

Resituating the Local in Cohesion and Territorial Development



Case Study Report A Post-Mining Regional Strategy for Western Macedonia Greece

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Report Information

Title: Case Study Report: A Post-Mining Regional Strategy for

Western Macedonia, Greece (RELOCAL Deliverable 6.2)

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Version: 2

Date of Publication: 29.03.2019 **Dissemination level:** Public

Project Information

Project Acronym RELOCAL

Project Full title: Resituating the Local in Cohesion and Territorial Develop-

ment

Grant Agreement: 727097

Project Duration: 48 months

Project coordinator: UEF

Bibliographic Information

Petrakos G, Topaloglou L, Anagnostou A and Cupcea V (2019) *A Post-Mining Regional Strategy for Western Macedonia, Greece*. RELOCAL Case Study N° 3/33. Joensuu: University of Eastern Finland.

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Abbreviations

ANKO Western Macedonia Development Company

CSR Case Study Report EC European Commission

EFRD European Fund for Regional Development EGTC European Grouping of Territorial Cooperation

ESF European Social Fund EU European Union

JESSICA Joint European Support for Sustainable Investment in City Areas,

GDP Gross Domestic Product LAU Local Administrative Unit

MD Minister's Decree

NUTS Nomenclature of Territorial Units for Statistics

PPC Public Power Corporation

RAM Regional Association of Municipalities

R&D Research and Development
RDP Regional Development Plan
RIS Regional Innovation Strategy
ROP Regional Operational Programme

RTDI Research, Technology Development & Innovation

SDP Special Development Programme SGI Services of General Interest

SME Small and Medium-Sized Enterprises



Executive Summary

This Greek Case Study Report (CSR) addresses the Special Development Programme (SDP.) of the Western Macedonia Region (Action hereinafter), focusing on the energy axis of the Regional Units of Kozani (EL531) and Florina (EL533). The Action is funded through a levy of 0.5% on the turnover of the Public Power Corporation (PPC)¹, based upon the energy production at the local level. The Action met the region's long-standing and fair demand against the environmental degradation due to the use of a non-renewable energy resource such the lignite. Seen in this "top down" respect, the Action could promote under certain conditions, distributive and procedural spatial justice. Assessing however, the overall outcomes derived by a "bottom up" approach as well as the extent to which the Action manages to pave the way for the transition of the region towards an alternative development path, the developmental footprint, could have been much greater.

Undoubtedly, the Action has left a positive imprint in terms of spatial justice, since many projects and interventions could not have been realized without it. However, most of the projects were small, with no critical size and no added value. The dominant spatial justice constraints can be attributed to the lack of visionary leadership and clear vision of "where we want to go". Crucial drivers proved to be localism, simplistic solutions, lack of realism, absence of impact indicators and "regional culture" as well as temporary political benefits in view of the next election cycle. As a result, the Action was not treated by the political staff, longsighted, as a golden opportunity for the region to prepare for a smooth transition from the lignite age to a new growth production pattern.

Besides, findings show that the institutional, political and the administrative contexts at the national level negatively influence the Action's spatial justice outcomes. A centreperiphery pattern seems to be dominant in all particular aspects of political, administrative and economic arrangements, associated by large bureaucracy and ineffective central administration. Within this frame, the political parties often intervene in the formation of local and regional agendas exercising "paternalistic" and "top down" practices. Against this background, the EC maintained a high degree of supervision within a "one size fits all" model, ignoring the many particularities of each locality.

Taking into account the dramatic de-carbonisation rates by 2020 and 2030, the only way to avoid making the dreadful 40% unemployment scenarios is a robust recovery plan by appropriately utilizing of all the potential financial instruments. In this direction, in the light of spatial justice, the Action should be integrated into a logical synergy with the ROP and the RIS of Western Macedonia 2014-2020, as well as other initiatives developed at European, national and regional level. Additionally, it is proven that the one-dimensional approach (that defines the prosperity level of an area solely through the per capita GDP) does not correspond to the total developmental reality.

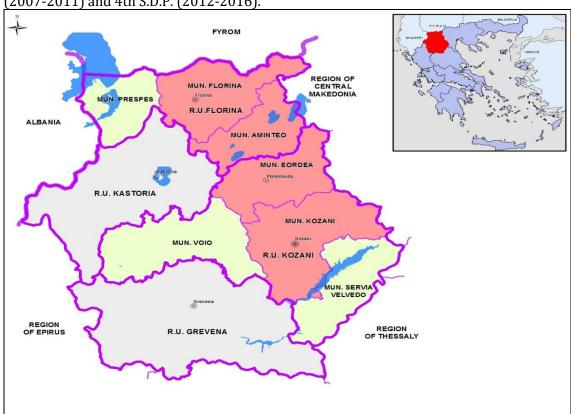
Lastly it should be noted that planning aiming to spatial justice is foremost a political process and choice. This requires a visionary political leadership that adequately comprehends the international, national and local challenges and efficiently responds with certain strategy, priorities and interventions.

¹ Public Power Corporation S.A. (PPC) is the biggest power producer and electricity supply company in Greece with approximately 7.4 million customers. PPC currently holds assets in lignite mines, power generation, transmission and distribution. PPC's current power portfolio consists of conventional thermal and hydroelectric power plants, as well as RES units, accounting for approximately 68% of the total installed capacity in the country.



1. Introduction

This Case Study Report (Post-Mining Regional Strategy), addresses the Special Development Program (S.D.P.) of Western Macedonia Region (EL53). The program is legally launched by the Greek Ministry of Environment and Energy imposing a special Development Levy, which is based upon the energy production at local level (0.5% on the turnover of the P.P.C). The SDP acknowledges that Western Macedonia is facing high environmental pressures due to industrial, mining, and energy production activities, which produce dangerous waste, deplete natural resources, and threaten the quality of life. Based to the RE-LOCAL rationale, the proposed case study represents an action to deliver/improve spatial justice. More specifically, the S.D.P. concerns environmental protection projects and also infrastructure projects that support growth, exploitation of the comparative advantages of the region and the creation of new jobs. For the determination of the development priorities and the particularization of the actions to be implemented, a Special Development Program (S.D.P.) is being developed from the Region every 5 years. Until now, there have been implemented 4 SDPs: 1st S.D.P. (1997-2001), 2nd S.D.P. (2002-2006), 3d S.D.P. (2007-2011) and 4th S.D.P. (2012-2016).



Map 1. The energy (red color) and non-energy (green color) Municipalities of the Western Macedonia Source:Kozani Development Agency (ANKO)

The territorial scope of the planned intervention refers to the two out of four Regional Units of the Region namely the ones of Kozani (EL531) and of Florina (EL533). However the S.D.P. focuses especially on the "energy axis", which is characterized by the intense mining activity and the environmental degradation due to the use of fossil fuel for energy production (see Map 1).

Coal activity has been reduced, since 2010. Therefore, transition to a new economic model is of paramount importance. So far, there are three main phases in the coal activity reduction process: The first phase suggests that older power production units must cease their



operation until 2015. In 2020 the second phase is expected to finish, by closing six power production units. In 2030, four more units will stop operating, leaving two units that are already in operation and one new unit that is expected to start operating. These account for only 30% of the capacity existing prior to the year 2010. Western Macedonia's contribution in the energy mix of the interconnected system has been reduced from almost 50% (2009) to 30% (2016). The consequences for the Regional economy are extremely ominous. Unemployment is expected to reach 40% in 2050, in case no countermeasures are applied. According to the National Strategy for Adopting to Climate Change (2015), the negative effects stemming from reducing coal fueled power production will be four times larger in Western Macedonia than in other Regions. Within this context, the challenging questions to be answered by the region are: "What about coal?" and "What will happen after Coal?".



2. Methodological Reflection

In Greece the term that predominantly defines the spatial injustice is "inequalities". This term was mainly used when translating the questions of the interview and during the interviews. Access to stakeholders of the action in general was easy. All in all, 20 formal interviews were conducted with representatives of stakeholders, mainly face-to-face, employing a snowballing sampling technique. Empirical findings have based on interviews, focus groups, informal talks, and observations. Most stakeholders openly stated their views instead of holding back information. During the interviews, terminology used was adapted to the different role of the stakeholder trying to make understandable spatial (in)-justice term. The field research took place from the period of 17/11/2017 till 31/8/2018. The role of the European cohesion policies is especially assessed in managing the regional inequalities. The way that these inequalities are perceived is also being analysed as well as the degree of understanding of the regional problem and its management through the implementation of the SDP.



3. The Locality

3.1 Territorial Context and Characteristics of the Locality

The region of Western Macedonia (in Greek: Περιφέρεια Δυτικής Μακεδονίας) lies in the north-western part of Greece (coordinates: $40.4^{\circ}N$, $21.5^{\circ}E$) and comprises a landlocked area. The region borders with the fYROM (to the north), Albania (to the north-east;), the Region of Kendriki Makedonia-GR (to the east), the Region of Thessalia-GR (to the south), and the Region of Ipeiros-GR (to the west). Region of Western Makedonia is a NUTS II spatial entity and is subdivided into four (4) NUTS III spatial entities, namely: the Regional Unit of Kastoria (in Greek: Νομός Καστοριάς), the Regional Unit of Florina (in Greek: Νομός Φλώρινας), the Regional Unit of Greek: Νομός Γρεβενών).

Name of Case Study Area	Region of Western Macedonia
Size	9,451 km ²
Total population (2016)	273,843 inhabitants
Population density (2016)	29 inhabitants/km2
Level of development in relation to wider	
socio-economic context	Disadvantaged within a wider underdevel-
Disadvantaged within a developed	oped country. However, according to EU
region/city?	regulations, Western Macedonia is charac-
Disadvantaged within a wider underde-	terized as a "phasing out region".
veloped region?	
Name and Identification Code of the	
NUTS-3 area, in which the locality is situ-	EL531 Kozani, EL533: Florina
ated (NUTS 3 Code(s) as of 2013)	
Name and Identification Code of the	EL53 Dytiki Makedonia/ Western Macedo-
NUTS-2 area, in which the locality is situ-	nia
ated (NUTS 2 Code(s) as of 2013)	
Type of the region (NUTS3-Eurostat)	
Predominantly urban?	Dradominantly rural
Intermediate?	Predominantly rural
Predominantly rural?	

Table 1: Basic socio-economic characteristics of the area (Source: own elaboration based on data from ELSTAT)

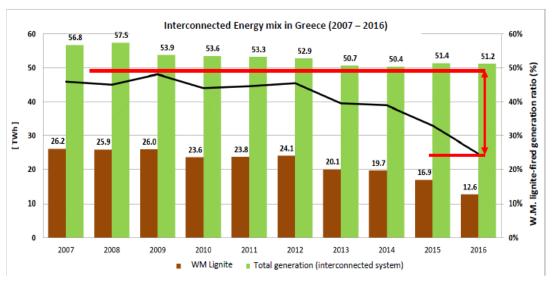
It's a sparsely populated region due to its mountainous and semi-mountainous nature. Most of the people in the region live in rural areas (villages or small towns). Western Macedonia covers a surface of 9,461km2 (almost 7.2% of Greece's total surface) and according to the latest data (2011) the population of the region is 282,120 inhabitants. So the population density of the region is approximately 29.85 inhabitants/km2 (Greece's population density is almost 81.75 inhabitants/km2).

Since mid-50s the Region started its coal intensive development pathway, due to its significant lignite reserves. The integrated exploitation of domestic lignite deposits was a national strategic decision, supported by all Greek governments. The security of national energy supply, the production costs and the enhancement of the reliability of long-term energy planning have made lignite a dominant national fuel. Based on mining activity, Western Macedonia's energy axis of Kozani – Ptolemais - Florina is ranked first in the Balkans, second in Europe and sixth in the world. The lignite mining in the Region during the



period between 1956 and 2006 was in the magnitude of 5.4 billion m³ total excavated soil (except Meliti mines) while respectively the lignite production amounted to 1.2 billion tons.

During the last decade the **lignite industry in Western Macedonia is in decline**, shrinking its share in the energy mix, as depicted in Figure 2. In particular, from 2009 until today there is a significant deterioration of the situation compared to the previous years. From 30.5 TWh and 58% participation in the country's energy mix in 2009, lignite dropped below 15 TWh and 29% in 2016. This decline is a consequence of a mix of energy policies, technological developments, economic data and administrative interventions.



Source: ADMIE, LAGIES processed by CERTH/CPERI

Figure 1: Evolution of electricity generation from Western Macedonia lignite in the interconnected system of Greece.

Regional economic growth was based on **one-dimensional characteristic, and was focused on the energy sector**, with all the traits of pathogenesis established through the years. Traditional professional skills have been substantially confined. A high negative environmental impact was caused, with strong pressure both on human and natural environment. At the peak of lignite production (2008), more than 34% of the Gross Added Value of the Region of Western Macedonia, about € 1.5 billion, was based on the mining and energy sector. In addition, 22.5 thousand jobs are directly, indirectly or inductively supported by lignite mining and utilization (2009). For each permanent staff position in the lignite mining and power production, 2.6 positions were created and maintained in the local labor market (2013). It should be mentioned here that the current local unemployment rate is approximately 30% while the unemployment rate among young people (72,5%) is the highest at the European Union level².

² According to Eurostat, the region of West Macedonia for the year of 2012, was the fifth region in the EU with the highest unemployment rate (92,9%) and the first in the EU concerning youth unemployment, among people from 15 to 24 years old out of work, at a rate up to 72,5%.



3.2 The Locality with regards to Dimensions 1 & 2

Analytical Dimension 1: Perception of spatial (in-)justice within the locality

Based on interviews' results, we can conclude that spatial justice can be perceived, traced and assessed in **geographical**, **social**, **environmental** and **financial** terms (Int# 1, Int# 10, Int# 12, Int# 19). The most distinctive dimension of inequalities however is "**geography**". Access to the sea or to large urban centers and agglomerations, the geographical coordinates and distance, the boundaries, borders and neighboring setting and even the geomorphology, are important geographical variables which create **different starting points** and "initial conditions" for people. Moreover, spatial justice concerns the quality of public services, administrative arrangements, infrastructure, the level of poverty, social exclusion or criminality. From the economic point of view, the weak productive base, pathetic R&D and the lack of innovation culture, create conditions of low competitiveness that exacerbate inequalities. All these factors shape the framework of **(in)equalities in opportunities** for wealth and personal development.

Intra-regional differences of economic growth in particular, can be usually evaluated in terms of per capita income. However, there is almost universal agreement that GDP alone is an imperfect metric for growth and prosperity.³ This methodology is characterized one-dimensional as other critical variables such as the European indicator for research and development, the investments in education and in general indicators that reflect better the reality in which the citizens off the region live are not included.

Spatial (in)justice can also be found at inter-generational and intra-generational level in term of sustainability in the way a locality exploits the natural and non-renewable resources. In the case of Western Macedonia, this issue is of great interest because of the significant environmental costs of the region's contribution to the country's energy efficiency. Undoubtedly, this model has caused inter-generational injustice because of environmental degradation. At the same time however, it is interesting that during the expansion phase (mid-50 until 2008), this "paradigm" generated high incomes and employment, while during the "de-carbonization" phase (from 2009 until today), unemployment is rising dramatically and incomes are constantly shrinking. During the "expansion phase", inter-generational injustice based on intensive use of nonrenewable resources, rendered a short-term benefit to the region. On the other hand, intra-generational injustice based mainly on high incomes compared to other areas, triggered spatial inequalities where citizens and places have been affected disproportionately. During the "de-carbonization" phase, inter-generational injustice based mainly on strict EU Regulations for reducing CO2 emissions, caused dramatic depression in the region towards its future perspective. Contrary, intra-generational injustice, seen in terms of unemployment arising and economic stagnation in the region, mitigates spatial inequalities, in comparison to other areas.

Inequalities however, **are not intense in all regions**. There are areas in Greece who have experienced only a small part of the current crisis, like the islands that are being supported by tourism. On the other hand, there are other regions that experienced and still experience the crisis intensely. The Western Macedonia Region in particular, has **structural**

³ As the *Financial Times* puts it, "GDP may be anachronistic and misleading. It may fail entirely to capture the complex trade-offs between present and future, work and leisure, 'good' growth and 'bad' growth. Its great virtue, however, remains that it is a single, concrete number. For the time being, we may be stuck with it." (date of the article missing)



deficiencies in its production system. The main characteristics of its economy are the limited range of sectoral specialization, the significant dependence on conventional sectors, the very small size of the enterprises and the lack in investments especially in R&D, which are limited to 0.1% of the Region's GDP. The Region is the least attractive tourist destination and comes, by far, the last out of the 13 Country's Regions in the above category-indicator.

Economic crisis which has been affecting the country since 2008, **found Western Macedonia Region unprepared** to cope with its effects, since, regional crisis had existed beforehand. This fact has led to a significant recession, affecting negatively the regional per capita GDP (80% of the average between the EU27). Employment was mostly affected, putting the region in the first place among Greece's regions in unemployment rates (31.8%, April 2013), while the high youth unemployment rate (70.6%, April 2013) places the region in the second place among the EU-27 regions. In conclusion the Region's current production layout is not in the position to absorb the "vibrations" resulting from the crisis.



Map 2: The Egnatia Highway and its vertical axes Source: http://observatory.egnatia.gr

The Egnatia highway, a road crossing horizontally Northern Greece with length of 67 km (along mountainous adverse sections) crosses five regions, has generated a strong impact in terms of territorial cohesion. As a consequence of the reduction in travel time and costs, relationships among the remotest urban centers and the most dynamic and developed ones have increased. In this context, Western Macedonia has significantly improved its access to **Thessaloniki metropolitan area**. Thessaloniki in particular, is the second largest city in Greece (after Athens), a huge administrative, educational and health hub and a significant industrial and commercial gateway for the Balkans and the wider Eastern Mediterranean region. The **intra-regional picture shows strong inequalities** on the level of per capita GDP, economically active population and human resources among the four Regional Units of Western Macedonia. The Regional Unit of Kozani is, by far, in the best posi-



tion, mainly because of the large mining and energy production units and the fur processing network of the area.

Regarding the **regional urban system**, in GDP terms, we have distinguished two poles. On one side there is Kozani, Ptolemaida and partly Florina (because of the Meliti PPC plant), and on the other side – all the other municipalities. Inequalities can be traced also among the **energy municipalities**. The municipality of Eordaia for instance seems to have a greater growth potential of the primary sector compared to Kozani in absorbing the jobs that will be lost in the post-lignite era. Also, there are intensities and inequalities in the administrative system of the municipalities between the **center and the peripheral set-tlements** brought by two major administrative reforms (Kapodistrias⁴ in 1997 & Kallikratis⁵ in 2010) aimed at a drastic reduction in the number of municipalities in Greece.

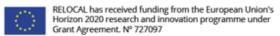
Obviously, **territorial inequalities between urban and rural space** strongly influence living conditions. Inhabitants of the mountain settlements for instance, do not have sufficient access to important health, education, administration and entertainment services. This becomes more obvious in municipalities that don't have an urban center. The impression in general is that the inequalities between urban and rural areas have become worse. Rural areas are characterized by aging population, problematic access to education and health services and the low level of infrastructure.

Our evidence suggests that in the Region of Western Macedonia, there are no **great social inequalities** like the ones found in the big urban centers. The most noted weak social groups consist of **people with poor skills** and lack of specialization, **young people, women and people with disabilities**. These groups became gradually weaker due to the crisis. In the cities, where there are feebler social solidarity networks, more socially weak groups can be found. Last but not least, other noticeable kinds of inequality can be sketched between **employed and unemployed** ones, between workers in public and workers in private sector, as well as between employed in the primary sector and the ones employed in industry or in the tertiary sector of the economy.

Analytical Dimension 2: Tools and policies for development and cohesion

Attempting to evaluate the general understanding of territorial development and related tools and policies, it seems that the regional problem has not been taken into consideration at the national level. At the local and regional level formal and informal stakeholders have not managed to be collectively mobilized on the basis of a common development vision. The formation of any common vision, manifestations or declarations though is tem-

 $^{^5}$ The **Kallikratis Programme** (Greek: Πρόγραμμα Καλλικράτης, translit. *Prógramma Callicrátis*) is the common name of Greek law 3852/2010, a major administrative reform in Greece. The Kallikratis Programme further reduced the number of self-governing local administrative units by compulsory merging the 1033 municipalities and communities which the Kapodistrias reform had already amalgamated to just 325 municipalities.



⁴ **Kapodistrias reform** (Greek: Σχέδιο Καποδίστριας, "Kapodistrias Plan") is the common name of law 2539 of Greece, which reorganised the country's administrative divisions. The law, named after 19th-century Greek statesman Ioannis Kapodistrias, passed the Hellenic Parliament in 1997, and was implemented in 1998. Before and after the Kapodistrias reform, the difference between municipalities (δήμοι) and communities (κοινότητες) was merely a matter of size. Municipalities were larger and had a more urban character than communities, which were as small as a single village. The reform reduced the number of municipalities and communities sharply: from 5775 (441 municipalities and 5382 communities) to 1033 (900 municipalities and 133 communities).



porary and **doesn't go beyond the needs of the election cycles**⁶. Within this frame, **localism** has dominated over time resulting in no major actions, lacking of critical size.

There is **lag in the implementation of the policies** that have been planned and approved. In many cases the way of approaching and assessing the development/regional problem is **"epidermal"**. Usually the policy makers run behind the problems after they have grown by operating firefighters rather than preventively. Additionally, there is resistance to change whereas the problems are addressed **fragmentarily rather than holistically**.

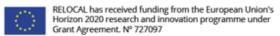
Assessing the overall development trajectory of the locality in the area of **entrepreneurship** only very few enterprises made a breakthrough in innovation matters and even fewer are the enterprises whose characteristics correspond to those of European levels. The business activities can be defined as "greenhouse like" due to the geographical isolation for many years having feebled link with R&D. Despite the fact that the creation of a permanent support mechanism-framework for business and innovation for the employment as well as an incubator for new innovative enterprises is foreseen in the Regional Operational Plan (ROP) 2014-2020, these actions have not yet been implemented because of bureaucratic delays.

The **living conditions** are connected to the lignite mining and the Power Plants in the Region that heavily affect the environment. Besides, the environmental problems, there is the income level, which before the crisis was quite high⁸. In general, the quality of life is not perceived as problematic compared to Athens or Thessaloniki in relation to everyday life, the climate, the traffic conditions and the rate of criminality.

An area's potential for development can be evidenced through its capacity to attract high level human resources and offer opportunities to the existing high skilled human capital. The region is far from achieving that yet. Brain drain tendencies, especially among young people, are still strong during the crisis. The **demographic tendencies** are declining, while at the same time there is a strong tendency for inland and outland immigration. Demographically speaking, there are losses and aging tendencies in the rural areas and population reduction and desertification phenomena in the small rural settlements. But, in general, the demographic tendencies resemble those of the rest of the country. The **cultural potential**, is significant but it is dormant and underdeveloped. There is also a general opinion that the area has no **identity and brand name** at the regional level.

It is widely recognized that the **geographical location** plays an important role in the development perspective of a region. In accessibility terms the geographical location is no longer a significant problem, although train connection does not exist and flights could have been more frequent. The geographical position of Western Macedonia has improved considerably since the construction of Egnatia Highway and its vertical road axes, which removed the area from isolation. The access to the Aegean, the Ionian and Thessaloniki has become much easier. But from a development point the Egnatia highway infrastructure was not capitalized, as it is mostly used as an escape route. Moreover, the vicinity of

⁸ <u>Interview Quotation</u> - Int# 12: "...there is undoubtedly co-responsibility of the local society, because it claimed economic resources but didn't claim with the same zeal a better quality of life"



⁶ <u>Interview Quotation - Int# 2:</u> "How many people working for the regional authority have thoroughly read the texts of planning and implementation beyond the title of the overall goal?"

⁷ <u>Interview Quotation - Int# 5:</u> "It is like having a patient and giving him drugs to treat the symptoms only, but not to cure the disease. It is like someone reading the title of a contract but not its terms, especially the ones written in small letters"



Western Macedonia to Albania and the FYROM could become a very important geographical advantage if the countries of Western Balkans joining the European Union.

Access to decision-making centers is still considered important. However, many problems are solved remotely due to technological developments. But the predominant feeling is that "the further away from Athens, the more difficult life is". In addition, the majority of local policy makers are considered not to have the **ability and the possibilities to influence the national and EU agendas** for territorial cohesion and spatial justice.

As far as the **sustainable use of the available resources**, there is a widespread agreement that this kind of mining activity that has taken place since the decade of '50s, "does not allow us to claim that we have achieved sustainable management". The way that the lignite reserves are exploited exhausts the natural and non-renewable resources in practice.

In Greece, most of the attractive and major **investments** concern tourism, a sector that does not favor a land locked area such as Western Macedonia. In addition, there are no adequate business infrastructures able to attract investments. Among the important constraints to investment especially highlighted by interviewers are the high tax rates at the national level, bureaucracy and the neighboring with particularly low-tax countries (Int# 11, Int# 20). The only field where the area may have a comparative advantage of attracting investments are the energy networks and the terrains to be rendered by Public Power Corporation towards a transition perspective.

In designing territorial and cohesion policies, the local and regional authorities organize **consultation processes** with other stakeholders to the extent they are obliged by the funding Programme to do so. Usually however, this kind of dialogue does not offer any meaningful value added, and this lies at the responsibility of both those who organize and those who participate in the consultation.

The list of actors perceived as the main drivers of the development programs, policies and initiatives includes the Western Macedonia Development Agency (ANKO) which is actively involved in the planning, operating as a development lever. Furthermore, the University and the Technological Educational Institute play a major role as knowledge carriers, the Chambers of Industry & Commerce as business support structures and the Waste Management of Western Macedonia (DIADYMA). In the field design, development & operation an important role plays the Integrated Waste Management System of the region (12 municipalities, 300,000 residents). Finally, the Church also plays a role in social organization and social justice advocating economic distributism.

It is generally agreed that the **European cohesion policies** contributed over time to the country's and region's development despite the weaknesses that still exist. Undoubtedly, many infrastructures (e.g. roads, schools, nursery schools, biological waste treatment plants etc.) would not exist today without the European cohesion policies. On the other hand, some interviewers they do not see an authentic will, in the European cohesion strategy to solve the "North-South" pattern of regional disparities in Europe⁹. Eventually, the believe that the most of interventions financing from the European Structural and Investment Funds favor the most advanced regions¹⁰ (Int# 1, Int# 17, Int# 18).

¹⁰ Interview Quotation - Int# 1: All this planning is just "bait" and "pulling wool over our eyes".



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⁹ Interview Quotation - Int# 3: "Europe's richest nations in Northern Europe such as Germany will never want Greece to reach the same level of development as it is.



Based on the experience of the interviewed, the main way of planning for each region was "one size fits all". The EC maintained a high degree of supervision, ignoring the many particularities of the regions. For instance, in the Strategies for Viable Urban Development, the European but also the national policies didn't take into consideration the particularities of the cities to which they are addressed, resulting in the logic of using "brought over projects" that were designed and implemented somewhere else. In other words, the way of implementation was a "patented" one. Furthermore, the impact of these policies was never measured and assessed (Int# 1, Int# 12, Int# 13).

In conclusion to this section and in an attempt to synthesize the interviewer's opinions, it is clear that a new development model and a collaborative planning culture is needed, focusing on the valorization of the comparative advantages, which integrates innovation and enhance the creation of new jobs, the social cohesion and the environmental dimension of the actions (Int# 11, Int# 16, Int# 20).



4. The Action

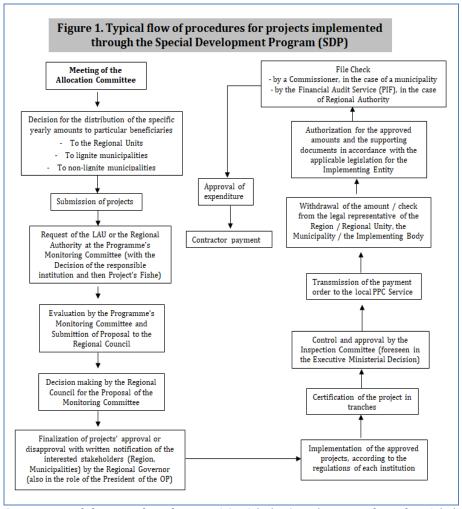
4.1 Basic Characteristics of the Action

Based on the MD Δ 5-H Λ /B/ Φ .5179/oux.2284 from the 6th/2/2013, the Development Levy for the Industrial Areas producing EC from lignite stations, that is provided according to art. 20 of the Law 2446/1996, as amended and now valid, (Levy hereinafter) is set at 0.5% on the turnover of the Public Power Corporation (PPC S.A.). The **distribution of the funds** to the Regional Units of Florina, Kozani and Arcadia, which result from the Levy, is proportional to the production of electricity from the thermal lignite plants of the above regions.

These funds, according to the Minister's Decree (MD), can be used for works and actions to serve the developmental priorities of the wider area. From the money deposited by the PPC in a special account are funded the annual budgets of the **5-year Spatial Development Plans (SPD)** of the beneficiaries. Until today, three (3) Spatial Development Plans (SPD) have been implemented (1996-2001, 2002-2006, 2007-2011), whereas the fifth SPD (2012-2016) is still being implemented due to low absorbency. A total amount of 285 million euro has been allocated in Western Macedonia (RU of Kozani 228 & RU of Florina 57) within four (4) SPDs (1996-2016). It should be noted that SDPs have been an additional financial resource in other region's planning schemes.

The **Region is responsible for developing the SDPs** which apply to certain infrastructure projects, development and environmental protection. The SDPs implementation does not reduce or remove the PPC's obligations to protect and restore the environment from direct or indirect impacts caused by its actions. Every SDP is approved by the Regional Council of the respective Region, after submission of a SDP draft, which is prepared after processing of the respective proposals of the local authorities and other institutions such as Chambers, Labour Unions Agricultural Cooperatives as well private individuals. The processing, assessment and ranking of the proposed projects to be included is done by a Monitoring Commitee on the basis of the indicative benchmarks. Figure 1, provides summary information on the procedural flow for implementins the S.P.D.





Source: own elaboration based on MD Δ5-HΛ/B/Φ.5179/οικ.2284 from the $\overline{6^{th}/2/2}$ 013

4.2 The Action with regards to Dimensions 3-5

Analytical Dimension 3: Coordination and implementation of the action in the locality under consideration

The SDP 2012-2016, which has been developed by the Regional Development Agency (ANKO) provides technical support facilitating the Action's implementation. In particular, it is responsible for the preparation of the proposals' documentation, the reports, the daily agenda, the meeting's minutes, the suggestions and every other necessary and relevant issue. It is responsible also for the smooth, on a daily basis, implementation of the program. It is important to mention that the Regional and Municipal Councils are the **bodies which hold the democratic legitimation** to decide which projects will be funded.

From the **organizational point of view** it was stated that despite the fact that the responsibility for the planning belongs to the region, the region is not involved and does not interfere in the allocation done by the municipalities. On an individual basis however, it was pointed out that this may sound right considering the autonomy and independence between the degrees of self-government. But, on the other side, it leads to deficiencies in the total planning, coordination problems, fragmentation of the interventions and finally dis-



sipation of the funds. It was also noted that the MD does not prevent the institutions from collaborating towards a common direction and strategy. This institutional context does not encourage local actors to establish an effective cooperation culture. It was also illustrated that the MD could prevent many problems by establishing rules to force the institutions to agree on common fields of intervention based upon pre-defined indicators and a substantial consultation as requirement.

Given that no planning body is provided at the regional level, legitimation is attained from the municipal councils for municipal projects and the regional councils for regional projects. These are the bodies that legitimize their selections and play a vital role. It was underlined that the SDP's operating plan establishes **the general developmental framework and the directions**, while the management consultant coordinates permanently all the technical aspects of the Action.

It was clarified by **ANKO**, that the management consultant's office is not involved in the policy issues. It simply follows the Monitoring Committee's decisions and complies with the procedures set by the MD based on its accumulated experience and skill. In particular, the office collects the applications, prepares the suggestions with the technical reports for the regional council and the Monitoring Committee. It monitors the compliance to the requirements that are set in advance based on a check list that every project should have met from the application stage till the stage of the final payment. The fact that the members of the Control Committee undersign, means that they assume legal responsibility and this reduces the prospect of outside interventions.

The **Regional Governor**, who is also the president of the Monitoring Committee, leads the Action. Beyond the institutional framework, significant role plays the profile of the leader himself. This profile is determined by the modes of leadership and forms of power the leader will select to exercise in practice and the degree to which the leader will pursue to patronize the management system. Within this context, the fact that the Action was considered an easy to manage funding source compared to the ROP, often led to methods "through the window".

There are always reactions from those that receive less towards those who receive the most. At this point it was mentioned as an example the case of legal claims between the energy municipalities and the region about the distribution rate between the region and municipalities. **Frictions** exist also between the energy municipalities and the non-energy municipalities. By NGO representatives from the area of ecology it was underlined also that during the planning and implementation course of the Action there were collisions and different strategic points of view that formed an area of debate in the public discourse. For instance, there was the position that "all the Action's Funds should be used for the protection of the environment". Another position stated that besides the projects for the protection of the environment, there should be implemented also projects which have a developmental direction.

Different points of view are identified even within the institutions that implement projects. That is, in the way the projects are prioritized in the framework of the democratic planning of the municipalities and the region. It is obvious, that on this level, different points of view and interests are taken into account, based on the criteria selected by each municipal or regional authority. It is true that there is a margin to apply political pressure and compose different points of view.

The fact that in the operational planning the **axes and interventions were fluid**, and without result indicators, was assessed as creating a foggy landscape regarding to the de-



termination of the policies that should be included under each axis. The claim states that if it was done in advance, there would be fewer points of different understandings and interpretations. Despite the fact that it was sought through the SPDs to synthesize the different point of views in practice, what happened was a fragmented approach of small interventions instead of innovative and holistic ones.

It is widely agreed that the balance between the beneficiaries involved reflects the context, the rates and distributions established by the relevant MD. The Western Macedonia Region plays the central role in the planning and implementation of the S.D.P., because it prepares and approves the Operational Plan and manages 50% of the budget. The rest 50% is distributed between the Municipalities of the Regional Units of Kozani and Florina, with special emphasis on the **four Municipalities that are within the "energy axis"** and therefore receive the lion's share.

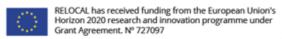
As a result, there are a few projects that have synergy with other projects and other bodies. On the municipality level, for example, there are no trans-municipal projects, although the institutional framework does not prevent it. Collaboration exists only at the level of some co-investment projects between the region and the municipalities. **Collaboration funding schemes** of 50%-50%, 70%-30% etc. can be traced. For example, in rural road construction, the region participates in the funding of municipal actions.

In the period from the establishment of the Action in 1997 until today, there were many **changes in the institutional framework**. The first MD for the Levy application¹¹ was issued on 22/7/1997, calculated at 0.4% on the turnover of the P.P.C, without any distinction on the distribution of the funds: neither between energy and non-energy municipalities, nor between regional units (ex-prefectures) and municipalities. The new Decree¹² on 3/10/2005 provided a distribution rate of 65% for the energy municipalities and 35% for the non energy municipalities. The new amendment of the MD¹³ on 11/1/2008 provided that 50% of the distribution should be directed to the Prefecture (today's Region), 35% to energy municipalities and 15% to the non energy municipalities. A new amendment¹⁴ on 12/12/2011 clarified some issues about the Distribution Committee and the Monitoring Committee. The last amendment¹⁵ regulated some technical issues. Informally it was stated by all that the rationale behind all these changes and revisions was the result of political pressure at stake, who will keep control over the management of the action.

Analytical Dimension 4: Autonomy, participation and engagement

The **processes of participation and engagement** have been facilitated through the management consultant, the ANKO by organizing consultation activities, awareness initiatives as well as by providing a specified platform on the internet. It has been pointed out however, that the response was neither satisfactory, nor reciprocal due to low participation and engagement. Scrutinizing the interpretation of this result, it was of great interest the individual views of some interviewees that the consultation was not satisfactory because no essential information on the actions and the results achieved compared to the targets have been provided ((Int# 1, Int# 3, Int# 4). The majority of the citizens lost their interest in actively participating in societal issues because they no longer believe in

¹⁵ MD/22-2-2013 - Δ5-ΗΛ/Β/Φ.5179/οικ 7042



 $^{^{11}}$ MD/22/7/1997 - $\Delta 5$ -H Δ /B/ $\Phi 5$.179/14812

 $^{^{12}}$ MD/3-10-2005 - $\Delta 5/H\Lambda/B/\Phi 5.179/17788/05$

 $^{^{13}}$ MD/11-1-2008- $\Delta 5/H\Lambda/B/\Phi 5179/456/$ 01 $\kappa 575$

 $^{^{14}}$ MD/19-12-2011 - Δ5-HΛ/B/Φ.5.179/οικ.28485/11



the credibility of the political elites and policy-makers. Some others however, accounted responsibility for low participation to the citizens themselves who are apathetic on the one hand, and also for the representatives of actors at the lowest local level, those who participate in the consultation procedures but they do not adequately meet their responsibilities.

Undeniably, the region and the **energy municipalities** are the groups that play the keyrole in formulating the SDP strategy. Based on MDs, the region and each one of the municipalities must manage an allocated specific amount, known in advance. In other words, there is no competitive context, similar to what is applicable to European funding programs. In practice this means that these policy makers have the flexibility to include in the SDP whichever projects consider as priority. **Other collective bodies** and groups such as chambers, association of municipalities, educational and research institutions, environmental organizations and NGOs, trade unions and various other interest groups, express their opinion and views within the context of their own institutional procedures, taking into consideration the proposed strategy in SDP.

Examining **how various interests and viewpoints are articulated**, the most seem to agree that the planning and implementation procedure of the Action allows a significant degree of flexibility. The program is free and by its logic leaves significant flexibility margins to the carriers. There are, in other words, the opportunities and change and adaptation margins, as long as these changes are approved by the regional council. For example, the axis "improvement of the quality of life" has operated as a **"planning umbrella"** integrating a great and differentiated range of actions. In this framework, it is certain that any changes can easily be made since the context of planning is constantly changing.

There are also **opportunities to initiate new topics** to generate alternative options and solutions. Seen in this respect, it was highlighted by many that, a target group that requires special attention are the enterprises, which could create new jobs in deprived areas hit by crisis such as Western Macedonia. The Development Fund of Western Macedonia (T.A. Δ Y.M.) for example, as it was noted by someone, resulted as a necessity for the support of entrepreneurship, although it was not clearly described either in the institutional framework or in the Operational Plan. However, it was stated as an idea by the Chamber of Commerce and was widely supported.

In the SDP's Operational/Action Plan it is noted the need for complementarities with other actions and other funding sources. However, this **procedural fairness** was not confirmed in practice. Often the choice was to cover operating costs or small interventions and not studies that would give a development perspective by including the projects in the ROP. Interesting was the opinion stated by some experts that in many occasions the invocation of the institutional framework covers the weaknesses and the responsibilities of the policy makers. The beneficiaries, instead of barricading behind their ensured budgets could formulate a local memorandum of management and agree that there would be a serious assessment framework of the proposals based on the goals of the operating plan. Project studies for instance should have as a safeguard the provision that in order to be funded, they should ensure integration in funding programs.

Most believe that the institutions are, in general, adequately informed on the procedures. Besides, the Action's administrative system is sufficiently specialized while the Action's office, which operates specifically for this purpose, contributes substantially to the clarification of all procedures, and serves, among other things as a training tool for the beneficiaries. Experts from the Action's office pointed out that the institutions gradually develop a more mature way of thinking in terms of accountability and slowly a "regional policy"



culture" is being cultivated in terms of common understanding of regional identity. On the other hand however, some NGOs representatives, have noted that they do not have sufficient access to information, while in practice they consider that the decisions had already been decided beforehand.

It was underlined by the most that the levels of "exercising power or power" can be traced with different forms and on different levels. The first stage is the exercising of power from the Region towards the other institutions, as the Regional Governor is the president of the Monitoring Committee, which integrates the projects while the Regional Council is responsible for the operating plan. Furthermore, the Region is the privileged partner with the central players like the ministries and the PPC. Another form of power (im-)balances can be traced between the energy municipalities, who receive the lion's share in the fund distribution and the non-energy municipalities, who receive very little from the distribution. This distinction is clearly depicted in the current institutional framework. Furthermore, the size of each municipality is proportional to the influence it exerts.

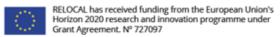
Another **type of power (im-)balance** that can be traced is between the municipalities and the region, which have the funds on one side and the possible beneficiaries on the other, who are seeking integration and implementation of a desired project. If a project will be integrated or not, typically depends, on the submission and assessment of the technical data sheet, something that all beneficiaries have the right to do. In practice, however, the integration of a project is the result of an effort to persuade the municipality or the region for the necessity of the integration of a project. It is generally accepted that during this effort there is a considerable margin for political fix and pressure apply methods.

Most agree that, in practice, **trustworthiness**, **honesty or mutual respect problems** did not turn up in the context of breach of promises made. The institutional framework contributed to this as everyone plays its part and things remain clear. Problems may arise due to misunderstanding or due to the change of the political persons during their adaptation phase. However, few have noted that under the ethical rules it should be ensured that all actors implementing projects should be credible¹⁶. The moral principles in particular, must be clear to see on the individual specifications and requirements provided on all implementation stages of the Action.

It has generally been accepted that the **democratic legitimization** is absolutely ensured because all projects implemented are approved by the regional council or municipal councils. Furthermore, in the Monitoring Committee there participate a great number of local, regional and national representatives. Typically, periodic implementation reports are drawn up, which are submitted to the Monitoring Committee and the regional council. The regional council but also the municipal councils have the right to organize accountability procedures, which can be as substantial and as serious they want them to be. It was however emphasized that during these procedures a serious dialog could be initiated on the review and effectiveness of the Action.

Trying to trace the cause of this inadequacy, it was emphasized by one interviewee that this happens either to prevent such a debate on a political level, or for lack of a clear vision by the beneficiaries (Int# 1). It was also notified that these **debates get consumed in pointless criticism** without any creative or developmental dimension.

Interview Quotation - Int# 1: How fair and honest is to fund entities that are not reliable? There should be inserted here.



22



Analytical Dimension 5: Expression and mobilisation of place-based knowledge and adaptability

The Action's **spatial scope of intervention** is the region of Western Macedonia, but the activities are concentrated in the regional units of Kozani and Florina and in particular on the energy axis where the lignite mines and the power stations, where they are installed and operating, as defined in the legal framework. In this context, place-based knowledge can be identified at all scales of the aforementioned spatial levels, in the form of business plans, studies or political decisions and practices. Place-based knowledge may also address a series of claims and struggles of local society and stakeholders to improve the environment or to claim the imposing of an extra restitution fund against the use of a non-renewable natural resource.

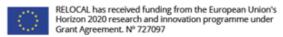
Almost everybody agrees that many forms of "accumulated local knowledge" were utilized such as studies, operating plans, applied methodologies, configured contact networks, experts etc. Especially utilised was the ROP 2014-2020, the Strategic Smart Specialisation Strategy (RIS), the Operational Development Plan for the Post-lignite Era, the Spatial Framework for Regional Planning, the specified Spatial Planning Framework for industry, tourism and processed proposals of the Technical Chamber of Greece WM Department as well as WWF studies and other international organisations and institutions with reference to Western Macedonia.

On the other hand, it was underlined by some interviewers that there were **forms of knowledge or studies that were ignored** and not utilized in the Action, like the development of an electric car which was studied by the university, but there was no follow up (Int# 1, Int# 16). The preparation that was done for the better utilization of the projects through JESSICA was also not utilized. Accordingly, the concern developed about the founding of ESCOs was not utilised, which could create positive perspectives in the field of optimal energy management. In the field of entrepreneurship, research and innovation ideas for the creation of micro incubators or entrepreneurship cells could be utilized.

Within the context of the **organizational learning** approach, it is widely accepted that the involved organization gain experience and improve over time. The organizations are able to create, retain and transfer knowledge, increasing its productivity and efficiency. The fact that in the Monitoring Committee participate 17 representatives of stakeholders such as the business and educational community, the Chambers, the Labor Unions, the PPC, as well as the Ministry of Environment, boost the dispersion of routines and methods of coordination at the inter-organizational level. Though, it was pointed out by some interviewers that the participation of the bodies in the Monitoring Committee is not essential as they simply approve the projects proposed in advance by the Region or the Municipalities¹⁷.

It was pointed out further, that the organizational learning was actively involved within the institutions and was utilised to a great degree. Planning tools and **management models** of other operational plans (e.g. Monitoring Committee, Audit Committee) were integrated in the Action's management model. But the opposite also occurred. Action's management system was copied and followed to a great degree in the management system of

¹⁷ Interview Quotation - Int# 13: Our role is just ineffectual. Nothing will change if you disagree within the Monitoring Committee.





the Program "Pindos", a program with different objectives and different geographical location.

Seen the above learning process at **individual level** and assessing the capacity to build knowledge, it is highlighted by some interviewees that learning begins with the interest, engagement, and motivation of the learner, in order to become more active participants. The general impression is that individual knowledge was accumulated by those who participate in the implementation procedures of the Action, which is utilized to a great degree. Seen in this respect, those individuals in most of the times acquired new knowledge and improve their skills in their organizations, facilitating the implementation of the Action.

Everybody agrees that the form, the fields and the limits of the interventions subdue clearly with legal and institutional restrictions in the framework provided by the relevant MD and by the national legislation. For instance, in order for a project to be implemented, it must have all legal authorizations and licenses. In reference to the aforementioned flexibility, it is pointed out that there is **plenty room for adaptations, amendments and new ideas** in the ongoing Action's implementation. The current managing legitimacy however, as defined in the legal framework can only change if this setting will be replaced by another one.



5. Final Assessment: Capacities for Change

Synthesising Dimension A: Assessment of promoters and inhibitors (in regards to dimensions 3 to 5)

Factor 1: The Region's economic profile & the role of the energy axis

<u>Promoter</u>: The energy axis was the one that produced, from the 50's until 2002 (that signifies the entrance in the post lignite period) high incomes in comparison with other areas, with the bipole Kozani – Ptolemaida being a leader. The dominant economic model in other words, was focusing on energy and mining, which surpassed the primary sector. <u>Inhibitor</u>: During the years of crisis, the middle income especially from the PPC is significantly reduced, while lately a tendency to return to the primary sector is detected as there is an interest from the young to become active in the field of agriculture and livestock farming.

Factor 2: Western Macedonia in the only one landlocked region in Greece

<u>Promoter</u>: WM is the region with the most surface water in Greece, a lot of natural wealth, and many protected areas, which could be significant assets in regional strategy. <u>Inhibitor</u>: WM is not what we call "sea and sun" in comparison with the other Greek regions. This model is under great danger in the years to come. The big question addressed is whether the Western Macedonia will achieve a transition from a solely field specialization to another development paradigm.

Factor 3: Transport infrastructure and geographical location

<u>Promoter</u>: Egnatia Highway comforted WM from isolation and got it easy access to both the Metropolitan area of Thessaloniki and the port of Igoumenitsa. Moreover, the prospect of Albania and FYROM joining the EU, (with which the WM is bordering), stretches very positive growth prospects.

Inhibitor:

The geographical location of the region is not attractive at all compared with the neighboring Greek regions that have serious infrastructure (port, airport etc.). The fact that Western Macedonia is bordering with countries with very low salaries and low tax scales intensifies the competitiveness problem of the area.

Factor 4: "Compliance rate" between planning and implementation

<u>Promoter</u>: The regional and local development policy strategy documents, such as the SDP 2011-2016-, ROP 2014-2020 and RIS 2014-2020 are quite adequate in term of planning and respond to the key spatial justice challenges.

<u>Inhibitor</u>: At the implementation stage, there are pieces missing at all levels. Between the approvals of a programming period until the start of its implementation lies an extremely long period due to the huge bureaucracy.

Factor 5: Practices and effectiveness of the policy makers

<u>Promoter</u>: It is true that policy makers often make sincere efforts to resolve the problems. For example, the establishment of a specialized working team of experts with the task of preparing the area in the post-lignite transition era, (recently decided by the region's Governor), reflects such an effort.

<u>Inhibitor:</u> Often policy-makers chase the problem after it has grown, operating as fire-fighters and not as planners. For example, the issue of the low carbon dependence strategy should have addressed earlier when the local economy was still resilient and not trying to diminish the negative consequences which are already visible. In addition, efforts made by



politicians are often trapped within "communication rules" or promotion and publicity agendas.

Factor 6: Ranking of region in the 4th Programming Period 2014-2020

<u>Promoter</u>: For the current Programming Period Western Macedonia is placed in the Transitional Support Regions (phasing out) as its per capita GDP amounts to 85.6% of the corresponding in the EU-27.

<u>Inhibitor</u>: The aforementioned ranking does not correspond with the current picture of the WM given that the serious financial crisis that hit the country after 2008 has led to a significant recession. This fact affects negatively the per capita GDP (in PPP of the WMR, configuring to even lower levels in relation to the corresponding indicator in the EU-27 and more precisely to 80% of the corresponding average). Thus, it is proven that the one-dimensional approach (that defines the prosperity level of an area solely through the per capita GDP) does not correspond to the total developmental reality.

<u>Factor 7</u>: National investment incentive policies

<u>Promoter</u>: The launch of investment incentives for all the Greek regions at a national level, undoubtedly favors the investment environment in Western Macedonia, a region with very high unemployment rates.

<u>Inhibitor:</u> The incentive policies of the Development Act, through a comparative view do not favor the region. Since WM shows fictitious wealth because of the PPC, augmenting the regional GDP, the neighboring Central Macedonia, including the metropolitan area of Thessaloniki, has a higher rate of funding¹⁸.

Factor 8: Environment & Conditions of life

<u>Promoter</u>: The region is characterized by very good climate conditions and good living conditions with particularly low crime rates. In addition, the cheap heating cost due to district heating is available to citizens due to PPC's activities.

<u>Inhibitor:</u> Significant environmental degradation exists because of the mining and power plants production activities. Seen in this respect,-environmentally speaking, the inequalities are reversed.

Synthesising Dimension B: Competences and capacities of stakeholders

Empirical evidence indicates that one of the interpretive factors of producing and reproducing spatial injustice was the so called "center-periphery" administrative, political and economic development model. This model, involved mechanisms, procedures and institutional arrangements, which dominated the country and are defined by the lack of autonomous regional planning, problematic administrative structures, overlapping of competences, forms of political dependency and huge bureaucracy. As a result, the region has a small degree of flexibility and sufficiency of financial and human resources and mechanisms to plan and apply effective policies, due to the discontinuity in the structural operations of the central state in relation to the region. The problem is that there is no permanence, consistency and clear focus in planning neither at national nor at regional level.

The above-mentioned setting designates to a great extent the scope and limitations as well as the potentials and opportunities for local stakeholders to shape and implement a place-based agenda. In this context, it is interesting to look at how the local stakeholders understand spatial justice and how they engage with it in relation to their access to decision-

¹⁸ Interview Quotation - Int# 17: "Why someone would come and invest in Western Macedonia and not in Thessaloniki, where he/she would find a huge consumer market and the relevant infrastructure?





making centers. Based on the analysis of the recorded views, one could hardly trace a single and clear picture. There is the opinion that under no circumstance the access to the **decision making centers** poses a problem¹⁹. At individual base however, it is pointed out by formal stakeholders, that the access to the decision making centers is still important and possibly plays the most important role reproducing dependency relationships²⁰. For this reason, this access must be improved in order for better results to be produced.

Assessing the **capacities of the local and regional political staff** and based on opinions expressed at individual and not at organization's point of view, it is widely agreed that policy makers didn't manage to adequately respond to the critical development challenges that emerged. In other words, the region's political staff didn't shape a consistent and independent mechanism allowing the implementation of a commonly accepted agenda. This applies to the regional as well as the local framework²¹. All of the above do not mean that there were no positive examples of policy makers with visionary leadership and significant results, utilizing "distributive" resources more appropriately and inclusively for mitigating spatial injustice. In this respect, the profile, the capacity and the willingness of persons in the decision-taking bodies even at the lowest local level play an important role²².

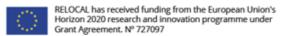
It is pointed out that phenomenon of policies being overthrown when the persons and the political staff change are frequent and intense. It was also stressed that an indication of inspired leadership is the ability of actors to overcome **localism and temporary political benefit**, and further to design projects and interventions of critical size and long-term developmental footprint. Evidence suggests that within the Action, this has not been achieved. In the majority of actions, infrastructure projects prevail with no developmental value added which would support entrepreneurship and create prospects for new and viable jobs. It is characteristic that the results of the actions for the entrepreneurship and employment have not been counted yet.

Among the factors, hindering stakeholders at the lowest local level to release their potential for development, social and spatial inclusion is the dominant role that **political parties** play in the formation of local and regional agendas. This parameter reflects "top down" and "paternalistic" practices which strongly influences the dynamics that can be identified between interplays of formal and informal empowerments.

It is stressed that the Action's interventions are not effective because they are not well-understood by those who are called upon to implement them. Additionally, it seems that stakeholders have no capacities to design visions, set realistic goals and serve them consistently. Often **simplistic solutions prevail** against what was planned. In other words, the avoidance of political costs was the predominant models of political decision-making. As a result, there are **no measurable outcomes** at the end of each programming period as well as **"lack of shared diagnosis"** of the real problems in the region.

It was also highlighted that the effectiveness of the interventions and overcoming the **bureaucracy** constraints were not the same in space and time. For example, there can be

²² <u>Interview Quotation - Int# 18:</u> "The persons leading the beneficiaries play an important role whether negative or positive. Negative is the case when the new person wants to change everything that reminds of the old one. In other words, there is no institutional continuity".



¹⁹ Interview Quotation - Int# 20: This access has always been on a good level. It is not what is missing.

²⁰ Interview Quotation - Int# 3: For every problem to be solved we wait for the "order" from Athens under the logic of the "poor relative" and "second class political personnel".

²¹ <u>Interview Quotation - Int# 14</u> It would be interesting to hear a self-assessment and a self-criticism on why we are in the position we're in and we live in crisis of such magnitude.



identified areas or time periods where the design and implementation effectiveness were much greater than some other areas or other time periods due to different political staff.

Awareness activities and consultation processes with local stakeholders and potential beneficiaries are another interesting part, in the decision making chain, concerning spatial justice. It is pointed out that the beneficiaries' participation in the consultation adds no specific added value²³ whereas most of the times these procedures take place within the legal compulsion of the regulatory framework. Also, it is highlighted reluctance of the beneficiaries to participate as they believe that the consultation is a pretext. Usually, the participants are a small group of people, representing a small circle of local institutions. As a result, consultation, public debate and planning engagement, is practically being recycled and discussed among the same people.

Beyond the above typical procedures, the level of co-operation, networking and coordination among key-stakeholders as well as formal and informal actors is not effective. Often **synergies and complementarities are absent** even between two beneficiaries, while overlapping in competencies is pointed out²⁴. -The issue is that the Region and the Municipalities in most cases "fortified" themselves behind their budgets and show no positive attitude for genuine coordination.

Synthesising Dimension C: Connecting the action to procedural and distributive justice

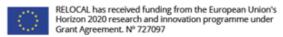
Attempting an overall assessment of the Action's impact, there is no doubt that **the final balance is positive**, in the sense that many projects and interventions would never happen if there was no Action. Also, a significant number of project studies have been funded by the Action with multiplied effects exploiting funding for infrastructure and other projects through the European Structural Funds. The Action also offered the necessary flexibility to design and implement projects that could never be included in another EU funding program in terms of eligibility.

However, it seems that the Action **did not produce a noticeable developmental foot- print** beyond solving some minor problems. In other words, the major challenge, namely the adequate preparation of the area for the transition to a different productive model beyond lignite and mines, has not been addressed. In this respect, the overall financial resources of the Action during the last 20 years, has been considered by most to be sufficient to contribute to spatial justice under different approach and preconditions obviously.

Improving access conditions for **marginalized population**, vulnerable groups and people living under urgent poverty needs, was not the focal point in the Action's SDP. It has been stressed by many that the weakness of the Action to create new opportunities and overcome the social, cultural, political and economic barriers that emerged within the crisis in particular. Additionally, **education system and health structures** have been highlighted as determinant factors of inequalities and spatial injustice. For example, many households are forced to move permanently from the rural areas to urban centers, degrading their living standards drastically in order to have access to education and health services. Similarly, the same happens for people with special disabilities or for young people talented in

Interview Quotation - Int# 7: The institutions representatives often do not furnish substantial arguments at the consultation table. Usually, the only criticism is "I don't like that..." without any productive proposal.

Interview Quotation - Int# 17: In the field of entrepreneurship for instance, there can be funds for two fairs, in two different adjacent cities instead of one which will exploit economies of scale.





the fields of sport or music. The overall view is that the Action has failed to influence these mechanisms and procedures and institutional arrangements of inequalities reproduction.

It was particularly interesting the discussion regarding the fair distribution of resources within the Region. It is widely agreed that the Action intensified intra-regional inequalities, **favoring the energy axis at expense of other areas** of the region. To this end, the Action should not only be focused on the energy axis but should be extended to the entire region. On the other hand, however, the exact opposite argument has often been stated, on the basis that **those directly affected by lignite activities should be solely those who should be strengthened and supported**. In other words, distributive and procedural justice is perceived through different perspectives within the region itself.

Large bureaucracy is identified at all levels of governance, from the upper to the lowest level of administration. This barrier can inhibit successful planning and implementation of projects and interventions from the procedural justice point of view. It has been identified by many the problems of **overlapping competencies**, the existence of several needless intermediate administrative structures, the ambiguity of "who does what" and the complex tendering and contracting system of public works. It has also stressed the need to simplify procedures and exploit modern technology which could solve many procedural justice issues in practice.

Enhancing Entrepreneurship through the Action has been an issue particularly highlighted by many. It has also been emphasized that supporting existing businesses as well as the setting up new ones, is the only strategy that can create new jobs and enable the region to overcome the crisis. It is pointed out however, that this distributive approach in practice cannot be effective to the best extent possible, given the wider context at national level. Within this context it is highlighted the high taxation, lack of access to finance and banking system, inadequate business infrastructure, poorly trained workforce, stateowned entrepreneurial mindsets, and lack of innovation culture. There is broad consensus that apart of some exceptions, such as the currently established Development Fund of Western Macedonia; the Action didn't manage to efficiently address the issues of entrepreneurship.

Other important factors that are determined and influenced in the wider context in which the Action is being developed are the **institutional context** at national and european level, the **administrative arrangements** and **political stability** within the current crisis. For example, taxation on CO_2 emissions imposed by the European Regulations, drastically affects the impact of the Action at the local level as the power plants in the region are no longer competitive. On the other hand, the complex and ineffective administrative system at national level determines the degree of autonomy of regional and local authorities and sets a restrictive framework for the impact of the Action. Political stability, which was also strongly tested during the crisis, did not create a supportive macro-environment for planning and implementing the Action at the local level. Based on the above, similar impact with small deviations could be expected in any region of the country.



6. Conclusions

There is no doubt that the launch of the Action by the Ministry of Environment and Energy 20 years ago, constitutes, in terms of the amount of funds, a positive development in the region's perspective. The Action met the region's long-standing and fair demand against the environmental degradation due to the use of a non-renewable energy resource such the lignite. Seen in this "top down" respect, the Action could promote under certain conditions, distributive and procedural spatial justice challenges. Assessing however, the overall outcomes derived by a "bottom up" approach as well as the extent to which the Action manages to pave the way for the transition of the region towards an alternative development path, one could claim that the developmental footprint, could have been much greater. In practice, there have been many small projects with no clear added value and substantial result. In other words, the Action failed to shape new major projects and form a long term strategy aiming to boost the transition process within spatial justice logic.

It is strongly agreed that through visionary leadership and clear vision of "where we want to go" a greater spatial justice could be achieved. In practice however, epidermal approaches, localism, simplistic solutions and lack of realism, absence of impact indicators and "regional culture" as well as temporary political benefits in view of the next election cycle, were the dominant spatial justice constraints. As a result, the Action was not treated by the political staff, longsighted, as a golden opportunity for the region to prepare for a smooth transition from the lignite age to a new growth production pattern.

Besides, finding show that the institutional and political context as well as the administrative arrangements at national level negatively influence the Action's spatial justice outcomes. More specifically, the major reforms in public administration involving local and regional governments were not accompanied by a precise and modern governance framework not to greater autonomy. A centre-periphery pattern seems to be dominant in all particular aspects of political, administrative and economic arrangements, associated by large bureaucracy and ineffective central administration. Within this frame, the political parties often intervene in the formation of local and regional agendas exercising "paternalistic" and "top down" practices.

Taking into account the dramatic de-carbonisation rates by 2020 and 2030, the only way to avoid making the dreadful 40% unemployment scenarios is a robust recovery plan by appropriately utilizing of all the potential financial instruments. In this direction, in the light of spatial justice, the Action should be integrated into a logical synergy with the ROP and the RIS of Western Macedonia 2014-2020, as well as other initiatives developed at European, national and regional level.

The recently initiative launched in 2017 by the EU, named "*Coal Regions in Transition Platform*", aims to enable multi-stakeholder dialogue among 41 EU regions, on national, regional and local level, in order to help them collaborate, share experiences and promote their interests on policy and financial frameworks, for successful transformation. The Platform's activities will focus, initially, on coal mining regions²⁵. The rapid modifications in

Regions with high carbon emission intensity will subsequently join, in the near future. Its actions aim to facilitate the development of strategies and projects in coal regions, notably through peer learning and exchange of best practices, in areas such as investment for structural transformation, growth and jobs, development of advanced coal technologies, as well as eco-innovative sectors. This is being done through technical assistance, information sharing and tailored bilateral discussions within two groups: (a) Post Economy and Structural Transformation and (b) Eco-Innovation and Advanced Coal Technologies. The first group covers strategies and projects focusing on the economic



the field of energy and climate change as well as the aforementioned EU's initiative, signals the start of a new era to which Western Macedonia must adapt very quickly.

In addition, at the national level, the "Hellenic Just Transition Fund", currently announced by the Greek Government will be available for the next three years to finance development actions in the lignite areas of Greece. Its resources are linked with the Greek greenhouse gas auctioning revenues, which are centralized state administration²⁶. Finally, at the regional level, the "Development Fund of Western Macedonia" (T.A.ΔΥ.Μ.) established in 2016 by the Western Macedonia Regional Council (reached its operational status in 2018), is co-financed by the Action and aims to provide support to local SMEs in the form of small low interest loans²⁷. Within this frame, the major challenge that lies ahead for the Action is to plan and implement projects that will bring investments and jobs, thus reducing the losses from decreasing the coal industry's activities, by using the existing technical knowledge and skills, as to ensure an environmentally and economically sustainable future.

Based on empirical evidence, spatial (in)justice can be found at **inter-generational and intra-generational level** in term of sustainability in the way a locality exploits the natural and non-renewable resources. The development path that the region has followed has caused during the "expansion phase" inter-generational injustice because of environmental degradation on the one hand and generating high incomes and employment on the other. By entering to the "de-carbonization" era however, incomes are constantly shrinking triggering spatial inequalities where citizens and places have been affected disproportionately. During the "de-carbonization" phase, inter-generational injustice based mainly on strict EU Regulations for reducing CO2 emissions, caused dramatic depression in the region towards its future perspective. Contrary, intra-generational injustice, seen in terms of unemployment arising and economic stagnation in the region, mitigates spatial inequalities, in comparison to other areas.

On the basis of the findings obtained from the field-research, a series of new ideas and policy recommendations could be introduced. Firstly, an upper limit in the budget of the projects should be imposed, that could not be by-passed, in order to prevent many small projects and actions of doubtful added value. Secondly, in regard to actions that concern project studies is that they should be paid only if they are associated with the project implementation, integrated in a funding program. Through this practice, the project studies will not be conducted to remain unusable but they will have a multiplying effect, responding to the need of many institutions to prepare in time and adequately project studies. Thirdly, the reliability and adequacy of all the institutions that are involved and implement projects should be ensured based on pre-defined procedures such as insurance and tax clearance as well as certification of their management sufficiency. At same time, these procedures must not be burdened bureaucratically. Fourth, funding of operational costs such

diversification of coal regions while the second group focuses on the improvement of air quality and coal-based technologies which are compatible with the long-term vision of the decarbonisation of the European economy.

²⁶ During the first period (2018-2020), 60 M€ will be available. The funding topics are related to the Region's Smart Competitiveness Strategy, as well as past development plans and proposals, promoting the development of clean energy, energy saving, circular economy, primary sector, exploitation of industrial heritage and integrated intervention programs.

Strong emphasis is being given on research and development projects with substantial added value to the local economy. Furthermore, the Fund promotes actions with considerable social impact, such as helping small and very small enterprises, especially those headed by women and/or young entrepreneurs. Initially the Fund will invest 10M € in a minimum of 200 innovative business plans.



as staff costs or covering of events' expenses should be blocked. All interventions should exhibit an investment rationale. Fifth, an independent authority for the management and monitoring should be established which will introduce an holistic approach in synergies with other funding resources, ensuring transparency and measurable results against clear pre-defined objectives and effective usage of place-based knowledge.

Finally, it should be noted that planning aiming to spatial justice is foremost a political process and choice. This requires a visionary political leadership that adequately comprehends the international, national and local challenges and efficiently responds with certain strategy, priorities and interventions. Should these priorities be politically legitimized then, the planning and implementation, on an operational and technocratic level, become easier and substantial.



7. References

- ANKO (2016), Operational Development Plan for the post-lignite period in Western Mace donia, Regional Development Agency of Western Macedonia-ANKO S.A., Kozani
- CSIL (2012), "Ex-post evaluation of investment projects Co-financed by the European Regional Development Fund (ERDF) or Cohesion Fund: The Egnatia motorway", Centre for Industrial Studies, Milan
- Region of Western Macedonia (2014), "Operational Programme of Western Macedonia, 2014-2020", Kozani
- Region of Western Macedonia (2014), "Regional Innovation Strategy-RIS of Western Macedonia, 2014-2020", Kozani
- Region of Western Macedonia (2012), Special Development Fund of Western Macedonia, 2012-2016, ANKO S.A., Kozani.
- Technical Chamber (2012), Evaluation of the transition cost of Western Macedonia at low lignite production era", Technical Chamber of Greece, Department of Western Macedonia, Kozani
- Wirth P. Mali B. & Fischer W. eds (2012), Post-Mining Regions in Central Europe: Problems, Potentials, Possibilities, OEKOM, Munich.
- WWF (2016), "Road Map for transition of Western Macedonia towards the post-lignite era", WWF Greece, Athens
- WWF (2016), "Alternative solutions of tele-heating in Western Macedonia", WWF Greece, Athens



8. Annexes

8.1 List of Interviewed Experts

- Anonymised list of experts
- Including type of expert, date and time of interview
- 1. Int# 1 Expert in Regional Planning, 17/11/2017, 10:00 a.m.
- 2. Int# 2 Expert in Operational Programmes, 17/11/2017, 13:00 a.m.
- 3. Int# 3 Person in charge for the Specific Operation Office of the Action, 5/12/2017, 10:00 a.m.
- 4. Int# 4 Expert in Development Agency, 5/12/2017, 19:30 p.m.
- 5. Int# 5 Expert in European Network and Entrepreneurship, 5/1/2018, 12:30, p.m.
- 6. Int# 6 Expert in Planning at Regional level, 21/3/2018, 9:00 a.m.
- 7. Int# 7 Researcher in Research Institution, 21/3/2018, 11:00 a.m.
- 8. Int# 8 Expert of Managing Authority of the ROP of the Region, 22/3/2018, 11:00 a.m.
- 9. Int# 9 Expert in Planning at Regional level, 27/3/2018, 10:00 a.m.
- 10. Int# 10 Academic, expert in energy sector, 28/3/018, 11:00 a.m.
- 11. Int# 11 Academic, expert in economics and innovation, 29/3/2018, 9:00 a.m.
- 12. Int# 12 Director in local administration, 2/4/2018, 11:30, a.m.
- 13. Int# 13 Environmental NGO representative, 17/4/2018, 10:00, a.m.
- 14. Int# 14 Expert of Managing Authority of the ROP of the Region, 19/4/2018, 9:00 a.m.
- 15. Int# 15 Expert of Managing Authority of the ROP of the Region, 19/4/2018, 11:00 a.m.
- 16. Int# 16 Expert of Managing Authority of the ROP of the Region, 20/4/2018, 9:00 a.m.
- 17. Int# 17 Expert of Managing Authority of the ROP of the Region, 22/3/2018, 10:00 a.m.
- 18. Int# 18 Representative of private business, 24/4/2018, 10:00 a.m.
- 19. Int# 19 Mayor, 23/8/2018, 11:00 a.m.
- 20. Int# 20 Politician at the Regional level, 31/8/2018, 10:00 a.m.

8.2 Stakeholder Interaction Table

Type of Stakeholders	Most relevant 'territorial' level they operate at	Stakeholders' ways of involvement in the project (What do we gain, what do they gain)
Local politicians	Local level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Local administration	Local Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Associations representing private businesses	Beyond Local Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Local development companies/agencies	Regional Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Non-profit/civil society organisations representing vulnerable groups	Beyond Local Level	Interviews: Insights into governance processes, ideas



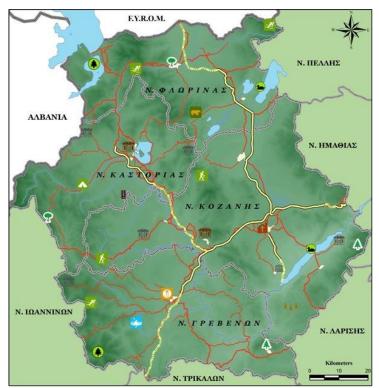
		& knowledge sharing, place base knowledge, future chal- lenges
Other local community stakeholders	Local Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Regional state offices/representations	Regional Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Cohesion Policy think tanks (national/EU-level)	Regional Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges
Colleges and universities	Regional Level	Interviews: Insights into governance processes, ideas & knowledge sharing, place base knowledge, future challenges



8.3 Map(s) and Photos



Map 2. Western Macedonia Region in the national context *Source:* https://en.wikipedia.org/wiki/Western_Macedonia



Map 3. The surface water basins of the region *Source: ANKO S.A.*





Photo 1. A mining site close to PPC facilities Source: https://www.vice.com/gr/article/53z378/ta-oryxeia-tis-dei-katapinoun-xoria-stin-ptolemaida



Photo 2: a typical facilities site of the PPC *Source: https://energypress.gr/news/dei-eimaste-antagonistikoi-stin-exoryxi-alla-o-ellinikos-lignitis-einai-ftohos*



Photo 4: Natural wealth of the region Source: Western Macedonia Regional Authority



8.4 Figures

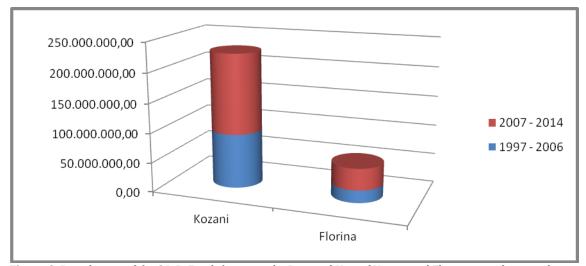
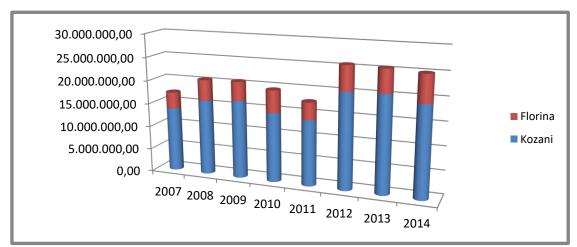


Figure 3. Distribution of the S.D.P. Funds between the Regional Unit of Kozani and Florina over the period 1997-2014

Source: own elaboration based on the data from the Western Macedonia Regional Authority



 $\textbf{Figure 4.} \ \text{Distribution of the S.D.P.} \ \text{Funds between the Regional Unit of Kozani and Florina over the period } 2007-2014$

Source: own elaboration based on the data from Western Macedonia Regional Authority



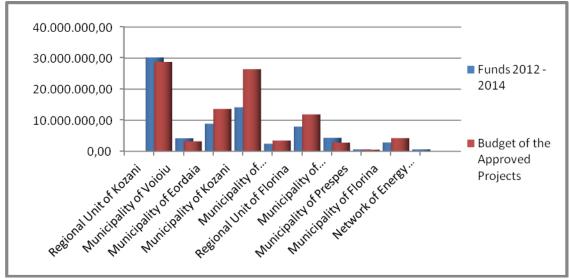


Figure 5. Distribution of the S.D.P. Funds between the energy municipalities of the Western Macedonia for the period 2012-2016

Source: own elaboration based on the data from ANKO

8.5 Tables

List of Financial Allocations for the Western Macedonia Special Development Programme for the Period 1997 - 2014				
Year	Kozani	Florina	Total	
1997 - 2006	91.966.792,85	21.006.700,64	112.973.493,49	
2007	13.786.513,01	3.494.446,82	17.280.959,83	
2008	16.089.810,00	4.448.200,00	20.538.010,00	
2009	16.674.270,00	4.033.040,00	20.707.310,00	
2010	14.787.340,23	4.740.405,73	19.527.745,96	
2011	14.042.224,00	3.631.339,00	17.673.563,00	
2012	20.467.422,71	5.262.139,06	25.729.561,77	
2013	20.644.554,10	4.917.807,95	25.562.362,05	
2014	19.288.874,42	5.794.844,19	25.083.718,61	
Total	227.747.801,32	57.328.923,39	285.076.724,71	

 $\textbf{Table 2.} \ \, \textbf{List of Financial Allocations for the Western Macedonia Special Development Programme for the Period 1997 - 2014}$

Source: ANKO S.A & UTH Research Team

	Beneficiaries (LAU)	Funds 2012 - 2014	Payment from PPC (2012 - 2013)	Budget of the Approved Projects	Rest to be paid by the PPC
		1	2	3	4=1-2
1.	Regional Unit of Kozani	30.200.425, 62	18.309.861,36	28.759.957,44	11.890.564,2 6
2.	Municipality of Voioiu	4.215.677,41	2.555.873,55	3.240.649,84	1.659.803,86
3.	Municipality of Eordaia	8.922.041,29	5.513.499,68	13.631.568,90	3.408.541,61
4.	Municipality of Kozani	14.163.164,0 6	8.482.558,35	26.425.160,11	5.680.605,71
5.	Municipality of Servies- Velvendos	2.428.416,23	1.472.295,95	3.487.893,38	956.120,28
6.	Regional Unit of Florina	7.987.395,6 1	4.554.919,53	11.901.685,83	3.432.476,08
7.	Municipality of Amynteos	4.355.853,02	2.512.270,98	2.824.623,32	1.843.582,04
8.	Municipality of Prespes	638.991,65	364.393,56	560.900,00	274.598,09
9.	Municipality of Florina	2.845.582,85	1.594.444,47	4.250.511,44	1.251.138,38
10.	Network of Energy Municipalities	618.094,72	369.444,36	141.000,00	248.650,36
	Total of SDP Fund for West- ern Macedonia	76.375.642, 46	45.729.561,79	95.223.950,26	30.646.080,6 7

Table 3. Distribution of the SDP Funds between the energy municipalities (the red areas in Map 1) of the Western Macedonia for the period 2012-2016

Source: ANKO S.A & UTH Research Team

Regional Entity	Size	Size			
	Km ²				
	2000	2008	2016		
GREECE	131,957	131,957	131,957		
Dytiki Makedonia	9,451	9,451	9,451		
Kastoria	1,720	1,720	1,720		
Florina	1,924	1,924	1,924		
Kozani	3,516	3,516	3,516		
Grevena	2,291	2,291	2,291		

Table 4: Size in Km²

Sources: ELSTAT & UTH Research Team

Regional Entity	Population			
	inhabitants	inhabitants		
	2000	2008	2016	
GREECE	10,775,627	11,060,937	10,783,748	
Dytiki Makedonia	287,156	286,696	273,843	
Kastoria	51,144	51,227	48,244	
Florina	49,502	51,120	50,473	
Kozani	154,725	152,955	147,546	
Grevena	31,785	31,394	29,985	

 Table 5: Population

Sources: EUROSTAT & UTH Research Team



Regional Entity	Population D	Population Density		
	inhabitants /	km ²		
	2000	2008	2016	
GREECE	81.7	83.8	81.7	
Dytiki Makedonia	30.4	30.3	29.0	
Kastoria	29.7	29.8	28.0	
Florina	25.7	26.6	26.2	
Kozani	44.0	43.5	41.9	
Grevena	13.9	13.7	12.8	

Table 6: Population Density

Sources: ELSTAT & UTH Research Team

Regional Entity	GDP, total economy €			
	2000	2008	2016	
GREECE	125,677,000,000	213,933,000,000	177,941,000,000*	
Dytiki Makedonia	2,889,000,000	4,852,000,000	4,337,000,000*	
Kastoria	364,000,000	601,000,000	515,000,000*	
Florina	567,000,000	953,000,000	946,000,000*	
Kozani	1,707,000,000	2,940,000,000	2,557,000,000*	
Grevena	251,000,000	358,000,000	319,000,000*	

Table 7: GDP, total economy (€)

* Year 2014

Sources: ELSTAT & UTH Research Team

Regional Entity	GDP per capita	1			
	€ / inhabitant				
	2000	2008	2016		
GREECE	11,663	19,341	16,285*		
Dytiki Makedonia	10,061	16,924	15,561*		
Kastoria	7,117	11,732	10,448*		
Florina	11,454	18,642	18,528*		
Kozani	11,032	19,221	17,270*		
Grevena	7,897	11,403	10,530*		

Table 8: GDP, total economy (%)

* Year 2014

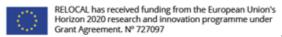
Sources: ELSTAT & UTH Research Team

Regional Entity	GDP, primary	sector		
	% GDP, total economy			
	2000	2008	2016	
GREECE	6.1	3.1	3.7*	
Dytiki Makedonia	9.4	5.0	6.3*	
Kastoria	13.5	9.3	10.4*	
Florina	14.1	7.7	9.7*	
Kozani	5.7	2.9	3.9*	
Grevena	18.3	8.4	8.4*	

Table 9: GDP, primary sector (%)

* Year 2012

Sources: ELSTAT & UTH Research Team





Regional Entity	GDP, secondary sector % GDP, total economy			
	2000	2008	2016	
GREECE	21.0	18.5	13.8*	
Dytiki Makedonia	45.2	46.7	41.1*	
Kastoria	23.4	22.6	17.6*	
Florina	45.9	49.3	40.6*	
Kozani	53.5	55.1	51.2*	
Grevena	19.1	11.7	7.8*	

Table 10: GDP, secondary sector (%)

* Year 2012

Sources: ELSTAT & UTH Research Team

Regional Entity	GDP, tertiary sector % GDP, total economy			
	GREECE	72.9	78.4	82.5*
Dytiki Makedonia	45.3	48.2	52.6*	
Kastoria	63.2	68.1	72.0*	
Florina	40.0	43.0	49.7*	
Kozani	40.8	42.0	44.9*	
Grevena	62.5	79.9	83.8*	

Table 11: GDP, tertiary sector (%)

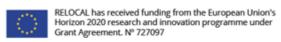
^{*} Year 2012 Sources: ELSTAT & UTH Research Team

Regional Entity	Employment, total economy		
	employees		
	2000	2008	2016
GREECE	4,580,150*	5,200,480	4,341,910**
Dytiki Makedonia	107,330*	111,970	93,850**
Kastoria	18,190*	23,060	20,020**
Florina	17,900*	22,360	17,190**
Kozani	61,720*	54,450	48,580**
Grevena	9,520*	12,100	8,060**

Table 12: Employment, total economy * Year 2001, ** Year 2012 Sources: ELSTAT & UTH Research Team

Regional Entity	Employment, primary sector		
	% employment, total economy		
	2000	2008	2016
GREECE	14.0*	10.2	11.3**
Dytiki Makedonia	17.0*	16.8	15.2**
Kastoria	12.0*	14.4	15.5**
Florina	24.3*	21.4	15.2**
Kozani	14.1*	12.2	11.4**
Grevena	32.0*	34.0	37.1**

Table 13: Employment, primary sector * Year 2001, ** Year 2012 Sources: ELSTAT & UTH Research Team





Regional Entity	Employment, secondary sector % employment, total economy			
	2000	2008	2016	
GREECE	18.4*	18.2	14.1**	
Dytiki Makedonia	30.0*	26.7	23.5**	
Kastoria	29.5*	27.1	22.8**	
Florina	23.7*	24.4	18.7**	
Kozani	33.5*	29.5	27.3**	
Grevena	19.9*	17.8	13.2**	

Table 14: Employment, secondary sector

* Year 2001, ** Year 2012

Sources: ELSTAT & UTH Research Team

Regional Entity	Employment, tertiary sector % employment, total economy			
	GREECE	67.6*	71.7	74.6**
Dytiki Makedonia	53.0*	56.5	61.3**	
Kastoria	58.5*	58.5	61.7**	
Florina	52.0*	54.2	66.1**	
Kozani	52.4*	58.3	61.3**	
Grevena	48.1*	48.3	49.8**	

Table 15: Employment, tertiary sector

^{*} Year 2001, ** Year 2012 Sources: ELSTAT & UTH Research Team

Regional Entity	Unemployment Rate			
	unemployed % economically active population			
	2000	2008	2016	
GREECE	10.8%	7.8%	26.5%*	
Dytiki Makedonia	16.2%	12.5%	27.6%*	
Kastoria	20.8%	18.6%	29.6%*	
Florina	17.7%	8.5%	24.2%*	
Kozani	14.9%	12.9%	29.9%*	
Grevena	n/a	n/a	n/a	

Table 16: Unemployment Rate

* Year 2014, ≈ almost equal to

Sources: ELSTAT & UTH Research Team

Regional Entity	Productivity, total economy			
	€/employee			
	2000	2008	2015	
GREECE	27,439≈	41,137	39,433*	
Dytiki Makedonia	26,914≈	43,333	40,426*	
Kastoria	20,011≈	26,062	25,524*	
Florina	31,676≈	42,621	43,397*	
Kozani	27,657≈	53,994	45,883*	
Grevena	26,366≈	29,587	38,213*	

Table 17: Productivity, total economy

* Year 2012, \approx almost equal to

Sources: ELSTAT & UTH Research Team

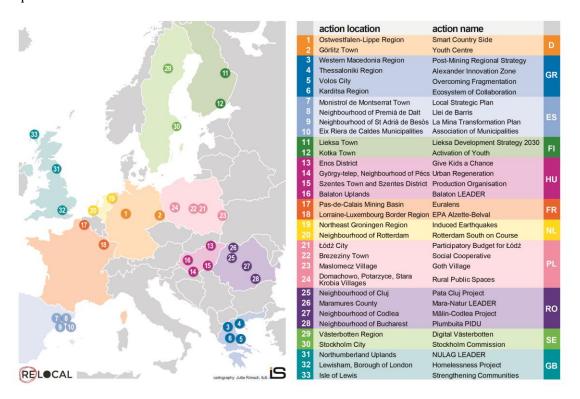


The RELOCAL Project

EU Horizon 2020 research project 'Resituating the local in cohesion and territorial development' –RELOCAL aims to identify factors that condition local accessibility of European policies, local abilities to articulate needs and equality claims and local capacities for exploiting European opportunity structures.

In the past, especially since the economic and financial crisis, the European Social Model has proven to be challenged by the emergence of spatially unjust results. The RELOCAL hypothesis is that **processes of localisation and place-based public policy** can make a positive contribution to spatial justice and democratic empowerment.

The research is based on **33 case studies** in **13 different European** countries that exemplify development challenges in terms of spatial justice. The cases were chosen to allow for a balanced representation of different institutional contexts. Based on case study findings, project partners will draw out the factors that influence the impact of placebased approaches or actions from a comparative perspective. The results are intended to facilitate a greater local orientation of cohesion, territorial development and other EU policies.



The RELOCAL project runs from October 2016 until September 2020.

Read more at https://relocal.eu

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