of practical skills. They learn how to apply knowledge on the job.
- Company based training prevails class training when we are speaking about industrial workers and technicians. Even for support staff, gaining experience from work is more valuable.
- The ambiguous strategy related to the operations of PPC (close or continue to operate?) still plays a very negative role for planning and organizing reskilling programs.
- Training programs should in first line focus on making experiential learning clear and objective. All that a worker or employee has learned during his/her work has to be expressed and certified.
- Training programs and reskilling seminars should therefore target identified professions, for example digital technical design for people with work experience.
- Besides that, trainings should include the development of digital competences for administrative and support staff.
- Logistics is another topic for reskilling programs.
- A concrete training reskilling program requires in any case a realistic transition plan addressing main investment priority.

Suggestions to the young generation

- Future options are subjective assessed as very limited and undervalued for the young generation – the young generation covers a wide spectrum of professions and specializations, however the future in the Region cannot ensure for such a variety employability.

- The lack of a concrete plan and lack of information of what is going to be implemented in the coming years produces anxiety to the young people who prefer to look for other more stable options.

Labor market policies for ensuring employment

- The Region of WM is the “Siberia of Greece” – so the proposal for agriculture is not a good option - one production cycle per year and not two or three as in other Regions in Greece.
- The Region used to be an agricultural economy and succeed to transform to a flourishing and intensive industrial economy producing significant revenues and contributing significantly to the GDP. It would be a non-reasonable regression the decision to de-industrialize the economy by promoting agribusiness and giving incentives to companies and employees to become farmers or smart agriculture businessman.
- Ensuring employment with investments for industrial production in the area utilizing the experienced labor staff and the available technical infrastructure.
- The Region should with any cost maintain industrial production, even if PPC shuts down.
- Countervailing projects from PPC that might create new jobs for workers and employees.
- Trainings and reskilling programs by NES or other public organizations will not succeed. The top priority is to gain investments in the industry sector.

Projections in the future – other proposals

- They project themselves in a future that has no critical changes and differences in comparison to the current situation.
- Upgrade the current Power Plants of PPC and promote a Greener Economy surrounding Power Plants.

4.4.2 Sub-subcontractors “Projects” Nr. 2

The detailed written documentation of the FGD and interview with the firm located in Kozani, is the following:

Focus Group Nr.	01
Professional Group:	D. Technicians, Engineers and Support Staff / Sub-subcontractors
Implementation date:	18/06/2020
Number of participants:	3
Implementation modus:	Microsoft Teams
Conductors	Konstantinos Giannakopoulos and Kathrine Economou
Video URL:	https://web.microsoftstream.com/video/f77d7ec4-831f-4cc4-9083-04fbdeb98a98

Company profile and information

- The company is active in the field of electromechanical, industrial and energy construction projects, mostly related to metal constructions, thermohydraulic pipelines, machines assembly and placement and other related technical support for construction projects.
- The permanent staff is consisted of appr. 210 people, covering all the spectrum of skills and educational levels.
- Established in the 1980's in Kozani.
- Company is Contractor, Sub-contractor but also Sub-subcontractor.

Jobs and skills

- High skilled civil engineers from Technical Universities, master's degrees, and several professional certifications mainly in Project Management and Welding Technicians.
- They are active in the company as Managers, seeking new business opportunities, preparing technical proposals for tenders, administrative tasks, project management, monitoring of ongoing construction projects, etc.

- The job opportunities in the Region follow a decreasing flow – Ptolemaida Unit V Project is still a big-scaled project that demands many technicians, mainly specialized technical jobs. Cause of the high demand of labor force many technicians and engineers came also from different cities of WM, but also from other Regions of Greece and abroad. But when this project is finalized this staff will seek for new job opportunities.
- They can apply their knowledge and skills in the everyday life of work.
- The company designs and implements training programs for low and medium skilled technicians by its own costs. For example, to respond to the demanding tasks of the Ptolemaida Unit V – project they delivered to the assigned technicians of the company trainings for Welding Technicians.
- For high skilled staff, the company implements trainings under the LAEK (public finance source from NES targeting at professional development of staff).
- The job opportunities for low and medium skilled technicians are limited. People with high skills who can also provide administrative and scientific support in a company have better chances, for example to prepare technical proposals, to supervise projects, etc.

Transition to the post lignite era

- The concept has a long history in the area, and they realized the coming event when the Prime Minister of Greece announced the policy for a fast transition to the post lignite economy (July 2019).
- Participation in the public discussion with Mr Mousouroulis, World Bank and others. The participants have questions about the method, the plan, and the way of this coming transition.
- They ask about other European or international best practices from other countries that might provide useful experiences to create an effective transition plan.
- It is a petty that an official transition plan has not been yet announced. If the employers do not know what is going to happen, what should the employees think about it?
- Proposal for alternative energy sources – this alternative must be announced from the political decision centers after discussing with local chambers,

companies, etc. The transition to other alternative energy sources, such as Renewable Energy Sources will limit job opportunities, because such a business does not require many technicians or other professionals (non-labor-intensive activities).

- They wish to maintain the business so that they can offer job places to the people. In addition, they are willing to contribute to the plan design for a smooth transition.

Personal transition strategy / personal action plan

- Green economy and Renewable Sources Energy sounds like a good option for engineers – but they propose big constructions, factories, buildings that could deploy labor force.
- District heating might be another investment priority for engineers.
- *“Nobody has taken a radical decision for changing job. Me neither, I do not know what I am going to do. Just like waiting someone to tell me that all this transition discussion will be postponed. ...The dream of every engineer is the building area. I moved from South Greece to Kozani to invest in my job. I invested in the area, I created my family here and I am living here for 15 years”.*
- The uncertainty and the lack of a comprehensive transition plan, considering not only the time line (when?) but also the content (which alternative energy sources, what will happen with the current mines?) limits the think process and furthermore it makes harder for engineers to plan their own professional and life plan.
- Engineers think that job opportunities might also cover other fields and sectors. They are in an open dialogue with other companies and professionals to think alternatives in and outside the Region of WM.

Seeking job opportunities

- Participants observe a dynamic flow of migration from WM Region to other Regions of Greece, but also abroad.
- Job seekers with low and medium skills are facing the risk of unemployment and many of them have already moved out of the Region.
- Work force with origin from WM and low or medium skills are seeking job opportunities in other Regions of Greece, but also in other countries.

- Work force with origin from other Regions of Greece and low or medium skills have already moved back to their hometowns, verifying that the de-lignitization process has already started.
- On the contrast, work force with high skills, like engineers, are seeking job opportunities within the Region of WM, where chances for job placement are still realistic.

Developing skills for jobs

- Reskilling programs for work force, especially for technicians, is in principle valuable, however the lack of a vision and the absence of a concrete redirection of the business priority investments does not allow employers to think of retraining their staff.
- Employers would prefer in such cases to recruit new technicians with the required skills and experience and not to re-training their current staff in new skills.
- For the profession of engineers, especially for those with professional experience in heavy and big-scaled construction projects, it sounds easier to invest in re-training programs for acquiring new knowledge and skills.
- For example, a challenging learning object for experienced engineers might be Renewable Energy Sources, a field which is “light” for them, not so demanding.

Suggestions to the young generation

- There is a strong and common argument that engineers, especially mechanical engineers have comparative advantages and more opportunities for job placement. For example, design and development of photovoltaic panels, energy buildings, etc.
- However, for young engineers without professional experience it is still difficult to find a job.
- Migration out of the Region or even out of the country might be also a good suggestion for young engineers who wish to develop their career and live a more qualitative life.
- What is also interesting is that young people who migrated for studies abroad, is more likely to stay and work abroad rather to return home. This is more the

case for those young people who do not have any secure workplace in their hometown, as a family company active in WM or a father who is an engineer and owner of a construction company, etc.

Labor market policies for ensuring employment

- Subsidizing labor costs and social security costs for companies who do not have a profitable business cycle is out of the discussion.
- Suggestion for subsidizing and supporting companies in WM who are affected by the mines closure aiming at supporting them in developing a transition plan, both for the company and the staff, based on European and international best practices. *“They don’t have to reinvent the wheel in our area. They can see other practices and applications from other countries”.*
- Financial support for entrepreneurship must be linked with the overall transition plan developed by the state, to target at specific sectors and professions that are going to have an increased rate in the coming years.
- Passive labor market policies and measures, but also active labor market policies which are not included in a concrete transition / Regional Development Plan, will just foster the vicious cycle of unemployment.

Projections in the future – other proposals

- They wish that in 5 years they will be still active in the field and that they will have successfully completed the transition to the post lignite era.
- The adaptation to the new reality will be probably an energy economy without lignite.
- Their main concern is about the available alternative options for business and jobs.
- What is also important is the fact the decreasing and shrink operations of PPC have already affected the regional and local economy, especially construction and technical companies, but also other sectors as commercial products, stores, etc. and it seems that in the coming future this negative cycle will affect more companies and people.
- So, the concern is that, even if a person is not directly affected by the decreasing economy in terms of decreasing revenues or risk of

unemployment, he/she will in reality live in an environment with low quality of life and many social challenges, given that many people will be either unemployed or underemployed.

4.4.3 Subcontractors “Projects”

The detailed written documentation of the FGD and interview with the firm is the following:

Focus Group Nr.	15
Professional Group:	D. Technicians, Engineers and Support Staff/ Subcontractors
Implementation date:	24/07/2020
Number of participants:	5
Implementation modus:	Zoom
Conductors	Konstantinos Giannakopoulos

Key findings

I. Company profile and information

- The company is a technical company located in WM in the sector of metal constructions and maintenance for the mines.
- 180 people permanent staff and 110 subcontractors.
- Strongly dependent on PPC activities.
- Very high expertise in the sector through a solid pool of local engineers and technicians.
- They work mainly as contractors but there are also specific cases in which they undertake project components from other Contractors who join a wide Consortium.

II. Jobs and skills

- The participants cover a wide spectrum of jobs and professions related to the business; mechanical engineers, technical supervisors, technicians for repair and fix of machines, machine operators and administrative staff.

- As one of the largest employers in the Region they shared with us the experience that although there is an enormous job demand from technicians and low and medium skilled staff, only 5% of these job seekers respond to the requirements, skills and culture of the company.
- They recruit external staff for big projects on fixed services contracts – if someone shows interest in the job, is engaged and motivated and performs with high skills, then the company makes him an offer for permanent employment.
- People who don't succeed this informal assessment are likely to work for other technical companies, of course smaller companies.
- Today many technical companies terminate contracts with staff because the projects are very limited and from very low budget.
- Participants estimate that the labour force that will be most affected by the mines closure are in the first line workers without specializations and other low skilled staff.
- These people are going to stay in the Region and survive using the benefits and allowances from the Greek National Employment Services.
- On the contrary, the participants assume that high skilled technicians and engineers will move out of the Region or migrate abroad.
- Other sectors and professions that are going to be affected are local hotels, taxi drivers, legal counselors, topographers, mechanical engineers, electrical engineers and other high skilled managers working in the industrial sector close to PPC mines business.

III. Transition to the post lignite era

- They heard more about this term in the last year. However, the concept is not new. There has always been a widespread and general public discussion for changing the lignite model, but no one believed that such a message would be suddenly conveyed in the form of a short notice.
- They do not understand the meaning of the transition to the postlignite era. It is an easy political decision to stop the lignite production, but the proposal for the next day is not easy at all. Something is still missing out of this term.

- The transition to the post lignite era means for them “Burning out of the economy”, “sudden death” encompassing unpredictable negative consequences.

IV. Personal transition strategy / personal action plan

- Participants do not have any identified personal transition plans - they feel very engaged in the company and its values and believe they will stay until the end.

V. Seeking job opportunities

- Working outside the Region is not new for the company staff. Previous experience in construction projects justifies any similar future decision for working in other regions.
- In 2015 during the financial crisis the company sent more than 100 people to a North European country for undertaking tasks under a new construction project.
- On organizational level there are plans for developing new complementary activities outside the Region, an initiative that bonds the permanent staff in a common vision, enabling job retainment.

VI. Developing skills for jobs

- Developing skills and reskilling programmes are designed and implemented in the company either by own staff or by recruiting external trainers.
- In company trainings are on own costs.
- No public funded training programmes.

VII. Suggestions to the young generation

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VIII. Labour market policies for ensuring employment

- Co-financing of in company trainings: NES could co-finance the selection and recruitment of an external trainers who will deliver trainings for the company

staff. For example, the company pays 70% and the state 30% of the training fees.

- Increase the financial resources within the financial tool of the “Development law” – investment plan. Today the percentage of financing companies who wish to expand their activities is very low for the Region of WM. Proposal for increasing this percentage.
- Any Labour Market Policies should take into account both sides of the same coin, namely companies and employees. There is no added value and it is a waste of time and money discussing unilateral how to support unemployed people or employees at risk of unemployment, without referring to the companies and employers. What is the scope of training labour staff if there are no companies capable for recruiting people?
- Supporting employment considers both companies and employees.

5. Detailed description and assessment of findings and conclusions

In the following sections we discuss the main findings of the FGDs. In order to categorize the gained information and to assess the findings in a better way, we structure our discussion on findings across the following axes:

- Company profile and background information
- Jobs and skills in the Region of WM
- Transition to the post-lignite era
- Personal transition strategy and seeking job opportunities
- Developing skills for jobs
- Suggestions to the young generation
- Labour market policies for ensuring employment

Finally, we provide concrete recommendations based on the main findings of the survey.

5.1 Company profile and background information

The researched population derives from local companies active in the lignite mines operations, with focus on the following economic sectors:

- retail of big vehicles and spare parts for vehicles
- Mining support and mines operations
- Manufacture of rubber and plastic products
- Power Production - Electricity and gas supply (PPC)
- Electromechanical, industrial and energy construction projects, mostly related to metal constructions, thermohydraulic pipelines, machines assembly and placement and other related technical support for construction projects.
- Transportation services for heavy machines and big vehicles

Companies are operating as Contractors of PPC, subcontractors for PPC Contractors, as well as sub-subcontractors. While shaping a dynamic ecosystem of local companies promoting mutual collaboration on the basis of interchanging roles, their economic activity is highly sensitive to the PPC operations. Most of the companies declare that more than **90%** of their revenues is dependent on PPC operations.

Another distinguished feature refers to the fact that local companies have a long history behind them, mainly established in the 1980's or 1990's in the big cities of WM, namely in Ptolemaida and Kozani. Today these companies are led by the younger generation,

which has also invested in this business not only by studying related topics, but also by being active for many years in such a professional career. It is also obvious that the second generation has better qualifications and skills than the older one.

In the recent years companies in WM show decreased revenues and therefore they are operating with less staff than they used to work. Today many technical companies terminate contracts with staff because the projects are very limited and from very low budget. Even in good times it was not a comparative advantage for a company to employ many people, because there were periods of time (3-4 months) in which the company didn't have active projects.

A **small-medium construction or manufacturing company** increases its labour force once a project is awarded and a contract is undersigned. Employers pointed out that they recruit **25-30** people for a new project. These people work on temporary basis, e.g. for so long as the project activities are implemented. By completion of the project the majority of these 25-30 people either gets another task, if the company is implementing another construction project or they are seeking for a next job in another company.

5.2 Jobs and skills in the Region of WM

Labour staff covers a wide spectrum of jobs and professions related to the lignite business; civil engineers, mechanical engineers, electrical engineers, technicians for welding and montage of machines, machine operators, technical supervisors, technicians for repair and fix of machines, welders, machine operators, drivers of heavy trucks, administrative staff and low skilled technicians.

The labor market in WM offers job opportunities responding to the actual needs of PPC, avoiding any other career options. Most people living in WM plan their professional career having in mind that the best option for them is to work as permanent staff in PPC or to get employed even with 8-months contracts. Other alternatives for professional career are directed by the lignite economy and the activities of PPC.

Today, the ongoing construction project for “**Ptolemaida Unit V**” involves appr. **1.300 - 1.500** people. It is one of the last big projects procured and financed by PPC.

Drivers of heavy vehicles and trucks is another popular profession in the Region. Following our discussions with companies active in the repair and fix of trucks and the trade of big vehicles we were told that drivers are usually free lancers. There are of course drivers who are employed by transportation and logistics companies. However, the past 5 years drivers face the difficulty of getting new contracts but also the problem of decreased

revenues. Today, it is estimated that approximately **700** drivers are still active in the Region surrounding the lignite activities:

- 300 trucks in mines close to Kozani
- 100 trucks at Power Plant Kardias
- 150 trucks in the mines of Mavropigis
- 150 trucks in Florina – Melitis

Enrolling in VET secondary Schools (Epaggelmatiko Lykeio, EPAL) or in Apprenticeship Schools of the National Employment Services Organization (EPAS OAED) is a popular strategy for the young people so as to gain technical qualifications and seek for a job in the Region related to PPC activities. Technicians of different specializations attained such VET schools and then entered the labour market, which offered them the opportunity to apply their skills, to improve them and to upgrade them by attending mainly in company trainings on company's cost. The specializations in technical jobs and profession are from high quality and technicians with successive professional experience in a specific job, for example operator for heavy machines is well paid.

Technicians usually work for private companies either as permanent staff or as external contractors. It seems that in the past 10 years there is a continuous trend of reducing permanent staff and recruiting external technicians on a project basis. There were periods of long employment followed by short periods of unemployment. Nowadays this relation is reversed, and technicians are struggling to find a job facing the risk of being unemployed for many months. In addition, today is very difficult to find a job in the Region, and this is not only for specialized and skilled technicians, but also for low skilled staff. Any changes in the work status of a specialized technicians would mean significant decrease of his income / monthly salary.

What the skills gap considers, the big employers in the Region shared with us the experience that although there is an enormous job demand from technicians and from low and medium skilled staff, only 5% of these job seekers respond to the requirements, skills and culture of the companies. On the other side it seems that technicians as job seekers identify opportunities which respond to their qualifications. However, the main asset for technicians to get a new job is the professional experience.

Engineers are graduates from Technical Universities and cover mainly the specializations of electrical engineering, civil engineering and mechanical engineering. They hold mostly scientific and managing positions, project managers, etc. The older generation over 50 years old doesn't have any further postgraduate qualifications. Their professional experience in several fields gives however them the advantage of having up to date skills from the field. In opposite the younger engineers up to 35 years old have Masters' Degree

in several topics, including Economics. The summative professional experience derives from PPC related projects and contracts and other power generated tasks.

PPC still remains the largest employer in the Region employing round **4.000** permanent staff and **1.000** external contractors (8-months contracts, etc.). The average age of PPC staff is **50** years old. People see PPC as the most reliable employer for technicians, providing not only secured work placements, but also well paid wages, on time payments and opportunities for further on the job learning by mobilizing permanent staff with experience to demonstrate and guide in an informal way the recently recruited technicians. Engineers working for PPC are highly skilled and have sufficient professional experience in practical and administrative issues. It is worth mentioned that PPC organizes and implements targeted training programmes for its staff in several topics, covering not only the need for further technical specializations, but also horizontal issues, such as Health and Safety at Work.

Participants estimate that the labour force that will be most affected by the mines closure are in the first line workers without specializations and other low skilled staff. These people are going to stay in the Region and survive using the benefits and allowances from the Greek National Employment Services.

On the contrary, the participants assume that high skilled technicians and engineers will move out of the Region or migrate abroad.

Other sectors and professions that are going to be affected are local hotels, taxi drivers, legal counselors, topographers, mechanical engineers, electrical engineers and other high skilled managers working in the industrial sector close to PPC mines business.

5.3 Transition to the post lignite era

Participants hear intensively news and discussions about the transition to the postlignite in the last year, since the conservative and neoliberal party of New Democracy won the elections in July 2019 and took the lead. However, the concept is not new for people living in the Region. There has always been a widespread and general public discussion for changing the lignite production model. More than 30 years, people living in the area hear about the transition to the postlignite era, but no one believed that such a message would be suddenly conveyed in the form of a short notice.

They do not understand the meaning of the transition to the postlignite era. It is an easy political decision to stop the lignite production, but the planning for the next day is not easy at all. In their understanding the easy part is to announce that mines will close in

the coming years. The hard job is to design and implement a concise, region-specific and comprehensive transition plan that ensures employment and continuity of business.

There is an intensive complain from the labour staff, including employers and employees, saying that so far, they have not receive any concise and region-specific transition plan. The five axes that were announced by the Government are not well responding to the needs and the characteristics of the Region. On the other side they acknowledge paradox messages in the form of a “double bind”; PPC Power Plants are closing, while new projects for the upgrade of current PPC Power Plants and the construction of new Units are announced and implemented.

In the absence of a concise, concrete and region-specific transition plan or Master Plan, people cannot easily make important decisions for changing jobs and professions or moving out of the Region. On the contrary, for those people prevails the belief and the inherent fear that such a transition will be equal to a “burning out of the economy”, a “sudden death” encompassing unpredictable negative consequences.

Since 2019 they address the fast, “sudden death” of the lignite economy. Although, no concrete plan is in place, the consequences are real, and it impacts strongly on the business. PPC procures less projects and supplies, which means a significant decrease of revenues for companies strongly dependent on PPC’s activities. In the consequence **unemployment** rates increase and a **brain gain effect** is observable.

The social impact of the mines closure will be dramatic, producing unstable situations.

In the Region the Chambers of Commerce and Industry, social partners and other private initiatives, such as the “Postlignite Center” are struggling to collect proposals, opinions and recommendations from companies and employees so as to analyze and submit them to the Ministry of Environment and Energy. However, they don’t really believe that their voice will be heard in the ears of the decision makers.

What is also important is the fact the decreasing and shrink operations of PPC have already affected the regional and local economy, especially construction and technical companies, but also other sectors as commercial products, stores, etc. and it seems that in the coming future this negative cycle will affect more companies and people.

5.4 Personal transition strategy and seeking job opportunities

Any individual transition plan is strongly dependent on the policy makers and the new priorities of investment. In the absence of a concrete transition plan that defines a specific time line for the mines closure, any decisions related to personal action plans are hard to be drafted.

Participants with **medium and low skills**, such as **technicians**, do not have any identified personal transition plans - they feel very engaged in the company they are working for and they strongly believe they will stay until the end. Their profession is very specialized and strongly dependent on the mines excavation activities. Any other thought for career shift is not sufficiently developed in their minds and they feel trapped.

Besides that, technicians acknowledge that moving out of the Region or migrating abroad is a last chance choice. Older technicians seem to think more about retirement plans, while middle aged people face strong difficulties when thinking of layoffs. The younger technicians develop plans considering job seeking in other Regions, but mostly abroad. Germany, Netherlands and Cyprus are main destinations for migration.

Technicians mentioned that many friends and family members aged between 25-40 years old have already migrated or are planning to leave the region or the country have already migrated abroad, looking for better job opportunities and better quality of life. These are mostly people with medium skills, but also people with high skills and qualifications not responding to the actual needs of the regional labour market (for example teachers). Migration has always been a well-known practice for people in WM.

We also documented that the incessant decreasing economic activity in terms of companies revenues increases uncertainty for technicians – if companies face further decrease of their total revenues, then technicians will face the risk of lay offs.

Linking the implementation of a personal transition strategy with the prior experience of the local labour staff one might say that working outside the Region is not a new practice. Especially technicians and engineers who are working for bigger companies, used to work for a short period of time in another place in Greece. Based on the discussion with the biggest company in WM we were told that during the financial crisis in Greece the company took the decision to send 110 technicians and engineers to Denmark for undertaking tasks under a new construction project.

Most of the considerations and fears about the future are related to the temporary staff of PPC, e.g. technicians on an 8-month contract base. This particular group has technical qualifications acquired from VET schools or Apprenticeships, but they are used to work for PPC in several working positions without obtaining the opportunity for becoming permanent staff. This oscillation between 8 months employment and 4 months unemployment, is for many of them a repeating cycle. Job seeking is very difficult for them. They will explore opportunities for migrating abroad and work as technicians in industrial production or get involved with their family members who already have a small family business.

For **engineers** the personal transition plan refers to the idea of job seeking within the country, utilizing their successive professional experience. Construction projects in big cities or other areas of Greece may attract highly skilled engineers from WM. Engineers are used to travel around to different building areas, so such a mobility requirement would be accepted. However, they fear an “over-concentration of companies and engineers” in construction spots in the different Regions of Greece – the competition between engineers will consequently increase and produce lower fees.

On **organizational level**, employers of **technical companies** have plans for developing new complementary activities outside the Region. More concrete, they think to redirect or have already directed their activities in implementing construction projects in the Region of WM, but also out of the Region. However, in many cases such projects refer to tenders where competitors offer low financial offers in order to win the contract. So, employers expect a reduction of their income in the coming period.

Employers of companies that surround technical companies, such as **garages, retail stores** for vehicles and spare parts, etc. are strongly dependent on the activities of PPC and the technical companies and cannot easily imagine what other options might be available for them. They acknowledge already the consequences of the transition to the postlignite era, considering the significant decrease of demand on supplies and the decrease of revenues. Such companies and their staff don't have any concrete plans for the day after.

5.5 Developing skills for jobs

A concrete training - reskilling program requires in first line a realistic transition plan addressing main investment priorities, timelines and selected economic activities and related professions.

Reskilling programmes for the labour force, especially for **technicians**, are in principle valuable, however the lack of a vision and the absence of a concrete redirection of the business priority investments doesn't allow employers to think of retraining their staff. Employers would prefer in such cases to recruit new technicians with the required skills and successive professional experience and not to train their current staff in new skills. Company based training prevails class training, when we are speaking about industrial workers and technicians. Even for the support staff, gaining experience from work is more valuable.

The training costs are too high for a technician or other low paid staff. Although training and reskilling programmes might lead to career shift or career advancement, technicians working at PPC or private companies cannot afford the costs.

PPC permanent technicians are open to attend reskilling programmes or trainings for skills improvement, if such a need arises. PPC has not yet designed new training programmes for reskilling technicians. Definitely, curricula, learning objectives and topics have to be aligned with the overall transition plan. The structural changes and the overall transformation plan of the organizational structure of PPC will indicate in the coming future which professional areas, jobs and skills have to be reconsidered. At the end, which jobs have to merge with others, and which jobs or specializations have to be developed.

PPC temporary contracted technicians interpret trainings and professional development as a necessary condition for people who have already decided to migrate abroad. Otherwise trainings for upskilling or reskilling are not well accepted because the future in the regional labour market is highly uncertain. In this context trainings are interpreted as a risky investment for them, which requires a budget which is not available for them.

Support staff working in private companies thinks that reskilling programmes might be from value. Improvement of current administrative skills and development of new skills responding to the actual needs of the labour market are well accepted. Trainings should include the development of digital competences for administrative and support staff. Logistics is another topic for reskilling programmes.

Under the light of the mines closure, training programmes for technicians and support staff should in first line focus on making prior learning clear and objective, e.g. to establish arrangements for the **validation of non-formal and informal learning**, based on the rationale and suggestions of the 2012 Recommendation of the European Commission. All that a worker or employee has learned during his/her work has to be addressed, documented, assessed and if possible certified so as to enable individuals to create a competitive portfolio, while assessing any further needs for upskilling or re-skilling programmes.

For the profession of **engineers**, especially for those with professional experience in heavy and big-scaled construction projects, it sounds easier to invest in re-training programmes for acquiring new knowledge and skills. For example, a challenging learning object for experienced engineers might be Renewable Energy Sources, a field which is “light” for them, not so demanding.

What is also interesting for developing skills for the people is the fact that construction and technical companies, once they win a project they train occasionally their own staff or the newly recruited staff. In company trainings are implemented on the cost of the employers. Developing skills and reskilling programmes are designed and implemented in the company either by own staff or by recruiting external trainers. They prefer not to make use of any public funded training programmes.

The ambiguous strategy related to the operations of PPC Power Plants and mines (close down or continue to operate?) still plays a very negative role for planning and organizing reskilling programmes.

5.6 Suggestions to the young generation

Projective reflections on the young generations enabled us to understand better the difficulties for job seeking in the regional labour market and to estimate the consequences of the mines closure considering the individual strategy.

It is a commonplace thesis that young people living in WM have to make the hard decision to migrate abroad. One reason is the uncertainty of the labour market and the correlated future prospects. Assuming that today a youngster takes a job offer in WM, it is very likely that in a few years he will get unemployed. This is valid for young people with medium or high skills who have diminished job opportunities within the Region.

Another factor points out the social aspects; the struggling economy and the low wages impact in the long term the family planning – restricted wages and uncertainty reflect on the postponement of getting married and to create own household. Especially for young people this is a critical matter to think and to develop a personal plan thinking outside the box.

What are the suggestions of fathers whose children were suggested to study on a technical qualification and to work with the father in the family business? This is a very popular concern in the area, because many companies are present more than 40 years and are operating as small – medium family business. The founders imagined a professional career for their children within the entrenched power of their company and have never thought of a shut down of the PPC business. This is the case with a father who is founder and manager of a company specialized in repairing wheels of heavy trucks operating in the mines. He has a son who is completing Bachelors Degree with distinction in the field of mines management. The thought was initially to acquire specialized University education so as to get a well-paid job in the Region or to work with him in the business. Nowadays, the father is regretting for this decision and is thinking to tell his son to migrate abroad.

So, the concern is that, even if a youngster is not directly affected by the decreasing economy in terms of decreasing revenues or risk of unemployment, he/she will in reality live in an environment with low quality of life and many social challenges, given that many people will be either unemployed or underemployed.

For civil engineers the job opportunities for a youngster might be still attractive in the Region of WM, given that this profession is “multidimensional” and can be adjusted to the needs related to construction. Electrical engineers and mechanical engineers are likely to face the risk of unemployment or under-employment in the Region, so the proposal to a young person would show the way out of the Region. Big cities in Greece demonstrate more job options for young engineers, for example PC, IT related projects, etc.

5.7 Labour market policies for ensuring employment

The participants proposed different, but nevertheless interesting, measures that aim to ensure employment in the Region and tackle the challenge of unemployment.

What also emerged as an innovative practice is the proposal to approach such a set of labour market policies from a systemic point of view, meaning that one has to consider companies and labour staff as a whole. Using the words of an interviewee: *“Any Labour Market Policies should take into account both sides of the same coin, namely companies and employees. There is no added value and it is a waste of time and money discussing unilateral how to support unemployed people or employees at risk of unemployment, without referring to the companies and employers. What is the scope of training labour staff if there are no companies capable for recruiting people?”*

Additionally, there is a strong argument that single labour market policies targeting at facing unemployment for technicians, drivers and other labour staff should only then be introduced, once other investments don’t succeed. Passive labour market policies such as unemployment fees and allowances are not effective and productions oriented. The common belief is that the motor of enhancing employability is to make the area more investment attractive for big companies.

Increase the financial resources within the financial tool of the “Development law” – investment plan. Today the percentage of financing companies who wish to expand their activities is very low for the Region of WM.

ALMP programmes for subsidizing the labour or insurance costs have a duration of some months (6, 8 or 12). Other similar programmes, like financing work placements for the unemployed lack of continuity and don’t value return on investment. It is preferable to ensure the continuity of business for the companies without applying wage or insurance subsidies. In such a way employer can ensure employment on the regional and local level.

Incentives for start ups and private investments

- The state has to promote incentives to industrial companies so as to create new production units for battery production, energy savers, etc. in the Region utilizing the experienced labour staff, the machines, trucks and other technical materials and infrastructure that are available in the area.
- Incentives to engineers to act as free lancers and decrease of social insurance costs.
- Reduced taxes for companies in the construction sector.
- Current state loans to companies usually provide specific restrictions in terms of not allowing staff decrease for the next one or two years. Under conditions of uncertainty and decreasing revenues engineers who are leading small or medium companies in the area are not willing to bind themselves in such an unpredictable contract. The state loan impacts in a paradox way in the reducing fluidity of companies which leads further to underemployment or unemployment of engineers.
- Supporting medium and low skilled technicians with financing programmes for start ups.
- Subsidizing affected companies for changing economic activity under the assumption of remaining operational within the Region.
- Measures for reduced taxes and lower insurance costs for investors or entrepreneurs who wish to set up business in the Region.

Trainings

- Any training programmes for the labour staff will then be from value when the transition plan identifies in a clear way the selected sectors and professions. Trainings per se and upon request of organizations or other stakeholders don't have any productive scope. If the decision is to make a new industrial unit in the Region, then NES can design and offer specific training programmes responding to the needs of the new industry. Unless the current labour staff is enough competent for undertaking such tasks.
- Co-financing of in company trainings: NES could co-finance the selection and recruitment of external trainers who will deliver trainings for the company staff. For example, the company pays 70% and the state 30% of the training fees.
- Training programmes for the development of entrepreneurship competences are from low importance and acceptance for technicians and support staff with medium and low skills.

- Trainings in specializations related to Renewable Energy Sources, for example Natural Gas Technician, will gradually create a society of pay roll staff, given that in Greece are authorized 5-6 Natural Gas companies.

Passive labour market policies

- A coherent and targeted set of labour market policies that can respond to the needs of the labour staff, considering not only their employment status, but also their social and economic status.
- However, people declare the support of employment and not financing unemployment.

5.8 Conclusions and proposals

Concluding the main findings and results of the research we hereby point out the key issues and proposals.

1. A concise, region-specific and comprehensive transition plan has to be developed

The absence of a concrete and region-specific transition plan raises questions about the economic activities in the area. Everyone is waiting for a structured proposal, including investment priorities, timelines, selected economic sectors and professions and budget. So long such a plan is not available people speak about a non reasonable decision and therefore about a violent transition that leads to a “burn out of the economy” and “sudden death”. Although people in principle agree to transform the economy by limiting the lignite excavation, they cannot understand and address the new opportunities and selected investments for business.

The contents and proposed priorities of the transition plan have to take into consideration the international and European best practices and not to experiment with the labour force and the companies of WM.

It is proposed to establish scientific committees consisted of recognized and specialized experts and not politicians who will map the needs of the Region and propose o long term plan for Energy and Power. Whereby, timing is of vital importance. If the time goes by, while everyone pays attention in preparing feasibility studies and searching for funding sources, then it is likely that labour staff migrates out of the Region, technical companies shut down and PPC infrastructure becomes a ghost machine.

Design a mid-term transition plan, involving PPC as key player. Any design for the postlignite era has to consider and involve PPC. Thinking a new regional economy without PPC will lead to insufficient results.

2. Green Economy and investments in Renewable Energy Sources are controversial

The popular topic about Green Economy and its related photovoltaic panels, wind turbines and other renewable energy sources cannot easily create employment in an area with long tradition in mines excavation and lignite. Investments in photovoltaic panels close to urban areas will produce several problems – the consideration in the long-term stresses that such an area will look like a cemetery of photovoltaic panels after a concrete period of time.

The State has to support investments in Renewable Energy Sources and photovoltaic panels by offering incentives to investors and big companies in order to develop Natural Gas to be used as a source of energy for heating, cooking, and electricity generation. This would create immediately a big interest for engineers and for technicians who will be employed for building the relevant infrastructure. Contrary to photovoltaic panels, Natural Gas investments might create more job placements, because such projects last longer.

Companies and physical persons who have properties may also invest in Renewable Energy Sources, such as photovoltaic panels. Definitely, such an approach requires in the first line clarifications about any investment friendly bank loans, but also the price lists for selling the produced power.

3. Promote industrial production investments utilizing the current labour staff, machines, technical infrastructure and know-how

The Region has been traditionally an industrial economy. The upgrade of the current Power Plants would be a solution from the total disaster of mines closure. People think, that even if PPC shuts down, the Region should with any cost remain an industrial production area.

PPC is an organization with experienced staff, knowhow, robust machines and infrastructure and is well prepared and capable to host investments for industrial production. To this regard, people propose to create a specific investment framework that will be attractive to foreign industrial companies.

Another critical project that has to be implemented in the same period of time is the improvement of the industrial infrastructure, with priority of constructing a modern

railway commercial and building a modern and well structure industrial area. This evolution will create a more investment friendly environment for foreign companies.

4. Upgrade current PPC Power Plants and transform them to environmental friendly Power Plants

The state in order to retain employability and defend the labour market from mass unemployment has to think plans for upgrading current Power Plants, aiming at functioning with lower costs and not contributing to the air pollution. A transformation plan has to be conducted and propose which combustible materials and fuels could feed the Power Plants.

5. Promote environmental recovery projects led by PPC

Environmental recovery projects are a promising solution for retaining employment and utilizing experienced staff, machines and technical infrastructure. Such projects can be seen as countervailing projects from PPC and they will create new jobs for workers and employees, while they will give time to local companies and employees to prepare better for the transition. Such projects will for sure retain the current employability, will create some new job placements and will extend the business for more than five years, a critical time period for preparing the local economy and society to adapt itself in the post lignite era.

A special attention has to be put in the selection of contractors and subcontractors – giving priority to local companies who have the technical and professional capacity to implement such projects and are affected by the mines closure.

Environmental recovery is a top priority for the society and the economy. The transformation of the current mines in lakes is an indicative proposal that can lead to the creation of green parks.

6. Promote investments in district heating for agriculture

To expand district heating in the Region and transform the current fields in greenhouses utilizing district heating. This is a practice popular in many countries.

Investment in agriculture, for example cherries and apples, which are popular in the Region.

Annex 1: Informed consent

Informed Consent, Greek version [*moderator reads out loud the informed consent and participants orally agree*]

Ενημέρωση και συγκατάθεση

- Η παρούσα έρευνα διενεργείται από την ελληνική εταιρεία PLAS S.A. για λογαριασμό της Παγκόσμιας Τράπεζας και υποστηρίζεται από την ΔΕΗ Α.Ε.
- Σκοπός της έρευνας είναι η εκτίμηση του πλήθους των εξωτερικών συνεργατών και προμηθευτών της ΔΕΗ Α.Ε. και του επαγγελματικού τους προφίλ καθώς και οι προοπτικές απασχόλησης.
- Τα αποτελέσματα θα αξιοποιηθούν για να σχεδιαστεί η οργανωμένη μετάβαση της Δυτικής Μακεδονίας στη μεταλιγνιτική εποχή.
- Η συμμετοχή στην έρευνα έχει χαρακτήρα απολύτως εμπιστευτικό. Πρόσβαση στα στοιχεία που συγκεντρώνονται θα έχουν μόνο οι ερευνητές που θα ασχοληθούν με την ανάλυση και επεξεργασία των δεδομένων. Παρεχόμενες πληροφορίες – στοιχεία θα αξιοποιηθούν μόνο για τους σκοπούς της έρευνας.
- Με τη συμμετοχή σας στην έρευνα συναινείτε στη συλλογή και επεξεργασία των προσωπικών δεδομένων από τους ερευνητές της εταιρείας PLAS S.A.
- Υπεύθυνος επεξεργασίας των προσωπικών σας δεδομένων είναι ο κύριος Κωνσταντίνος Γιαννακόπουλος με στοιχεία επικοινωνίας 210 69 05100 και email kgiannakopoulos@plas-sa.gr
- Η συμμετοχή στην Ομάδα Εστιασμένης Συζήτησης είναι προαιρετική και έχετε το δικαίωμα να διακόψετε τη συμμετοχή σας στην έρευνα οποιαδήποτε στιγμή το θελήσετε.

Annex 2: Focus Groups Discussion Questionnaire

English version of the questionnaire

1.	Company	
2.	Age	_ _
3.	Gender	_ Male _ Female
4.	Highest education achieved	_ Primary _ Lower secondary _ Upper secondary _ Higher
5.	Years of working (total)	_ _
6.	Current position	
7.	Years of working in your current job position	_ _
8.	Vocational trainings completed after Upper secondary and/or after Higher Education? Please indicate titles of trainings / qualifications	A. _ _ _ _ B. No trainings completed
9.	Current skills level	_ Low-skilled technician _ Highly skilled technician _ Engineer/supervisor/manager _ Support staff
10.	Monthly gross wage	€ _ _ _ _ _
11.	Other additional legal benefits (insurance, annual bonus, ...)	
12.	Number of Household members above 15 years old	_ _
13.	Number of adult working (other than you)	_
14.	Number of adults in your household who are without job	_

15.	What is the minimum monthly wage you would be willing to accept in any new job?	€ _ _ _ _ _
16.	Total household income per month	€ _ _ _ _ _
17.	If you were to be laid off, how many months will you be covered by unemployment benefits?	_ _
18.	If you were to be laid off, how many months would you be able to live without working?	_ _
19.	How would you support yourself during these months (Savings, remittances, social insurance? ...)	
20.	Would you prefer to stay in the same sector of occupation and migrate to another part of Greece, or accept a job in a different field in Western Macedonia?	_ Same job elsewhere in Greece _ other job in WM
21.	Would you prefer to stay in the same sector of occupation and migrate outside of Greece, or accept a job in a different field in Western Macedonia?	_ Same job elsewhere outside of Greece _ other job in WM
22.	If you were unable to find a work opportunity in WM, would you consider self-employment?	_ Yes _ No

Greek version of the questionnaire



Ερωτηματολόγιο Focus Group

Ενημέρωση και συγκατάθεση

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- Με τη συμμετοχή σας στην έρευνα συναινείτε στη συλλογή και επεξεργασία των προσωπικών δεδομένων από τους ερευνητές της εταιρείας PLAS S.A.
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* 1. Επωνυμία Εταιρείας.

* 2. Ηλικία.

* 3. Φύλο.

☐ Άνδρας

☐ Γυναίκα

* 4. Επίπεδο εκπαίδευσης.

☐ Δημοτικό

☐ Γυμνάσιο

☐ Λύκειο (Γενικό ή Επαγγελματικό)

☐ Μεταλυκειακή Επαγγελματική Εκπαίδευση (πχ. ΙΕΚ, Κολλέγιο)

☐ ΑΕΙ / Πολυτεχνείο

* 5. Συνολικά έτη εργασίας.

* 6. Τρέχουσα θέση εργασίας.

* 7. Συνολικά έτη εργασίας στην τρέχουσα θέση.

* 8. Επαγγελματική κατάρτιση πέραν του επιπέδου εκπαίδευσης (παρακαλώ αναφέρετε τα προγράμματα κατάρτισης που έχετε ολοκληρώσει).

Τίτλοι προγραμμάτων
κατάρτισης

Καμία επαγγελματική
κατάρτιση

* 9. Επίπεδο δεξιοτήτων

- ☐ Τεχνίτης χαμηλών δεξιοτήτων
- ☐ Τεχνίτης μεσαίων δεξιοτήτων
- ☐ Μηχανικός/ Προϊστάμενος/ Διευθυντής
- ☐ Υπάλληλος γραφείου (λογιστής, γραμματεία, κ.λπ.)

* 10. Μεικτές μηνιαίες αποδοχές.

11. Άλλες πρόσθετες παροχές από τον εργοδότη (πχ. ασφάλιση, επιμίσθιο κλπ.).

* 12. Αριθμός μελών οικογενείας άνω των 15 ετών.

* 13. Αριθμός ενήλικων μελών οικογενείας που εργάζονται (πέρα από εσάς).

* 14. Αριθμός ενήλικων μελών οικογενείας που είναι χωρίς εργασία.

- * 15. Ποιός είναι ο ελάχιστος μηνιαίος μισθός που θα ήσασταν διατεθειμένος να δεχτείτε σε μία καινούργια θέση εργασίας;

- * 16. Συνολικό μηνιαίο οικογενειακό εισόδημα.

- * 17. Αν βρεθείτε σε κατάσταση ανεργίας για πόσους μήνες θα λαμβάνετε το επίδομα ανεργίας;

- * 18. Αν βρεθείτε σε κατάσταση ανεργίας για πόσους μήνες θα μπορείτε να ζείτε χωρίς να εργάζεστε;

- * 19. Πως θα μπορούσατε να καλύψετε τα έξοδά σε μια τέτοια περίπτωση; (πχ. αποταμιεύσεις, εισοδήματα εκτός εργασίας, κοινωνικά επιδόματα);

- * 20. Θα προτιμούσατε να παραμείνετε στον ίδιο επαγγελματικό κλάδο, αλλά να μεταναστεύσετε σε άλλο μέρος εντός Ελλάδας ή να αποδεχτείτε εργασία σε διαφορετικό επαγγελματικό κλάδο στη Δυτική Μακεδονία;

- ☐ Ίδιος επαγγελματικός κλάδος αλλού στην Ελλάδα
- ☐ Άλλος επαγγελματικός κλάδος στη Δυτική Μακεδονία
- ☐ Δεν ξέρω / δεν απαντώ

- * 21. Θα προτιμούσατε να παραμείνετε στον ίδιο επαγγελματικό κλάδο, αλλά να μεταναστεύσετε εκτός Ελλάδας ή να αποδεχτείτε εργασία σε διαφορετικό επαγγελματικό κλάδο στη Δυτική Μακεδονία;

- ☐ Ίδιος επαγγελματικός κλάδος εκτός Ελλάδας
- ☐ Άλλος επαγγελματικός κλάδος στη Δυτική Μακεδονία
- ☐ Δεν ξέρω / δεν απαντώ

- * 22. Εάν δεν μπορούσατε να βρείτε μια ευκαιρία εργασίας στην Δυτική Μακεδονία, θα σκεφτόσασταν την αυτοαπασχόληση;

- ☐ Ναι
- ☐ Όχι

Annex 3: Individual Questionnaires

See attached file “Individual Questionnaires”

Annex 4: Recordings

Due the big size of the videos the Project Team included them in the file with the name **“Recordings”**.