









TO BE A REGION THAT HAS BROKEN ITS DEPENDENT E RAISED ITS LIFE QUALITY

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WESTERN BLACK SEA DEVELOPMENT AGENCY



# 2011-2023 WESTERN BLACK SEA REGIONAL PLAN ZONGULDAK I KARABÜK I BARTIN

TO BE A REGION THAT HAS BROKEN ITS DEPENDENT ECONOMIC STRUCTURE AND

SEPTEMBER, 2013

#### **RESOLUTION STATING THAT THE TR81 WESTERN BLACK SEA**

#### **REGIONAL PLAN (2014-2023) HAS BEEN APPROVED**

#### Resolution No. 2014/1

The first two volumes of the TR81 Western Black Sea Regional Plan (2014-2023) have been approved with the resolution dated 12/30/2014 and numbered 2014/1, issued by the High Council of Regional Development, which was created under the chairmanship of the Prime Minister pursuant to the Statutory Decree on the Organization and Duties of the Ministry of Development, no 641, Article 23/A.



#### HIGH COUNCIL OF REGIONAL DEVELOPMENT

#### Resolution Date: 30.12.2014

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## PROLOGUE

Today, balancing developmental disparities between regions, ensuring sustainable development through regional and local development, and developing related tools are important issues that need to be addressed. Identifying the properties of the region, as well as its dissimilarities, uniqueness, fundamental problematic areas and development levels, and offering suggested solutions to its problems while highlighting its potentials in ensuring the region remains competitive are important in terms of achieving economic and social development on a regional basis.

Regional plans were prepared during different periods in this regard, although it has not been possible to implement them to the desired level for various reasons, and so encouraging people to embrace the plans and securing the participation of the stakeholders in the region has been difficult. Under these conditions, regional development policies have changed, and the need to administer a more transparent, flexible, dynamic and participative process has emerged. The implementation of this process supports the idea that public organizations, private industry, non-governmental organizations and universities have more voice in regional development works and need to work together within the framework of today's governance concept.

Development agencies were established in Turkey and charged with developing local and regional developmental policies, preparing regional plans and the implementation programs, increasing regionbased project preparation and implementation capacity, financing successful projects in line with the budget, and, accordingly accelerating regional development.

The purpose of development agencies is stated to be, "To develop collaboration between public institutions, the private sector and nongovernmental organizations; to ensure the onsite and effective usage of resources; to activate local potential and accelerate regional development in line

with the principles and policies stipulated in the national development plan and programs; to ensure sustainability; and to reduce developmental disparities between and within regions." The Western Black Sea Development Agency (BAKKA), which covers the Zonguldak, Karabük and Bartin Provinces, was founded in order to serve this common purpose.

The 2014–2023 Western Black Sea Regional Plan was prepared under the coordination of BAKKA, pursuant to contributions, opinions and recommendations of the related ministries, local authorities, universities, trade associations, nongovernmental organizations, and other related public bodies and organizations. The agency has engaged in studies to identify the current status of the region in this work which covers the 2014–2023 period, and has established the areas of priority that will guide the activities to be made in the coming period. The regional plans, as the fundamental strategic frameworks that guide the works of development agencies, take the form of a reference document for the drawing up of strategic plans by local authorities and plans related to development.

Confident that the Regional Plan, which is a guiding strategic document with regard to the development of our region and in terms of underlining the competitive advantages of our region will be implemented successfully and will be embraced, I'd like to congratulate the members of the Board of Directors and the Board of Development who worked on the preparation of the plan, as well as the regional stakeholders and the Agency personnel, and I hope for their continued success.

Chairman of Board of Directors of BAKKA

The purpose of the foundation of development agencies, as stated in Law no 5449 on the Foundation, Coordination and Duties of Development Agencies, is to develop collaborations between public institutions, the private sector and nongovernmental organizations, to ensure the onsite effective usage of resources, to activate local potential and to accelerate regional development in line with the principles and policies stipulated in the national development plan and programs, to ensure sustainability, and to reduce developmental disparities between and within regions.

In this regard, the Western Black Sea Development Agency (BAKKA) was founded in the TR81 Level 2 Region covering the Zonguldak, Bartin and Karabük provinces, with headquarters in Zonguldak, upon the enactment of Cabinet Resolution no 2009/15236, published in Official Gazette no 27299, dated July 25, 2009.

The "2014–2023 Western Black Sea Regional Plan" prepared by BAKKA is a basic document that evaluates Zonguldak, Karabük and Bartin provinces with a holistic approach within the TR81 Level 2 Region, presents the current status and needs of the region, adopts the participation principle, and identifies the strategies and goals of the development aimed to be realized in economic and sociocultural areas.

The Western Black Sea Regional Plan aims to achieve a perspective and unity of goals that will serve to increase the collaborative culture, with focus on participation between the private sector, public institutions and nongovernmental organizations, and activating local dynamics, and that will be adopted by all segments. The experiences observed around the world indicate that broad participation and adoption plays a very important role in the success of plans and programs, from the preparation, implementation and monitoring stages to the evaluation stage. To this end, our agency pays attention to ensuring that participation is at the highest level within the scope of plan preparation works, and to evaluating the opinions and suggestions of stakeholders in our region, with the goal of preparing a strategic document that will be adopted by all segments.

This plan will also contribute to realization of the identified priorities, and will bring about the economic and social development of the region, while forming the basis for Financial Support Programs to projects aimed at increasing employment potential in the region.

We would like to thank to our Agency experts for their work and contributions to the preparation of the 2014–2023 Western Black Sea Region Plan, as well as to:

- Our valuable Members of the Board of Directors,
- The Chairman and Members of the Development Board,
- participated surveys and interviews.

The Western Black Sea Region Plan, which covers the 2014–2023 period, targets the sustainable management of regional resources, making them a guide for the works carried out in the region. The plan is a fundamental policy document that described the goals and priorities of the development strategy that will be realized in the region through a holistic approach in economic, social and cultural areas. The plan will also contribute to the realization of the identified priorities, and will form the basis of Financial Support Programs in support of projects that will increase employment potential and aid in development.



 The District Governorates, Municipalities and all Public Bodies and Organizations, Nongovernmental Organizations, Trade Associations, Representatives of the Private Industry, and all stakeholders in the region who took part in the organization and workshops, who stated their opinions, and who

> Secretariat General of Western Black Sea Development Agency

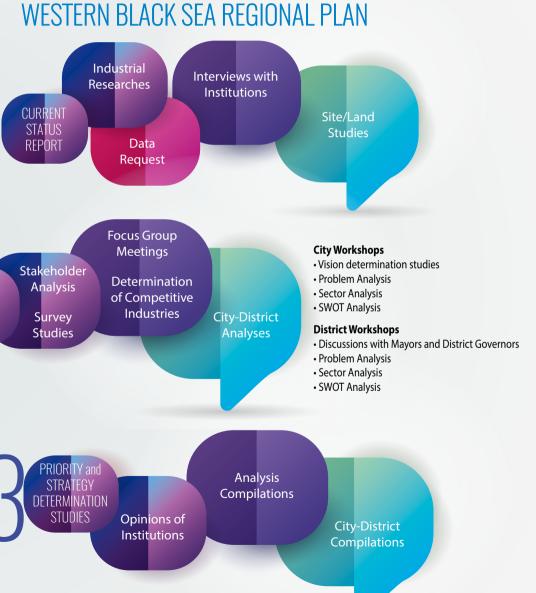
# PREPARATIONS FOR THE WESTERN BLACK SEA REGIONAL PLAN, METHODS AND PARTICIPATION

The preparation of the regional plan is carried out in three stages: creating the current status report; carrying out analyses; and identifying strategies. Feedback was received from regional stakeholders in all three stages, which are based on participation, and works continued pursuant to these opinions. The plan works that carried out during the competitiveness analysis meetings and the provincial and district workshops were also brought to the agenda of the Development Board Meeting. Within the scope of plan works, the opinions and suggestions of some 500 people, including the participants of the Development Board Meeting, were obtained. Sectoral researches, data requests from organizations and institutions, interviews with institutions and site/land studies were conducted while preparing the Current Status Analysis.

The sectoral research covers scientific works conducted or procured by the agency related to the more prominent industries in the region, in addition to the works conducted by related ministries. Synthesizing the information on the current status, the Current Status Analysis relies on data and opinions garnered from public bodies and such regional stakeholders as KOSGEB, universities, labor unions, organized industrial zone (OIZ) directorates, nongovernmental organizations, upper scale strategic documents and sectoral examinations.

The section about Development Axis, Priorities and Measures, and Current Status Analysis was prepared based on the findings at hand, and contains detailed descriptions of the measures and policies that hold strategic significance in the Western Black Sea Region's efforts to develop and to achieve the established priorities. When drafting this section, many sources including the previously prepared strategic documents about the country as well as provincial and district analyses were referred to.

The analyses section contains the Provincial and District Analyses of the current status of each district in the region, the industry-specific strategies established pursuant to the current status, and the Industry Identification, Prioritization and Competitiveness Analysis works demonstrating the competitive status of the industries in the region.





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# PROCESS OF 2014 – 2023

## **DEVELOPMENT AXIS 1** SUSTAINABLE SOCIAL DEVELOPMENT



- Supporting Aquaculture and Apiculture Activities
- **CREATING A HEALTHY** and BALANCED

**ENVIRONMENT** 

- Preventing Environmental Pollution Arising from False Urban Usage
- Taking Measures to Remove Industry-Based Environmental Pollution
- Taking Measures for the Storage and Disposal of Waste
- Increasing Awareness with Regards to Environmental Pollution







- **ACTIVITIES**
- REINFORCING TRANSPORTATION **NFRASTRUCTURE** and LOGISTICS

POTENTIAL





## VISION, TO BE A REGION THAT HAS BROKEN ITS DEPENDENT ECONOMIC STRUCTURE AND RAISED ITS LIFE QUALITY

**DEVELOPMENT AXIS 2** SECTORAL VARIATION SUPPORTED BY INNOVATION and ENTREPRENEURSHIP

> Creating a Recycling Sector • Developing a Furniture and Forestry Products Sector • Improving the Investment Climate and Increasing the Capacity of SMEs

• Reinforcing the Iron and Steel Industry and Related Sub-Industries Ensuring Efficiency in the Mining Sector Ensuring Energy Efficiency Commencing Clustering, Industrial Symbiosis and Branding Works

Realizing the Filyos Valley Project Ensuring Integration with National and International Networks Improving Regional and Urban Transportation Systems

 Identifying Thematic Routes between Touristic Regions • Eliminating the Shortage of Qualified Personnel • Increasing Quality, Capacity and Variety in Accommodation Ensuring Promotion and Branding Skills

## 2014-2023 WESTERN BLACK SEA

## LOCALISAED PRIORITIES

TO BECOME A REGION THAT HAS BROKEN ITS DEPENDENT ECONOMIC STRUCTURE AND INCREASED ITS LIFE OUALITY

## **DEVELOPMENT AXIS-I**

SECTORAL VARIATION SUPPORTED BY INNOVATION AND ENTREPRENEURSHIP

## DEVELOPMENT AXIS-II SUSTAINABLE SOCIAL DEVELOPMENT

#### Priority 1 Ensuring Sectoral Variation

Measure 1.1 Creation of a recycling sector Measure 1.2 Development of furniture and forestry products Measure 1.3 Improvement of investment environment and increasing the capacity of SMEs

#### Priority 2 Increasing the Competitive Power of the Current Industrial Activities

Measure 2.1 Reinforcement of iron & steel sector and its sub-sectors Measure 2.2 Providing productivity in the mining sector Measure 2.3 Providing energy productivity Measure 2.4 Commencement of aggregation industrial symbiosis and branding studies

#### Priority 3 Reinforcing Transportation, Infrastructure and Logistics Opportunities

Measure 3.1 Commencement of Filyos Valley Project Measure 3.2 Providing integration with national and international networks Measure 3.3 Improvement of regional and urban systems

#### Priority 4 Varying and Developing Tourism

Measure 4.1 Determination of thematic routes between tourism regions Measure 4.2 Elimination of the need for gualified personnel Measure 4.3 Increasing the quality, capacity and variety of accommodation Measure 4.4 Providing promotion and branding skills

#### Priority 5 Improving the Quality of Residences and Enhancing Life Quality in the Settlements

Measure 5.1 Moving the industrial institutions from urban areas to upstate

#### Measure 5.2

Making urban areas livable Measure 5.3 Taking measures towards settlement areas Measure 5.4 Generalization of handicapped friendly city applications

#### Priority 6 Ensuring Social Development

Measure 6.1 Increasing occupational health and safety applications Measure 6.2 Providing social inclusion of disadvantages people Measure 6.3 Increasing the preferability of the region in education and health Measure 6.4. Taking measures to increase the employment capacity of women Measure 6.5 Increasing the capacity of human resources and making information production sustainable

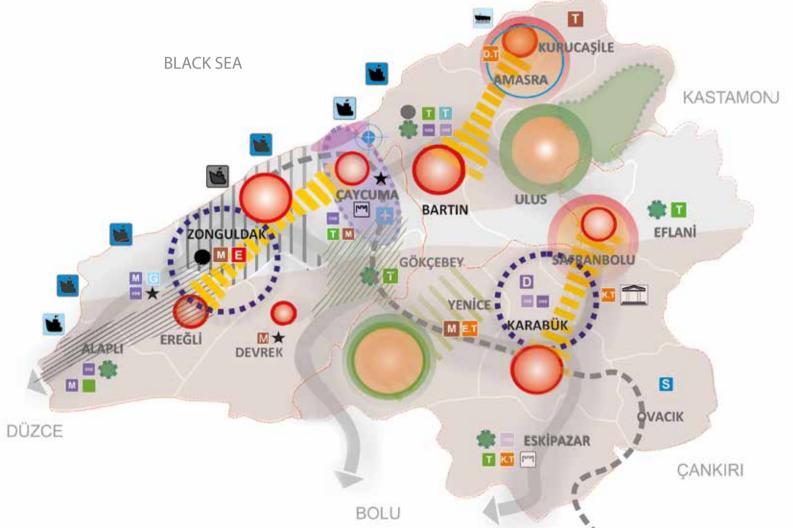
#### Priority / Ensuring Rural Development

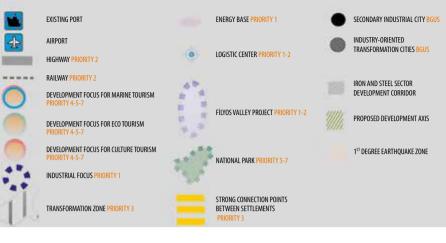
Measure 7.1 Making small and dispersed area structures arable Measure 7.2 Development of agricultural activities Measure 7.3 Development of non-agricultural economic activities in the countryside Measure 7.4 Development of Seedling-Sapling production, greenhouse and organic agricultural activities Measure 7.5. Supporting Aquaculture and Apiculture Activities

## Priority 8 Creating a Healthy and Balanced Environment

Measure 8.1 Prevention of environment pollution resulting from inappropriate urban usage Measure 8.2 Taking measures to remove industrial environmental pollution Measure 8.3 Taking measures for the storage and disposal of waste Measure 8.4 Increasing the awareness of environment pollution







# VISION AND DEVELOPMENT AXES

The vision for the 2014–2023 West Back Sea Regional Plan has been identified as "BECOMING A REGION WHICH HAS BROKEN ITS DEPENDENT ECONOMIC CONDITION AND RAISED ITS LIFE OUALITY". The three fundamental principles that are considered as the basis for the achievement of this vision are as follows:

- MULTI-INDUSTRY
- PARTICIPATION
- SUSTAINABLE DEVELOPMENT

Two fundamental development axes have been established within the scope of the plan, which are "SUSTAINABLE SOCIAL DEVELOPMENT" and "SECTORAL VARIATION, SUPPORTED BY INNOVATION AND ENTREPRENEURSHIP" Here are the priorities that have been identified in relation to these axes:

1. Ensuring Sectoral Variation 2. Increasing the Competitive Power of the Current Industrial Activities 3. Reinforcing Transportation, Infrastructure and Logistics Opportunities 4. Varying and Developing Tourism 5. Improving the Quality of Residences and Enhancing Life Quality in the Settlements 6.Ensuring Social Development 7. Ensuring Rural Development 8. Creating a Healthy and Balanced Environment

## DOCUMENTS FORMING THE BASIS OF THE WESTERN BLACK SEA REGION PLAN

The regional plans that are prepared in order to position the regional economy on a global and national scale, and to identify the roles that it can undertake need to be based on national strategy documents and upper scale plans prepared for the purpose by different organizations. National and regional works were utilized under the scope of the Western Black Sea Region Plan to establish the relationship between the upper scale plans and strategies and lower scale plans:

The Tenth Development Plan prepared by the Ministry of Development; the Turkey Industrial Strategy Document and the Turkey Iron and Steel and Nonferrous Metals Industry Strategy Document and Action Plan prepared by the Ministry of Science, Industry and Technology; the Turkey Export Strategy and Action Plan, prepared by the Ministry of Economy; the National Science, Technology and Innovation Strategy, prepared by TÜBİTAK (The Scientific and Technological Research Council of Turkey); the Energy Efficiency Strategy Document, issued by the Ministry of Energy and Natural Resources; the Turkey Transportation and Communication Strategy, prepared by the Ministry of Transportation; the KENTGES Integrated Urban Development Strategy and Action Plan, conducted by the Ministry of Environment and Urban Planning; the Turkey Organic Agriculture Strategic Plan, issued by the Ministry of Food, Agriculture and Livestock; the National Climate Change Strategy Document, issued by the Ministry of Environment and Forestry; the Zonguldak-Bartın-Karabük (ZBK) Regional Development Plan, Zonguldak-Bartın-Karabük Landscaping Plan with 1/100,000 Scale, 2010–2013 Western Black Sea Region Plan and the Turkey Tourism Strategy Document, issued by the Ministry of Culture and Tourism; as well as the strategy documents and survey reports conducted by organizations and institutions carrying out activities at a regional level, are among the works that were taken into account.

# **GENERAL OVERVIEW OF THE REGION**

The Western Black Sea Region covers Zonguldak, as well as Bartin – a former district of Zonguldak that eventually became a province in 1991 – and Karabük, which also used to be a district of Zonguldak but became a province in 1995. The region covers an area of 9,493.04 km<sup>2</sup>, excluding the lakes, and has a total population of 1,020,957, comprising 601,567 in Zonguldak, 189,139 in Bartin and 230,251 in Karabük, according to 2013 data. The region neighbors the TR42 East Marmara Region, comprising the Bolu, Düzce, Kocaeli, Sakarya and Yalova Provinces, to the south west, and the TR82 North Anatolia Region, comprising the Kastamonu, Çankırı and Sinop Provinces, to the east.

Works conducted by the Ministry of Development were taken as the basis when examining the levels of development in the regional provinces, which were measured with the help of variables selected from different areas in a study entitled, "Research on the Order of Socioeconomic Development of Provinces and Regions" (SEGE-2011) prepared in 2003 and updated by the Ministry of Development in 2011. The provinces were categorized based on the results of these measurements and analyses, and groups of provinces with the same properties were identified. Variables such as demographic indicators, training indicators, competitive and innovative capacity indicators, life quality indicators and accessibility

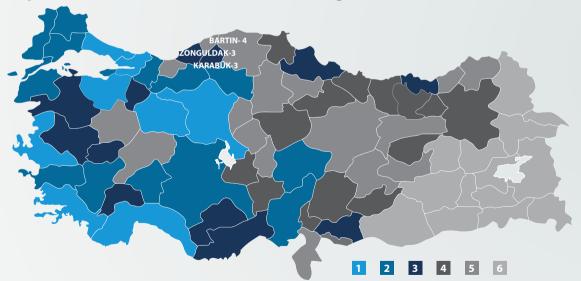
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indicators were used, according to the components of the improvement/development concept to be measured. The works conducted based on these variables ranked Zonguldak 29th among 81 provinces, Karabük 28th and Bartın 48th. Furthermore, the Western Black Sea Region was found to rank 22nd among the 26 regions in Turkey in a study of regional shares on a sectoral basis prepared by the Turkish Statistical Institute (TÜİK).

The Provinces are divided into six divisions, as shown on the map below according to their level of economic and social development, pursuant to the SEGE work updated by the Ministry of Development in 2011. The main purpose of the Regional Incentive Practices conducted by the Ministry of Economy is to increase the production and export potential of provinces, and to reduce the disparities in development among the provinces. From among the provinces in the region, Zonguldak and Karabük are located in the 3rd and Bartin is located in the 4th region in the New Incentive System.

#### Map 1. Incentive Levels of Provinces in the TR81 Region



Source: Ministry of Development (2011)

The region is known for its rich hard coal, its underground resources and its consequent iron and steel industry. Although the industrial activities in the region still rely heavily on mining and the iron and steel sector, a reduction has been observed in employment ratios owing to issues encountered in the

mining sector over time. While the share of mining in all industries was 49 percent in 2000, this dropped to 32 percent in 2009 and 25 percent in 2013. Discussions with bodies and organizations in the region revealed that unemployment is the largest problem in the region, and the issues encountered in the mining sector have played a major role in the rise of unemployment and, consequently, in the growth of financial insecurity.

Unlike the mining sector, which has been facing problems for long years (though the situation has come to light only in recent years), iron and steel sector as well as the sector concerning the related sub-industry products have been continuously increasing their shares in the economy of the region. Achieving more rapid development in recent years, this sector offers significant hope for the region. According to data from the Turkey Exporters Assembly, around 70 percent of regional exports were made by the steel sector in 2012.

Other than these two dominant industries, the share of furniture and forestry products and energy in the regional economy have also witnessed an increase, while agricultural have only minor significance in the Western Black Sea Region's economy. According to data from TÜİK, the share of the agricultural sector in the region in 2010 was just 5.8 percent in terms of gross added value. The low level of agricultural activity is a result of the topography of the region and its unsuitability for mechanical agriculture, and because the limited agricultural lands that are available have a fragmented and loose structure. The agriculture and livestock activities that are currently being conducted are at the scale of small-sized enterprises, and so provide little economic income to the region.

According to 2012 ADNKS system data obtained from TÜİK, the rural population is higher than the urban population in the Bartin and Zonguldak provinces, however, since the towns of Kozlu and Kilimli, which are connected to Zonguldak, obtained a district status at the end of 2012, the ADNKS data for 2013 shows that only Bartin has a larger rural than urban population. As distances are short, and therefore the urban and rural areas in the provinces show an integrated structure, a significant proportion of the population working in the cities live in rural areas. Considering the issues related to mining in the region, where urban population and rural population live close to each other, and the consequent unemployment, agricultural activities need to be supported. Choosing the most appropriate alternative, such as organic agriculture, greenhouse cultivation, fishing or apiculture, to utilizing the potentials of the region in terms of climate, soil and geographical properties, with the goal of increasing agricultural efficiency, are actions that will prove useful in supporting rural development.



Another industry in the region that can support rural activities is tourism. Some 63 percent of the region is covered by forests and grasslands, containing many assets that are suitable for nature tourism, and which may support rural development. The Küre Mountain National Park and the Yenice Forest are just two of these assets. The region is suitable for culture-history-congress and beach tourism, in addition to nature tourism. Safranbolu, named as a "World Heritage City" by UNESCO, and Amasra Castle, which is included on the World Heritage Provisional List, are at such a level that they can be considered a tourism brand. The development of the tourism sector, which may undertake a significant role in the development of the region, may be possible with the elimination of certain existing issues, among which can be counted the insufficient transportation and accommodation, as well as the lack of promotional activities and qualified personnel, as the main issues. Another issue is environmental pollution, which affects both livability and tourism.

As infrastructure hasn't been given the necessary significance in the region owing to years of haphazard urbanization and industrialization, the consequent environmental pollution is on a significant scale. In terms of the means of transportation that can be considered under infrastructure, it is apparent that the region offers much variety with regards to land, sea, rail and air.

Within the region, the land route axes are only partially adequate, and additional investments are required in order to increase accessibility within the region. Currently, air transport is not at a sufficient level. There are currently a total of six sea ports in the region, four of which are in Zonguldak and two in Bartın, and other than these, there are two additional port projects planned for Zonguldak, one of which is the Alport Port Project, planned for Alaplı, and the other is the Filyos Port Project, which is aimed to have an ultimate capacity of 25 million tons. The Filyos Port Project will be realized in the Çaycuma District of Zonguldak within the scope of the larger Filyos Valley Project, which is intended to serve as an Industrial Symbiosis project for the industrial investments to be made in the region, and which is very important for the Western Black Sea Region, and for Turkey as a whole in this regard.

It is apparent that the education opportunities in the region are close to the Turkish average at a primary and secondary level. In terms of education opportunities offered and in terms of social structure, the region has become gradually more positive after the founding of Bülent Ecevit University in 1992, Karabük University in 2007 and finally Bartın University in 2008.

The region is somewhat lacking in terms of access to health services and social services. The population in the region is quite old, according to 2012 data from TÜİK, and the services provided for this aged are

quite limited. There are areas of response that need to be considered under scope of livability in the region where insight into urbanization could not be fully achieved. Improving education and health services, increasing social and cultural utility areas, offering reasonable opportunities for all members of the public and creating new business opportunities, particularly to keep the well-trained young population in the region, are necessary if social development is to be ensured. Unemployment stands as one of the most significant problems in the region, standing at 53.9 percent, with only 67 in every 100 men and 42 in every 100 women in work. The total unemployment rate in the region is 7.3 percent, standing at 6.5 among men and 8.6 among women.

The highest unemployment rate in the region is among women aged between 15 and 24, and it is apparent that it is not possible to increase employment without increasing opportunities for women. For this purpose, it is necessary to raise the level of education among women and to develop training, incentive and entrepreneurship programs for the employment of women with a low level of education.

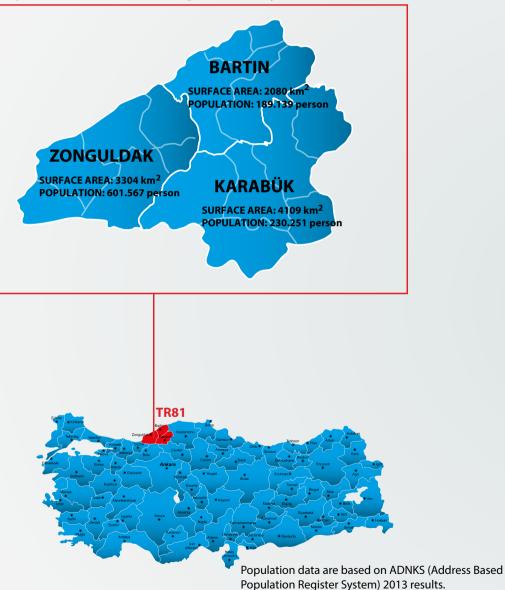
# THE LOCATION OF THE REGION IN TURKEY

The Nomenclature of Units for Territorial Statistics (NUTS) report was prepared under the coordination of the Ministry of Development and with contributions from the State Statistics Institute Head Office as part of the acquis implemented by the European Union on a regional scale. The NUTS were compiled for the entire country, collecting and recording regional statistics, making socioeconomic analyses of each region, identifying a framework for regional policies and creating a comparable statistical database in accordance with the European Union Regional Statistics System. In the NUTS classification, provinces were defined as "Level 3", and the regions covering neighboring provinces with common economic, social and geographical features are grouped as "Level 1" and "Level 2", based on the regional development plans and the relevant provinces' population sizes. In this way, a hierarchical Nomenclature of Units for Territorial Statistics was developed.

As a result of this work, 26 Statistical Region Units were defined as Level 2 and the resolution of the Cabinet no 2002/4720, dated September 22, 2002 was published in the Official Gazette. Covering the Zonguldak, Karabük and Bartın provinces, the Western Black Sea Region is referred to as a **TR81 Level 2 Region** under NUTS.



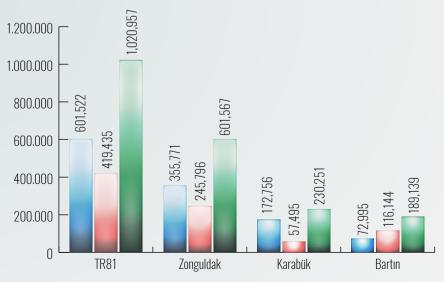




The Western Black Sea Region neighbors the TR42 East Marmara Region, comprising the Bolu, Düzce, Kocaeli, Sakarya and Yalova Provinces to the south west, and the TR82 North Anatolia Region, comprising the Kastamonu, Çankırı and Sinop Provinces to the east, and is bordered by the Black Sea to the north. Covering Zonguldak as well as Bartın – a former district of Zonguldak that became a province in 1991 – and Karabük, which also used to be a district of Zonguldak but became a province in 1995, the region has a total surface area of 9,493.04 km2. According to data from ADNKS (address-based register system) TÜİK for 2013, the total population was 1,020,957, spread fairly equally between the urban and rural populations.

According to 2012 ADNKS system data obtained from TÜİK, the rural population is higher than the urban population in the Bartın and Zonguldak provinces, however, since the towns of Kozlu and Kilimli, which are connected to Zonguldak, were granted the status of district in 2012, the ADNKS data for 2013 shows that only the rural population of Bartın is greater than its urban population. As distances are short, and therefore urban and rural areas in the provinces show an integrated structure, a significant part of the population working in the cities live in rural areas. The region has 40 municipalities, 18 districts and 921 villages.

#### Graphic 1: Western Black Sea Region 2013 ADNKS Results







# GENERAL OVERVIEW OF THE REGION'S ECONOMIC AND SOCIAL STRUCTURE

There are two basic industries that determine economic activities in the Western Black Sea Region. The first is mining which dates back to mid-19th century, and the second is iron and steel.

The leading determining actor in hard coal production since 1983 has been the Turkish Hard Coal Enterprises (TTK). Production needs to be carried out in the area in which the mine is located, since producers have no choice of location in hard coal production, and so hard coal investments in Turkey are concentrated in the Zonguldak Basin. The limits of the hard coal basin, known as Havza-i Fahmiye, were established with the Teskere-i Samiye (Resolution of the Prime Ministry) no 289, dated 17 January 1326 (Gregorian 1910), and acquisition of immovable property by way of ownership was forbidden within these limits, which were extended in 1958. For this reason, private ownership is currently quite limited in Zonguldak and this has raised various issues in different areas, particularly urbanization.

Industrial activities in the region still rely heavily on mining and the iron and steel sector, although employment figures have witnessed a drop owing to issues encountered in mining over time. Deep underground coal mining is conducted in the Zonguldak Basin, where the complex geological structure prevents full mechanization in production, meaning that extraction is based on manpower in an effort intensive form. Worker and energy costs constitute the main factors in the mining sector, which was affected by the privatization activities that commenced in the 1980s. At the time, some of the production began to be realized by private enterprises, and companies began to work on a royalty basis, involving such unscrupulous acts as reducing workers' wages and cutting back on work safety with the aim of increasing profit.

The issues observed in the mining sector, which has been a source of employment in the region for many years, brought about a reduction in employment rates in recent years. While the share of mining in all industries was 49 percent in 2000, this figure had reduced to 32 percent in 2009 and further to 25 percent in 2013.

In contrast to the issues observed in mining, the share of iron and steel and related sub-industry products in the region's economy is gradually increasing. The Western Black Sea Region has an important role to play in achieving the vision of "Becoming a Production Base for Products with High Added Value in the Iron & Steel and Nonferrous Metals sector" cited in the Turkey Iron & Steel and Nonferrous Metals Industry Strategy Document and Action Plan prepared by the Ministry of Science, Industry and Technology. The region has two large integrated iron and steel facilities that carry out activities in iron and steel production, and which have gradually more prominent in their field: ERDEMIR T.A.Ş., located in the Zonguldak Ereğli District; and KARDEMIR A.Ş., located in Karabük. The main reason why the iron and steel sector – one of the largest consumers of energy – is concentrated in the Western Black Sea Region is that it is close to the hard coal resources. Sectoral sub-diffractions began to appear in the region as the integrated facilities were established, and the region became one of the most important areas in the iron and steel sector, and this can be clearly observed in employment rates. The number of people working in the iron and steel sector in the region as of 2012 is 12,887, with 52 percent of employment in the iron and steel sector in the region being provided by ERDEMIR, which employs 6,701 people. KARDEMIR, on the other hand, provides 24 percent of employment in the sector, with 3,072 employees.

In addition to ERDEMİR T.A.Ş. and KARDEMİR A.Ş., there are many small- and medium-sized enterprises (SMEs) carrying out activities in the iron and steel sector. The most important industry, which has been designed and whose infrastructure has been prepared in relation to the iron and steel sector in the region, is shipbuilding. However, considering the issues observed in the shipbuilding sector, regional tendencies and the significance of the increase in scrap usage, which is also addressed in the Input Supply Strategy (GİTES), the importance of specializing in the shipbreaking sector for the region is clear.

One should keep in mind that increasing the production of machinery, which has high added value as a sub-industry, the shipbreaking sector and auto sub-industry products will provide positive results for the region. In this regard, creating a culture of joint movement among SMEs, providing the necessary technical support via the universities in the region, establishing collaborations between universities, industry and the public, and founding Research and Development Centers and laboratories are considered to be applications with the ability to resolve issues related to employment and migration in the region.

In addition to these, the activities of SMEs must be shaped in particular with a clustering approach. In this regard, clustering approaches must be developed particularly in the iron and steel, yacht and ship building, and machine production/automotive sectors.

Another sector with potential in the region other than iron and steel is the furniture and forestry products sector. Failure to ensure specialization or employee qualifications are among the problems faced by enterprises in this sector, in which issues regarding continuity of work related to the limited employment structure of the region are encountered. Key actors in the value chain, such as suppliers of



raw materials, are lacking in the region, and need to be attracted to the region if the sector, which has potential, but is underutilized, is to be developed.

Another sector that may undertake a significant role in the economic and social development of the Western Black Sea Region is tourism. If the problems related to transportation and accommodation can be resolved, and qualified people who speak a second language can be raised via the existing Tourism and Hotel Management departments, the region has the potential to become a significant center of attraction in terms of congress, nature, history and alternative tourism. The diversification and development of tourism in the region, which falls under scope of the Western Black Sea Beach Corridor project, as addressed in the Tourism 2023 Strategy prepared by the Ministry of Culture and Tourism, have been established as priorities. The region is covered predominantly (63%) by forest and grasslands, and has many assets that are suitable for nature tourism, and which may also support rural development. The Küre Mountain National Park and Yenice Forest, which have been listed among the 122 most important flora areas in Turkey by the World Wildlife Foundation (WWF), are just two of the above-mentioned assets. The region is also suitable for culture-history-congress and beach tourism. Safranbolu, named a "World Heritage City" by UNESCO, and Amasra, which is known for its historical and natural beauties, are among the sites with potential to have great significance in the scope of branding in tourism. Areas suitable for agriculture are quite limited in the region, and so agricultural and livestock activities are conducted only in a few areas, and generally on at the scale of small-sized enterprises. In this regard, they bring little economic income to the region. Considering the issues in mining and the consequent unemployment, it is clear that agricultural activities need to be supported. Choosing the most suitable alternatives, such as organic agriculture, greenhouse cultivation, fishing and apiculture, for the climate, soil structure and potentials of the region in order to increase agricultural efficiency are actions that will prove useful in supporting rural development.

The universities in the region play a major role in shaping the future of the mining and iron and steel sectors, which are among the leading sectors in the region, and the developing tourism, logistics and shipbuilding sectors. It is very important that young people who have graduated or will graduate from departments such as international relations, human resources management, international logistics and trade, automotive engineering, metallurgy and material engineering, mining engineering, shipbuilding, mechatronic engineering and environment engineering, all of which are currently available, or whose foundation would be useful in the Bülent Ecevit University which was founded in 1992, Karabük University, which was founded in 2007, and Bartın University which was founded in 2008, enter into employment in the region and have a voice in production.

While the Western Black Sea Region has a population of 1,020,957 according to the Address Based Register System for 2013, the rate of urban population is 58.92 percent. The only province in which the rural population is higher than the urban population is Bartın. As distances are short, the urban and rural areas in the provinces show an integrated structure, and a significant proportion of the population working in the cities continue to live in rural areas.

The female population rate is above the country's average at 50.39 percent, while the highest unemployment is observed among women aged between 15 and 24. Unemployment is among the key issues in the region, and increasing the employment rate is not possible without increasing female employment.

The region is at an insufficient level in terms of access to health and social services. The old people dependence rate, measured as the ratio of people aged 65 or above to those aged 15–64 in the region, is above the average for Turkey at 14.50 percent. In addition to old people, the number of handicapped people is also high in the region, and services for this group are quite limited. There are areas of response that need to be considered under scope of livability in the region, which is still lacking the understanding of urbanization. There are serious problems related to urbanization in the region, as the industrialization process is occurring faster than the urbanization process. The fact that the region has a challenging topography, in addition to the haphazard urbanization, has caused the insufficiencies of infrastructure in the region to reach a serious scale.

Improving education and health services, encouraging of increasing social and cultural utility areas, offering reasonable opportunities to all the people living in society and taking measures to keep in particular the well-trained young population in the region are targeted in order to ensure social development.

In the light of all these factors, breaking the dependence of the economic structure in the region on the mining and iron and steel sectors, and creating new areas of employment in other sectors in which there is potential or that are already developing in the region are vital. The goals and strategies underlined in the plan have been selected carefully and have been developed with the goal of securing the future of the region.





# VOLUME 1 CURRENT STATUS ANALYSIS

# **VOLUME 1 - CURRENT STATUS ANALYSIS REPORT 1. ECONOMIC STRUCTURE**

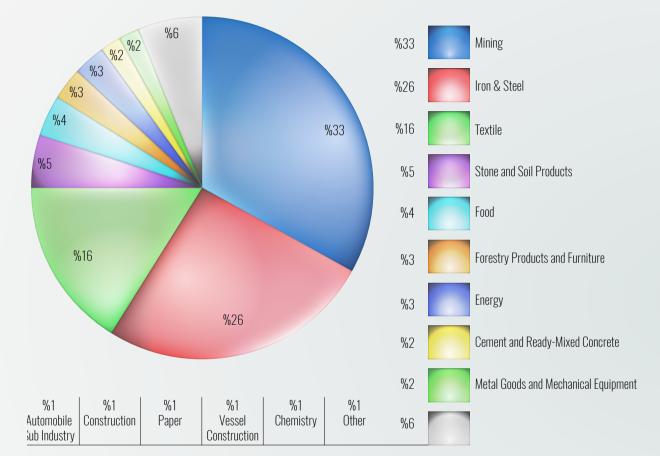
The Western Black Sea Region has maintained its existence through its mining activities and the consequent iron and steel sector, having developed and grown based on these industries. Since the 1940s, the mining and iron and steel sectors have driven the development of the region as the leading providers of employment. However, the general lack of consideration for industries other than mining have led to a single industry-based economic structure, and so entrepreneurship has been inadequate, and other sectors have failed to develop. It is imperative that industries with high competitiveness and development potential be identified in order to break the prevailing single-industry structure.

The purpose of the Western Black Sea Region Plan is to identify strategies to break the dependent economic structure in the region, and a comprehensive economic analysis of the region must be made in order to establish strategies in a sound manner. In Economic Structure, as the first chapter of the Current Status Analysis, all Industries with Development Potential and Industries that Need Transformation, as well as the region's Investment Climate, are addressed.

The following subjects are addressed in respective order in the economic structure, with the intention being to keep the finger on the pulse of the region:

- EXAMINATION OF INDUSTRIES
- FOREIGN TRADE
- INVESTMENT CLIMATE IN THE WESTERN BLACK SEA REGION





#### Graphic 2. 2013 Industry-Specific Employment Rates

Source: Provincial Directorates of Science, Industry and Technology, 2013

First of all, the current status of industry and SWOT Analyses are presented under the title of Economic Structure, which is the first chapter in the Current Status Analysis. In this chapter, all industries with high competitiveness and development potential, as well as those requiring transformation, are addressed:

Mining
 Iron and Steel
 Furniture and Forestry Products
 Energy
 Agriculture
 Tourism
 Structure

#### 1.1. MINING

The Western Black Sea Region is rich in underground resources. There are significant reserves of quartz sand and quartzite, which are used as raw materials by glass manufacturing industries, in the region, according to data obtained from the General Directorate of Mineral Research and Exploration (MTA), followed by hard coal. The region has failed to utilize certain mineral deposits other than hard coal, despite the presence of rich underground resources.

Quartz sand is used in the glass sector, in the production of crystal goods and in the ceramics sector, and utilizing the reserves in the region, where there are major enterprises carrying out activities in the construction materials sector, could contribute to the region in terms of employment and revenue in the long term.

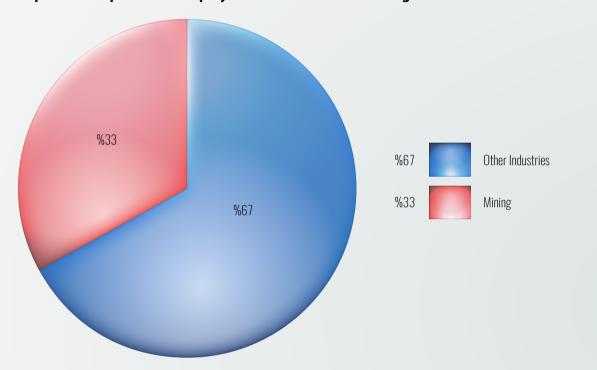
Used for different purposes in the iron and steel sector, quartzite stands out as another mineral that needs to be utilized, considering the many iron and steel enterprises operating in the region.

Some 95 percent of Turkey's bauxite deposits can be found in the Taurus belt. Used in the production of aluminum, corrosive materials, aluminum cement, refractor bricks, plaster and in the chemical sector, bauxite is the only raw material that is used in aluminum production on an industrial scale. The most important bauxite resources in the country other than those in the Taurus belt are located in the Kokaksu vicinity of Zonguldak.

Another mineral resource in the region is the fire-clay used to make refractor materials, which have a wide range of use, from coal ovens to heavy industrial ovens.

There are a total of 85 enterprises engaged in mining in the region, and these enterprises employ 16,877 people, with 57 of the 83 such enterprises across the region engaged in coal extraction.







which placed Zonguldak 9th and Karabük 12th in the country, although the region's provinces are expected to rank higher as a result of the ongoing port and railway investments. According to data from the Turkey Exporters Assembly, around 70 percent of the value of exports from the region were steel.

The number of people working in the iron and steel sector in the region was 12,887 in 2012, with 52 percent of employment in the iron and steel sector in the region being provided by ERDEMİR, with 6,701 people, compared to the 24 percent provided by KARDEMIR, with 3,072 employees.

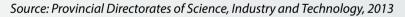
Of the enterprises engaged in iron and steel production in the region, six were enlisted on the "Turkey's 500 Major Industrial Organizations List" compiled by the Istanbul Chamber of Industry (ISO) for 2011, on which ERDEMİR ranked the highest. From among the listed enterprises, ERDEMİR, Çınar Boru and Özdemir Boru are based in the Karadeniz Ereğli district, while KARDEMİR, Mescier and Çağ Çelik are based in the Karabük province.

The one and only Iron and Steel Institute in the country was founded in 2011 within Karabük University, and the works conducted jointly by KARDEMIR A.S. and Karabük University are a good example of a university-industry collaboration. Planned in line with the "Iron, Steel and Material Research and Development Center (MARGEM)", supported by the Ministry of Development, the Institute building was constructed by KARDEMIR A.Ş.

In the region, other industries related to the iron and steel sector may be considered as developing industries, and can be listed as follows:

- SHIPBUILDING INDUSTRY
- MACHINE-MANUFACTURING-ENGINEERING INDUSTRY
- OTHER INDUSTRIES

The companies doing business in the steel construction area in the region include an enterprise manufacturing radiators, towel warmers and boilers, making use of the logistical advantage of the flat steel produced by ERDEMİR, as well as companies manufacturing office furniture made of steel, and electric panels. In particular the enterprises manufacturing radiators, towel warmers, boilers and office furniture made of steel have competitive capacity not only within Turkey, but also abroad.



#### 1.2. IRON AND STEEL

Despite the long-term issues faced by the mining sector that have increased in recent years, the share of the iron and steel sector and the related sub-industries in the regional economy is gradually increasing. There are three integrated iron and steel facilities in Turkey, two of which are located in the Western Black Sea Region: ERDEMİR, located in Zonguldak Ereğli; KARDEMİR in Karabük; and İSDEMİR, in İskenderun. Achieving faster development in recent years, this sector offers significant hope to the region. Turkey's steel exports in 2011 amounted to 15.4 Billion Dollars according to data from Turkish Exporters Assembly (TİM), and of this 473.6 million Dollars was made by the Western Black Sea Region, representing 3.2 percent of the national total. Of this, 40 percent was made by Karabük and 60 percent by Zonguldak,



#### 1.3. ENERGY INDUSTRY

The Western Black Sea Region has significant important potential for the energy sector, based on its proximity to energy resources, its established facilities and the planned investments. The energy resources in the region can be listed under two main headings.

Renewable Energy Sources: Wind power, hydroelectric energy, Black Sea deep waters and hydrogen sulfur, solar power, geothermal energy and biomass energy

#### Exhaustible Energy Sources: Coal

#### **1.3.1. RENEWABLE ENERGY SOURCES**

#### WIND POWER

Wind power potential in Zonguldak, Karabük and Bartın, as the three provinces in the region, were assessed separately by the Electric Works Survey Administration (ElE), which found that there was a lack of sufficient wind potential to warrant the establishment of a wind-power generating facility in the region.

The wind power potential of the Zonguldak province is also low according to the Atlas for Wind Power Potential, although there is a wind power plant in the project phase with an installed power of 120 MW. The Amasra district, which falls under Bartin, offers greater potential for the establishment of a wind power plant than other districts in terms of wind speed distribution, as well as of other factors. Accordingly, two wind power-plants, one in Amasra with installed power of 45 MW, and the other in the Bartin province, Kurucaşile District, with installed power of 27 MW, are in project phase.

#### HYDROELECTRIC POWER

There are two hydroelectric power plants in operation in the Zonguldak province: Köprübaşı HES and Tefen HES, with a total installed power of around 115 MW. The province in the region with the highest hydroelectric power potential is Karabük, where there is a hydroelectric power plant in operation with an installed power of 6.54 MW. Furthermore, there are currently eight hydroelectric power plant projects that are found appropriate and four that are in effect. If all of the projects in Zonguldak and Karabük are realized, the region's total installed power will be 305 MW. Having said that, whether all of these hydroelectric power plants can be realized in terms of economy and sustainability and the preservation of the natural environment are issues that need to be analyzed.

The Bartin province has the lowest level of installed hydroelectric power in the region, amounting to only 9 MW. Despite having significant energy potential, it is below what would be expected in terms of installed power.

#### BLACK SEA DEEP WATERS AND HYDROGEN SULFUR

Hydrogen sulfur (H2S) has formed as a result of extreme pollution in the deep Black Sea waters, and must be decomposed in order to mitigate its environmental hazards, leading to the creation of sulfur and hydrogen in gas form. It is easier to access H2S off the coasts of Zonguldak, Samsun, Sinop and Giresun, and H2S can be easily decomposed using energy obtained from renewable energy sources. In this regard, the Black Sea Solar-Wind Hydrogen Energy System Project (KGRHES) is a project that should be considered carefully.

Considering the amount of hydrogen that can be obtained from the total H2S potential of the deep Black Sea waters, this is especially important for the region.

#### SOLAR ENERGY

The Black Sea region offers the least sunbathing potential in Turkey, as the recipient of the least amount of sunlight. However, if we consider the world's installed solar power usage rates, it is apparent that the number of days with sunlight is not the leading factor in this regard. Considering in particular the success of Germany, which is not located in the sufficient radiation belt in terms of solar power, one may say that the region is efficient, however there are more efficient areas for the generation of solar power in Turkey, and so this potential is yet to be utilized. Accordingly, solar power plants must be established, starting in the regions with the highest potential, and the usage of water heating systems in particular that make use of solar power, the efficiency of which has recently been increased significantly, must be encouraged in the Western Black Sea Region.

#### GEOTHERMAL ENERGY

The region offers little potential for geothermal energy generation, however there are resources with temperatures of 26–33°C and 4.8 lt/sec flow rates in the Karabük region in Eskipazar-Akkaya that are



suitable for use as thermal springs. During boring operations, spring waters with temperatures of 37°C and a 40 lt/sec flow rate, offering 0.33 MWt thermal power were identified (MTA, 2005). Other than that, there is no unit that undertakes an active role in power generation.

#### **BIOMASS ENERGY**

Biomass energy is currently overlooked as a source of energy. The products produced in agricultural areas that have a high oil content that can also be used as biomass energy source include wheat, barley, forage plants and corn, in descending order, although it is also possible to extract biomass energy from forestry products and garbage. No works have been carried out to date in the region in this regard, and so researches into the generation of energy from forestry residues could be important for power generation.

#### **1.3.2. EXHAUSTIBLE ENERGY SOURCES (COAL)**

There are three thermal power plants in operation in the region, all of which are in the Zonguldak province: the ÇATES and Eren Enerji Thermal Power Plants in Çatalağzı, and the thermal power plant operating with natural gas in Çaycuma, with a total installed power of around 1,854 MW. ERDEMİR and KARDEMİR, which are large industrial organizations, founded a power plant in order to generate their own power, and use the energy that they generate. Currently, there are no thermal power plants in operation in Bartın or Karabük. Apart from the above mentioned power plants, there have been many project applications, particularly in the Zonguldak province.

As mentioned in the work conducted by the Chamber of Mechanical Engineers, Zonguldak Branch in 2009 entitled "Regional Means of Heating using Waste Heat from ÇATES", and in the analysis completed by BAKKA in 2011, the use of the waste water from ÇATES for residential heating was investigated. Similar works need to be carried out, and such projects need to be realized in order to benefit from thermal power plants, given the requirements of the age. This is also important for the effective usage of resources.

#### **1.4. FURNITURE AND FORESTRY PRODUCTS SECTOR**

The furniture sector has not made much of a mark in the region in terms of the number of enterprises. While the proportion of companies manufacturing furniture in Zonguldak among all enterprises is 2 percent, this figure is 9 percent for Bartin and 4 percent for Karabük. Compared to other industries, the furniture sector doesn't have much of a presence in the regional economy in terms of employment or the number of enterprises. The furniture sector must be considered under two different classes in the Western Black Sea Region:

1) Enterprises that carry out activities on a micro-small scale. These enterprises meet the demand within the region, and are only active in the regional market. Failing to ensure specialization or employee qualification are among the problems faced by such enterprises, leading them to encounter issues related to continuity of work, given the limited employment structure in the region. Low added-value work is one of the main problems faced by micro-small scale enterprises in the furniture sector.

2) Mid-sized enterprises. These enterprises focus entirely on exports from the region, and have taken major steps with regards to institutionalization. Although few in number, this group draws attention with the high level of added value it creates. These enterprises have grasped the significance of branding and design components in the sector, and are important for the region's economy, based on their specialization in certain product groups and their ability to develop export markets, although they do not perform well in terms of delivering innovative products.

The competitive power of furniture enterprises in the region is low, and institutionalization is at its lowest among the micro-scale companies. There is no serious issue in the region with regards to the provision of goods to the desired quality or access to raw materials. Raw materials and intermediate products are sources from provinces such as İstanbul, Bursa, Adapazarı, İzmir and Ankara, and since there is no container port in the region, the products are shipped via Istanbul. All of the manufacturers in the region are supplied for other regions, and therefore shipping constitutes a competitive disadvantage in the region, not only in terms of sales, but also in indirect purchases. In addition to shipping costs, another issue for the sector is the poor infrastructure. Furniture companies in the region made about TL 13,170,000 worth of exports in 2011, accounting for around 1 percent of the furniture exports made by Turkey, and was carried out by five main companies. The list of countries to which these five companies export furniture currently export, or consider as potential markets, are:

**Countries to which exports have already been made:** Germany, France, the Netherlands, Italy, Libya, Kenya, Cameroon, Belgium, Turkmenistan, Azerbaijan, Iraq, Iran, Georgia, France, Jordan, Nigeria and Uganda.



**Countries considered as potential markets:** Kenya, South African Republic, the Russian Federation, Algeria, the Netherlands, Jordan, Lebanon, France, the Middle East, North Africa, the Ivory Coast, Senegal and Ghana.

#### FORESTRY PRODUCTS INDUSTRY

The forestry products sector is dominated by enterprises with low technology and which are capital and labor intensive. The Western Black Sea Region is among Turkey's most important product suppliers owing to its vast forested areas and the density of enterprises doing business in the forestry products sector. Enterprises conducting activities in the industry generally produce logs, lumber and parquet.

The supply chain of the enterprises in the region consists of forest sub-district directorates, companies and enterprises in the construction, furniture, iron and steel and transportation sectors, most of which do business outside the region. Companies source raw materials from their respective forest sub-district directorates, and then turn the raw material into lumber of standard dimensions for sale to enterprises engaged in the construction, furniture, iron and steel, and transportation sectors. All of the equipment and consumables required by this sector come from such provinces as Bursa, İstanbul, İzmir, Ankara and Kocaeli.

Companies doing business in the forestry products sector usually make sales to the private sector, with most of their customers being construction companies in the larger provinces and furniture enterprises carrying out business in the region. There are also companies doing business with iron and steel industries, hospitals and the military in the region, as well as those supplying products to the TTK. None of the companies conducting activities in the region make specialized products, and so no patent or industrial designs have been registered in the region.

Companies in the region in the forest products sector do not export their products, although there are a number of countries with high potential in this regard, including Iran, Iraq, Syria, Tunisia, Algeria, Morocco and Egypt.

Agricultural activities have little significance in the Western Black Sea region's economy. According to TÜİK data, the share of the agricultural sector in the region in 2010 was just 5.8 percent in terms of industrial share of gross added value. The lack of agricultural production in the region can be attributed to the topographical structure of the region, which is unsuitable for mechanical agriculture, and because the limited agricultural lands that do exist have a fragmented and loose structure. The low level

of agricultural and livestock production is generally conducted at the scale of small-sized enterprises, and so they provide little economic income to the region.

#### **1.5. TOURISM SECTOR**

Another sector in the region that can support rural activities is that of tourism. Some 63 percent of the region is covered by forests and grasslands, and the region has many assets that are suitable for nature tourism that may also support rural development, including the Küre Mountain National Park and Yenice Forest. The region is also suitable for culture-history-congress and beach tourism. Safranbolu, named as a "World Heritage City" by UNESCO, and Amasra Castle, which is included on the World Heritage Provisional List, are at such a level they can be considered a tourism brand. The development of the tourism sector, which has the potential to undertake a significant role in the development of the region, may be possible through the elimination of certain issues, among which the limited transportation and insufficient accommodation, as well as the lack of promotional activities and qualified personnel, are the most significant.

Safranbolu is the most developed district in Karabük in terms of touristic activities, being an open air museum that been home to many civilizations throughout its 3,000-year history. The excavations that were launched in the ancient city of Hadrianapolis, located in the Eskipazar district of Karabük, began to draw attention to the area, although it cannot take any share from the tourism industry yet, as the excavation works are continuing. Works are being conducted for develop nature tourism in Yenice, Safranbolu and Eskipazar, while the district in which tourism activities are the busiest in the Bartin province is Amasra.

One of the most important natural areas in the Western Black Sea Region is the Küre Mountain National Park (KDMP) within the provincial borders of Bartin and Kastamonu, and incorporating the Küre Mountain range. The administrative district centers around the park are Ulus, Kurucaşile and Amasra, which are connected to Bartin, as well as the Azdavay, Pinarbaşi and Cide districts of Kastamonu. Having obtained its "National Park" status in 2000 based on its natural resources, KDMP brought about the emergence of the "buffer zone" concept that is used to preserve biological assets. Other than that, KDMP was the first area to be accepted in Turkey by PAN Parks, which derives its name from the "Protected Area Network", which is a nongovernmental organization that encourages increasing quality in the management of protected areas by creating a network of preserved areas based on mutual balance and harmony between Europe's extraordinary natural beauties and tourism.



### **1.5.1. TYPES OF TOURISM THAT CAN BE DEVELOPED IN THE WESTERN BLACK SEA REGION**

The Western Black Sea Region offers significant tourism potential, with around 140 km of beaches, cultural treasures from various civilizations, natural beauties and different climates. Boasting a broad range of tourism opportunities with its plateaus, caves, rivers, lakes and national parks, the region has the potential to be a significant destination, particularly for nature and culture tourism.

#### **MARINE TOURISM**

The 140 km of beaches in the Western Black Sea Region offer significant potential, although it lacks the necessary conditions for marine tourism such as a clean sea, clean sandy beaches, a suitable climate and long hours of sun for bathing.

#### SCUBA DIVING TOURISM

Although scuba-diving activities do not attract much attention in the Western Black Sea Region due to such factors as environmental pollution and a lack of equipment, there are some ongoing works to remedy the situation.

#### **ECOTOURISM**

With its rich natural resources, the Western Black Sea Region has good potential in terms of the sustainability of resources and the utilization of these resources for tourism. A major opportunity could be utilized by raising awareness among local people and ensuring rural development through the adoption and dissemination of the benefits of eco-tourism in rural areas where there are no industrial activities.

#### **MOUNTAIN TOURISM / TREKKING**

Today, trekking activities, which allow people to experience nature in all aspects, are rapidly gaining popularity. The Ministry of Culture and Tourism is carrying out works to develop mountain and trekking tourism, and has identified trekking routes and checkpoints in certain locations. The Ministry is providing a level of infrastructure along these routes, such as camping areas, WCs and garbage collection points. The Küre Mountains and Yenice Forest in the region are the best known areas for trekking.

#### **CAVE TOURISM**

Developing as an alternative form of tourism in recent years, and drawing attention from many adventurists, cave tourism has been added to the agenda of the Ministry of Culture and Tourism, which has been following a policy of diversity in tourism since the 1990s. Cave tourism can take three forms, depending on the situation of the caves and the equipment brought by visitors:

#### 1. Caves that are open for tourism

Zonguldak Cehennemağzı Cave, Zonguldak Gökgöl Cave, Bartın Gürcüoluk Cave and Karabük Mencilis Cave

2. Caves that casual visitors with equipment can visit in the company of a guide Zonguldak Çayırköy Cave

3. Caves that properly equipped professional visitors can enter Zonguldak-Kızılelma Cave

#### LOCAL CULTURAL ASSETS

In terms of local handicrafts, it is apparent that Zonguldak has developed in the souvenir-based market reflecting its weaving and mining culture. Elpek in Ereğli, Pelemet in Çaycuma, as well as other local weaving techniques, are today ornamented with local embroidery for marketing as souvenirs. Even though Elpek Cloth is an important local cultural asset, it is produced only in limited quantities given the inability to produce linen, as the basic the raw material for the cloth, in the region. Other than that, a walking stick business is burgeoning in Devrek, as a pure handicraft, and today walking sticks made of various materials in different patterns are emerging as a cultural value to be retained.

There are a greater variety of handicrafts in the Bartin province than in other provinces in the region. Today, wood engravings from Amasra and its surrounding villages are particularly important for the area, while the stone plates made in the village of Karaman in the Kurucaşile district represent another significant craft. Another branch of art in the Bartin Province is weaving. Even though it has been affected by mechanization, it is still carried out today in the rural areas of Kurucasile, Kumluca and Kozcağız. Dating back to the beginning of the 20th century, tel kırma embroidery is another important local art form that is well known in the Bartin province.



A guild tradition is being retained, albeit to a limited extent, in Karabük, and particularly in Safranbolu.

Saddles, copper, tin, shoes, saddlery and blacksmithing works are all still in production out in this region. Furthermore, the saffron plant, which grows only in Safranbolu in Turkey, and the renowned Turkish Delight of Safranbolu, are among the key assets of the province.

#### **ANCIENT CITIES**

The Western Black Sea Region has many settlements that date back to the 1st century B.C., and while some of the excavations made here have been completed, others are continuing.

**Filyos (Tios / Tieion) Historical Site:** Referred to by different names throughout history, including Tios, Tieion, Tianon and Tium, the Tios / Tieion Ancient City is located in the Zonguldak Çaycuma district in the town of Filyos. Tios is the only ancient city to be excavated on the shores of the Black Sea in Turkey, and it is believed that the ongoing excavation works will reveal a large city with roads, a town square, Turkish baths, religious structures, houses, warehouses, shops and graveyards.

**Kadıoğlu Village Mosaic Excavation Area:** This area is in the Çaycuma district, in the village of Kadıoğlu. In 2008, a resolution declared a mosaic, located on private property, to be an archeological site and a rescue excavation was commenced by the Karadeniz Ereğli Museum Directorate.

**Asar Tepe (Kimistene Ancient Settlement):** This Ancient Settlement area was founded on Asar Tepe, in the village of Eskipazar Deresemail. Based on current knowledge, the temple is believed to have been built during the Late Hellenistic period, i.e. in the 1st century B.C. and was in use up until the 4th century A.D. The temple is the only one to have been found over a very large geographical area.

**Sandıkkaya Temple or Mausoleum:** The Sandıkkaya Temple is located in Sandıkkaya in the village of Yazıkavak, Deresemail Valley. It is a well preserved Roman temple and mausoleum.

**Hadrianapolis:** "Hadrianapolis" is loosely situated in the location referred to as "Viranşehir" to the west of the Eskipazar county seat and its surroundings. It was first identified during land works in 2005 that Hadrianapolis is a south western Paphlagonia city that was first settled in the Late Hellenistic, Roman and Early Byzantine period (at least from the 1st century B.C. to the 8th century A.D.). To date, a total of 24 public and other types of structures scattered around the area have been identified during archeological surface works.

### **1.6. BUILDING INDUSTRY**

The Western Black Sea Region building materials sectors contains 10 sub-industries: Cement, plaster, lime, ready-mixed concrete, aggregate, brick, tile, ceramics, glass and marble.

### 1.6.1. CEMENT

The region has significant resources of pozzolanic materials such as blast furnace cinder and fly ash, which are used in blended cement production in the grinding facilities of the region. The Zonguldak, Karabük and Bartın provinces all have a cement factory, among which, those in the Zonguldak, Ereğli and Karabük provinces are grinding facilities, while the one in Bartın is an integrated facility. A total of 215 people work in the cement sector in the Zonguldak, Karabük and Bartın provinces, and the three cement factories in the region produce an average of 876,000 tons of cement a year. Production in Western Black Sea Region accounts for 8.1 percent of the entire production capacity of the entire Black Sea Region, and 0.83 percent of the cement production capacity of Turkey. Cement exports are made from the region mainly to the Russian Federation, North Africa and Romania.

Improving the ports in the region and increasing their capacity is very important in terms of providing access to both near and distant markets. In the region, the fly ash produced by thermal power plants is used as a cement additive, and periodical fluctuations in the technical quality of the ash is a significant issue, since it can cause problems in the production of cement of persistent quality, while also raising costs.

#### **1.6.2. PLASTER**

The Çaycuma paper factory which carries out production using advanced technologies has significant potential in the production of robust plaster plate cardboard in the Western Black Sea Region based on its extensive R&D works.

There is significant potential in the region for the development of a plaster industry, and significant economic input and employment in the region may be achieved by utilizing the synthetic plaster that arises out of the flue gas treatment processes in thermal power plants in the cement and ceramics sectors. As an additional benefit, this would also help to address environmental issues related to the disposal of the synthetic plaster, which would be disposed of as waste if not utilized. Furthermore, this would have an even greater impact if utilized in cement production together with fly ash. It is also



possible to produce gas concrete by making use of the gypsum and ash produced as a by-product by thermal power plants.

#### 1.6.3. LIME INDUSTRY

The limestone reserves suitable for lime production in the Western Black Sea Region are greater than the consumption requirements. Industrial lime production in the region is carried out by the Bartin Kireç Fabrikası [Bartın Lime Factory] (KİMTAŞ), and there is also an AHO lime factory that carries out production using the slope furnace method in the region.

The lime products produced by the lime factory are marketed in the Trabzon, Ankara and Bursa provinces in the country, for use mainly in the iron and steel, cement and electric power generation sectors, while secondary markets are the construction materials, construction and agricultural sectors. The ERDEMİR and KARDEMİR iron and steel enterprises, which are among the main consumers of limestone and lime, satisfy their needs for limestone and lime from their own mines. The ZETES Thermal Power Plants in Catalağzı consume a significant quantity of limestone, and their need is met from nearby guarries. Lime usage is also common in the construction and building sector across the region.

#### **1.6.4. READY-MIXED CONCRETE**

The region has a total of 13 ready-mixed concrete companies, with concrete facilities connected to these companies being spread over the Zonguldak, Karabük and Bartin provinces. Ready-mixed concrete producers sell their produce primarily in their own regions, obtaining cement, which is a leading production input from outside the region, from Ankara and Bolu, and chemical additives from Ankara, Istanbul and Kocaeli. The products of the ready-mixed concrete sector are used instantly, and so are unable to be exported.

#### **1.6.5. CONCRETE AGGREGATES**

The concrete aggregates sector is essentially a sub-industry of the ready mixed concrete sector, and there are 11 enterprises carrying out concrete aggregate production – four in the Karabük province and seven in Zonguldak – although most of these carry out production in multiple locations.

Other than these enterprises, public organizations in the region (DSI, Highways, Rural services, etc.) own licensed sites where subcontractors can carry out aggregate production, but only to satisfy the needs of the public organization. An examination of the licensed sites of these organizations reveals that the Provincial Special Administration has licensed sand-gravel pits or guarries in five different locations, while the DSI has sites in three locations, Highways in eight locations, the DLH in five locations, Alapli Municipality in two locations and the TCDD in one location in Zonguldak. In the Bartin province, Highways has licensed sites in six different locations, while Rural Services has sites in three locations and the DLH in three locations.

In terms of capacity, the Zonguldak province has a production capacity of 4 million tons while Zonguldak itself has a production capacity of 2 million tons. In 2008, 1.851 million tons of production was made in Zonguldak, compared to 400,000 tons in the Karabük province.

#### 1.6.6. BRICK and TILE

In the region, brick and tile production only takes place in the Bartin and Zonguldak provinces, all of which is carried out by four manufacturers – three in Bartin and one in Zonguldak. One enterprise in Bartin produces concrete tiles in addition to bricks, and this facility stands out as one of the first manufacturers in Turkey in concrete tile production.

The annual brick production capacity of the factories in the region is about 74 million pieces, which accounts for around 1.3 percent of the total brick production for Turkey and 7.65 percent for the Black Sea Region. Furthermore, the region's production capacity for concrete tiles is around 12 million pieces.

After remaining similar in 2008 and 2009, concrete tile production in the region increased by about 72 percent in 2010. Companies in the area sell to various parts of Turkey, including Istanbul, Ankara, İzmir, Antalya and Yalova, aside from its local sales, and buys from provinces such as Çorum, Kayseri, Ankara, Mersin, Bursa, İstanbul and Konya.

#### 1.6.7. REFRACTORY PRODUCTS

There are three factories in the region producing refractory materials and bricks that are resistant to high temperatures, one of which is in Bartin and the other two in the Zonguldak province.

It is believed that the production of high temperature-resistant building materials in the Western Black Sea Region started with the discovery of dolomite deposits around Karabük in the 1940s. While the refractory production capacity was 14,000 tons/year at the end of 1947, it reached 65,000 tons/year



in 1988, due mainly to the production carried out at the Sümerbank Filyos Fire Brick Industrial facility, which was founded in Zonguldak Hisarönü in 1949. Producing alumina-silicate refractory materials, the Filyos Fire Brick Industry enterprise has served as a major producer in the region (as well as in Turkey), and was privatized in 1997.

The region's total refractory brick production capacity is around 34,500 tons/year according to information obtained from the companies. It is observed that even though the two companies have increased their capacity, the total capacity in the region has dropped following the privatization as product changes were implemented in the Filyos Fire Brick Industry enterprise.

#### **1.6.8. CERAMICS**

There are two large players in the ceramic sector in Western Black Sea Region, being the Çanakçılar and Bartin Ceramic companies. These enterprises account for some 7.3 percent of the total capacity of Turkey, and export to many countries, particularly in North Africa, the Middle East and the Turkic Republics, employing around 700 people across the region.

#### 1.6.9. GLASS INDUSTRY

Although there are significant reserve of the basic raw materials for glass production in the region, only one mine and preparation facility is operating for the production of silica sand, in Bartin Kurucaşile. The silica sand production and preparation facility operated by Cam İş Madencilik A.Ş., which is affiliate to the Sisecam Group, has a production capacity of 250,000 tons/year and employs a total of 42 people. The manufactured silica sand is utilized as flat glass sand in the glass production sector.

Dolomite, guartzite, feldspar and guartz sand are among the major industrial raw material resources in the Zonguldak and Karabük provinces. The potential economic access to basic glass products (flat glass, etc.) via land and sea should encourage the development of glass processing industries in the region.

#### 1.6.10. MARBLE

The natural stone sector is a key economic source for Turkey in terms of global trade, and the sector has recently gained momentum as new producers have entered the market. The only notable marble deposits in the region are located in the Karabük province, concentrated particularly in the Eskipazar district.

#### **1.7. AGRICULTURE**

Considering the issues related to mining in the region, where the urban and rural populations live in close proximity to one another, and the consequent unemployment, agricultural activities need to be supported. Choosing the most appropriate farming type, such as organic agriculture, greenhouse cultivation, fishing and apiculture, to best utilize the potentials of the region in terms of climate, soil and geographical properties and so to increase agricultural efficiency are actions that will prove useful in the support of rural development.

It is the "Level 2" region with the second least amount of agricultural land in the country. The region has a wide variety of endemic flora owing to the extensive and varied forestry lands, although there is no focused production in this regard. Agricultural enterprises in the region tend to be family enterprises and are scattered.

#### **1.7.1. VEGETATIVE PRODUCTION**

The region has various potentials, although it is not among the leading regions in Turkey with regards to agriculture. Agriculture is possible only in restricted areas due to the rugged terrain in the region. A common problem in the districts with agricultural potential is the fragmented and scattered terrain. The agricultural areas in the region are fragmented both because of the topographical structure and because of the disputes between children after the inheritance of these lands by their parents.

The total land presence of the region for 2012 accounts for 1 percent of the total for Turkey, with 61 percent being croplands, 15 percent fallow, 4 percent vegetable gardens and 22 percent fruit gardens. The province with the greatest agricultural area in the region is Bartin, while Karabük has the highest amount of fallowed land and Zonguldak has the largest area of fruit orchards.

Zonguldak has very rough land, with 56 percent being covered with mountains, 31 percent with plateaus and 13 percent with lowlands. Agricultural fields comprise around 28 percent of the province.

Karabük is generally mountainous, with lowlands and planes being relatively few. Agricultural lands account for 93,020 ha, accounting for 22 percent of the total lands.

A large part of the Bartin province, which is in a rough geographical area in the Western Black Sea Region, consists of ridges, while 29 percent of the province is taken up by agricultural lands.



Vegetative production in recent years has concentrated on grain, fruit and vegetables. In grain production, the product with the largest sowing area is corn, followed by wheat. The product with the highest yield is clover, wand there is also significant barley production in the region.

The product that stands out in fruit production in Zonguldak is the **hazelnut**, almost all of which, along with strawberries, is made in the Ereğli and Alaplı districts. The cultivation of Ottoman Strawberries, which is a variety that is unique to the region, is also concentrated in this area, and there is also a significant cultivation of walnut, apple, pear, plum, grape and cherry in the region.

The region also has potential in terms of its climatic conditions for growing kiwi.

In Karabük, the variety of table grape known as **Çavuş Üzümü** (a sweet white grape) is among the unique values of the province, having been cultivated for centuries in almost all of the villages in the Karabük Merkez District and Safranbolu.

#### **ORGANIC PRODUCTION - LOCAL PRODUCTS**

There are around 1,212 farmers engaged in organic agriculture on an area of 38,600ha in the Ereğli and Alaplı districts of the Black Sea. In addition, Gökçebey; Bodaç, Namazgâh- Hacı Musa line, Devrek; Dirgine Valley and Ereğli Gülüç Valley are all thought to be suitable for organic agriculture. Among the products with organic agricultural potential in the province are **apple**, **walnut**, **chestnut**, **kiwi** and, in particular, **hazelnut**, as well as **apiculture** as a branch of animal production. In addition to these products, the climate and soil properties of the Ereğli and Alaplı districts are suitable for **truffle**, which sells for between 500–2000 Euro per kilo.

There are five manufacturers carrying out organic honey production with 100 hives in Karabük. The saffron plant which has been granted a geographical indication as "**Safranbolu Saffron**" has a very high economic value, and the Karabük province should pay particular attention to growing and marketing saffron, given its use in especially the pharma and food sectors.

The primary vegetables grown in Karabük are beans, tomato, potato and cabbage, with tomatoes in particular being prominent in regards to the yield obtained from sown products. The local tomato species known as Maniye can be counted among the specialized agricultural products of the region.

Vegetable production in Bartin is largely aimed at domestic consumption. As greenhouse production has become widespread in recent years, commercial production has increases. Tomato is the leading crop among vegetables in the province, followed by cucumber, cabbage, pepper and beans, respectively. Fruit cultivation across the province has a loose structure, although the number of orchards is quite low, except for those producing hazelnut and the recently developing walnut orchards. The fruit that is produced the most in the province is the hazelnut, followed by walnut and apple.

Greenhouse production has also recently gained significance in Bartin, being concentrated in the villages of Amasra and Kurucaşile, and the Ulus districts, particularly in the villages connected to the central district. There are a total of 4,490 greenhouse production enterprises in the province.

#### LIVESTOCK PRODUCTION

There are restrictions on livestock production that are based on the geographical and local conditions across the region, just as in the case of vegetative production.

**Poultry** constitutes the bulk of livestock production, and poultry farming has recently begun to gain significance, with a rise in broiler breeding observed particularly since 2000. The contracted farming model of broiler breeding by large companies has created significance employment in the region and provides significant income. Poultry farming has developed in the Gökçebey, Devrek and Çaycuma districts of Zonguldak, as well as in the Safranbolu and Eskipazar districts of Karabük. Turkey breeding is conducted in Eflani.

Poultry farming should be supported in the region considering the potentials and the location of the region in relation to Ankara and Istanbul, and organic chicken/turkey production should be launched to ensure more added value.

Cattle comes second to poultry, and can be found predominantly in Zonguldak, Bartin and Karabük, in respective order.



	Cattle	Sheep and Goat	Poultry	Apiculture
Zonguldak	66,4	17,95	3,250,000	29,4
Karabük	46,06	16,494	715,897	19,162
Bartın	56,222	4,522	828,163	25,381
TR81	168,682	38,966	4,794,060	73943

#### Table 13: Animal Distribution by Province

The animal product produced most in the Western Black Sea Region is **milk**, followed by eggs, red meat and leather. Milk and dairy production is concentrated in the Çaycuma district and in the Bartin province, although the districts suffer from a **lack of cold storage** in terms of number and capacity, which shortens the life span of products and negatively affects marketing processes.

Fishing activities are fairly well developed in the Zonguldak and Bartin provinces in the region. While 99 percent of fish are obtained from the sea in the region, the utilization of the existing fresh water potential is somewhat lacking. There is potential in the Zonguldak and Bartin provinces with regard to fisheries, however, there are issues in food safety and marketing owing to the shortage of infrastructure and superstructure in the sector. The **inadequacy of superstructures in the fishing ports (cold storage, sorting area, etc.), the lack of compliance with standards of fishing boats and the lack of fish processing facilities are among the major issues in this area.** 

The region offers suitable conditions for apiculture activities, based on its rich flora. The Zonguldak province is more advanced in this regard than many other provinces, with 52 percent of forest cover, 60,000 hives and 600 tons honey production. It has been found that the laurel, linden, blackberry, rhododendron, oak, acacia and a vast quantity of chestnut trees within the existing flora, support the production of the most valuable honey in Turkey in regards to its antibiotic and antioxidant properties. Queen bee, royal jelly, pollen and propolis production are all made in the region, and bee venom production was started in Turkey for the first time in 2013 here. In particular, the villages between the Devrek and Ereğli districts and the Alaplı district are considered suitable for efficient apiculture and organic honey production.

## 2. FOREIGN TRADE

### 2.1. IMPORT

The Western Black Sea Region accounts for around 1 percent of the country's total imports, having fluctuated between 0.74 and 1.35 percent within the 10-year period from 2002–2012.

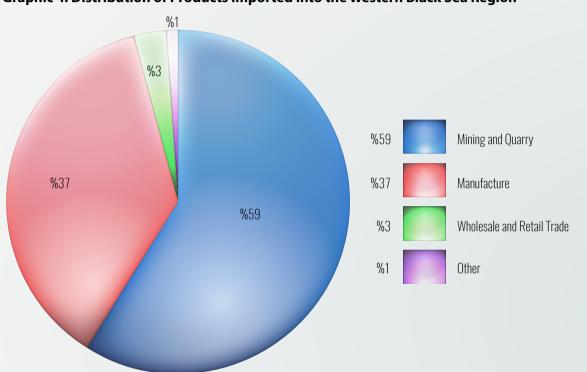
Imports into the province are mostly made in Zonguldak, which accounted for around 90 percent of the region's imports on its own until 2008, after which Karabük started to take a larger share, reducing Zonguldak's share to around 72 percent of the 1.754 billion US Dollars of the imports made into the region as of 2012. There are 93 importer companies in Zonguldak according to 2011 data, which make on average 16.538 million US Dollars of imports. During the same period, the value of imports per person amounted to 2,512 US Dollars.

The Karabük province increased its imports from 18.720 million US Dollars in 2002 to 482.827 million US Dollars in 2012, and increased its regional share from 4 to around 27 percent. There are 26 registered importer companies in the Karabük province according to 2011 data, with each company making on average 16 million US Dollars of imports, and imports per person amounting to 1,902 US Dollars.

The regional share of the Bartin province has remained unchanged in the 10-year period, maintaining its 1 percent level in the region. Data from 2011 reveals that there are 20 importer companies in the Bartin province, making, on average, imports valued at 742,000 US Dollars each, and imports per person of around 79 US Dollars.

Examining the sectoral distribution of imported products across the region reveals that most imports are made in the mining and quarry sector, amounting to 63 percent of the total, followed by the manufacturing sector with a 30.61 percent share and wholesale and retail trade with a 6 percent share.





#### Graphic 4. Distribution of Products Imported into the Western Black Sea Region

Source: TUIK, Import based on 2013 Economic Activities (1000 USD)

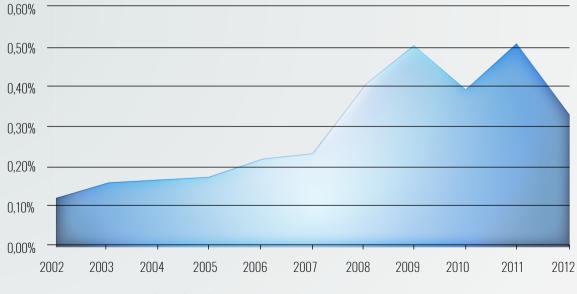
#### 2.2. EXPORT

The share of Western Black Sea Region in the country's export was 0.33 percent in 2012, and looking over the last decade reveals that this rate has fluctuated between 0.12 and 0.5 percent. After 2002, the region's exports increased in line with the overall increase in the country's export. In fact, the region's exports increased more than the country average, and its share increased proportionally every year until 2010. In 2010, exports from the region declined under the influence of the global financial crisis, but rose again in 2011 to break new records, reaching 680 million US Dollars in total, but dropped again in 2012 to 500 million US Dollars. There are 100 exporter companies doing business in the region according to 2011 data. The total exports per exporter company varies in line with the potentials of the individual provinces, although the region average was 6.8 million US Dollars for 2011, and exports per person amounted to 667 US Dollars. These figures rank the Region 13th among the 26 Level-2 regions.

Considering the order of regions according to export amounts, the Western Black Sea Region ranked 19th in 2012 among the 26 Level-2 Regions. The performance of the region over the last five years has seen its ranking fluctuate between 17th, 18th and 19th.

The province the steers the region's export is Zonguldak, with the region's exports performing in line with the exports from Zonguldak province until 2009. In recent years, however, the region's exports have followed a different trend with the rising performance of the Karabük province, which Karabük accounted for 33 percent of the region's total exports according to data from 2012. While the regional share of the Bartin province has varied over the years, it has remained in the region of 3 percent.

# and 2012



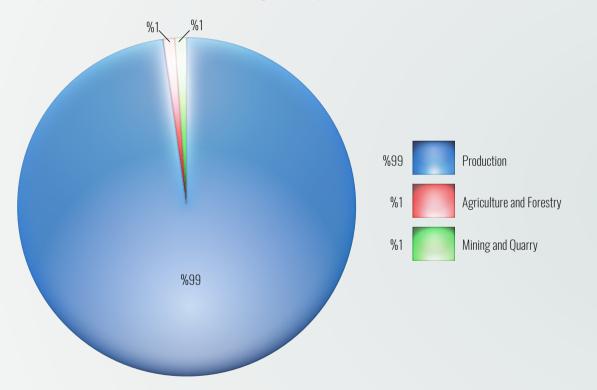
Source: TUIK, Export Figures based on Cities (2002-2012)



#### Graphic 5. Share of the Western Black Sea Region in the Country's Exports between 2002

The sectors that dominate in the export market is steel, which dominate in the Zonguldak and Karabük province, accounting for around 70 percent of regional exports in 2012. This is followed by the cement, glass, ceramics and soil goods sector, with a 9 percent share. The shares of other sectors are relatively smaller. An examination of 2011 figures indicates no remarkable change in the ordering, although the export share of the steel sector had reached around 79 percent.

#### Graphic 6. Prominent Industries of the Region in Exports (2012)



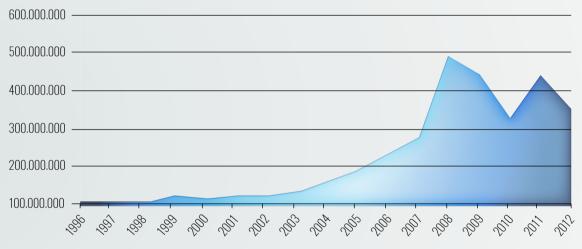
#### Source: TUIK, Export based on Economic Activities of 2013

The country with the largest share in the region's export is Romania, which is the destination for some 13 percent of the region's total exports, followed by the United States and Morocco. During the period in question, the region exported to 137 countries, with the top 10 export destinations taking 58 percent of the region's total exports. In 2011, Romania remained as the leading destination for exports, followed by Morocco and Italy (TİM, Province-Based Industry Figures, 2012).

#### 2.2.1. ZONGULDAK

The Zonguldak province leads the region in terms of exports. After breaking its own record in 2008, the province was unable to repeat its performance in the following years and witnessed a decline. In 2012, exports amounted to around 320 million US Dollars – 68 percent of the region's total. According to 2011 data, there were 61 registered exporter companies in the Zonguldak province, making, on average, around 7.5 million US Dollars of exports each. The province ranks 24th in the order of provinces in Turkey, with an export average of 711 US Dollars per capita.

#### Graphic 7. Exports from the Zonguldak Province between 1996 and 2012 (\$)



Source: TUIK, Export Figures Based on Cities (1996-2012)

The dominant sector in exports in the Zonguldak province is steel, with exports amounting to around 60 percent of the total for the province, followed by cement, glass, ceramic and soil goods, with a 15 percent share. The total share of the five highest ranking sectors in the province's export is over 91 percent (TİM, Province Based Industry Figures, 2012).

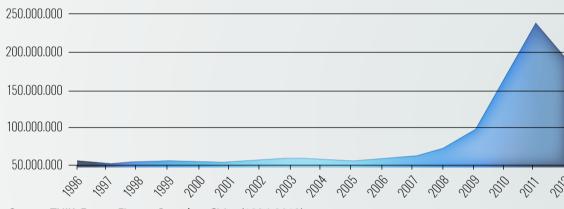
Zonguldak exports to numerous countries around the world. According to 2012 data, products were exported to 108 different countries, with the largest customer being Romania with a share of 22 percent, followed by the United States, with a share of 16 percent, and Canada, Germany and the United Kingdom. The share of the first five destinations in total exports is 53 percent.



### 2.2.2. KARABÜK

A remarkable rise has been observed in the exports made from the Karabük province in recent years. Rising from 10 million US Dollars in 2000, the province broke records in 2011 to reach 224 million US Dollars, accounting for 33 percent of the region's total in 2011–2012. There are 25 registered exporter companies in the Karabük province according to 2012 data, with each making on average 9.86 million in exports. The province ranks 17th in the order of provinces in Turkey with an export average of 1,020 US Dollars per capita.

#### Graphic 8. Exports from the Karabük Province between 1996 and 2012 (\$)



Source: TUIK, Export Figures Based on Cities (1996-2012)

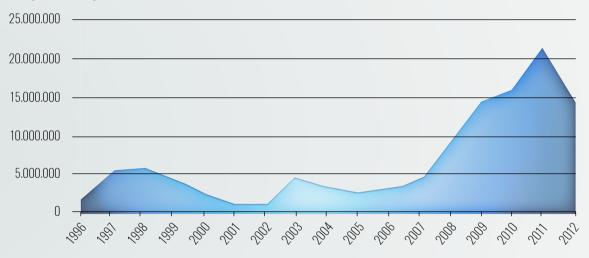
Like in Zonguldak, the steel sector accounts for a significant proportion of the exports from Karabük province, amounting to around 89 percent, followed by the defense and aerospace sector with a 5 percent contribution. The total share of the first five industries in the province's exports is 98.8 percent (TİM, Province Based Industry Figures, 2012).

Exports were made from the Karabük province to 104 countries in 2012, with the largest customer being Morocco, comprising around 26 percent of the province's exports, followed by Yemen with a 9 percent share, and Syria, the United Arab Emirates and Iran complete the top five list. Exports to these five countries constitute 58 percent of the province's total exports.

#### 2.2.3. **BARTIN**

Bartin makes the least exports among the provinces in the region. While the province's exports amounted to 2 million US Dollars in 2000, it broke its own record in 2011 to top 20 million US Dollars. The province's share in the region is generally between 3 and 4 percent, and there are 17 registered exporter companies in the Bartin province according to 2011 data, with each making, on average, exports of around 1.213 Million US Dollars of exports. The province ranks 60th in the provinces in Turkey with an export average of 110 US Dollars per capita.

#### Graphic 9. Exports from the Bartin Province between 1996 and 2012 (\$)



Source: TUIK, Export Figures Based on Cities (1996-2012)

The leading exporting sectors in the Bartin province differ from those of Karabük and Zonguldak, with no single dominant sector, unlike in the other two provinces. The most exports from the Bartin province are made by the ready to wear and garment sector, with a 39 percent share, followed by the timber and forestry products sector with a 20 percent share. The total export share of the first five sectors in the province is around 87 percent (TİM, Province Based Industry Figures, 2012).

Exports were made from the Bartin province to 33 countries in 2012, with Germany standing out as the province's best customer, accounting for around 55 percent of the province's total exports, followed by



Turkmenistan with an 11 percent share, and Iraq, Georgia and Azerbaijan. Exports made from Bartin to neighboring countries hold a significant place. The export total of the top five countries constitute around 79 percent of the province's total exports.

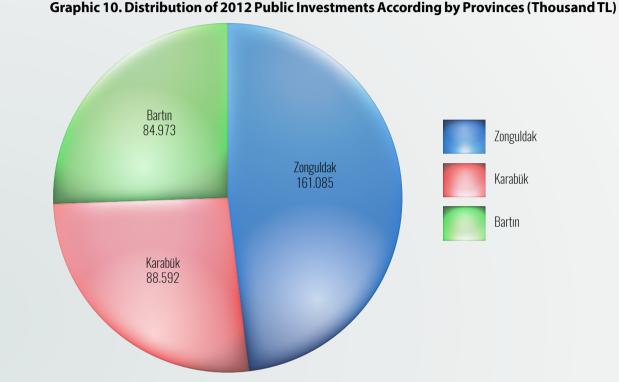
#### 2.3. INVESTMENT CLIMATE IN THE WESTERN BLACK SEA REGION

As a result of the changes in spatio-temporal perception in relation to globalization, an increase has started to be witnessed in direct capital investments by enterprises. In the case of direct foreign investments (FDI) and national investments made by large and multi-national enterprises, the level of competitiveness in the region in which the investment will be made can be expected to be high. In addition to having a high level of accessibility, such regions should also be close to raw material resources, developed logistics and qualified human capital if they are to be attractive for investment.

When examining the investment climate of Western Black Sea Region, public and direct foreign capital investments in the region were analyzed, along with the life cycle of active SMEs, and the bottlenecks required to be overcome in order to improve the means of investment were identified. The regional provinces were also examined with regard to loan volumes according to industries and existing R&Dinnovation activities were investigated.

#### **2.3.1. PUBLIC INVESTMENTS**

The region is home to 1.34 percent of the country's population, and value of existing investments in the region correspond to 0.7 percent of the total investments in the country. An analysis of the domestic distribution of public investments reveals that the region falls short of taking an adequate share, requiring investments to be doubled if a fair distribution of public investments in terms of population is to be achieved. The province in which the most public investment is made in the region is Zonguldak.



#### Source: Ministry of Development

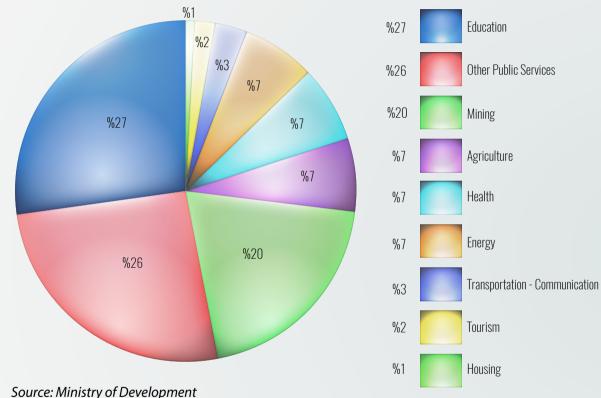
Looking at the industry-based distribution of investment, it can be understood that investments are made above the Turkish average only in two sectors. The first among these is mining, which receives 5.58 percent of the total mining investments for Turkey, based on the fact level of development in mining the region. There are numerous hard coal mines in the province, and Zonguldak receives the largest share of these investments followed by Bartin, while no public investment has been made into the mining sector in Karabük.

The sector with second largest share of investment is tourism, accounting for 2.16 percent. The regional province that receives the largest share of tourism investments is Bartin, followed by Karabük, both of which have a developed tourism sector based on such assets as Amasra and Safranbolu. No public investments have been made into the tourism sector in Zonguldak.



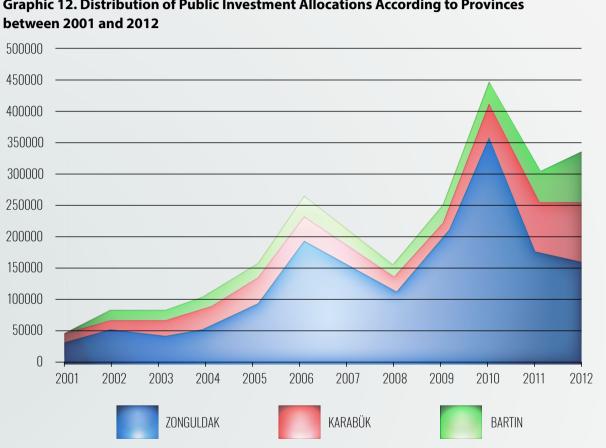
Most investments in the region are made into education, other public services, mining, agriculture, health, energy, transportation & communication, tourism and housing.





The allocation of public investments between 2001 and 2012 reveals that although the region's share of total public investments as of 2012 has increased since 2001, it is still not at an adequate level when the population of the region is taken into account. A fluctuating course has been observed in the public investment allocations to the region between 2001 and 2012. While investments across the country can be seen to increase continually, no such steady increase, and even a decline, has been seen in the region in question.

### Graphic 12. Distribution of Public Investment Allocations According to Provinces between 2001 and 2012



#### (Current Prices – Thousand TL)

The region enjoyed its largest share of public investments in 2010, followed by 2006, and had the lowest shares in 2001, 2002 and 2003. Zonguldak has had a greater share than Karabük and Bartin from 2001 to 2012, while Karabük had a lower share than Bartin in 2002, 2007, 2008 and 2009, while the share of Karabük was greater than that of Bartin in the other years.

WESTERN BLACK SEA DEVELOPMENT AGENC



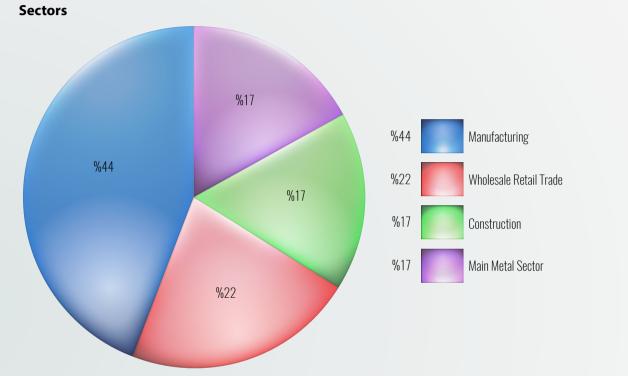
#### **2.3.2. DIRECT FOREIGN CAPITAL INVESTMENTS**

Turkey signs Mutual Encouragement and Preservation of Investment (YKTK) Agreements with countries with which it has good investment and trade relations, those which have potential, and those that it deems strategically useful to reinforce bilateral relations with. The purpose of the YKTK Agreements signed with 84 countries to date is to increase the flow of capital and technology between the countries that are party to the agreement. The foreign investor group targeted with these agreements is direct foreign capital investors in developed countries that can bring know-how, technology, management skills and new market opportunities to the country, in addition to capital. Turkey ranked 13th on the list of most attractive countries in 2012 on the A.T. Kearney Direct Foreign Investments Confidence Index. The international direct investment stock value in Turkey reached 181 billion US Dollars at the end of 2012.

Some 55 percent of investments in 2012 were in the manufacturing, electric/gas and mining sectors, while the remaining 45 percent were made into service industries. The countries that provided the most international direct investment input were the United Kingdom, Austria, Luxembourg, the Netherlands and Germany (YASED, 2013).

Of the 33,843 companies with international capital doing business in Turkey, 18 were located in the region as of 2012, with nine doing business in Zonguldak, six in Karabük and three in Bartın.

Of the foreign capital enterprises in the region, eight operate in the manufacturing sector, four in the wholesale and retail trade sector, three in the construction sector and three in the base metal sector.



#### Source: Ministry of Development

In the region, 165 Investment Incentive Certificates were issued between 2009 and 2013, although 14 were cancelled, and all of the issued certificates were for domestic capital investments. An examination of data relating to international direct foreign capital investments and incentives reveals that drawing foreign capital investments to the region is among the regional priorities.

Opening the Filyos Port and the Mixed Industrial Zone, which is located in the area behind the port, for investment; the works that have already been commenced and the ones that are planned to be conducted for improving the transportation infrastructure in the region; and the decentralization of industry in Istanbul are considered an opportunity in terms of attracting direct foreign capital investment to the region.



Graphic 13. Number of Foreign Capital Companies in the TR81 Level 2 Region and their

#### 2.3.3. SME ACTIVITIES

#### 2.3.3.1. SECTORAL DISTRIBUTION OF SMEs

An examination of the 2013 record of enterprises reveals that 56.4 percent of SMEs in the Western Black Sea Region do business in wholesale and retail trade, as well as transportation and storage. One of the sectors in the region in which there are few enterprises doing business is mining and quarrying, owing to the existence of the strong TTK. The number of SMEs conducting activities in the manufacturing sector is 3,795, accounting for 8.9 percent of SMEs in the Western Black Sea Region.

#### 2.3.3.2. PROBLEMS FACED BY SMEs IN THE REGION

The main problem in the Western Black Sea Region is the insufficient entrepreneurship ratio. The main reason why the region has an economic structure based on a single sector is that there is no entrepreneurship. Business enterprises in the region account for only 1 percent of the total for the country. The highest number of initiatives are observed in the Zonguldak province, while Bartin has the lowest number.

A significant problem faced by SMEs in the region is longevity, with some 589 enterprises closing in 2011, and a further 486 in 2012. The ratio of the number of closing enterprises in the region to the number of established enterprises for the year 2012 was 0.57. The fact that this ratio is below 1 shows that the number of established enterprises is more than the number of closing enterprises. The TR81 Western Black Sea Region ranks 10th among the 26 Level 2 regions (TOBB (The Union of Chambers and Commodity Exchanges of Turkey), Established/Closed Company Statistics, December 2012).

The major problems faced by SMEs, identified by workshops and an examination of the results of survey evaluation forms and application forms submitted for financial support programs, are as follows:

- Difficulties in finding a qualified workforce
- Inadequacy of enterprise capital
- Low level transportation and logistics
- Shortage of technical capacity with regard to energy efficiency
- Failure to analyze the efficiency of production processes
- Inadequacy of capabilities for export
- Lack of organizations in the region offering professional consultation services

- Issues in finding land on which to make investments in the region
- The fact that no organization is made on a national or international level for SMEs, since there is no exhibition or convention center in the region and for other reasons • Failure to transition to products with high added value, and therefore failing to increase product variety
- enterprises that can serve as a model for the SMEs in the region is very low

#### 2.3.4. FUNDAMENTAL SUPPORT MECHANISMS

- Development Agency Financial Support Programs
- Investment Incentive System
- KOSGEB Support
- TÜBİTAK Support

## 2.3.3.3. DEVELOPMENT AGENCY FINANCIAL SUPPORT PROGRAMS

The Western Black Sea Development Agency launched three Financial Support Programs for SMEs from 2010 to 2013, and agreements were signed with 41 enterprises under the Financial Support Program conducted in 2010. A total of 37 projects have been completed within the financial support program, in which the Agency offered a total of TL 10,094,568 in financial support. Agreements were signed with 44 enterprises under the Financial Support Program in 2011, when the Agency offered a total of TL 10,977,196 in financial support. A total of 26 enterprises were eligible for support under the Financial Support Program conducted in 2013.

The sectors that obtained the largest level of support from the Financial Support Programs according to sectoral and priority distribution were those of metal and mining, followed by the machinery and equipment sector in 2010 and 2011, and the tourism sector in 2013.

Examining the distribution of support according to the priorities identified by the Western Black Sea Development Agency reveals that the increasing production capacity was given the highest priority, followed by bringing variety to the tourism sector and increasing service quality.



• The fact that institutionalization is not on an adequate level, and that the number of corporate The lack of common work platforms between universities and SMEs

There are four fundamental support mechanisms utilized by SMEs in the region:

#### 2.3.3.4. INVESTMENT INCENTIVE SYSTEM

The number of enterprises who received an Investment Incentive Certificate from the Western Black Sea Region between 2009 and 2013 was 134, and while this included companies that were not classified as SMEs, the majority were SMEs. In the same period, 68 enterprises in the Zonguldak province, 35 in the Karabük province and 31 in the Bartin province received Investment Incentive Certificates.

An examination of the incentive certificates awarded by sector reveals that 72 enterprises received incentives in the manufacturing sector and 43 enterprises in the services sector, as the highest ranking recipients.

## 2.3.3.5. TÜBİTAK FINANCIAL SUPPORT PROGRAMS

The number of companies who applied for TÜBİTAK Financial Support Programs between 1995 and 2012 is 19, accounting for 0.41 percent of the total number of companies making applications across the country. Among these, companies other than ERDEMİR and KARDEMİR are all classified as SMEs.

The fact that the mechanical manufacturing sector that was expected to emerge in the region under the influence of ERDEMİR and KARDEMİR in particular didn't develop sufficiently, and no R&D has been made, has contributed significantly to this outcome. The total number of projects submitted in the same period is 43, 13 of which were submitted by ERDEMİR and six by KARDEMİR. The projects applied for in the region account for 0.44 percent of the country total, which is not sufficient.

#### 2.3.3.6. R&D and INNOVATIVE WORKS

#### Brand, Patent, Industrial Design and Useful Model Applications

The total number of patent applications made by the region to the Turkish Patent Institute (TPE) between 1995 and 2012 was 59, while the number of registered patents was 14. Only 0.35 percent of the total registered patents in the country came from the region in question, which ranks 18th in terms of the number of registered patents among the Level 2 regions.

The number of industrial design applications made to the TPE for the same yearly was 85 and the number of registered industrial designs was 71. The region ranks the 20th among the other Level 2 regions, providing 0.1 percent of the registered industrial designs to the country total.

A total of 58 useful model applications had been made as of the end of 2012, and 22 were registered. The region ranks the 22nd among the other Level 2 regions in this regard, accounting for 0.13 percent of the total number of registered useful models in the country.

Applications from the Western Black Sea Region for brand registration numbered 2,018 as of the end of 2012, while the number of registered brands was 963. The number of registered brands as of the end of 2009 was 655. Some 0.24 percent of the registered brands in the country are located in the region.

#### 2.3.3.7. BUSINESS DEVELOPMENT CENTERS

Business Development Centers are centers that are founded and managed to offer services to enterprises within its organization, such as providing training in enterprise development, providing access to support networks and financial resources, workplace in appropriate conditions, providing affordable office places as well as shared office equipment and office services, aiming to ensure enterprises survive their initial years in a healthy way when they are at their most fragile and to grow. They are also referred to as Enterprise Nests or Enterprise Plantations.

There are two business development centers in the region, both of which are within the borders of the Zonguldak province. The fact that two of the 12 business development centers in Turkey are located in the region is worthy of note, but considering the fact that no business development centers were established after 2008, and given the performance of the existing work development centers, it is apparent that their efficiency needs to be revised.

### 2.3.5. WESTERN BLACK SEA REGION ORGANIZED INDUSTRIAL ZONES

There are a total of five Organized Industrial Zones in the Western Black Sea Region, four of which are active. Investments are continuing in the Organized Industrial Zones located in the Ereğli and Çaycuma districts of Zonguldak, and a location has been selected for the establishment of an Organized Industrial Zone in the Alaplı district, and works to put this into operation are continuing. The other such zones in the region are the Karabük and Bartın Organized Industrial Zones.



## **3. DEMOGRAPHIC AND SOCIOECONOMIC STRUCTURE**

Demographic Structure, which is the subject of the second chapter of the Current Status Analysis, addresses population movements of the regional provinces, education and health amenities, employment structure, the impact of a single industry economic structure on social life and urbanization.

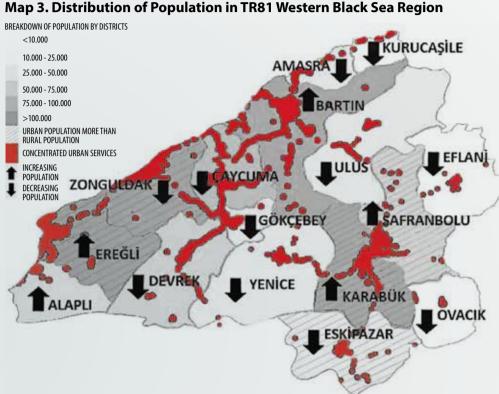
#### **3.1. DEMOGRAPHIC STRUCTURE**

The population of Western Black Sea Region was 1,020,957 according to the 2013 Address-Based Population Register System, accounting for 1.34 percent of the total Turkish population. The province with the largest population among the regional provinces is Zonguldak, while the province with the lowest population is Bartin.

The region's urban and rural populations are fairly balanced, with the urban population accounting for 51.8 percent of the total. Within the individual provinces, the rural population in Bartin is greater than the urban population. It is thought that the ratio of urban population to rural population in Zonguldak might have increased as Kozlu and Kilimli, which were considered to be among the rural population of Zonguldak because of their previous status as sub-district, have obtained district status at the end of 2012.

The province with the rural/urban population ratio that is closest to that of Turkey, according to data from TÜİK 2013, is Karabük, while Bartın is the least closest. The Ereğli, Safranbolu and Eskipazar districts are prominent in terms of distribution of the urban population on a district basis, while Ulus, Kurucasile and Eflani stand out in terms of their rural population.

Different from the average for Turkey, the female population is greater than the male population in the Western Black Sea Region, except for in the Karabük province. While women account for 49.81 percent of the population across Turkey, the figure for the Western Black Sea Region is 50.39 percent.



#### **3.1.1. MIGRATION TRENDS IN THE WESTERN BLACK SEA REGION**

Examining the migration figures for the Western Black Sea Region and the other Level 2 regions according to ADNKS 2012 reveals that 31,266 persons migrated to the Western Black Sea Region, while 34,793 persons left the region, meaning a drop in population of 3,527 by way of migration. The top five Level 2 regions from which the region receives the most migration are TR10 İstanbul, TR42 East Marmara, TR51 Ankara, TR41 Bursa, Eskişehir, Bilecik and TR82 Northern Anatolia, in respective order. This ordering is similar in terms of migration from the region.



#### 3.2.1. **HEALTH**

The number of hospitals per 100,000 people across the region is above the average for Turkey. The number of beds per 100,000 people is above the Turkey average in the Zonguldak and Karabük provinces, but below the average in the Bartin province. The average for OECD countries is 490 beds per 100,000 people (OECD, 2012), and both Turkey's and the region's averages are below this. In Turkey, there is no province in which the number of hospital beds per person is above the OECD average, other than Isparta and Elazığ.

Turkey is also below the OECD average in terms of the number of physicians per person. The number of physicians per 1,000 people is 3.1 in the OECD countries, but around 1.7 for Turkey (OECD, 2012). In the Western Black Sea Region, the number of physicians per 1,000 people is 1.57, which is below the average for Turkey, although Zonguldak is above the country average. There are serious disparities in this regard between the region's provinces.

#### **3.2.2. EDUCATION**

The regional provinces are above the Turkey average with regard to gross enrolment ratios. There is no significant difference between the male and female enrolment ratios across the region according to data from TÜİK in 2013.

The illiteracy rate is around 6 percent in all three provinces according to data from TÜİK for 2013, while school graduation rates indicate that highest figure is observed among primary school and elementary school graduates. Examining the ratio for high school and equivalent level of education as well as college and faculty graduates reveals that Karabük province has higher figures than the other provinces. Master's degree and PhD graduates are guite few. Female literacy and graduation rate of females from a school are lower compared to males.

#### **3.2.3. HUMAN CAPITAL**

## 3.2.3.1. GENERAL OVERVIEW OF THE WORKFORCE MARKET

The main issue that draws attention in the Zonguldak province with regard to the main variables in the workforce market, according to data from TÜİK for 2010, is the unemployment rate of 10.7 percent, which ranks Zonguldak in 39th position on the list of provinces with the highest unemployment rates, while Karabük ranks 31st with 11.5 percent ratio and Bartin ranks 45th with 10.2 percent ratio. The workforce participation rates are 52.2 percent for Zonguldak, 51.4 percent for Karabük and 54.6 percent for Bartın. The employment rate in the region's provinces is above the average for Turkey of 43 percent.

### **3.3. SPATIAL TRENDS AND URBANIZATION**

There are three provinces in the Western Black Sea Region – Zonguldak, Karabük and Bartin – and 18 districts making up these provinces. The urban utilization and service areas are found predominantly in the Zonguldak Merkez, Ereğli, Bartın Merkez, Amasra, Karabük Merkez and Safranbolu districts in the region, which was a single province before Bartin and Karabük were separated. As can be seen in the map below, the districts of Karadeniz Ereğli, Alaplı, Çaycuma-Gökçebey and Devrek of Zonguldak, and the districts of Merkez and Safranbolu of Karabük seem to have combined with each other due to the high concentration of services provided in each of these districts.

#### **3.4. SUSTAINABLE ENVIRONMENT**

## **3.4.1. GENERAL STATUS**

One of the main problems in the region, where the industrial culture is dominant, is the environmental pollution arising from the shortage of infrastructure that came with unplanned industrialization. The primary issue observed in the Zonguldak, Karabük and Bartin provinces in this regard is air pollution, followed by water pollution and waste, in respective order. Soil pollution is another problem that needs to be resolved as a matter of urgency.



# **4. TRANSPORTATION AND LOGISTICS INFRASTRUCTURE**

#### **4.1. GENERAL STATUS**

The Western Black Sea Region has significant logistic potential, being on the coast of the Black Sea, and so appeals to the hinterland of Central Anatolia and Ankara. However, mere positional superiority is not adequate for competition, for which the variety and integration of the transportation networks are very important. The Western Black Sea Region has potentials for sea, rail, land and air transportation. Although it is a strong region in terms of variety in its transportation network, the usage of the transportation networks is not adequate in the region. The region's geographical position and its variety of transportation will become more important as the transportation and logistics infrastructure -improves, integration between transportation networks is increased and the other shortcomings are removed.

#### **4.2. LAND ROUTE AND RAILWAY**

The transportation infrastructure across the region is mostly land based. Although the presence of a railway network in the Zonguldak and Karabük provinces is an advantage, it offers only a limited service, and is particularly for passenger transportation. Highway transportation in the region is partially adequate, and so additional arrangements and investments need to be made in order to increase the accessibility of the region. Among these investments, dual carriageways hold a significant place. Developing the land route transportation network is quite important in increasing industrial investments in the region and for the development of trade, tourism and logistics.

#### **4.3. SEAWAY AND PORTS**

Although the region offers significant potential for seaway transportation, there is next to no passenger transportation. The Western Black Sea Region has six ports, four of which are in Zonguldak and the other two in Bartın, although there are two additional port projects planned in Zonguldak. One of these is Alaplı Port, which is planned for Alaplı, and the other is Filyos Port, with a 25 million-ton capacity and is planned to for Çaycuma. The tender model for the Filyos Port is planned to be decided upon in 2013 and put out to tender. Seaway transportation will thus gain a significant position in the region with the existing facilities and additional investments.

## 4.4. SIGNIFICANT PROJECTS ON A REGIONAL SCALE

## 4.4.1. FİLYOS VALLEY PROJECT

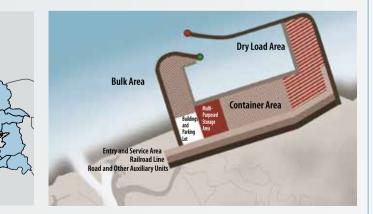
Port capacities on an appropriate scale, time and place will be realized pursuant to the national plan, and railway and highway connections to these ports will be completed in order for Turkey to achieve its export goals. These ports will facilitate the creation of new transportation corridors, for which railway connections are planned, and Turkey will be able to undertake a significant role in international transportation with the creation of these corridors. There are three main ports planned for the Black Sea, Aegean and Mediterranean regions, aimed at responding to the increasing foreign trade in Turkey and ensuring the creation of a regional transfer center. Among these large scale ports, survey projects for Filyos Port have been completed, and the project has now entered the tender stage.

One of the most important among the planned ports is the Filyos Port Project, to be realized in the Western Black Sea Region. The project has been planned together with the Filyos Free Zone, the Filyos Industrial Zone, Filyos Port, flood defenses, industrial infrastructure and strong transportation connections. The project is expected to be one of the largest integrated investments in Turkey, and it is thought that it will contribute to the economic and social development of the entire region, and even of the country, owing to its broad sphere of influence.

#### Map 4. Filyos Port Hinterland







#### Map 5. Filyos Port Layout Plan



# VOLUME 2 DEVELOPMENT AXIS, **PRIORITIES and MEASURES**

# **VOLUME 2 - DEVELOPMENT AXIS,** PRIORITIES AND MEASURES REPORT **5. PRIORITIES AND MEASURES**

## 5.1. ENSURING SECTORAL VARIATION

#### M.1.1. CREATING A RECYCLING SECTOR

**MEASURE 1.1.1.** Recycling has the potential to make a significant increasing in national welfare. Recycling, recovery, collection and decomposition operations will be commenced and disseminated.

**MEASURE 1.1.2.** It must be ensured that the ship scrapping sector, which is a significant source of scrap steel reusable equipment and raw materials used in shipbuilding, becomes prominent in the region. Country-wide extension of the ship scrapping activities, which are currently being conducted intensively in İzmir Aliağa, will play an important role in terms of the recovery of scrap metal. Examining its infrastructure and the work culture in the shipping industry reveals that Ereğli and Alaplı have adequate potential to have a voice across the region in the ship scrapping sector.

MEASURE 1.1.3. The dissemination of these practices needs to be ensured in the region, as the necessary development with regard to recycling and recovery has been lacking, despite international protocols and national strategies and plans.

**MEASURE 1.1.4.** It must be ensured that independent enterprises share each other's products and waste products (materials and energy), logistics and specialization with a sustainable and innovative resource utilization approach, for industry-based environmental and social problems to be avoided, and for economic return to be obtained. An Industrial Symbiosis approach must be adopted and realized in industrial applications across the region.

**MEASURE 1.1.5.** Public and industrial awareness on the issue of recycling and the environment is inadequate in the region, as is the case across Turkey. Raising awareness in this regard would contribute to the preservation of recycling as an efficient economic investment in the long term, and the creation



new areas of employment. For this reason, the necessary infrastructure works should be completed and recourse should be made to sustainable recycling applications.

#### M.1.2. DEVELOPING FURNITURE AND FORESTRY PRODUCTS SECTOR

**MEASURE 1.2.1.** There is significant potential in the region for non-timber forestry products (bay leaf, linden, chestnut, mushroom varieties, forest fruits, etc.), however, there have been insufficient efforts to utilize these products. It will be possible to create added value by making use of these values by identifying the potentials of the region, and the necessary works should be made in this regard.

**MEASURE 1.2.2.** The enterprises doing business in the furniture sector in the region are mostly family companies. It is very important that these enterprises change their working models it the potential of the industry to be sufficiently utilized.

**MEASURE 1.2.3.** Institutionalization, branding, quality management, image and marketing activities are lacking in the region, which is a significant obstacle to the development of the sector. It is therefore important for the future and competitiveness of the sector that enterprises doing business in the region develop their efforts in these areas.

**MEASURE 1.2.4.** Export capacity should be increased in the region, as mentioned in the goals of the Turkey Export Strategy and Action Plan for 2023. In this regard, first of all, the export activities of enterprises that are already exporting, or have the potential to make exports, should be supported.

**MEASURE 1.2.5.** The development of the enterprises must be ensured by ensuring specialization in certain areas rather than competing in the same area against companies in Bursa and Kayseri who dominate in the furniture sector.

#### M.1.3. IMPROVEMENT OF THE INVESTMENT CLIMATE AND INCREASING THE CAPACITY OF SMES

**MEASURE 1.3.1.** The primary bottleneck that needs to be overcome if the investment climate in the region is to be improved is the restrictions on land, and the fact that potential investors cannot access information about industrial zones in the region via the Internet. It is important that measures are taken in land production in order for issues to be eliminated, and that web-based applications providing detailed information, including the coordinates of investment areas, are commenced.

**MEASURE 1.3.2.** One of the purposes of the National Science, Technology and Innovation Strategy is for "More SMEs to be added to the Circle of those Engaged in R&D and Innovation". In this

regard, it is necessary to resolve the issues encountered by SMEs whose working capital and number of qualified personnel are at an inadequate level for the production of innovative products, and to increase their capacity for product development and R&D, along with clean technology utilization, in order to increase their energy efficiency.

**MEASURE 1.3.3.** Producing products with high added value through the use of raw materials, semi-products and products from the region, particularly those from iron and steel and forestry resources, must be supported.

**MEASURE 1.3.4.** Supporting applications that will help enterprises remain informed of available government support and international funds, and allowing them to utilize these in the most efficient way, may resolve many of the issues encountered by a significant proportion of the enterprises engaged in activities in the region. In this regard, activities to increase the capacities and awareness levels of enterprises should be supported.

**MEASURE 1.3.5.** Works to create variety with regard to products, services and the market should be supported in order for the region's exports to increase on a stable basis.

## 5.2. INCREASING COMPETITIVE POWER OF CURRENT INDUSTRIAL ACTIVITIES

#### M.2.1. REINFORCING THE IRON AND STEEL SECTOR AND RELATED SUB-SECTORS

**MEASURE 2.1.1.** KARDEMİR is planning to begin producing wire rods and high quality round products in the years to come. Products with high added value that may be made by processing these products made of iron ore will create significant opportunities for the rolling mills in the province. The fact that it is possible to produce such items as rails, fasteners and shafts for rail transportation systems from the high quality steel bars and wire rods made by KARDEMİR will provide serious advantages to the region in terms of competition, and will contribute to reduction of external dependence for the supply of inputs.

**MEASURE 2.1.2.** If the steel service centers (SSC) bring the products they process close to the final usage form, it will vary the product range and provide added value to the products. Accordingly, it must be ensured that by-product industry is reinforced and varied.

**MEASURE 2.1.3.** It must be ensured the steel pipe producers in the region make ventures to produce noncorrosive pipe, considering the investments made by steel pipe producers in the region for noncorrosive flat sheet production in the country.



**MEASURE 2.1.4.** The necessary works should be carried out to enable the SMEs, who use the ERDEMİR-made sheet material in their fields of business involving pipes, profiles, sheet shredding and cutting, to form clusters and head towards making products with high added value.

**MEASURE 2.1.5.** In the region, there are enterprises with the potential to produce steel parts for construction equipment, however, final production in the region is not at the desired level. Producers should focus on working to produce construction equipment with high added value.

**MEASURE 2.1.6.** The region is home to many qualified workers owing to its long established history of iron and steel. The fact that the region is close to areas in which the automotive sector is concentrated, such as Istanbul, Bursa and Kocaeli, that the process of decentralization of industry in Istanbul is on the agenda, that a strong enterprise like ERDEMIR that can supply materials for the automotive sector and the existence of the Filyos Valley Project makes the region suitable for the automotive sector. In line with these potentials, automotive and sub-sector investments should be made in the region.

#### **M.2.2. ENSURING EFFICIENCY IN THE MINING SECTOR**

**MEASURE 2.2.1.** The inspection of certain mines has been transferred to Special Administrations pursuant to Law no 5177 and Unclassified Mining Law no 3213. That said, not all special administrations in the basin have adequate and experienced mining engineers and technical personnel. The fact that legislative provisions of the Mining Law with regard to occupational health and safety cannot be fulfilled in a healthy manner owing to this shortage of qualified personnel causes problems, and the necessary measures must be taken in this regard.

**MEASURE 2.2.2.** The technological infrastructure of the organization has weakened since the TTK, as the main player in the region, was unable to develop the appropriate mechanized excavation means. The main policy to be followed should be aiding the organization in R&D with qualified personnel, and supporting and structuring it in such a way that it is able to respond to the sector at a local level. The TTK should take on the role of a super-organization, responsible for inspecting enterprises that carry out their activities on a royalty basis, as this will raise efficiency in the sector. Such practices would not only preserve public power in the sector, but also allow it to utilize the experience of a long-established organization like the TTK.

**MEASURE 2.2.3.** Works must be carried out to continue production in areas where production can be made with the existing technologies and a relatively low cost in hard coal reserves, and to stop works in high cost areas.

**MEASURE 2.2.4.** The fact that some enterprises working on a royalty basis are not institutionalized causes issues in many areas, particularly with regards to occupational health and safety. Works must be carried out to raise awareness in these enterprises.

**MEASURE 2.2.5.** The Western Black Sea Region has rich reserves not only of hard coal, but also marble, fire-clay and dolomite. Works need to be conducted not only for the production of hard coal, but also for the above-mentioned industrial raw materials so that mining activities in the region can be diversified.

#### M.2.3. ENSURING ENERGY EFFICIENCY

**MEASURE 2.3.1.** The Çatalağzı Thermal Power Station located in the Kilimli district, which is connected to Zonguldak, uses old technologies. Investments need to be made to suit today's conditions and production efficiency needs to be increased in the facility pursuant to the strategy of "Reducing energy density and energy losses in the industry and services sector", as mentioned in the Energy Efficiency Strategy Document prepared by the Ministry of Energy and Natural Resources.

**MEASURE 2.3.2.** Failure to utilize the waste heat arising from thermal power plants causes possible energy resources to remain inert. Using this heat in the region to heat houses and public buildings would be an important step in ensuring energy efficiency.

**MEASURE 2.3.3.** Heating and cooling of houses and public buildings are the areas in which the most energy loss is observed. Measures must be taken to reduce energy loss and energy consumption pursuant to the regulations put in place by the Ministry of Energy and Natural Resources.

**MEASURE 2.3.4.** Article no 252 of the Turkey Strategy Document reads: "An increase in efficiency will be imperative in many industries as the transition is made to clean production processes. In this process, particularly projects that increase combustion efficiency in the energy production and transportation sectors need to be realized". Measures must be taken to reduce the emission of gases that cause the greenhouse effect, and to encourage recycling in the integrated iron and steel facilities, rolling mills, steel service centers and other enterprises carrying out activities in the iron and steel sector in the region, as part of the efforts to increase efficiency.

**MEASURE 2.3.5.** The utilization of renewable energy sources must be encouraged in order to ensure the effective and efficient consumption of energy, to reduce energy consumption, to mitigate the risks arising from external dependence and to reduce energy costs in a sustainable manner.



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#### M.2.4. COMMENCING CLUSTERING, INDUSTRIAL SYMBIOSIS AND BRANDING WORKS

**MEASURE 2.4.1.** It must be ensured that enterprises concentrate in certain locations and develop a culture of cooperation to ensure their joint utilization of customer and infrastructure resources in the regions in which there are no clusters, and to increase their competitiveness in the global market pursuant to the clustering approach, as addressed in the 12th article of the Turkish Industry Strategy Document.

**MEASURE 2.4.2.** Founded by the joint efforts of 17 rolling mill owners located in Karabük, KARMET A.Ş. is the most important example of cooperation in the iron and steel sector. If the rolling mills are able to conduct log purchases at more reasonable costs and at short supply terms as KARMET A.S., it would positively affect their competitiveness.

**MEASURE 2.4.3.** As in the POSCO Model in South Korea, the integration of the rolling mills in Karabük and KARDEMİR is important for the sustainability of the sector. Producing low quality products without high added value using the old technology, the rolling mills will be able to produce much better quality products with the logs produced for them by KARDEMIR as a semi-product. Accordingly, this model should be examined to ensure rolling mill and KARDEMİR integration.

**MEASURE 2.4.4.** Although there is no clustering in the furniture and forestry products industries across the region, industrial cooperation can be observed. Creating a cluster from scratch would place bureaucratic loads on companies and cause an increase in infrastructure costs, and so encouraging the integration of furniture companies in the existing clusters instead of a separate clustering process, as well as encouraging membership of strong industry organizations, are important for developing competitiveness.

**MEASURE 2.4.5.** If accommodation providers in the region, particularly in Safranbolu and Amasra, create a network that permits them to market their services via a common platform, it would allow them to gain more added value from the tourism sector. Creating such network would allow the promotion of the region, as well as its tourism-based enterprises, and would also allow the target group to access more comprehensive and detailed information regarding the enterprises. In this regard, a common web portal make a significant contribution to tourism.

**MEASURE 2.4.6.** Industrial design is today becoming an important factor in competitiveness, although regional enterprises are currently lacking in this regard. Work must be conducted in collaboration with the universities in the region in order for the companies in the region to create their own identities and launch a branding process.

# **POSSIBILITIES**

#### M.3.1. REALIZING THE FILYOS VALLEY PROJECT

**MEASURE 3.1.1.** The industrial investments in the Filyos investment basin must proceed in a planned manner to ensure the success of the project, which will steer the future of the region. It is important for sustainability that investments are made based on the "clean production technologies" highlighted in the Turkish Industry Strategy and the Turkey National Climate Change Strategy Document, prepared by the Ministry of Science, Industry and Technology.

**MEASURE 3.1.2.** An organization that can ensure the coordinated execution of all public and private industry works to be made in Filyos Investment Basin must be created. The necessary coordination must be ensured in the area planned for Turkey's first Eco-Industrial Park, to be carried out by an organization that will allow a relationship between investments to be established.

**MEASURE 3.1.3.** As part of the efforts to achieve Turkey's export goals, after completing the necessary surveys and projects, a regional transfer center needs to be established connected to the large-scale Filyos Port, as mentioned also in the 10th Development Plan and in the Turkey Transportation and Communication Strategy.

**MEASURE 3.1.4.** The Filyos investment basin is located on flood plain, and so the necessary measures must be taken to protect the basin and investments against possible flood disasters.

**MEASURE 3.1.5.** It is imperative that the different modes of transport in the region be improved and integrated to allow an economic leap to be made in the region. In the present day, when time is important, the existence of a large project that would increase population in the region makes airport transportation particularly important. Integration of the transportation networks should be ensured through reinforcement efforts, and the necessary infrastructures should be created that will allow the region to become an industrial and logistics base.

**MEASURE 3.1.6.** New settlement areas will emerge in the region in line with the industrial activities that will develop as the Filyos Valley Project is realized. The Filyos Project is an important opportunity in terms of urban development, however, repeating old mistakes will be inevitable if the necessary planning isn't made. In this regard, the necessary measures should be taken to support the expected rise in the population and workforce in the region.



### 5.3. REINFORCING TRANSPORTATION, INFRASTRUCTURE AND LOGISTICS

#### **M.3.2. ENSURING INTEGRATION WITH NATIONAL AND INTERNATIONAL NETWORKS**

**MEASURE 3.2.1.** Passage routes and new projects are planned in the countries that are part of the TRACECA Project. Within the framework of this project, the North Anatolia region of Turkey has been determined as a passage route. Projects in the Western Black Sea Region have further significance in regards to the development of the infrastructures that will form part of the international networks and that will connect the domestic and overseas markets.

**MEASURE 3.2.2.** The Black Sea is an inland body of water that is bordered by Ukraine to the north, Russia to the north east, Georgia to the east and Romania and Bulgaria to the west, and the presence of these countries means that the region has significant commercial potential. In this regard, it is important that necessary promotion and collaboration works be made to increase the volume of trade with the ports of Burgaz, Varna and Köstence on the west coast of Black Sea; with the ports of Poti and Sochi to the east; and with the ports of Edessa, Evpatoria and Novorosisk to the north.

#### M.3.3. IMPROVING REGIONAL AND URBAN TRANSPORTATION SYSTEMS

**MEASURE 3.3.1.** It is imperative that the different modes of transport be improved and integration to allow an economic leap to be made in the region. The presence of the Filyos Valley Project which will increase the population in the region, brings extra significance to air transportation in the present day, when time is important.

**MEASURE 3.3.2.** The region has been unable to make efficient use of maritime transportation, despite the opportunities that are available, and efficiency needs to be increased in this regard for the carriage of both cargo and passengers.

**MEASURE 3.3.3.** The creation of dual carriageways in the region is continuing. Highway works need to be completed with attention paid to road quality, while the traffic load on the city centers needs to be reduced and connections need to be strengthened to increase accessibility in the region.

**MEASURE 3.3.4** Reducing fossil fuel consumption by motor vehicles, increasing the share of railways in public transportation and reducing emissions that are harmful to the environment by preventing unnecessary fuel consumption are among the main transportation policies in the Energy Efficiency Strategy Document prepared by the Ministry of Energy and Natural Resources. In this regard, it is important that the railway projects that have been launched that will connect the region to the Marmara and Central Anatolia Regions be completed.

**MEASURE 3.3.5.** Certain applications for city centers need to be realized to increase the livability of the regional provinces. To this end, light rail systems are being commissioned, best practices in public transportation are being disseminated, and measures are being taken to regulate flow in areas of dense traffic in order to reduce traffic load resulting from the poor selection of place.

**MEASURE 3.3.6.** The Fevkani Bridge, the construction and maintenance works of which have been disregarded since it was constructed in Zonguldak, has completed its economic life. Rather than resolving transportation issues, the bridge actually divides the city and different usage areas, while also endangering life. Works should be carried out to move the commercial enterprises located under the bridge to a more appropriate place, and different activities to facilitate urban transportation should be realized to replace the bridge.

#### 5.4. VARIATION AND DEVELOPMENT OF TOURISM

#### M.4.1. IDENTIFYING THEMATIC ROUTES BETWEEN TOURISTIC REGIONS

**MEASURE 4.1.1.** It is stipulated in the Tourism Strategy Document for 2023 that the area between Sile and Sinop is to be developed as a domestic tourism development corridor, to serve in particular metropoles such as Ankara and Istanbul. The share taken from culture, beach and nature tourism must be increased as part of a holistic tourism plan for the region.

MEASURE 4.1.2. The "Ancient Teion-Billaos City and Filyos Castle" in Filyos, connected to Caycuma

and lying on thematic routes, are characterized as the "Ephesus of the Black Sea". This one and only ancient city on the coast of the Black Sea has potential as a site for history and cultural tourism. The necessary works need to be conducted in order to earn "Teion Ancient City" to tourism, considering the balance between protection and usage, and expected industrial development in the region.

MEASURE 4.1.3. Different tourism activities can be observed in different districts in the region. It will be possible to increase the currently low number of overnight stays and become more competitive by creating different tourism routes between the districts that have potential in many different tourism types, such as coastal, cultural, cave and nature tourism.

**MEASURE 4.1.4** Remnants such as a Turkish bath, a church, city walls, sepulchers, ancient theaters, monumental buildings and mosaics have been found at the Hadrianoupolis Ancient City in Eskipazar. Eskipazar should be prioritized as a tourism asset and added to the list of the country's cultural touristic destinations, and should be considered in combination with the other touristic resources in Eskipazar in order for it to be a center of attraction, highlighting its proximity to Ankara.



**MEASURE 4.1.5.** In Bartin city center can be found an urban archeological site, containing houses, timber structures, a water tank with a fountain, Turkish bath and inns. The restoration works that were launched for these buildings, which represent civil architecture, have yet to be completed. Opening these architectural buildings to the use of the society after renovation is important for the development of tourism, based on a framework of preservation and usage balance.

**MEASURE 4.1.6.** The Yenice Forest is one of the most biologically varied areas in Europe, with its rich flora, deep valleys and wide variety of wildlife. This are must be included on thematic nature tourism routes, and the outdoor sports facilities and ecotourism opportunities in the area must be developed.

**MEASURE 4.1.7.** The Safranbolu Municipality organizes the "International Gold Safran Documentary Movie Festival" every September. Promoting the festival, which focuses on documentaries which seeks to embrace Turkey's cultural heritage, and increasing attendance, may contribute to the variation of tourism in the district.

**MEASURE 4.1.8.** Leyla Gencer, an opera singer who has performed both in Turkey and abroad, is one Safranbolu's most valuable assets. Making use of Safranbolu's stunning atmosphere would raise the interest of a larger variety of people in honoring the name of the singer, who is world renowned, but who has never received the attention she deserves from the region in which she was born.

**MEASURE 4.1.9.** As home to the Küre Mountain and Yedigöller National Parks, the region should be considered within the framework of a sustainable ecotourism approach wherein visitors can contribute to the environment and to the local people.

#### M.4.2. ELIMINATING THE SHORTAGE OF OUALIFIED PERSONNEL

**MEASURE 4.2.1.** One of the reasons for the lack of gualified personnel in the region, which is the main hurdle for tourism in the region, is the inadequate quality of education in the schools offering training in tourism in the region. Regulations should be made in these educational organizations, particularly with regard to raising personnel with the necessary qualifications for nature and cultural tourism in order to eliminate this shortcoming. Second language training should be prioritized in this regard.

MEASURE 4.2.2. Enterprises need complete their institutionalization efforts, given the importance of human relations in the sector. Institutionalization must be ensured in enterprises and the wages policy must be improved in order to encourage qualified personnel to stay in the region.

#### M.4.3. INCREASING QUALITY, CAPACITY AND VARIETY IN ACCOMMODATION

**MEASURE 4.3.1.** The most significant problem in the region's tourism areas is the lack of accommodation of sufficient variety and quality, which shortens durations of stay. Arrangements must be made so that different demands can be met so as to increase these durations and to take an adequate share from tourism.

**MEASURE 4.3.2.** Accommodation and service quality need to be increased to ensure that tourists visiting the region stay longer, and that the incoming qualified tourists are satisfied.

#### M.4.4. ENSURING PROMOTION AND BRANDING SKILLS

**MEASURE 4.4.1.** Many touristic assets in the Western Black Sea Region are not adequately known at a national or international level, owing to the lack of promotion and marketing activities in the region. These need to be considered as a whole and to be developed as such.

### 5.5. INCREASING VENUE AND LIFE QUALITY OF SETTLEMENTS

#### M.5.1. RELOCATING INDUSTRY UTILIZATIONS TO THE OUTSIDE OF THE CITY

**MEASURE 5.1.1.** The majority of the rolling mills in Karabük are located in the city center. The rolling mills, in which heavy industrial activities are carried out, are concentrated around the station area, and in Yeşil Mahalle and Beşbinevler. The area around Asit Bridge has been identified as the most appropriate area for the relocation of the rolling mills from the city center in a feasibility study conducted for the Western Black Sea Development Agency. Such a relocation needs to be completed in order allow more appropriate urban utilizations, and so to increase livability levels.

**MEASURE 5.1.2.** The 69 Storehouses belonging to TTK, located at the Ankara entrance to Zonguldak are no longer functional in their current condition, and can be described as visual pollution. Retaining such an inactive area within the center causes many issues in Zonguldak, where encouraging urban usage has been challenging. Inactive industrial areas need to acquire a function other than usage as housing, pursuant to the urban transformation efforts.

**MEASURE 5.1.3.** The fact that the TTK Port in Zonguldak is within the city center causes many issues in such areas as transportation, and environmental and visual pollution. With the completion of the Filyos Port project, as well as the other ports in the region, it is thought that the functions of TTK Port will be transferred to other ports in the long term. Creating a large square in the current the port area



and integrating it with the washery area would remove pressure from the city center and eliminate the shortage of social reinforcement areas.

**MEASURE 5.1.4.** Land is limited and property issues are common in the region, and there are a number of Small Industrial Workplaces and Small Industrial Sites inside city centers that restrict land usage. The creation of development axes in the cities should be considered, and works should be conducted to relocate industrial functions to suitable areas outside the city centers.

#### M.5.2. MAKING URBAN AREAS LIVABLE

**MEASURE 5.2.1.** One of the three main approaches mentioned in the KENTGES Integrated Urban Development Strategy and Action Plan is to increase the venue and life quality of settlements. The necessary steps to be taken in order to render the urban areas across the region livable have been identified based on the KENTGES strategies. Currently, the production and residential activities are conducted together in Zonguldak. In its current condition, the city displays a disorderly structure comprising a clutter of multistory buildings that prevent the use of green areas. Certain regulations must be made as regards to housing in order to create a livable city.

**MEASURE 5.2.2.** The Acılık and Üzülmez Rivers that pass through the city center of Zonguldak cause environmental and visual pollution. Improvement works need to launched for the rivers and recreational arrangements need to be made in the area between 69 Storehouses and the TTK Port.

**MEASURE 5.2.3.** If a project design is made for the Washery Area with a holistic planning approach containing the port, the Fevkani Bridge and 69 Storehouses, it could address many urban usage requirements, and so the necessary works must be carried out in this regard.

**MEASURE 5.2.4.** The Fener Quarter, which is an archeological site in Zonguldak where the TTK lodgings are currently located, must be recovered from its current non-maintained status and must be evaluated as part of the efforts to recreate the urban image.

**MEASURE 5.2.5.** The Bartin province will be able to increase its social reinforcement resources if Bartin River, which passes through it, can be utilized for transportation and tourism.

**MEASURE 5.2.6.** Regulations on venues that will increase quality of life in Bartin are needed. A sub-center must be created as an alternative to the current city center, which cannot be changed due to its status as an urban archeological site, and which has inadequate infrastructure.

**MEASURE 5.2.7.** Large-scale unplanned urbanization and parking area issues are common in the Amasra district, and tourism in the district in particular is being negatively affected by these issues owing to the increased number of visitors during the summer season.

**MEASURE 5.2.8.** The most fundamental problem of Karabük with regard to urbanization is the emergence of slum housing. Residential areas that are outside the development plan, even though they are within the municipal borders, exacerbate these issues.

**MEASURE 5.2.9.** Appropriate solution alternatives must be put forward for the State Railways Terminal site that splits the city center of Karabük in two, resulting in different traffic loads on both sides of the city.

**MEASURE 5.2.10.** One of the main issues affecting the development of Karabük province is Karabük University. The student capacity of the University increases every year, and this affects the city both socially and spatially. The province lacks the ability to respond to the increasing number of students and personnel, and so city square and parking area arrangements must be made in order to transition to practices that give priority to pedestrians in the city center of Karabük. This would contribute to the fulfillment of the need for outdoor areas, while also reducing traffic in the center.

#### M.5.3. TAKING MEASURES WITH REGARD TO SETTLEMENT AREAS

**MEASURE 5.3.1.** Settlement areas are the most important issue in the Zonguldak province, and urgent precautions need to be taken. Bülent Ecevit University and Anadolu University prepared the "Zonguldak İncivez and Bahçelievler Quarter Ground Movements Report" as an assessment of the current status. The findings of the report must be taken into account, and the necessary measures must be taken with regard to settlement areas.

#### **M.5.4. GENERALISATION OF HANDICAP ACCESS URBAN APPLICATIONS**

**MEASURE 5.4.1.** It is rare to find any examples of urban applications promoting handicap access in the provinces of the region. The necessary arrangements must be made in housing and transportation to facilitate the access of people with disabilities.

**MEASURE 5.4.2.** It is important that venues where people come together, such as public places and social reinforcement areas are arranged in line with the needs of all segments of people.



#### 5.6. ENSURING SOCIAL DEVELOPMENT

#### M.6.1. INCREASING OCCUPATIONAL HEALTH AND SAFETY APPLICATIONS

**MEASURE 6.1.1.** The sectors in which work accidents are most common in the region are mining, iron & steel and construction, in respective order. A more effective inspection and control strategy must be followed with regard to work accidents and occupational diseases, and the necessary legal regulations must be made in order to ensure the implementation of the measures identified during the inspections.

**MEASURE 6.1.2.** The fight against dust must be accelerated and the related guidance must be given in order to minimize occupational diseases arising from dust in the intensive mining activities conducted in the region.

**MEASURE 6.1.3.** Works need to be carried out to diagnose and report on occupational diseases, to collect related data and to ensure that best practices are shared between parties.

**MEASURE 6.1.4.** Efforts of all parties need to be increased in order to raise awareness and to develop a culture of Occupational Health and Safety in all segments of society.

**MEASURE 6.1.5.** Workplaces need to be designed, constructed, operated and maintained without endangering the health and safety of workers. It is also important that employers have OHS awareness, and that the employer and the employee act together in the applications.

#### M.6.2. PROVIDING SOCIAL INCLUSION FOR DISADVANTAGED PEOPLE

**MEASURE 6.2.1.** The locational convergence of people who are similar in terms of income status and lifestyle is a reflection of the social discrimination of a place. It must be ensured that people classified under different income groups in the cities have fair access to basic services such as education, health and infrastructure.

**MEASURE 6.2.2.** Heavy industrial activities in the region, where mining and iron and steel activities are predominant, have a high level of work accidents that can lead to disablement. The region has a rough topography and it is imperative that physical arrangements are made in the region for physically handicapped people to ensure their ability to integrate with social life.

**MEASURE 6.2.3.** Mentally handicapped people are more subject to social discrimination. Many arrangements, particularly awareness-raising works, if this segment is to be able to integrate into society.

**MEASURE 6.2.4.** The access of women who do not work owing to pressure from their husbands in families with low income to a social and working life would be a fundamental step along the road to social development.

**MEASURE 6.2.5.** Access to justice is important for the protection of the rights of disadvantaged groups. The best way to protect these groups is by making them aware of their legal rights, and the means by which they can make use of these rights.

**MEASURE 6.2.6.** Social services rendered to families, children, the handicapped, the aged and other persons in need of protection, care or aid will be provided.

**MEASURE 6.2.7.** Unemployed people who are unable to adapt to the changing work market owing to a lack of training and qualifications are among the disadvantaged groups, and are subject to both social and economic discrimination. As a priority, the areas in which employees are needed must be analyzed thoroughly with a workforce demand analysis in order for unemployed individuals to be involved in working life.

**MEASURE 6.2.8.** People with addictions form another disadvantaged group that are excluded from society who need to be integrated. Economic and social exclusion as a result of addictions to alcohol or narcotic substances, these individuals first need to be treated and then their integration into society must be completed through employment and psychological support.

**MEASURE 6.2.9.** Romani People are another disadvantaged groups, owing to the issues they encounter with regard to living conditions and access to basic services and employment. Increasing employment rates among Romani people will serve to integrate them into society, and so the necessary measures should be taken in this regard in order to ensure social integration in the region.

**MEASURE 6.2.10.** Obstacles preventing the involvement of relatives of martyrs and war veterans in economic and social life must be removed, and measures need to be taken to ensure their full involvement in society.

#### M.6.3. INCREASING THE OPPORTUNITIES IN THE REGION IN EDUCATION AND HEALTH

**MEASURE 6.3.1.** The region is in close proximity to such major cities as Ankara and Istanbul, both of which offer significant education potential, as well as to provinces such as Bolu, Kastamonu, Çankırı and Düzce. The region has three universities, although there is a low level of preferability of the region in higher education based on the lack of promotion and the insufficiency of social, cultural and physical infrastructure.



**MEASURE 6.3.2.** Works should be carried out to diversify education and to increase the quality of the regional universities.

**MEASURE 6.3.3.** The presence of well-established large enterprises like ERDEMİR and KARDEMİR, in addition to three universities, are factors that may positively influence the preferences of students seeking education particularly in engineering and technical subjects. It is important that the well-established culture of engineering in the region be utilized as part of the efforts to create collaborations between academia and industry.

**MEASURE 6.3.4.** The Bülent Ecevit University Faculty of Medicine offers radiotherapy and chemotherapy services that can ease the pressure on the health facilities in the larger cities. Furthermore, the Karabük University Research and Application Hospital, the construction of which is continuing in Karabük, shall open soon, and shall be a major advantage for the region. Considering the occupancy rates of hospitals in the nation's larger cities, these advantages would increase the preferability of the region in terms of health services.

**MEASURE 6.3.5** The necessary works need to be conducted to increase the capacity of occupational diseases hospitals in the region, given the prevalence of such diseases in the region, and establishing new specialized occupational disease hospitals would be useful in the region, as well as the neighboring regions.

**MEASURE 6.3.6** Establishing a health campus containing different health units and providing geriatric care in an area that is suitable in terms of its natural and environmental values, while also being easily accessible, may server as a different resource for the development of health tourism and the region as a whole.

#### M.6.4. TAKING MEASURES TO INCREASE THE EMPLOYMENT CAPACITY OF WOMEN

**MEASURE 6.4.1** The main reason behind the low female employment rates, which is a significant problem not only in the region, but in the country as a whole, is the lack of education. Preventing girls form attending school is one of the greatest obstacles preventing economic and social development.

**MEASURE 6.4.2** Having a single industry is the largest bottleneck for the region's economy in that it offers little opportunities for the employment of women. Female employment must be increased by creating work opportunities in different sectors.

**MEASURE 6.4.3** Female entrepreneurs who would like to establish their own business must be supported with training and support programs.

**MEASURE 6.4.4.** The inadequacy of care services for old people and children in the region is another factor negatively affecting the involvement of women in employment. Works commenced to encourage female employment must be continued, and working women must be supported. It should not be forgotten that maternity leave regulations may cause employers in the private sector to be reluctant to employ women, and so incentives must be provided to private sector employers in this regard.

**MEASURE 6.4.5.** One of the reasons why employment among women is low in the Western Black Sea Region is the fact that economic activities are dominated by the iron & steel and mining sectors, in which employment is predominantly men. Employment opportunities for women must be increased in the iron & steel and mining sectors.

#### M.6.5. DEVELOPING CAPACITY OF HU A SUSTAINABLE BASIS

**MEASURE 6.5.1.** Works must be carried out to increase the quality of education and training, research and development, and scientific publications and applications to bring them up to world standards and to teach people how to access information.

**MEASURE 6.5.2.** The entrepreneurship potential of the Western Black Sea Region is below the country average, according to research. Increasing entrepreneurship would have a positive influence on employment, welfare and quality of life in the region.

**MEASURE 6.5.3.** Social solidarity will be developed in the region with a culture of collaboration, and by acting together, the efficiency of nongovernmental organizations (NGOs) will be increased.

**MEASURE 6.5.4.** Certain elements need to be developed in order for society to develop and grow. A human-based approach should be adopted with regards to such issues as the development of public services and the elimination of gender inequality, and ensuring social inclusion efforts involve disadvantaged groups, all of which will support social development.

**MEASURE 6.5.5**. Regional employme develop and become a center of attraction.

**MEASURE 6.5.6.** Labor market supply and demand works will be carried out with regard to employment resources, with focus on the provision of occupational training and on-the-job training.



#### M.6.5. DEVELOPING CAPACITY OF HUMAN RESOURCES AND PRODUCING INFORMATION ON

MEASURE 6.5.5. Regional employment resources will be developed to allow the region to

#### 5.7. ENSURING DEVELOPMENT IN RURAL AREAS

#### M.7.1. MAKING SMALL AND LOOSE LAND STRUCTURE SUITABLE FOR AGRICULTURE

**MEASURE 7.1.1.** The most important problem faced in the region with regard to agricultural activities is the small, fragmented and loose land structure, which is unsuitable for mechanical agriculture. It will be possible to improve agricultural activities if the fragmented structure of agricultural soils can be resolved through the development of an irrigation system and the launch of training applications.

#### **M.7.2. DEVELOPING AGRICULTURAL ACTIVITIES**

**MEASURE 7.2.1** Increasing efficiency and the utilization of technology in the agricultural sector, improving product quality, complying with standards and steering production towards the market is very important. Local products must be identified and recorded, works should be launched for their branding and the sharing information between related segments must be enabled.

**MEASURE 7.2.2.** Milk and dairy production is particularly rife in the Çaycuma district, which is connected to Zonguldak in the Bartin province. The lack of cold storage facilities and capacity in this segment shortens the lifespan of products, negatively affecting marketing processes.

**MEASURE 7.2.3.** Agricultural lands in the region are limited, and while there are areas that are suitable for agriculture, the main problem in these areas is the lack of irrigation.

**MEASURE 7.2.4.** It must be ensured that products grown in the region are utilized in place as part of efforts to integrate agricultural production with local industry, thus increasing added value.

**MEASURE 7.2.5.** Poultry farming and stockbreeding have recently begun to gain significance in the region, but these industries must be supported, taking advantage of the region's proximity to Istanbul and Ankara.

#### M.7.3. DEVELOPING NONAGRICULTURAL ECONOMIC ACTIVITIES IN THE RURAL AREA

**MEASURE 7.3.1.** Developing ecotourism, alternative tourism and agro-tourism in the Western Black Sea Region, based on its natural beauties, may trigger the economic and social development of rural sectors owing to their influence on employment and in the service sectors.

**MEASURE 7.3.2.** Measures will be taken to raise, market and sell products that grow naturally in the area, and the people will be encouraged to engage in this economic activity.

**MEASURE 7.3.3.** Areas in which agricultural activities cannot be carried out, particularly the forest villages, need to be steered towards alternative activities relying on local resources.

**MEASURE 7.3.4.** It is possible to make use of culturally rich products and to create employment opportunities for the disadvantaged segments of society, particularly women and the young, in the areas in which they are located by supporting traditional handicrafts.

**MEASURE 7.3.5.** Rich with forests, the region should specialize in forestry products. To this end, it is necessary to be open to innovative ideas and to guide entrepreneurs in this regard. Furthermore, focus should be on making products that are exported from Turkey, particularly to European countries, where the returns are high.

**MEASURE 7.3.6.** There are many prominent local products in the region, and Ereğli Elpek Cloth, Eflani Çember Cloth, Devrek Walking Sticks and Bartın Tel Kırma can be given as examples in this regard. It is possible to increase touristic potential in the region and to contribute to rural development by carrying out the necessary works and giving brand value to these products.

**MEASURE 7.3.7.** Continued as a tradition in Kurucaşile for centuries, and one of the competitive industries in the region, wooden yacht construction must be supported with works to be conducted by universities in this area.

#### M.7.4. DEVELOPING SEEDLING - S. AGRICULTURE ACTIVITIES

**MEASURE 7.4.1.** There are areas in the Bartin Merkez, Ulus, Ovacik, Eflani, Eskipazar, Alapli, Çaycuma, Gökçebey and Devrek districts that are suitable for organic agriculture, and these areas must be utilized for organic agriculture, which has high economic return, by encouraging the local communities.

#### M.7.5. SUPPORTING AQUACULTURE AND APICULTURE ACTIVITIES

**MEASURE 7.5.1.** There is significant potential in Zonguldak and Bartin provinces with regard to fisheries, however, issues related to food safety and marketing exist due to the lack of infrastructure and superstructure in the sector.

**MEASURE 7.5.2.** Awareness must be raised among the fishers in the region, and the sector must be developed through the use of environmentally friendly "ecological fishing" methods to allow fishing to make a greater contribution to the region's economy.



#### M.7.4. DEVELOPING SEEDLING - SAPLING PRODUCTION, GREENHOUSE AND ORGANIC

**MEASURE 7.5.3.** The region offers a suitable environment for apiculture, with its forest areas, the wide variety of natural flora and the appropriate climate conditions. Apiculture and organic honey production must be encouraged in the villages located between the Devrek and Ereğli districts, in the Alaplı district and in the Ovacık, Yenice and Eflani districts, all of which are connected to Karabük. Apiculture products in the region must be endowed with brand value, and collective marketing activities must be supported.

#### 5.8. CREATING A HEALTHY AND BALANCED ENVIRONMENT

#### M.8.1. PREVENTING ENVIRONMENTAL POLLUTION ARISING FROM FALSE URBAN USAGE

**MEASURE 8.1.1.** Settlements have witnessed unplanned development as the speed of urbanization has been unable to keep up with the speed of industrialization across the region. Unplanned urbanization causes many issues, particularly in the fields of transportation and infrastructure. The pollution that has resulted from unplanned urbanization and the lack of infrastructure must be reduced in order to increase livability levels.

**MEASURE 8.1.2.** Air pollution in the city centers increases particularly in the winter as a result of the dense urbanization, the rapid population growth and industrialization, and the selection of locations in a way that is not suitable for topographic conditions. The articles in the "Reducing fossil fuel consumption by motor vehicles, increasing the share of public transportation on land, sea and rail routes and preventing unnecessary fuel consumption in urban transportation" and "Using energy effectively and efficiently in public organizations" sections of the Energy Efficiency Strategy Document, prepared by the Ministry of Energy and Natural Resources, must be observed, and the necessary measures must be taken to prevent air pollution, which negatively effects the health of the residents.

**MEASURE 8.1.3.** Settlements concentrated in coastal areas and river valleys cause direct pollution to natural springs. Disposing of domestic waste in streams or the sea without treatment increases pollution, and measures must be taken in this regard.

**MEASURE 8.1.4.** Storing domestic waste without composting or recycling, inappropriate agricultural practices and the disposal of waste in ways contrary to regulations are fundamental factors causing soil pollution in the region. Measures must be taken to prevent soil pollution, and the damage caused must be minimized.

#### M.8.2. TAKING MEASURES TO ABOLISH INDUSTRY-BASED ENVIRONMENTAL POLLUTION

**MEASURE 8.2.1.** The main issue in the region, where industrial and urban utilizations cannot be separated owing to a lack of planning, is the presence of industrial facilities in the water basin, forests and residential areas. Necessary measures should be taken to address this issue, which has a negative effect of quality of life, nature and urban functions.

**MEASURE 8.2.2.** Works aimed at developing clean production methods in industrial facilities, implementing advanced technologies and making efficient usage of energy are very important for the environment. Existing industrial infrastructures should be checked and clean production should be carried out in accordance with the applicable legislation and legal regulations.

MEASURE 8.2.3. Measures will be taken to prevent sea accidents.

#### M.8.3. TAKING MEASURES FOR THE STORAGE AND DISPOSAL OF WASTE

**MEASURE 8.3.1.** Measures should be taken to ensure the recovery and regular storage of solid waste using appropriate methods.

**MEASURE 8.3.2.** The current status must be revised with regard to waste storage and disposal, and new measures must be taken. The region must be endowed with new facilities, if deemed necessary.

#### M.8.4. INCREASING AWARENESS WITH REGARD TO ENVIRONMENTAL POLLUTION

**MEASURE 8.4.1.** Awareness must be created to reduce human consumption that causes environmental pollution, and to reduce its impact on the environment.





# **VOLUME 3** ANALYSES REPORT

# 6. INDUSTRY IDENTIFICATION, PRIORITIZATION AND COMPETENCE ANALYSIS REPORT

Production and service industries, as important triggers of regional economic and social development, make significant contributions to the preservation and development of the attractive and sustainable qualities of regions in the long term as a result of their potential to create work, employment and high added value. Increasing competition in the industrial and service sectors is important not only for the creation of an attractive investment center, but also for the improvement of the quality of life of the regional population.

In the regions with competitive industries, supporting industries with greater potential in the international market than others, and increasing the amount of goods and services delivered to the global market from the region are the most important parts of regional development works. Accordingly, most regional development programs make a thorough analysis of local industries, establish structures to support the development of innovative abilities, reinforce collaborative network structures to aid in globalization and produce projects that encourage competitiveness. One of the models seen most frequently in this regard is "clustering", although in recent years, models such as "smart specialization", "encouraging creative industries" and "preservation and commercialization of local resources" have been among the prominent models in regional development.

First of all, the industries in the region must be classified, and among them, those with high potential for competitiveness and clustering must be identified (prioritized) in order to create and support industry-specific (tailor-made) projects and collaboration platforms, as part of a process to develop the competitive power of the production and service industries, thus spurring regional development.

This report contains the results of works conducted between May and August 2013 for the identification and prioritization of industries in the Zonguldak, Karabük and Bartin provinces in the TR81 Level 2 Region, and making competition analyses of primary industries and developing an action plan based on the results.

The methodology used to identify and prioritize industries is based on the use of the most up-to-date sources in Turkey with regard to clustering, the most important of which is the "Cluster Definition and



Prioritization Guide" prepared under scope of the SME Collaboration and Clustering Project of the Ministry of Economy. The "Three Star Analysis", one of the guantitative methods suggested within the guide, was supported by interviews made with the Chambers in the provinces and the Provincial Directorates of Science, Industry and Technology, and was used to classify the industries. The "Industry Prioritization Matrix" in the same guide was supported with workshops attended by local authorities in the provinces as well as stakeholder organizations, and was used for prioritization of the industries.

For each province, two primary industries were identified in the TR81 Level 2 Region, based on the results of the works carried out to define and prioritize industries. The identified primary industries are Mechanical Production and Furniture for Zonguldak; Iron & Steel and Tourism for Karabük; and Tourism and Wooden Yacht Production for Bartin.

The "Porter's Diamond Model" was used for the competition analysis of the six identified industries, which were then analyzed under five main titles: Company Strategy and Competitive Structure; Input Conditions; Demand Conditions; Related and Supporting Industries/Organizations; and the State. The competitiveness scores of the six primary industries identified by the digitalized Porter Diamond Model Analysis are as follows (One shouldn't forget that these scores are based on the current status of the industries when compared to other industries in the respective province and their clustering potential, and were identified as primary industries): 0–20 No Competitive Power; 20–40 Low Competitive Power; 40-60 Competitive; 60-80 High Competitive Power; 80-100 Superior Competitive Power

Turkey is among the 17 largest economies in the world and comes to the forefront every day with its increasing foreign trade volume and economic performance.

Turkey has set itself challenging goals for the years ahead, among which are ensuring exports reach 500 billion USD by 2023, when the country will celebrate the 100th anniversary of the Republic, and being among the top 10 economies in the world. Although these goals are challenging, they are achievable via systematic work, identifying correct strategies, developing creative human resources, developing and producing innovative products, and managing marketing pursuant to the competitive and exportbased growth strategies of Turkey. Works to develop sectoral strategies are being carried out by the respective Ministries, and are being shared with stakeholders in industries. A total of four main areas in which these strategies intersect have been identified while identifying common strategy areas the development of industry in the TR81 Level 2 Region, and an Action Plan has been formulated based on these areas. The four main areas are:

- Innovation,
- Competitiveness,
- Collaboration Network Management,
- Internationalization/Interregionalizaton

A total of 19 actions have been identified for the development of the primary sectors in the TR81 Level 2 Region, and these have been classified according to the primary industry, common areas of competition and priority levels. Responsibilities have not yet been assigned for all of the actions in the Action Plan in the TR81 Region owing to an "inadequacy of stakeholders in the sector", which is the main issue observed in every sector, and proactive roles have been stipulated for BAKKA.

In general, an Action Plan was designed for the development of basic managerial capabilities, increasing exports, institutionalization, education and sectoral branding in the region, since all of the analyzed industries showed a low competitive profile. At the same time, suggestions were made for the renewal of existing industries, the development of the software/information sector as a "key facilitative industry" that could bring significant advantages to the process of realizing product-process innovation.

The impact of industry on the development of the region, its comprehensiveness and its implementation and success in the other regions were considered as criteria in the identification of the priority levels of suggested actions. In this context, it is suggested that the implementation of actions begins with actions with the highest priority levels.

The collaboration and communication issue is frequently encountered in every sector, regardless of whether dealing with production or providing services, and therefore it is important that sectoral associations and platforms in which all sectoral companies and their stakeholders take part are activated during the Action Plan realization process. Most actions related to firm projects that can be moved to the Region through the creation of good communications and a collaborative environment involving certain Ministries and public bodies and organizations. For this reason, it is suggested that BAKKA reinforces its good communicative and collaborative structure and increases and maintains its visibility/reputation.

In light of the analyses made and insights from field interviews, the sectors in the table below are recommended for prioritization in the carrying out of detailed competition analyses related to the project and in the development of a strategy regarding the preparations for Turkey's 2023 goals



Zonguldak	Karabük	Bartın
Furniture	Iron and Steel	Wooden Yacht / Boat Construction
Machine Construction	Tourism	Tourism

#### **COMPETITION ANALYSIS FOR PRIMARY INDUSTRIES**

The results and findings of the company and expert meetings, interviews, literature research and site survey data related to the industries that are active in the TR 81 Region, and designated to be prioritized for detailed analyses (Zonguldak Machine Production, Zonguldak Furniture, Karabük Iron and Steel, Karabük Tourism, Bartın Tourism, Bartın Wooden Yacht/Boat Construction) point to the fact that the international competitive capability of local industries is weak.

Province	Industry	<b>Competitiveness Score</b>
Zonguldak	Machine Construction Sector	25
Zonguldak	Furniture Sector	27
Karabük	Iron and Steel Sector	27
Karabük	Tourism Sector	33
Bartın	Tourism Sector	30
Bartın	Wooden Yacht Building Sector	33

#### ZONGULDAK MACHINE CONSTRUCTION INDUSTRY COMPETITION ANALYSIS

The machine and parts manufacturing sector is the leading producer of investment goods among the all industrial sectors, and has a special and important place in the manufacturing sector. This covers all sub-industries, referred to as "engineering industries", in which mechanical equipment and spare parts are manufactured. It is a branch of industry that is defined as a priority industry, and is attached great significance in all developed countries.

The presence of ERDEMİR in Zonguldak Ereğli is very important in structuring the steel service centers that develop rapidly in the sector offering products of the desired sizes and lengths to various industries, and to the machine- and parts-manufacturing sector. However, it is obvious that regional companies offering services to many sectors in the country are not ready for international competition. It can

be understood that companies who begin to take steps with regard to institutionalization and show development with regard to branding, certificates and management have no vision for the realization of their goals. Regional companies perform quite poorly in terms of collaboration in such activities as joint production and joint purchase, which would put them one step ahead of the competition. There are very few companies investing in R&D and innovative products in the region.

As the people living in the region are already familiar with the sector, the sector does not encounter any problems with regard to human resources. Furthermore, the concept of loyalty to workplace is highly common in the region because of this familiarity. The proximity of companies to raw materials is a plus for them in terms of competition, although the inadequacy of regional infrastructure and the costs counter that benefit. Being unable to become a brand owing to a lack of vision, while having the necessary raw materials and human resources under such good conditions has caused national and international demand for such companies to stay at minimum levels. The lack of customer groups that drive companies to innovate and the inadequate knowledge of companies about the markets also keep input conditions at a poor level.

It is apparent that none of the regional companies collaborate with any university departments in the province, and no activities are taking place for the benefit of industry by any NGOs or Chambers of Industry and Commerce. Furthermore, no aid is being provided to the sector by any organization in issues such as branding or export, and no support is provided to the sector in the form of finance. ERDEMIR stands as a major support mechanism for the companies in the sector, however companies fail to utilize it to a satisfactory level.

#### ZONGULDAK FURNITURE INDUSTRY COMPETITION ANALYSIS

Furniture manufacturers can be evaluated under two separate categories in the Zonguldak province. The first category is micro-small scale enterprises, which are widespread, but lack the vision to become institutionalized or to work for markets outside the region, and generally conduct their activities in response to the demand in the region. The main problem of these enterprises is that they work with low added value. Middle-size enterprises in the sector, on the other hand, focus entirely on exports outside the region and have taken major steps with regards to institutionalization. Small in numbers, these businesses draw attention with the high level of added value they create, and have grasped the significance of branding and design components in the sector. Although they do not perform well in regards to the number of innovative projects and products, they are critical players in the regional economy based on their ability to specialize in certain product groups for furniture products, and to develop export markets in these product groups.



The sector is dominated by enterprises with low competitive ability, and among the main problems of furniture enterprises doing business in the region are the lack of area of growth, failure to institutionalize, failure to finance growth in technical terms and as a team, failure to ensure continuity of demand, insufficiency in promotion and marketing, failure to follow trends and developments in the sector, the narrow market and commercial activities of non-regional players in the region, the lack of collaboration, the low level of communication between chambers of industry and commerce, universities and the other organizations in the region, and the insufficiency of activities with regard to innovation.

The dependence of the industry on the region is at its lowest level, with most of the required raw materials being sourced from outside the region. Furthermore, providers of services or technology to the sector are not located in the region. The high logistics costs arising from the nature of the product make regional enterprises advantageous, however the regional structure, particularly the inadequacy of transportation alternatives, create a disadvantage in competition for middle-sized enterprises focusing on exports.

Enterprises that have significant shortcomings particularly with regard to company structure and strategic management need to be supported in raising their managerial capabilities. Managerial skills such as institutionalization, innovation and R&D-based activities, focusing on value creation or cost reduction, understanding the sector well and reflecting this in the vision of the enterprise are quite rare in the region.

#### KARABÜK TOURISM INDUSTRY COMPETITION ANALYSIS

Tourism is one of the most significant global sectors, with around 1 billion people travel on a global scale in the present day, and spending about 950 billion US Dollars during these travels. Tourism income is an important source of revenue in developing countries for closing deficits in the balance of payments. Tourism activities in Karabük gained major momentum when the Safranbolu district was added to the list of World Heritage Cities in 1994.

An analysis of the companies doing business in the Tourism sector in Karabük reveals that most companies have made little progress in terms of institutionalization and branding, where they carry out activities with local resources. The collaborative culture is qualified as poor in the region, although the region has a competitive power based on its geographical features.

While the sector is rising in terms of input conditions owing to the convenient access to raw materials and because costs in the industry aren't high, it still remains poor due to the lack of human resources, the inadequacy of educational organizations and the local infrastructure.

The region draws heavy attention in terms of the cultural tourism it offers, which is gaining in popularity. Demand for culture from abroad is observed to be lower than in other regions of the country (such as Cappadocia), and so it is necessary to increase promotional efforts abroad for the region and to ensure its inclusion on tour programs.

While new initiatives are conveniently realized in the sector with capital stock, the necessary public support is also provided via national policies. Universities and NGOs contribute only at low levels, though it shouldn't be forgotten that educational organizations are very important for service industries. It is also notable that lecturers on tourism in the province's educational institutions carry out certain projects under their own initiative.

Government incentives and the taxes applied to the sector do not constitute a significant burden on the enterprises. Considering the scale of enterprises in the sector, it is clear that they do not require a serious amount of capital, and the fact that the taxes are the same as in all other sectors indicates that legal practices and bureaucracy do not bring much of a burden. Accordingly, the competitive power of the sector is increased.

#### KARABÜK IRON AND STEEL INDUSTRY COMPETITIVENESS ANALYSIS

As an inseparable part of contemporary social life owing to its robust properties, reliability, common usage, ecofriendly composition and many technical advantages, iron and steel is a strategic material that is at the very foundations of industrialization, which has driven the development of the sector.

Iron and steel companies carrying out business in Karabük attach little significance to innovation and R&D, despite them being among the most important elements affecting the competitive power of companies. The fact that company strategies are not identified and that no culture of collaboration has developed in the region are factors that further reduce competitiveness.

It can be understood that sector, which has become part of the living culture of the city throughout history has no significant issues in terms of raw materials, human resources or infrastructure, and this has put the sector in a quite competitive state with regards to input conditions.



One of the most important factors affecting the competitive structure of the industry is the fact that specialized products that create added value are not produced. The production of specialized products with high added value in the region is quite low, and it is mostly products with low added value that are produced, with demands received from within the country coming particularly from the construction sector and related industries. It can be observed that overseas sales in the sector are inadequate.

It is apparent that the universities in the region carry out no activities with companies in the sector aimed at increasing their competitive abilities, and no development project involving academia in the sector was found in the region. The sector also receives little public support, although the Rollers Association Karabük Branch conducts various activities to this end. Furthermore, the high number of related and supporting industries, which are among the factors that may render the sector competitive in terms of variety of use of iron and steel products, is notable.

Considering the fact that the financing necessary for entry into the sector industry is capital stock, initial investments in the sector can be quite high. Accordingly, the government should support the sector with a package on a level that would meet investment costs as part of its incentive system.

#### BARTIN TOURISM INDUSTRY COMPETITION ANALYSIS

Tourism is one of the most significant global sectors, with around 1 billion people travel on a global scale in the present day, and spending about 950 billion US Dollars during these travels. Tourism income is an important source of revenue in developing countries for closing deficits in the balance of payments. The region became a center of tourism particularly with the popularity that Bartin Amasra district caught across the country and its proximity to big cities like Ankara and Istanbul.

The enterprises in the Bartin tourism sector have been unable to develop in terms of institutionalization, which is particularly important for the tourism sector, and they are also weak in terms of collaboration and company strategies. On a regional basis, the competitors and enterprises who are informed about the market are not at a level at which they are able to compete with regards to innovation.

While the sector is rising in terms of the conditions for input owing to the easy access to raw materials and the lack of costs in the sector, it is still suffering from a lack of human resources, the inadequacy of educational organizations and, in particular, the poor infrastructure.

The fact that the Amasra district has become a preferred destination for short-term vacations owing to

its easy access and proximity to big cities like Ankara and Istanbul, the food and beverage sector and the year-round mild climate have brought the region to a competitive level in terms of domestic demand, although overseas demand is lacking. It is therefore necessary that more promotion be made abroad for the region, and that it be included on tour programs.

It is apparent that educational institutions in the region are unable to contribute significantly to the sector. Students raised in the educational institutions in the province choose the Aegean and Mediterranean regions for work, and therefore problems occur with regard to the availability of qualified human resources. The universities have engaged in no works to support the sector in this regard, and there is also very little public support on a provincial basis for the sector, where new initiatives could be easily realized with capital stock. Even though NGOs are present, it cannot be said that they conduct works at a level that would influence the competitiveness of enterprises.

Government incentives are at the fourth level in this region, and the minimum impact of bureaucracy on the enterprises multiplies the competitive power of the sector.

#### BARTIN WOODEN YACHT CONSTRUCTION INDUSTRY COMPETITIVENESS ANALYSIS

Around the world, the boat building sector is given priority for development by the governments of many countries, as it not only brings a high amount of quality employment and added value in the region, but also has little impact on the environment.

Wooden yacht manufacturers in the Bartin Kurucaşile region are lacking in company strategies and competitive power. None are targeting institutionalization, they have no information about the sectoral market, nor do they conduct any work in the sector, which is very open to design and innovation. That said, the culture of collaboration is at an advanced level in the region. A collaborative culture that would increase competitive power through such models as joint production, joint purchase and joint marketing, is quite prominent.

The sector is identified as traditional, and so there is little problem as regards to human resources, although there is shortage of people who are able to work on foreign trade. The proximity to raw materials, easy access and minimal costs in the sector gives the region an opportunity for high competitive power, while the inadequate infrastructure hampers it.

An analysis of demand in the sector reveals that domestic sales are generally limited to fishing boats



and some yacht construction, while overseas demand is almost nil. It is also apparent that the rising popularity of the second-hand market has affected demand. Qualified customers and specialized products in the sector provide another competitive ability to the sector, which is open to design and innovation.

No special support to the sector is provided by financial institutions, as is the case for the other active industries in the region. Although public institutions in the region carry out works to provide incentives for the sector, there efforts I regards to foreign trade and branding are inadequate. The educational institutions in Kurucaşile are useful for the sector, although the greatest support comes from the cooperative founded jointly by manufacturers.

Although Bartin is located in the fourth incentive region, the area of specialization, which is required in order for the region to be covered in the upper category of incentive regions, must be offered to manufacturers.

# 7. PROVINCE AND DISTRICT ANALYSES REPORT

The Province and District Analyses mentioned in the Analyses chapter of the 2014–2023 Western Black Sea Regional Plan were prepared following site visits by the experts from the Western Black Sea Development Agency Strategy Development and Programming (SGPB) unit.. In the framework of the survey conducted on all the city centers and districts within the borders of the region, the districts in which workshops were held were assigned to relevant groups of experts. Each expert carried out a preliminary research and organized workshops in the district for which s/he was responsible.

The 16 districts as enlisted below were examined within the district analyses.

- ZONGULDAK : Merkez, Ereğli, Alaplı, Devrek, Gökçebey, Çaycuma Districts<sup>1</sup>
- KARABÜK : Merkez, Ovacık, Safranbolu, Eskipazar, Yenice, Eflani
- BARTIN : Merkez, Amasra, Kurucaşile, Ulus

The works within the scope of the district analyses were carried out in two stages: In the first stage, faceto-face negotiations were made with district governors and municipality mayors, and then workshops were organized, attended by district bodies and organizations as well as NGO representatives in the second stage.

During the negotiations with the district governors and municipality mayors, various questions were asked to the parties via a questionnaire related to the most prominent sectors in the district, as well as the districts with further potential, their fundamental problems and what kind of policies need to be put in place in order to resolve these problems.

Prominent industries, and those with the potential to become prominent were identified based on the answers received and the analyses made. After identifying the prominent industries, a second round of workshops was held, attended by the representatives of the bodies and organizations in the districts and NGO representatives.

During the workshops, in which strategies were developed for the identified sectors, and district SWOT (Strong-Weak-Opportunity-Threat) Analysis and problem analyses were made, cards were handed out to the attendants linked to their area of specialization, and they were asked to write down their opinions on the cards.

Within the framework of these works, all of the districts in the Western Black Sea Region were visited and the opinions of roughly 150 attendees were obtained. In addition, during the workshops held in the central districts as well as in Ereğli, which is in the same status with central districts in terms of population size, work was carried out to identify a vision.

Below is a Schematic presentation of the results of the study:



<sup>1</sup> The towns of Kozlu and Kilimli, connected to Zonguldak, obtained district status at the end of 2012, increasing the number of districts in the region, including the central districts, to 18. Kozlu and Kilimli had not yet acquired district status at the time when this report was being prepared, and therefore these areas are considered within the central district in this study.

# 2014-2023 REGION PLAN STRATEGIES TOWARDS TOWNSHIPS



## BARTIN

#### **BARTIN CENTER (TEXTILE, AGRICULTURE)**

- Shoemaking and shoe upper activities should be supported and gualified personnel should be trained for the organizations operating on these areas.
- The necessary promotional activities should be commenced for the promotion of regional fabric and wire weaving.
- Producers in Bartin who take their production technique from the Istanbul Beykoz township, which is renowned for its shoemaking, should be brought together and clustering activities should be started.
- Water buffalo and water buffalo yoqhurt production should be supported.
- For 12 month-long production, modern agricultural methods should be adopted, such as greenhousing and plant house agriculture.
- Small-scale cattle husbandry should be supported.

#### KURUCASILE (WOODEN YACHT/VESSEL PRODUCTION)

- Yacht furniture and manufacturing sectors should be specialized in Kurucasile, where there is the necessary knowledge and experience for the construction of wooden yachts and vessels.
- The necessary steps should be taken for the common operation of businesses that operate in wooden vessel and yacht production.
- Businesses operating in these areas should be moved to a determined area.

#### ULUS (TOURISM)

- Natural and cultural assets, such as the Küre Mountain National Park, which is a member of the PANParks program, Uluyayla and the Ulu Kaya Waterfall should be promoted.
- Roads connecting the township to Ankara and Cide should be improved.
- Alternative tourism activities should be supported.
- The variety, capacity and quality of accommodation facilities in the township should be increased.

#### AMASRA (TOURISM)

- 5 star hotels should be constructed.
- Education should be provided to business owners and industrial workers, with importance attached to human relationships, and people should be made aware that if the service quality increases, revenues will also increase.
- The quality of the existing tourism facilities should be increased and there should be a pricing standard.
- Sea tourism opportunities, such as yacht tourism, passenger ships, amateur navigation etc. should be improved.
- Parking problems in the city center should be solved.
- Alternative tourism activities should be created by developing walking routes that pass ancient cities and the natural environment.

## 

#### **ZONGULDAK CENTER (ENERGY - FURNITURE)**

- The usability of Hydrogen Sulfide, which is found in the deep waters of the Black Sea, in hydrogen energy production should be researched.
- Coal gas and biogas potential should be evaluated.
- Hot waste water and steam obtained from thermal plants should be used again for waste products with energy potential.
- The number and locations of the thermal plants to be built should be planned taking into account sustainability and livability.
- Intermediate goods in the furniture sector should be specialized, and can be supplied to the furniture sectors of Ankara, Adapazari and Durusu, and the market should be expanded.
- Importance should be attached to the design and branding of furniture production.
- Integrated furniture production should be promoted.

#### EREĞLİ (SHIP CONSTRUCTION/SCRAPPING – MACHINERY PRODUCTION)

- Studies should be carried out to move the shipvards of Tuzla to Ereğli, the infrastructure of which has been completed within the scope of the decentralization of Istanbul sector.
- The inventory of the iron & steel sub product sector should be taken and action plans should be developed.
- Ereğli shipyards should be improved to create international ship scrapping facilities in line with international standards in order to provide maintenance-repair and disassembly operations on Russian, Ukrainian and Georgian vessels.

#### ALAPLI (AGRICULTUR – MACHINERY PRODUCTION)

- The hazelnut production sector should be supported and hazelnut final product production should be promoted.
- Alternative productions suitable for the regional climate, such as beekeeping and kiwi farming, should be promoted as an alternative to hazelnut production.
- Walnut production should be supported.
- The companies that operate on the transformation of flat product to final product within the scope of iron & steel sector should be supported.

#### **CAYCUMA (LOGISTIC, AGRICULTURE, FURNITURE AND FORESTRY PRODUCTS)**

- Inadequate infrastructure and settlement areas should be prepared for a possible expansion, and their current conditions should be increased within the scope of the Filyos Valley Project. Filvos Port should be commissioned.
- Studies should continue for the applicability of the Filyos Project as an industrial symbiosis project.
- The necessary regulations for the effective usage of the airport should be performed.
- Dairy cattle should be generalized.
- Cold air storage necessary for the agriculture and animal husbandry activities should be established.
- An OIZ for furniture and forestry products should be established and synergy should be created.

#### **GÖKCEBEY (AGRICULTURE, CONSTRUCTION MATERIALS)**

- Decorative plant business should be supported.
- Production of forestry products such as chestnut and linden should be supported.
- Poultry raising should be supported.
- The feasibility of the glass processing sector for SMEs in the township where transportation connections are powerful should be focused upon.

#### **DEVREK (FOREST PRODUCTS AND FURNITURE, CONSTRUCTION MATERIALS)**

- Introduction and promotional activities should be launched by creating showrooms along the Ankara road.
- Special product production such as wooden toys and cane in Devrek, where the hand workmanship culture and material potential are suitable should be focused upon.
- Large companies operating in the building materials sector should be encouraged to export to countries neighboring the Black Sea, and to the Turkic Republics and Africa.
- Since there is significant development potential in this area, companies in the cement, plaster, glass processing, ceramic, metal and steel processing sectors should be supported

## **KARABÜK**

**KARABÜK CENTER (IRON-STEEL)** 

Product range should be diversified.

Rolling mills in the city center should be moved upstate.

Sub-sector products of the iron & steel sector should be supported.

Iron & steel specialization OIZ should be established.

#### EFLANİ (AGRICULTURE)

 Fields that are open to economic investment should be gained for vegetable an animal agriculture through field consolidation.

• In the central township, which has reached an advanced level in the metal parts field, activities for the

Sector-university cooperation should be established, and R&D activities should be launched.

Organic agriculture and organic turkey production should be supported.

integration of these parts into the furniture sector should be supported.

#### ESKIPAZAR (FOREST PRODUCTS, TOURISM)

- The Hadrianapolis excavation works should be facilitated and should be added to the Western Black Sea tour route.
- The Akkava Thermal facilities should be open to tourism.
- An integrated tourism route including cultural tourism in Safranbolu and nature tourism in Yenice should be developed.
- Mushroom drving facilities should be established.
- Facilities to allow the transformation of of forestry products into finished products should be established.
- Forestry product specialization OIZs should be established.

#### OVACIK (SPORT)

- Sports camp education centers should not be limited to football and wrestling, but should cater for all sports branches
- Sports complexes should have an infrastructure that is open for active usage for 12 months of the year, and for various organizations.
- A facility where KARABÜKSPOR can spend its camp periods should be constructed.

#### SAFRANBOLU (TOURISM)

- Within the scope of handling nature-culture-history tourism as a whole, tour programs should not only include the Old Safranbolu center, but also natural beauties such as canyons and saffron fields.
- Intangible cultural heritage should be introduced to visitors; manners and customs specific to the region should be presented through animations.
- Canyons should be cleaned and utilized for alternative tourism, walking paths should be created and mid stations and rest stations should be established.
- Prices should be stable and controlled.
- Accommodation alternatives other than mansions should be increased (5-star hotels, etc.)
- Parking problems should be resolved.
- Special tourism programs should be instigated not only during the day, but also in the evenings.

#### **YENICE (FUNITURE AND FOREST PRODUCTS, TOURISM)**

- Seker Canyon should be promoted.
- Tree-home themed accommodation areas integrated with nature should be established as part of the efforts to increase accommodation capacity.
- Non-timber forestry products, such as mushrooms, should be gathered to boost the economy.
- Instead of only marketing forestry products as raw materials, they should be processed to gain added value.

# WESTERN BLACK SEA REGION CITY AND TOWNSHIP ANALYSES



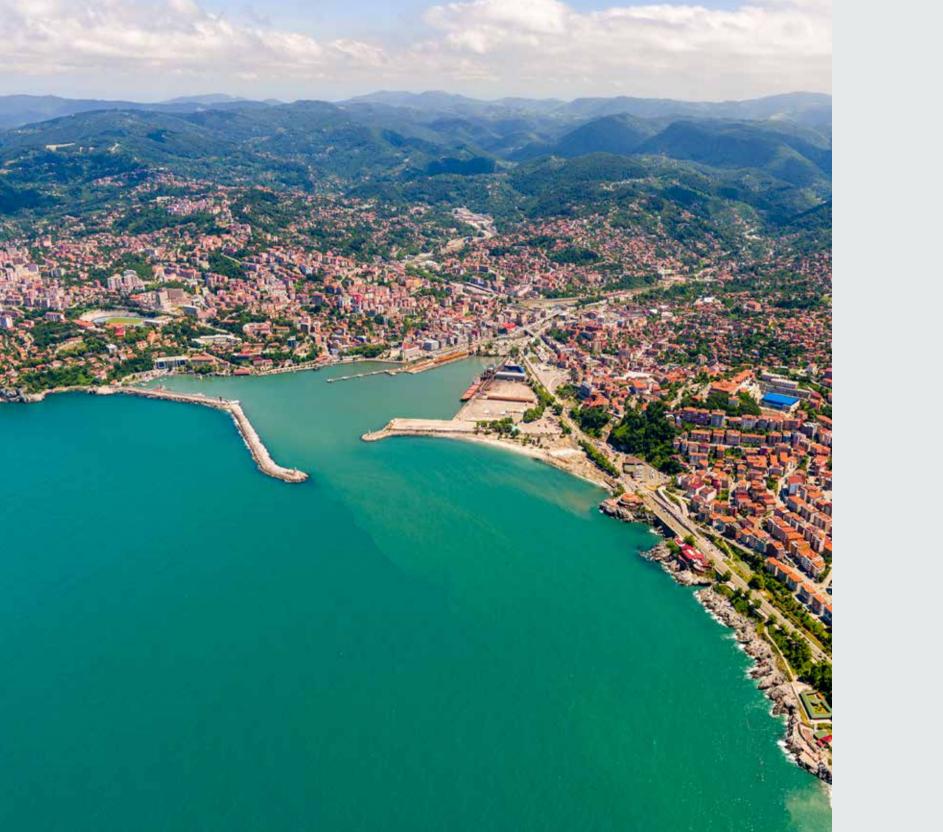
CENTER I. STAGE SUB CENTER **II. STAGE SUB CENTER** Agriculture Furniture and Forest Products Machinery Production Ship Construction/Disassembly Energy Wooden Vessel/Yacht Production Culture Tourism Sea Tourism Eco tourism Iron Steel Strong Connection Points Between Residences FILYOS VALLEY PROJECT ROAD





## WESTERN BLACK SEA DEVELOPMENT AGENCY











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