





DIAGNOSTICS OF SOCIO-ECONOMIC SITUATION OF COAL REGION PLJEVLJA



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List of abbreviations

EE - Energy efficiency

EEA - European Environment Agency

EEC - European Economic Community

EU - European Union

ETS - EU emissions trading system

EPCG - Energy Power Company Montenegro JSC

GHG - Greenhouse gas emissions

INTERREG - Interreg is a series of programs to stimulate cooperation between regions inside and outside the European Union

PHI - Public Health Institution

LEAP - Local Action Plan for Environmental Protection

IMF - International Monetary Fund

IFI - International Financial Institutions

MIDAS – Montenegro Institutional Development and Agriculture Strengthening Project

MOSI - Inter-municipal Youth Sports Games

LC - Local community

MAFW - Ministry of Agriculture, Forestry and Water Management

NDC - National Determined Contribution of Montenegro

NGO - Non-governmental organization

RES - Renewable energy sources

IPA - Instrument for pre-accession assistance

 $\label{lem:interpolation} \mbox{IPARD-Instrument of pre-accession aid for rural development}$

IRFCG - Investment and Development Fund of Montenegro

RPG - Register of agricultural holdings

RTPV - Radio Television Pljevlja

WHO - World Health Organization

TPP Pljevlja - Thermal power plant Pljevlja

UNDP - United Nations Development Program

UNESCO - United Nations Educational, Scientific and Cultural Organization

WOOL - Project "Wool as Outstanding Opportunity for Leverage"

ZZZCG - Employment Agency of Montenegro

INTRODUCTION

By ratifying the Paris Agreement in 2017, Montenegro committed to reducing global greenhouse gas (GHG) emissions by at least 1,572 kt CO2 eq, to a level of 3,667 kt CO2eq or less. The Government of Montenegro adopted the Report for preparation of updated nationally determined contribution (NDC) from 2020 on 03 June 2021. By this document, Montenegro has updated its Nationally Determined Contribution (NDC) and committed to reduce GHG emissions for 35% by 2030¹. Furthermore, at the Energy Community Ministerial Council meeting on December 14, 2022, Montenegro accepted new goals for reducing greenhouse gases (GHG) by 55% compared to the base year of 1990². The commitment to these goals stems from the National Strategy on Climate Change until 2030 (2015), which was confirmed by passing of the Law on Climate Change Protection (2019).

Montenegro committed to working with the European Union (EU) to make Europe a climate-neutral continent by 2050 by signing the Declaration on the Green Agenda for the Western Balkans at the Summit in Sofia in November 2020. This necessitates the implementation of a strict climate policy, as well as the reform of the energy and transportation sectors, as well as a series of concrete actions and measures such as:

- Analyzing and revising all regulations that support the progressive decarbonization of the energy sector, and ensuring their full implementation, primarily through the Energy Community;
- Prioritizing and improving energy efficiency in all sectors;
- Increasing the share of renewable energy sources and providing the necessary conditions for investment, in accordance with EU and Energy Community legal acquis;
- Reducing and gradually eliminating coal subsidies while strictly adhering to state aid rules;
- Active participation and access to a just transition in the coal regions of the Western Balkans in order to transition to a carbon-free economy, with the goal of making the transition just;
- Cooperation in the preparation of an assessment of the socio-economic impact of decarbonization on each country and at the regional level, with the goal of a just transition.

The energy sector, which produces electricity and heat, contributes the most to GHG gas emissions among the key sectors of the Montenegrin economy (energy, agriculture, and tourism). Montenegro's economic structure was based on industrial production, which accounted for 35% of the national product in the early 1990s. Montenegrin social enterprises were focused on producing reproduction means for the large Yugoslav market and final processing in other republics. The collapse of the state (FRY) and the loss of the market, war in the immediate vicinity, hyperinflation, and UN and EU sanctions caused tectonic changes in the economic structure, which reoriented itself over time towards the service sector, to the detriment of agriculture and industry³. Economic development has been marked by, among other things, the expansion of construction and the pressures caused by internal migration since independence. The expansion of capacity in the tourism sector, which made up a quarter of the gross domestic product prior to the crisis caused by the corona virus pandemic, put additional pressure on space and increased GHG emissions in the transportation sector.

By shutting down aluminum production, the main contributor to emissions from industrial processes in Montenegro has been eliminated. Montenegro's transportation sector is a significant source of CO2 emissions, accounting for nearly 22% of total emissions in 2018, with a projected increase to 30% by 2030. However, the production of electricity and heat⁴ has the greatest impact on GHG emissions in Montenegro, accounting for 74.2% of total GHG emissions in 2018. In accordance with international and national obligations, it is necessary to work on economic decarbonization in the coming period. According to emissions, the energy sector, which contributes the most to GHG emissions, relies heavily on the production of energy from non-renewable sources, namely coal. In this regard, decarbonization measures are primarily aimed at this sector, where decarbonization is defined as a reduction in coal-based electricity production and an increase in renewable-energy production.

The commitment to the aforementioned goals is primarily based on a gradual reduction in the use of coal in the production of electricity and as a source of heat for heating in homes and businesses. Meeting the targets also necessitates a reduction in coal production for export, because even in that case, it contributes to GHG emissions, albeit in different locations⁵. In this regard, the decarbonization process will primarily affect the municipality of Pljevlja and its inhabitants, given the municipality's decades-long production of coal and electricity from coal. Coal Mine AD Pljevlja (hereinafter: Coal Mine) and Thermoelectric Power Plant "Pljevlja" (hereinafter: TPP Pljevlja) as a subsidiary of Elektroprivreda Crne Gore AD Nikšić (hereinafter: EPCG) are the most important economic companies in Pljevlja, affecting the entire economic activity and, in particular, the income of its residents. Above all, the process of decarbonization is important for the whole of Montenegro, considering that the production of electricity from coal at the Pljevlja Thermal Power Plant is currently the only basic source⁶ of energy in Montenegro.

The process of producing electricity from coal has a significant environmental impact, primarily on the quality of air, soil, and water, as well as the generation of industrial waste. This impact is significant during the company's operations, but it will also be felt after the mining process in the Pljevlja ore-bearing basin is completed. The surface mine's proximity to Pljevlja's city center has an impact on the outside air during the summer months. This influence is amplified on windy summer days when marl dust rises from the surface mine. Aside from the air, there is an impact on water courses, particularly the Ćehotina river, because the water pumped out of the surface mine flows into it. The negative effects of using coal are especially pronounced during the winter months due to the use of this energy source for household heating in individual fireplaces.

The transition to a carbon-neutral society is both a pressing challenge and an opportunity to create a better future for all. The energy transition brings with it social, economic, and environmental benefits, though it is certain that they will not be distributed evenly throughout society. Reducing reliance on coal has a gender component as well. Specifically, the mining sector's restructuring has an impact on women's well-being in several ways, including the loss of employment in the coal industry, the increased burden of household responsibilities when men lose their jobs, tensions within households, and the impact of migration caused by the reduction of activities in the coal value chain. Rising expenditures will primarily affect the poorest and most vulnerable populations, owing to potential increases in energy costs. Reduced coal-fired electricity production, if not accompanied by diversification of economic activities in the local community, but also by diversification of energy production from renewable sources, can have a significant impact on population living standards and encourage economic migration. Many countries are preparing, and some are already implementing, measures to promote a just transition to address the unfair burden of low-carbon development. A just transition necessitates an understanding of the potential effects of the energy transition on the workers, businesses, and communities most impacted by the reduction and eventual elimination of coal exploitation. This socioeconomic diagnosis of the

Pljevlja coal region should serve as a foundation for social dialogue that will lead to concrete solutions for gradually reducing reliance on coal through diversification of electricity production and economic activity in the coal region. According to estimations, the Pljevlja basin has enough coal deposits for mining in the next 35 years⁷. However, the future operations of the Coal Mine and TPP Pljevlja will be determined by the current energy transition processes and the reduction of electricity production from fossil fuels until its abolition. Because the local economy is so heavily reliant on the coal value chain, it is critical that any policy changes that affect coal exploitation and production at the TPP Pljevlja take into account the social, ecological, and economic implications. In this regard, the United Nations Development Program (UNDP) is implementing the Montenegro Roadmap for Just Transition project, which is funded by Slovak Aid, within which this diagnostic analysis of socio-economic situation, has been preprared with the main goal to support a national, inclusive dialogue, which should result in a national road map for a just transition.

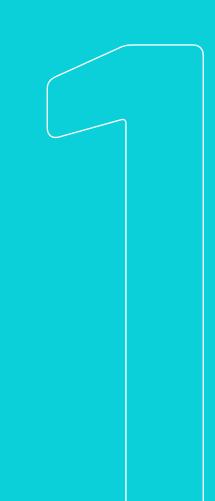
Research objective and methodology

This dignostic analysis of socio-economic situation will serve as a starting point for identifying and resolving challenges in Montenegro's gradual reduction of coal use based on the principles of a just transition. The analysis is based on consultations with representatives of key companies in the coal value chain, labor unions, local government, local businessmen, municipal management, and the non-governmental sector, as well as information gathered from secondary and primary data sources. A survey was also conducted among the employees of the TPP Pljevlja and the Coal Mine for the purposes of the analysis. In addition, focus group discussions with emploees were organised. The goal is to collect relevant data about the current state and needs of the local population, the business community, and all important actors in society who are socioeconomically dependent on the coal-based electricity production chain through the lens of this region's and Montenegro's future development.

The first section of the analysis includes: a review of the use of coal in Montenegro and the economic importance of the coal value chain; characterization of employees in the Pljevlja Coal Mine and TE Pljevlja; and the results of research (quantitative and qualitative) on the preferences of employees and other actors in the coal value chain, key challenges and opportunities for the municipality of Pljevlja. Based on the foregoing, key findings are presented that should serve as a starting point for a social dialogue.

The second section of the analysis includes relevant statistical data on the profile of the municipality of Pljevlja, its demographic and economic structure, and other information important for understanding the context in which a just energy transition should be designed and implemented.

FIRST SECTION



1. THE USE OF COAL IN MONTENEGRO

Montenegro's sustainable development faces challenges such as maintaining macroeconomic stability, accelerating economic growth through the implementation of a green and circular economy, while respecting, preserving, and valuing all national resources, particularly natural capital; increased resource efficiency and economic competitiveness; and balanced development at the regional and social levels.⁹

On the other hand, one of the priorities of Montenegro's energy policy until 2030 is sustainable energy development – enabling development based on the accelerated but rational use of its own energy resources while respecting environmental protection principles, increasing energy efficiency (EE), and increasing use of renewable energy sources (RES), all in accordance with the needs of Montenegro's socio-economic development.¹⁰

This section of the analysis depicts the current use of coal in Montenegro as well as its significance in the energy sector. Data on available quantities and the next period's exploitation plan are presented. In addition, GHG emissions by sector and projections with proposed mitigation measures are presented based on Montenegro's Third National Report on Climate Change.

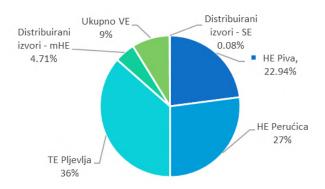
1.1 The importance of coal for the energy sector of Montenegro

Production capacities in Montenegro are represented by the following types of energy sources: hydroelectric power plants, thermal power plant, wind power plants, and solar power plants. Montenegro's total installed production capacity of hydropower plants is 67.08% (705 MW), TPP Pljevlja 21.41% (225 MW), wind power plants are 11.23% (118 MW), and solar power plants are 0.28%. (2,9 MW).

In 2021, a total of 3,655.66 GWh of electrical energy was produced. Pljevlja Thermal Power Plant production dominates the energy mix, accounting for 36.45% of total accomplished production in 2021. In 2021, the share of renewable energy and highly efficient cogeneration in total electrical energy production was 63.55% .

Because of unfavorable hydrology conditions, total electric energy production in power plants of EPCG was 1,810 GWh, with an average TPP Pljevlja's share of 54%. In July, August, and September 2022, the TPP Pljevlja contributed more than 70% of total production, confirming its importance in providing base energy for Montenegro. In this context, coal-fired electricity generation is critical not only for the Pljevlja coal region, but for Montenegro as a whole.

Graph 1. Participation capacity in total electrical energy production in Montenegro, 2021



1.2 Coal deposits on the territory of the Pljevlja municipality

The most economically significant deposits of so-called brown lignite coal in Montenegro are located on the territory of the municipality of Pljevlja. The area of coal deposits of Pljevlja municipality is reserved as a special purpose area for the exploration and exploitation of mineral raw materials by the Spatial Plan of Montenegro until 2020¹⁴, and by the SUP of the Municipality of Pljevlja, Amendments to the SUP of the Municipality of Pljevlja, and Amendments to the DSP "TPP Pljevlja," the purpose of the space was taken over and spatial planning guidelines were defined for the use of the space of these deposits for detailed geological research and coal exploitation.

In the wider surroundings of Pljevlja, in the basin of the river Ćehotina, there are the Pljevlja, Luće-Šumski and Maoče coal-bearing basins and the "Otilovići", "Bakrenjače", "Mataruge" and "Glisnica" coal deposits. According to the study's findings, the quality of coal from all deposits in the Pljevlja basin can be marketed for mass consumption. The balance reserves of the coal in Pljevlja municipality on 31 December 2021 was 177.874.783t. Their distribution by deposits is given in the Table 1.

The annual volume of coal exploitation at the "Potrlica" open pit is 1,650,000t, of which 1,400,000t is delivered to the TPP Pljevlja and approximately 250,000t to the regional consumer market.

The State Plan for Mineral Raw Material Exploitation 2019-2028, contains the projection of coal exploitation for the observed ten-year period based on an assessment of coal placement possibilities and existing mine capacities, taking into account the complete exhaustion of certified coal reserves and rational planning of the dynamics of coal deposit opening in terms of coal homogenization and placement for the needs of the Pljevlja Thermal Power Plant. Pljevlja municipality's total projected coal exploitation for the observed period is 16,500,000t. It is expected that 85% of the coal extracted will be delivered to the TPP Pljevlja, with the remaining 15% intended for mass consumption.¹⁷

Table 1: State of coal reserves in the Pljevlja municipality as of 31 December 2021

No	Basin/deposit	Category	Reserves(t)	Verification of reserves	Share a+b (%)	Overburden (m3)	DTE (kj /kg)	Mean strip ratio (m 3 /t)
	CONCESSIONS							
	Pljevlja Basin							
	Potrlica	A+B+C1	26,503,982	balance	99.71	112.728.093	11,746	4.25
	Kalušići	A+B+C1	15.047.141	balance	97.32	46,627,374	7,957	3.1
1	Grevo	C1	2,281,805	balance	0	11.722.118	12,442	5.14
'	Komini	C1	4,958,098	balance	0	6,628,880	11,515	1.34
	Rabitlje	C1	2,903,059	balance	0	34,684,531	13,663	11.95
	TOTA	L	51,694,085			213,390,996	6 4.1	
				Ljuće-Šuman	basin			
	Šumani I	A+B+C1	200,000	balance	60	230,000	7,684	1.15
2	Ljuće II	B+C1	1,056,085	balance	61,21	500,000	5,572	0.47
	Ljuće I	A+B	269,957	balance	100	793,889	8,600	3.09
	IN TOTAL		1,526,042			1,523,889		1.19
3	Glisnica	В	1,701,343	balance	100	4.232.019	9,384	2.49
	TOTAL CONCESSION	NS RU	54,921,470		218.146.904		3.97	3,97
4	Otilovići	B+C1	3,421,000	balance	99.5	11,887,300	10,510	3.47
5	Coppersmiths	A+B+C1	1,332,313	balance	73.46	1,151,000	10,296	0.86
то	TOTAL BALANCE 59,674,783				231.185.204		3.87	3,87
6	Mataruge	C1	8,300,000	estimate		15,000,000	8000	1.81
7	Maoče	B+C1	109,900,000	balance	82.98	497,500,000	12,504	4.53
	TOTAL OF ALL DEP	OSITS	177,874,783		743.685.204		4.18	4,18

Source: Regulatory Agency for Energy and Regulated Utility Services, IMontenegro Energy Sector Report for 2021

Taking into account the estimated reserves given in the concession to the Coal Mine of 54.9 million tons and the annual exploitation of coal of 1.65 million tons, of which 85% is delivered to the TPP Pljevlja, and other unchanged circumstances (capacity of the Coal Mine and TPP Pljevlja, without new concessions), we conclude that the existing reserves would be exhausted in approximately 35 years.

1.3 GHG emissions from the energy sector

The National Report on Greenhouse Gas Inventory, prepared for the Third National Report on Climate Change in accordance with the United Nations Framework Convention on Climate Change, covered the years 1990–2017. The sources and sinks of direct and indirect GHG emissions are classified into six major categories: 1) energy sector; 2) industrial production and use of products; 3) use of solvents; 4) agriculture; 5) land conversion and forestry; and 6) waste. The analysis revealed that the energy and industry sectors accounted for the majority of total ${\rm CO_2}$ eq emissions during the study period, with the exception of 2011, when high emissions were recorded in the forestry and land use sectors due to large burnt areas. During the studied period, the share of emissions from the energy sector ranged from 24% in 1995 to 70% in 2014, with 48.1% in 2017. Emissions from industrial processes ranged from 4.3% in 1994 to 46% in 1997, and were 7% in 2017. ${\rm CO_2}$ eq emissions from agriculture ranged from 6.2% in 2004 to 57% during the critical year of 2011, and 39% in 2017. The waste sector has the lowest share of total emissions, ranging from 2% in 1991 to 11% in 2009, and 5% in 2017. A more detailed analysis reveals that activities related to the generation of electricity and heat account for the largest share of total emissions from the energy sector. ¹⁸

The TPP Pljevlja is undergoing ecological reconstruction worth more than 54 million euros, with the goal of completing a complete technical and environmental rehabilitation of the building and providing

a heat and backup source for the city's district heating. In terms of sulfur and nitrogen oxide emissions, the operation of TPP Pljevlja will have an impact on the environment following ecological reconstruction, in accordance with current EU directives. However, ecological restoration will have no effect on CO2 emissions. In this segment, EPCG continues to pay for CO2 emissions in accordance with the Regulation on Greenhouse Gas Emissions until compliance with EU regulations is achieved.

1.4 GHG projections and mitigation measures

TPP Pljevlja is the country's sole source of fossil-fuel electricity and it has critical importance for the national power system. Furthermore, it is expected that the national share of electricity generated by renewable sources will continue to rise.

The Third National Report includes a proposal for mitigation measures by sector based on GHG projections. One of the key measures in the energy sector, among others, refers to the ecological reconstruction of TPP Block 1. This means that the plant will be shut down for four months per year, and production will be reduced due to low market prices, followed by the EU emissions trading system (ETS)²⁰.

One of the anticipated mitigation measures that was not implemented was the TPP Pljevlja's operating hours limitation. Namely, In accordance with the Decision of the Ministerial Council of the Energy Community and the obligation from the Energy Community Implementation Agreement, which concerns Directive 2001/80/EC on the reduction of emissions of certain pollutants from Energy Community plants with large combustors, Montenegro agreed to have the TPP Pljevlja work at a reduced capacity of 20,000 working hours. After that, it would be required to stop working unless it met the maximum emissions prescribed by the Industrial Emissions Directive. TPP Pljevlja had exhausted the permitted number of working hours by the end of 2020 and continued to operate. The Environmental Protection Agency initiated the procedure of revoking the integrated license because TPP Pljevlja did not comply with the conditions that were the basis for its issuance. The Montenegrin government terminated that procedure by decision, and the Pljevlja TPP has continued to operate despite violations of the Law on Industrial Emissions and the Energy Community Agreement (EEC), which prompted the EEC to initiate a misdemeanor procedure against Montenegro.

One of the measures is the heating of the city of Pljevlja, which was declared "a public interest project", following the ecological reconstruction, and its implementation is expected to result in additional GHG emissions reductions due to the reduced use of coal in individual furnaces throughout the city. Other mitigation measures include the construction of new power plants that use renewable energy sources and increased energy efficiency (from the development of the regulatory framework to financial incentives for citizens and the reconstruction of hydropower plants).

2. COAL VALUE CHAIN ECONOMIC SIGNIFICANCE AND ENVIRONMENTAL IMPACT

In this chapter, we will examine the economic significance of the Coal Mine and TPP Pljevlja, both of which are subsidiaries of EPCG.

2.1 The significance of the Coal Mine and its impact on the municipality of Pljevlja

The Coal Mine is a company that has been operating in its current organizational form (joint-stock company) since the end of 1998, while it was founded as a coal mining company in 1952 ("Company for exploration and production of coal – Pljevlja"). The company was founded for the primary activity of coal exploitation in the Pljevlja coal basin, while coal exploitation is continuously carried out in the Potrlica and Kalušići deposits, i.e. the Potrlica open pit, and until 2018 production also took place in the Borovica open pit. After the construction of the Pljevlja Thermal Power Plant, which was specially adapted for the exclusive use of coal ore from the exploitation in Pljevlja, the Coal Mine, since 1982, supplies more than 85%–90% of its annual production to the Pljevlja Thermal Power Plant.

Since the establishment, the Coal Mine has been the backbone of the development of the Pljevlja region and is one of the pillars of economic development in the north of Montenegro. With its operations, the Coal Mine was the economic, financial, and technical flywheel of the Pljevlja region's economic development, generating the majority of the region's economic, technical, and educational activities over the last few decades. The Coal Mine, along with the TPP Pljevlja, is the "backbone" of Montenegro's electricity production (the only basic source of electricity), and under normal conditions, in the energy balance with energy production, it contributes 40% to 60% of the electricity produced in Montenegro. Aside from positive effects, the mining process has a significant impact on the state of the environment in Pljevlja, specifically the quality of air, water, and land. All of the aforementioned factors have an impact on the health of the local population. At the beginning of 1998, JSC Coal Mine underwent a business and organizational transformation from a public to a joint-stock company. Following the company's transformation, cost optimization is carried out, which has an impact on the number of permanent employees. From 2,200 workers twenty years ago, the number of directly employed has decreased to around 815 by the end of 2020 with additional 37 of employees through Outsourcing Agency. During the years 2021 and 2022, the number of employees on various types of employment contracts increased, as did participation in new activities for the parent company, such as agriculture. The company's capital is estimated to be 21,492,989.65 euros, divided into 5,064,443 shares with a nominal value of 4.2439 euros per share. As of August 2018, the sole owner of the Coal Mine shares is EPCG AD Nikšić. The table below compares the company's income and expenses from 2018 to 2021, along with the quantities of coal produced and delivered.

Table 2 . Comparative revenues and expenses of the Coal Mine

Year	Operating revenue (euro)	Coal Sales Income (euro)	Expenses (euro)	Coal production (tons)	Delivery to TPP Pljevlja (tons)	Wide consumption (tons)
2018.	43.662.532	43.029.915	36.209.777	1.539.122	1.411.298	127.823
2019.	47.659.979	43.470.171	37.184.599	1.561.618	1.419.967	141.650
2020.	48.974.893	45.423.676	34.516.318	1.656.952	1.530.879	126.072
2021.	46.212.271	43.513.842	40.742.575	1.548.612	1.360.522	188.089

Source: Coal mine

The coal mine is the largest source of employment in the municipality of Pljevlja. In addition to employment opportunities within the company itself, the production of coal is also directly or indirectly important to a number of other private businesses as well as public services. The operation of the company has a significant impact on the total revenues of the budget for the municipality of Pljevlja and, along with the operations of two other leading companies (TPP Pljevlja, which is a component of EPCG and Gradir Montenegro doo), provides the majority of the municipality's current revenues. The following table gives an overview of the income that the operations of the Coal Mine have brought in for the Municipality of Pljevlja.

Table 3. Pljevlja Municipality's budget revenues, in EUR

	Type of revenue	JSC Coal Mine Pljevlja						
	Type of Testende	2017	2018	2019	2020	2021		
1	Real estate tax	391,625.16	401,483.04	344,557.60	435,186.29	491,371.60		
2	Tax surcharge	167,427.76	117,024.12	90,640.80	119.142,11	139,254.27		
3	Personal income tax	132,992.71	132,992.71	588,301.75	525,921.28	613,743.72		
4	Road access fee	6,670.00	8,270.00	8,270.00		1,100.00		
5	Fee for protection of water from pollution			3,998.32	22,321.00	7,117.74		
6	Concession fee for mineral raw materials	675,032.84	723,681.69	745,997.79	755,682.76	800,341.51		
7	Envrionemnt protection and improvement fee				734,101.53	768,537.99		
	TOTAL	1,373,748.47	1,383,451.56	1,781,766.26	2,592,354.97	2,821,466.83		

Source: Municipality of Pljevlja

In addition to payments to the Municipality of Pljevlja's budget, Coal Mine regularly pays significant obligations to the state budget in the form of contributions, VAT, customs duties, and excise taxes. The table below shows the total amount paid by the Coal Mine to the local self-government and the state.

Table 4 . Total payments made from the Coal Mine to municipal and national budget, in EUR

Year 2018		2019	2020	2021	
Total payments 14,281,210.56		16,367,285.91	23,006,130.62	20,401,094.99	

Source: Coal mine

In the period 2019-2021, the Coal Mine has allocated 1.7 million euros through loans to meet employees' housing needs.

Table 5. Total disbursed funds for employees' housing needs, in eur

Year	Value
2019	525,443
2020	544,735
2021	639.478

Source: Coal mine

The Coal Mine finances environmental protection projects and supports cultural and sports events implemented by relevant institutions as weell as sector of Non-Governmental Organizations (NGO) in Pljevlja. The table below summarizes the company's financial contributions for the stated purposes.

Table 6. Other financial contributions, in euros

Godina	Sportski klubovi	Sportske ustanove i manifestacije	Obrazovne ustanove	Zdravstvene ustanove	Vjerske zajednice	NVO	Ostale donacije	UKUPN0
2018.	71.500	43.300	6.600	24.900	31.000	7.500	121.390	306.190
2019.	127.900	41.500	12.750	35.630	15.000	9.300	64.275	306.355
2020.	117.500	32.222	3.000	98.000	0	7.500	48.800	307.022
2021.	84.450	63.000	26.196	80.400	117.900	28.079	11.899	411.924

Source: Coal mine

The Coal Mine donates coal to associations of pensioners and socially vulnerable families, which is significant in terms of pollution from individual combustion plants.

Table 7. Donations of coal to associations of pensioners and socially vulnerable families, in tons

Year	Quantity
2019	853
2020	890
2021	868

Source: Coal mine

According to the Memorandum of Cooperation between the Municipality of Pljevlja and the Coal Mine, it was agreed to sponsor cultural and sports activities organized by the Municipality of Pljevlja, sports and cultural public institutions. The allocation for this purpose is shown in the table below.

Table 8. Donations for sports and culture activities organized by Municipaliy Pljevlja, in eur

Year	Value
2019	65,000
2020	50,000
2021	9,500

Source: Coal mine

2.2 Significance of Pljevlja Thermal Power Plant

TPP Pljevlja is Montenegro's first condensing thermal power plant, with two 210 MW blocks which started its operations on 21 October 1982. Water storage, as well as all auxiliary, technical, and administrative facilities (except for the decarbonization and recirculation cooling system), were designed for two blocks of electricity production; however, only one block was built and is operational. TPP Pljevlja burns Pljevlja's coal with a guaranteed calorific value of 9,211 kJ/kg.

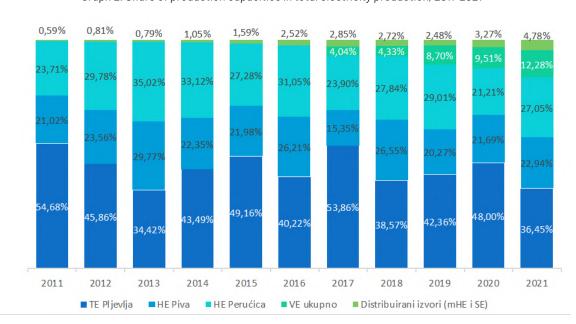
Important projects related to the ecological and technological stabilization of electricity production from the Pljevlja Thermal Power Plant were carried out in 2009 and 2010. The TPP Pljevlja's installed capacity was increased from 210 MW to 225 MW following the works on the turbine and boiler plant reconstruction in 2009.²¹

TPP Pljevlja is a subsidiary of the national Electric Power Company Elektroprivreda Crne Gore AD Nikšić,

a joint stock company formed to produce and supply electricity. In terms of ownership, the majority owner in EPCG is the State of Montenegro, with over 98% of the share capital, while the remaining share capital is held by individuals and legal entities.

The TPP Pljevlja is located on the fourth kilometer of the road Pljevlja - Đurđevića Tara. The Borovica open pit, from which it was supplied with coal during its initial operation, is roughly the same distance away on the same road, while the coal supply has been completely from the Potrlica open pit in the city's immediate vicinity since 2018. The Pljevlja Thermal Power Plant receives process water for cooling and other purposes from the "Otilovići" reservoir on the Ćehotina River.

TPP Pljevlja represents the base power plant for Montenegro's electric power system, with the task of covering the constant load diagram. The following graph displays the share of different production capacities in total electricity production in the period 2011–2021.



Graph 2. Share of production capacities in total electricity production, 2011-2021

Source: REGAGEN Regulatory Agency for Energy and Regulated Utility Services

During unfavorable hydrological conditions, which often occur over longer periods of the year, electricity production from the TPP Pljevlja accounts for more than 80% of the total amount of electricity from all sources for production in Montenegro, while on some days and even weeks it is the only source of electricity due to long dry periods and wind stillness, as confirmed by the current data for 2022 in the table below.

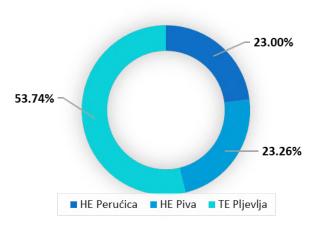
Table 9. Electricity production, in MWh

2022	HE Perućica	HE Piva	TE Pljevlja	UKUPNO
1	86.757	69.558	153.765	710 000
Januar	27,98%	22,43%	49,59%	310.080
	77.550	56.151	120785	057.700
Februar	30,47%	22,06%	47,46%	254.486
Mart	69.202	72.411	153.643	005.050
Mart	23,44%	24,52%	52,04%	295.256
A	113.840	5.844	107.089	000 777
April	50,20%	2,58%	47,22%	226.773
M-:	34.851	48.741	0	07.500
Maj	41,69%	58,31%	0,00%	83.592
L	21.031	58.959	34.388	114.378
Jun	18,39%	51,55%	30,07%	114.578
11	3.924	51.677	136.697	100.000
Jul	2,04%	26,87%	71,09%	192.298
A	0	42182	152.864	105.070
Avgust	0,00%	21,63%	78,37%	195.046
Ourtomber	9.080	15.337	113.410	177.007
Septembar	6,59%	11,13%	82,28%	137.827
	416.235	420.860	972.641	
UKUPNO	23,00%	23,26%	53,74%	1.809.736

Source: TPP Pljevlja underwent regular annual overhaul from April 23 to June 23, while HPP Peruica also underwent annual overhaul during the month of August, which is why the listed production values are zero.

The following graph depicts TPP Pljevlja's contribution to total EPCG production over the first ten months of 2022.

Graph 3. Total electricity structure (in %, period September 2022) including one month stoppage in June when TPP Pljevlja was under renovation



Source: TPP Pljevlja

Given the Pljevlja Thermal Power Plant's age and negative environmental impact, as well as a violation of EU directives limiting the emission of thermal power plant exhaust gases, EPCG announced an international tender in July 2019 for the selection of contractors for the Pljevlja Thermal Power Plant's ecological reconstruction. The so-called ecological reconstruction of the Pljevlja Thermal Power Plant is planned on the basis of the conceptual project created by the German company Steag Energy Services, which should bring its operation in line with the parameters of exhaust gas emission and environmental impact with Directive 2010/75 of the European Union, through the construction of an exhaust gas desulfurization plant, an exhaust gas denitrification plant, a waste water treatment plant, a noise abatement plant, and a noise abatement plant. In addition to these works, the construction of a heat exchanger for Pljevlja's district heating is planned, and the new start-up boiler house will serve as a heat source for peak and backup power supply with Pljevlja heat in addition to the city's planned heating. Following the tender process, EPCG signed a contract with the first-ranked consortium for EUR 54,427,700 including VAT. The main contractor in the scope of 66% is the Chinese company Donfang Electric International Corporation, while the subcontractors are the Montenegrin companies Bemax doo Podgorica (18%), BB solar doo Podgorica (5%), and Permonte doo Podgorica (11%). Following the additional tender procedure, another contract for additional works was signed with the same contractor, bringing the total value of the Pljevlja Thermal Power Plant's environmental reconstruction project to more than 70 million euros. The construction began in April 2022 and is scheduled to be completed in October 2024.

2.3 Impact on the environment

Pljevlja Municipality adopted a Local Environment Protection Action Plan (LEAP) for the period 2022-2026, which included a detailed analysis of the condition and identification of problems. Air and climate changes, water, soil, waste management, biodiversity, urban green spaces, and energy efficiency are all being studied. The negative impact of the Coal Mine and Thermal Power Plant is primarily recognized in terms of the impact on air, water, and land quality, as well as the generation of industrial, including hazardous waste. The negative impact of the TPP Plievlja is primarily recognized in terms of the impact on air, water, and land quality, as well as the generation of industrial, including hazardous waste. Previously, and especially in recent years, the company has invested significant financial and human resources in minimizing the environmental impact of the mining process. Despite this, environmental incidents do occur on occasion. After the mining process in the Potrlica open pit is completed, significant financial resources must be invested in mine rehabilitation. This primarily refers to backfilling, or restoring the coal mining site to a usable condition, given that the open pit is approximately 2,500 meters long, 1,500 meters wide, and 500 meters deep. The development and construction of a sports and recreational zone in Borovica is planned as part of the Municipality of Plievlja's local action plan for environmental protection for the period 2022-2026. The activities will be funded by the Municipality of Plievlja, Coal Mine, and EPCG and will cost 400,000 euros.²²

2.3.1 Impact of Coal Mine and Pljevlja Thermal Power Station on water

When it comes to water quality, the main impact of the Coal Mine and TPP Pljevlja, as well as lead and zinc mines, landfills, and hazardous material slag dumps, is recognized in relation to the pollution of the Ćehotina river, which has primarily affected the reduction of fish stocks. The most waste water from the Coal Mine is produced when excess water is pumped out of the reservoir at the Potrlica open pit's lowest elevation. Water is pumped from the reservoir to the clarifier and then from the clarifier to the Ćehotina river using pumps and transport pipes. The quality of these waters is determined by the activity on the overburden, meteorological conditions, and, in many cases, the human factor that controls the operation of the reservoir's pumps. Annually, approximately 18,000,000m3 of this water will be discharged into Ćehotina.

When it comes to TPP Pljevlja's impact on water, it is most visible in accidental situations that may arise during plant operation. The Maljevac landfill has a negative impact on the quality of the Vezišnica River (via the Paleški Potok, a tributary of the Vezišnica), but in 2021, the Paleški Potok was relocated from its source to the Borovičko Lake, avoiding unwanted contact with the leachate from the Maljevac slag heap. According to the LEAP, the Coal Mine has made efforts to solve the wastewater problem by building sedimentation tanks, which still need to be upgraded. In addition, as set out in LEAP's Activity 3.1 the coal mine will soon return the Ćehotina river to its original bed. The relocation of Paleški Potok has solved part of the problem of wastewater from the Pljevlja Thermal Power Plant, and the rest is to be solved through the ecological reconstruction of the existing thermal power plant block, within which a closed technological procedure for the use of water and wastewater is planned. Meanwhile, it is critical to ensure that ecological incidents such as the one in 2019 do not occur, when TPP Pljevlja released illegal toxic substances into the river, resulting in an unprecedented fish kill in Montenegro and the destruction of the entire ecosystem in a section of the river Ćehotine over a distance of 15 kilometers.²³

2.3.2 The impact of the Pljevlja Coal Mine and TPP on the soil

When it comes to soil, the exploitation and occupation of vacant land, the formation of industrial zones, surface mines, and mines has a tendency to develop and have unavoidable consequences, such as the destruction of the natural environment, pollution of the environment, and the loss of fertile land and forest areas. Following the end of exploitation, the Coal Mine is required to rehabilitate degraded areas. However, as stated in the LEAP, reclamation is mostly absent or not carried out sufficiently, despite recent increases in activity. Specifically, in the northwestern part of open pit "Potrlica" during 2020, technical and biological recultivation was carried out on a plot of 2ha, and agrotechnical and biological recultivation was carried out on a plot of 4 ha in the second half of 2021. Over 60,000 seedlings (lavender, sage, thyme, and myrrh) were planted, and additional activities are planned to continue reclamation work in the northwestern part of the Potrlica open pit of the the Coal Mine Pljevlja²⁴. The previous tests of samples of land used for the needs of the TPP Pljevlja carried out by CETI from Podgorica show that the content of all tested parameters does not exceed the prescribed standards in the soil sample at the location near the "Maljevac" landfill and the soil sample at the Coal Mine location - reclaimed land.

2.3.3 Industrial waste

When it comes to industrial waste, the main influence is TPP Pljevlja's production processes, which resulted in the formation of the TPP Pljevlja Maljevac ash and slag landfill, which has been in use for nearly 40 years and covers an area of approximately 62ha. Meanwhile, the remediation of the ash and slag disposal site "Maljevac" and the tailings dump "Gradac" has been completed as part of the "Industrial waste management and cleaning" project, which is being implemented in Montenegro in collaboration with the World Bank. From the perspective of Chapter 27, the implementation of these projects has resulted in significant progress in the implementation and enforcement of the EU acquis. The importance of the aforementioned remediation is especially significant in terms of pollution control and prevention in the Municipality of Pljevlja. Another landfill linked to the coal value chain is "Jagnjilo", which was used for overburden disposal until mid-2017. This material is used to cover municipal waste,

²³ Source: Local Envirnment Action Plan of the municipality Pljevlja 2022-2026

When you consider that the area of the active mine (where work is currently being done) is about 80ha, and that the area that is active for the disposal of marl within the mine and that is in levels is about 162 ha, recultivated areas are negligible. A marl landfill with an area of about 28 ha was recultivated at the Grevo location, a marl landfill with an area of about 45 ha was recultivated at the Đulina Guk, Kipa, and airport locations, and the land after exploitation at the old cement factory site was recultivated with an area of about 20 ha.

and conditions for landfill reclamation have been created based on the "Supplemental Mining Project of Coal Exploitation at open pit "Potrlica" for the period 2015 - 2019", Book 2.6. Technical reclamation project." Discarded marl is regarded as an extremely high-quality raw material for the initial stages of cement production.

In order to fulfill the obligations prescribed by law, the Coal Mine and the TPP Pljevlja as producers of hazardous waste are obliged to deal with waste (hazardous and non-hazardous) in accordance with the Waste Management Plan 2019-2022 approved by the Nature and Environment Protection Agency, which specifies in detail disposal and treatment of all types of hazardous and non-hazardous waste²⁵.

2.3.4 Impact of Coal Mine and Pljevlja Thermal Power Station on air quality

The coal mine, along with unprotected open pits, the overburden disposal site and transport system, transport and mining machinery, and the production facilities of the Pljevlja Thermal Power Plant with the ash and slag dump "Maljevac" are recognized as major sources of air pollution. Other air pollutants include boiler rooms and fireplaces in public and residential buildings.

The most significant impacts on air quality occur during open pit exploitation. These effects include emissions from marl and coal extraction, exhaust gases, harmful gases from oxidation, and coal combustion itself. Also contributing to air pollution is the technological process of coal exploitation, which includes drilling and blasting, loading and transport of coal and overburden, transport and disposal of overburden, wind erosion, and other accompanying works.

TPP Pljevlja emits carbon (IV)-oxide, sulfur (IV)-oxide, water vapor, and suspended particles into the atmosphere by burning lignite. The combustion of coal also produces ash and slag. Wind blows ash particles from the Maljevac landfill, and coal dust is blown around during coal transport and crushing. The Pljevlja thermal power plant also has an indirect impact on air quality due to the cooling tower's emission of water vapor, which contributes to the retention of suspended particles in the lower layers of the atmosphere²⁷.

Measurements of suspended particle emissions show that boiler houses and individual combustion plants are the significant contributors to air pollution in Pljevlja. This is due to increased concentrations of suspended particles in the air exceeding the permitted limit values being recorded during the winter months, i.e. during the heating season. Because boiler houses have such a low chimney height, the emission occurs directly in the ground layer of the atmosphere. In the current microclimatic conditions of the Pljevlja area, any emission of polluting particles becomes significant, with immediate negative effects on the state of air quality. This is made possible by approximately 4,000 individual fireplaces, 980 of which are pellet-fired²⁸.

Based on available research, it is known that three major pollutants are harmful to health in the context of the municipality of Pljevlja: particulate matter (PM), sulfur dioxide (SO₂), and nitrogen oxides (NOx), and that they are mostly released into the air during the combustion of coal. Sulfur oxides combined with solid microparticles and fog have the greatest impact on respiratory organ damage. Because of its irritating effect, sulfur dioxide causes coughing, bronchial contraction, and increased secretion of bronchial secretions. The most serious pollution issue in Pljevlja is suspended particles (PM_{10} and PM_{25}).

Local Environment Action Plan of the municipality of Pljevlja 2022-2026

²⁸ Ibid.

The concentration of fine particles in ambient air ($PM_{2.5}$ particles with a diameter of less than 2.5 µm) appears to be a significant indicator of health risks associated with air pollution. Particles cause the onset and progression of cardiovascular diseases, as well as an increase in their mortality. They have also been shown to cause cancer in humans.²⁹ PM_{10} coarse fractions (particles with a diameter of less than 10 µm) increase the incidence of respiratory diseases and contribute to increased mortality.³⁰

High levels of air pollution, primarily from suspended particles (PM_{10} and $PM_{2.5}$), are most common during the winter months. The permitted concentration of PM10 particles is up to $50\mu g/m3$. In Pljevlja, there were 114 days with an illegal exceedance of PM concentration in 2021, compared to 102 days from January to the end of November 2022.³¹ The frequent occurrence of temperature inversions, particularly in the Pljevlja basin, prevents the dispersion of emissions and causes the retention of pollutants produced by the combustion of fossil fuels, emissions from traffic, and other similar sources, directly above the ground, resulting in high concentrations of pollutants in the ground layer of the atmosphere.³²

The ongoing ecological reconstruction of the Pljevlja Thermal Power Plant includes, among other things, the installation of a waste gas desulphurization system, which can reduce emissions from this source by up to 80%, improving air quality in Pljevlja not only by reducing sulfur dioxide concentrations, which have sporadically increased, but also because sulfur dioxide can be a precursor of secondary suspended particles, also known as accelerant. In addition, as part of the ecological reconstruction of the Pljevlja Thermal Power Plant, a system for denitrification of waste gases is planned, which will reduce emissions from this source by up to 70% and eliminate increased nitrogen dioxide concentrations in Pljevlja. Ecological reconstruction did not address carbon dioxide (CO2) emissions.³³ Currently, EPCG pays 24 euros per ton of CO2 emissions to the Eco Fund, which funds ecological projects, in accordance with a government regulation³⁴.

2.3.5 Impact on the population health

Recent findings from the European Environment Agency (EEA) confirm that air pollution has significant effects on human health, particularly in urban areas. This is especially true in places where there is a high concentration of people. The economic costs, decreased life expectancy, increased medical costs, and decreased productivity due to absenteeism are all manifestations of these effects. The European Environment Agency (EEA) monitors $PM_{2.5}$ particle emissions, $PM_{2.5}$ particle emissions, $PM_{2.5}$ particles, $PM_{2.5}$ particles,

The levels of the highly carcinogenic substance benzo(a)pyrene in PM10 particles (less than 10 micrometers in diameter) exceed the permitted limits by up to 15 times. The International Agency for Research on Cancer has classified this polycyclic aromatic hydrocarbon found in tar as a carcinogenic substance. It causes ovarian, lymph node, breast, liver, digestive tract, lungs, and leukemia tumors.

 $³⁰ Influence of Thermal power plant Pljevlja on the residents health, http://www.greenhome.co.me/fajlovi/greenhome/attach_fajlovi/lat/glavne-stranice/2014/05/pdf/Uticaj_TE_Pljevlja_na_stanovnistvo.pdf$

³¹ Source: Environment Protection Agency

³² Source: Environment Protection Agency, https://epa.org.me/informacije-o-stanju-zivotne-sredine/

³³ Ibid.

³⁴ The regulation on activities that emit greenhouse gases went into effect in February 2020. Despite not being in line with EU regulations in this area, the Regulation aims to reduce greenhouse gas emissions, protect the ozone layer, and adapt to climate change.

³⁵ Source: https://www.eea.europa.eu/themes/air/country-fact-sheets/2021-country-fact-sheets/montenegro-2013-air-pollution-country

and 22% in Pljevlja. More than half of these effects are related to increased pollution levels during the winter, primarily due to the combustion of solid fuels for heating.³⁶ According to the WHO, no level of air pollution is "safe," and scientific understanding of how air pollution harms our health is growing. Even at low levels of pollution, inhaling particles can cause physiological changes in the body that are harmful to health. Poor air quality is linked to chronic and acute respiratory diseases such as bronchitis and asthma, lowering quality of life significantly. According to new research, polluted air particles travel through pregnant women's lungs and remain in their placentas, causing harm to babies even before they are born.³⁷ According to officials from Montenegro's Institute for Public Health, harmful particles we inhale reduce life expectancy by 2.5 years in Pljevlja, 1.5 years in Nikšić, and 8 months in Podgorica.

The situation with air pollution is comparable in the region, that is, in the Western Balkans countries, which also have coal-fired thermal power plants. Air pollution caused by the burning of coal contributes not only to a number of health problems, but also to a reduction in productivity and causes enormous costs to society.

The report "Impacts of coal-fired power plants on health in the Western Balkans" from 2016 shows and quantifies (monetizes) the negative health impacts of continuing to use coal for energy production, both in Montenegro and in Western Balkan and European countries. The following table shows the health costs of using coal to generate electricity at the Pljevlja Thermal Power Plant, taking into account SO_2 , NOx, and $PM_{2.5}$ emissions. However, the presented results do not take into account the variety of additional impacts associated with coal mining, GHG emissions from combustion and other activities, and disposal at the end of the fuel production chain.

Table 10. Health costs of using coal for electricity production in Thermal Power Plant Pljevlja

	POD TRENUTNIM/PLANIRANIM USLOVIMA - DONJA GRANICA (VOLY), U MILIONIMA EVRA GODIŠNJE					IUTNIM/PLANIF CA (VSL), U MIL		
	SO ₂	NO _x	PM _{2.5}	UKUPNO	SO ₂	NO _x	PM _{2.5}	UKUPNO
Pljevlja I	92	7	1	100	238	16	3	257

Source: https://env-health.org/IMG/pdf/technical_report_balkans_coal_sr_web.pdf page 27

Applying the ExternE method (flow of influence approach³⁹) calculation to the data from the mentioned report yields a total monetary effect of 130 million euros. When converted to equivalent working hours, of which there were 6,610 in 2020, we get an estimate of around 160 million euros, which is closer to the table's lower limit.

The report "Chronic coal pollution - EU action in the Western Balkans will improve health and economies across Europe" delves deeper into the health consequences of using coal to generate electricity at the Pljevlja Thermal Power Plant. Table 13 provides an overview of the estimated health effects and consequences of air pollution in Montenegro, including the effects of the Pljevlja TPP as well as other Western Balkan coal-fired power plants. Table 14 shows the estimated health effects and consequences of air pollution from the Pljevlja Thermal Power Plant on the entire affected territory, of which 52% is EU territory, 32% is Western Balkan countries territory, and 15% is other countries territory.

The following adverse health effects are taken into consideration: premature deaths, infant mortality, bronchitis in children, days with asthma symptoms in children who already have asthma, and chronic bronchitis in adults. The costs of hospitalization for respiratory or cardiovascular symptoms, the number of days of limited activity, and lost work days for the population of working age are used to measure the consequences. The high value of the cost as well as the median value are displayed in two

following tables.

Table 11. Estimated health effects and consequences of air pollution in Montenegro (includes the effects of the TPP Pljevlja but also the effects of other coal-fired power plants from the Western Balkans)⁴¹

Health effects		Consequences of health effects		
Premature deaths	35	Hospitalizations for respiratory or cardiovascular symptoms	23	
Infant mortality (1-12 months)	0	Days of limited activity	44 491	
Bronchitis in children	64	Lost working days, working-age population	9 160	
Days with asthma symptoms at asthmatic children	548	Total cost high value (eur)	102 789 489	
Chronic bronchitis in adults	15	Total cost mean value (eur)	53 784 642	

Table 12. Estimated health effects and consequences of air pollution from the Thermal Power Plant Pljevlja 42

Health effects		Consequences of health effects		
Premature deaths	133	Hospitalizations for respiratory or cardiovascular symptoms	106	
Infant mortality (1-12 months)	0.2	Days of limited activity	204 449	
Bronchitis in children	285	Lost working days, working-age population	39 686	
Days with asthma symptoms at asthmatic children	2 894	Total cost high value (eur)	303 087 731	
Chronic bronchitis in adults	68	Total cost mean value (eur)	160 455 296	

Iz navedenih razloga, brojne analize upućuju da su neophodna povećana ulaganja u obnovljive izvore energije, promovisanje zdrave energije, nulte zagađenosti, kao i kvalitet klime i vazduha. Zatim, podizanje svijesti javnog mnijenja o zagađujućem aspektu sagorijevanja fosilnih goriva kroz javne kampanje, debate i angažovanje zdravstvenih radnika na podizanju svijesti svojih pacijenata.

⁴¹ Ibid.

⁴² Ibid.

2.4 Local Government Financing

The income structure of the Municipality of Pljevlja was determined by economic, geographical, and natural factors. The surface of the municipality Pljevlja comprises 10% of the country's total land area. Its territory contains approximately 20% of the country's agricultural land, as well as more than 35% of usable forest land, 95% of coal ore, and significant water resources. With over 45% of Montenegrin electricity production, 100% of lead and zinc ore production, and average employee incomes that rank second in Montenegro, the main sources of revenues of Pljevlja's local self-government budget are: personal income taxes, land tax, tax on construction objects, surtax on personal income tax, fees for water use, fees for forest use, fees for the use of mineral raw materials (coal, metal ores), fees for environmental protection and improvement. Certain revenues, such as personal income taxes and concession fees, for example, are state-regulated revenues that represent ceded revenues. With a strategic decision aimed at strengthening local communities in Montenegro's north, the Government proposed, and the Montenegrin Parliament adopted, several legal solutions that significantly increased the income of local self-governments in the country's north.

The municipality of Pljevlja is the first local self-government unit to decide on a fee for environmental protection and improvement based on Article 79 of the Law on the Environment (Official Gazette of Montenegro 52/16). (the so-called environmental tax). The decision establishes the obligation to pay compensation for environmental protection and improvement for legal entities that engage in activities related to energy production and extractive industry on the territory of the municipality of Pljevlja that have a negative impact on the state of the environment.

The following table shows the budget revenues of the Municipality of Pljevlja by year and the share of current reveues of the budget.⁴³

Table 13. Total revenue of Pljevlja Municipality Budget and share current revenues, in eur

	2018	2019	2020	2021	2022 (plan)
Total Budget revenues	13,351,249	13.462.114	16.120.141	21.0230678	20.610.071
Current revenues	6,378,525	9,496,393	12,392,582	13,323,968	11,692,653
Share of current reenues in total revenues	47.77%	70.54%	76.88%	63.38%	56.73%

Source: Municipality of Pljevlja

The Coal Mine and EPCG generate the majority of the Municipality of Pljevlja's budget revenues, primarily current revenues. The table below shows the amounts of revenue collected from the two observed companies for the Municipality of Pljevlja's Budget over the previous four years. Over the last four years, the Coal Mine and EPCG have contributed nearly 41% of the Municipality of Pljevlja's current revenue.

Table 14. Total amounts of collected revenues from the Coal Mine EPCG, in EUR

No.	Collected revenues	2018	2019	2020	2021
1	Real estate tax	607,888.68	1,607,902.62	1,656,960.05	1,716,846.61
2	Tax surcharge	170,113.88	136,628.02	156,677.55	178,871.95
3	Personal income tax	222,992.71	858,301.75	795,921.28	883,743.72
4	Road access fee	16,438.99	16,447.79	4,423.57	1,100.00
5	Fee for water pollution protection	0.00	73,243.26.00	132,778.25	7,117.74
6	Water usage fee	0.00	69,316.480.00	64,906.90	0,00
7	Mineral raw material concession fee	723,681.69	745,997.79	755,682.76	800,341.51
8	Fee for environmental protection and improvement	0.00	0.00	1,748,648.53	1,878,955.06
T	DTAL Coal Mine, EPCG (Thermal Power Plant Pljevlja)	741,115.95	3,507,844.71	5,315,998.89	5,466,976.59
Sh	are in current revenues of the Municipality of Pljevlja	42.97%	36.93%	42.90%	41.03%

Source: Municipality of Pljevlja

2.5 Mapping and profile of suppliers and buyers of the Coal Mine and TPP Pljevlja

The coal value chain in Pljevlja is centered on Coal Mine as well as TPP Pljevlja, a subsidiary of EPCG, with the other participants are companies with creditor-debtor relationships. To shed more light on the significance of the cola value chain to the local economy, we examine the buyers and suppliers of the Coal Mine and TPP Pljevlja, which are part of the so-called coal value chain. The companies in this chain are experiencing operational changes to varying degrees as a result of the change in the operating regime of the Coal Mine Pljevlja and TPP Pljevlja. The operations of companies in the coal value chain are reflected in employment and new employment in the municipality of Pljevlja, in addition to the income they generate⁴⁴.

The analysis of the operations of suppliers from the database of business partners for the period 2020-2022 was used to profile and classify companies operating in the so-called coal chain that connects, and whose operations are affected by business processes in the Coal Mine (including the month of July).

The criteria for company classification are given below.

Table 15. Criteria for classification of companies in the coal value chain

Criterion	Description
Busines continuity with the Coal Mine	The company operates with the Coal Mine in all three observed years – 2020, 2021 and part of 2022
Value of business continuity with the Coal Mine	Some companies have significant business with the Coal Mine during one year based on delivery of a large quantity of equipment or machinery but there is no continuity in the value of business
Bare minimum of business value with the Coal Mine	Experienced value of business of minimum 5,000 eur annually
The proportion of the company's total revenues derived from operations with the Coal Mine	Experienced proportion of 25% in total revenues

Source: Authors

The analysis revealed that in the observed period, i.e. in the business years 2020, 2021, and the first seven months of 2022, the total number of different (unique) suppliers amounted to 422 companies, with the value of delivered goods or services ranging from 6.03 euros to 5,402,490 euros on an annual basis.

Table 16. Total number of suppliers of the Coal Mine in the period 2020-7/2022

Business year	Number of supliers
2020	254
2021	274
7/2022	221

In terms of business continuity, 115 companies, or 27.31% of the supplier base, had a business relationship with the Coal Mine in all three observed years.

Based on the above-mentioned analysis of the operations of companies from the supplier base, an empirical conclusion was drawn that a margin of at least 5,000 euros of the annual value of goods or services is relevant for further analysis of the impact of the coal value chain on the work of companies from the supplier base. Following the establishment of the specified margin, the list of suppliers was reduced to 43 companies. The table below shows the companies in question, as well as information about their headquarters, main activity, year of establishment, total number of employees, and, for companies whose headquarters are outside the municipality's territory, the number of employees in Pljevlja obtained from communication with their representatives.

Table 17. Suppliers of the Coal Mine with an annual income from this business relationship exceeding 5,000 euros

No.	Name of supplier	Municipality	Country	Activity	Year of establishment	Number of employees	Number of employees in Pljevlja
1	JUGOPETROL AD	Podgorica	Montenegro	production inputs	1947	98	, ,
2	OUTSOURCING PARTNERS DOO	Podgorica	Montenegro	services	2013	255	200
3	ELEKTROPRIVREDA CRNE GORE AD	Nikšić	Montenegro	production inputs	1977	975	158
4	ATLAS MONTENEGRO DOO	Nikšić	Montenegro	equipment and machinery	2012	4	1
5	DOO BEN-KOV	Tivat	Montenegro	equipment and machinery	2002	15	
6	VECTOR SYSTEM SECURITY DOO	Nikšić	Montenegro	Security	2014	185	100
7	CRNAGORAPUT AD	Podgorica	Montenegro	Services	2002	230	
8	JUGOBICYCL PROMET DOO	Podgorica	Montenegro	production inputs	2002	8	2
9	MONTENEGRO SERVICES DOO	Pljevlja	Montenegro	equipment and machinery	2009	3	3
10	AUTOCOMMERCE DOO	Pljevlja	Montenegro	equipment and machinery	2008	5	5
11	DS INŽENJERING-CG DOO	Podgorica	Montenegro	equipment and machinery	2007	5	
12	ELEKTROREMONT DOO	Podgorica	Montenegro	equipment and machinery	2009	10	
13	SAVA INSURANCE	Podgorica	Montenegro	Services	2002	136	8
14	MONTEX HYDROMONT DOO	Nikšić	Montenegro	production inputs	2002	5	
15	NANOTRONIC DOO	Pljevlja	Montenegro	equipment and machinery	2008	2	2
16	MESO PROMET DOO	Bijelo Polje	Montenegro	Other	2002	500	17
17	M&I SYSTEMS DOO	Kotor	Montenegro	Engineering	2020	4	
18	ČIKOM DOO	Podgorica	Montenegro	Engineering	2003	56	
19	M TEL DOO	Podgorica	Montenegro	Services	2007	434	
20	VODOVOD DOO	Pljevlja	Montenegro	Services	1982	122	122
21	VUJACIC COMPANY DOO	Podgorica	Montenegro	equipment and machinery	2010	34	
22	SINCOMMERCE DOO	Podgorica	Montenegro	equipment and machinery	2002	43	
23	VOLI TRADE DOO	Podgorica	Montenegro	Other	2002	2119	22
24	TEIKOM MONTE DOO	Niksic	Montenegro	equipment and machinery	2006	5	1
25	UNIS -USHA	Belgrade	Serbia	Services	1999	5	
26	EURO FLEX SZR	Pljevlja	Montenegro	equipment and machinery	2016	1	1
27	HEATING LTD	Pljevlja	Montenegro	Services	2009	29	29
28	ZNAK DOO	Podgorica	Montenegro	equipment and machinery	2002	5	
29	TENEGRO GROUP DOO	Podgorica	Montenegro	production inputs	2017	4	
30	CAR REPAIR OSMANAGIC CO DOO	Podgorica	Montenegro	equipment and machinery	2002	23	
31	CENTER FOR ECOTOXICOLOGICAL TESTS CG DOO	Podgorica	Montenegro	Services	2012	77	
32	HEMOSAN DOO	Bar	Montenegro	Services	2002	37	
33	Public health institution (JZU) Community Health Center	Pljevlja	Montenegro	Services		134	
34	TEKNOXGROUP CAT DOO	Danilovgrad	Montenegro	equipment and machinery	2002	11	
35	BLACK METALLURGY INSTITUTE LTD	Nikšić	Montenegro	Services	2002	69	
36	VELETEX DOO	Podgorica	Montenegro	Other	2013	112	6
37	SLAVIJA KOMERC DOO	Pljevlja	Montenegro	equipment and machinery	2002	13	13
38	DOO MIRABOU	Podgorica	Montenegro	equipment and machinery	2002	2	
39	MINING MONT DOO	Pljevlja	Montenegro	Services	2008	8	8
40	KASTEX DOO	Podgorica	Montenegro	Other	2002	15	
41	MONTELADA S&B DOO	Nikšić	Montenegro	equipment and machinery	2002	4	
42	DOO AUTO SERVIS KNEZEVIC	Pljevlja	Montenegro	Services	2006	10	10
43	MESSER TEHNOGAS AD	Budva	Montenegro	production inputs	2002	22	

Along with TE Pljevlja, which operates in Pljevlja and is formally a subsidiary of EPCG with headquarters in Nikšić, only 10 companies or 23% of those with a business income of more than 5,000 euros per year from the Coal Mine, have their headquarters in Pljevlja. The total number of employees in the 43 companies studied is 5,834, with 842 working in Pljevlja. The table below summarizes the total annual income of the 43 companies studied as well as the volume of business with the Coal Mine.

Table 18. Annual income of observed suppliers of the Coal Mine , in eur

	Year	2020	2021	2022 (until July 1)
1	Total annual income	873,404,482.97	1,046,978,111.41	
2	Total annual income excluding EPCG	543,717,454.97	651,615,564.41	
3	The total value of doing business with the Coal Mine	15,107,943.65	9,152,288.29	9,265,314.77
4	The total value of operations with the Coal Mine, excluding TE Pljevlja	13,155,230.12	7,071,640.04	7,920,226.69

The listed companies are classified into the following categories based on their main activity: production inputs, equipment and machinery, services, engineering, security, and others. The table below shows the number of employees by company activity as well as the total number of employees in Pljevlja (whether the companies themselves are in Pljevlja or have permanent employees in Pljevlja).

Table 19. The number of employees of the observed suppliers of the Coal Mine according to activities

Activity	Total number of employees	Number of employees in Pljevlja
Engineering	60	0
Security	185	100
Equipment and machinery	185	26
Production inputs	1,112	160
Services	1.546	511
Other	2,746	45

A margin of 25% of the value of the company's business with the Coal Mine in its total revenue was established to determine the degree of dependence of the observed companies on the supplier base. We conclude that 9 companies, four of which are based in the municipality of Pljevlja, are directly dependent on the JSC Coal Mine Pljevlja's business. The total number of employees in the aforementioned companies is 468, with 315 working in Pljevlja.

Table 20. Coal mine suppliers whose revenue from this business relationship accounts for at least 25% of the total annual revenue of the company

No.	Name of supplier	Municipality	Country	Activity	Number of employees	Number of employees in Pljevlja
1	EURO FLEX SZR	Pljevlja	Montenegro	Maintenance and repair of motor vehicles	1	1
2	TEIKOM MONTE DOO	Nikšić	Montenegro	Wholesale of mining and construction machinery	5	1
3	NANOTRONIC	Pljevlja	Montenegro	Production of electronic elements	2	2
4	AUTOCOMMERCE DOO	Pljevlja	Montenegro	Wholesale of parts and equipment for motor vehicles	5	5
5	MONTENEGRO SERVICES DOO	Pljevlja	Montenegro	Maintenance and repair of motor vehicles	3	3
6	JUGOBICYCL PROMET DOO	Podgorica	Montenegro	Wholesale of parts and equipment for motor vehicles	8	2
7	VECTOR SYSTEM SECURITY	Nikšić	Montenegro	Private security	185	100
8	ATLAS MONTENEGRO DOO	Nikšić	Montenegro	Wholesale of mining and construction machinery	4	1
9	OUTSOURCING PARTNERS DOO	Podgorica	Montenegro	Outsourcing Agencies	255	200
	IN TOTAL				468	315

Table 21. Annual income of Coal Mine suppliers, whose income from this business relationship accounts for at least 25% of the company's total annual revenues, in euros

Year	2020	2021	2022 (until July 31)
Total annual income	13,806,458.00	10,868,239.00	
The total value of the business with the Coal Mine JSC Pljevlja	5,046,292.48	4,635,589.21	1,626,960.17
Participation	36.55%	42.65%	

In the observed period for EPCG, i.e. TPP Pljevlja, the total number of different (unique) suppliers in business years 2020, 2021 and the first seven months of 2022 amounted to 12 companies, with the value of delivered goods or services ranging from 23,742.67 euros to 48,165,375.69 euros on an annual basis.

Table 22. Total number of suppliers of TPP Pljevlja in the period 2020-7/2022

Business year	Number of suppliers
2020	11
2021	12
6/2022.	12

In order to determine the dependence of the observed companies from the supplier base, a margin of 25% of the value of the company's business with TPP Pljevlja in its total revenue was previously established. We conclude that 5 companies, three of which are based in the municipality of Pljevlja, from the supplier base directly depend on doing business with TPP Pljevlja.

Table 23. TPP Pljevlja suppliers whose income from this business relationship accounts for at least 25% of the company's total annual income

No.	Name of supplier	Municipality	Country	Activity	Number of employees	Number of employees in Pljevlja
1	AD Pljevlja coal mine	Pljevlja	Montenegro	Production inputs	1.124	1.124
2	Termoelektro-Mont doo	Podgorica	Montenegro	Services	45	40
3	Tangenta doo	Podgorica	Montenegro	Equipment and machinery	8	2
4	Tim Company doo	Pljevlja	Montenegro	Services	63	63
5	Roto-Term doo	Pljevlja	Montenegro	Services	29	29
	TOTAL				1,269	1.258

The total number of employees in the aforementioned companies is 1,269, with Pljevlja employing 1,258 of them. The table below summarizes the total annual income of the five companies studied as well as the volume of business with TPP Pljevlja.

Table 24. Annual revenues of the supplier of TE Plevlja, whose income from this business relationship makes up at least 25% of the company's total annual revenues, in euros

Year	2020	2021	2022 (until July 1)
Total annual income	55,854,853.00	53,400,445.00	
Total value of doing business with TPP Pljevlja	52,103,919.80	49,533,733.59	29,876,626.42
Participation	93.28%	92.76%	

The table below calculates **the value of the coal chain for the years 2019-2021.** The Coal Mine's annual income is included in the calculation, minus the income earned from the sale of coal to EPCG. This figure is increased by the value of electricity generated at the Pljevlja Thermal Power Plant, which was calculated at a rate of 45 EUR/MWh. Based on the above, the average value of the coal chain in the observed period amounts to EUR 69,647,603 million.

Table 25. The value of the coal chain for the period 2019-2021, in EUR

Year	2019	2020	2021
Coal Mine Total income (A)	43,470,171.00	45,423,676.00	43,513,842.00
Revenue from sales of the coal of TPP Pljevlja (B)	37,229,499.00	40,001,619.00	35,693,662.00
Production of Pljevlja Thermal Power Plant (MWh)	1,390,120	1,487,500	1,332,600
Average MWh cost price in Pljevlja Thermal Power Plant	45.00	45.00	45.00
Electricty production value in TPP Pljevlja (C)	62,555,400.00	66,937,500.00	59,967,000.00
Coal chain value	68,796,072.00	72,359,557.00	67,787,180.00
Average value chain coal 2019-2021 (A-B)+ C		69,647,603.00	

Source: Authors calculation based on official financial statements of companies

The listed companies are classified into the following categories based on their main activity: production inputs, equipment and machinery, services, engineering, security, and others. The table below shows the number of employees by company activity as well as the total number of employees in Pljevlja (whether the companies themselves are in Pljevlja or have permanent employees in Pljevlja).

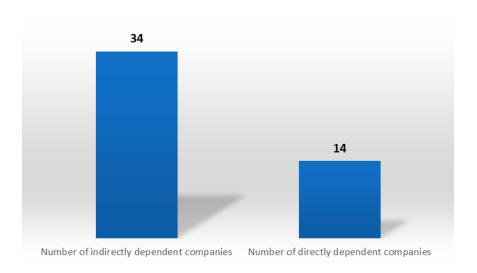
Table 26. The number of employees of the observed suppliers of Thermal Power Plant Pljevlja based on activities

Activity	Total number of employees	Number of employees in Pljevlja
Production inputs	1.124	1.124
Services	137	132
Equipment and machinery	8	2

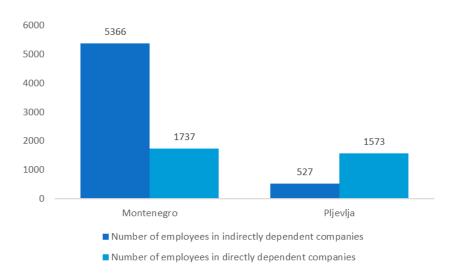
We will adopt a division into companies that are directly and indirectly dependent on the functioning of the coal value chain based on previously derived data and adopted criteria for the classification of companies in the coal value chain (suppliers of the Coal Mine and TPP Pljevlja). Companies that are directly dependent on the Pljevlja Coal Mine and TPP Pljevlja have a minimum of 25% of their annual income from them, while companies that are indirectly dependent on the Pljevlja Coal Mine and TPP Pljevlja have a minimum of EUR 5,000 in income from the Coal Mine and TPP Pljevlja on annual level.

The graphs below provide an overview of characteristic data related to directly and indirectly dependent companies, as well as revenue values.

Grafik 4. Total number of indirectly and directly dependent companies in the coal value chain



Graph 5. Number of employees in indirectly and directly dependent companies

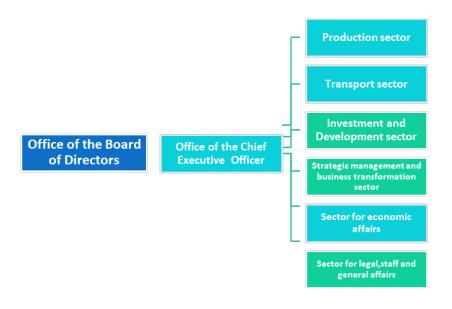


3. PROFILE OF THE EMPLOYEES IN THE COAL MINE AND TPP PLJEVLJA

This section presents the characteristics of the employees in the two observed companies, based on data obtained from Human resource department. The organizational structure of the companies Coal Mine and TPP Pljevlja was presented, as well as the number of employees by type of contract, gender, and sector, as well as other important characteristics such as qualifications, pay grades, and so on.

3.1 Profile of employees in the Coal Mine

The Coal Mine, which was founded as a coal exploration and production company, has changed its status and organizational form over the years. The internal organization of the company is based on the sectoral division of its activities. The Rulebook on internal organization in accordance with business and development needs governs it in greater detail. The organizational structure is depicted graphically below.



Graph 6. Coal Mine Organizational Structure

As of July 31, 2022, the total number of permanent and fixed-term employees, as well as those assigned through the Outsourcing Agency, is 1124.

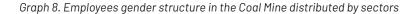
SECTORS	Permanent	Fixed-term	Outsourcing Agency	Trainees (professional training)
Office of the Board of Directors	16	6		
Office of Chief Executive Officer	25		1	
Production Sector	567	10	76	3
Transport Sector	158		25	1
Investment and Development Sector	44	29	14	
Strategic Management and Business Transformation Sector	62	2	2	
Sector for Economic Affairs	56		4	1
Sector for Legal, Staff and General Affairs	25		2	
TOTAL NUMBER OF EMPLOYEES	953	47	124	5

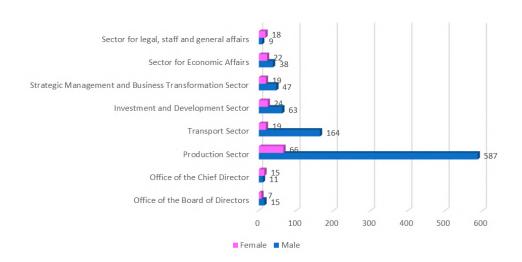
Table 27. Structure of employees in the Coal Mine by the employment contract and by sector

The Coal Mine JSC Pljevlja employs 934 men (83.1%) and 190 women (16.9%). The "Production" sector employs the most people (653 employees), while the "Transport" sector employs only 183 people.

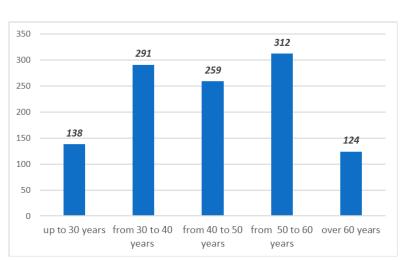


Graph 7. Employees gender structure in the Coal Mine





In the Coal Mine, one-quarter of the employees (25.9%), or 291 workers, are between the ages of 30 and 40, while 27.8%, or 312 workers, are between the ages of 50 and 60. Under the age of 30 are 12.3% (138 workers), while 11% (124 employees) are over the age of 60.



Graph 9. Employees age structure in the Coal Mine

Table 28. Employees structure in the Coal Mine by age and by sectors

SECTORS	Up to 30 years	From 30 to 40 years	From 40 to 50 years	From 50 to 60 years	Over 60 years
Office of the Board of Directors	2	7	8	2	3
Office of Chief Executive Officer	4	7	5	5	5
Production Sector	58	157	156	216	66
Transport Sector	25	49	46	43	20
Investment and Development Sector	27	24	15	14	7
Strategic Management and Business Transformation Sector	4	23	9	22	8
Sector for Economic Affairs	14	16	14	6	10
Sector for Legal, Staff and General Affairs	4	8	6	4	5
TOTAL NUMBER OF EMPLOYEES	138	291	259	312	124

When it comes to years of service, more than a quarter (28.7%) are those with up to 2 years (18.8%; 211 employees), followed by those with 3-5 years (10%; 112 employees). There are 162 employees (14.4%) with 6 to 10 years of service. Number of employees with 11 to 20 years of service, or 21 to 30 years of service is 38% of (269 employees; 158 employees respectively), while 18.9% have over 31 years of service.

Graph 10. Total number of employees in the Coal Mine, by years of service

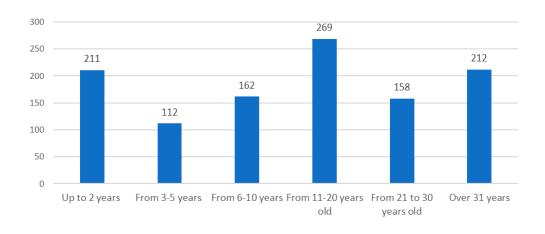
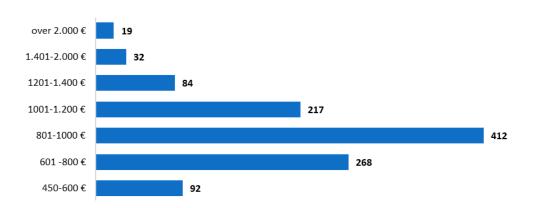


Table 29. Employees structure in the Coal Mine, by years of service and by sectors

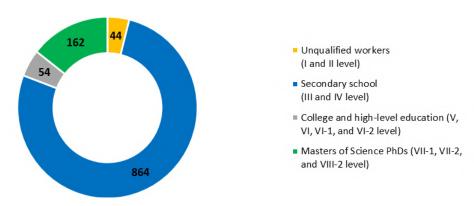
SECTORS	Up to 2 years	From 3-5 years	From 6-10 years	From 11-20 years old	From 21 to 30 years old	Over 31 years
Office of the Board of Directors	7	3	3	5	2	2
Office of Chief Executive Officer	7	2	3	7	3	4
Production Sector	79	61	104	159	113	137
Transport Sector	39	19	27	49	18	31
Investment and Development Sector	45	10	6	12	5	9
Strategic Management and Business Transformation Sector	10	9	8	19	11	9
Sector for Economic Affairs	20	6	7	10	3	14
Sector for Legal, Staff and General Affairs	4	2	4	8	3	6
TOTAL	211	112	162	269	158	212

A little more than a third of workers (36.7%; 412) earn between 801 and 1,000 euros per month. Employees in 19.3% of cases (217) earn between 1,000 and 1,200 euros per month, while 12% (135) earn more than 1,200 euros per month. There are 23.8%, or 268 workers who earn between 601 and 800 euros, and 8.2% (92), who earn less than 600 euros. For the month of July 2022, the average net salary was EUR 930.20.



Graph 11. Net earnings of employees in the Coal Mine

Two-thirds of the employees, or 76.9% (864 employees), have completed high school, meaning they have completed the III and/or IV level of education. This primarily refers to employees in the "Production" and "Transport" sectors.



Graph 12. Employees structure in the Coal Mine, by level of education

Table 30. Employees structure in the Coal Mine, by level of education and by sectors

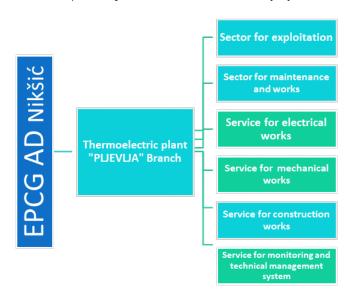
		LEVELS 0	F EDUCATION	
TYPES OF EDUCATIONAL PROFILES OF ALL EMPLOYEES	Unqualified workers (I and II level)	Secondary school (III and IV level)	College and high- level education (V, VI, VI-1, and VI-2 level)	Masters of Science PhDs (VII-1, VII-2, and VIII-2 level)
Office of the Board of Directors	0	5	1	16
Office of Chief Executive Officer	0	7	2	17
Production Sector	26	546	31	50
Transport Sector	9	155	3	16
Investment and Development Sector	2	65	1	19
Strategic Management and Business Transformation Sector	3	41	4	18
Sector for Economic Affairs	0	35	9	16
Sector for Legal, Staff and General Affairs	4	10	3	10
TOTAL	44	864	54	162

All employees, according to the Human Resource Department, meet the general and special conditions for working at jobs to which they are assigned under the Act on Internal Organization and Systematization of Jobs in the Coal Mine JSC Pljevlja. The Human Resources Department does not have information about specific skills.

Within the company, 586 jobs are at higher risk, with 435 of them being workplaces where the insurance period is calculated with a longer duration (jobs with reduced retirement age). All of these jobs have a two-degree increase (12/14 or 12/15). This means that the insurance period is calculated in those workplaces by counting the 12 months actually spent in the insurance period as 14 or 15 months.

3.2 Structure of employees at TPP Pljevlja

The TPP Pljevlja is organized into two main sectors and several services, employing 158 people. A schematic representation is shown below.



Graph 13. Organizational chart of the TPP Pljevlja

Out of the total number of employees (158), 131 are employed indefinitely, while the remaining number is on a fixed-term contract.

SECTORS Permanent Fixed-term Trainees Total TPP Pljevlja - Branch office 0 Sector for Exploitation 20 0 99 79 6 49 0 55 Sector for Maintenance and Works TOTAL NUMBER OF EMPLOYEES 131 1 158

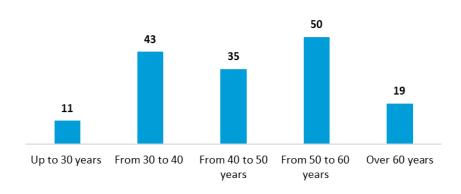
Table 31. Structure of employees in TPP Pljevlja by employment contract and by sector

At the TPP Pljevlja, 93% of the people (147) are men, while 7% (11) are women. The Exploitation Sector employs 62.7% of the total workforce, or 99 people.

Table 32. Structure of employees at TPP Pljevlja, by gender and by sector

SECTORS	Male	Female
TE Pljevlja - Branch office	2	2
Sector for Exploitation	94	5
Sector for Maintenance and Works	51	4
TOTAL NUMBER OF EMPLOYEES	147	11

Graph 14. Age structure in Thermal Power Plant Pljevlja



The majority of TPP Pljevlja's employees are over 50 years old (43.7%; 69 employees), with 22.2% (35 employees) being between 40 and 50 years old. A little more than a third of employees (34.2%; 54 employees) are under the age of 40.

Table 33. Employees structure at TPP Pljevlja, by age and by sector

SECTORS	Up to 30 years	From 30 to 40	From 40 to 50 years	From 50 to 60 years	Over 60 years
TE Pljevlja - Branch office	1	1	0	1	1
Sector for Exploitation	7	29	28	25	10
Sector for Maintenance and Works	3	13	7	24	8
TOTAL	11	43	35	50	19

When it comes to years of service, the majority of employees (47.5%; 75 workers) have more than 20 years of experience. There are 30.4% (48 workers) with 6 to 10 years of experience, or 11 to 20 years, and 22.2% (35 workers) with 5 years or less of experience.

Graph 15. Employees at TPP Pljevlja, by years of service

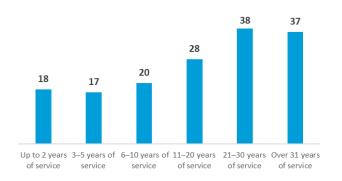
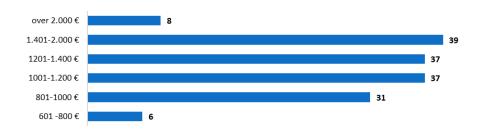


Table 34. Structure of employees at TPP Pljevlja, by years of service and by sector

SECTORS	Up to 2 years of service	From 3–5 years of service	From 6-10 years of service	0d 11-20 years of service	From 21 to 30 years of service	Over 31 years of service
Thermo Power Plant "PLJEVLJA" Branch office	1	0	0	1	1	1
Sector for exploitation	10	13	15	19	24	18
Sector for Maintenance and Works	7	4	5	8	13	18
TOTAL NUMBER OF EMPLOYEES	18	17	20	28	38	37

When it comes to net earnings, nearly a quarter (23.4%; 37 employees) earn between 600 and 1000 euros. Employees in 46.8% of cases (74 workers) earn between 1,000 and 1,400 euros, while 29.7% (47 workers) earn more than 1,400 euros.

Graph 16. Net earnings of employees at TPP Pljevlja



Almost two-thirds of the employees (73.4%; 116 workers) have completed high school, that is, they have the III or IV level of education. There are only 8.2% of unqualified workers (13 workers). 18.4% (29 workers) of highly educated qualified staff. 48 employees passed the professional exam in accordance with the Law on Energy, and one employee holds a license in accordance with the Law on Spatial Planning and Building Construction.

Graph 17. Employees structure in TPP Pljevlja, by the level of education

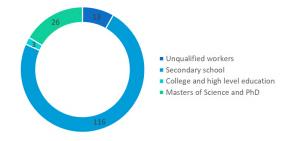


Table 35. Number of employees in TPP Pljevlja, by level of education and by sector

	LEVELS OF EDUCATION					
TYPES OF EDUCATIONAL PROFILES OF ALL EMPLOYEES	Unqualified workers (I and II level)			Masters of Science and PhDs (VII-1, VII-2, and VIII- 2 level)		
TE Pljevlja - Subsidiary	0	1	0	3		
Sector for exploitation	13	77	1	8		
Sector for Maintenance and Works	0	38	2	15		
TOTAL	13	116	3	26		

4. EMPLOYEE SURVEY AND IN-DEPTH INTERVIEWS

In addition to data and information gathered from secondary sources, primary data was collected for analysis using quantitative and qualitative methods. A survey was conducted among the employees of both companies in order to collect information on: i) the characteristics of the employees, including their family structure, sources of household income; ii) satisfaction with the existing employment, perspective of work engagement and readiness to improve one's own skills, iii) potentials for the development of Pljevlja, and iv) general familiarity with the term "just transition". The research was conducted in early December 2022, in collaboration with the management of the companies TPP Pljevlja and Coal Mine, with logistical support by the president of a coal mine union. Questionnaires with openended and closed-ended questions were developed. The respondents in the study were guaranteed anonymity, which contributed to honest responses, which are discussed below.

In-depth interviews were conducted with representatives of the Coal Mine and TPP Pljevlja management structures, as well as representatives of EPCG. In addition, in-depth interviews were orgnised with representatives of business associations and the management of the company Gradir Montenegro doo, representatives of three coal mine trade unions, the head of the regional department of the Montenegrin Employment Agency, and representatives of the non-governmental sector. Municipal leaders also shared their thoughts on the importance of the coal value chain and the process of a just transition.

Discussions in four focus groups provided a deeper understanding of the employees' vision. In the Thermal Power Plant, one focus group was organized with employees of all age structures. The remaining three focus groups were organized with Coal Mine employees, taking into account the age of participants in the discussions⁴⁵.

4.1 Quantitative research among the employees of Rudnik uljja and TE Pljevlja

The survey was conducted on a sample of 454 employees (respondents), 111 of whom worked at the TPP Pljevlja and 343 at the Coal Mine. A total of 70.7% of the total population was surveyed in relation to employees in the TPP Pljevlja (158 employees), while 30.5% of all employees were surveyed in the Coal Mine (in relation to 1,124 employees according to the records of the service in charge of human resources⁴⁶).

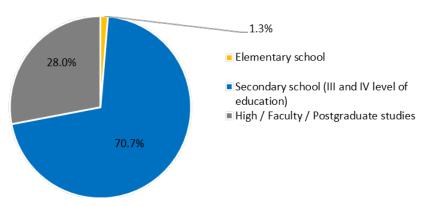
Because men outnumber women in the workplace, 78.9% of respondents are men and 21.1% are women. According to the age of the respondents, there are 63 respondents (13.8%) between the ages of 20 and 30, 119 respondents (26.2% each) between the ages of 31 and 40 and 41 to 50, and 142 respondents (31.3%) are over 51 years old.

Table 36. Structure of respondents by company, gender and age

COMPANIES	N	%
TPP Pljevlja out of a total of 158 employees, 70.3% were surveyed	111	24.4
Coal Mine out of a total of 1,124 employees, 30.5% were surveyed	343	75.6
IN TOTAL	454	100%
GENDER	N	%
Male	358	78.9
Woman	96	21.1
IN TOTAL	454	100%
AGE	N	%
Under 20	2	0.4
From 20 to 30	61	13.4
From 31 to 40	119	26.2
From 41 to 50	119	26.2
From 51 to 60	106	23.3
Over 60	36	7.9
No answer	11	2.4%
IN TOTAL	454	100%

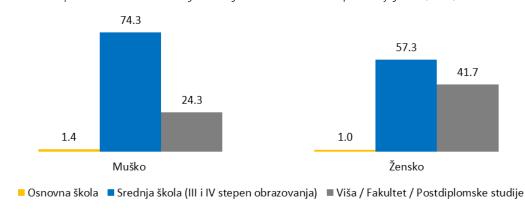
The majority of respondents (70.7%) have a high school diploma. Observed by gender, women employed in the coal value chain are on average better educated than their male counterparts, which is also a result of the type of work they do.

Graph 18. The highest degree of education completed, in %, n =454



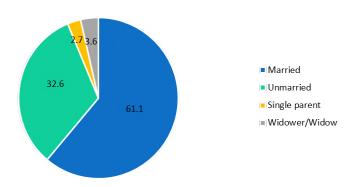
Out of the total male population, 1.4% has completed primary school, 74.3% has completed secondary school, and nearly a quarter (24.3%) is highly educated. The educational structure of the female population differs. Specifically, among the highly educated staff, the percentage of women is significantly higher at 41.7%, with slightly more than half (57.3%) having completed secondary school and 1% having completed elementary school.

Graph 19. Structure of the highest degree of education completed by gender, in %, n=454



In terms of family structure, six out of ten respondents (61.1%) are married, while nearly one-third (32.6%) has not yet formed a family. There are 2.7% of single parents, and 3.6% have lost a spouse (widow/widower).

Graph 20. Family structure , in %, n=445



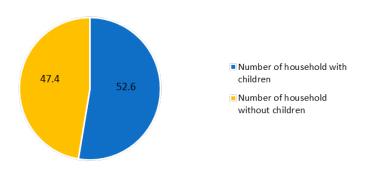
Each household has three or more members on average (average 3.4).

Table 37. Structure of household members, by gender and in total

	Male		Fem	nale	TOTAL (NI)
	N	%	N	%	TOTAL(N)
0 - 5 years	90	54.5	75	45.5	165
6 - 14 years	74	46.8	84	53.2	158
15 - 18 years	41	54.7	34	45.3	75
18 - 64 years old	539	51.8	501	48.2	1040
Over 65 years	42	45.7	50	54.3	92
Persons with disability	4	66.7	2	33.3	6
	790		746		1536

Slightly more than half of the respondents (52.6% or 239 respondents) have children of one of the ages mentioned.

Graph 21. Structure of households, in %, n=454



Of the total number of respondents, 21.7% have children in preschool or kindergarten, 37.7% have children in elementary school, 19.0% have children in high school, and 21.7% have children at the university.

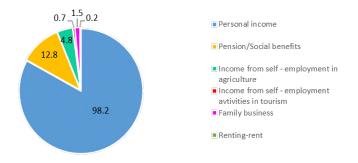
Table 38. Number households and children share in the household

Children shoustone	Total number of	Total number of households		r of children
Children structure	N	%*	N	%
In preschool institution/ kindergarten	81	33.9	89	21.7
In elementary school	107	44.8	155	37.7
In high school	68	28.5	78	19.0
At the university	66	27.6	89	21.7
In total	322*		411	100%

^{*} Note: Some households have children in several age categories

Own earnings are the primary source of income for 83.1% of households (personal income). Every tenth respondent (10.8%) stated that their primary source of income is a pension or some type of social income. Only 1.3% of respondents stated that the family business is their primary source of income. Income from self-employment activities in agriculture is 4.1%, while income from self-employment activities in tourism is only 0.6%.

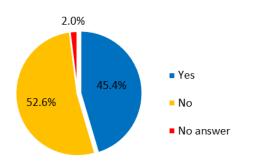
Graph 22. The main sources of household income, in %, n=537 responses

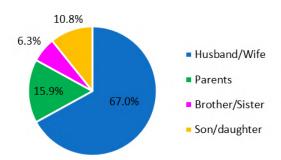


When asked if any of the other household members work, 52.6% said no. Nearly two-thirds (67%) of the 45.4% who responded positively said their husband or wife was employed, 15.9% said their parent was employed, 10.8% said their son or daughter was employed, and 6.3% said their brother or sister was employed.

Graph 23. Does any other household member work besides you?, in %, n=454

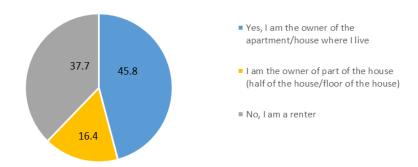
Graph 24. Who of your household members is employed besides you?, in %, n=176





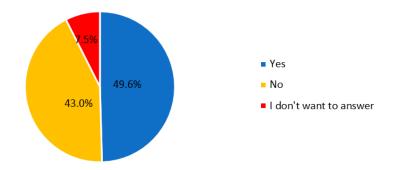
Eight out of ten respondents (83.5%) have provided a housing, with 45.8% owning the apartment/house they live in and 37.7% owning a portion of a house they share with someone else. The remaining 16.4% are renters.

Graphic 25. Do you have a housing provided, i.e. are yu the owner of a housing unit you live in? in %, n=432



Montenegro has seen an increase in income from remittances from abroad over the last fifteen years as a result of migration. Measured by the share in Gross Domestic Product, the population's income in 2007 was 4.7% (less than 200 million euros), but by 2021 it increased to 13.54% (nearly 800 million euros). However, less than 2% of respondents reported receiving other types of support from the diaspora or locally.

Graphic 26. Do you have long term liabilities (credit debts)? in %, n=454



The majority of employees (59%) have more than 11 years of experience, while 41% have less than 10 years.

Table 39. How many years have you been working?

TOTAL YEARS OF EMPLOYMENT	N	%
Up to 2 years	64	14.6
From 3 to 5 years	50	11.4
From 6 to 10 years	66	15.0
From 11 to 20 years	117	26.7
From 21 to 30 years old	62	14.1
Over 31 years	80	18.2
TOTAL (answered by respondents)	439	100.0

Respondents are satisfied or completely satisfied with the current working conditions and interpersonal relations with employees and superiors (83%), relations between employees (78.7%), current job position (75.6%), work organization in the sector (73.8%), safety at work (71.1%), personal income (71.7%), and workplace conditions (66%).

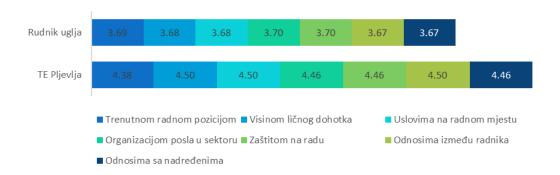
Respondents are dissatisfied and completely dissatisfied with working conditions in 15.8% of cases, while 13.3% are dissatisfied and completely dissatisfied with safety at work.

Graph 27. Level of satisfaction – ratings from 1 to 5 (where 1 refers to – completely dissatisfied up to 5 – completely satisfied) in %, n=444



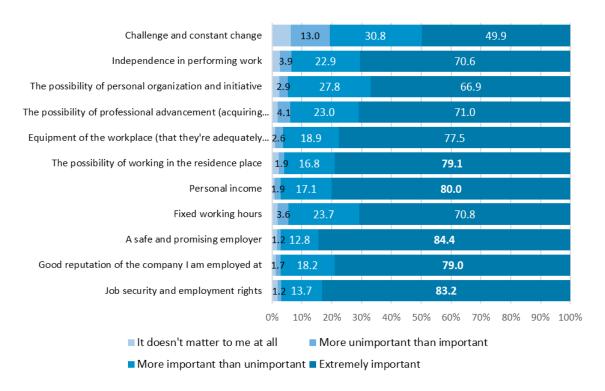
What the respondents find extremely important is a safe and promising employer (84.4%), job security and rights from the employment relationship (83.2%), personal income level (80%), the ability to work in their place of residence (79.1%), and the good reputation of the company where they work (79%).

Grafik 28. Stepen zadovoljstva – ocjene od 1 do 5 (gdje je 1 – potpuno nezadovoljstvo do 5 – potpuno zadovoljstvo) u %, za pojedinačne kompanije

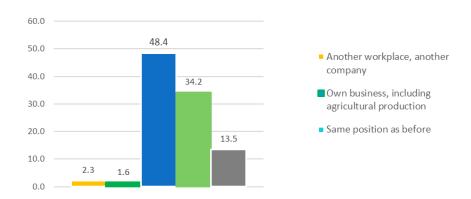


What the respondents find extremely important is a safe and promising employer (84.4%), job security and rights from the employment relationship (83.2%), personal income level (80%), the ability to work in their place of residence (79.1%), and the good reputation of the company where they work (79%).

Graph 29. Generally speaking, to what extent do you find each of the following aspects of the job important, regardless of your current workplace? in %, n=418



Employees are extremely loyal to their current employer, as confirmed by more than 82.6% of them. Specifically, almost every second respondent (48.4%) sees himself in the same position as before in the next five years. A little more than a third (34.2%) see themselves in the same company but in a better position than they are now. Only 2.3% see themselves in another workplace or company, while 13.5% see themselves in retirement.



Only 1.6% of respondents see themselves in their own business. The majority of them have no idea what the business would be. The mining sector is still present, possibly in some operational jobs, some kind of service providing or trade, while a few of them see themselves in on line trade, sales/renting real estate, possibly in some kind of agricultural activities.

When asked if there are opportunities for fast job finding or conditions for establishing own business/ startup/development agricultural production in Pljevlja, 85.3% said no. Only 14.7% of people believe this possibility exists.

According to 92.4% of respondents, they do not want to change jobs even if a similar job is offered to them in another company. Other employment would be accepted immediately by 4.2%, while the remaining number was undecided or stated that it depends on the conditions of work and the amount of the earnings.

4%
Yes, I would accept it immediately
No, I would stay in this company
Other

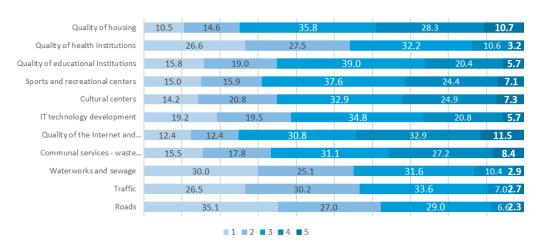
Graph 31. If a similar job in other company were offered to you, would you accept it? in %, n=382

When asked if they were willing to participate in the adult education process, by providing a new job (retraining, professional advancement), more than half of the respondents (54.3%) said yes, while 45.7% were not ready for that move. Women are more interested in additional training (58.4%) than their male counterparts (53.2%).

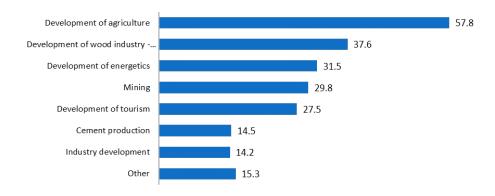
Almost one-third of respondents (31.8%) confirmed the existence of educational institutions in Pljevlja that provide retraining or expert training. The following institutions were recognized: Pljevlja Secondary Professional School (84.8%), Employment Office (10.1%), and Coal Mine AD Pljevlja (3.8%). In the future, they see some new faculties in that role, but also Secondary Vocational School in Pljevlja, Employment Agency, or some new centers or training in successful companies.

When it comes to satisfaction with available infrastructure in Pljevlja, the roads and traffic have the most dissatisfaction and the lowest ratings (62.1% or 56.2% of respondents are dissatisfied or completely dissatisfied, respectively); 55.1% of them gave the lowest rating for the condition of waterworks and sewage, and 54.1% are dissatisfied and completely dissatisfied with the quality of health institution.

Graph 32. Level of satisfaction for the above related segments referring to the life in Pljevlja ratings from 1 to 5 (where 1 is completely dissatisfied up to 5 – completely satisfied), in %, n=439

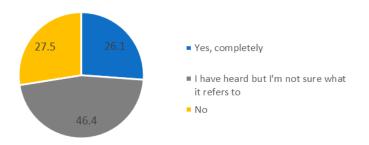


Graph 33. In which areas do you recognize developmental potentials of municipality Pljevlja?, in %, n=454 respondents,

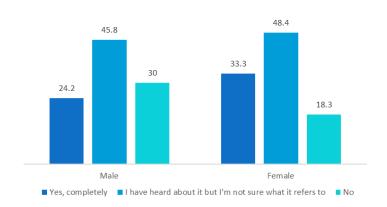


When asked if they were familiar with the meaning of the term "just transition," every fourth respondent (26.1%) stated that they were completely familiar, but only 1.7% knew how to explain what it was about.

Graph 34. Are you familiar with the meaning of the term "just transition"? u%, n=440



According to their assessment, women are more familiar with the meaning of the term "just transition": every third woman (33.3%) and every fourth man (24.2%) are familiar with this term.



Graph 35. Are you familiar with the meaning of the term "just transition") by gender, in %, n=440

The statement "energy production from coal has a negative impact on the environment and climate change, but the benefits of the Coal Mine and TPP Pljevlja operating are critical for Pljevlja and Montenegro" is supported by **two-thirds of respondents (66.5%).**

Only 3.5% of respondents agreed with the statement "Negative effects of energy production from coal in Pljevlja outweigh benefits to Pljevlja and Montenegro," **while 4.4% agreed with the statement** "Negative effects of energy production from coal in Pljevlja equal the benefits to Pljevlja and Montenegro."

A quarter of respondents (25.5%) disagree with any of the statements mentioned.

	I	
STATEMENTS	N	%
The energy production from coal has a negative impact on the environment and climate change, but the benefits of the Coal Mine and TPP Pljevlja operating are critical for Pljevlja and Montenegro	284	66.5
Negative effects of energy production from coal in Pljevlja outweigh benefits to Pljevlja and Montenegro	15	3.5
Negative effects of energy production from coal in Pljevlja equal the benefits to Pljevlja and Montenegro	19	4,4
I disagree with any of the statements mentioned.	109	25.5
	427	100.0

Table 40. Please circle the statement you agree with, in %, n=427

When asked if they agreed that using coal as the primary energy source - for heating in households and the public sector (business and residential) - was the best solution for Pljevlja, 51.7% said no, while 48.3% said yes. More than half of respondents (52.9%) believe that heating the entire city is the best solution for heating in Pljevlja because it does not pollute the environment, does not affect climate change, and does not affect residents' health, while 19.4% believe that electric energy is the solution. Heating on pellets (9.3%) is the most popular proposal, with 3.3% still believing that heating on coal is the best option. Heating on wood, solar panels, biomass, solar energy, water and wind, gas, and other solutions such as procurement of purifiers of combusting materials, subsidies for heating on electricity, and thermal insulation of facilities were proposed.

When asked, "What would you do first if you had the opportunity to change/improve something in Pljevlja?" the majority of respondents (45.2%) proposed activities with the ultimate goal of economic development of the municipality of Pljevlja and employment of residents; 15.8% of proposals refer to improving the ecological situation in the municipality and improving the quality of the environment; 12.4% of respondents focus on health, educational, and cultural institutions; and 8.8% say they see no way to improve the situation in Pljevlja.

4.2 In-depth interviews

In addition to statistical data for comprehending the socioeconomic profile of the municipality of Pljevlja, qualitative data was gathered through in-depth interviews with representatives of relevant participants in the coal value chain. There were 12 in-depth interviews organised with 23 representatives of different stakeholder groups, including Coal Mine and TPP Pljevlja management structures, as well as representatives of EPCG. In addition, in-depth interviews were organised with representatives of business associations and the management of the company Gradir Montenegro doo, representatives of three coal mine trade unions, the head of the regional department of the Montenegrin Employment Agency, and representatives of the non-governmental sector. Municipal leaders also shared their thoughts on the importance of the coal value chain and the process of a just transition. Among the participants with whom in-depth interviews were conducted were four women: one from the Coal Mine's management structure, one from the Employment Office of Montenegro, one from the local administration, and one from the non-governmental sector.

The key findings from the interviews are listed below.

1. Significance of the Pljevlja Coal Mine/TPP and the coal value chain for Pljevlja and Montenegro

The coal value chain is critical not only for the municipality of Pljevlja and its residents, but also for the entire country of Montenegro. This was especially evident during the energy crisis caused by the war in Ukraine, as well as during periods of poor hydrological conditions, when TPP's participation in the energy mix exceeded the usual 40-60% of electricity production in Montenegro. According to all respondents who were interviewed, this requires extra attention and careful consideration when assuming obligations to the international community related to specific goals and deadlines that must be met. Given the proven reserves and quality of coal in the Pljevlja basin, Montenegro should continue to exploit coal and produce electricity from coal until stable sources of basic electricity are available, improving technology as much as possible and taking into account the environmental impact.

It's incredible how lightly our country treats energy policy. Block II is mentioned as a solution for the next 30-40 years in Montenegro's official energy development strategy. Nothing has happened since the government officially gave up block two in 2016. Nobody knows what the other primary energy source is. We have relied on the energy and economy of the entire country on a 40-year-old facility... We have yet to begin construction on a facility that can provide us with basic energy, which is a major issue for us... this is why talking about just transition is premature in our country." – management representative

During the interview, it was suggested that **Montenegro build a second block of TPP Pljevlja**, not only because electricity production from coal is important for the stability of electricity supply, but also because of the possibility of export.

"The supply of electricity is more important than a just transition. The employees in Pljevlja are the least problematic. What matters most is what TPP means for Montenegro." - management representative

This is further supported by the fact that Montenegro's contribution to total CO2 emissions is negligible in comparison to Europe's developed economies. Respondents cited Germany as an example, which increased coal imports and re-commissioned previously conserved thermal power plants during this period to mitigate the impact of the energy crisis on its own economy. According to the interviewed stakeholders, this is a sufficient reason for Montenegro "not to rush" and to accept the abandonment of electricity production from coal "after the last ones in the EU". Furthermore, the respondents highlight other sources of greenhouse gases, such as traffic, waste, and agriculture, that should be considered in order to reduce GHG emissions.

According to the respondents, Pljevlja was once one of the largest industrial center in Montenegro.

"More than 30 large companies in Pljevlja were closed down during the transition period and as a result of failed privatizations such as: Građevinar, Clothing industry Tara, Sloga, Velimir Jakić, Cement plant, Monter, 1. december, Optel ... and the Coal Mine would have failed too, if Montenegro did not need it." / representative of the Employment Agency of Montenegro.

The Coal Mine and Thermal Power Plant "Pljevlja" are regarded as the "heart of the Pljevlja economy," given the number of families who rely on them directly or indirectly. According to the estimates of the respondents, approximately 30% of the Pljevlja residents are directly dependent on these two companies.⁴⁷

The city would disappear without the Coal Mine, Thermal Power Plant and Gradir. - representative of the Employment Office of Montenegro

For decades, generations of Pljevlja residents have grown up with the goal of working in the Coal Mine. In Pljevlja, employment in the coal value chain is regarded as "safe and stable," with salaries above the national average".

2. Potential alternatives for the economic development of the municipality of Pljevlja

Pljevlja has potential and significant resources for economic diversification, but in order to capitalize on them, "political stability in the state and cooperation at all levels" are required. The possibility of building a cement plant on the basis of large quantities of high-quality marl, which has been discarded as a byproduct of the coal value chain for years, is frequently mentioned in this context, despite the fact that this type of production requires special consideration in terms of environmental impact. Respondents stated that there are interested investors from developed countries who have "green technologies" for environmentally friendly cement production. However, the current political insecurity is an impassable barrier to concrete action.

"We have a complicated political situation... no investor wants the rules to be changed." He wants stability... In terms of investor confidence, we are on shaky ground." – management representative

In addition to political stability, improving the traffic connection of Pljevlja, primarily through the railway connection with Prijepolje, is critical for the valorization of mineral resources on the municipality's territory. According to what was said during the interview, this type of project necessitates greater national involvement and is beyond the authority of local government and the local economy.

Pljevlja has the most diverse raw material base for the growth of wood processing. Given the factory's capacities and modern technology, including the pellet production facility, respondents believe that putting "Vektra Jakić" factory into operation would significantly contribute to the launch of the value chain in this area. A significant number of employees in the Coal Mine and TPP Pljevlja previously worked in IK "Velimir Jakić" which, given their age, would be a good alternative for them in the event of a decrease in employment in the coal value chain due to a possible reduction in production in the Coal Mine and TPP Pljevlja or an increase in productivity.

There are significant deposits of high-quality clay on the territory of the municipality of Pljevlja, which can be used to begin production of masonry and brick products. The respondents recall that in the second half of the previous century, Montenegro had factories for clay processing and the production of cement and brick products, namely cement factory Pljevlja and "Breznik" brick factory. Both of the factories were closed down in the 1980s due to poor financial performance and the use of outdated technologies, as well as the unfavorable impact on the environment.

According to the respondents, the municipality of Pljevlja has a lot of potential for agricultural development. This is supported by the fact that more than half of the municipality's area is agricultural land (51% or 68,494ha), accounting for 13.3% of Montenegro's total agricultural land. Furthermore, the municipality of Pljevlja⁴⁸ is home to 21% of Montenegro's arable land and gardens. The municipality of Pljevlja is near the top in Europe in terms of total fund of agricultural land per inhabitant of 1.9 ha and arable land per inhabitant of 0.8 ha, which represents a significant resource (the average of EU members is about 0.40 ha). The municipality of Plievlja is near the top in Europe in terms of total fund of agricultural land per inhabitant of 1.9 ha and arable land per inhabitant of 0.8 ha, which represents a significant resource (the average of EU members is about 0.40 ha)⁴⁹. Animal husbandry, such as the processing of milk into the regionally known Pljevlja cheese, which has a mark of protection of origin, is one of the leading sectors, in accordance with the Law on Quality Schemes for Agricultural and Food Products (Official Gazette of Montenegro No. 22/17). Agricultural production in the function of animal husbandry, vegetable growing, and fruit growing are also highlighted, and organic production has received special attention in recent years. "Large subsidies are required for the younger world to return to the villages," according to the interlocutor. Also, they believe that it is necessary to organize the purchase of agricultural products because now individual agricultural producers are left to fend for themselves and in that "fight" with buyers, "wholesale buyers earn more than the one who made that product".

Agriculture's future development is linked to the tourist valorization of Pljevlja's natural resources (in particular, the upper course of the river Ćehotina, which is being designated as a nature park, Ljubinja and Kova mountains, but also cultural heritage and so-called religious tourism). In addition to rural tourism development, the potential for sport fishing development while protecting the environment is recognized.

Although the villages of Pljevlja have been emptying for years, there are already signs of a revival due to the influence of foreign tourists seeking services. During the interview, it was stated that tourism development in Pljevlja's rural areas will continue, as will the consolidation of agricultural holdings with the goal of developing agriculture and mass production.

These are some of the opinions expressed during the interview. Respondents also acknowledge the shortcomings of Pljevlja's economic development, emphasizing that, due to the municipality's reliance

on the coal value chain, other sectors were neglected and entrepreneurial activity was not stimulated.

Here are some quotes from stakeholders in this situation. They demonstrate that alternatives to coal production are available, but too much reliance on coal predetermines a significant portion of the municipality's economic activity:

"As much as Pljevlja saw benefits from coal, it suffered damage as a result of it, and not just in terms of environmental quality." – business sector representative

"Pljevlja was somehow captured by the coal mine..." - business sector representative

"The people of Pljevlja have been 'stunted' in terms of entrepreneurial activity... this was precisely due to over-reliance on the coal value chain." – local administration representative

Respondents also acknowledge the shortcomings of Pljevlja's economic development, **emphasizing** that, due to the municipality's reliance on the coal value chain, other sectors were neglected and entrepreneurial activity was not stimulated. This was reflected in the actions of the people of Pljevlja, who, as previously stated, have long been associated with the Coal Mine and the TPP Pljevlja. Parallels were drawn during the interviews with neighboring municipalities such as Prijepolje (Republic of Serbia, 35 kilometers from Pljevlja) and Bijelo Polje (85 km from Pljevlja). Except for the lack of coal, these two municipalities are similar to the municipality of Pljevlja in terms of available resources and population. Pljevlja, on the other hand, has not developed entrepreneurship or craftsmanship, nor has it diversified its economy.

3. Suggestions for future activities and guidelines

In the newly formed Association of Businessmen of Pljevlja they try to avoid involvement in political events because they believe they represent topics of general interest that require the participation of all social actors. The association was formed in response to the need to find solutions to problems that primarily affect micro and small businesses and limit their growth. They believe that the municipal administration should work to improve the business climate. This primarily refers to decisions to impose new economic taxes and increase the existing ones (such as real estate taxes, land leases, etc.). They also believe that it is necessary to establish business zones and to create conditions that will attract investors, including small businesses focused on final products. The association analyzes economic processes independently and identifies potential business ideas that could be realized in Pljevlja, highlighting the production of wooden houses, which is currently without a future due to mistrust and uncertainty regarding the granting of concessions for wood raw materials, which prevents serious investments in final production. In the tourism industry, they recognize entities such as Slatine, which can grow into a one-of-a-kind tourist experience for visitors. Pljevlja also lacks a "business center", which would provide technical and administrative assistance to those interested in starting a business, such as information, business plan preparation, assistance in negotiations with financial institutions, and so on. They recognize municipalities such as Priboj (Republic of Serbia) and Goražde (Bosnia and Herzegovina) in the immediate vicinity as good examples for the development of small businesses.

"It is so incredible that we don't have ears, every municipality must have its own business card. We will not construct airplanes, trucks, or computers. It is unrealistic, but the brick and cement industry is real. It. I am also aware of the environmental issues. But if we can't accomplish anything within that framework, I'm not sure what we're looking for." - business sector representative

Respondents also believe that, regardless of political instability, it is necessary to improve

communication with the government and relevant ministries because the municipality lacks resources.

Participants believe that the dependence on the coal value chain has had an impact on education over time. Personnel capacities for a variety of economic activities (such as forestry, wood processing, and agriculture) were not developed, so leaving Pljevlja for education served as a springboard for many young people to remain in the areas where they obtained their university degrees.

"Young people are departing for Belgrade, Podgorica, Kragujevac, Sarajevo." - representative from Empoyment Agency of Montenegro.

According to the businessmen interviewed, "the workforce must be created," which is a time-consuming process. They recognize the value of dual education and believe that it should be required at all levels of education. The Municipality anticipates that the Creative Hub, which was recently established in collaboration with UNDP, will contribute to the development of entrepreneurial competencies and the awakening of entrepreneurial initiative among young people.

When it comes to who **should lead the process of just transition in Montenegro**, opinions are divided. It can be said that the positions that the participants in the coal value chain and municipal management should play equal leadership roles, as well as the positions that the process of just transition should be led from the national level with great respect for the opinions of local community representatives, are equally represented. Despite disagreements, it was stated that all political parties at the local level recognize the importance of the coal value chain for Pljevlja and the local population, but also for Montenegro as a whole, until an alternative source of base energy is provided. Because of the importance of this process for the entire country, **it requires a high level of cooperation from all stakeholders.**

When the discussion on the topic of just transition began, it was incorrectly associated with the closure of the Coal Mine and the TPP Pljevlja.

Kada je pokrenut razgovor na temu pravedne tranzicije, ona je pogrešno identifikovana sa gašenjem Rudnika uglja i TE Pljevlja.

"We're considering closing what we have, and no one knows what new industries we'll develop." – business sector representative

In contrast to the initial resistance to the mere mention of a just transition due to the expected reduction in coal-fired electricity production, employees in the coal value chain were heard during the interview to have a better understanding of the process ahead and want to be a part of it. However, representatives of the coal mine's trade union organizations believe that the employees are not well-versed in the process of just transition and what to expect.

"No worker will agree to the closure of the mine... we are cutting the branch we are sitting on."representative of a trade union organization

"In terms of maturity, I believe we have passed the first stage of the just transition concept, and that people are familiar with the term, perceiving it as something acceptable in 20-30 years, but they do not have to deal with it now, which is unfortunate because now is the time to deal with it in terms of preparation". - representative of the non-governmental sector

Although they are not convinced that the increased employment in the Coal Mine in the last year is entirely justified, they support this process because "the money is kept in Pljevlja and not sent to Podgorica, as it was before."

Despite the fact that the current political instability has pushed the topic of just transition to the sidelines⁵⁰, in the Coal Mine they have begun preparations for a just transition, forming teams that design projects and numerous concrete activities that should contribute to the diversification of this company's income and, ultimately, the diversification of Pljevlja's economic activities. As part of regular activities, medicinal plants were planted on former mine sites using technical and agricultural recultivation with the goal of producing essential oils (on a 4ha area). A greenhouse was built on a portion of the former mine for agricultural production, which also began on the open recultivated areas. These activities resulted in new jobs.

According to non-governmental sector representatives, the initiated initiatives represent a semblance of preparation for a just transition. What we want to do in Pljevlja requires comprehensive and strategic action based on commitment. What are the most important resources? What is lacking? What are the potential roadblocks to transformation?

Answers to these questions require an organized approach to strategic thinking and the agreement of all stakeholders, but those channels of communication are currently dysfunctional, owing primarily to political changes and instability, as well as populist decisions made without valid analysis, according to the non-governmental sector.

4.3 Focus groups with employees of the Coal Mine and TPP Pljevlja

Discussions in four focus groups organised during December 2022 in which 36 employees participated, 12 of whom were women⁵¹, provided a deeper understanding of the employees' vision. One focus group was organized with employees of all age structures in TPP Pljevlja. The remaining three focus groups were held with Coal Mine employees, with the age of the participants in the discussions taken into account⁵².

The arguments and findings from the focus group meetings are presented below.

Pljevlja is a city of good, hospitable, and honorable people. However, young people are leaving Pljevlja years back - "...whoever finished school did not return... As soon as they see Podgorica, clear air, beauty.. they leave" The main reason for leaving is a lack of perspective and an inability to find work.

People from Pljevlja are valuable, as evidenced by their success outside of Pljevlja, and frequently outside of Montenegro. "Wherever one sets foot in the world, one finds a prominent Pljevlja resident"

Employees regard the TPP Pljevlja and the Coal Mine as critical companies in Pljevlja, as well as the foundation for the survival/development of other sectors. They consider them equally important in Montenegro's overall energy system, particularly in the event of a bad hydrological situation that makes hydropower plant operation impossible.

"The energy system of Montenegro cannot function without the Coal Mine and the TPP Pljevlja. For hydroelectric plants, we can never be sure if it will rain to produce energy from renewable sources. So the Coal Mine comes first..."

"Pljevlja would be a dead city without them"

When asked what they would do and where they would work if they were not employed at Coal Mine/TPP, focus group participants frequently state that they would leave Pljevlja in search of their first job. This is especially noticeable among the younger focus group participants. "I'd go for the first job."

Several of them state that they would return to their "old jobs," retrain, and work in agriculture or ecotourism. They recognize that the city lacks craftsmen and that private business development is not encouraged. They conclude, however, that even those other sectors would be unable to function without the Coal Mine and TPP Pljevlja.

"When there is a salary in the Coal Mine around the 15th of the month, the city immediately feels it."

They believe that Pljevlja was neglected for many years and that "...all the profits went to Podgorica". The situation is different now – they find the new jobs in the Coal Mine and the start of new activities within the company extremely positive.

"I've worked in Rudnik for forty years... it's never been like this: never before have so many people been employed, never before have so many investments been made in the acquisition of new machines and equipment, and never before have our wages been this good."

"Young people are employed... Pljevlja now has a wedding every weekend. Young people stay and start families here."

They see opportunities for Pljevlja's development in the construction of a cement factory, the expansion of wood processing, and the valorization of clay deposits for the production of bricks and construction materials. They believe that organizing the purchase of agricultural products is critical for the serious development of agriculture. They see uncontrolled imports as the main issue in agricultural product marketing. In general, Pljevlja's poor infrastructure and lack of business zones

to attract investors are significant constraints. Furthermore, private business development is not encouraged.

Takođe, ne stimuliše se razvoj privatnog biznisa.

"Over the last five years, Serbia has attracted over 40 foreign companies. Every major brand came there. All of this within a 20-kilometer radius. We have opened a chips manufactoring facility..."

"We don't have enough crafstmen, everyone wants to got to college. In ten years, we will no longer have craftsmen."

For employees, the word transition has negative connotations because it recalls the period of transition from a centrally planned to a market economy, followed by so-called privatization of social enterprises, which they believe had a devastating impact in Pljevlja. "Companies were purchased for nothing and then destroyed..." The company's closure resulted in the loss of jobs. The speed and structure of the transition did not allow for significant steps toward retraining the resulting techno-economic surplus of the workforce, but solutions were sought in the form of social programs, the adoption of special retirement laws, and so on. Although they are aware of the term "just transition," the employees (as if) refuse to consider the possibility of reducing coal-fired electricity production, emphasizing the importance of the Coal Mine and TPP Pljevlja for both Pljevlja and Montenegro. Furthermore, they believe that the TPP Pljevlja, with its capacity, contributes minimally to global GHG emissions. It even goes so far as to emphasize, despite the fact that it was not the topic of discussion, that working in these companies has no negative impact on the employees' health. "I've been here for so long that I don't recall ever having a systematic examination where it was determined that any of the employees had health problems as a result of working in the Mine." According to them, "individual furnaces and boiler houses in Skerlićeva" are the main polluters in the city, not the coal mine and TPP Pljevlja. They see heating system as the solution to their problem. However, during the discussion, the issue of the increasing prevalence of autism in children was also raised, and a particular issue is a lack of drinking water due to the poor condition of the pipelines, despite the fact that "Pljevlja lies at the springs."

"As employees, we are aware that the Coal Mine will close one day. However, for the state to devise a strategy, it must first provide us with something. If people have good intentions, they should start investing in Pljevlja right away. Let's create some new jobs when the coal mine closes so that this city can continue to exist. That is a matter for the state."

"A portion of the funds generated by the Coal Mine and TPP should be invested in this city," I believe it is feasible to do so in the future."

Employees believe that their problems can only be understood and solved by people from Pljevlja, who live with them every day.

"You can't carry a feeling anywhere in the world and protect it if you haven't experienced it.... They aren't in our shoes."

"It would be good to form teams to communicate with the municipality and the state". That those teams serve as representatives for this city. What should happen in the coming period in terms of a just transition should begin with a broad interest - that we all benefit from our country, city, and the resources we have."

5. KLJUČNI NALAZI

Based on the methodology used to collect data from secondary (pre-existing) and primary data sources (quantitative research, in-depth interviews, and focus groups with employees), the following diagnostic analysis of socioeconomic situation resulted in the following findings:

1. The Coal Mine Pljevlja and the TPP Pljevlja represent a unique coal-based electricity production system that is important not only for Pljevlja because of the employment and added value it provides, but also for the entire country because it is Montenegro's sole source of energy. TPP's annual planned electricity production is approximately 1,300 GWh, which accounts for approximately 45% of the energy produced in the Montenegrin electricity balance. Renewable energy sources are still insufficient to ensure the necessary electricity supply stability. In the face of a bad hydrological situation, TPP Pljevlja's participation in 2022 exceeded 70% and even 80% on a monthly basis, making TPP Pljevlja connected to the Coal Mine Montenegro's only stable source of energy production. Considering the estimated reserves given in the concession to the Coal Mine of 54.9 million tons and the annual exploitation of coal of 1.65 million tons, of which 85% is supplied to the TPP Pljevlja, and other unchanged circumstances (the capacities of the Coal Mine and TE Plievlja, without new concessions), we conclude that the existing reserves would be exhausted in approximately 35 years. However, this comes at a high cost in terms of environmental and health impacts, as well as the risk of non-compliance with ratified and signed international agreements (eg the Paris Agreement, obligations towards the European Energy Community).

According to companies executives, the fact that Montenegro has yet to begin the construction of new energy sources that would provide the necessary supply security and stability, as well as desired energy independence, leads to the conclusion that all moves on the path of energy transition must be carefully planned, with realistic implementation deadlines.

2. The Coal Mine and TPP Pljevlja form the "heart" of the coal value chain, which has an average annual value of 69,647,603 euros, which is calculated by applying the price of 45EUR/MWh. Around 55 companies are directly or indirectly dependent on these two companies, 14 of which are headquartered in Pljevlja (excluding TPP Pljevlja, which is a subsidiary of EPCG with headquarters in Nikšić). The total number of employees in the coal value chain is 7103, with 2100 (29.6%) residing in Pljevlja. Almost 75% of employees in the municipality of Pljevlja work in directly dependent companies, which account for 23% of all employees in the municipality of Pljevlja (compared to July 2022⁵³).

Almost half of all employees in directly dependent companies live in the municipality of Pljevlja, and it makes a quarter of all employees in the municipality of Pljevlja (compared to July 2022).⁵⁴ The dominance of Coal Mine and TPP Pljevlja in the local labor market has a gender component. Despite the fact that women constitute half of the Pljevlja population, their representation in the total number of employees at the Coal Mine and TPP Pljevlja is only 15.7%. Women have fewer employment opportunities and are focused on trade and services due to the local economy's lack of diversification and the dominance of coal-based electricity production. Women's employment in Pljevlja is slightly below 39.7%, compared to 46% in Montenegro. In addition, six out of every ten unemployed people in Pljevlja are women.

Women's well-being will be impacted by the eventual reduction in coal-fired power generation in a variety of ways, including the loss of employment in the coal chain, the increased burden of household responsibilities when men lose their jobs, intra-household tensions, and the impact of migration caused by reduced coal use and the search for new employment. Other countries' practices, on the other hand, show that women accept other jobs more easily, whereas men typically identify with a more limited range of job options. Furthermore, women tend to respond to a broader range of active labor market policies: impact assessments show that women's post-training employment probabilities and earnings outnumber men's⁵⁵.

The vast majority of employees rely on their earnings from the Coal Mine, or the Thermal Power Plant Pljevlja. Own earnings are the primary source of household income in 83.1% of cases (personal income). For more than half of the respondents (52.6%), their earnings at Coal Mine/TPP Pljevlja are also their household's sole source of income. Employees at Coal Mine and TPP Pljevlja (9 out of 10 or 92.4%) have no desire to change jobs, even if offered a job similar to their current one in a different company. Respondents in 4.2% of cases would accept a second job right away, while the rest were undecided or stated that it depends on the working conditions and earnings. Almost every second respondent (48.4%) sees himself in the same position as before in the next five years. A little more than a third (34.2%) see themselves in the same company but in a better position than they are now. 13.5% see themselves retiring, while only 2.3% see themselves in another job and company. Despite their desire to stay with their current employer, more than half of the respondents (54.3%) are eager to participate in the adult education process by securing a new early position (retraining, professional development).

Based on the results of the analysis, reducing coal-fired electricity production as well as for the heating needs necessitates timely planning of a just transition, including support for the diversification of economic activity in the municipality of Pljevlja, training of those whose jobs are threatened for employment in new sectors, and the development of support programs for those who decide to start their own business or retire. The diversification of the local economy will create conditions for women to realize their potential through economic inclusion.

- 3. The operation of the coal mine has a significant impact on the budget of Pljevlja municipality through various types of income. The Coal Mine and EPCG generate the majority of the Municipality's budget revenues, including real estate tax, personal income tax, and tax surcharge, as well as the concession fee for mineral raw materials and income from the fee for environmental protection and improvement. In the previous four years, coal mines and EPCG contributed nearly 41% of the municipality of Pljevlja's current revenues on average. Rudnik uglja, as a socially responsible company, also supports a large number of social and sports organizations in Pljevlja, sponsors cultural and sports events organized by the municipality of Pljevlja. Every year, the Coal Mine donates approximately 870 tons of coal to associations of pensioners and socially vulnerable families.
- 4. Aside from the very positive impact of the coal value chain and its significance for the municipality of Pljevlja and the entire country of Montenegro, the mining process and coal combustion in the TPP Pljevlja have a significant impact on the state of the environment as well as people's health and quality of life in Pljevlja and the region. This has an impact on water pollution, soil contamination, and the production of industrial waste. The greatest impact, however, is on air

Source: Cunningham W, Schmillen A. Te Coal Transition: mitigating Social and Labor Impacts, Discussion paper, May 2021

quality due to the emission of particle matter (PM), sulfur dioxide (SO $_2$), and nitrogen oxides (NOk). Sulfur oxides combined with solid microparticles and fog have the greatest impact on respiratory organ damage. Sulfur dioxide causes coughing, bronchial contraction, and increased secretion of bronchial secretions due to its irritating effect. The most serious air pollution issue in Pljevlja is suspended particles (PM $_{10}$ and PM $_{2.5}$). The presence of fine particles (PM $_{2.5}$ particles with a diameter of less than 2.5 μ m) in the ambient air causes the emergence and progression of cardiovascular diseases, as well as an increase in their mortality. They have also been shown to cause cancer in humans. PM $_{10}$ coarse fractions (particles with a diameter of less than 10 μ m) increase the incidence of respiratory diseases and contribute to increased mortality.

High levels of air pollution, primarily from suspended particles (PM_{10} and $PM_{2.5}$), are most common during the winter months. The permitted concentration of PM_{10} particles is up to 50g/m^3 . In the period from January to the end of November 2022, the specified concentration was exceeded on 102 days in Pljevlja, 64 days in Bijelo Polje, 43 days in Podgorica, and 41 days in Nikšić. ⁵⁶ The number of days with PM_{10} particle concentrations exceeding the limit in 2021 was 114, accounting for nearly a third of the year. The frequent occurrence of temperature inversions, particularly in the Pljevlja basin, prevents the dispersion of emissions and causes the retention of pollutants produced by the combustion of fossil fuels, emissions from traffic, and other similar sources, directly above the ground, resulting in high concentrations of pollutants in the ground layer of the atmosphere ⁵⁷.

Although almost two-thirds of the surveyed employees at the Pljevlja Coal Mine and TPP Pljevlja accept that the production of electricity from coal has a negative impact on the environment and climate change, they believe that the benefits of the work of these two companies are of crucial importance for Pljevlja and Montenegro. Only 3.5% of respondents believe that the negative effects of electricity production from coal in Pljevlja outweigh the benefits that Pljevlja and Montenegro have from it.

Although it was not a topic of discussion in the focus groups, participants attempted to emphasize that working in these companies has no negative impact on the employees' health. According to them, the main polluters in the city are "individual furnaces and boiler rooms in Skerlićeva," not Coal Mine and TPP Pljevlja. They see heating system as the solution to their problem.

With growing awareness of the negative effects of air pollution on human health, it is to be expected that there will be a new wave of migrations that are not solely economic in nature, as previously.

5. According to available estimates, the total cost of the health effects of air pollution in Montenegro, including the effects of the Thermal Power Plant Pljevlja and other coal-fired power plants from the Western Balkans, amounts to 53.8 million euros (average value), while the monetized health effects of air pollution from the Pljevlja thermal power plant in the entire affected territory, of which 52% is the territory of the European Union (EU), 32% is the territory of the Western balkan countires amount to 160.5 million euros (also the average value). This calculation takes into account the following human health effects: premature deaths, infant mortality, bronchitis in children, days with asthma symptoms in asthmatic children, and chronic bronchitis in adults. Hospitalization costs for respiratory or cardiovascular symptoms, days of limited activity, and lost workdays for the working-age population were used to calculate the consequences. The

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Source: Environment Protection Agency

⁵⁷ Source: Environment Protection Agency, https://epa.org.me/informacije-o-stanju-zivotne-sredine/

manifestation of the effects of air pollution will increase the pressure for an energy transition, which means that all planned activities must be carried out as soon as possible.

The ongoing ecological reconstruction of the Thermal Power Plant Pljevlja includes, among other things, the installation of a waste gas desulphurization system, which can reduce emissions from this source by up to 80%, improving air quality in Pljevlja not only because sulfur dioxide concentrations have sporadically increased, but also because sulfur dioxide can be a precursor of secondary suspended particles, i.e. accelerate their generation In addition, as part of the ecological reconstruction of the Thermal Power Plant Pljevlja, a system for denitrification of waste gases is planned, which will reduce emissions from this source by up to 70% and eliminate elevated nitrogen dioxide concentrations in Pljevlja⁵⁸. However, ecological reconstruction will not result in lower CO2 emissions.

6. In addition to deposits of lignite, the municipality of Pljevlja has the potential and significant resources for the diversification of economic activity. Based on data from secondary sources that indicate available mineral raw materials, arable land and natural resources, as well as based on primary data collection through quantitative and qualitative survey, Pljevlja has the potential for the development of wood processing, agriculture (development of animal husbandry and milk processing, organic production), production of building materials and brick products, tourism valorization of natural resources (the upper reaches of the Cehotina River, Ljubišnja and Kovač mountains), as well as the development of thematic tourism (rural tourism, tourism valorization of cultural heritage, religious tourism). In particular, the recognition of the "Pljevlja's cheese" brand and the further development of rural tourism can be based on the economic empowerment of women through the development of green production and business. In support of the development of tourism is also the opinion of the interlocutors about the people of Pljevlja as good, hospitable and honorable people who love their city and who leave solely for economic reasons. Although none of the respondents mentioned it, secondary sources show that Pljevlja was once known for its computer major at the Secondary Vocational School, which gave birth to the founders of today's well-known IT firms.

With the exception of non-governmental sector representatives who emphasize the importance of environmental protection, all respondents emphasized the need for further coal exploitation, including the construction of the second block of the TPP Pljevlja, and the valorization of high-quality marl through the construction of a cement plant based on green technologies. Despite the fact that 44.1% of surveyed employees identify agriculture as a development potential in the municipality of Pljevlja, the wood industry - wood processing (28.6%), energy (24%), and mining (22.7%) are also identified as key development potentials in this city. Tourism was identified in 20.9% of cases, and every tenth respondent, or 11% of them, believed that the potential lies in cement production. The analysis concludes that the selection of priorities for Pljevlja's future economic development necessitates a broad participatory process and the making of informed decisions that consider both the benefits and costs of various scenarios, not only in the short and medium term, but also in the long term.

7. According to the study's findings, the key prerequisites for successful resource utilization are: political stability in the country and cooperation at all levels, improvement of the business environment at the local level, better traffic connections of Pljevlja and improvement of local road infrastructure, establishment of business zones and development of entrepreneurial

skills among the local population, particularly economic empowerment of women through strenghtening of their capacities, skills and resouce availability (financial, material, etc.).

As part of the qualitative survey, the respondents stated that certain projects that could be implemented in Pljevlja require knowledge and know-how that do not currently exist in Pljevlje or Montenegro. That is why Pljevlja and Montenegro must attract foreign investors. The conditio sine qua non is political stability, which neither abundant resources nor low tax rates can replace. Respondents have clearly expressed the view that Pljevlja has been neglected for years because economic development decisions have been made in Podgorica, so they believe that cooperation and good communication between institutions at the national and local levels are required.

One of the opportunity costs of the previous period's heavy reliance on the coal value chain is the lack of entrepreneurial activity among the local population. This is most evident when Pljevlja is compared to neighboring municipalities of comparable size and available resources that do not rely on mineral raw materials as the foundation of their development. Municipalities such as Bijelo Polje, Prijepolje, Priboj, and Goražde base their development on the development of small and medium-sized businesses, entrepreneurship, and craftsmanship, whereas generations in Pljevlja have grown up with the goal of working at the Coal Mine Pljevlja or TPP Pljevlja. The municipal administration's neglect of entrepreneurial education and then activities reflected on its actions, which, according to businessmen, must improve the business environment. This refers to the review and elimination of numerous levies that discourage small entrepreneurs from engaging in non-mining-related activities. This also refers to the need to establish business zones in order to attract medium-sized investments, given Pljevlja's advantageous geographical location at the crossroads of Montenegro, the Republic of Serbia, and Bosnia and Herzegovina.

The attractiveness of business zones will also depend on the road connectivity of Pljevlja, which is currently poor, given that Pljevlja is not connected by a railway line, nor is it in the corridor of the planned highway. Improved road infrastructure on the municipality's territory is required for agricultural development, particularly due to unfavorable winter conditions that cut off individual villages from urban areas. Poor road infrastructure not only impedes agricultural product marketing, but also discourages people from staying in rural areas due to a lack of social and cultural resources. The establishment of a purchasing center would be critical for Pljevlja farmers who are preoccupied with agricultural work. All respondents emphasized the importance of subsidies and financial support for agricultural activities in Pljevlja's mostly abandoned villages.

To encourage entrepreneurial activity among the residents, it is necessary to improve the educational process and to provide content in places where young people congregate that will allow the development of missing skills, creativity, and innovation. More than half of those polled in the Coal Mine and TPP Pljevlja (54.3%) expressed willingness to participate in the adult education process through the provision of a new job (retraining, professional development), with women (58.4%) slightly higher than men (53.2%). Almost one-third of respondents (31.8%) agreed that educational institutions in Pljevlja provide opportunities for retraining or professional development. The Vocational Secondary School in Pljevlja (84.8%) and the Employment Agency (10.1%) were among those recognized.

8. Pljevlja was once one of Montenegro's largest industrial centers, with a developed forestry industry, wood processing, textile production, optoelectronic device production for military needs, a brickyard, and even a cement factory. Because of the SFRY's disintegration, international

sanctions, the transition from a centrally planned to a market economy, failed bankruptcies, and privatizations, most employees associate the word "transition" with negativity. Although 26.1% of employees said they understood what the term "just transition" meant, only 1.7% could explain what it meant. This quantitative research finding is also supported by representatives of coal mine trade union organizations, who believe that employees are not adequately informed about the process of just transition and what they can expect. The preceding suggests that it is critical to inform and educate the immediate participants about a just transition. Comprehensive information and quality education are not only required for successful transition implementation, but also lend legitimacy to the entire process.

9. Despite the fact that the current political instability has diverted the authorities⁵⁹, attention away from the topic of just transition, Coal Mine states that they have begun preparations for a just transition, forming teams that design projects and numerous concrete activities that should contribute to the diversification of this company's income, and, ultimately, diversification economic activities in Pljevlja. It is specifically concerned with activities based on previously quarried areas, such as technical and agricultural reclamation. These areas have already been planted with medicinal plants with the goal of producing essential oils. A modern greenhouse was installed for agricultural production, which began on open recultivated areas as well.

According to non-governmental sector representatives, the initiated initiatives represent a semblance of preparation for a just transition. What we want to do in Pljevlja requires comprehensive and strategic action based on commitment. What are the most important resources? What is lacking? What are the potential roadblocks to transformation? Using the User Center Design methodology, the "end users" to whom the process of just transition refers should be involved in all stages of decision-making.

10. When it comes to who should lead the process of just transition in Montenegro, opinions are divided. It can be said that the views that participants in the coal value chain and municipal management should play equal leadership roles, as well as the views that the process of just transition should be led from the national level while respecting the opinions of local stakeholders, are equally represented. Employees believe that their problems can only be understood and solved by people from Pljevlja, who live with them every day. Despite disagreements, it was stated that all political parties at the local level recognize the importance of the coal value chain for Pljevlja and the local population, but also for Montenegro as a whole, until an alternative source of base energy is provided. Because of the importance of this process for the entire country, it requires a high level of cooperation from all actors.

THE SECOND SECTION



6. PROFILE OF PLJEVLJA MUNICIPALITY

The municipality of Pljevlja is located in the northern part of Montenegro. It covers an area of 1,346 km², which is about 10% of the total territory of Montenegro, and after Podgorica and Nikšić, it is the third largest municipality in Montenegro. The municipality borders Bosnia and Herzegovina (the municipalities of Foča and Čajniče) in the northwest and west, the Republic of Serbia (the municipalities of Priboj and Prijepolje) in the north and northeast, the municipalities of Mojkovac and Bijelo Polje in the southeast and east, and the municipality of Žabljak in the southwest. The total length of the border is 208 km. The Pljevlja area is rich in wooded and tame mountains and the Tara, Cehotina and Breznica rivers. Most of the municipality consists of the Ljubišnja, Kovača, Čemerna and Jabuka mountain ranges. The Plievlja valley is one of the high ones with an average altitude of 770m. The city itself is located in it, bordered on all sides by the hills of Golubinja, Maljevac, Bogiševac and Balibegovo brdo.



The area of the Pljevlja municipality has mostly a moderately continental climate with the features of a mild mountain climate, the influence of which is reflected in extremely low temperatures, which is why Pljevlja is one of the coldest places in Montenegro. Pljevlja is the city with the highest cloudiness in Montenegro. About 70% of days a year are windless, and about 200 days are foggy.

The administrative center of the municipality of Pljevlja is the city of Pljevlja, which, due to its favorable geographical location, is at the crossroads of old and new roads.

Važno je istaći da se posljednjih godina sprovode inicijative i aktivnosti lokalne samouprave koje mogu biti ključne za proces pravedne tranzicije, smanjenje nezaposlenosti, razvoj preduzetništva i podršku zajednici za podizanje energetske efikasnosti u opštini Pljevlja. Kroz razne programe, finansijska sredstva usmjeravaju se za podršku i podsticaj razvoju preduzetništva s akcentom na žensko preduzetništvo, zapošljavanje mladih, razvoj zanatstva, poljoprivrede, turizma i promociju turizma u ruralnom razvoju. Neke od njih su:

- » **Inženjerska škola nauke** koja popularizuje i promoviše inženjerske nauke i kojoj je cilj da proširi naučni spektar u gradu a koji važi za centar energetskog potencijala Crne Gore.
- » Otvaranje kreativnog huba za mlade koji će predstavljati mjesto za mlade ljude koji su zainteresovani za razvoj preduzetničkih vještina i kreiranje novih radnih mjesta.

O realizovanim projektima više detalja u nastavku ovog dokumenta (Poglavlje j. Programi podrške za zapošljavanje, pokretanje biznisa i podrške zajednici u opštini Pljevlja)

s relevant statistical data that depict the he municipality of Pljevlja as a community
enced by the coal value chain.

7. DEMOGRAPHY

According to the Census 2011, 30,786 inhabitants live in the territory of the municipality of Pljevlja, of which 15,138 are men (49.17%) and 15,648 are women (50.83%). The city (urban) part of the municipality is inhabited by 63.3% of the population (19,489 in total), while the remaining 36.7%, i.e. 11,297 live in the (rural) out-of-town area of the municipality, with a population density of 20,09 inhabitants per km².

The average age of population in Pljevlja is 42.8 years. Unlike men, where the average age is 40.4 years, women are somewhat longer-lived, as the average age is 43.1 years.⁶⁰

Table 41. Average age by gender and settlement

Average age of population						
Total Male		Female	Urban	Other		
42,8	40,4	43,1	39,0	46,6		

Source: Statistical Office - MONSTAT

The total number of inhabitants is constantly decreasing so that it is estimated that in 2021 it was 25,917, which is 15.82% less compared to the last Census.

Table 42. Estimated population for the municipality of Pljevlja

Estimated population for the period 2011-2020											
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	30,788	30,369	29,899	29,487	29,047	28,586	28,124	27,531	27,006	26,556	25,917

Source: Statistical Office - MONSTAT

The number of households in Pljevlja in 2011 was 10,627, which is 5.5% compared to the number at the national level. On average, 2.9 people live in one household in Pljevlja.

Demographic indicators show a constant decrease in the number of population. According to the estimates of the Statistical Office, Pljevlja loses about 500 inhabitants annually.

Table 43. Basic demographic indicators for the period 2016-2019

Pljev	lia	Mid-year	Natural Birth rate		Mortality rate	New marriages		Div	orces
		population	increase rate		, , , , , , , , , , , , , , , , , , , ,	Total	Nuptiality rate	Total	Per 1000 concluded marriages
	2016	28,586	-8.3	7.5	15.7	114	4.0	24	210.5
	2017	28 124	-8.4	6.7	15.1	119	4.2	18	151.3
Year	2018	27 531	-9.7	6.9	16.6	131	4.8	28	213.7
	2019	27 006	-9.0	7.1	16.1	117	4.3	29	247.9
	2020	26 556	-9.9	7.1	16.9	45	1.7	17	377.8

Source: Statistical Office - MONSTAT

Da se opština Pljevlja suočava s negativnom demografskim trendovima ukazuje podatak da je 2021. godine broj živorođenih bio 156, a umrlih 571, što govori da je prirodni priraštaj iznosio -415.

Table 44. Natural increase in Pljevlja

		Živorođeni						
Pljevlja	a Pol		l		Pol		Prirodni	
	Ukupno		<u> </u>	Ukupno		<u> </u>	priraštaj	
Godine		Muški	Ženski		Muški	Ženski		
2016.	213	91	122	450	242	208	-237	
2017.	189	91	98	426	233	193	-237	
2018.	190	95	95	458	215	243	-268	
2019.	193	102	91	435	219	216	-242	
2020.	188	90	98	450	223	227	-262	
2021.	156	87	69	571	275	296	-415	

Source: Statistical Office - MONSTAT

Uz negativan prirodni priraštaj, migracije predstavljaju dodatni značajan faktor smanjenja broja stanovnika. U periodu od 2011. godine do 2021. godine, broj odseljenih je i do četiri puta veći u odnosu na broj doseljenih lica.

Table 45. Migration balance for the municipality of Pljevlja

	PLJEVLJA MUNICIPALITY									
Year	Immigration	Emmigration	Total							
2011	77	242	-165							
2012	62	215	-153							
2013	63	245	-182							
2014	61	232	-171							
2015	89	231	-142							
2016	86	266	-180							
2017	69	256	-187							
2018	94	379	-285							
2019	78	325	-247							
2020	69	235	-166							
2021	104	327	-223							
Total	852	2,953	-2,101							

Source: Statistical Office - MONSTAT

In 2019, the largest number of residents moved to Podgorica (59.7%), while almost a third (32.3%) moved to municipalities in the Coastal region, mostly to the municipality of Budva. Such demographic trends also affect the average age of the population, which is of great importance for the local labor market. According to the census 2011, the average age in Pljevlja was 41.8 years, which ranks the municipality among the four with the oldest population in Montenegro. ⁶¹

When it comes to the elderly population, there are 6,482 pensioners registered in the municipality of Plievlja

Table 46. Number of pension beneficiaries and average pension in the municipality of Pljevlja, by types of rights - October 2022

TYPES OF PENSIONS										
Old-age Disability Survivors'					Tota	ıl				
Number of beneficiares	Average pension	Number of beneficiares	Average pension	Number of beneficiares	Survivor benefit	Number of beneficiares	Average pension			
3,901	401.22	673	321.09	1,908	287.83	6,482	359.52			

Source: https://www.fondpio.me/statistika/

Social exclusion is often associated with poverty and the data from the Survey on Income and Living Conditions (EU-SILC) are the basis for calculating indicators of poverty and social exclusion for Montenegro. At risk of poverty rate in 2021 was 21.2%, which shows the percentage of persons whose equivalent disposable income is below the risk of poverty threshold. These persons are not necessarily poor, they just have a higher risk of being poor, because their equivalent disposable income is below the risk of poverty threshold. Although these statistics are not available at the regional or municipal levels, all similar analyses indicate that the poverty risk rate in the northern region would be significantly higher if calculated.

Table 47. At risk of poverty rate in Montenegro for the period 2017 – 2021 in %

At risk of poverty rate %	2017	2018	2019	2020	2021(p)
At risk of poverty rate (all transfers included in income)	23.6	23.8	24.5	22.6	21.2
At risk of poverty rate (social transfers not included in income)	31.4	31.2	29.5	27.8	27.2
At risk of poverty rate (pensions and social transfers not included in income)	46.7	45.0	42.9	41.4	42.4

Source: Statistical Office – MONSTAT, Survey on Income and Living Conditions (EU-SILC) 2021

Depending on the most frequent activity status, among persons aged 18 and over, in 2021 persons employed at employer had the lowest risk of poverty (5.0%), while the unemployed were most exposed to the risk of poverty (40.2%).

Tablel 48. At risk of poverty rate by the most frequent activity status (18 years and over), in %

Activity status	2019	2020	2021(p)
-----------------	------	------	---------

Employed at employer	7.0	7.0	5.0
Self-employed	19.9	22.7	15.7
Unemployed	45.5	42.8	40.2
Pensioners	11.4	12.2	12.2
Other inactive	35.9	29.5	28.8

Source: Statistical Office - MONSTAT, Survey on Income and Living Conditions (EU-SILC) 2021

In 2021, at risk of poverty rate for men was 21.1%, and for women 21.3%.

Table 49. At risk of poverty rate by gender, in %

GENDER	2019	2020	2021(p)
Men	24.9	23.0	21.1
Women	24,0	22,2	21,3

Izvor: Uprava za statistiku - Monstat, Anketa o dohotku i uslovima života (EU-SILC), 2021. godina

In 2021, 40.8% of residents of the northern region were at risk of poverty, while residents of the southern region had the lowest risk of poverty at 10.5%. Almost every third resident of rural areas (29.6%) was exposed to the risk of poverty in 2021. The poverty risk rate in the urban area was 16.6% in 2021.

Table 50. At risk of poverty rate by gender, in %

REGION	2019	2020	2021(p)
North	41.2	44.5	40.8
Centre	16.6	14.8	14.7
South	19.9	11.6	10.5

Source: Statistical Office - MONSTAT, Survey on Income and Living Conditions (EU-SILC) 2021

Although Pljevlja belongs to the northern region of Montenegro, which, compared to the rest of Montenegro, is characterized by a lower level of development and a lower standard of living as measured by the poverty rate, the total number of beneficiaries of basic material benefits in social welfare has been decreasing in recent years. During 2021, an increased number of beneficiaries of one-time assistance was recorded.

Table 51. Presentation of the number of beneficiaries o basic material benefits in social welfare

	201	8	20	2019 2020 2021		2020)21
TYPE OF ASSISTANCE	Number of beneficiares	Funds spent	Number of beneficiares	Funds spent	Number of beneficiares	Funds spent	Number of beneficiares	Funds spent
Material benefit	400 u prosjeku	430.431,06	373 u prosjeku	398.617,57	345 u prosjeku	370.806,55	292 u prosjeku	312.976,64
One-time financial assistance	280	17.812	159	11.500	100	9.295,42	237	13.525,95
Personal disability allowance	120 u prosjeku	268.681,70	119 u prosjeku	264.251,27	123 u prosjeku	276.666,83	126 u prosjeku	283.169,97
Care and support allowance	1.224 u prosjeku		1.356 u prosjeku	1.251.821,58	1.630 u prosjeku	1.327.564,98	1.286 u prosjeku	1.297.398,02

Source: JU Center for Social Work for the municipalities of Pljevlja and Žabljak

In the field of child protection, most of the social needs are serviced through one-time financial assistance. The number of beneficiaries of material benefits within child protection for the period from 2018 to 2021 is as follows.

Table 52. The number of beneficiaries of the right to material benefits in child protection

Year	ear 2018 2019		19 2		2020	2021		
Total	Number of beneficiares	Utrošena sredstva	Number of beneficiares	Utrošena sredstva	Number of beneficiares	Utrošena sredstva	Number of beneficiares	Utrošena sredstva
	882	506,755.08	94	440,074.26	1,054	277,017.95	1,413	381,588.43

Source: JU Center for Social Work for the municipalities of Pljevlja and Žabljak

One of the factors that influence the socio-economic development of the city is the educational structure of the population. According to the Census 2011, half of the population (50.09%), aged 15 and over, has completed secondary education. This situation is additionally affected by the large migration of young people to larger university centers (Podgorica, Belgrade, Sarajevo) and the coast of Montenegro, who do not return to their hometown after their studies.

Table 53. Population aged 15 and over according to highest completed level/school by municipality, Census 2011

	PLJEVLJA	NUMBER	%
Without school		1,006	3.85
	Incomplete primary school	3,433	13.15
Primary school	Primary school	5,726	21.94
Secondary school		13,072	50.09
	High school and first degree of university	918	3.52
Higher education according to	Higher school, faculty/aacademy	1,617	6.20
the old education system	Postgraduate master's studies	42	0.16
	Primary school 5,726 13,072 High school and first degree of university 918 Higher school, faculty/aacademy 1,617 Postgraduate master's studies 42 Doctorate 8 Basic academic studies 62 Basic applied studies 19 Postgraduate specialist studies 41 Postgraduate master's studies 10	8	0.03
	Basic academic studies	62	0.24
Higher education according	Basic applied studies	19	0.07
to the new education system- Bologna declaration	Postgraduate specialist studies	41	0.16
	Postgraduate master's studies	10	0.04
No response	·	144	0.55
	TOTAL	26,098	100

Source: Statistical Office - MONSTAT

8. LABOR MARKET AND EMPLOYMENT STRUCTURE

The labor market in Pljevlja is influenced by a large number of factors, namely: demographic trends, existing economic situation and economic trends, educational structure, current supply and demand for work, quality of living environment and social inclusion.

8.1 Structure of employees in the municipality of Pljevlja

According to data from the Statistical Office of Montenegro for the year 2021, the number of employees in the municipality of Pljevlja was 5,653, and in September 2022, that number reached 6,308.

Table 54. Number of employees in the municipality of Pljevlja

Year	2019	2020	2021	1-09 2022
Number of employees	5,863	5,195	5,653	6,328

Source: Employment Agency of Montenegro

Taking into account the insured employees in the municipality of employment in Pljevlja, the Revenue and Customs Administration of Montenegro registered 6,939 employed persons in October 2022. Out of the total number of insured employees, 94.8% of them have their workplace in Pljevlja, while the rest are engaged in other Montenegrin municipalities.

Table 55. Insureds-employees with the municipality of employment in Pljevlja⁶²

PLACE OF RESIDENCE	NUMBER OF EMPLOYEES
ANDRIJEVICA	4
BAR	10
BERANE	23
BIJELO POLJE	62
BUDVA	19
DANILOVGRAD	5
GUSINJE	1
HERCEG NOVI	8
KOLAŠIN	4
KOTOR	11
MOJKOVAC	20
Not included	8
NIKŠIĆ	23
PETNJICA	1
PLAV	1
PLJEVLJA	6,577
PODGORICA	87
ROŽAJE	4
ŠAVNIK	5
ULCINJ	2
ŽABLJAK	64
TOTAL	6,939

Source: Revenue and Customs Administration of Montenegro

The largest number of employees in Pljevlja (44.1%) have completed secondary school (3rd and 4th level of vocational education), and only 13.1% are employed with completed high or higher degree or post-graduate studies. However, the data on the level of education is not up-to-date, because this data is not mandatory for employee insurance.

Table 56. Structure of employees by professional qualification

PROFESSIONAL QUALIFICATION OF EMPLOYEES	NUMBER OF EMPLOYEES AT THE LEVEL OF MONTENEGRO	NUMBER OF EMPLOYEES AT THE LEVEL OF PLJEVLJA MUNICIPALITY
DOCTOR'S DEGREE (VIII degree)	147	1
MASTER'S DEGREE (VII-2 degree)	624	7
HIGHER (VII-1)	29,897	898
HIGH (VI-1 i VI-2)	4,691	173
HQW (V degree)	669	37
QW, SE (IV degree)	50,304	1,881
QW (III degree)	16,859	1,179
HFQ, LE (II degree)	1,940	23
UQW (I degree)	15,257	400
No professional qualification	72	16
Not entered	97,695	2,324
TOTAL	218,155	6,939

Source: Revenue and Customs Administration of Montenegro

Table 57. Structure of employees by gender

GENDER STRUCTURE OF EMPLOYEES	NUMBER OF EMPLOYEES AT THE LEVEL OF MONTENEGRO	%	NUMBER OF EMPLOYEES AT THE LEVEL OF PLJEVLJA MUNICIPALITY	%
Men	118,257	54.2%	4,183	60.3%
Women	99,898	45.8%	2,756	39.7%
TOTAL	218,155		6,939	

Source: Revenue and Customs Administration of Montenegro

The total number of employees is dominated by men - 60.3% compared to 39.7% of women, which is significantly lower than the participation of women in the total number of employees at the state level. The following table shows the age structure of the employees, which is a reflection of the previously mentioned age structure of inhabitants of the municipality of Pljevlja. In comparison with the age structure of employees at the level of Montenegro, we see that in Pljevlja, almost every other employed person (48.1%) is over 40 years old, while this is the case with 39.5% of employees at the state level.

Table 58. Structure of employees by age

AGE LIMIT	NUMBER OF EMPLOYEES AT THE LEVEL OF MONTENEGRO	%	NUMBER OF EMPLOYEES AT THE LEVEL OF PLJEVLJA MUNICIPALITY	%
1-30 years	42,490	19.5%	992	14.3%
31- 40 years	62,319	28.6%	1,748	25.2%
41 - 50 years	56,381	25.8%	1,848	26.6%
51 - 60 years	41,028	18.8%	1,667	24.0%
Over 60 years	15,937	7.3%	684	9.9%
TOTAL	218,155		6,939	

Source: Revenue and Customs Administration of Montenegro

8.2 The structure of the unemployed in the municipality of Pljevlja

Although intensive migration and demographic trends are present in Pljevlja, there are no large variations in the number of unemployed persons. The number of unemployed persons in October 2022 was 2,384, while the unemployment rate was 25.57%.

Table 59. Total number of unemployed persons (2018 - 04.10.2022)

PERIOD/DATE	TOTAL NUMBER OF UNEMPLOYED PERSONS IN PLJEVLJA	UNEMPLOYMENT RATE IN PLJEVLJA	UNEMPLOYMENT RATE IN MONTENEGRO
31. 12. 2018.	2.274	28,33%	17,83%
31. 12. 2019.	1.977	25,22%	16,21%
31. 12. 2020.	2.580	33,18%	20,48%
31. 12. 2021.	3.004	34,70%	24,73%
4. 10. 2022.	2.384	25,57%	19,36 ⁶⁴

Source: Employment Agency of Montenegro

Although there is a noticeable increase in the number of employees in Pljevlja, in the past period, the unemployment rate is still above the national average.

Over the years, the number of unemployed women has been higher than the number of unemployed men. In 2011, unemployed women represented 44% of all unemployed, in 2016 their share increased to 52.1%, while in 2018 it reached 57.7% of total unemployment. During 2016, newly registered women, or most of them, probably wanted to use the right that allowed mothers with three or more children a lifetime allowance. Despite the slight decrease in the number of unemployed women in 2019 (57.4%), their share was increasing sharply and in 2021 it was 62.1%, while in October of the current year it was 60.2%.

2,000 1.864 1,800 1,600 1,541 1,436 1,400 _ 1,312 1,200 1,135 1,000 1,140 1,039 948 962 800 842 600 400 200 0 31.12.2018 4.10.2022 31.12.2019 31.12.2020 31.12.2021 Broj nezaposlenih žena Broj nezaposlenih muškaraca

Graph 36. Total number of unemployed persons, by gender

Source: Employment Agency of Montenegro

⁶⁴ Source: Employment Agency of Montenegro, Registered unemployment rate on 31 October 2022

Looking at the educational structure of the unemployed, the majority of unemployed are persons with III and IV degrees of education, and this is a predominantly female population. The number of highly qualified, more precisely those with at least VI and VII degrees of education is decreasing. This is primarily a consequence of highly qualified persons moving away or not returning to their hometown after completing their studies.

Table 60. Unemployed persons by level of professional education and gender

D-1					Nivo/po	dnivo kvalif	ikacija obr	azovanja				
Datum		I-1	I-2	II	III	IV-1	IV-2	٧	VI	VII-1	VII-2	VIII
71 10 0010	Ukupno	72	408	89	549	751	8	35	105	239	18	0
31. 12. 2018.	Žene	50	224	52	260	494	0	17	54	147	14	0
71 10 0010	Ukupno	73	370	84	463	639	9	25	85	212	17	0
31. 12. 2019.	Žene	51	205	46	229	408	0	13	43	130	10	0
71 10 0000	Ukupno	110	516	107	566	884	10	24	130	212	21	0
31. 12. 2020.	Žene	65	301	67	287	588	0	14	75	133	11	0
71 10 0001	Ukupno	146	620	123	692	1.051	6	35	126	196	9	0
31. 12. 2021.	Žene	97	377	85	365	712	0	21	73	128	6	0
/ 10 0000	Ukupno	124	496	106	578	858	7	29	63	117	6	0
4. 10. 2022.	Žene	80	281	65	302	569	0	18	45	71	5	0

Source: Employment Agency of Montenegro

At the occupational group level, the limiting factor is the large participation of persons for whom no occupation or occupational group has been defined. These are persons without school or with completed elementary school. Based on the available data, it can be seen that the records in the Labor Bureau in Pljevlja most often include: economists-economic technicians, traders, occupations from catering and tourism-chefs, road traffic occupations-drivers and road traffic technicians, mechanical constructors, metal workers- locksmiths, mechanics and machinists - car mechanics and electrical engineers - electricians; then from social humanities professions - high school graduates, computer engineering professions - electrical technicians for computers and PTT traffic technicians.

Table 61. The most common occupational groups of unemployed persons

BIRO RADA PLIEVLIA - Grupa - zanimanje	NL na dan 1.1.2018.	NL na dan 31.12.2021.	NL na dan 4.10.2022.
Ukupno: 10 Prerađivači i obrađivači drveta	36	40	34
Ukupno: 18 Obrađivači metala	82	95	80
Ukupno: 20 Mašinski konstruktori i projektan	74	106	85
Ukupno: 22 Mehaničari i mašinisti	64	66	59
Ukupno: 24 Elektroenergetičari	68	70	60
Ukupno: 25 Elektromehaničari	58	66	49
Ukupno: 28 Zanimanja računarske tehnike	39	61	43
Ukupno: 31 Hemičari	30	56	38
Ukupno: 40 Proizvođači odjeće	52	72	59
Ukupno: 56 Zanimanja drumskog saobraćaja	99	144	137
Ukupno: 60 Zanimanja PTT saobraćaja	59	76	69
Ukupno: 64 Trgovci	145	191	163
Ukupno: 65 Zanimanja ugostiteljstva i turizm	144	237	151
Ukupno: 67 Ekonomisti	212	259	206
Ukupno: 68 Pravnici	48	48	39
Ukupno: 71 Administratori	42	69	56
Ukupno: 82 Društveno-humanistička zanimar	95	112	85
Ukupno: 96 Zanimanja ličnih usluga	14	33	30
Ukupno: 99 Neraspoređeni	480	766	620
Ostale grupe zanimanja	486	437	321
UKUPNO:	2274	3004	2384

Source: Employment Agency of Montenegro

Looking at the age structure, the most pronounced increase is the number of unemployed persons aged 51 to 60, and even over 60. In 2021, compared to the end of 2018, the number of unemployed women in the age group of 41-50 and 51-60 increased by 48.4%.

Table 62. Number of unemployed by age groups

Determ		NL – Age groups					
Datum		15-24	25-30	31-40	41-50	51-60	61-67
71 10 0010	Total	270	256	510	499	514	225
31. 12. 2018.	Women	136	133	295	312	320	116
71 10 0010	Total	211	229	406	410	490	231
31. 12. 2019.	Women	104	119	224	249	307	132
71 10 0000	Total	305	308	512	529	640	286
31. 12. 2020.	Women	166	173	299	334	411	158
71 10 0001	Total	344	298	579	675	765	343
31. 12. 2021.	Women	178	172	359	432	506	217
/ 10 0000	Total	210	216	461	557	628	312
4. 10. 2022.	Women	97	135	305	345	369	185

Source: Employment Agency of Montenegro

In Pljevlja, the participation of long-term unemployed persons, i.e. persons who have been registered for more than 12 months, is expressed. Only in 2021, 55% of the total number of unemployed people are registered as long-term unemployed, which is at the level of the national average (55.41%). Among the long-term unemployed in Pljevlja, women dominate, so at the end of 2021, 63.3% of the long-term unemployed were women.

Table 63. The structure of the unemployed according to the length of the job search

Datum		NL - Length of job search				
<u> </u>		Up to 1 year	From 1 to 3 years	Over 3 years		
71 10 0010	Total	1.026	609	639		
31. 12. 2018.	Women	591	427	294		
71 10 0010	Total	807	535	635		
31. 12. 2019.	Women	446	357	332		
71 10 0000	Total	1.253	599	728		
31. 12. 2020.	Women	751	364	426		
71 10 0001	Total	1.349	837	818		
31. 12. 2021.	Women	816	544	504		
	Total	760	825	799		
4. 10. 2022.	Women	429	540	467		

Source: Employment Agency of Montenegro

Although the departure of young people from Pljevlja has been evident for years, the number of those who have stayed and are looking for an opportunity to find a job in their municipality is not negligible. On the other hand, there is a large number of long-term unemployed persons and investing in increasing their employability is one of the priorities that requires active employment policy measures at the local level. The average net salary in the municipality of Pljevlja was EUR 723 in September, which is slightly higher than the average net salary in Montenegro. The reason for this is the dominant number of employees in Sector B - Mining and quarrying, where earnings are above average and amounted to 883 euros in the same period.

Table 64. Average earnings without taxes and contributions (net) in the municipality of Pljevlja

	2019	2020	2021	1-09. 2022
Net earnings in the municiplaity of Pljevlja	536	552	561	723
Net earnings in Sector B- Mining and quarrying	672	703	716	883

Source: Employment Agency of Montenegro

8.3 Active employment policies

The Employment Agency of Montenegro (ZZZCG) mediates employment and rights during unemployment. On the basis of the annual work program which determines the measures and activities for the employment action plan, support activities are defined, which are implemented through counseling on employment opportunities and conditions. The three main support programs of ZZZCG for unemployed persons are: programs of active employment policy, grant program for self-employment and employment of persons with disabilities. Below is a brief description of current programs with key achievements during 2021.

During 2021, active employment policy measures were implemented for 1,173 unemployed persons from the records of the Agency. In cooperation with 241 employers, the Agency implemented programs for 1,114 unemployed persons and in cooperation with three organizers of adult education for 58 unemployed persons. The innovative program for continuous self-employment and development of entrepreneurship was implemented by granting one loan for self-employment, which opened one new job. Adult education and training programs included 58 persons, self-employment training for 255 persons, on-the-job training program for 207 persons, seasonal employment incentive program for 66 persons, public work programs for 586 persons and self-employment program for 1 unemployed person. In the total number of participants of the active employment policy program implemented in cooperation with employers (1,114 unemployed persons), 62.39% (695 persons) of females participated, 38.96% (434 persons) of young persons under the age of 30, while the participation of long-term unemployed persons was 39.95% (445 persons). Members of the RE population participated with 1.62% (18 persons), persons with disabilities with 7.36% (82 persons), while the participation of persons from the municipalities of the Northern Region was 67.86% (756 persons).

ACTIVE EMPLOYMENT POLICY PROGRAMS include the following programs:

1) Adult education and training program.

Education and training of adults is realized through programs for acquiring professional qualifications and programs for acquiring key skills in cooperation with licensed organizers of adult education. There are 58 unemployed persons included in adult education and training programs in 2021. Professional qualification acquisition programs were implemented for 38, and knowledge and skills acquisition programs for 20 unemployed persons. Participants in the adult education program acquired professional qualifications that increase their employment opportunities, primarily in the service industry, catering and tourism.

2) Self-employment training program.

The self-employment training program is implemented for unemployed persons with completed secondary education (III and IV level of education), without work experience at the level of education, for whom the lack of work experience in the field of work of the acquired qualification at the level of education is an obstacle to employment. The program employed 255 participants at 76 employers – program contractors, for the shortest duration of up to six months. In 2021, 63 long-term unemployed persons, 11 persons over 50 years of age, of which 4 are women, participated in the program. The participation of young people under the age of 30 was 62.75%, i.e. 160 people, of which 89 were women. There were 3 female persons with disabilities and 8 beneficiaries of material benefit employed in the program. With regard to the territorial aspect, the most participants of the program are from the municipalities of the Northern region – 213 persons (83.53%), followed by the municipalities of the Central region – 42 persons (16.47%). The program was not implemented in the municipalities of the Coastal region.

3) On-the-job training program.

The goal of the program is to enable the participants to acquire the knowledge and skills necessary to perform work and work tasks at specific positions. The program employed 207 participants at 34 employers for up to six months. The employers implement program activities and, with the support of mentors, train participants to independently perform the tasks of certain jobs. 55 long-term unemployed persons participated in the program, 20 persons under the age of 50, of whom 12 are women, 93 young people under the age of 30, of whom 37 are women. Then, 8 beneficiaries of material benefit and 7 persons with disabilities.

4) Public works.

In 2021, public work programs were implemented for 586 persons. Public work "Personal assistant" is carried out through programs of creating temporary non-market jobs of public interest in the field of protection of persons with disabilities, and Public work "Care for the elderly" in the field of protection of the elderly. In addition to these public work programs, other socially useful programs are implemented in the fields of environmental protection, education, culture, sports, maintenance and renovation of public infrastructure and in other areas of public interest. In Public Work "Personal Assistant" and "Care of the Elderly", 302 people are employed by 54 program contractors, for a duration of up to four months, in the work of providing help and support for persons with disabilities and support for the elderly in a state of social need. Public work programs were attended by 295 long-term unemployed persons, 157 over the age of 50, of which 102 were women. The participation of young people under the age of 30 was 25.94%, i.e. 152 persons, of which 103 were women; 18 beneficiaries of material benefit, 18 members of the RE population and 65 persons with disabilities, of which 50 are women.

5) Incentive program for seasonal employment.

As part of the incentive measure for seasonal employment, in 2021 an incentive program for employment was implemented through subsidized employment of unemployed young people and unemployed women in seasonal jobs for a minimum duration of three months. The program employed 66 participants at 16 employers – program contractors for up to three months. The program was attended by 32 long-term unemployed persons, 6 persons older than 50 years, 29 young persons up to 30 years of age, 14 of whom are women; 19 beneficiaries of material benefit, 4 persons with disabilities, all of whom are

women. With regard to the region, the most involved persons are in the municipalities of the Northern region - 62 (93.94%) and the municipalities of the Coastal region - 4 (6.06%). No unemployed persons participated in the municipalities of the Central Region.

6) Professional training of persons with acquired higher education.

The professional training program for persons with acquired higher education was implemented for the tenth generation of beneficiaries in 2021/2022. The right to professional training is granted to persons with higher education who do not have work experience at the level of education and are registered with the ZZZCG. Employers have announced the 12,560 vacancies for vocational training positions for the mentioned generation, of which the public sector is for 4,227 and private sector for 8,333 beneficiaries. After electronically connecting beneficiaries and employers, 2,723 higher education students had the opportunity to receive professional training at their chosen employer. Employers were mostly looking for qualifications in the fields of economics, law, accounting, finance and banking, electronics, telecommunications and computers, tourism, English language and literature, construction, architecture and graphic design.

7) An innovative program for continuous stimulation of employment and entrepreneurship in MNE.

In 2021, 2 loan applications were submitted and approved, with a total value of EUR 15.000,00, which would create 3 new jobs. One application was submitted by an unemployed woman, with the implementation of which 2 new job positions worth EUR 10,000.00 were planned to open. One loan was granted to a legal entity, the implementation of which would open 1 new job position in the amount of EUR 5.000,00. Both submitted applications are from the municipality of Kolašin. In 2021, 1 loan was provided to an unemployed person to whom the Management Board of the Agency approved a loan in 2020, with a total value of EUR 5.000,00, intended for the opening of 1 new job position. In 2021, 4 unemployed persons went through the "Providing elementary knowledge in the field of entrepreneurship" education, of which 2 applied for a loan. The Commission proposed to the Board of Directors of the Agency to approve 2 applications for the allocation of credit funds and considered 43 beneficiaries' loan applications.

8) Professional treatment of unemployed persons.

During the year 2021, the Employment Agency provided counseling services related to the selection, search and acceptance of employment, familiarization with the methods and techniques of active job search, support in the development of career management skills, as well as the skills necessary to increase employability and improve professional development. The first individual counseling services were provided to all newly registered persons, which resulted in the development of an individual employment plan for 42,415 persons. In addition to the first individual counseling services, 431,132 individual consultations were carried out, representing mutual contacts between the unemployed person and the records and mediation advisor, through which information was exchanged about the activities determined by the individual employment plan.

9) Professional orientation

- The program "Career orientation and labor market in primary and secondary schools" is continuously implemented by the Employment Agency and the Ministry of Education, starting from 2011. It was launched with the intention of providing young people in the education system who enter the labor

market and/or continue their education with a basis for encouraging career development, proper choice of profession, choice of employment, development of the idea of entrepreneurship, etc. This program is implemented for primary and secondary school students who continue their education and for secondary vocational school students who enter the labor market. Counselors for professional orientation informed 420 students about the services provided by the Agency at the Centre for Information and Professional Orientation through visits to primary and secondary schools.

- The program "Encouraging the career development of directly employable unemployed persons" is intended for persons who register for the first time with the Employment Agency, and in the function of encouraging the professional development of candidates for employment. The program is implemented, through workshops, lasting from one to three days. It was designed to summarize a program directed towards social form, a program focused on informing, motivating and actively looking for employment. In 2021, 12 one-day workshops were held for a total of 138 participants, as well as 16 three-day workshops for a total of 156 participants.

10) Employment incentive program.

The goal of the program is to increase the employment of unemployed persons having obstacles to entering the labor market, through subsidized employment for a duration of 3 months. The target group of the program consists of unemployed persons up to the age of 40, unemployed women or persons who have been registered as unemployed for longer than 12 months. Funds in the amount of EUR 150.000,00 have been earmarked for the implementation of the employment incentive program. These funds are intended for the implementation of the program for 88 unemployed persons-participants of the program. The Agency will support the implementation of the program for a duration of 3 months for a maximum of three participants at one employer – beneficiary of funds. The minimum participation of the Agency in financing of justified expenses, at the level of one beneficiary of funds, will amount to 1.704,21 eur, and the maximum participation will be 5.112,63 eur.

11) Other measures aimed at increasing employment, i.e. reducing unemployment

The pilot project "Activating women", which began in 2021, continued to be implemented in 2022, and involves the activation of women aged 25 to 34 through the awarding of grants for unemployed women with children of preschool age and through subsidized training at the workplace (from 6 and 12 months), in order to mitigate the effects of the pandemic in Montenegro. The pilot project is planned to be implemented in Podgorica, Bijelo Polje, Nikšić and Berane for 75 unemployed women, and from 2022 it is planned to be implemented in the coastal municipalities - Bar and Tivat. In 2021, the pilot project was implemented for five participants from Podgorica, in cooperation with three employers. Then, in cooperation with four employers, for one participant from Podgorica and three from Bijelo Polje, the implementation of the project started in 2021 and continued in 2022 and 42 unemployed women, 27 of whom are from Podgorica and 15 from Bijelo Polje. In 2021, preparation activities for inclusion in workplace training were carried out and grants determined by the project were awarded.

12) Cooperation of the Employment Agency and centers for social work.

The agreement between ZZZCG and centers for social work on the process of social activation of able-bodied beneficiaries of material benefit was concluded with the aim of improving the position of vulnerable groups of unemployed persons through the offer of integrated services from both systems. During 2021, the Agency, at the request of social work centers, participated in the development of 1,307 individual activation plans, of which 682 activation plans refer to women. In the measures of the active employment policy, 27 beneficiaries of material benefit are included, of which 18 are women. 31 persons were included in the measures of professional rehabilitation, of which 16 were women. Two persons received grants for self-employment, and 33 persons were included in other programs aimed at increasing employability. The employment mediation service took place in accordance with the expressed needs of employers and resulted in the employment of 268 able-bodied beneficiaries of material benefit, of which 157 are women.

13) Guarantees for young people.

The program was created with the aim of supporting smooth transition of young people from the process of education or unemployment to the labor market. The main principle of the program is that every young person, within 4 months after leaving education or training or becoming unemployed, receives a quality offer for a job, internship, further formal and/or informal education and training. The implementation of the program requires the allocation of significant financial resources, which the Government of Montenegro will provide through pre-accession funds. The Ministry of Economic Development and Tourism planned to start implementing this activity in 2023 through the Proposal for the Instrument for Pre-accession Assistance (IPA) III for the period 2023 - 2024. An inter-sectoral Working Team for the introduction of the Youth Guarantee program was set up, which brings together representatives of the Ministry of Economic Development and Tourism, ZZZCG, Ministry of Education, Ministry of Science and Technological Development, Ministry of Culture and Media, centers for social work and non-governmental organizations active in the field of implementing projects intended for youths.

EMPLOYMENT OF PERSONS WITH DISABILITIES is a program of professional rehabilitation and imployment of persons with disabilities, for which 11.816.545,11 euros were spent in 2021 65. An overview of the key activities financed from these funds is presented below:

1) Wage subsidies for employed persons with disabilities.

In 2021, 1,739 applications for recognition of the right to wage subsidies for employment of persons with disabilities were submitted to the Fund for Professional Rehabilitation and Employment of Persons with Disabilities. Out of the total number of applications, 856 or 49.22% referred to employed men with disabilities, while 883 or 50.78% referred to employed women with disabilities. Out of the mentioned number, 1,015 or 58.37% related to persons with disabilities who were employed for a fixed period of time, and 724 or 41.63% of applications related to persons with disabilities who had an employment for an indefinite period of time. In 2021, 1,540 employers obtained the right to wage subsidies for 2,474 persons with disabilities.

2) Grants for adapting the workplace and working conditions.

In 2021, 22 employers submitted 40 applications for the right to grants for adapting workplaces and working conditions (22 applications for women and 18 for men). Thirty applications related to persons with disabilities who are employed for an indefinite period of time, while 10 applications related to persons who are employed on a fixed-term basis.

3) Participation in the financing of the assistant's personal expenses.

In 2021, 16 employers submitted 33 requests for a subsidy – participation in financing personal expenses of an assistant (work assistant) to an employed person with a disability. 17 persons with disabilities whose employers submitted a request to exercise this right were employed for a fixed term, while 16 persons were employed for an indefinite period of time. On 31 December 2021, 80 employers obtained the right to a subsidy for 123 employed persons with disabilities (men – 66; women – 57), of which 7 persons were employed for a fixed term, while 116 persons were employed for an indefinite period.

4) Funding of employment projects for persons with disabilities - grant schemes.

Based on the public call from 13 February 2020. 52 projects were approved for financing, with a total value of EUR 2.476.991,31. Through these projects, 420 persons with disabilities were involved, of which 293 persons were employed during the project, and 140 persons will be employed after the completion of the project for a minimum of nine months. In the first half of 2021, 52 projects were implemented. On 25 November 2021, the Agency announced a public call for financing projects for the employment of persons with disabilities, in the amount of EUR 1.000.000.00.

5) Professional rehabilitation.

Professional rehabilitation is a process that is implemented with the aim of training persons with disabilities for social and work integration. It includes measures and activities that enable persons to prepare for the labor market in an appropriate manner, train them for work, keep employment, advance in it or change their professional career. In 2021, 507 persons with disabilities were included in professional rehabilitation measures and activities, with three contractors: ZOPT doo – 287 persons (178 women), Pamark doo – 189 persons (129 women) and Center for Professional Rehabilitation Podgorica – 31 persons (23 women). Oou of the total number involved, 65.08% are female (330 women), while 34.92% are men (177 men).

SELF-EMPLOYMENT GRANT PROGRAM contributes to employment through financial support in order to encourage entrepreneurship, self-employment and the creation of new jobs. It is financed with the funds of the European Union, from pre-accession funds. It is implemented within the sector operational program for education, employment and social protection. The employment grant program is implemented by the Employment Agency in cooperation with the Ministry of Economic Development and Tourism and the Ministry of Labor and Social Welfare, with a total budget of 3.5 million euros. Also, the project functions through a call for project proposals. It is intended for all unemployed persons who are registered with the ZZZCG for at least 4 months before the announcement of the call. The project lasted three years, ending in December 2021, and included the allocation of grants of 3,000 to 7,500 euros per user.

Table 65 showing the number of signed Grant Agreements and the total amount of funds approved through all three calls is below.

Table 65. Number of supported users and the amount of approved funds per individual calls

Call	Number of signed Grant Agreements	Amount approved
l call (October 2019)	95	683,123.34 eur
II call (June 2020)	215	1,592,469.58 eur
III call (April 2021)	159	1,181,000.00 eur

Source: ZZZCG

8.4 Measures of active employment policy in the municipality of Pljevlja

Within the measures of active employment policy in the municipality of Pljevlja implemented by the Employment Agency, training programs for self-employment, public works and training for employers are mostly applied. Below is an overview of the number of participants in the program of active employment policies in Pljevlja for the year 2021.

Table 66. Overview of participants of active employment policy program in Pljevlja for 2021

Employment Office	Public work	Incentive for seasonal employment	On-the-job training	Self-employment training	Adult education and training	Loans Innovative programs	Total
Pljevlja	28	4	22	45	0	0	99

Source: Performance Report 2021, ZZZCG

In 2021, the Adult Education and Training Program and the <u>Innovative Program for Continuous Stimulation of Employment and Entrepreneurship in Montenegro</u> were not used by a single person registered with ZZZCG in Pljevlja.

There are 3 adult education organizers licensed In the municipality of Pljevlja, while the total number of licensed programs is 34.66

Table 67. Licensed adult education organizations

PU SECONDARY VOCATIONAL SCHOOL - PLJEVLJA	Education programs for obtaining a vocational qualification - training (29)	- Car mechanic
ORGANIZER OF	Education programs for the acquisition of key competences - foreign languages (2)	- English language - Banking - Faculty of Philology - English language - Faculty of Philology
ADULT EDUCATION, AUTO SCHOOL MARJANOVIĆ	Education programs for obtaining a vocational qualification - training (7)	-Education programs for obtaining vocational qualification - training
GIMNASIUM "TANASIJE PEJATOVIĆ	Education programs for the acquisition and improvement of key competences - foreign languages (1)	- English Language - Cambridge Center

In Pljevlja, through the "Self-Employment Grants Program", 18 unemployed persons who became self-employed were supported, in the total amount of 133.734,64 eur, which represents 4% of the total funds allocated through this Program.

Below is an overview of the number of unemployed persons who showed interest in applying, the number of submitted projects and signed Grant Agreements, through all three calls, in the municipality of Pljevlja.

Table 68. Overview of submitted applications and supported applicants through all three calls

Pljevlja municipality	Interest shown	Gender structure	Application submitted	Gender structure	Signed Agreements	Gender structure
CALL 2019	36	16 ž	5	3 ž	4	3 ž
CALL ZOIG		20 m	Ŭ	2 m	·	1 m
CALL 2020	80	32 ž 48 m	19	9 ž 10 m	9	6 ž 3 m
	9-	38 ž	95	11 ž	_	2 ž
CALL 2021	95		25	14 m	5	3 m

Source: ZZZCG

Within the framework of the first Call, 4 unemployed persons were supported (of which three were women, with an approved amount of **29.977,64 eur**. Through the second call, 9 Grant Agreements were signed with unemployed persons, of which 6 were women) in a total amount of **66.257,64 eur**, while in the last call, 5 unemployed persons (among them two women) received start-up business grants, with a total amount of **37.500,00 eur**.

Supported ideas are predominantly service activities, but there are also those engaged in trade and agricultural production. A list of supported business ideas is presented below.

Table 69. Supported business ideas through Self-employment Grant Program in the municipality of Pljevlja

R. br.	Project proposal title	Amount of awarded grant in €
I	CALL 2019	
1	Sale and installation of plumbing materials and sanitary devices	7.500,00
2	Establishment of a beauty salon	7.477,64
3	Procurement of equipment and raw materials for a laying hen farm with a capacity of 800 pcs.	7.500,00
4	Production, provision of services, procurement and sale of beekeeping accessories, equipment and medicines for bees	7.500,00
		29.977,64
II	CALL 2020	
1	Machines for PVC and aluminium carpentry	7.500,00
2	Establishment of a funeral equipment store	6.893,00
3	Women's hair salon	7.182,00
4	Upholstery and tailoring workshop	7.500,00
5	Hairdressing and beauty salon	7.500,00
6	Equipping the centre of recreational ethno-tourism	7.233,00
7	Opening of the newstand	7.500,00
8	Car and carpet wash	7.500,00
9	Carpet service "San"	7.449,00
		66.257,64
III	CALL 2021	
1	Mini clothing business	7.500,00
2	Sheet metal and roofing works	7.500,00
3	Commercial tailor shop	7.500,00
4	Auto mechanic workshop	7.500,00
5	Decorations and wedding dresses ",Magic Corner"	7.500,00
		37.500,00
	Total (I+II+II)	133.734,64

Source: ZZZCG

Regarding favorable loans for self-employment and development of business ideas in the municipality of Pljevlja, the measures of the Investment and Development Fund of Montenegro (IRFCG) are available. In the previous three years ($2020-2022^{67}$), IRFCG supported 34 business ideas in the municipality of Pljevlja of which approved loans' total amount was 1.868.092,55 euros, which represents 2.4% of the total number and 0.6% of the total amount of approved loans for the development of business ideas in Montenegro It's burning.

An overview of the number of approved loans by gender, in total approved amounts, for the last three years is presented below.

Table 70. Overview of approved IRFCG loans in the municipality of Pljevlja by gender, in total amounts for the period 2020 - 2022, in euros

2020 Realization by		2021 I-XI 20		I-XI 2022	!	Total in EUR		
gender	Amount	Number	Amount	Number	Amount	Number	Amount	Number
М	1.005.610,26	21	80.000,00	2	470.000,00	5	1.555.610,26	28
F	226.762,17	4	85.720,12	2	0,00	0	312.482,29	6
Total:	1.232.372,43	25	165.720,12	4	470.000,00	5	1.868.092,55	34

Source: IRFCG

With regard to the year, in 2020 the municipality of Pljevlja had a share of 3.2% in the total number of approved loans at the level of Montenegro (776), after which there was a decrease in 2021(1.2%) and 2022 (1.6%). It is interesting to mention that the number of approved loans in 2021 and 2022 is in a significant decline both at the level of Montenegro and in the municipality of Pljevlja, compared to 2020. Below is an overview of the Municipality of Pljevlja's share in the total number and amount of loans approved by IRFCG in Montenegro, for the observed period.

Table 71. The municipality of Pljevlja's share in the total number of approved IRFCG loans in Montenegro for 2020-2022

	Montenegro		Municipality of Pljevlja		
Year	Amount	Number	Amount	Number	Share regarding the number
2020	143.470.839	776	1.232.372	25	3.2%
2021	103.676.603	341	165.720	4	1.2%
2022	75.198.111	318	470.000	5	1.6%
Total:	322.345.553	1.435	1.868.092,55	34	2.4%

Izvor: IRFCG

When it comes to the activities for which loans were approved in the period 2020-2022, the largest number of approved loans is from the field of trade (11). A slightly smaller number of approved loans are from the fields of agricultural production (9) and service activities (8). An overview of the loans granted by activities for the last three years is presented below.

Table 72. Approved loans by activity for the period 2020-2022

5 " " 1 " "	2020		2021		I-XI 2022		Total (eur)	
Realization by activity	Amount	Num.	Amount	Num.	Amount	Num.	Amount	Num.
Agricultural production	71.200,00	8	35.720,12	1	0,00	0	106.920,12	9
Production activity	165.000,00	2	0,00	0	200.000,00	2	365.000,00	4
Manufacture of food products	350.000,00	2	0,00	0	0,00	0	350.000,00	2
Trade	375.267,93	9	80.000,00	2	0,00	0	455.267,93	11
Service activities	270.904,50	4	50.000,00	1	270.000,00	3	590.904,50	8
Total:	1.232.372,43	25	165.720,12	4	470.000,00	5	1.868.092,55	34

Source: IRFCG

The microcredit financial institution Alter Modus makes a significant contribution to the increase of self-employment and the development of business ideas in the territory of the municipality of Pljevlja and in the period 2020-2022 it approved 944 loans for business development in the municipality of Pljevlja, amounting to 2,180,200.00 euros in total. Below is a presentation of the number of submitted loan applications and the number of approved loan applications, by gender, for the observed period.

Table 73. Gender structure of submitted loan applications and approved loans in the municipality of Pljevlja for the period 2020-2022

	2020.	2021.	I-XI 2022 ⁶⁸			
	Numbe	er of clients at the end of the year				
Women	278	270	264			
Men	337	321	288			
	Number of clien	ts who were granted a loan during the year				
Women	94	170	135			
Men	142	182	171			
	Number of loans approved for business development					
	245	378	321			

Source: Microcreditl financial institution (MFI) Alter Modus

If we look at the activities of approved loans in the municipality of Pljevlja, most of the financial resources have been directed to service activities (46%), followed by livestock breeding, fishery, beekeeping (30%), but also trade (16%) and production (8%).

Table 74. The amount of approved loans by activity groups for the period 2022-2022

By activity groups	2020.	2021.	I-XI 2022	Total (eur)
Agriculture	6.700,00	25.900,00	20.500,00	53.100,00
Livestock breeding, fishery, beekeeping	172.250,00	266.150,00	223.450,00	661.850,00
Trade	69.100,00	93.000,00	140.900,00	303.000,00
Manufacture	35.500,00	69.450,00	60.100,00	165.050,00
Services	230.850.00	371.650,00	394.700,00	997.200,00
Total	514.400,00	826.150,00	839.650,00	2.180.200,00

Source: MFI Alter Modus

In the observed period, MFI Alter Modus approved the most credit funds in the municipality of Pljevlja for the breeding of dairy cows - EUR 585.300,00. The construction industry with 243.850,00 eur is in second place, while individual amounts over 100 thousand are directed to hairdressing and other beauty treatments; then, textiles, shoes and clothing trade, transport of goods and passengers and production of bread, production of fresh pastries and cakes.

⁶⁸ Balance for 2022 including 30 November 2022

Table 75. Amounts of approved loans in Pljevlja by activity for the period 2020-2022

By the most represented activities	Period 2020- I-XI 2022. (amount in eur)
Breeding of dairy cows	585.300
Construction	243.850
Hairdressing and other beauty treatments	183.300
Textile, footwear and clothing trade	158.700
Transport of goods and passengers	123.800
Production of bread, fresh pastries and cakes, bakery	111.650
Trade in motor vehicles	41.500
Other	732.100

Source: MFI Alter Modus

If we look at the average amounts of approved loans by IRFCG, MFI Alter Modus and allocated grants from ZZZCG in the municipality of Pljevlja, we can conclude that all three institutions in 2022 had the highest average amount of approved loans/allocated funds in relation to the observed period. The average amount of the approved loan is dominantly the largest with IRFCG, with an emphasis on the year 2022, because in that year the smallest number of loans (5) ranging from 200 to 270 thousand euros was approved, while the largest number of loans was approved in 2020 (25) ranging from 70 to 276 thousand euros.

Furthermore, the average loan amount from MFI Alter Modus is three times less than the average grant amount allocated to ZZZCG for the observed period, while the number of supported business ideas is incomparably higher.

Table 76. Average amount of approved loans/grants, in EUR

	Average amount (in EUR) of approved loans/grants				
Name of institution	2020.	2021.	2022.		
IRFCG	49.294,90	41.430,03	94.000,00		
MFI Alter Modus	2.100,00	2.186	2.616		
ZZZCG	7.494.41	7.361,89	7.500,00		

The Municipality of Pljevlja will continue to implement its planned activities from the Employment Action Plan 2021-2025, aimed at stimulating self-employment through the support of 15 business ideas within the Entrepreneurship Support Program, which did not exist at all in 2019. Then, they will work on increasing the number of employees by 3.4% (200 new employees) compared to 2019 (in which 5,863 employees were recorded), as well as on an increase of 650 unemployed persons included in education and training programs compared to 2019 (93 unemployed persons were included in the programs).

8.5 Provisions of the Coal Mine A.D. Pljevlja Collective Agreement regarding cases where the need for employees'work ends

Collective agreement of the Coal Mine A.D. Pljevlja regulates the rights, obligations and responsibilities of employees and the Coal Mine A.D. Pljevlja (employer) in the field of labor relations, the manner and procedure of their exercise or fulfillment, as well as other mutual relations between the parties of this agreement.

Termination of the employment relationship between the employee and the employer is provided for in articles of the Collective Agreement, from Article 100 to Article 110. In cases where the need for employees' work ceases, the rights and obligations are provided for in Article 111 to Article 122.

An employee, whose job becomes unnecessary in the Company, shall be paid severance pay in accordance with the Social Program agreed upon and signed between the representative trade union organization and the Employer, at least in the amount of 24 employee's average salaries, or 24 average salaries of the Employer, if that is more favorable for the employee (average salary of an employee in the coal mine in October 2022 was 980.18 euros net)

The employees of the Coal Mine, who have fulfilled the condition for exercising the right to a pension, and by force of law do not have to use that right, are granted incentives for retirement, as follows:⁶⁹

- by paying compensation in the amount of 3 employee's average salary or the average salary in the Company, if it is more favorable for the employee, for each full year of early retirement, up to a maximum of 5 years. For the time exceeding the completed year, compensation will be determined proportionally to the number of months, that is, days.
- by paying a severance pay for retirement in the amount of 6 average net earnings of the employee from the previous 6 months, or 6 average net earnings of the employer from the previous 6 months, if this is more favorable for the employee. Severance pay is paid within 30 days from the date of termination of employment. An employee who retires is obliged to pay all outstanding financial obligations to the Employer on all grounds (unpaid part of the mutual fund, unpaid part for taken coal, possible advance payments, etc.) before the payment of severance pay. In the event that the employee does not settle his obligations, the amount of the severance pay is reduced by the amount of outstanding obligations.
- by paying grants in the amount of 3 net accounting coefficients that are applied in the Company on the date of this Decision, for each year of effective service in the Company, to employees who have never used funds to solve housing needs, i.e. by paying grants in the amount of 3 net accounting coefficients of the coefficients applied in the Company on the date of this Decision, for each effective year of service in the Company, reduced by the percentage of utilization of funds for solving housing needs by employees who used funds for solving housing needs. For the time exceeding the completed year, funds will be will be determined proportionally to the number of months, that is, days.

The funds that will be paid in the name of compensation, severance pay and funds for solving the housing issue cannot exceed the limit of EUR 27,000.00 in total.

If an employee wants to terminate the employment with the Company, he is paid a compensation in the amount of 24 times the salary of the employee, or 24 times the average salary of employees in the Company, if it is more favorable for the employee, with the fact that the employees who have fulfilled the condition for pension rights on any basis are not entitled to this right.

An employee with a disability whose disability occurred as a result of an injury at work or an occupational disease may terminate the employment with the Company by being paid a compensation in the amount of 36 average salaries of Company's employees in the (net amount) in the month preceding the month of termination of the employment.

9. Education

The municipality of Pljevlja has one state pre-school institution with 6 active units. Compared to the period of two years ago when 621 were enrolled, there is a slight increase in the number of enrolled children, and for the school year 2021/22, there were 645 children enrolled. In the city area, there are three parent nine-year schools: Elementary School "Ristan Pavlović", Elementary School "Boško Buha" and Elementary School "Salko Aljković", and the other 11 schools function as regional departments and are located in rural areas: Mataruge, Šula, Gradac, Kosanica, Maoče-Vrulja, Kruševo, Bobovo, Odžak, Kovačevici, Srdanov grob and Boljanici. There is also a school for elementary music education in Pljevlja. The system of inclusive education, which refers to the inclusion of children and youth with developmental disabilities in the regular education system, is implemented by directing children to appropriate educational programs, and there is a special department in the "Boško Buha" Elementary School.

There are two secondary schools in Pljevlja: "Tanasije Pejatović" Gymnasium and Vocational Secondary School. The number of students in the 2019/2020 school year, when there were 1,125 students, dropped to 941 in the 2021/2022 school year.

The municipality grants scholarships to up to 20 students of basic academic and professional/applied studies and 10 students of master's studies. Scholarships are awarded for one academic year and are paid in 10 monthly installments in the amount of 100 euros.

In 2008, the municipality established an Academic Center within which a department of the Faculty of Mechanical Engineering from Podgorica was formed. Despite the fact that the municipality bore the costs of financing students and invested significant funds in the adaptation of the space, the Academic Center is not in operation and the Faculty of Mechanical Engineering stopped teaching in September 2015.

10. MEDIA AND IT INFRASTRUCTURE

Radio Television Pljevlja (RTPV), a public radio broadcasting service, was established by the Decision of the Municipal Assembly of Pljevlja in 2005, as the legal successor of the Local Public Service Radio Pljevlja. Radio and television programs are broadcast 24 hours a day. Citizens can get information through the portal www.tvpljevlja.me as well as through other city portals: www.pvinformer.me, www.pvportal.me and www.portalpljevlja.me.

One of the important channels of communication is the web portal of the Municipality of Pljevlja www. pljevlja.me, through which citizens and the general public are informed about all events and activities in the local self-government and the city.

The only printed media is NIP "Pljevaljske novine" DOO, founded on 1 November 1960. It deals with Pljevlja's current issues in politics, economy, culture, sports and entertainment in its bimonthly editions. The local magazine gives space to citizens to publish reports, comments and to participate in numerous contests. "Pljevaljske Novine" also has its online edition on the website www.pvnovine.com.

Three mobile phone operators are present in the municipality: T-Mobile (part of Crnogorski Telekom a.d.), One Crna Gora and M:tel. Coverage of the Municipality by signals is about 80%. Signal coverage is very good on the territory of the entire municipality.

11. CULTURE, SPORT AND RECREATION

The strategic development plan of the municipality of Pljevlja for the period 2021-2025 is based on a general strategic goal which includes the preservation of historical, religious and cultural heritage through the protection of tangible and intangible cultural heritage, as well as increasing the visibility of cultural heritage. The potential of ethnogastronomy is recognized as a special aspect of cultural heritage that can be a driving force for the further development of tourism.

Based on the available data from the register of the Institute for the Protection of Cultural Monuments of Montenegro, two cultural monuments of category I (monuments of exceptional importance) and four cultural monuments of category II (monuments of great importance) were recorded in the municipality of Pljevlja. In 2020, the municipality of Pljevlja started the process of expropriating part of the plots under which, according to valid assumptions, the remains of the ancient city center are located.

In 2019, the JU Center for Culture was established. This public institution is in charge of organizing cultural events and in cooperation with the Secretariat for Social Activities of the Municipality of Pljevlja it works to improve the cultural life of the Municipality of Pljevlja. Culture is successfully dealt with by a large number of organizations with special status in the field of culture and nurturing of cultural heritage, tangible and intangible, folklore, tambourine music, schools for stringed instruments, acting, painting schools, publishing activities.

With the opening of the Youth Center in 2020, young people in Pljevlja got a place for gathering and informal education. Every year, the local self-government co-finances an average of 10 to 15 projects in the field of literary, artistic or musical creativity. However, there is no cinema in the municipality that operates throughout the year, but the premises of some other institutions, such as the JU Center for Culture, are used for showing films.

During the preparation of the Local Action Plan for Youth 2021, as one of the problems, young people highlighted the lack of cultural content. What is challenging is the mobility of the population. Cultural content is mostly the privilege of urban residents. Young people living in rural areas do not have the opportunity to see many cultural events. At the same time, due to the unfavorable material situation, these young people are not able to travel to cities where there are cultural events.

The 2020-2021 sports development action plan of the municipality of Pljevlja recognizes the main goals that enable the improvement of the current situation and creation of better conditions in the field of sports. The municipality of Pljevlja sees the development of sports as one of the ways to enrich the tourist offer and attract domestic and foreign tourists, therefore every year through a public call it cofinances the work of sports organizations and supports the organization of sports events that are of social importance for this city.

There are two institutions that deal with the organization of sports and recreational programs in the

municipality of Plievlja. These are Sports Center "Ada" and "Center for Sports and Recreation" d.o.o.

One of the most significant events was the organization of the 54th "MOSI" sports games. These are traditional inter-municipal youth sports games that bring together young athletes from municipalities on the triple border of Montenegro, Serbia and Bosnia and Herzegovina. Some of the traditional sports events are the night basketball tournament "Throw the drug in the basket" and "Bicycling".

What has been recognized as the main challenge is the improvement of infrastructure, especially within educational institutions. In addition to the improvement of infrastructure, the goals include the improvement and promotion of sports for people with disabilities. Sports and culture are recognized as an area for inclusion, so according to the Local Social and Child Protection Plan for the Municipality of Pljevlja for the period 2021-2025, one of the goals is the free inclusion of children from Roma and Egyptian families in sports and socio-cultural activities.

In the municipality of Pljevlja, there are 24 registered sports clubs, 3 sports and recreation clubs and 2 school sports clubs. Two sports clubs for disabled persons are also registered: Sitting Volleyball Club "Set", Pljevlja, whose founder is the Association of Paraplegics Pljevlja, and the club founded by the NGO "Ray of Hope". The strategic plan for the development of the municipality of Pljevlja 2021-2025 recognizes the potential for the promotion of tourist capacities in the field of hunting and fishing tourism. With its activities, the municipality supports non-governmental associations operating in the field of hunting and sport fishing: Sport fishing company "Lipljen", Sport-fishing club "Ipon" and the Pljevlja Hunters' Association.

12. ECONOMY AND BUSINESS ENVIRONMENT IN PLJEVLJA

The number of legal and natural persons - taxpayers having "active" status in the Central Register of Taxpayers and Insured at the level of Montenegro and the seat or place of residence in the municipality of Pljevlja.

Table 77. The number of legal and natural persons that are "active" in the Central Register of Taxpayers of Montenegro by size class

CLASS	Montenegro	Pljevlja	Share %
MICRO	36.122	534	1,48
SMALL	2.042	61	2,99
MEDIUM	433	10	2,31
LARGE	72	3	4,17
TOTAL	38.669	608	1,57%

Table 78. Number of business entities by activity

NAZIV SEKTORA	Montenegro	Pljevlja
Sector A - Agriculture, forestry and fishery	445	16
Sector B – Mining and quarrying	70	3
Sector C - Manufacturing	2.768	88
Sector D - Electricity, gas, steam and air conditioning supply	111	2
Sector E - Water supply; sewerage, waste management and remediation activities	123	2
Sector F - Construction	4.363	37
Sector G - Wholesale and retail trade and repair of motor vehicles and motorcycles	9.626	215
Sector H - Transportation and storage	1.861	53
Sector I - Accommodation and food service activities	4.697	79
Sector J - Information and communications	2.276	9
Sector K - Financial and insurance activities	155	0
Sector L - real estate activities	2	0
Sector M - professional, scientific and technical activities	1.562	2
Sector N - administrative and support service activities	5.246	16
Sector 0 - state administration and defense and compulsory social insurance	2.110	9
Sector P - Education	13	1
Sector Q - Health and social protection	566	19
Sector R - Art, entertainment and recreation	644	25
Sector S - Other service activities	694	10
	1.337	22
TOTAL	38.669	608

The following table presents the structure of legal entities that are registered and active in the Central Register of Obligors and the number of insured persons in the new Montenegro and with their headquarters, i.e. residence in the municipality of Pljevlja.

Table 79. Structure of legal entities - number of taxpayers and number of insured persons

CODE	NAME OF SECTOR	NUMBER OF TAXPAYERS	NUMBER OF EMPLOYEES*
А	Agriculture, forestry and fishery	23	39
В	Mining and quarrying	3	1.183
С	Manufacturing	119	519
D	Electricity, gas, steam and air conditioning supply	2	27
E	Water supply; sewerage, waste management and remediation activities	3	295
F	Construction	47	219
G	Wholesale and retail trade and repair of motor vehicles and motorcycles	269	623
Н	Transportation and storage	64	138
I	Accommodation and food service activities	90	276
J	Information and communications	14	47
L	Real estate activities	2	2
М	Professional, scientific and technical activities	19	50
N	Administrative and support service activities	15	63
0	State administration and defense and compulsory social insurance	28	645
Р	Education	22	593
Q	Health and social protection	28	659
R	Art, entertainment and recreation	93	85
S	Other service activities	282	79
	UKUPNO	1.123	

Source: Revenue and Customs Administration of Montenegro⁷⁰

*Note: It is not relevant to add up the number of employees in the final one, because one person can be registered with two/more employers insured on e.g. 10 hours each, with a different activity code, and by grouping such a person will enter both/more sectors;

According to data from the Local Self-Government (Secretariat for the Economy), 304 business entities are currently registered in the field of services and craft services.

Tabela 80. Struktura privrednih subjekata iz oblasti usluga i zanatskih usluga

CRAFT AND OTHER SERVICES	NUMBER OF REGISTERED PERSONS
Car services	29
Other services	11
Craftsmanship - repairs	15
Craftsmanship - carpentry installation	3
Craftsmanship - Other	18
Construction works - construction	21
Other construction works	17
Hairdresser - beautician	60
Dry cleaning	3
Entertainment/Betting	15
Electrical engineering services	1
Engineering services	9
Consulting firms	4
Mediation	7
Bill. accounting services	5
Logging	11
Veterinary services	4
Other services	71
UKUPN0	304

Source: Municipality of Pljevlja, Secretariat for Economy, Service for Entrepreneurship and Tourism

For the past two years, the local self-government (Secretariat for the Economy) has been implementing the Program to Support the Development of Entrepreneurship and Women's Entrepreneurship, with a total of 48,000 euros distributed so far through a public competition. This body organized traditional local tourist fairs such as "Regional exhibition of honey, beekeeping products, and beekeeping equipment" and "Pljevlja Cheese Days" between 2018 and 2021.

Defining business zones is of strategic interest to every municipality because they represent a strong mechanism for attracting investors important for the further economic development of the city. Business zones are managed by the local self-government and, in addition to common space and infrastructure, they provide users with additional tax and administrative benefits from the state and local level. Business zones in the municipality of Pljevlja are defined by the PUP and have different infrastructural facilities. Chances for further development of the municipality of Pljevlja are reflected in the formation of business zones and their more intensive communal equipment, stimulation measures that will be brought by the local parliament to create more favorable conditions for business development and promotion of business zones at the state and regional level. Given the nature of the enterprises that could be located in business zones, considering the industry structure in Pljevlja, those are mostly of a service character for industrial plants as well as smaller production plants.⁷¹

12.1 Support programs for employment, business start-up and community support in the municipality of Pljevlja

In recent years, the municipality of Pljevlja allocates funds and supports the development of entrepreneurship, agriculture and related activities and other activities through various support programs, all with the aim of improving the position of citizens in the local community. The following presents an overview of significant calls and projects implemented in the municipality of Pljevlja.

1. Public competition for the allocation of funds to support and encourage the development of entrepreneurship and tourism and support and encourage the development of female entrepreneurship

In June 2022, the Municipality of Pljevlja announced a public competition for the allocation of grants for the development of entrepreneurship and tourism and women's entrepreneurship. Through this type of support, the Municipality allocated funds of 15,000 euros for the development of entrepreneurship and tourism, while 15,000 euros were also allocated for the promotion and improvement of the own business of female entrepreneurs and companies in which women are business owners. This is the third Competition through which the Municipality allocates financial resources so that registered entrepreneurs and micro and small economic entities from Pljevlja are economically empowered to expand their own capacities and create conditions for starting new entrepreneurial activities.

3. Public call for wool processors, artisans, artists and trainees 72

The municipality of Pljevlja implements the project "VUNA" ("Wool as Outstanding Opportunity for Leverage") within the Interreg series of programs for stimulating cooperation between regions in and outside the European Union, INTERREG VB Adriatic-Ionian Program 2014–2020. This project, managed by the Pordenone SCPA Technology Park, is implemented in six Adriatic-Ionian countries: Italy, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro and Greece. The general goal of the "WOOL" project is to valorize wool as an essential natural resource and to protect the cultural heritage of hand-made wool products. In order to increase the attractiveness of woolen handicrafts, a public call was issued in May 2022 to organize trainings, exchange of good practices and capacity building for local artists and artisans.

3. Competition for the distribution of funds to non-governmental organizations for the year 2022 73

The subject of the competition is the distribution of funds to non-governmental organizations planned by the Budget of the Municipality of Pljevlja, and for 2022, 22,653 euros are planned for projects that are fully implemented on the territory of the Municipality of Pljevlja, which are in accordance with strategic documents and other program or planning acts of the Municipality. Regarding the priority areas, in addition to the inclusion of vulnerable groups, the development of culture, the emphasis is on environmental protection and promotion of youth employment, promotion of tourism in rural development and promotion of the development of rural areas.

4. Public call within the project "Launch of support services for small and medium-sized enterprises and encouragement of training programs at the workplace"

The general goal of this call is to create a support model for employers from targeted municipalities in the direction of contributing to a tangible and long-term impact on their competitiveness, sustainability, and capacity to create new jobs. This call is intended for small and medium-sized enterprises from the area of the Municipality of Pljevlja and 13 other less developed municipalities (Danilovgrad, Plužine, Kolašin, Mojkovac, Nikšić, Šavnik, Bijelo Polje, Berane, Rožaje, Plav, Gusinje, Andrijevica and Petnjica) through a partnership with small and medium enterprises from the Municipality of Pljevlja. The project is implemented as part of the EU-Montenegro Program for Employment, Education and Social Protection, through the grant scheme "Employment Support in Less Developed Municipalities of Montenegro", in accordance with Contract No. CFCU/MNE/184, Municipality of Pljevlja, in partnership with the Association for democratic prosperity Zid.

5. Engineering School of Science in Pljevlja 75

Now traditionally, the month of July is reserved for the promotion of science in Pljevlja. For the third year in a row, the association of young engineers, NGO KSAN, organizes the Engineering School of Science, to which all secondary school students and freshmen eager for knowledge, new friendships and an unforgettable experience are welcome. The camp for secondary school students from Montenegro and Pljevlja aims to expand the scientific spectrum in the city which is considered the center of the energy potential of Montenegro. In the course of the Engineering School of Science, participants have

⁷² https://pljevlja.me/treci-javni-poziv-za-obradjivavace-vune-zanatlije-umjetnike-i-polaznike-obuke/

the opportunity to attend lectures on the topic of current events in the world of engineering, but also to acquire diverse practical knowledge, which will be a springboard for them as future engineers on their professional path.

6. Establishment of the Creative Hub

In support of the formation and expansion of the culture of innovative technologies and sustainable solutions, the Creative Hub in Pljevlja has been opened recently. The Hub will represent a place for creatives to learn and use tools for innovative financing, attracting young entrepreneurs and digital nomads. The idea is for it to be a place for the development of start-up projects, green business ideas, which will create jobs in addition to the two largest companies Coal Mine and TE Pljevlja. The furnishing of the space was financed by the United Nations Development Program (UNDP).

Based on the agreement reached between UNDP and the Municipality of Pljevlja on the implementation of the "Urban transformation of Pljevlja-City Experiment Fund" project, and within the scope of activities and services of the Creative Hub, a public call for cooperation and partnership in the form of free use of the Hub's premises and equipment, and realization of joint projects was issued in November 2022.

The call was issued within the field of activity for all interested non-governmental organizations, citizens' associations, civil society organizations and other entities in Pljevlja with goals that are fully aligned with the goals of the Hub itself, namely:

- Creating an environment for young people to study the possibilities of using innovative technologies in different fields;
- Implementation of programs in the fields of innovation, science, engineering, e-mobility, energy efficiency, entrepreneurship in partnership with selected non-governmental organizations;
- Creation of a scientific-experimental laboratory for conducting research in various fields and introducing a model of the community "smart and innovative management";
- Creation of a resource center to support the creation and spread of a culture of innovative technologies and sustainable solutions;
- Active participation in promoting new start-up ideas through product testing and validation;
- Building ecosystems and partnerships for a just transition;
- Establishing cooperation with small and medium enterprises and academic circles;
- Facilitating IT education for children, adults and the elderly;

7. Public call for the allocation of non-refundable funds to support solving the housing issue of young families from the territory of the municipality of Pljevlja

On 3 November 2022, Pljevlja published a Public Call awarding grants to young families from Pljevlja to solve their housing issues. In the Budget for 2022, the Secretariat for Social Activities of the Municipality of Pljevlja allocated funds in the amount of EUR 40,000, which would be used to co-finance the interest on housing loans for the purchase or construction of residential real estate.

The call aims to enable young couples and single parents living in the territory of Pljevlja to buy an apartment, build or buy a house on preferential terms. The municipality will finance a maximum of 100 EUR of interest per month, for a period of up to 10 years, provided that the housing loan was approved in the year of the public call, or the year preceding the year of the public call.

Young married or unmarried couples and their children are entitled to the subsidy, provided that on the day of the public call, at least one of the married or unmarried partners is no older than 45 years old, and that by purchasing or building a residential building, they are solving their housing issue for the first time.

The condition for the construction of a residential building is the possession of a building permit or the corresponding act for construction, as well as the application for the start of construction, which was made in the year before the public call was issued or in the year of the public call.

Co-financing did not refer to the purchase of real estate owned/co-owned by a person related by blood to at least one member of the young family.⁷⁶

12.2 Agriculture

Structure of agricultural holdings

According to the Agricultural Census 2010, the total number of agricultural holdings In the municipality of Pljevlja is 4,001. Due to the decrease in the number of inhabitants, especially in rural areas, the number of agricultural farms decreased. According to data from the Register of Agricultural Farms (RPG) from the Ministry of Agriculture, Forestry and Water Management (MAFWM), there are currently 2,009 registered agricultural farms, which represents 11.4% of the total number in Montenegro, and 21.9% of the northern region.

Number of agricultural Female holder of holding % Male holder of holding % Area producers 17.671 2.621 14,8 15.050 85,2 Montenegro 1.271 8.203 Northern region 9.474 13,4 86,6 2.009 275 13.7 1.734 86,3 Plievlia

Table 81. Number of registered agricultural producers (total and by gender)

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

As in the labor market, gender inequalities are also pronounced in agriculture. Only 13.7% of women are holders of agricultural holdings, which is close to the national level.



Graph 37. Holders of holdings in Pljevlja

In the structure of agricultural holdings, almost half of agricultural producers (48.7%) are engaged in livesatock breeding. 38.3% are engaged in crop production, i.e. growing perennial crops, while other types of agricultural production are represented by only 13%.

22.403 Montenegro 12.560 Northern region Municipality of Pljevlja 1.412 Mixed agricultural production 129 Nurseries Livestock breeding 687 Service activities in agriculture and post-harvest activities Growing of non-perennial crops 49 541 Growing of perennial crops

Table 82. Structure of agricultural holdings according to basic activities 77

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

The total area of agricultural land used by registered agricultural holdings is 8,157.6ha, which is 16.5% in comparison to Montenegro, and 26% in comparison to the northern region

Table 83. total area of agricultural land, in ha

Area	Total area in (ha)
Montenegro	49.297,2
Northern region	31.412,2
Pljevlja	8.157,6

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

Meadows (57.7%) and pastures (32.6%) have the largest share in the structure of used agricultural land in the municipality of Pljevlja. Orchards (plum, apple and other fruits) occupy 5.2%, arable land (alfalfa, clover and grass mixture) 2.8%, wheat, corn and barley 0.6%, while other crops occupy less than 0.5% in total areas.

Table 84. Structure of agricultural land

Name of the culture	Area (ha)	%
Rye, oats, buckwheat	38,2	0,5
Vegetables	24,7	0,3
Fruit	422,1	5,2
Alfalfa, clover, grass mixture	225,0	2,8
Aromatic and medicinal plants, seedlings, flowers	36,5	0,4
Meadows	4.703,8	57,7
Pastures	2.657.6	32,6
Wheat, corn, barley	49,2	0,6
The forest	0,5	0,0
TOTAL	8.157,6	100,0

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

Primary production – livestock breeding is the basic activity and is mostly based on the production of milk, which is further processed into "Pljevlja's cheese", a product with a protected designation of origin. In the Municipality of Pljevlja, agricultural holdings produce about 22,000 tons of milk annually. Of that amount, 10% is bought by dairy enterprises, 30% is used for feeding the rising new generation and for own needs, and 60% is mostly processed into "Pljevlja's cheese". The daily production of "Pljevlja's cheese" on family farms is about 5 tons, which is about 2,000 tons on an annual level and revenues of 10 to 12 million euros are realized.⁷⁸.

Apart from milk, the market surplus of livestock (calves, cows, steers, etc.), except for cattle for breeding and own consumption, is mostly sold by farms to meat processing industries, catering establishments and markets in Montenegro. It is estimated that about 850 tons of live weight calves and steers and about 860 tons of live weight lambs are sold annually. Based on these data, the projected revenues are around 4 million euros.

Crop production on agricultural holdings is largely in the function of livestock breeding, because in the structure of the used agricultural land of the Municipality, the largest share is meadows (bulky fodder for livestock) and pastures for grazing.

In vegetable production, the production of potatoes dominates the area of about 22.1 ha, while other vegetables cover about 2.6 ha. This production is mostly for meeting own needs. In fruit growing, the total area under plantations is about 422.1 ha. Plum and apple dominate. Most of the fruit is used for the production of brandy and partly for the production of jam for one's own needs.

There are 45 organic producers registered in the municipality of Pljevlja, who are holders of the "Monteorganika" certificate. Of these, the largest number is in grain production - about 82%, or 37

producers, and the other 8 producers are in livestock breeding and fruit growing. Buckwheat, barley and rye dominate with organic grain producers with areas of around 100 ha.

Review of the number of livestock

According to the estimates of the MPŠV and the Local Service for Agriculture, based on field work and users of agro-budgetary measures in livestock breeding, there are about 10,000 livestock heads (of which 7,000 cows), 15,000 sheep, 22,000 lambs and 1,000 goats on the territory of the municipality.

Data on subsidies paid in agriculture

The agricultural budget of the municipality of Pljevlja, that is, the defined conditions, method and dynamics of the implementation of agricultural policy measures, 1,271,000 euros were paid out in the period from 2018–2021. These are: subsidies for milk, support for the production of continental fruits, insurance for registered farmers, procurement of high tunnels and professional greenhouses, support for the procurement of irrigation equipment, agrochemical soil analysis, support for crop production, support for the production of vegetables and mushrooms, visits to agricultural fairs, support to married couples in rural areas, regional honey exhibition, support for investments on family farms in the protection of Pljevlja's cheese, support for the production of berry fruits, protection of the designation of origin of Pljevlja's cheese, support for organic production, agricultural products processing program, measures to improve the quality of life in rural areas, beekeeping improvement program, promotion of agricultural products and education of agricultural producers, modernization of agricultural production and meeting standards in livestock production, support for the production and support to the livestock breeding improvement program (raising of breeding heifers and fattening of steers).

Table 85. Subsidies paid from the Agricultural Budget of the Municipality of Pljevlja

Year	Paid funds
2018	299,000 eur
2019	307,000 eur
2020	336,000 eur
2021	329,000 eur
TOTAL	1,271,000 eur

Source: Municipality of Pljevlja, Secretariat for Economy, Service for Agriculture

The funds provided for in this program are allocated every year in the local self-government budget, and for 2022, funds in the amount of EUR 452,000.00 have been allocated.

Based on data from the Ministry of Agriculture, Forestry and Water Management, 476,363.50 euros were paid to 902 beneficiaries from Pljevlja through direct payments provided for by the Agricultural Budget in 2021, and 12,370.00 euros were paid as part of the "Livestock Improvement Program" measure. The amount of 12,370 euros was paid to 110 subcontractors through the measure "Support for the development of market milk production".

Table 86. Support premiums paid by the MAFSV for 2021

Direct payn	nents	Livestock improvem	ent program	Milk	1
Number of beneficiaries	902	Number of beneficiaries	79	Number of cooperates	110
Number of heads (sheep, goats, cows)	16,431	Number of heads (pigs, bulls, stallions, heifers)	175	Total liters for 2021	1,888,612
Total support	476,363.50 eur	Total support	12.370,00 eur	Total support	1,888,612 eur

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

Only one beneficiary in plant production was the beneficiary of the support in the amount of 786.97 eur (for seeds).

In the municipality of Pljevlja there are potentials for collecting mushrooms, wild strawberries, raspberries, blueberries and medicinal plants. It is estimated that the annual crop of mushrooms in the territory of the municipality is around 300-400 tons of porcini mushrooms, 50-100 tons of chanterelles, 5-10 tons of morels, 50 tons of forest fruits, 300 tons of juniper, 200 tons of rose hip and medicinal and other herbs, with the fact that yields vary by year, depending on weather conditions.

In the goat industry, a smaller number of farms are registered that are engaged in the production of goat meat and the processing of goat milk into cheese, with insignificant market surpluses. In recent years, there has been a tendency to increase production in the poultry industry, a smaller number of family farms have been built for egg production and broiler fattening. Currently, two commercial farms are registered for the production of eggs for consumption, with a capacity of 2,000-5,000 pieces per day. About 350 farms, with 3,500 beehives, are engaged in beekeeping. The total annual yield of honey is about 35t with income of about 400,000eur.

Withdrawal of funds from EU and World Bank pre-accession funds

In order to improve the production process on agricultural farms in the municipality of Pljevlja, 127 agricultural producers from Pljevlja were supported through the programs Instrument for Pre-Accession Assistance for Rural Development (IPARD), IPARD Like and the Montenegro Institutional Development and Agriculture Strengthening (MIDAS). Only through five MIDAS calls in the previous period, 64 farmers were supported and paid 639,460.54 euros, which is only 9.8% of the total amount of the support at the level of Montenegro, while regarding the northern region, that participation is 19.6%. Within the IPARD II program, although a total of 77 agricultural producers from the municipality of Pljevlja applied, only 30 of them were successful and they were paid 514,400.80 euros. Through the IPARD Like program, the total value of 434,180.38 euros has been paid to 33 producers out of 62 applicants.

Table 87. Beneficiaries of EU funds

IPARD II	Total applications	Total required investment amount	Total number of contracts	Total amount of contracted investments	Number of paid users	Total amount of support
Teritory of MNE	1042	203.699.223,9	521	87.263.858,88	291	15.231.973,62
Northern region	515	51.235.575,98	273	23.932.484,4	161	5.713.906,7
Pljevlja Municipality	77	5.898.334,95	44	2.451.569,82	30	514.400,8
IPARD like	Total applications	Total required investment amount	Total number of contracts	Total amount of contracted investments	Number of paid users	Total amount of support
Teritory of MNE	862	47.001.217,48	564	28.673.193,05	424	8.979.581,9
Northern region	443	19.867.298,12	278	11.851.669,21	204	3.692.460,01
Pljevlja Municipality	62	2.429.769,72	43	1.448.648,1	33	434.180,38
MIDAS	Total applications	Total required investment amount	Total number of contracts	Total amount of contracted investments	Number of paid users	Total amount of support
Teritory of MNE	1467	36.208.171,39	707	14.744.621,78	659	6.532.040,65
Northern region	802	17.673.046,27	390	7.170.967,06	367	3.270.498,1
Pljevlja Municipality	102	2.119.781,91	65	1.338.795,03	64	639.460,54

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

Total number and structure of agricultural cooperatives, non-governmental associations and registered enterprises.

On the territory of the municipality of Pljevlja, the ZZ "Koperativa Mljekara" cooperative is registered, and one cooperative is in the process of bankruptcy, that is ZZ "Doganje", which in the meantime was bought by the Coal Mine. There is one buyer of mushrooms, forest fruits and medicinal herbs and one for the purchase of cheese and other dairy products in the registry of the Secretariat for the Economy of the Municipality of Pljevlja. A large number of purchasers buy Pljevlja's cheese in the rural part of the municipality, and they are not in the database of registered purchasers in the Municipality of Pljevlja. Two dairy enterprises that purchase milk and process it into dairy products (pasteurized milk, cheese, sour milk, yogurt, cream) are registered. Of the total number of insured agricultural producers (1744 at the level of Montenegro), 130 of them in the Register are from Pljevlja. The number of beneficiaries of old-age allowances has been declining in the last 4 years. The following table shows the number and amount of disbursed funds on this basis.

Table 88. Elderly benefits, number of beneficiaries and payments for the municipality of Pljevlja

Year	Average number of insured persons	Funds disbursed
2018.	576	436.382,3 eura
2019.	535	411.829,5 eura
2020.	502	438.409,2 eura
2021.	464	492.058,2 eura
TOTAL		1,778,679.3 eur

Source: Ministry of Agriculture, Forestry and Water Management of Montenegro

Although the number of registered agricultural areas is small, the municipality of Pljevlja has a large land potential. By analyzing the resources and technical-technological equipment of farms in individual rural local communities, various untapped potentials were recognized.

The agricultural sector is a great development opportunity for the municipality of Pljevlja. They are regionally recognized for "Pljevlja's cheese" as a quality product. The demand for commercial dairy products is increasing, especially in tourist areas. Raising the competitiveness of this sector through direct support to producers can significantly accelerate the development of market production and its adaptation to EU standards.

The production of continental fruit from the majority of perennial plantations in Pljevlja is, due to their age, economically unprofitable. Raising new plantations, introducing new and more resistant varieties into production and modernizing fruit production are just some of the goals for the improvement of this agricultural branch.⁷⁹

The production of cereals and the cultivation of berries has the potential for the development, primarily because of the altitude above 600 meters. Favorable climatic and vegetation conditions and the wealth of honey-bearing plants provide excellent natural conditions for the development of beekeeping - the production of honey and other bee products. By promoting bee products, introducing producers to quality standards and EU requirements, expanding the market and exporting it, it is possible to stimulate production and increase income.⁸⁰

12.3 Tourism and tourist offer

The municipality of Pljeval has ideal conditions for the development of rural tourism. In addition to the natural and underutilized potential, the warmth and hospitality of the locals, a large number of cultural and historical sights, can contribute to the development of rural tourism. However, there is no sufficiently high-quality and developed rural tourism product which could be offered to the national and foreign markets. The reason for this is the lack of adequate tourist promotion, the low level of information, as well as the undeveloped.

The NGO "Legalis" is a major promoter of rural tourism in Pljevlja. During 2020, they promoted the tourist attractions of Pljevlja through various project activities, produced tourist promotional material - brochures related to the promotion of rural and fishing tourism in the municipality. They created a flyfishing web portal and promotional films, some of which were recognized at international film festivals.

The area along the upper course and on the left side of the Ćehotina river, from the source to the border with Bosnia and Herzegovina, has been recognized for the development of rural tourism; then, the part that includes the canyon of the Tara River, along the right tributary of the Draga, which is located within the borders of the "Durmitor" National Park and which is included in the UNESCO World Natural Heritage List.

⁷⁹ https://pljevlja.me/wp-content/uploads/2022/04/Agrobudzet-31032022.pdf

⁸⁰ https://pljevlja.me/wp-content/uploads/2021/11/AgrobudZet-2021.-god..pdf

Market trends in the world are moving in favor of the development of rural tourism, which is confirmed by the estimates of the World Tourism Organization. This represents an ideal opportunity to generate additional income by using the potential. However, the city is recognized as an industrial and mining region, and it is necessary to change the general image of Pljevlja towards the valorization of natural potentials, healthy food and natural beauty.⁸¹

There are currently 10 rural households on offer that deal with rural tourism in the area of the municipality of Pljevlja and that offer accommodation, hospitality, enjoyment of traditional cuisine, preserved customs and other authentic experiences.⁸²

Tourism as an economic branch has developed significantly in the past period. According to available data, 5 hotels with a total capacity of about 100 beds, 4 restaurants and 35 private accommodations with a total capacity of up to 350 beds are registered in the area of the municipality of Pljevlja. There are also two entities that are registered to provide adventure services.

Regarding the total number of guests and overnight stays at the level of Montenegro, the municipality of Pljevlja has a negligible share (0.3% and 0.1% respectively in 2019). During 2021, 4,359 guests with 18,822 overnight stays stayed in private accommodation in the area of the municipality of Pljevlja. According to available data from the Tourist Organization of Pljevlja, by the end of October 2022, 2,187 guests stayed in private accommodation with 8,526 overnight stays, and 2,465 guests stayed in collective accommodation (hotels) with 4,786 overnight stays.

Table 89. Arrivals and number of overnight stays of tourists

TOURIST ARRIVALS AND OVERNIGHT STAYS IN THE MUNICIPALITY OF PLJEVLJA						
	2019		20	020	202	21
Type of accommodation	Tourist arrival	Number of overnight stays	Tourist arrival	Overnight stays	Tourist arrival	Overnight stays
Collective accommodation (hotels and similar accommodation facilities)	4.644	8.237	1.542	2.068	2.068	4.228
Private accommodation	3.386	6.892	1.711	2.291	2.291	14.594
TOTAL	8.030	15.129	3.253	4.359	4.359	18.822

Table 90. Revenue realized from tourism for the period 2019-2021

REVENUE REALIZED FROM TOURISM/TRAVEL AND EARMARKED REVENUE - TO PLJEVLJA			
REVENUE (in EUR)	2019.	2020.	2021.
Revenue from the tourist tax	6.746,63	598,72	225,30
Revenue from membership fees	40.93791	14.132,66	6.978,84
Total earmarked revenues 47.684,54 14.726,78 7.204,14			7.204,14

Based on the presented statistics, it is clear that tourism in Pljevlja is still recovering from the pandemic caused by the coronavirus disease (COVID-19).

A large area of the rural area is insufficiently covered by tourist infrastructure, especially in the hilly and mountainous area. In the entire area of the municipality, there are marked cycling and hiking trails with a total length of about 250 km, which represents an exceptional **basis for the development of**

tourism based on active rest in nature, through cycling, hiking and mountain climbing activities. There are great opportunities for the development of tourism in rural areas in the form of agro-tourism and eco-tourism, which could become a supplementary offer in rural households. As it was recognized in the main strategic document of the Municipality, the offer of cultural tourism would be significantly strengthened by investing in the development of old crafts and ethnogastronomy as a special aspect of cultural heritage.

The Ljubišnja mountain meets all the conditions for the wider area of that mountain to be declared a regional park. Ljubisnja has exceptional conditions for the construction of a ski resort and the development of summer mountain, adventure, recreational, winter and hunting tourism. The "Ljubišnja" hunting ground, with indigenous game species and a built hunting lodge, is another important tourist resource. In recent years, with the involvement of the non-governmental sector and with the support of the local self-government, the first steps have been taken to valorize this locality. Hiking trails long 64.4.km have been marked and two mountain lodges are under construction. An obstacle to the valorization of all the potential on the Ljubišnja mountain is the poor traffic connection.

The construction of the section of the main road Bijelo Polje-Đurđevića Tara, from Vrulja to Mijalković opens up the possibility of developing all types of tourism in the entire area of Vrulja and Maoč. The importance is additionally strengthened by the proximity of the "Durmitor" National Park, the Tara River and the Tara Bridge. Kosanica and the wider environment, together with the Tara canyon, is surrounded by outstanding natural beauty, good traffic connections and provides good conditions for the development of eco-tourism, agro-tourism and sports-recreational tourism. Also, the village of Bobovo, which is located on the edges of the Tara and Draga river canyons and the Kovač mountain area, have exceptional potential for the development of recreational, health and hunting tourism. The village of Metaljka, on the slopes of Mount Kovač, was one of the most important air spas in the area at the beginning of the 20th century, and has good conditions for a climatic health resort. In the area of Kozica and the valley of the Kozica River, the natural environment has been significantly preserved with an abundance of diverse forests and a large number of watercourses and springs. Here are also the remains of the medieval fortress of the town of Koznik (crossroads of medieval roads), at the foot of which are the remains of an iron mine from that period, as well as the remains of a medieval monastery. So far, 20 km of hiking trails have been marked in that area and work has been carried out to clean up the remains of the aforementioned fortress-city.

In all these areas, it is necessary to provide the necessary infrastructure and accommodation capacities, both in organized rural accommodation (in households) and in facilities that can be built for tourist purposes (renovation of neglected facilities, guesthouses, mountain houses, eco villages, etc.). Recognizing typical local dishes that are prepared in a traditional way in certain parts of the municipality can lead to their valorization and inclusion in the catering offer through the definition of tourist trails such as: cheese routes, honey routes, etc.

The Ćehotina River has all the predispositions for the development of fishing tourism as well as for the development of sports-recreational tourism on the water. The course of the Ćehotina River is diverse, which makes it attractive for anglers and guarantees a good ambient experience. The locations downstream from Pljevlja are particularly attractive. We can single out two Fly Fishing zones on the course of the Ćehotina: Rabitlje and Voloder. The attraction of both zones is that only autochthonous and completely wild fish are represented: grayling, trout and Danube salmon. On Ćehotina there is also a reservoir - Lake Otilović, rich in brook trout, chub, common nase, and also Danube salmon. The lake is suitable for fishing from the shore and fishing from a boat. It is located 5 km upstream of Ćehotina River from Pljevlja, and it is about 11 km long. Although it is artificial, it managed to fit into the environment, there are a lot of viaducts and curves, which is a very interesting phenomenon in nature.

Support for the promotion of tourist capacities in the field of hunting and fishing tourism in the municipality is provided by the non-governmental associations "Lipljen", "Ipon" and the Pljevlja Hunters Association.

Borovičko lake is located 6 km from Pljevlja, and it is only 300 meters from the main highway Pljevlja - Đurđevića Tara. The lake has an area of about 22 ha, and it is from 1 m to 40 m deep This place has the potential to become a sports and recreation zone, with accompanying facilities, a system of pedestrian paths and richly landscaped and green areas, which would be used as a city picnic area in the future. The plan envisages the formation of a complex of sports fields, a visitor center with accompanying contents of central and commercial activities, along with the arrangement and urban furnishing of the entire area with a system of pedestrian paths and abundant greenery. The landscape design of this locality represents the potential for the development of fishing tourism.

In the context of the achievement of the general strategic goal of the Municipality of Pljevlja, which includes the preservation of historical, religious and cultural heritage, through the protection of tangible and intangible cultural heritage, there are two cultural monuments of category I (monuments of exceptional importance), as well as four cultural monuments of category II (monuments of great importance) registered with the Institute for the Protection of Cultural Monuments of Montenegro for this municipality. During 2020, the process of expropriation of part of the plots under which, according to valid assumptions, the remains of the center of the ancient city are located, began.

12.4 Development of traffic infrastructure

The only form of traffic on the territory of the Municipality of Pljevlja is road traffic. Public roads on the territory of the municipality are categorized into: main roads, regional roads and local roads. In addition to public roads, in Pljevlja, there is also a network of uncategorized roads consisting of rural, field and forest roads, roads on embankments for flood protection, etc. The only main road on the territory of the Municipality of Pljevlja is the M-8, which stretches in the east-west direction, from the border of the Republic of Serbia through Mihailovica, Pljevlja to Gradac. This is the most frequent road and it stretches 36.3 km through the territory of the municipality. The highest share of the realized traffic refers to freight traffic that takes place exclusively on roads.

The main regional routes are: Regional road R-3 (Pljevlja - Metaljka) with a length of 39.7 km, extends in the northwest direction from Pljevlja to the border with Bosnia and Herzegovina, while one branch of road R-3 separates to the east, from Dajević Han towards Čemerno (border with the Republic of Serbia). Regional road R - 4 stretches from Pljevlja to Đurđevića Tara and further towards Mojkovac. Regional road R - 10 stretches from Sljepač bridge over Vrulja to Trlica in a length of about 29.6 km. The regional road R - 21 stretches in the east-west direction, in the continuation of the main road M - 8 from Gradac via Poros to Šula in a length of 10.8 km. At the very border of the municipality, the regional road Pljevlja - Mojkovac (R - 4) separates from the regional road Đurđevića Tara - Žabljak - Šavnik - Nikšić (R-5).

The road network of the municipality of Pljevlja is underdeveloped compared to other municipalities in Montenegro and municipalities from neighboring countries. The nearest airports are Podgorica and Tivat airports. The nearest railway line to the municipality of Pljevlja is Belgrade-Bar. Although the construction of the railway line from Bijelo Polje to Pljevlja was announced many times, this project was not recognized even in the Strategy for the Development of Traffic in Montenegro for the period from 2019 to 2035, which was drafted and adopted in 2019.

In recent years, the citizens of Pljevlja have been left without organized bus transport, not only in local

but also in intercity transport. Currently, there is intercity transport between Pljevlja and Žabljak with six departures per day, thanks to the fact that numerous carriers maintain lines towards Nikšić and Podgorica via Žabljak. There is one line to the coastal towns via Mojkovac and Kolašin. When it comes to neighboring municipalities: Bijelo Polje, Priboj or Foča, there is no bus transport services. It is possible to go to Prijepolje by bus once a day, because there is still a Pljevlja-Novi Sad bus line. The situation is similar with Čajnič, because buses run from Pljevlja to Sarajevo every second day of the week. By the way, until 15 years ago, Pljevlja had the best bus connections with neighboring municipalities and with all important centers in the region.

The following is a detailed overview of currently active traffic lines:

Table 91 Active lines in international and intercity traffic

Active lines in international traffic Pljevlja - Prijepolje - Nova Varoš - Užice - Čačak - Gornji Milanovac - Beograd - Novi Sad			
Schedule	Carriers	Regular line/Seasonal line	
12:45 - 21:20 Banbus d.o.o. Regular line			

Active lines in international traffic Pljevlja - Čajniče - Goražde - Sarajevo		
Schedule	Carriers	Regular line/Seasonal line
07:00 - 12:15	In Turist d.o.o.	Every other day of the week

Active lines in intercity traffic Pljevlja - Žabljak - Šavnik- Nikšić- Danilovgrad - Podgorica		
05:00 - 8:30	Radulović d.o.o.	Regular line
6:15 - 9:45	Stanišić d.o.o.	Regular line
7:20 - 11:15	Radulović d.o.o.	Regular line
10:45 - 14:56	Radulović d.o.o.	Regular line
12:00 - 16:12	Stanišić d.o.o.	Regular line
15:23 - 19:30	Radulović d.o.o.	Regular line
15:23 - 19:30	Radulović d. o. o.	stalna linija

Active lines in intercity traffic Pljevlja - Mojkovac - Kolašin - Podgorica - Cetinje - Budva - Tivat - Kotor		
Schedule Carriers Regular line/Seasonal line		
12:05 - 18:02 Vot Turist d.o.o. Regular line		

Currently, there are four lines active on the territory of Pljevlja. The local self-government subsidizes the transport costs in suburban traffic for students and pensioners.

Table 92. Active lines in suburban traffic

Active lines in suburban traffic:	Carriers
Pljevlja - Šula	Radulović d.o.o.
Pljevlja - Zekavice	In Turist d.o.o.
Pljevlja - Vodno	Registarski prevoznik Gačević
Pljevlja - Vraca	Registarski prevoznik Marić

The total number of auto taxi carriers that are registered for the transport of passengers in local road traffic is 38 (5 taxi associations and 33 entrepreneurs) with a total of 97 vehicles (the number of issued copies of licenses for individual vehicles). According to available data from the Secretariat for the Economy of the Municipality of Pljevlja, 9 vehicles are registered for regular and suburban transport, while the total number of registered carriers for freight transport is 2, with a total of 10 vehicles for freight transport. The number of registered carriers for transport for their own needs is 51 with a total of 137 registered vehicles.

Maintenance of the network of local roads is the responsibility of the Secretariat for Spatial Planning of the Municipality of Pljevlja and the Public Enterprise for the Maintenance and Protection of Local Roads of Pljevlja. Although the priority of the local self-government is to improve the state of the road infrastructure, with the intention of raising the quality of life of citizens and creating conditions for a more dynamic development of Pljevlja, the main challenge in maintaining the local road network is outdated mechanization and high maintenance costs, so in the winter period local road routes are often detoured and impassable due to which the population of the rural area is unable to meet their daily needs.

There are marked cycling and hiking trails with a total length of about 250 km on the municipality's territory, representing an exceptional potential for the development of tourism based on active rest in nature, through cycling, hiking, and mountain climbing activities. We need to keep working on promotion, and one way to do so is through the "Bicycling" event. There are pedestrian zones in the city center (Ulica Kralja Petra I and Trg ora Peruniia). The reconstruction created modern pedestrian zones and improved pedestrian traffic safety. Previously, investments in pedestrian areas were made; in 2019, the local administration built and adapted more than 1,218 m of large and 653.30 m of small curbs, and 2,066 m2 of sidewalks were paved. The municipality of Pljevlja announced a tender in May 2022 for the asphalting of road and pedestrian surfaces on city roads, with 500,000 euros allocated - twice as much as in 2021.

13. COMMUNAL INFRASTRUCTURE

JP V0D0V0D PLJEVLJA maintains the water supply in Pljevlja. In the dry period, the city receives about 140 l/sec, in the rainy part of the year, about 200 l/sec. The total length of the pipeline is 73,904 m. There is a total of $4,000 \text{ m}^3$ of reservoir space.

The city of Pljevlja is supplied with water from several water sources, which makes the water supply system extremely complex to maintain. In order to improve the quality of water and the reliability of water supply, as well as to preserve drinking water resources, several important investment projects were implemented, among which are:

- During 2021, works on the reconstruction of the existing Pliješ drinking water processing plant worth 900,000 euros were completed. Work has begun on the construction of the Bogiševac plant worth over 400,000 euros.
- In 2022, it is planned to start work on the new Pliješ plant worth over 2.8 million euros, for the processing of lake water from the Otilovići reservoir, financed by the state, as well as work on the Breznica plant worth 1.7 million euros, with half of the money provided from the state budget. In addition to investments in processing capacities and the primary distribution network, the municipality of Pljevlja also plans to implement projects on the reconstruction and construction of the secondary distribution network in the city.

The total length of the built sewage network at the city level is 56 km, of which 7 km is atmospheric sewage, which amounts to some 12% of the constructed atmospheric sewage. In this regard, the municipality of Pljevlja is slightly below the national average of 20%.

In 2019, the construction of the Wastewater Treatment Plant and the main city collector was completed, which is one of the most significant infrastructure projects in the field of wastewater management. There is no satisfactory cadastre of the existing sewage network, and even with numerous technical documentation, it is difficult to determine a more precise picture of the sewage system. The sewage system of the central core of the city is mapped in the Geographical Information System - GIS, which needs to be updated and supplemented with the newly built network. One of the priorities of the municipality is the separation of fecal and atmospheric sewage, as well as the reconstruction of the primary and secondary sewage network, which will contribute to the better functioning of the newly built wastewater treatment plant. Wastewater management is one of the most important issues that needs to be resolved in the future. The challenge is to provide funds for the implementation of larger projects on which the functioning of the waste water removal system depends. So far, as part of the first phase, the Židovici wastewater treatment plant worth 6 million euros (3.5 million EU grant) has been built, as well as the main inlet collector worth over 1 million euros (EU grant). The preparation of the second phase of the project of reconstruction and construction of fecal and atmospheric sewerage, with an estimated value of over 7 million euros, is underway. On the territory of the municipality, public lighting covers the urban city area, including the suburbs of Gradac, Sula and Odžak with around 1,480 lighting fixtures. Public lighting management is entrusted to the utility company DOO ČISTOĆA PLJEVLJA. As public lighting, due to its age and outdated technology, is in a rather poor condition, during 2019 and 2020, funds in the amount of about 82,107.48 euros were allocated for the purchase of equipment and consumables, construction of new and maintenance of existing public lighting.83

Also, UNDP provided financial and implementation support for the implementation of energy efficiency measures, where an energy audit was carried out and the exact state of the public lighting system was

determined, an overview of the optimal and best technical solutions was given, as well as a proposal for a financing model for the reconstruction and modernization project of public lighting.

Of other infrastructure projects, several projects have been implemented or are in the process of being implemented, the most important of which are:

- During 2020 and 2021, the local self-government financed the installation of more than 9,000 m2 of new energy-efficient facades on 11 public buildings with over 7,500 m2 of business and residential space. In an earlier period, the facade of the Municipal Assembly building, the Pljevlja building of the DPO (social and political organizations), the building of the Secretariat for the Economy and State Funds was reconstructed, so that all the buildings in which the local government bodies function are energy efficient.
- Energy inspection of buildings and facilities for collective housing that are heated from the boiler house in Skerlićeva Street in order to reduce the amount of thermal energy needed for heating, given that the facility in Skerlićeva Street significantly contributes to the increase in pollution.
- Preparation of an Energy audit report for each building and implementation of energy efficiency
 measures through subsidizing thermal insulation of facades, replacement of external joinery,
 procurement of stoves and pellet boilers.

Based on the Municipality of Pljevlja's Budget Decision for 2021 and the Agreement signed between the Municipality of Pljevlja and the United Nations Development Program (UNDP) on the implementation of the "Subsidy model for measures to increase energy efficiency and reduce pollution in the municipality of Pljevlja's housing sector," approximately 230,000 euros was allocated for 84 subsidies, based on the published list of results of the public call in April 2022. Six months later, a supplementary public call was issued to increase the number of beneficiaries who will receive financial and

14. ENVIRONMENTAL PROTECTION AND SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

The local self-government recently adopted the "Local Environmental Protection Plan of the Municipality of Pljevlja for the period 2022-2026", which was prepared by the Municipal Service for Environmental Protection. Through the local action plan, several operational goals were recognized in terms of air, water, soil, waste management, biodiversity, urban green areas and energy efficiency.

Air - operational objectives

- Reducing the level of air pollution in the Municipality of Pljevlja
- Improvement of air quality monitoring

IMPLEMENTED	PLANNED
 Regulations were adopted for the implementation of the law on industrial emissions Donijet je Plan kvaliteta vazduha za opštinu Pljevlja i Akcioni plan za opštinu Pljevlja u slučaju prekoračenja ili rizika od prekoračenja praga upozoravanja za sumpor-dioksid. The Air Quality Plan for the Municipality of Pljevlja and the Action Plan for the Municipality of Pljevlja in case of exceeding or risk of exceeding the warning threshold for sulfur dioxide were adopted 	 Implementation of the environmental reconstruction project of the Pljevlja Thermal Power Plant Optimization of the electrostatic filter of the Pljevlja thermal power plant Construction of the main heat pipe Construction of the primary and secondary network in the function of heating the city Construction of a dedusting system - Coal Mine and Gradir Montenegro d.o.o. Promotion of the use of alternative fuels for vehicles and eco-mobility Installation of new eco charging stations for electric vehicles Regular maintenance and calibration of measuring instruments and other equipment for air quality monitoring Further improvement of the website of the Air Quality Monitoring Agency Installation of measuring stations that monitor the impact of industrial pollution on air quality near the Pljevlja Thermal Power Plant

Land - operational objectives

 Preventing the increase in the concentration of soil pollution on the territory of the Municipality of Pljevlja, which originates from activities in the fields of industry and mining

IMPLEMENTED	PLANNED
 Soil sampling - examination of hazardous and harmful substances on land in the area of the municipality of Pljevlja Remediation of Cassette 2 - "Maljevac" ash and slag landfill startedpepela i šljake "Maljevac" Remediation of the Gradac flotation tailings pond Recultivation in the part of P.K. "Potrlica" 	 Recultivation of degraded land in accordance with legal obligations Continuation of disposal (cassette system) at the Maljevac landfill, with phased reclamation of the cassettes, until the final remediation of this location Recultivation of flotation tailings (II phase) of the lead and zinc mine "Šuplja stijena" Technical and biological reclamation at the external landfills "Jagnjilo" and "Grevo" and internal landfills in P.K. "Portlica". Reclamation of former mines in Šumani

Water - operational objectives

- Improving the quality of water/watercourses in the territory of the Municipality of Pljevlja
- Improving the quality of drinking water

IMPLEMENTED	PLANNED
Construction of the wastewater treatment plant and the main city collector	 Reconstruction of the water supply network, construction of a plant for processing the lake water of the reservoir "Otilovići" Construction of drinking water purification plants in Breznica and Bogiševac, as well as the main pipeline Brdo Pliješ - urban area Reconstruction of the main raw water supply Potpeć/PPV Pliješ with a return pipeline Reconstruction of the city water supply distribution system Solving the problem of waste water with the construction of a settling tank from the Coal Mine Regulation of the Ćehotina and Breznica riverbeds Solving the problem of the Mjednički brook Solving municipal waste disposal on the banks of rivers

Waste management - operational goals

• Establishment of a functional waste management system on the territory of the Municipality of Pljevlja

IMPLEMENTED	PLANNED
 Waste management infrastructure is being built in accordance with the Local Plan for the Management of Municipal and Non-hazardous Construction Waste Disposal of flotation tailings (II phase) of the lead and zinc mine "Šuplja stijena" Placement of containers (bins and containers) for collecting communal waste by zone 	 Development of the Local Plan for Municipal and Non-Hazardous Construction Waste Management for 2024, based on the anticipated State Plan for Waste Management in Montenegro for the period 2023-2028. year, which will include all types of waste in accordance with the Waste Management Law. Construction of a transfer station with a recycling center Establishment of a system for separate collection of communal waste at the point of origin Establishment of a system for disposal and processing of biodegradable waste Opening of a compost site at the Jagnjilo landfill Solving the problem of the wood waste landfill of the "Vektra Jakić" Corporation Remediation of unorganized waste disposal sites Raising public awareness in the area of municipal and non-hazardous waste management

Biodiversity - operational goals

• Establishment of a sustainable model of management and protection of existing biodiversity on the territory of the Municipality of Pljevlja

REALIZOVANO	PLANIRANO
 Biodiversity monitoring of certain localities on Ljubišnja, in the Ćehotina and Voloder watercourse Monitoring of flora biodiversity in the area of Ljubišnja-Popov do Biodiversity research in the area of the upper reaches of the Ćehotina, City Park and Biserka for the purposes of creating protection studies 	 Proclamation of nature park Gornji tok Ćehotina Increasing the resilience of forests and reducing the threat of forest fires, protecting forests from diseases and pests Placing under protection the linden tree in Odžak, the mulberry tree in the village of Ljutići, the oak tree in the village of Brvenica, due to their characteristics and age in accordance with the Law on Nature Protection. The establishment of a sustainable model for the exploittation of forest wealth on Ljubišnja is a priority in order to protect this mountain, through the declaration of the Ljubišnja Nature Park, in accordance with the Law on Nature Protection. Preparation of the Plan of measures and program for monitoring the state of the environment, which should be carried out until the end of the Ecological Reconstruction of Block I of the Pljevlja Thermal Power Plant. Production of autochthonous salmonid fish species in the hatchery on the Breznica River and stocking activities with the aim of remediation of the Ĉehotina River after the 2019 fish deaths. Education and enlightenment of people about the need to preserve biodiversity through the activities of the NGO sector. Placing certain areas under protection (City Park and Ljubišnja mountain) Prevent invasive alien species in terrestrial and aquatic ecosystems, in cooperation with fishing and hunting societies Fight against poaching and trade in protected species. Development of the Ćehotina river valorization plan in order to preserve the fish stock and develop fishing tourism has already been initiated by SRK "Lipljen". Development of the Local Action Plan for Biodiversity of the Municipality of Pljevlja for a four-year period. Activities to remove or reduce the negative impacts of dams or barriers in water ecosystems.

Energy efficiency - operational goals

• Building the necessary capacities for the establishment of a sustainable energy efficiency system

REALIZOVANO	PLANIRANO
 Pošumljavanje okolnih, potpuno ogoljelih brda i podizanje zelenih površina unutar urbanog dijela naselja Obnavljanje gradskih parkova i formiranje novih zelenih površina Ozelenjavanje Spomen parka Stražica 	 Izrada Katastra gradskih zelenih površina Obnavljanje gradskih parkova i formiranje novih zelenih površina Rekonstrukcija Gradskog parka Valorizacija zelenog masiva Stražice s novim sadržajima za rekreaciju građana i odmor Uređenje šuma urbane zone Podizanje novih drvoreda Izgradnja novih dječijih i sportskih igrališta Uređenje obala rijeka Breznice i Ćehotine

Energy efficiency - operational goals

• Building the necessary capacities for the establishment of a sustainable energy efficiency system

IMPLEMENTED	PLANNED
 Subsidizing the purchase of an environmentally friendly energy source - pellets, Preparation of reports on detailed energy audits of buildings Installation of thermal facades in facilities used by local and state administration bodies, as well as collective housing facilities that are heated from the boiler room in Skerlićeva street or have the option of being connected to heating from the said boiler room 	 Continuation of subsidizing the purchase of pellets Replacement of existing street lighting with energy-efficient lighting Continuation of the implementation of energy efficiency measures in residential and commercial buildings Stopping the operation of all boiler rooms and reducing the number of individual combustion chambers Replacement of heating devices and energy efficiency (EE) measures in the household and public sectors Development of a Local Action Plan (SECAP) for energy and climate development

15. HEALTH CARE

In the area of the municipality of Pljevlja, health care is organized through the JZU General Hospital Pljevlja, the JZU Health centre Pljevlja and the Institute for Emergency and Medical Assistance.

JZU General Hospital Pljevlja is a secondary level health care institution in Montenegro which provides excellence in health services both in the field of diagnostics and in outpatient-polyclinic and inpatient treatment of patients, through teamwork with the maximum use of available resources, and with the continuous improvement of the quality of work through the implementation of planned activities aligned with the national health policy and the needs of the population, and with the application of modern medical and clinical technologies.

JZU General Hospital Pljevlja has existed since 1991. From its establishment to the present day, this institution strives to provide high-quality health care to the population with its work and quality, in accordance with its capabilities and adapting it to needs. JZU General Hospital Pljevlja is the holder of planning and program tasks for hospital health care of the population in the area of the municipalities of Pljevlja and Žabljak.

Specialist and hospital health care of the population is provided in the areas of:

- Internal medicine with infectious diseases
- Children's diseases
- General surgeries with orthopedics and urology
- Obstetrics and gynecology.

As part of the General Hospital, there are also specialist outpatient clinics:

- Internist
- Surgical
- Orthopedic
- Dermatological
- Urological
- Ophthalmological
- Neurological
- Infectious
- Otorhinolaryngology
- Biochemical and hematology laboratory
- Hemodialysis service
- Ultrasound diagnostics
- Physical therapy
- CT diagnostics.

The plan to reform and improve the work of the General Hospital in Pljevlja is based on the project of improvement and management in the healthcare system in Montenegro, which was adopted in 2011. The reform plan is based on the need to address spatial capacity, personnel, infrastructure facilities and secondary infrastructure network, apparatus and means for diagnostics and therapy. In addition to personnel issues, one of the pressing problems is the dilapidation of infrastructural facilities.

General goals are based on improving the quality and safety of health care, optimizing the hospital sector, in order to rationalize the use of available resources and achieve savings that will be reinvented in the hospital system. This means limiting the growth of costs, promoting the quality and efficiency of service provision and the rational use of resources. For the purpose of financial sustainability of the health system of the Pljevlja General Hospital, it is also necessary to improve the quality of health services, review and rationalize medical and non-medical costs.

There are eight outpatient clinics Within the Health Center, distributed in rural settlements. The Health Center in Pljevlja, in addition to primary health care for the population of the municipal center, the local community (MZ) Gotovuša, MZ Kruševo, MZ Crljenica, MZ Odžak, MZ Zabrđe, MZ Golubinja, MZ Moćevac, MZ Centar and MZ Ševari, also has specialist services for the population of the entire territory of the municipality. Since the municipalities of Pljevlja and Žabljak cover a large territory, along with unfavorable climatic conditions (long winter and impassable roads), the transport of patients to the Clinical Center of Montenegro is very difficult. In an effort to permanently satisfy the need of the population of the municipality of Pljevlja for quality health care, it is necessary to begin the implementation of the project of building a new hospital building.

In the territory of the municipality of Pljevlja, there is one state-owned pharmacy and several privately owned pharmacies, two of which are part of the network of private health institutions.

The municipality of Pljevlja co-finances the process of medically assisted fertilization. Anyone can apply for funds, regardless of marital status, that is, the invitation applies to married and cohabiting partners, as well as women who do not live in a married or cohabiting union, and who cannot obtain funds for the procedure at the expense of the Health Insurance Fund of Montenegro. Municipal funds are used to co-finance: up to 80% of the costs, with a maximum of 2,000 euros in the country, and up to 60% of the costs, with a maximum of 4,000 euros for the procedure abroad.

15.1 Public health

Data on illness and death in the municipality of Pljevlja, and in accordance with health records and available health-statistical data, are kept at the Institute for Public Health of Montenegro. An overview of data on cancerous diseases, respiratory and mental in children and adults, by gender for the municipality of Pljevlja and overall at the level of Montenegro were given on the basis of the information system of primary health care, i.e. on the basis of recorded visits of patients in the Health Center⁸⁵.

Although the aforementioned diseases are at the very top of the world's health problems, the health status of the population is influenced by many factors: the living environment, the health care system of the population, the behavior of the individual, family and/or social community, and numerous hereditary factors.

Environmental factors directly or indirectly affect health to a significant extent. Among the registered patients (in the categories newly registered and the number of all patients who came forward), there is a noticeable increase in the number of patients, especially in the case of diseases of the respiratory system.

Table 93. Malignant tumors (C00-C97) - Newly registered - incidence

			Nun	Number	Chara								
Year of	up to 19 years 20+ years							Total			Share		
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	%
2017		1	1	107	76	183	107	77	184	1,687	1,552	3,239	5.68
2018			0	112	102	214	112	102	214	1,871	1,710	3,581	5.98
2019		1	1	110	98	208	110	99	209	1,859	1,749	3,608	5.79
2020	1	1	2	71	68	139	72	69	141	1,638	1,567	3,205	4.40
2021		1	1	85	78	163	85	79	164	1,777	1,572	3,349	4.90

Source: Institute for Public Health of Montenegro

Table 94. Malignant tumors (COO- C97) - Number of all patients who visited the clinics - prevalence

			Nuber	Number	Chara								
Year of	Up t	o 19 ye	ears		20+ year	s		Total			Total		Share
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	%
2017		2	2	293	291	584	293	293	586	4,756	6,141	10,897	5.38
2018			0	303	322	625	303	322	625	4,990	6,519	11,509	5.43
2019		1	1	315	319	634	315	320	635	5,201	6,821	12,022	5.28
2020	1	2	3	272	299	571	273	301	574	5,024	6,646	11,670	4.92
2021	1	3	4	266	297	563	267	300	567	5,142	6,772	11,914	4.76

Source: Institute for Public Health of Montenegro

Table 95. Diseases of the respiratory system (J00–J99) - Newly registered - incidence

			Number	Share									
Year of	Up to 19 years 20+ years							Total			Total		
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	%
2017	495	534	1,029	868	1,092	1,960	1,363	1,626	2,989	43,961	51,602	95,563	3.13
2018	454	454	908	906	1,049	1,955	1,360	1,503	2,863	46,360	54,472	100,832	2.84
2019	418	423	841	784	1,021	1,805	1,202	1,444	2,646	45,959	53,049	99,008	2.67
2020	294	232	526	1,163	1,065	2,228	1,457	1,297	2,754	42,115	43,306	85,421	3.22
2021	350	351	701	1,835	1,742	3,577	2,185	2,093	4,278	52,340	54,942	107,282	3.99

Source: Institute for Public Health of Montenegro

Table 96. Diseases of the respiratory system (J00–J99) - Number of all patients who visited the clinics - prevalence

	Number of patients – Pljevlja												Share
Year of	ırs		20+ years	;		Total			Total		Silare		
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	%
2017	1,324	1,359	2,683	1,660	2,294	3,954	2,984	3,653	6,637	88,680	104,277	192,957	3.44
2018	1,280	1,229	2,509	1,699	2,265	3,964	2,979	3,494	6,473	93,752	111,132	204,884	3.16
2019	1,129	1,087	2,216	1,603	2,253	3,856	2,732	3,340	6,072	94,088	110,970	205,058	2.96
2020	830	763	1,593	1,923	2,057	3,980	2,753	2,820	5,573	83,226	92,075	175,301	3.18
2021	806	758	1,564	2,985	3,272	6,257	3,791	4,030	7,821	95,680	107,238	202,918	3.85

Source: Institute for Public Health of Montenegro

Table 97. Mental disorders and behavioral disorders (F00-F99) - Newly registered - incidence

		Nu	Number of										
Year of	Up	to 19 yea	nrs	20+ years			Total				Share		
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	%
2017	28	10	38	130	197	327	158	207	365	4,142	5,213	9,355	3.90
2018	16	11	27	158	228	386	174	239	413	4,539	5,926	10,465	3.95
2019	24	17	41	157	216	373	181	233	414	4,101	5,259	9,360	4.42
2020	19	14	33	121	141	262	140	155	295	3,417	4,085	7,502	3.93
2021	26	8	34	117	176	293	143	184	327	3,813	4,613	8,426	3.88

Source: Institute for Public Health of Montenegro

Table 98. Mental disorders and behavioral disorders (F00- F99) - Number of all patients who visited the clinics - prevalence

	Number of patients												Share
Year of	nrs		20+ years	s		То	tal		Total		%		
observation	М	F	Σ	М	F	Σ	М	F	Σ	М	F	Σ	
2017	40	25	65	429	562	991	469	587	1,056	10,013	11,818	21,831	4.84
2018	23	21	44	448	589	1,037	471	610	1,081	10,605	12,831	23,436	4.61
2019	33	29	62	460	590	1,050	493	619	1,112	10,306	12,249	22,555	4.93
2020	30	21	51	425	513	938	455	534	989	9,704	11,063	20,767	4.76
2021	37	16	53	413	491	904	450	507	957	10,040	11,154	21,194	4.52

Source: Institute for Public Health of Montenegro

Data on deaths are provided as preliminary (unofficial) data for the period 2017-2019, based on the submitted death certificates from health institutions. These are also the last available data, considering the period of the pandemic caused by the COVID-19 disease, which began in 2020. The data are given by causes of death and gender for the mentioned diseases, as well as at the overall level for Pljevlja and Montenegro.

Table 99. Number of deaths - Malignant tumors (COO - C97)

Year of observation	Pljevlja municipality				MONTENEGRO	Share		
	М	F	Σ	М	F	Σ	%	
2017	58	27	85	726	523	1,249	6.81	
2018	49	39	88	655	534	1,189	7.40	
2019	43	29	72	638	560	1,198	6.01	

Source: Institute for Public Health of Montenegro

Table 100. Number of deaths - Diseases of the respiratory system (J00 - J99)

Year of observation	Pljevlja municipality			1	MONTENEGRO	Share		
	М	F	Σ	М	F	Σ	%	
2017	13	3	16	156	93 249		6.43	
2018	8	6	14	137	98	235	5.96	
2019	10	4	14	193	100	293	4.78	

Source: Institute for Public Health of Montenegro

Table 101. Number of deaths - Mental and behavioral disorders (F00 - F99)

Year of observation	Pljevlja municipality				MONTENEGRO	Share	
	М	F	Σ	М	F	Σ	%
2017			0	15	18	33	-
2018		1	1	12	14	26	3.85
2019	1		1	27	39	66	1.52

Source: Institute for Public Health of Montenegro

15.2 Health and Safety at Work

In the field of health and safety at work, Montenegro currently lacks a strategic framework relevant for this field. Namely, in September 2021, the Ministry of Economic Development formed a multi-sectoral working group with the mandate of preparing the National Strategy for Health and Safety at work for the period 2022-2027. The labor protection fund provided for in the previous strategies (for the period 2010-2014 and 2016-2020) has not yet been formed, and the available statistics are quite limited. The reason for this is the forms of reports on work injuries, which are based on free text entry, without the use of a code book, which makes data processing difficult. The following table shows the record of injuries at work for the period 2019-2020. Compared to 2018 when 1199 work injuries were reported, a downward trend is noticeable.

Table 102. Record of injuries at work

Year	Total	Male	Female	Gender not entered	
2019	1034	657	366	11	
2020	875	567	308	/	

Source: Ministry of Economic Development and Tourism, https://www.gov.me/cyr/clanak/zastita-i-zdravlje-na-radu

The following table provides an overview of fatal, collective and serious injuries at work, which is managed by the labor inspectorate.

Table 103. Number of fatal, serious and collective injuries at work in the period 2011-2019

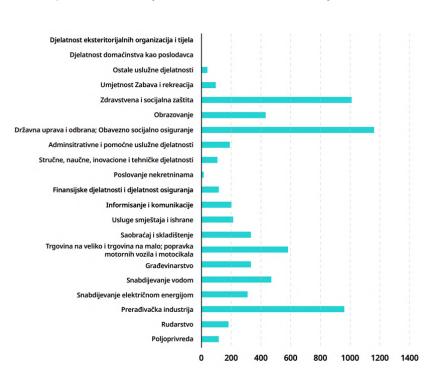
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatal injuries	5	7	6	6	9	4	5	9	7
Serious injuries	19	40	37	45	26	14	22	17	20
Collective injuries	1	2	1	2	1	3	0	2	0

Source: ILO, https://www.ilo.org/wcmsp5/groups/public/—-europe/—-ro-geneva/—-sro-budapest/documents/publication/wcms_811857.pdf

By comparing the incidence of fatal injuries at work in the EU and in Montenegro for 2017, it was noticed that Montenegro has a fairly high incidence. The report further notes that in 2016 and 2017, the lowest incidence of injuries at work was registered in Montenegro and that there is a lot of room for the prevention of injuries at work in Montenegro. When it comes to the causes of fatal, serious and collective injuries at work, the Labor Inspectorate stated the following in its 2019 report:

- 1) Non-application of safety and health measures at work (fall from a height or into a depth, electric shock, impact/crushing of a log),
- 2) Hiring persons who are not qualified for safe work in the jobs they perform,
- 3) Hiring persons who have not been previously examined for medical fitness,
- 4) Obsolescence of means of work.

Based on unofficial statistics from Dr. Lejla Refka Dervišević's specialist paper which shows the number of injuries at work in the period 2008-2018 according to the sector in which the injured person is employed, it turns out that the highest number of injuries at work was registered among employees in the state administration sector, closely followed by healthcare sector. Paradoxically, although the construction industry was extremely active in Montenegro in the previous period, the number of injuries at work in the construction industry is lower than in the education sector. This paradox is the result of employees' lack of information and education in many sectors, but it also emphasizes the importance of employment relationship stability. Thus, in Montenegro, the number of reported workplace injuries indicates the dominant type of employment in a given sector rather than the risk of performing work in that sector. We can see from the graph below that the number of injuries at work in the mining sector for the mentioned period is relatively small compared to other sectors. In addition, no workplace collective accident was identified during discussions with the Coal Mine and TPP management.



Graph 38. Number of injuries at work 2008-2018. according to sectors

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