



Ministry of Environment and Energy



Region of Western Macedonia



**Coal Regions in Transition Platform
Working Group Meetings and High-Level Dialogue on
Financing and Investments**

Brussels, Belgium – 26 February 2018



**Coal Regions
in Transition
Platform**

Post-coal economy and structural transformation

Project Lab : Western Macedonia case

Working Team for Coal Platform of Western Macedonia

Requirements for regional transition to low lignite dependency economy (1)

- Structural transformation in the regional economy requires a continuous evaluation of strengths and opportunities and for sure to change the way of thinking “as usual”.
- The overall target of this effort should be the launch of a new sustainable economic model based on region’s advantages and taking into consideration the global framework.

In methodological framework among other studies and researches, a regional study on post lignite era was carried out (Input-Output Model used) and the income and employment multipliers of the various branches of economic activity and in particular those for which Western Macedonia has sectoral expertise, were estimated. The proposed production system, which will deal with transition impact to low lignite dependency and to a new sustainable economy, should take into account:

- the direct, indirect and induced impact on income and employment through sectoral multipliers,
- the comparative advantages of the area as identified in the productive characteristics and human resource specialization and
- international trends and sectoral dynamics

Requirements for Regional transition to low lignite dependency economy (2)

The regional strategy for the transition should fulfil the following specified three main axes:

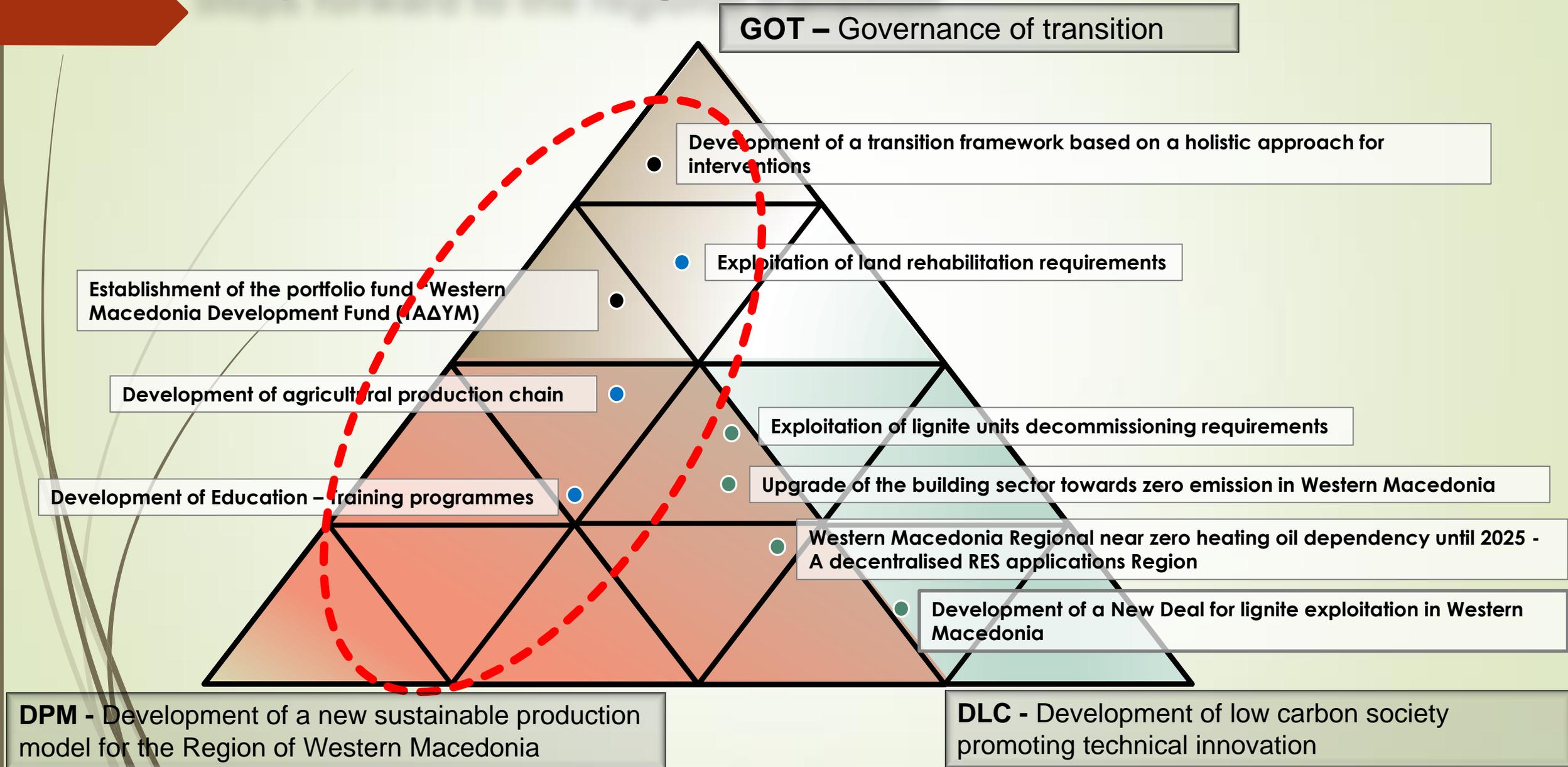
- Strengthening of **business activities** and enrichment of the region's **productive baseline** with innovative and competitive activities.
- **Capacity building** and human resource skills development in areas directly linked to the region's potentially productive environment.
- Protection, promotion and enhancement of the natural and human environment and development of **favourable living conditions**.

Requirements for Regional transition to low lignite dependency economy (3)

CALCULATION OF REQUIRED COST FOR POST-LIGNITE ERA TRANSITION		
Assumption	Necessary investment cost for 1 job creation	400,000
Calculations	Type II Employment Multipliers	
	Processing	2,709
	Energy	8,127
	Construction	2,334
	Tertiary sector	5,390
Expected impacts	Increase in unemployment due to a reduction in lignite production by 2020	12,000
	Cumulative increase in unemployment due to reduction of lignite production by 2035	24,000
Transition funds needed	Unemployment to be tackled by 2020	
	Option: Processing (€ billion)	1.77
	Option: Energy (€ billion)	0.59
	Option: Construction (€ billion)	2.06
	Option: Tertiary sector (€ billion)	0.89
	Total unemployment treatment by 2035	
	Option: Processing (€ billion)	3.54
	Option: Energy (€ billion)	1.18
Option: Construction (€ billion)	4.11	
Option: Tertiary sector (€ billion)	1.78	

The total financial resources required to be invested in tackling unemployment from the energy sector are estimated at between € 1.18 and € 3.54 billion, depending on the mix of development and investment policy chosen to be implemented and obviously by its capacity for attracting investment.

Steps forward to the regional transition



Pilot Projects:

GOT - 1. Development of a transition framework based on a holistic approach for interventions

Specific challenge:

The successful Regional transition to a lower carbon society is a multi-dimensional problem to be solved by local, regional, national and EC stakeholders, acting in several levels of planning and authorization. Based on different approaches and scenarios examined, several complementary or even opposite interventions may be resulted, being an obstacle to a smooth transition process.

Scope:

The Region's transition, especially for lignite-based areas, should be based on a more holistic approach to the intervention area with three dynamically interconnected issues that will respond simultaneously to the questions "**where?**", "**Who?**", "**Why?**" and "**With what?**" and are the following:

- "**Spatial planning**", determining the possibility of projects and actions implementation in these areas.
- The **Management mechanism/structure** that will be established, will act as the responsible entity of continuous monitoring and update of the actions to be implemented during the transition process.
- Reform of the **Institutional / Financial Framework** in order to facilitate the implementation of the programme and to overcome the several barriers.

Pilot Projects:

GOT - 1. Development of a transition framework based on a holistic approach for interventions

Expected Impact:

The adoption of a holistic transition approach will contribute to:

- The development of projects, actions and interventions where expected results and their complementarity will be assessed and discussed.
- The selection of optimized solutions through scenarios examined.
- The achievement of a robust management securing the combined effort toward the transitions goals.
- The formulation of an attractive investment framework, as well as the identification of fields and opportunities for new entrepreneurship development.

Current status:

The project deals with Preparation of Regional transition phase

Initiation of the project is of high priority and technical assistance from Coal Platform was requested.

Expected Partners of the project are the Regional Government and Municipalities, the Greek State, as well as Regional organisations, Public Power Corporation, chambers and academic / research institutions, civil society as a whole.

Pilot Projects:

GOT - 2. Establishment of the portfolio fund “Western Macedonia Development Fund (TAΔYM)”

Specific challenge:

Diversification and enrichment of the regional economy depends on the improvement of the competitiveness of local enterprises.

Scope:

Western Macedonia Development Fund is a separate financial unit within the National Entrepreneurship and Development Fund (ETEAN A.E.) aiming to the improvement of the competitiveness of local enterprises and financing of development programmes in Western Macedonia region.

More specifically, TAΔYM envisages to facilitate SMEs to access to financing and encourages the implementation of investments, taking into consideration both the special needs of the local enterprises and the regional comparative advantages.

TAΔYM can create or invest to several financial instruments like, venture capitals, guarantee funds, loans, micro credits and financial guarantees.

Pilot Projects:

GOT - 2. Establishment of the portfolio fund “Western Macedonia Development Fund (TAΔYM)”

Expected Impact:

The function of TAΔYM will contribute to:

- The diversification of the regional economy by enrichment of the productive system
- The improvement of investment framework
- The empowerment of entrepreneurship in the region.
- The access of local SMEs to financing.

Current status:

TAΔYM has already established after the sign of the relevant agreement between the Regional Authority of Western Macedonia and the National Entrepreneurship and Development Fund (ETEAN A.E.).

The initial capital of the Fund raised to 10 mil. €, 50% covered by local funds and 50% by the public investment programme.

Following the definition of the projected Investment Committee, it will start the publication of the first call for tenders.

The project could be recognised as best practice in coal regions as well as to be linked and expanded with current or foreseen European funding mechanisms.

Pilot Projects:

DPM - 1. Exploitation of land rehabilitation requirements

Specific challenge:

The restoration of areas where lignite deposits are depleted is one of the most crucial issues towards the Region's transition dealing with the form and size of new land to be available, imposing their future possible uses.

Scope:

The end-use land utilisation, the existing requirements for existing mines operation and the related time schedule as well as the particularities of the existing mines areas structure, an integrated mines restoration action could be developed based on the following :

- Reduction of environmental impact .
- Adoption of novel concept for forestry creation in terms of environmental – water requirements and management.
- Formulation of RES areas with respect to advanced decentralized concepts.
- Exploitation of depleted mine areas for use of different economic activities (agriculture, tourism etc.)

Pilot Projects:

DPM - 1. Exploitation of land rehabilitation requirements

Expected Impact:

The proposed project will contribute to:

- To ensure the appropriate and continuous implementation of land reclamation activities adapted to regional policy and in a cost – benefit base like herbs cultivation, development of recreational parks etc.
- To contribute to jobs creation and new business opportunities.
- To develop technical knowhow and experience.

Current status:

The project deals with Preparation of Regional transition phase

Expected Partners of the project are the Regional Government and Municipalities, the Public Power Corporation, Regional chambers and stakeholders as well as academic / research institutions

Pilot Projects:

DPM - 2. Development of agricultural production chain

Specific challenge:

New production concepts are required to be developed in transition regions, where agricultural sector is expected to have a significant role. Viability of the sector is linked with the advanced supporting infrastructure and the adoption of vertical schemes from field to end-product and market providing added value and brand name.

Scope:

In order to prepare the framework of attracting innovative and competitive activities in Western Macedonia, specific axis of growth should be developed in the agricultural sector where new skills and competences of human resources should be applied in areas as follows:

- Support for rural structures in terms of creation and / or improvement of infrastructure (improvement of irrigation conditions, reforestation, grassland utilization)
- Support for setting up new farmers
- Support for agricultural chain upgrade with farms restructuring, vertical integration of production at farm level as well as products standardization and marketing
- Encouraging Contractual Agriculture.
- Implementation of research - experimental - pilot projects.
- Business networking
- Implementation of Integrated Environmental Management Systems
- Systematic management of irrigation projects
- Integration of RES in agricultural production

Sectorial studies for the identification of most promising new products and local products market growth potentials will be carried out, while an extensive survey on the outcome of existing relevant studies will be taken into account.



Pilot Projects: **DPM - 2. Development of agricultural production chain**

Expected Impact:

The proposed project will contribute to:

- The development of required infrastructure.
- The adoption of modern products, production processes and marketing.
- The job creation through a sector development with attractive characteristics.

Current status:

The project deals with Development of a new sustainable production model for the Region of Western Macedonia and the project proposal is based on Region's study on post lignite era (ANKO)

Expected Partners of the project are the Regional Government and Municipalities, the Public Power Corporation, Regional chambers and stakeholders as well as academic / research institutions



Pilot Projects: **DPM -3. Development of Education – Training programmes**

Specific challenge:

The development of a new production model in regional level, during the transition period, requires a significant reallocation of employees where acquisition of new skills and specialization are crucial for their future professional success. Well prepared and focused activities are required as far as basic practices and conventional knowledge unlinked with Region's transition goals and actions could produce adverse effects and increase the unemployment in a costly manner in terms of efforts and sources.

Scope:

Based on the identified local employees technical skills and linked to the strategy goals and priorities, the needs of new skills development should be set in close collaboration with OAED, labour unions, chambers (commerce, technical, economic, geotechnical) and academic community in order to support new activities and sectors. Business extroversion, innovation and increased added value and jobs and GDP creation rates are of high importance aspects on educational and training programmes planning and implementation.



Pilot Projects:

DPM -3. Development of Education – Training programmes

Expected Impact:

The proposed project will contribute to:

- The identification of sectors with increased employment prospects.
- The support of local human resources to identify new business opportunities.
- The improved link between jobs demand and offer scheme contributing to a smooth transition process.
- The establishment of an attractive investment framework.
- The optimized use of effort and financial resources.

Current status:

The project deals with the development of a new sustainable production model for the Region of Western Macedonia and it is supported by Region's ROP and RIS3 priorities.

Expected Partners of the project are the Regional Government and Municipalities, the Greek State, OAED and workers unions, as well as Regional organisations, Public Power Corporation, chambers and academic / research institutions.

Coal Platform of Western Macedonia Leadership



Theodoros KARYPIDIS, Governor of Western Macedonia

Eleftherios IOANNIDIS, Mayor of Kozani

Savvas ZAMANIDIS, Mayor of Eordaia – President of the Network of Energy Production Municipalities

Konstantinos THEODORIDIS, Mayor of Amyntaio

Ioannis VOSKOPOULOS, Mayor of Florina - President of Municipalities of Western Macedonia

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Building our common future upon Coal Platform Networking...



Thank for your attention!

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