



Municipality of Suharekë/Suva Reka

Cross-Sectoral Intervention Plan (CSIP) for Climate Change 2023-2028

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Acronyms and abbreviations used in the text:

CSIP	Cross-sector Intervention Plan
NAMA	Nationally Appropriate Mitigation Actions
MGGC	Municipal Green Growth Center
EE	Energy Efficiency
RES	Renewable Energy Sources
CO ₂	Carbon Dioxide
HVAC	Heating, Ventilation and Air Conditioning
GHG	Greenhouse Gases
MEO	Municipal Energy Office
MEM	Municipal Energy Manager
UNDP	United Nations Development Programme
nZEB	Near Zero Energy Buildings
MEEAP	Municipal Energy Efficiency Action Plan
MED	Municipal Education Directorate
FMC	Family Medicine Center
MFMC	Main Family Medicine Center
PLSS	Primary and Lower Secondary School
PV	Photovoltaic
KEEF	Kosovo Energy Efficiency Fund
ESCO	Energy Service Companies
LED	Light emitting diode
MWMP	Municipal Waste Management Plan
MESPI	Ministry of Environment, Spatial Planning and Infrastructure
MDP	Municipal Development Plan
MZP	Municipal Zoning Map
EU	European Union
m	Meter
m ²	Square meter
m ³	Cubic meter
kgCO ₂ /year	Kilograms of carbon dioxide per year
MoE	Ministry of Economy
mil. m ³	Million cubic meters
km	Kilometer
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MTI	Ministry of Trade and Industry
€	EUR

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1. Executive Summary

To be effective, climate change mitigation and adaptation actions need to be mainstreamed across sectors and greater policy coherence is essential. The municipal sectoral departments therefore need to recognise and assess the risks of climate change and undertake necessary measures in their respective sector. In addition, the Municipal Green Growth Center established in Suharekë/Suva Reka is the key because climate change poses risks to multiple sectors and requires co-ordination and facilitation to avoid conflicting or duplicative measures.

The CSIP gives a comprehensive account of the potential mitigation and adaptation intervention of five key sectors at municipal level. The sectors in focus in the CSIP are Energy, Waste Management, Public Services, Transport and the Rural development. Furthermore, the rural development sector is elaborated with its subsectors, such as Agriculture, Biodiversity, Forestry and Rural Tourism. For each of sectors, are defined measures and actions which will contribute to sector decarbonisation and adaptation to climate change. The following table summarizes the number of objectives, measures, actions to implement, and the estimated financial cost for the implementation of all measures and activities. The total estimated budget for implementation is 72,667,033.00 euro.

Table 1. Number of objectives, measures, actions, and their implementation cost by sector

	Energy	Waste management	Public Services	Transportation	Rural development	Total
Number of objectives	8	5	5	5	4	27
Number of measures	11	9	7	10	12	49
Number of actions	31	21	19	23	51	145
Implementation costs (€)	17,334,000,0	2,290,000.0	42,627,033,0	4,256,000,0	6,160,000.0	72,667,033

The estimated CO₂ emission reduction according to proposed interventions for implementation in this CSIP and based on the data available shows estimated GHG emission reduction potential of 1290.74 tCO₂ per year. However, this potential is even higher as for some proposed interventions in the sectors, the calculation of reduction of the CO₂ emission can be performed through detailed assessments, and which are beyond scope of this CSIPs. For example, the preliminary analyses in the sector of energy, shows potential of CO₂ emissions reduction by 47.79%, through interventions in public building and street lightning.

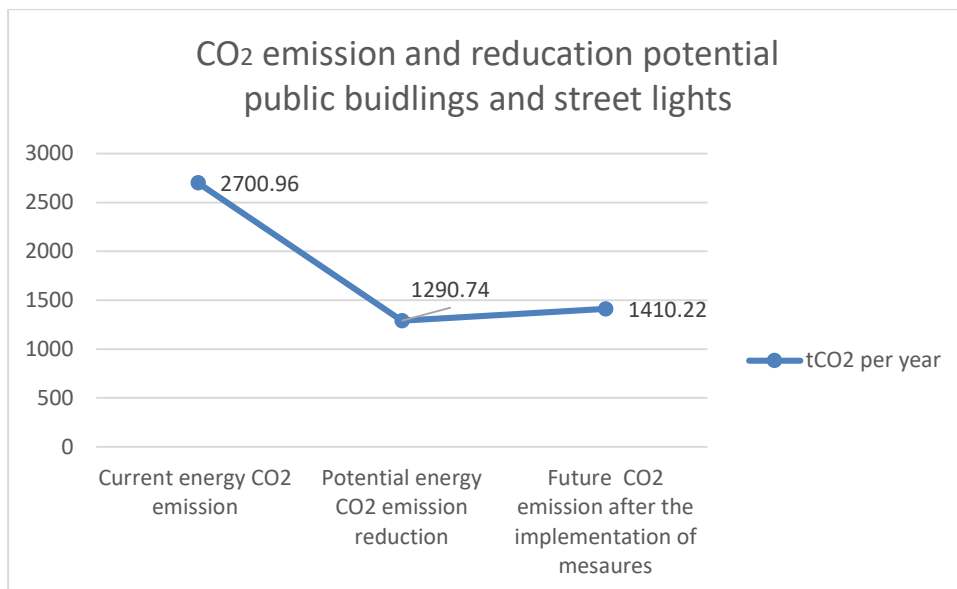


Figure 1. Comparison of CO₂ emission reduction compared with the calculated CO₂ emissions from the energy consumption of municipal public buildings and public street lighting according to the MEEAP 2019-2021

This GHG emission reduction potential does not include energy data i.e from residential sector, due to no data analyses. However, the GHG Inventory which will be developed for Suharekë/Suva Reka Municipality, will provide insight of emission from all sectors, and will enable analyses of the reduction potential.

The CSIP serves will serve as a guiding document for local climate action in Suharekë/Suva Reka and its transition to sustainable green development. The participatory process which involved not only institutions, but also relevant players from the private sector and civil society enabled inclusion of gender and social sensitive climate actions in the CSIP.

2. Introduction

In today's world, climate change has turned into one of the major challenges faced at the global level, and scientific research has shown its principal cause is the increase in greenhouse gas emissions caused by the burning of fossil fuels, intensive agriculture, and deforestation. Climate change impact on a given sector and its vulnerability may be similar in a number of cases or in a number of different countries, alas, unfortunately there are no general guidelines for adaptation. Each case is unique and each case requires an individual solution - climate change has a global impact, however, climate change adaptation measures are obviously tailored to the local circumstances of the particular country or territory. Climate change consequences on society and social processes are diverse, but they all lead to an increase in the vulnerability of people and natural systems. Actions dealing with climate change are possible in two ways, which are: actions to eliminate or reduce the causes of climate change, namely prevention or mitigation of climate change; or actions to adapt to the consequences of climate change, namely adaptation to climate change. Climate change mitigation aims to reduce greenhouse gas (GHG) emissions and/or increase the absorption capacity of these gases.

Embedding effective and equitable adaptation and mitigation in development planning can reduce vulnerability, conserve and restore ecosystems, and enable climate-resilient development. This is especially challenging in localities with persistent development gaps and limited resources. Integrated and inclusive system-oriented solutions based on equity and social and climate justice reduce risks and enable climate resilient development¹.

Kosovo² municipalities manage their territory and are responsible for drafting and implementing local development plans. It is particularly important that when drafting these plans, the municipalities include aspects of cross-sectoral coordination for dealing with climate change. In accordance with this, the Municipality of Suharekë/Suva Reka, with the support of the United Nations Development Programme (UNDP), is implementing the "Strengthening Local Action for Climate" Project. The project aims to accelerate efforts to reduce overall greenhouse gas (GH) emissions through cross-sectoral interventions, including climate change mitigation and adaptation measures. The Municipality of Suharekë/Suva Reka has established the Municipal Green Growth Center, which serves as a center for planning interventions and projects, and oversees the municipal "Nationally Appropriate Mitigation Actions" (municipal NAMAs). In the future this will enable the Municipality of Suharekë/Suva Reka to define its priorities regarding climate and mitigation actions.

In order to plan and coordinate joint interventions for climate change, the Municipality of Suharekë/Suva Reka Cross-Sectoral Intervention Plan (CSIP) for Climate Change 2023-2028 includes the energy, transportation, waste management, public services and rural development sectors. This plan also includes suggestions on reducing inequalities within society, whether gender inequalities or marginalized groups. Based on this plan, the Municipality would be able to determine the portfolio of mandatory and potential interventions to achieve the targeted reduction of GHG emissions.

¹ Climate Change 2022, Impacts, Adaptation and Vulnerability; Summary for policy makers

² References to Kosovo shall be understood to be in the context of United Nations Security Council resolution 1244 (1999).

3. Purpose

The cross-sectoral plan aims to define interventions by relevant sectors to achieve the targeted reduction of GHG emissions for the Municipality of Suharekë-Suva Reka through the summary formulation of urban NAMAs interventions by the energy, transportation, public services, waste management and rural development sectors, in order to prioritize interventions.

4. Methodology

For the development of the Cross-Sectoral Intervention Plan (CSIP) for Climate Change for the Municipality of Suharekë/Suva Reka, the same approach and process implemented during the elaboration of the Cross-Sectoral Intervention Plan (CSIP) for Climate Change for the Municipality of Prizren in 2019, was generally followed, due to the fact that the CSIP for Climate Change is the same document, it is equally important, and covers the same sectors for both municipalities. Obviously, the vision of the decision makers, the needs of the people, and the respective municipal context, are not the same and this includes the different vulnerabilities each municipality has towards climate change, which may differ from one Municipality to the other. This has been analysed and the CSIP for Climate Change for Suharekë/Suva Reka is fitting to the circumstances and situation in the local context.

Prior to the initiation of consultations and discussions with the Municipal Green Growth Centre (MGGC), the relevant existing Kosovo wide and municipal sectoral plans and strategies were analysed and served as a starting point for discussion with the MGGC. Actions and suggestions for possible inclusion of gender-related risks, integration of wider opportunities for gender are included as well as the gender-responsive cross-sectoral approach is ensured in the Plan. In close consultation with the UNDP project team and the MGGC it has been agreed on the sectors that will be covered in the CSIP for Climate Change, which are the: energy sector, waste management sector, transportation sector, public services sector, and the rural development sector. Each sector of the Municipality was analysed separately and discussed with the MGGC in the workshops held on April 14-15, 2022 and May 31, 2022. Based on the discussions and proposals from the above-mentioned workshops, the draft Action Plan, with projects divided by sector, was designed. The CSIP for Climate Change contains the proposed projects with details such as: success indicators, institution responsible for implementation, implementation period, investment costs, sources of financing, reduction of CO₂ emissions (wherever it has been possible to calculate) under each action, including implementation prioritization. The draft CSIP for Climate Change was presented to civil society organizations (CSOs) and the private sector in the workshop held on July 20, 2022, where the projects included in the draft CSIP for Climate Change were discussed and new proposals were received from the participants, which were incorporated into the document of the CSIP for Climate Change.

4.1. Action Plan

For each analysed sector, a separate Plan of Actions and Measures for the implementation of the CSIP for Climate Change was developed. The following table

summarizes the number of objectives, measures, actions to implement, and the financial cost for the implementation of all measures and actions.

Table 2. Number of objectives, measures, actions, and their implementation cost by sector

	Energy	Waste management	Public Services	Transportation	Rural development
Number of objectives	8	5	5	5	4
Number of measures	11	9	7	10	12
Number of actions	31	21	19	23	51
Implementation costs (€)	17,334,000,0	2,290,000.0	42,627,033,0	4,256,000,0	6,160,000.0
Cost of implementing entire CSIP for Climate Change:					72,667,033.0

5. Municipality of Suharekë/Suva Reka Profile³

The Municipality of Suharekë/Suva Reka is located in the southern part of Kosovo. It borders with the municipalities of Prizren, Mamushë/Mamuša, Rahovec-Orahovac, Malishevë-Mališevo, Lipjan-Lipljan, Shtime-Štimlje, Ferizaj-Uroševac and Shtërpçë-Štrpce. It lies at a northern latitude of 42°15' - "Sharri/Sar National Park" (south), 42°30' – Berisha/Beriša and Javori Mounts (north). Eastern longitude: 20°45'- Municipality of Rahoveci-Orahovac (west), 21°00'- Jezerci/Jezerac and Guri i Dellocit/Delovački Kamen Mounts (east). It is surrounded by high mountains and in the North-West by the mountains of Pagarusha/Pagaruša and Temeqina/Temećina with altitudes of 796 to 828m, in the North by those of Carraleva/Crnoljevo 922 to 1048m, in the east with the mountains of Jezerci/Jezerac 1677m (Kryet e Ahishtës/Glava Ahišta) and in the South-East with the mountains of Sharri 2092m (Dera e Pashës/Pašina Vrata) until the plain (lowland) of Prizren lies in the west.

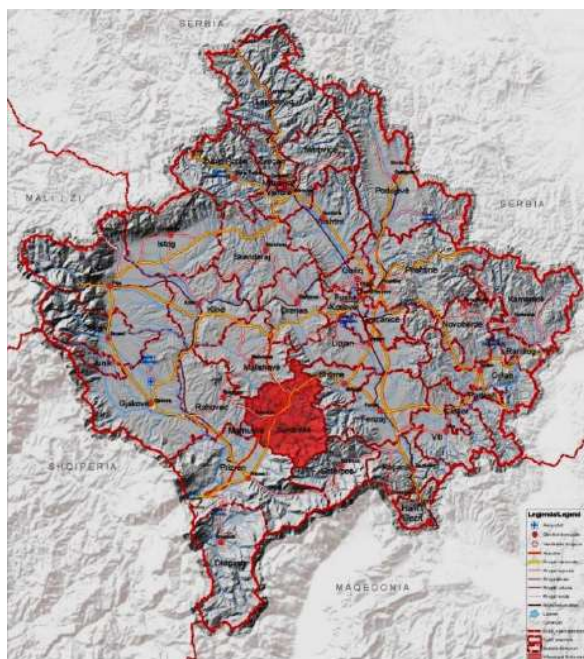


Figure 2. Geographical position of the Municipality of Suharekë/Suva Reka

The above sea altitude of the municipality varies from 455m in city and surroundings up to 1760 m in the mountains. The area of municipality is 361.78km² (which covers 3.3% of the territory of Kosovo). From the overall area of the municipality (of

³Suhareka Municipal Development Plan 2021-2029

36099ha) 15,074ha or 41.7% are covered with forests, 19,373ha or 53.7% are agricultural land and 1652ha or 4.6% if the area used for different purposes including the settlements.

Comparing with the number of resident population Suharekë/Suva Reka is the 10th bigger municipality in Kosovo and belongs to the category of medium-sized municipalities.

Based on the 2011 population census, a high concentration of 49,300 inhabitants is in rural areas, while 10,422 inhabitants live in urban areas. Based on the data of the Municipal Civil Registry, the population at the end of 2020 in the Municipality of Suharekë/Suva Reka is 58,184 residents, with a residential density of 158 residents per km².

Table 3. Municipality's Spatial Features⁴

Surface area km ²	Number of resident inhabitants 2011	Number of non-resident inhabitants 2011	Density (inhabitants/km ²)	Average elevation
361.78	59,722	28,418	165	455 m – 1760 m

The data in the above table are based on the last official census of 2011, showing that a total of 59,722 inhabitants and 9,145 households live in the Municipality.

5.1. Legislative

The Municipal Assembly has 31 members coming from five (5) political entities and a residents initiative that has one (1) assembly member. Of the members of the Municipal Assembly, 13 are women and 18 are men⁵. The Speaker of the Municipality of Suharekë/Suva Reka Assembly is Mr. Bexhet B. Kuçi.

5.2. Executive

The Municipality is headed by the Mayor, Mr. Bali Muharremaj, elected for his second term with 50.36% of ballots cast in the first round of the 2021 municipal elections. The Municipality's executive branch has ten directorates. Four (4) Directorate Directors are women and six (6) Directorate Directors are men. Directorates led by women are: Administration, Inspections, Culture, and Health and Social Welfare. Directorates led by men are: Education, Agriculture, Finance, Property and Cadastre, Public Services, Environment and Emergencies, and Urban and Spatial Planning⁶.

5.2.1. Municipal Budget ⁷

The approved overall municipal budget for 2022 is 17,120,631.00 euro. The central grant covers 15,065,642.00 euro, or 87.997%, while the rest from 2,054,989.00 euro or 12.003% consist from the own revenues. The budget planned for capital investments in sectors is 5,206,865.00, which represent the 31.7% of the municipal overall budget. Directorate of Public Services, Environment and Emergency has the biggest budget for capital investments with 3,132,507.00, following by Directorate of

⁴Suhareka Municipal Development Plan 2021-2029

⁵<https://kk.rks-gov.net/suhareke/asambleistet/>

⁶<https://kk.rks-gov.net/suhareke/>

⁷<https://kk.rks-gov.net/suhareke/category/buxheti/?page=2021>

Agriculture, Rural Development and Forestry with 747,989.00, Directorate of Education 572,450.00, etc.

Table 4. Suharekë/Suva Reka Municipal budget 2022

Budget from the central grant	15,065,642.00	Euro
Budget from own revenues	2,054,989.00	Euro
Total Municipal budget for the year 2022	17,120,631.00	Euro

5.3. Economy⁸

Economic development in the Municipality of Suharekë/Suva Reka is primarily based on several prioritized development fields, which are considered to represent good development opportunities in fields such as: Agriculture, Tourism, Energy and Manufacturing. Suharekë/Suva Reka had registered and active 2032 enterprises in 2019, composed largely by the small and medium sized enterprises (SME) which are characterized by different levels of development of activities. The large enterprises are the "Balkan" Rubber Production Plant, the "AgroKosova Holding" Wine Production Plant, the "Solid" Leather Processing Plant, the "Arta-Tex" Textile Plant, the "Flor-en" Meat Processing Plant, the "Frutex" Soft Drinks Plant, and a number of enterprises for the manufacturing of wood, plastic, aluminum, metal products, etc.

The employment indicators show that the economic situation in Suharekë/Suva Reka is not favourable. According to the Municipal Development Plan 2021-2029, the number of people that depends on other support is 29660, while 7277 peoples are dependent on remittances. As per Kosovo Census 2011, in Suharekë/Suva Reka the number of peoples that are regularly employed is 8043, from which 6666 are male and 1377 female. Employment based on sectors is shown in diagram in figure below. From the private sectors with biggest impact in employment are the building construction sector with 1534 employed, following by Wholesale and retail trade; motor vehicle repair, motorcycles and personal and household items with 1532 employed and by production sector which has 1002 employed people. Other sectors with big impact are mainly public sectors such as education with 1054 and public administration and defence with 688 employers⁹.

⁸Suhareka Municipal Development Plan 2021-2029

⁹ Kosovo Census of population, family economies and flats, 2011

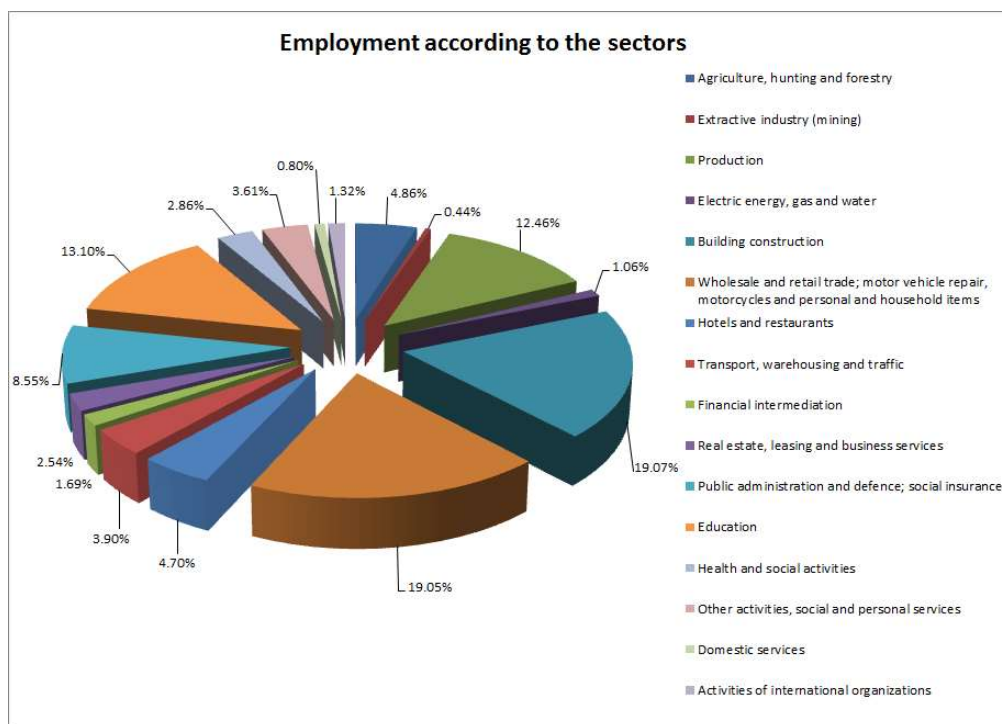


Figure 3. The employment according to the sectors in Municipality of Suharekë/Suva Reka

An important aspect of economic development is represented by the Industrial Zone in Shiroka and the Agri-Zone in Samadrexha, as well as the Morina-Merdare highway that practically cuts through the Municipality of Suharekë/Suva Reka.

5.4. Technical Infrastructure¹⁰

Like throughout Kosovo, even in the territory of the Municipality of Suharekë/Suva Reka, the technical infrastructure and consequently the public services related to it, are not at a satisfactory level of development. This issue constitutes a problem, especially with regard to the level of development of the water infrastructure, and for this reason, greater efforts by the society to solve or mitigate this problem are required. The Municipality of Suharekë/Suva Reka has the most unfavourable position (after Malishevë/Mališevo) in Kosovo when it comes to having a secure source of drinking water.

Another problem is also the poor supply of electricity, and with a number of obsolete sections in the electrical grid, the voltage is weak and there are supply interruptions. The road network is in relatively good condition, and all settlements are connected by paved roads.

The supply of drinking water to the residents of the Municipality of Suharekë/Suva Reka is currently facing major problems. Even the villages that have a water supply system are facing problems. The existing exploitation capacity of water resources is 0.17 m³/s, while 0.121 m³/s are currently used for supply.

Transport of people and goods in the territory of the municipality is done exclusively through road transport. There exist developed networks of roads that offer good connections with other municipalities in Kosovo. The network of public and regional

¹⁰Suhareka Municipal Development Plan 2021-2029

roads and highways administered by the central level that paths through the municipal territory is 131.5 km long. Local roads are 120 km long and are the responsibility of the municipality. In addition exist 45 km of local roads for connecting the local settlements that are not regulated. The local roads are not categorised and for this reason the local roads do not differentiated based on their functioning and do not have the properly designed which could support the spatial and urban developments of municipality for the pleasant traffic and good connection between the settlements¹¹.

The "Ibrahim Rugova" highway and the M25 highway (Prizren/Prishtinë/Priština) lie through the territory of the Municipality, and therefore the position of the Municipality of Suharekë/Suva Reka can benefit greatly from the development of these two roads. The table below shows the distribution of roads (in km) within the municipal territory.

Table 5. The overall length of the existing roads in municipal territory¹²

Highway	National roads	Regional roads	Local roads	Roads within the rural settlements	Roads within the urban settlements
32.5	42.5	56.5	119.7	385.83	87.4

Up to date the Municipality has not drafted the Mobility Plan with detailed analysis the road network in relation to the functions of different parts of the city, the capacity of major intersections in the city, pedestrian movement, parking, and street categorization.

5.5. Public and Social Infrastructure¹³

Administrative and public buildings are mostly concentrated in the town of Suharekë/Suva Reka, as the municipal centre. Municipal level institutions, such as the Municipal Assembly, Municipal Court, Municipal Employment Office, Post and Telecom Office, banking services, Bus Station, Fire Station, and Police Station, are located in this town. Meanwhile, in other settlements, the number of these institutions is very small and includes several site offices and registrars in several villages, two Post Offices in Samadrexha and Mushtisht, as well as a Police Station in Mushtisht.

Public administration services are provided through the main municipal building in Suharekë-Suva Reka and 7 local rural communities in Suhareka, Mushtisht, Studençan, Duhël, Gjinoc, Nishor, Bukosh, and Mohlan, located within short distances from the settlements they serve.

Education: At the municipal level, the educational process takes place at three levels, preschool, primary and secondary education. The network of education buildings consists of 29 Primary and Lower Secondary Education Schools and 3 Higher Secondary Education Schools, in which 11,522 pupils are enrolled, and about 1,000 employees are engaged in the educational process, of which 786 are teachers, 38 are educators, and the rest is composed of senior, administrative and technical support staff.

¹¹ Suhareka Municipal Development Plan 2021-2029

¹² Suhareka Municipal Development Plan 2021-2029

¹³ Suhareka Municipal Development Plan 2021-2029

Health Care: The public health service in the Municipality of Suharekë-Suva Reka is organized on three levels, in the Main Family Medicine Center (MFMC) in Suhareka, 6 Family Medicine Centers (FMCs) in Mushtisht, Studenqan, Gjinoc, Duhël, Mohlan and Bukosh, as well as 5 Ambulatory Units: in Grejkoc, Samadraxha, Sopi, Nishor and Dobërdolan.

5.6. Environment and Environmental Pollution¹⁴

In the Municipality of Suharekë/Suva Reka, environmental pollution is evident. Overall, the biggest pollution is caused by the release of sewage from the sewers of the settlements, as well as of waste water from industrial facilities, directly into the rivers. Dumping of solid waste near roads and rivers is another big problem. Sand is extracted in the river between Reshtan and Nепrebishti. Due to the need to burn wood for space heating, but also for economic activities, forests are damaged without respecting the criteria of their use.

5.7. Areas at Risk

5.7.1. Floods

According to the Suharekë/Suva Reka Municipal Development Plan (2020-2028), the Toplluha river, which passes through the town, represents a high risk for residents, since for years on a row now, after heavy rains it has risen out of its bed and has flooded the lands, and in some cases even surrounding houses. Floods have also occurred in some villages such as: Semetisht, Studenqan and Nепrebisht, but the degree of risk is lower.

With the fixing of the overflow channels, from the mouth of Dubiqak and the ravines that caused floods from the direction of Biraç, in the direction of the Toplluha River, a good solution has been delivered to avoid floods for Suharekë/Suva Reka.

Since the Toplluha river often overflowed, its bed was fixed in its part that passes through the town. The fixed bed is quadrangular in shape. Its walls are lined with stones. However, the Toplluha river, in the area between Suharekë/Suva Reka and Mamushë/Mamuša (in the Municipality of Prizren), risks flooding agricultural land surfaces.

The monitoring of floods is done by the Kosovo Hydro-meteorological Institute (KHIM). The KHIM has installed 27 automatic hydrology stations spread in Kosovo's territory¹⁵, but there is no any station in territory of Suharekë/Suva Reka. These stations measure the level of the water in river every 4 hours and report it automatically. The closest automatic hydrology station is in village Piranë (Prizren Municipality) that monitor river Toplluha in its lower stream outside the territory of Suharekë/Suva Reka and generated data cannot be useful for the Suharekë/Suva Reka Municipal territory.

5.7.2. Erosion

In terms of erosion, significant landslides occurred in the village of Vraniq, where residential houses were also endangered. In addition, erosive soil movements have also occurred in the place called "Gradina" at the exit of the town, around the main road to Prizren, where several houses were damaged by soil movements. Erosive soil

¹⁴Suhareka Municipal Development Plan 2021-2029

¹⁵ <https://ihmk-rks.net/?page=1,4>

movements, but to a lesser extent, have also been noted in the villages: Vraniq, Peçan, Budakova and Papaz.

As for the potential risk points in the Municipality of Suharekë/Suva Reka, based on the assessment by the relevant Directorate in the Municipality, it has been concluded that there are none¹⁶.

5.8. Current Land Use

The territory of the Municipality of Suharekë/Suva Reka is dominated by hilly-mountainous areas that enable the development of the forestry economy, tourism and livestock, while the flat areas are used for other agricultural activities and for the construction of settlements. It is estimated that 53.75% of the surface of the Municipality of Suharekë/Suva Reka is forest land and 41.58% is agricultural land. Below are presented all the existing uses of the territory of the Municipality of Suharekë/Suva Reka in surface area (hectares) as well as in percentage.

Table 6. Surface area and share of built-up areas by category

Land use by	Surface area (ha)	%
Water surface	189.41	0.6
Other use / Natural land not under any other economic use / Natural land not under another economic function	26.46	0.08
Tertiary Manufacturing / Community Service	220.41	0.7
Secondary Manufacturing / Light Industry	291.86	0.92
Secondary Manufacturing / Mining and Quarrying / Other Mining and Quarrying	124.15	0.39
Primary Manufacturing / Agriculture	13140.43	41.58
Tertiary Manufacturing / Commercial Service	54.22	0.17
Tertiary Manufacturing / Cultural, Entertainment and Recreational Service / Open Recreational Space	26.95	0.09
Residential / Residential with other Compatible Functions	315.29	1.0
Primary Manufacturing / Forestry / forestry based on intermediate or long rotation	16985.97	53.75
Tertiary Manufacturing / Cultural, Entertainment and Recreational Service / Open Recreational Space	200.09	0.63
Transportation, Logistics and Public Infrastructure Networks / Transportation Networks	5.51	0.02
Residential / Permanent Residence	2198.63	0.06

5.9. Climatic Conditions¹⁷

The average annual temperature in Suharekë/Suva Reka is 11.6°C. In the month of August, the absolute maximum of 38.2°C has been recorded. The absolute amplitude is 52.3°C. The Municipality of Suharekë/Suva Reka is located in the south of Kosovo and has a continental climate with a Mediterranean influence.

¹⁶Suhareka Municipal Development Plan 2021-2029

¹⁷Suhareka Municipal Development Plan 2021-2029

The key climate values are listed below:

- The average annual relative humidity value in Suharekë/Suva Reka is 74.3%. The lowest relative air humidity recorded in Suharekë/Suva Reka is in August 63.2%.
- The average value of precipitation in Suharekë/Suva Reka is 674.0 mm. Most precipitation falls in October, while the smallest amount in February and January.
- The largest amount of precipitation in Suharekë/Suva Reka is during the month of March, 169.6 mm, while the minimum amount of precipitation on this territory is 410.0 mm.
- Winds from the southwest (4.6m/sec) and the northeast (3.6m/sec) have the highest average speed.

Table 7. Average Climatic Values

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Ann. Ave.
Max. Temp.	16.4	20	25.5	26.3	32.3	36.5	37	38.2	35	30.2	23.8	22	38.2
Min. Temp.	-14.1	-12.4	-10.4	-3	1	7	6	6.2	1.5	-1.8	-9	-11	-14.1
Ave. Temp.	0	1.7	5.3	11.5	15.7	19.8	22.7	22.3	18.2	11.7	7.2	3.3	11.6
Humidity (%)	84.5	76.6	75.4	75.0	75.0	69.4	63.6	63.2	68.1	71.8	85.7	34.2	74.3
Atmospheric Pressure	954.1	949.6	938.4	942.6	948.5	950.1	948.4	948.2	948.6	948.6	948.7	948.6	947.9
Wind Speed (m/s)	1.0	1.5	2.5	2.7	1.9	2.4	2.2	1.9	1.8	1.8	2.2	2.6	2.0
Precipitation - Rain	33.0	12.0	26.0	47.0	89.0	124.0	36.0	37.0	31.0	136.0	70.0	33.0	674.0
Precipitation - Snow	0.4	3.9	4.2	2.1	0.3	0.1	0.4	3.9	4.2	2.1	0.3	0.1	0.4

5.10. Mountains and Valleys ¹⁸

The Municipality of Suharekë/Suva Reka is surrounded by high mountains, to the northwest by the Pagarusha/Pagaruša and Temeqina/Temećina Mounts at altitudes of 796 to 828 m above sea level, to the north by the Carraleva/Crnojjevo Mounts, 922 to 1048 m, to the east by the Jezerci/Jezerac Mount 1677 m (Kryet e Ahishtës/Glava Ahišta), and to the southeast by the Sharr/ Šar Mounts (Dera e Pashës/Pašina Vrata) 2092m, while in the west it lies on the plains (lowlands) of Prizren.

The elevation of the town center is 455 m. The town of Suharekë/Suva Reka sit at an elevation of 400 m. The surface area of the Municipality is 361 km², and it covers 3.3% of the territory of Kosovo.

5.11. Hydrographic Features

The Municipality of Suharekë/Suva Reka has a developed hydrographic network, consisting of a large number of rivers (creeks) that pass through the territory of the Municipality.

¹⁸Suhareka Municipal Development Plan 2021-2029

Small rivers are display the features of mountain creeks, with very large oscillations of water quantities during the year. During the dry season, in most of these rivers there is little or no water at all, while during the rainy season it often happens that there are local floods.

All waters originate from and flow on the territory of the Municipality, except for some creeks such as the Carraleva and Topilla creeks and the Bllaca river, whose source is in the territory of Municipality of Suharekë/Suva Reka but flow into the territory of other municipalities.

5.12. Natural Heritage Assets

In the territory of the Municipality there is a wealth of raw materials, metals and non-metals. Chrome ore is found in several places, but its presence is more pronounced in the area between Mushtisht and Grejkoc. Iron ore is found on the northern slopes of Rusenica towards the Rrafshi i Uthullave, and is found near the series of serpentine slates. As for non-metals, in the territory of Municipality of Suharekë/Suva Reka there is clay, carbonaceous rocks and graphite slates. Of economic importance are clay for brick manufacturing and carbonaceous rocks for construction materials. Graphites are found in the south of the village of Mushtisht at the contact with the Tertiary and chlorite-sericite layers, but their depth penetration has not been investigated. Also in Biraq, based on the research done, an area was found where the stone can be used for the production of construction material, as a base for asphalt. This area is 90% privately owned.

Natural Heritage:

- Guri i Dellocit
- The source of mineral water in Reqan
- Rusenica Nature Reserve
- Rahavane Nature Park
- Bllaca Oak
- “Sharri/Šar Mountain National Park”

The territory of the Municipality of Suharekë/Suva Reka includes a part of the “Sharri/Šar National Park”, which is quite rich in coniferous forests.

Table 8. Natural Heritage Assets under Protection

Location	Category	Surface area (ha)
Rusenica	Nature Reserve	300.00
Sharri Mountains	National Park	39000.00
Rahavane	Protected Landscape	-

To achieve economic growth, it is necessary to make rational use of resources, always taking into account the preservation and protection of the environment. The forests in the Municipality of Suharekë/Suva Reka, together with their biodiversity, present a special attraction. Part of the forests are found on the Sharri Mountains, located in the southeastern part (south of Mushtisht and Delloc) and make up 18% of the area included in the Prizren region from the total area of the “Sharri/ Šar National Park”.

5.13. Greenhouse Gas Emissions in the Municipality of Suharekë-Suva Reka

Suharekë/Suva Reka's GHG emissions were estimated to have been 215 ktCO₂e in 2016, decreasing to 204 ktCO₂e in 2019. The most significant emissions source is the energy sector, comprising 79.5% of total emissions in 2019. The agriculture sector represented 18.7% of emissions and waste represented 1.8% of emissions in 2019.

6. Existing Documents Related to the Cross-Sectoral Plan's Design

At the municipal level, the reviewed development documents and strategies relevant to the drafting of the CSIP for Climate Change are:

- Suhareka Municipal Development Plan (SMDP) 2021-2029
- Draft Suhareka Municipal Zoning Map (MZP) 2022-2030
- Local Economic Development Strategy for the Municipality of Suhareka (LEDS) 2022-2027
- Municipal Energy Efficiency Action Plan (MEEAP) 2019-2021
- Municipal Waste Management Plan 2016-2021, Municipality of Suhareka (Draft)

The key Kosovo central-level policy-making and planning institutions for the environment, climate, and energy efficiency, are:

- Ministry of Environment, Spatial Planning and Infrastructure,
- Kosovo Environmental Protection Agency,
- Ministry of Economy,
- Kosovo Energy Efficiency Agency.

The relevant strategies and plans at the Kosovo level are:

- "Kosovo National Energy Efficiency Action Plan 2010-2018"
- "Kosovo National Energy Efficiency Action Plan 2019-2021"
- Environmental Protection Strategy 2013-2022
- Climate Change Strategy 2019-2028
- Energy Strategy 2017-2026
- Multimodal Transportation and Sectoral Strategy 2015-2025 and 5-Year Action Plan
- Waste Management Strategy 2013-2022

Some of the laws and administrative guidelines issued by MESP related to climate change and GHG emissions:

- Law No. 04/L-197, 2014 - Law on Chemicals
- Law No. 04/L-060, 2012 - Law on Waste
- Law No. 03/L-043, 2009 - Law on Integrated Pollution Prevention and Control
- Law No. 03/L-025, 2009 - Law on Environmental Protection
- Law No. 03/L-214, 2010 - Law on Environmental Impact Assessment
- Administrative Instruction GoK) No. 19/2013 on access to information on economic expenses of fuel consumption and CO₂ emissions of new personal vehicles;
- Administrative Instruction GoK No. 20/2013 on the Implementation of Flexible Clean Development Mechanisms
- Administrative Instruction GoK No. 01/2016 on the GHG Emissions Tracking Mechanism,
- Administrative Instruction GoK No. 16/2013 on Substances that Damage the Ozone Layer and Fluorinated Greenhouse Gases.
- Administrative Instruction GoK No. 08/2016 on Permissible Air Emission Rates from Mobile Sources of Pollution,
- Administrative Instruction (MTI) No. 01-2012 on amending AI 2008/13, on the technical control of vehicles
- Administrative Instruction (MI) No. 04/2016 on technical control of vehicles

7. Energy Sector Analysis

7.1. Energy consumption at Kosovo level

The total amount of energy consumption in Kosovo in the last three years (2019, 2020 and 2021) has marked a slight increase. In 2020, consumption was 1542.85 ktoe, marking an increase of 2.34% compared to 2019 (1507.52 ktoe), while in 2021, consumption was 1596.4 ktoe, or compared to 2020 the rise in energy consumption was 3.47%. The amount of consumption of energy by sectors for the years 2019, 2020 and 2021¹⁹ is provided graphically below:

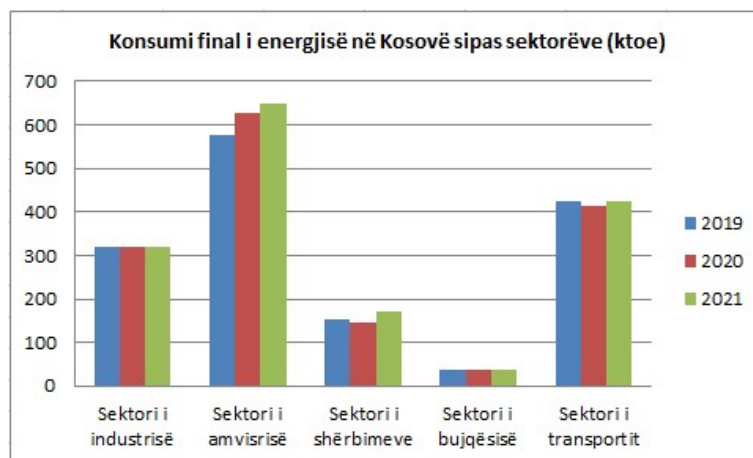


Figure 4. Final Energy Consumption in Kosovo by Sector

The most consumed energy products during the three years under review, are petroleum fuels products, which in 2021 amounted to 689.86 ktoe, which accounts for about 43.21% of the total consumption of all energy products, while the second most consumed product is electricity, in the amount of 486.56 ktoe, or about 30.48%, followed by biomass energy at 353.74 ktoe, or 22.76%. Solar energy remains the smallest source consumed, in the value of 0.49 ktoe, or 0.03%²⁰.

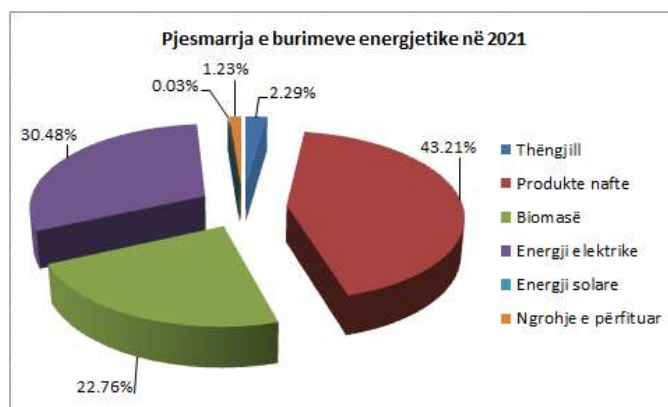


Figure 5. Share of Energy Resources in Energy Consumption in Kosovo in 2021

¹⁹ Annual Energy Balance in Kosovo 2019, 2020 and 2021. Kosovo Agency of Statistics

²⁰ Annual Energy Balance in Kosovo, 2021. Kosovo Agency of Statistics

7.2. Energy Consumption at Municipality of Suharekë/Suva Reka level

7.2.1. Municipal public buildings and municipal fleet of vehicles

The municipal document that deals with energy for the Municipality of Suharekë/Suva Reka is the Municipal Energy Efficiency Action Plan (MEEAP) 2019-2021. The MEEAP provides information on energy consumption in the stock of municipal buildings - administrative, educational and health care buildings, as well as in the street lighting sector and for the municipal fleet and public companies based within Municipal borders. Below are the findings from the MEEAP 2019-2021 of the Municipality of Suharekë/Suva Reka. The analysis of the stock of municipal buildings and street lighting services shows that the total potential of energy savings in the Municipality of Suharekë/Suva Reka is estimated to be 4,809MWh per year.

Table 9. Overview of the potential of energy savings in the Municipality of Suharekë/Suva Reka

	Energy Consumption (2017) MWh/year	Energy Consumption Expenses (2017) €	Savings Potential MWh/year	Savings Potential %
Municipal Buildings Sector	9.999 ²¹	€ 311,015	4.611 ²²	47% ²³
Street Lighting Sector	397	€ 31,739	198 ²⁴	50% ²⁵
Municipal Vehicle Fleet	1.806	€ 127,476	-	-
Public Companies in the Municipality	NA	NA	-	-
Total	12.202	€ 470,231	4.809	

Within the MEEAP, a list of priority investment projects has been created that includes 5 projects with total energy savings of 800 MWh/year and investments ranging between EUR 371,000 - 552,000.

Table 10. List of projects for priority investments according to the MEEAP

#	Name of Facility	Type	Consumption (2017) MWh/year	Savings Potential MWh/year, (%)	Investments EUR
1	"7 Marsi" Primary School	Education	261	128 (-49%)	65.000-115.000
2	"Shkëndija" Primary School	Education	243	82 (-34%)	140.000-200.000
3	Suhareka MFMC	Health	715	563 (-79%)	133.000-190.000
4	Bukosh FMC	Health Care	36	21 (-58%)	13.000-19.000
5	Mushtisht FMC	Health Care	28	^(-22%)	20.000-28.000
TOTAL:			1.284	800	371.000-552.000

According to the MEEAP, 2017 energy expenses in the Municipality of Suharekë/Suva Reka are summarized in the following table:

Table 11. Energy expenses in relation to the municipal budget for 2017

Municipality of Suharekë/Suva Reka	2017
Overall Municipal Budget	€ 13,783,632
Overall Energy Bills	€ 470,231
Public Buildings – (including electricity)	€ 311,015

²¹ For all reported municipal buildings

²² Savings for municipal buildings included in the analysis (i.e., with known area and energy consumption over 80 kWh/m²/year)

²³ Percentage of savings only for municipal buildings included in the analysis

²⁴ For the remaining public lighting that does not yet have LED technology

²⁵ Compared to the energy consumption of reported non-LED technology street lighting

Public Lighting	€ 31,739
Municipal Vehicles (fuels)	€ 127,476
TOTAL investments in EE measures	Unknown

The Municipality of Suharekë/Suva Reka has spent approximately 3.4% of its budget to cover energy costs. Costs are calculated using energy consumption reported by the Municipality and average specific fuel and electricity prices. Fuel costs for the municipal fleet are €127,476 per year.

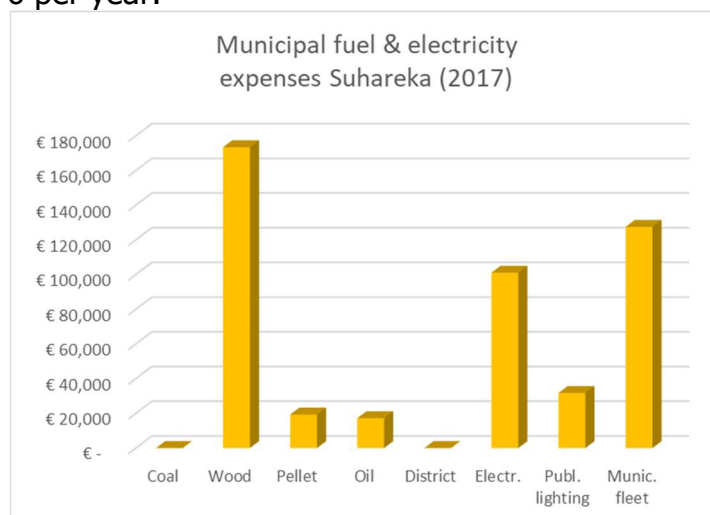


Figure 6. Municipal expenses on fuel and electricity, 2017

The MEEAP 2017-2021 has identified the possibility of energy savings by implementing EE measures in all public municipal buildings (schools, administration buildings, health care buildings, cultural/sports buildings). The estimated energy savings amount to 4,611.46 MWh/year. However, savings are expected to be greater since the analysis made in the MEEAP is based on EE investments only in buildings with a specific consumption higher than 80 kWh/m²/year.

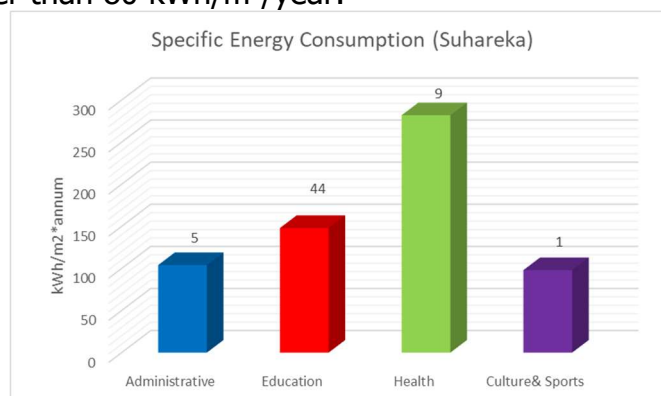


Figure 7. Comparison of average specific energy consumption for selected municipal buildings in the Municipality of Suharekë/Suva Reka

7.2.2. Public Street Lighting

According to the MEEAP 2019-2021, the total length of the public lighting network in the Municipality of Suharekë/Suva Reka is reported to be 26.94 km. Street lighting is secured for 45 streets/sections in the Municipality of Suharekë/Suva Reka. The electrical grid of public lighting includes 583 lamps. Of this total, 100% are reported to be of HID Metal Halide lighting technology.

The electricity consumption of the public lighting system in 2017 was reported to be around 397MWh. Therefore, according to the MEEAP, by applying LED technology to

the existing number of public lighting poles, the energy savings potential is significant (about 50%), or about 198 MWh.

7.3. Reduction of Greenhouse Gases through planned and proposed measures in the energy sector

From the analysis of the data of the Municipality of Suharekë/Suva Reka MEEAP 2019-2021, it appears that the implementation of EE measures in public municipal buildings and public street lighting carries a significant potential for energy savings. Consequently, energy savings also translated into reduced GHG emissions, and this is especially evident in public street lighting consumption of electricity that is mainly produced by Kosovo’s coal-fired power plants. The MEEAP 2019-2021, however, does not provide data for detailed analyses of the energy savings potential in buildings and public lighting and potential reduction of GHGs.

Another opportunity with great potential for energy savings and reduced GHG emissions, is represented by the household sector, whose share in the total energy consumption in Kosovo in 2020, stood at 41% according to the Kosovo Agency of Statistics. Although there is no study on Suharekë/Suva Reka energy consumption, the situation should not differ much from other parts of Kosovo.

Another option to reduce GHG emissions in the territory of the Municipality of Suhareka is the construction of plants for energy generation from RES. According to the Wind Resources Assessment, carried out in 2010, in the territory of the Municipality of Suharekë/Suva Reka there is potential for the generation of wind energy in two locations:

- **Budakova** near Suharekë/Suva Reka, located at an altitude of 1,667 m above sea level;
- **Duhël** near Suharekë/Suva Reka, located at an altitude of 858 m above sea level;

Table 12. Average monthly wind speeds (in m/s) at measured locations in Suharekë/Suva Reka area²⁶

	Budakovë [m/s]	Duhël [m/s]
gusht 2009	4.7	5.0
shtator 2009	5.9	4.7
tetor 2009	5.8	4.3
nëntor 2009	7.4	2.9
dhjetor 2009	9.5	5.1
janar 2010	9.0	5.1
shkurt 2010	9.1	4.3
mars 2010	8.0	4.8
prill 2010	5.9	4.4
maj 2010	7.6	4.6
qershor 2010	5.5	3.5
korrik 2010	5.0	4.4
Mesatarja për 1 vit	6.95	4.43

In the Action Plan for the energy sector, a number of measures to reduce GHG emissions have been proposed, including different types of measures ranging from outreach and capacity building to proposals for investments in EE and utilization of RES.

²⁶ Wind Resources Assessment, NEK Umwelttechnik AG, 2010

7.3.1. Estimated CO₂ emission reduction from the proposed measures

The estimated CO₂ emission reduction is done according to activities and measures proposed to be implemented in the CSIP and are based on the specific activities of the measures for implementation and based on the data that where available. The estimation of reduction is 1290.74 tCO₂ annually, which is shown in the table below, while the comparison is shown in the diagram in figure 6.

Table 13. The estimated CO₂ emission reduction

Current CO ₂ emission from the public municipal buildings and street lighting, (in tCO ₂ /a)	CO ₂ emission reduction estimated for the public municipal buildings and street lighting, (in tCO ₂ /a)	CO ₂ emission estimated after the implementation of the CSIP, (in tCO ₂ /a)
2700.96	1290.74	1410.22

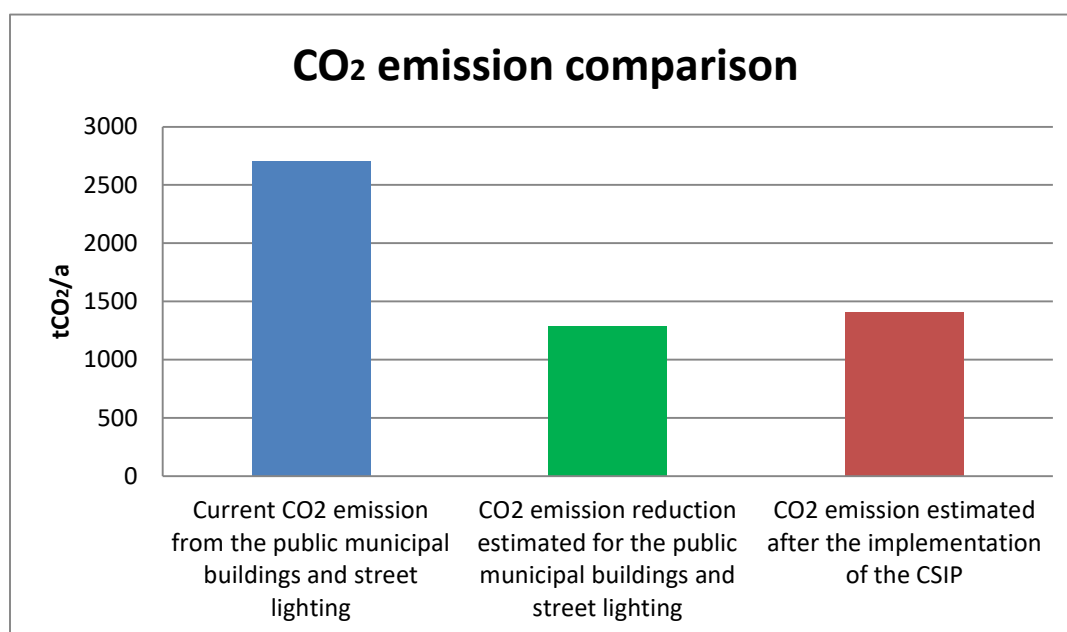


Figure 8. Comparison of CO₂ emission reduction compared with the calculated CO₂ emissions from the energy consumption of municipal public buildings and public street lighting according to the MEEAP 2019-2021

7.4. Plan of Measures for the Energy Sector

Sector: Energy	Success Indicators	Responsible Institution	Related Sectors	Time Frame	Financial Costs	Funding Source	CO ₂ Reduction (tons/year)	Status	Sectoral Project/Plan	Priority
<p>Gender considerations priorities:</p> <p>Consider the specific needs and concerns of women when improving energy efficiency, as they often have different energy consumption patterns due to their roles and responsibilities in the household.</p> <p>Ensure that the integration of renewable energy resources promotes equal access to energy for women and men and take into account the potential gender impacts of different renewable energy technologies.</p> <p>Provide opportunities for women to develop their skills and knowledge in the energy sector to promote gender equality.</p> <p>Include women's perspectives and experiences in energy policy planning and decision-making processes to inform more effective and equitable energy policies.</p> <p>Ensure that women's voices are heard in decision-making processes related to energy by enhancing their participation in energy boards and other relevant bodies.</p> <p>Raise public awareness of energy efficiency in a way that is accessible and relevant to both women and men, and promotes behavior change at the household level.</p> <p>Pilot household rooftop solar installations in a way that takes into account the specific needs and concerns of women, including their safety and security.</p> <p>Enforce building standards rigorously to ensure that buildings are energy-efficient and take into account the needs and concerns of both women and men, such as adequate lighting and ventilation.</p>										
<p>Objective 6.1: Outreach and awareness-building about climate change and the main measures for climate change mitigation</p>										
<p>Measure 6.1.1: Educate and promote energy efficiency and outreach on climate change effects on residents</p>										
6.1.1.1	Organize outreach campaigns in secondary schools of the territory of the Municipality on increasing energy efficiency (EE), the possibilities of using RES technologies and the effects of climate change, e.g. outreach on innovative heating technologies (HVAC), EE measures in buildings, use of solar energy in residential buildings, information regarding the use of low electricity tariffs to help mitigate peak use of electricity, etc.	<ul style="list-style-type: none"> - Campaign Plan Preparation, - Organize campaign activities in schools 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Education Directorate, - Civil Society Organizations. 	2022-2025	10,000.00	<ul style="list-style-type: none"> - Municipal budget 	-	New proposal	

6.1.1.2	Set up an information point where residents can get all the necessary information about energy savings opportunities by enhancing EE and using RES technologies in the residential sector, replacing inefficient heating and cooling systems with more efficient systems, and other measures to increase energy efficiency and energy savings, information on innovative heating, cooling and air conditioning (HVAC) technologies.	Construct and equip EE and RES information point	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Administration Directorate Civil Society Organizations, Private Sector	2022-2023	20,000.00	Municipal budget Private sector through technology exposure	-			New proposal
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30,000.00

Objective 6.2: Empower and operationalize municipal energy management system

Measure 6.2.1: Apply municipal energy management – organizational measures

Increase energy efficiency in public municipal buildings and street lighting by modelling and operationalizing the Municipal Energy Management System.

6.2.1.1	- Establish the MEO, or employ or appoint the MEM from the existing technical staff of the Municipality with job description for full-time energy management,	Municipal Energy Office established, or Municipal Energy Manager employed.	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Administration Directorate	2023-2024	Organizational measure		-			New proposal
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6.2.1.2	–Train MEO staff or MEM on energy management in: use of municipal software for energy management determined by the relevant ministry; use of the Platform for monitoring, verification and reporting of energy savings to the relevant ministry, from the projects implemented in the Municipality of Suharekë-Suva Reka; basic training on energy efficiency measures in buildings and lighting.	MEO staff, or the Municipal Energy Manager (MEM), trained to perform work tasks	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	MEO – Education Directorate – Administration Directorate – Culture Directorate – Health and Social Welfare Directorate	2023-2024	10,000.00	Municipal budget		-	New proposal	
6.2.1.3	–Establish and operationalize the hierarchical organizational scheme for MEM relations and communications with energy managers in all municipal public buildings, with regards to the monthly reporting on the consumption of electricity, thermal energy and water in each municipal building, as well as the reporting of monthly consumption for public street lighting.	–Establish and operationalize the hierarchical organizational scheme for MEM relations and communications with energy managers in all municipal public buildings.	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	– Education Directorate – Administration Directorate – Culture Directorate – Health and Social Welfare Directorate	2023-2024	Organizational measure		68		New proposal	
						10,000.00					

Measure 6.2.2: Enhance municipal technical and planning capacities

6.2.2.1	Train technical staff of municipal directorates that manage public buildings and public lighting, including the technical staff of: Public Services, Environment and Emergencies Directorate; Education Directorate; Health Directorate, Administration Directorate, and Culture Directorate. The training should include the acquisition of knowledge on the planning and implementation of EE measures in buildings and lighting; basic methods for calculating energy savings and GHG emissions.	Number of organized trainings and number of training participants	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Education Directorate Administration Directorate Culture Directorate Health and Social Welfare Directorate	2022-2023	10,000.00	Municipal budget	-		New proposal	
6.2.2.2	Train technical staff who operate heating, ventilation and air conditioning systems as well as new technologies with heat pumps. Training for technical staff in charge of all public municipal buildings. The training should focus on how to operate the equipment, their regular maintenance, putting special emphasis on how to use them with high efficiency, environmental aspects, as well as issues related to safety at work during the operation of the systems.	Number of organized trainings and number of training participants	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Education Directorate Administration Directorate Culture Directorate Health and Social Welfare Directorate	2022-2023	30,000.00	Municipal budget	53		New proposal	
6.2.2.3	Organize study visits to EU countries to acquire good experiences related to the application of EE and the use of RES as an opportunity for sustainable municipal development, including financial instruments that can be used by the Municipality for investments, incentives/subsidies, inclusion of investments from the private sector, etc.	Good practices from good experiences in EU countries, implemented	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Green Development Office	2022-2023	40.000,00	Municipal budget Support from international development organizations (UNDP, etc.)	-		New proposal	
						40,040.00					

Objective 6.3: Enhance EE and use of RES in public buildings and reduce GHG emissions

Measure 6.3.1: Apply EE measures in public buildings

6.3.1.1	Feasibility study for public municipal buildings. The study includes: energy audit, measures for implementation of EE in building envelopes, internal and external lighting of buildings, HVAC systems, use of warm sanitary water as well as drinking water, in accordance with the minimum criteria for energy performance in buildings and the newest standards, including the renovation of public buildings up to the nZEB (near zero energy buildings) standard, investment costs, as well as EE measures' investment return period.	Feasibility Study Report	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Administration Organizations, Education Directorate, Culture Directorate	2022-2023	100,000.00	Municipal budget Private sector through technology exposure	-		New proposal	
6.3.1.2	Energy audit of highly-prioritized public municipal buildings for renovation with EE measures under MEEAP 2019-202: "7 Marsi" PLSS, "Shkëndija" PLSS, Suhareka MFMC, Bukosh FMC, Mushtisht FMC. Part of this package should also be: "Xhavit Sylaj" PLSS in Sllapuzhan and "Kongresi I Manastirit" PLSS in Studenqan	The energy audit report to include the investment bill of quantities for the implementation of EE measures and the simple investment return period.	Education Directorate Health and Social Welfare Directorate	Urban and Spatial Planning Directorate	2022-2023	25,000.00	Municipal budget Kosovo Energy Efficiency Fund (KEEF)	-		New proposal	
6.3.1.3	Implement EE measures in highly-prioritized public municipal buildings for renovation with EE measures under MEEAP 2019-202: "7 Marsi" PLSS, "Shkëndija" PLSS, Suhareka MFMC, Bukosh FMC, Mushtisht FMC, "Xhavit Sylaj" PLSS in Sllapuzhan and "Kongresi I Manastirit" PLSS in Studenqan	Renovate buildings with EE measures	Education Directorate Health and Social Welfare Directorate	Urban and Spatial Planning Directorate	2023-2024	600,000.00	Municipal budget KEEF	395		New proposal	

6.3.1.4	Monitor regular maintenance in all public municipal buildings of: systems and equipment for heating, ventilation, cooling and air conditioning (HVAC); internal water supply systems, and internal and external lighting.	Monitoring Reports.	Public Services, Environment and Emergencies Directorate (until the MEO is established or the MEM is	Urban and Spatial Planning Directorate	2023-2024	0,000.00	Municipal budget -KEEF	54		New proposal	
						725,000.00					
Measure 6.3.2: Promotion and piloting of projects using RES in public municipal buildings											
6.3.2.1	Promote reduction of GHG emissions from the generation of electricity from RES in public municipal buildings by conducting feasibility studies for the installation of solar systems in public municipal buildings and the identification of priority projects with better feasibility in the buildings of the Gymnasium, Technical School, Library, Secondary Schools and the Museum.	Number of Feasibility Studies	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Administration Organizations, Education Directorate, Culture Directorate Health and Social Welfare Directorate	2022-2023	25,000.00	Municipal budget -Donors	-		New proposal	

6.3.2.2	Reduce GHG emissions through the planning and implementation of promotional projects for the generation of electricity from RES – solar energy from photovoltaic panels (PV) in public buildings mentioned above, depending on the results of the feasibility study.	Number of projects implemented for the installation of solar PV systems for the generation of electricity in public municipal buildings	<ul style="list-style-type: none"> - Mayor of the Municipality - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - Administration Organizations, Education Directorate, Culture Directorate - Health and Social Welfare Directorate 	2023-2024	200,000.00	<ul style="list-style-type: none"> - Municipal budget - Donors 	400		New proposal	
6.3.2.3	Feasibility study for the installation of solar thermal systems for heating sanitary water in municipal health buildings and identification of priority projects with better feasibility. The study will also analyze the possibility of using washing machines that are supplied with warm water from the solar system for heating sanitary water.	Number of Feasibility Studies	<ul style="list-style-type: none"> - Mayor of the Municipality - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - Health and Social Welfare Directorate 	2023-2025	8,000.00	<ul style="list-style-type: none"> - Municipal budget - Donors 	-		New proposal	

6.3.2.4	<p>Pilot project on supply and installation of washing machines that are supplied with warm water from the sanitary water heating solar system, based on the results of the study (mentioned in the previous point). The project includes: planning, installation of the solar system for heating sanitary water, supply and installation of washing machines that are directly supplied with warm water from the solar thermal system, as well as training of workers who will operate and maintain the solar system.</p> <p>This project will serve as a model and experience for the further promotion of similar projects in the residential sector. This would significantly affect the</p>	Pilot Project Implementation	<ul style="list-style-type: none"> - Mayor of the Municipality - Health and Social Welfare Directorate 	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - Public Services, Environment and Emergencies Directorate 	2023-2025	35,000.00	<ul style="list-style-type: none"> - Municipal budget - Donors 		37	New proposal		
						268,000.00						
Measure 6.3.3: Use different financial instruments for the reduction of CO2 emissions by increasing EE and use of RES in municipal buildings												
6.3.3.1	<p>Municipality of Suharekë-Suva Reka to work on mobilizing funds for financing EE measures and the use of RES in municipal public buildings:</p> <ul style="list-style-type: none"> - Design Investment Plan for renovation with the implementation of EE measures in public municipal buildings and public lighting, - cooperate with the KEEF for investments in EE measures in municipal buildings and public lighting, - use international financial instruments, - use private investments through the ESCO model. In this case, there must be full compliance with the legislative aspect derived from Kosovo's Law on EE. 	Pilot Project Implementation	<ul style="list-style-type: none"> - Mayor of the Municipality - Health and Social Welfare Directorate 	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - Public Services, Environment and Emergencies Directorate 	2023-2025	Organizational measures				-	New proposal	

Objective 6.4: Reduce energy consumption in residential buildings by promoting EE measures and reducing GHG emissions

Measure 6.4.1: Renovate residential buildings by applying EE measures

6.4.1.1	Reduce GHG emissions in the residential sector through the implementation of minimum energy performance criteria in new buildings when applying for building permits for new buildings	Number of construction permits	Urban and Spatial Planning Directorate	Inspections Directorate	2023-2030	Organizational measure			-		New proposal	
6.4.1.2	Design Municipal Regulations on: 1. subsidizing the renovation of existing residential buildings by implementing EE measures, and 2. subsidizing new buildings built with higher standards than the minimum criteria (in this case, the subsidy can also be in the form of a reduction of municipal taxes for those buildings for a certain period of time).	Number of awarded municipal subsidies	Urban and Spatial Planning Directorate	Inspections Directorate	2023-2024	Organizational measure			-		New proposal	
6.4.1.3	Subsidize renovation of existing residential buildings by implementing EE measures, and subsidize new buildings built with higher standards than the minimum criteria	Number of awarded municipal subsidies	Urban and Spatial Planning Directorate	Inspections Directorate	2024-2030	500,000.00	Municipal budget Central Budget Donors		218		New proposal	
6.4.1.4	Reduce GHG emissions related to lighting in the residential sector in the existing multi-residential buildings, with the installation of lighting fixtures with automatic presence sensor in the entrances and corridors of the buildings, co-financed by the Municipality of Suharekë/Suva Reka and residents.	Number of light fixtures and lamps with presence sensor installed	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate	2023-2024	15,000.00	Municipal budget		7		New proposal	
						515,000.00						

Objective 6.5: Reduce GHG emissions by promoting use of RES in residential and commercial buildings

Measure 6.5.1: Regulations on advancement of the use of EE measures, installation of solar PV systems and solar thermal systems for heating sanitary water

The Municipality could establish Regulations on different incentive support measures to increase the incentives for investment in EE measures and the use of RES in the residential sector and business sector. The support of the Municipality could be in the form of subsidies and co-financing of a certain percentage of the investment, through which the return period of the investment will be shortened for the private beneficiary and will create incentives to invest. In this regard, the Municipality could establish a support plan with subsidies from its own budget. In order to increase this fund, the Municipality should research the possibilities of support from different donors, or prepare project proposals for applications to different funds that are supported by the EU, certain donor states, as well as different international financial instruments, including soft loans financing.

6.5.1.1	Study and analysis of different models of municipal subsidies for the residential and business sectors for investments in EE measures and the use of RES.	Study Report	Public Services, Environment and Emergencies Directorate MEO or	Urban and Spatial Planning Directorate	2023-2025	10,000.00	Central Budget Municipal budget Donors	-		New proposal	
6.5.1.2	Establish Municipal Regulation on subsidies for the residential sector, multi-residential buildings and the business sector for the use of RES in buildings (solar water heating systems, solar PV systems and heat pumps for space heating).	Regulation Document	Public Services, Environment and Emergencies Directorate MEO or	Urban and Spatial Planning Directorate	2023-2025	No costs	Central Budget Municipal budget Donors	-		New proposal	
6.5.1.3	Subsidies for the residential sector, multi-residential buildings and the business sector for installing RES systems in buildings (solar water heating systems, solar PV systems and heat pumps for space heating).	number of subsidies granted	Public Services, Environment and Emergencies Directorate MEO or MEM	Urban and Spatial Planning Directorate	2024-2030	300,000.00	Municipal budget Central Budget Donors	270		New proposal	
						310,000.00					
Objective 6.6: Reduce GHG emissions and energy consumption for heating											
Measure 6.6.1: Construct district heating system for the town of Suharekë/Suva Reka											

6.6.1.1	Feasibility study for the construction of the district heating system for the town of Suharekë/Suva Reka. The study should take into account the construction of heat generating capacities from RES by studying different resources such as: use of solar energy, energy from wood biomass with chips. The study should also consider the decentralized use of heat pumps with a higher performance coefficient.	Detailed Study Document with possible investment scenarios	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Property and Cadaster Directorate	2023-2025	150,000.00	Municipal budget	-		New proposal	
6.6.1.2	Construction of district heating system for the town of Suharekë/Suva Reka based on the feasibility study carried out in advance	Investment in the construction of the district heating system	Mayor of the Municipality Public Services, Environment and Emergencies Directorate	Urban Planning Directorate Property and Cadaster Directorate Other Municipal Directorates and Sectors as needed	2026-2030	15,000,000.00	Municipal budget Central Budget Long-term loans from various financial instruments Donors	-		New proposal	
						15,150,000.00					

Objective 6.7: Reduce GHG emissions and energy consumption for public lighting

Measure 6.7.1: Implement EE measures in public street lighting with the application of LED technology

6.7.1.1	Feasibility Study of increasing energy efficiency in public street lighting throughout the territory of the Municipality. This study must include: Energy audit of existing public street lighting, proposals for EE measures in lighting, calculation of energy expenditure in the existing state and in the state after EE measures under different investment scenarios. The scenarios can be: investments in the implementation of EE measures in all existing lighting, under the principle of creating "smart lighting"; gradual investment in the principle of creating "smart lighting"; as well as simple investment in replacing existing non-efficient lamps with efficient LED technology lamps.	Detailed Feasibility Study report with investment scenarios	Public Services, Environment and Emergencies Directorate		2023-2024	25,000.00	Municipal budget	-		New proposal	
6.7.1.2	Implement EE measures in public street lighting throughout the territory of the Municipality depending on the investment scenarios selected by the Municipality	Projects implemented with EE measures in public lighting	Public Services, Environment and Emergencies Directorate		2024-2026	500,000.00	Municipal budget	285		New proposal	
6.7.1.3	Apply LED technology in cases of installation of new public lighting in the streets of the whole territory of the Municipality.	Number of projects implemented with the application of LED technology	Public Services, Environment and Emergencies Directorate		2023-2030-		Municipal budget	To be calculated		New proposal	
						525,000.00					
Objective 6.8.8: Enhance EE and use of RES in the business sector											
Measure 6.8.1: Outreach on the possibilities of benefits from enhanced EE and use of RES in the business sector											

6.8.1.1	–Organize information sessions in cooperation with the Suhareka Business Center (SBC) to inform Industrial Zone and Agri-Zone businesses regarding the possibilities of benefits from the enhanced EE and use of RES.	–Number of meetings with businesses –Number of businesses that have implemented EE measures	–Public Services, Environment and Emergencies Directorate –Urban and Spatial Planning Directorate	–Property and Cadaster Directorate –Suhareka Business Center	2023-2030	Organizational measure					New proposal	
6.8.1.2	–Draft criteria on prioritized review of applications of companies with projects for the construction of capacities for energy generation from RES. This has especially to do with the acceleration of the procedures related to the designation of the location for construction, preparation of ownership documentation, and requests for change of land use.	–Number of businesses that use RES in their work process –Number of businesses that have received ERO Permit for generating electricity from RES	–Urban and Spatial Planning Directorate	–Property and Cadaster Directorate –Public Services, Environment and Emergencies Directorate	2023-2030	Organizational measure	Municipal budget				New proposal	
Overall estimated investment cost for the Energy Sector:						17,334.000.000						

8. Waste Management Sector Analysis

8.1. Waste Management in Kosovo

In Kosovo, waste management is based on Law No. 04/L-060 on Waste. Based on this law and the relevant administrative instructions, the monitoring and reporting obligations of all actors in this sector are regulated. At the Kosovo level, there seems to be greater activation of waste management stakeholders through the undertaking of initiatives. However, without the full implementation of the legal basis, investments and concrete projects, it is difficult to see the results of the improvement of the situation. Although there is an improvement in the indicators, the continued dumping of the vast majority of waste remains problematic in Kosovo, while there are no genuine initiatives for a circular economy. The amount of waste collected in 2019 is 2.19% larger compared to the previous year, while the amount of waste collected in 2020 is 446,332.36 tons/year, dropping by 3,549 tons or about 1% less disposed waste than in year 2019²⁷.

The amount of waste generation at the level of Kosovo, per capita, can be calculated at a rate of 0.74 kg/inhabitants/day, or 269.18 kg/inhabitants/year. Municipal waste in 2020 at the Kosovo level was 480,648.62 tons/year. When comparing the amount of generated waste, 480,648.62 tons/year, with the amount of disposed waste, which is 446,332.36 tons, it can be seen that there is a deviation of 34,316 tons of waste that did not end up in landfills. The assumption is that this amount of waste has been collected by informal sector collectors, while a part ended up in illegal collection points (illegal dump sites).

8.1.1. Municipal Waste Disposal

Landfill management and final waste disposal in Kosovo is performed by the Kosovo Landfill Management Company (KLMC). The KLMC manages landfills and transfer stations, and has a total of 4 landfills under its management in: Prizren, Gjilan/Gnjilane, Prishtinë/Priština and Podujevë/Podujevo, and a transfer station in Ferizaj/Uroševac. The amount of waste disposed in the sanitary landfills managed by the KLMC for 2019 is 340,790.98 tonnes/year. Meanwhile, other sanitary landfills are managed by Regional Waste Companies (RWCs). The amount of waste disposed by RWCs is about 105,541.38 tons/year. Thus, the amount of municipal waste disposed in sanitary landfills reached 446,332.36 tonnes/year, marking a drop of 3,549 tonnes. This doesn't account for the amount of waste disposed in other non-sanitary landfills, such as the one in Istog (Tuqep), or other landfills in northern Kosovo, since there is no reported data.

8.1.2. Coverage of Municipal Waste Collection Service

The coverage of municipal waste collection service for households has increased. According to data reported by the Kosovo Environmental Protection Agency, there are 5 municipalities that have already reached 100% service coverage. The coverage of the municipal waste collection service in 2019 was 78.5%, which shows an increase

²⁷ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020

of 2.9% compared to the previous year²⁸, while the coverage at the end of 2020 was 85.3% at the Kosovo level, with an increase of about 7% (exactly 6.8%) in coverage compared to 2019²⁹.

Another category for which municipalities have reported service coverage are businesses and institutions. Based on this data, service coverage for businesses until the end of 2020 was 53.7%, while for institutions 84.5%. This figure should be considered with certain reservations, since many municipalities have not managed to filter active businesses, namely those that receive the waste collection service. Thus, the number of businesses may represent all registered businesses within the territory of the Municipality, and consequently the service coverage is assumed to be much lower than what is presented in the report.

8.1.3. Collections at Kosovo Level

The collection rate in 2018 was 76.64%, while it increased by 13.76% by the end of 2019 and reached 90.4% at the Kosovo level. In 2020, the reported collection rate for households reached 90.84%, with an increase of 0.5% since 2019. For businesses it reached 79.30% and for institutions 93.51%.

Despite this mentioned increase, it should be taken into account that the operators have not managed to distinguish between the collection from the collections for the relevant year and the previous years (old debts). Therefore, it should be understood that the collection rate is lower than that presented above and that collections reporting does not necessarily reflect a significant increase in billing for the respective reporting year. For 2020, the regions with the highest reported collection rates are the Mitrovica Region with 97.10% and Prizren Region with 92%. The lowest collection rate is in the Gjakova region, at 89.3%³⁰

8.2. Waste Management in Municipality of Suharekë/Suva Reka

Waste management in the Municipality of Suharekë/Suva Reka is regulated by the Municipal Regulation on waste management of the territory of Suharekë/Suva Reka, of 2020. The Suharekë/Suva Reka Municipal Waste Management Plan 2016-2021 has also been drafted.

The regulation on waste management in the territory of Suharekë/Suva Reka 2020, defines the types of waste managed by the Municipality, which are³¹:

- Municipal waste (household and other similar waste in composition)
- Inert waste that does not dissolve or break down or react chemically
- Bulky waste (household appliances and furniture)
- Construction-demolition waste
- Bio-waste
- Commercial waste (from facilities used for commercial, business, sports purposes, etc.)

²⁸ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2019

²⁹ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020

³⁰ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020

³¹ Regulations on Waste Management in the territory of Suhareka, 2020

- Industrial waste
- Medical waste
- Animal waste

The Municipality does not manage:

- hazardous waste, and
- waste from sludge/mud and the like.

Among other things, the Regulation foresees municipal obligations on:

- Establishing a sustainable system for municipal solid waste management
- Environmental monitoring of the landfill
- Identification of illegal waste dump sites and their elimination
- Promoting waste minimization (home composting, etc.)
- Promoting public awareness-- active participation of residents in the implementation of solid waste management.

The (draft) Municipal Waste Management Plan 2016 – 2021-- has identified illegal dump sites. 38 locations with an area of 16 ha that existed in 2016 have been recorded. The Municipality has planned to reduce this number of illegal dump sites (illegal waste disposal points) through the expansion of the service area and awareness campaigns. In 2022, nearly 62 illegal dump sites are reported on the territory of the Municipality of Suharekë/Suva Reka.

8.2.1. Waste Service Coverage in the territory of the Municipality

According to the Municipal Plan 2016-2021, the collection service covers 31 settlements of the Municipality³²:

- 17 settlements are served by the “Eko Regjioni” regional company.
- 14 settlements are offered this service by the private “IS Company”.
- In 10 settlements in the rural area, there is no waste collection service.

According to municipal authorities, since 2020 the Municipality has authorized the regional “Eko Regjioni” company to cover its entire territory. They are cover 100% of the territory, and 92.2% of households.

Table 14. Waste Collection Service Coverage Rate³³

Municipality	Service coverage rate for households (2018) ³⁴	Service coverage rate for households (2019)	Service coverage rate for households (2020)	Increase or decrease in the coverage rate for households 2019-2020 (%)	Service coverage rate for businesses (2020)	Service coverage rate for institutions (2020)
Suharekë/Suva Reka	62.1 %	92.2%	80.0%	-12.2%	25.1%	64.1%

Table 15. Overview of municipal waste collection and transportation service coverage in 2019 and 2020,³⁵

³²Municipal Waste Management Plan 2016-2021, Municipality of Suhareka. January 2016

³³ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting year - 2020 (Appendix 2.1)

³⁴ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2019

³⁵ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting year - 2020 (Appendix 2)

Municipality	Number of inhabitants (KAS-2011)	Number of households (KAS-2011)	Number of active businesses in the Municipality 2020	Number of institutions in the Municipality 2020	Number of households receiving service (2019)	Number of households receiving service (2020)	Number of businesses receiving service (2020)	Number of institutions receiving service (2019)
Suharekë/Suva Reka	59722	9145	2738	64	8.431	7.316	686	41

8.2.2. Collections in the Municipality of Suharekë/Suva Reka

According to the KEPA Report on waste management in Kosovo for the years 2019 and 2020, the collection rate in the Municipality of Suhareka for 2018 was 88.93%, while there was a large increase in 2019 reaching 101.27%, and for 2020 it is reported to be 94.86%.

However, when talking about the increase in collections, it should be taken into account what was said in point 7.1.3 of this document regarding the difference that operators must make between the collection of prior debts (of previous years) and the real collections for the reporting year.

8.2.3. Waste Generation in the Municipality of Suharekë/Suva Reka

The waste generation per capita reported for 2020 is 0.47 kg per capita/day. Comparing to the average Kosovo wide waste generation of 0.74 kg per capita/day (see chapter 8.1, paragraph one, in this document), Municipality of Suharekë/Suhareka has the second lowest rate of waste generation per capita in Kosovo, after the Municipality of Junik.

Other data related to waste generation is shown in the table below.

Table 16. Amount of municipal waste collected and generated in Suharekë/Suva Reka, ³⁶

Municipality	Number of inhabitants (KAS-2011)	Number of inhabitants served	Number of households (KAS-2011)	Number of households served (2020)	Collected mixed municipal waste (tons/year)	Collected mixed municipal waste (kg/year)	Waste generation per capita (kg/year)	Waste generation per capita (kg/day)
Suhareka	59,722	55,574	9,145	5,175	9,456.16	9,456,160.00	170.16	0.47

8.2.4. Waste Landfills

Municipal waste from the territory of Suharekë/Suva Reka is disposed in the Prizren Regional Landfill (in Landovica). This Landfill was built in 2003 by the European Council (EC) and started operating in 2004 with a total capacity of 2,500,000 m³. In 2020, 105.305 tonnes/year were recorded and the rate increased by 1.2% compared to the previous year³⁷. This landfill serves the municipalities of Prizren, Rahovec/Orahovac, Malishevë/Mališevo, Suharekë/Suva Reka, Dragash/Dragaš, Mamushë/Mumuša and Gjakovë/Djakovica. In this landfill, the water pumping system is not operational, and the water from the landfill and surface water can mix, causing environmental hazard.

³⁶ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting year - 2020 (Appendix 1)

³⁷ Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020

Waste compression is not done up to standard. This landfill is scheduled to close in 2020.³⁸

Suharekë/Suva Reka has **the agricultural waste landfill** in the village of Shiroka³⁹. While there is also an **industrial waste landfill** at the location of the former “Ballkani” rubber plant, which, according to the municipal authorities was eliminated in 2019. **The construction and demolition waste landfill** is located within the industrial zone in Suharekë/Suva Reka, with an area of 39,156 m² and is owned by the Municipality. The management issue of this landfill will be regulated by a separate act.⁴⁰

Illegal dump sites (illegal waste disposal points) – based on the table below, the data shows that in 2020 there was a total of 61 illegal dump sites.

Table 17. Number of illegal dumps in Suharekë/Suva Reka in 2019/2020⁴¹

Municipality	Small dump sites (1-5 garbage bags of 200 liters)	Medium dump sites (6-20 garbage bags of 200 liters)	Large dump sites (>20 garbage bags of 200 liters)	Municipal waste	Construction and demolition waste	Industrial and hazardous waste	Voluminous waste	Other waste	Total illegal dump sites (number)
Suharekë/Suva Reka	24	21	16	16.00 %	26.00%	0.00%	0.00%	58.00%	61

8.2.5. Waste separation

According to the data from the KEPA Report, there is no waste separation at source infrastructure in Suharekë/Suva Reka.

Table 18. Access to municipal waste separation at source infrastructure, in 2019,⁴²

Municipality	Number of inhabitants (KAS-2011)	Number of households (KAS-2011)	Number of households with access to Separation at Source Infrastructure (2019)	Share of households with access to Separation at Source Infrastructure (2019)
Suharekë/Suva Reka	59722	9145	0.00	0.00 %

8.2.6. Waste Reduction and Recycling

No information has been found about specific measures being developed by the Municipality for waste reduction, composting, etc. According to data from the Municipality, the Municipality of Suharekë/Suva Reka has started the waste recycling initiative and has prepared the project. This project has not been implemented, but the Municipality plans on pushing this initiative forward.⁴³

³⁸Prizren Cross-Sectoral Intervention Plan (CSIP) for Climate Change 2020-2025. October 2019

³⁹Municipal Waste Management Plan 2016-2021, Municipality of Suhareka, January 2016

⁴⁰Municipal Waste Management Plan 2016-2021, Municipality of Suhareka, January 2016

⁴¹Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020.

⁴² Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020.

⁴³Scheme of the technological design of the bioreactor composting plant and production of eco-compost. Municipality of Suhareka

8.3. Reduce Greenhouse Gases through planned and proposed measures in the waste management sector

The measures planned for the Waste Management sector, in this plan, include 5 objectives with the corresponding measures. The objectives are:

- Improve waste management system and revise/draft relevant legislation
- Reduce amount of generated waste
- Promote waste recycling and reuse
- Reduce GHGs by stopping illegal waste dumping
- Reduce GHG emissions from illegal dump sites (illegal waste disposal points).

The reduction of GHG emissions from the measures undertaken in the waste sector must be determined during the compilation of the technical measures for the implementation of the measures (projects) determined under this plan.

8.4. Plan of Measures for the Waste Sector

Sector: Waste Management	Success Indicators	Responsible Institution	Related Sectors	Time Frame	Financial Costs	Funding Source	CO ₂ Reduction (tons/year)	Status	Sectoral Project/Plan	Priority
<p>Gender considerations priorities: Increase waste collection points and provide online schedules to make waste disposal more accessible for women Use modern, ergonomically designed equipment to reduce physical strain on workers, particularly women Hire women in waste management to promote gender equality Include informal waste pickers in formal waste management systems Promote composting and sustainable waste management practices that are easier for women to participate in Raise awareness of waste prevention and recycling, targeting women who prioritize environmental protection Impose disincentives for certain types of waste, such as plastic bags, to encourage women to reduce household waste.</p>										
<p>Objective 7.1: Improvement of the waste management system and revision/drafting of relevant legislation</p>										
<p>Measure 7.1.1: Revise waste management system</p>										
7.1.1.1	Finalize and approve Municipal Waste Management Plan (MWMP). The MWMP has to consider the integration of climate change mitigation and adaptation in its depth analysis.	Action Plan Document	Public Services, Environment and Emergencies Directorate	Eco-region Private Sector Civil society Donors	2022-2023	20,000.00	Municipal budget Central Budget Donors			Ongoing
7.1.1.2	Establish a sustainable system for municipal solid waste management. This system is based on the 3R concept: – Reduce (Prevent), – Re-use, and – Recycle Waste	Amount of re-used and recycled waste	Public Services, Environment and Emergencies Directorate	Eco-region Private Sector Civil society Donors Inspections Directorate	2023-2030	600,000.00	Municipal budget Central Budget Donors			New proposal
						620,000.00				
<p>Measure 7.1.2: Revise Regulations on Waste Management in the territory of Suharekë/Suva Reka</p>										

7.1.2. 1	Revise Regulations on Waste Management in the territory of Suharekë/Suva Reka, based on the finalized MWMP. Regulation also deals with other aspects, such as: – Waste re-use (waste reduction), – Regulating the use of plastic bags, (e.g., imposing a price on plastic bags provided by shops and vendors) – Treatment of organic waste – Composting organic plant waste	– Amount of re-used and recycled waste	– Public Services, Environment and Emergencies Directorate	– Eco-region – Private Sector – Civil society – Donors – Inspections Directorate	2023-2024	15,000.00	– Municipal budget – Central Budget – Donors			New proposal	
Measure 7.1.3: Enhance waste collections efficiency											
7.1.3. 1	Study of existing container points in cities and villages, functional analysis and recommendations for easier access to them, as well as identification of new possible points for placing containers.	– Study Report with Recommendations	– Public Services, Environment and Emergencies Directorate	– Eco-region – Private Sector – Civil society – Inspections Directorate	2023-2024	5,000.00	– Municipal budget			New proposal	
						15,000.00					
Objective 7.2. Reduce amount of generated waste											
Measure 7.2.1: Increased composting of organic waste											
7.2.1. 1	Develop Plan for the composting of plant organic waste. Composting plan to include analysis of the parties/persons who would benefit most from the distribution of composters. The analysis will also include the amount of grape, pumpkin, fruit and vegetable waste that can be composted.	– Composting Plan Document	– Public Services, Environment and Emergencies Directorate	– Eco-region – Agriculture, Rural Development and Forestry Directorate – Private Sector	2023-2024	10,000.00	– Municipal budget	-	-	New proposal	

7.2.1.2	Supply and distribution of composters for composting of organic plant waste	Number of distributed composters in use	Public Services, Environment and Emergencies Directorate	Eco-region Agriculture, Rural Development and Forestry Directorate Private Sector	2024-2026	70,000.00	Municipal budget Central Institutions Donors	-	-	New proposal	
7.2.1.3	Develop and organize awareness-building and resident outreach campaign on the importance of reducing waste, including organic waste, about the way composters are used, as well as about the benefits of composting.	Amount of collected organic waste	Public Services, Environment and Emergencies Directorate	Eco-region Agriculture, Rural Development and Forestry Directorate Private Sector	2023-2024	10,000.00	Municipal budget	-	-	New proposal	
7.2.1.4	Establish a compost collection point for the collection of organic waste from residents	Amount of collected organic waste	Public Services, Environment and Emergencies Directorate	Eco-region Agriculture, Rural Development and Forestry Directorate	2024-2026	100,000.00	Municipal budget Central Institutions	-	-	New proposal	
						190,000.00					
Measure 7.2.2: Reduce the generation and use of plastic bags											
7.2.2.1	Incentive package for the provision of reusable bags by shops (for a fee)	Amount of distributed eco-bags	Public Services, Environment and Emergencies Directorate	Private businesses (shops), local manufacturers of multi-purpose bags.	2024-2025	15,000.00	Municipal budget Central Institutions	-	-	New proposal	
						15,000.00					
Objective 7.3. Promote waste recycling and reuse											
Measure 7.3.1: Promote waste reuse											

7.3.1.1	Study on the possibility of circular development through the reuse of different types of waste.	Study Report with findings and recommendations	Public Services, Environment and Emergencies Directorate	Eco-region MESPI Private Sector	2024-2025	20,000.00	Municipal budget Central Institutions	-	-	New proposal	
						20,000.00					
Measure 7.3.2: Increase amount of recycled waste and reduce waste volume											
7.3.2.1	Establish the waste recycling Center, which includes: classification, processing of biomass (including wood from furniture waste), paper, plastic and glass	Waste Recycling Center is established	Public Services Directorate	Regional Waste Management Public Enterprise (Ekoregjioni),	2023-2024	500,000.00	Municipal budget Private Sector	-	-	Existing project	
7.3.2.2	Plan and organize awareness-raising campaign on: - importance of eliminating plastic and plastic bags as waste - benefits to residents from the delivery of plastic and glass bottles to collection points - Promote waste separation at source	Amount of plastic and glass bottles collected and recycled Number of residents targeted by the campaign	Public Services, Environment and Emergencies Directorate	Eco-region MESPI Private Sector	2024-2025	40,000.00	Municipal budget Central Institutions Donors	-	-	New proposal	
7.3.2.3	Feasibility Study and Plan to establish plastic and glass bottles collection points	Study Report and Plan	Public Services, Environment and Emergencies Directorate	Private businesses (Malls, etc.), Private Sector	2024-2025	10,000.00	Municipal budget Central Institutions	-	-	New proposal	
7.3.2.4	Establish plastic and glass bottles collection points for businesses generating many such bottles (cafes, restaurants, etc.).	Number of established points, Number of businesses involved	Public Services, Environment and Emergencies Directorate	Private Sector	2025-2026	15,000.00	Municipal budget Central Institutions	-	-	New proposal	

7.3.2.5	Establish collection points for organic animal waste in cooperation with businesses dealing with its recycling	<ul style="list-style-type: none"> - Number of established points, - Amount of collected waste 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Private Sector 	2025-2026	15,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Institutions 	-	-	New proposal	
						580,000.00					
Objective 7.4: Reduce GHGs by reducing illegal dump sites											
Measure 7.4.1: Enhance waste collection efficiency											
7.4.1.1	Implement Municipal Waste Management Plan (MWMP)	<ul style="list-style-type: none"> - Projects implemented by the Municipal Waste Management Action Plan 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Eco-region - Private Sector - Civil society - Donors - Inspections Directorate 	2023-2030	500,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Budget - Donors 			Proposal	
7.4.1.2	Install waste bins in public spaces.	<ul style="list-style-type: none"> - Number of installed bins 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Eco-region - Private Sector - Technical School - Donors - Inspections Directorate 	2023-2030	150,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Budget - Donors 			Proposal	
						650,000.00					
Measure 7.4.2: Reduce GHGs through automated waste collection											
7.4.2.1	Conduct study on automated waste collection containers, especially for points that generate a lot of waste (to avoid dumping) and rarely used points to avoid the circulation of waste collection vehicles	<ul style="list-style-type: none"> - Study Report 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Eco-region - Private Sector 	2023-2026	15,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Budget - Donors 	-	-	New proposal	

7.4.2. 2	Pilot projects with automated system containers	Number of projects and containers	Public Services, Environment and Emergencies Directorate	Eco-region Private Sector	2026-2028	20,000.00	Municipal budget Central Budget Donors	–	–	New proposal	
						35,000.00					
Objective 7.5: Reduce GHG emissions from illegal dump sites (illegal waste disposal points)											
Measure 7.5.1: Eliminate illegal dump sites											
7.5.1. 1	Increase inspections to deter the creation of illegal dump sites in cooperation with residents through resident reporting with photos from such sites.	Number of forms on waste dumped outside containers	Inspections Directorate	Public Services, Environment and Emergencies Directorate Eco-region	2022-2030	-		–	–	In place	
7.5.1. 2	Remove waste from existing illegal dump sites	Number of eliminated illegal dump sites	Public Services, Environment and Emergencies	Eco-region Private Sector	2022-2024	60,000.00	Municipal budget Central Budget Donors	–	–	New proposal	
7.5.1. 3	Recover sites that have served as illegal dump sites, e.g., afforestation of the spaces, or adjust, according to the circumstances, the infrastructure of their use for entertainment/recreation.	Afforested area	Public Services, Environment and Emergencies Directorate	Regional Waste Management Public Enterprise (Ekoregjioni), Private Sector	2023-2026	100,000.00	Municipal budget Central Budget Donors	–	–	New proposal	
						160,000.00					
Overall estimated investment cost for the Waste Management Sector:						2,290,000.00					

9. Transportation Sector Analysis

In Kosovo, transportation is mainly based on road transport. The construction of roads has a direct impact on the environment for several reasons, the most important of which are considered to be the occupation of agricultural lands, heightened soil erosion, fragmentation of natural habitats, change of the water regime, and other socio-environmental aspects. Kosovo has 2311.7 km of paved road network, of which 1509.4 km are regional, 665.2 km are public, and 137.2 km are highways⁴⁴. Paved and unpaved municipal roads are 4,925 km in all of Kosovo (MoI, DEIPC, June 2015). There is a growing trend of expansion of the road infrastructure from year to year, which also increases the pressure on the environment.

The number of vehicles registered in Kosovo in 2020 was 356,962 motor and non-motor vehicles. Compared to 2019, there is an increase of 0.31%. Cars account for the overwhelming majority of means of transportation in Kosovo, making up 292,902 vehicles. The figure below shows the trend of motor and non-motor vehicles registered in Kosovo in the 2011-2020 period⁴⁵.

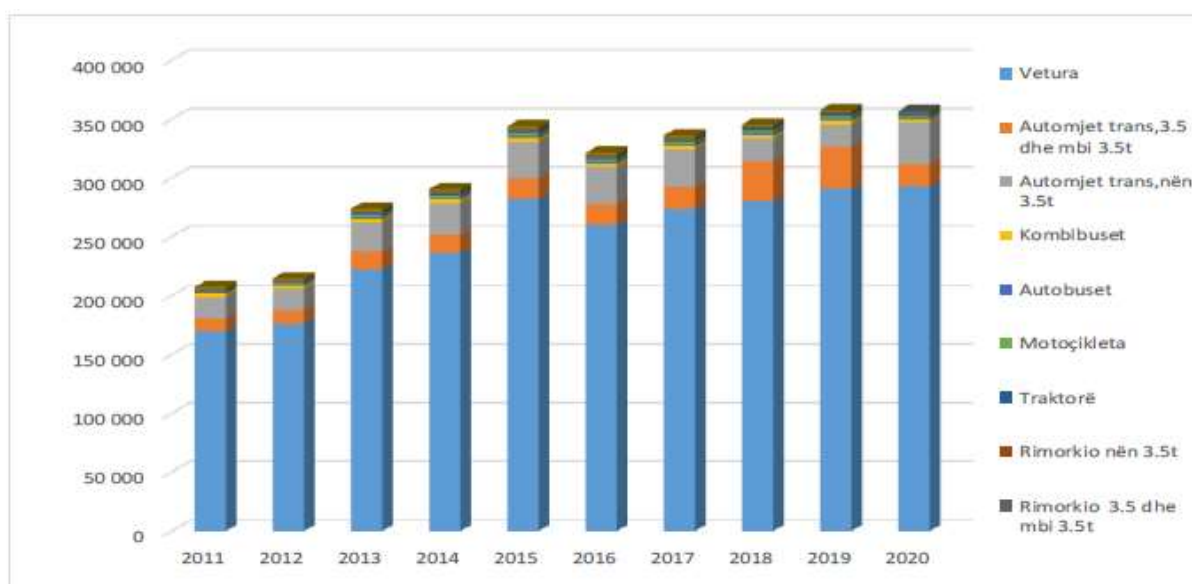


Figure 9. Motor and non-motor vehicles registered in the 2011-2020 period

The Ministry of Infrastructure and Transportation has begun implementing vehicle gas metering as of September 01, 2019, for which residents will have to pay an additional fee when registering cars. On the one hand this can cause problems, as most vehicles are expected to have trouble passing the tests to be applied due to their old age, while on the other hand it will provide more accurate data on the level of pollutants emitted by vehicles, also including GHGs. It will also enable compliance with the permissible gases and particles emission rates of vehicles in use, according to the European Union (EU) Emission Standard for Passenger Cars and Light Commercial Vehicles⁴⁶.

⁴⁴ Kosovo's Environment, 2020. Environmental Indicators Report. KEPA, 2020.

⁴⁵ Transportation and Telecommunication Statistics, Q1 2021. KAS 2021.

⁴⁶ Prizren Cross-Sectoral Intervention Plan (CSIP) for Climate Change 2020-2025. October 2019

In terms of GHG emissions, the transportation sector in Kosovo comes immediately after the energy industry, and its emissions stand at 1,337 Gg CO₂eq, or make up 15% of total emissions⁴⁷. Transportations emissions are due to the use of petroleum fuels.

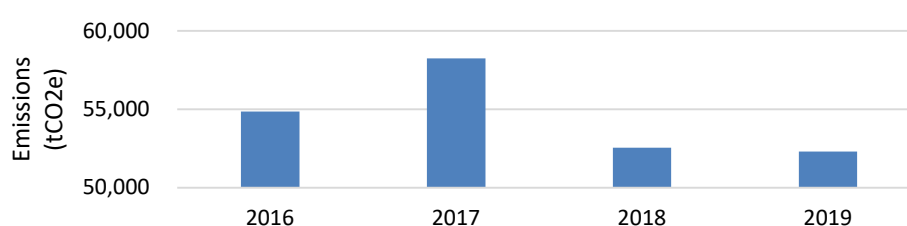
In the transportation sector, gas and particle emissions from combustion of fuels occur in or very close to residential areas, and thus have a direct and harmful impact on human health. On the other hand, transportation is the sector where a reduction in energy use and emissions is proving to be extremely difficult to achieve, despite some success in any urban area. But the main opportunities for reducing emissions from this sector would be to replace older vehicles with new ones, use public transportation and promote sustainable transportation with less motor traffic, and more cycling.

9.1. Consumption of energy products and emissions in the transportation sector in Suharekë/Suva Reka

In Suharekë/Suva Reka, the dominant transport mode is on-road transportation. No other mode of transport is included in the study as there is no active rail network, water network, or airport in the municipality.

The most likely source of information for the road transportation sector would be statistics on vehicle registrations at municipality Vehicle Registry Centre. Only limited data is available on the fleet composition, however. In Suharekë/Suva Reka, this is limited to statistics on the number of vehicle registrations by fuel type and EURO standard. This is insufficient to undertake a complete assessment of road transport emissions. Instead, assumptions were made on the representativeness of other data to Suharekë/Suva Reka.

The GHG report for Suharekë/Suva Reka used the data reported for Albania, assuming that the overall vehicle mileage are applicable to Suharekë/Suva Reka. Thus, in the figure are presented emissions trends from the road transportation sector from 2016-19 in t CO₂e



Emissions drop significantly between 2017 and 2018 is due to artefacts of the assumptions made. European Commission data for Albania shows significant reductions in the number of Euro V buses and HGVs between 2017 and 2018 as Euro VI buses are introduced into the fleet. This demonstrates the importance of developing a robust dataset for Suharekë/Suva Reka municipality rather than using alternative proxies.

⁴⁷ Report on Greenhouse Gas Emissions in Kosovo 2014-2019. KEPA 2021.

9.2. Climate Change Risks in Transportation and Adaptation

The transportation sector is vulnerable to climate change due to:

- Damages to traffic infrastructure from extreme weather events (mainly on routes and signage)
- Damages to traffic infrastructure from the occurrence of landslides on roads
- Rapid damages to the asphalt layer on roads due to increased temperature extremes
- Need to organize a rapid and efficient response to various extreme traffic disruption events caused by the effects of climate change

An effective adaptation to climate change must consider and address the risks mentioned above. In this cross-sectoral plan, several measures for adaptation to climate change in the transportation sector are foreseen.

9.3. Reduction of greenhouse gases through measures in the transportation sector

This cross-sectoral plan includes a number of measures from the transportation sector, both existing and proposed by the Working Group. In this sector are listed actions according to 5 objectives:

- Plan sustainable transportation in the territory of the Municipality of Suharekë/Suva Reka
- Promote the use of public transportation and reduce GHG emissions
- Reduce GHG emissions through the use of high-efficiency vehicles and electric cars
- Promote sustainable transportation with less motor traffic, more cycling
- Adapt to climate change in transportation and issues related to road infrastructure

The accurate calculation of GHG emissions reduction can only be made after the design of the bills of quantities and the implementation of the proposed measures, and therefore it is not fully accounted for in this plan.

9.4. Plan of Measures for the Transportation Sector

Sector: Transportation	Success indicators	Responsible institution	Related sectors	Timeline for implementation	Financial costs	Funding source	CO2 Reduction (tons/year)	Status	Sectoral Project/ Plan	Priority
<p>Gender considerations priorities:</p> <p>Developing a cycling path should take into account the specific safety concerns of women, who may face higher risks of harassment and violence while cycling in public spaces.</p> <p>Investing in public transport should consider the specific needs and constraints of women, who may have caregiving responsibilities or face safety concerns while using public transport.</p> <p>Developing a walkability toolkit application should consider the specific needs of women, who may have different walking patterns and needs than men, such as the need for safe and well-lit pedestrian paths.</p> <p>Increasing investment in improving walking paths should prioritize areas where women are more likely to walk, such as areas around schools and markets.</p> <p>Promoting women's participation in urban transport planning can ensure that the specific needs and concerns of women are taken into account in transport infrastructure and service design.</p> <p>Including more women in transport-based jobs can promote gender equality and provide economic opportunities for women.</p> <p>Providing preferential treatment to woman-owned businesses in transport procurement can promote gender equality in the industry.</p> <p>Advocacy for the benefits of low-carbon transport should consider the potential gender impacts of different transport modes, such as the differential impacts on women and men's access to economic opportunities and services.</p>										
<p>Objective 8.1: Plan sustainable transportation in the territory of the Municipality of Suhareka</p>										
<p>Measure 8.1.1: Develop sustainable mobility</p>										
8.1.1.1	Develop sustainable municipal mobility plan	Mobility Plan Document	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster	2023-2024	120,000.00	Municipal budget			Provided in the MZP ⁴⁸

⁴⁸ MZP - Suhareka Municipal Zoning Map 2022-2030

8.1.1.2	Draft Public Parkings Management Plan. and promote green parking.	Plan Document	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster	2023-2024	20,000.00	Municipal budget			Provided in the MZP	
						140,000.00					
Measure 81.2: Reduce GHG emissions through optimization of the road network and traffic											
8.1.2.1	Study to find opportunities to reduce GHG emissions and reduce traffic in existing road junctions with heavy traffic loads, both in the town and in the suburbs.	Study Document	Inspections Directorate	Urban Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster	2023-2024	20,000.00	Municipal budget		-	New proposal	
8.1.2.2	Expand Municipal Bus Station	Bus Station expanded and operational	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and	2023-2024	350,000.00	Municipal budget			Provided in the MZP	

8.1.2.3	Expand regional bus station and construct underground parking lot	Regional Bus Station is expanded and underground parking is built	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and	2024-2026	1,300,000.00	Municipal budget			Provided in the MZP	
8.1.2.4	Promote reduction of GHG emissions and increase safety in transportation through the construction of the "Smart City" system.	System is operationalized	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies	2023-2024	80,000.00	Municipal budget			Provided in the MZP	
8.1.2.5	Develop study on finding the possibility of reducing GHG emissions in the existing road junctions with heavy traffic loads, in the direction of the entrances and exits of the highway, in the town and its suburbs. The analysis should provide recommendations on reducing traffic.	Study Report	Public Services, Environment and Emergencies Directorate	MESPI MoE	2023-2024	10,000.00	Central Budget Municipal budget			New proposal	
8.1.2.6	Reduce GHG emissions by eliminating the load created by public transportation buses in front of schools in the town of Suharekë/Suva Reka. Review of breakpoints and their control.	Unhindered and free movement of cars	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate	2023-2024	20,000.00	Municipal budget			New proposal	
						1,780,000.00					
Objective 8.2: Promote the use of public transportation and reduce GHG emissions											

Measure 8.2.1: Promote use of public transportation in Suharekë/Suva Reka											
8.2.1.1	Feasibility study on the possibility of establishing urban public transportation in Suharekë/Suva Reka	Study Document	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate	2025-2027	20,000.00	Municipal budget		-	New proposal	
8.2.1.2	Existing buses of intra-municipal lines are suitable for people with special needs (with wheelchairs), strollers for children, announcements are made over the PA system.	Existing buses are suitable and announcements are made over the PA system.	Inspections Directorate	Public Services, Environment and Emergencies Directorate Private Sector	2023-2028	50,000.00	Private Sector		-	New proposal	
8.2.1.3	Promote reduction of GHG emissions through the construction of 12 "green" public transportation bus stops in the urban area.	Green stops are built	Inspections Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies	2025-2027	216,000.00	Municipal budget Donors		-	Provided in the MZP	
						286,000.00					
Objective 8.3. Reduce GHG emissions through the use of high-efficiency vehicles and electric cars											
Measure 8.3.1: Promote replacement of old vehicles with new ones											
8.3.1.1	Replace gradually old municipal fleet vehicles with new, hybrid or fully-electric efficient vehicles with lower emissions	Amount of GHG and fuel reduction	Administration Directorate	Public Services, Environment and Emergencies Directorate	2023-2030	1,200,000.00	Municipal budget Donors	To be calculated		New proposal	

8.3.1.2	Priority licensing of public transportation companies and taxi service companies with at least 50% replacement of old vehicles with new, hybrid or fully-electric efficient vehicles with lower emissions	Amount of GHG and fuel reduction	Inspections Directorate	Public Services, Environment and Emergencies Directorate	2023-2028			To be calculated		New proposal	
8.3.1.3	Promote hybrid and electric cars through the installation of car chargers at designated points.	Number recharging points for electric vehicles	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate Private Sector	2023-2028	50,000.00	Municipal budget Donors Private Sector	To be calculated		New proposal	
						49,995.00					
Objective 8.4: Promote sustainable transportation with less motor traffic, more cycling											
Measure 8.4.1: Create new bike lanes											
8.4.1.1	Improve existing bicycle lanes and construct new bicycle lanes and parking places throughout the territory of the Municipality, prioritizing the urban area and the connection with the Suharekë/Suva Doka industrial area	Length in km of improved lanes and length of new cycling lanes	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate	2023-2028	100,000.00	Municipal budget Donors Private Sector	To be calculated		New proposal	
						100,000.00					
Measure 8.4.2: Awareness-building and Outreach Campaign on Biking											
8.4.2.1	Plan and organize the awareness-building and outreach campaign about the importance of using bicycles to reduce GHG emissions and improve our health	Number of persons involved in the campaign Promotional materials: posters, leaflets, TV shows, etc.	Public Services, Environment and Emergencies Directorate	Education Directorate Urban and Spatial Planning Directorate	2023-2028	10,000.00	Municipal budget Donors Private Sector	To be calculated		New proposal	
						10,000.00					

Measure 8.4.3: Promote motorcycles, bicycles and electric scooters to reduce GHG emissions											
8.4.3.1	Install charging points for electric motorcycles, bicycles and scooters throughout the territory of the Municipality, including rural tourism points.	– Number of electricity charging points	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate – Private Sector	2023-2028	20,000.00	– Municipal budget – Donors – Private Sector	To be calculated		New proposal	
8.4.3.2	Promote business of bicycle rentals using modern rental models that employ smartphone applications.	– Number of bikes rented (borrowed)	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate – Private Sector	2023-2028	40,000.00	– Private Sector	To be calculated		New proposal	
						60,000.00					
Objective 8.5: Adaptation to climate changes in transportation and those related to road infrastructure											
Measure 8.5.1: Protect roads and traveller's from heat waves											
8.5.1.1	Build shades with smart greenery in key pedestrian areas of the town and villages that are already connected to the town	– Number of shades built	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban Planning Directorate – Private Sector – Civil society	2023-2028	50,000.00	– Municipal budget – Donors – Private Sector			New proposal	
8.5.1.2	Establish protocol with movement schedules on certain roads for heavy tonnage vehicles during periods of heat waves, to preserve the asphalt layer (this is especially important for the southern and eastern areas of the Municipality facing south and west).	– Established Protocol Document	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate – Private Sector – Civil society	2023-2028	20,000.00	– Municipal budget – Donors – Private Sector			New proposal	
						70,000.00					

Measure 8.5.2: Protection from flooding of transportation routes											
8.5.2.1	Study roads at risk of flooding and propose protection measures	– Study Document	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate	2023-2024	20,000.00	– Municipal budget – Central Budget			New proposal	
8.5.2.2	Construction of embankments for protection against road flooding based on the study carried out by the Municipality.	– Length of embankments constructed	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate	2024-2025	300,000.00	– Municipal budget – Central Budget			New proposal	
						320,000.00					
Measure 8.5.3: Protect biodiversity from road constructions											
8.5.2.3	Monitor the integration of animal migration corridors in road infrastructure construction projects throughout the territory of the Municipality.	– Number of monitored projects and integrated corridors	– Public Services, Environment and Emergencies Directorate	– Inspections Directorate – Urban and Spatial Planning Directorate	2026-2027	20,000.00	– Municipal budget			New proposal	
						19,999.00					
Overall estimated investment cost for the Transportation Sector:						4,256,000.00					

10. Public Services Sector Analysis

The most direct impacts of climate change on public services are expected on public infrastructure, particularly transportation, threatening major disruptions and making public infrastructure strengthening and maintaining a key element of any adaptation policy. Water management will also face major challenges and will require adaptive responses to climate change. The public sector has a key role to play in climate change mitigation as well as in the adaptation policy and implementation. This role includes public investment, public procurement, energy transformation management, flood protection and waste management. The Municipality of Suharekë/Suva Reka consists of 41 settlements with 59,722 resident inhabitants (2011 Population Census in Kosovo). The area of the territory of the Municipality is 361.78 km². According to the 2011 census, 49,300 inhabitants live in rural areas and 10,422 inhabitants in urban areas. Therefore, in terms of geography, the Municipality of Suharekë/Suva Reka has a dispersed population without any large urban center. This dispersal of the population in rural areas naturally requires the extension of the infrastructure for the provision of public services to residents, which is: water supply, sewerage, public roads, public street lighting, disaster protection, etc.

Access to water supply – Out of 41 localities in the Municipality of Suharekë/Suva Reka, the “Southern Hydro-Region” Regional Water Company manages the water supply system in 16 settlements. In the MLGA report on the evaluation of municipal performance for 2019, the Municipality of Suharekë/Suva Reka has reported on the extension of the drinking water network to 96.86% of households, public institutions and businesses.

Drainage (atmospheric) water channels – With the exception of the urban area that has only 2031m of drainage networks, all other settlements do not have any sewerage and drainage network. On the part of the network that extends to the suburban streets of the urban area, the existing network creates floods during heavy rains, because there is no separation of sewage and storm water collection.

Also at the entrance of the town, the Topluha River bed is degraded, which results in the possibility of flooding, while in certain rural areas the maintenance of creeks is not sufficient. Only 11, or 23% of the villages, have a storm water drainage network, but it shared with the sewerage network, while the rest of the villages, 30 or 63%, have no storm water drainage network. All sewerage flows into rivers⁴⁹.

Only climate change-related interventions and not all public services will be included in this plan. While public services related to the energy, transportation and waste management sectors are listed under these sectors.

10.1. Treatment of public services from the aspect of climate change

This cross-sectoral plan includes a range of public service sector measures, both existing and proposed by the Working Group. In this sector are listed actions according to 5 objectives:

- Promote walking
- Green City
- Enhance knowledge on green development and climate change

⁴⁹Suhareka Municipal Development Plan 2021-2029

- Ensure stable supply of drinking water
- Reduce GHG emissions and protect the environment from waste and polluted water

This plan determines measures related to the reduction of GHG emissions (mitigation of climate change) and certain adaptation measures. The accurate calculation of GHG emissions reduction can only be made after the design of the bills of quantities and the implementation of the proposed measures, and therefore it is not fully accounted for in this plan.

10.2. Plan of Measures for the Public Services Sector

Sector: Public Services	Success indicators	Responsible institution	Related sectors	Timeline for implementation	Financial costs	Funding source	CO2 Reduction (tons/year)	Status	Sectoral Project/ Plan	Priority
<p>Gender Considerations priorities:</p> <p>Clean urban drainage networks should consider the specific needs and concerns of women, who may have less access to safe and clean water for household use due to their caregiving responsibilities. Improve services for waste collection should take into account the specific needs of women, who may be responsible for managing household waste and need access to convenient and safe waste collection points.</p> <p>Consider biodiversity protection in urban planning can help promote gender equality by preserving natural spaces that women may use for recreation and gathering.</p> <p>Prevent the development of residential areas near the river can protect women's safety, as they may be more vulnerable to flooding and other natural disasters.</p> <p>Improve public infrastructure for people with disabilities should consider the specific needs of women with disabilities, who may face additional barriers to accessing public services and infrastructure.</p> <p>Provide organized transport to public institutions for older adults can promote gender equality by ensuring that women have equal access to public services and facilities.</p> <p>Develop an application/system for voluntary reporting of illegal waste dumpsites can encourage women's participation in waste management and reporting, as they may have valuable local knowledge of waste management issues.</p> <p>Improve public lighting in the town can promote women's safety and mobility, as they may be more vulnerable to violence and harassment in poorly lit areas.</p> <p>Use of renewable energy for streetlights can promote sustainable and equitable development by reducing the environmental impact of energy use and promoting equal access to energy for women and men.</p> <p>Improve the management of the environment at the local level can promote gender equality by ensuring that women have a voice in environmental decision-making and that environmental policies consider the specific needs and concerns of women.</p>										
Objective 9.1: Promote walking										
Measure 9.1.1: Built new pedestrian pathways										
9.1.1.1	Construct pedestrian pathways in the town and install sensory paths on sidewalks for the orientation of the visually impaired and the blind.	Length of walking pathways for pedestrians	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate	2023-2028	150,000.00	Municipal budget Central Budget, Donors			New proposal
9.1.1.2	Construct ramps on sidewalks to enable the passage of wheelchairs of people with special needs and mothers/parents with strollers.	Percentage of streets where ramps are built	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate	2023-2025	100,000.00	Municipal budget Donors			New proposal

9.1.1.3	Signage for passage of wheelchairs of people with special needs and mothers/parents with strollers	Percentage of signed streets	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate	2023-2025	5,000.00	Municipal budget Donors			New proposal	
9.1.1.4	Construction of green recreational-sports spaces	Number of recreational-sports spaces built Number of trees planted	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate	2023-2025	120,000.00	Municipal budget Donors	To be calculated , 1 tree absorbs about 22 kgCO ₂ /ye		New proposal	
						375,000.00					
Objective 9.2: Green City											
Measure 9.2.1: Expand green areas											
9.2.1.1	Construct green areas in the town and install games for children	Number of trees planted GHG reduction potential	Public Services, Environment and Emergencies Directorate	Inspections Directorate Urban and Spatial Planning Directorate Private Sector	2023-2024	50,000.00	Municipal budget Donors	To be calculated , 1 tree absorbs about 22 kgCO ₂ /ye ar		New proposal	
9.2.1.2	Absorption (capture) of CO ₂ through planting trees and arranging green spaces in the Industrial Zone.	Number of trees planted GHG reduction potential	Public Services, Environment and Emergencies Directorate Suhareka Businesses Association	Inspections Directorate Urban and Spatial Planning Directorate Private Sector	2023-2024	40,000.00	Municipal budget Private Sector	To be calculated , 1 tree absorbs about 22 kgCO ₂ /ye ar		New proposal	

9.2.1.3	Planting trees/shrubs along sidewalks to prevent illegal parking and enable unhindered walking.	<ul style="list-style-type: none"> - Number of trees planted - GHG reduction potential 	Public Services, Environment and Emergencies Directorate	<ul style="list-style-type: none"> - Inspections Directorate - Urban and Spatial Planning Directorate 	2023-2024	30,000.00	<ul style="list-style-type: none"> - Municipal budget - Donors - Private Sector 	To be calculated , 1 tree absorbs about 22 kgCO ₂ /ve		New proposal	
						120,000.00					
Objective 9.3: Enhance knowledge on green development and climate change											
Measure 9.3.1: Education for innovative green development											
9.3.1.1	Green development educational programmes in schools	<ul style="list-style-type: none"> - Number of programmes - Number of pupils - Number of schools 	Public Services, Environment and Emergencies Directorate	Education Directorate	2023-2028	30,000.00	<ul style="list-style-type: none"> - Municipal budget - Donors 	-		New proposal	
9.3.1.2	Establish botanical park with different types of plants for use for relaxation by residents (community) as well as for demonstration of different types of plants for pupils and the general public. The park will promote the importance of biodiversity conservation in terms of climate change.	<ul style="list-style-type: none"> - Park is built 	Public Services, Environment and Emergencies Directorate	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - Public Services, Environment and Emergencies Directorate 	2023-2028	150,000.00	Municipal budget, donors,	-		New proposal	
						180,000.00					
Objective 9.4: Ensure stable supply of drinking water											
Measure 9.4.1: Reduce water losses in the water supply network											

9.4.1.1.	Negotiate with the central level for the replacement of the main pipe ACC Ø 300mm with a pipe of HDPE PE 100 material, as well as establish the secondary network along the main road Suhareka-Prizren (up to the Pump station in Malësia e Re).	Project is completed	MESPI MoE	Public Services, Environment and Emergencies Directorate Southern Hydro-Region	2023-2027	1,250,000.00	Central Budget Southern Hydro-Region	-		Provided in the MZP	
						1,250,000.00					
Measure 9.4.2: Establish water storage reserves											
9.4.2.1	Construct water storage lake in Dragaqina with a volume V=68 million m ³	Water storage constructed	MESPI MoE Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster Directorate		2023-2027	20,000,000.00	Central Budget Donors	-		Provided in the MZP	
9.4.2.2	Research drinking water sources (Reqan and Nishor)	Projects are completed	MESPI MoE	Public Services, Environment and Emergencies Directorate Southern Hydro-Region	2023-2026	50,000.00	MESPI MoE Southern Hydro-Region	-		Provided in the MZP	

9.4.2.3	Capture water source, construction of catchments, construction of the 500 m3 reservoir and installation of the pipe from the source to the reservoir in the village of Budakovo	Project is completed	MESPI MoE	Public Services, Environment and Emergencies Directorate Southern Hydro-Region	2023-2026	185,630.00	MESPI MoE Southern Hydro-Region	-		Provided in the MZP	
9.4.2.4	Construction of the new water supply network for the villages of Budakova, Buzhala, Krushica and Papaz	Water supply network is completed and operational	MESPI MoE	Public Services, Environment and Emergencies Directorate Southern Hydro-Region	2023-2028	522,183.00	MESPI MoE Southern Hydro-Region	-		Provided in the MZP	
						20,757,813.00					
Measure 9.4.3: Conservation of water for irrigation of green spaces											
9.4.3.1	Feasibility study for rainwater capture for recycling and use for irrigation of public and private green spaces	Study Report	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Private business sector Households Environmental organizations	2023-2024	10,000.00	Municipal budget	-		New proposal	
9.4.3.2	Implement pilot projects for rainwater capture for recycling and use for irrigation of public and private green spaces	Number of projects delivered	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Private business sector Households Environmental	2024-2025	35,000.00	Municipal budget Donors Private Sector	-		New proposal	

9.4.3.3	Based on the results of the study and the implementation of the pilot projects, establish a municipal regulation on setting the construction criteria for buildings that include as a condition the placement of tanks for capturing rainwater for irrigation of green spaces		Public Services, Environment and Emergencies Directorate Urban and Spatial Planning Directorate	Private business sector Households Environmental organizations	2025-2027	7,000.00	Municipal budget Donors Private Sector	-		New proposal	
						52,000.00					
Objective 9.5: Reduce GHG emissions and protect the environment from waste and polluted water											
Measure 9.5.1: Treat sewerage and wastewater											
9.5.1.1	Construct the sewerage treatment plant, based on the recommendations of the 2011 Feasibility Study. Construction according to variant D - Construction of collectors for removal of waste water and construction of the Plant for Option II and III with the inclusion of secondary sludge treatment.	Plant is built	Public Services, Environment and Emergencies Directorate	MESPI MoE Urban and Spatial Planning Directorate Property and Cadaster Directorate	2023-2027	14,673,720.00	Central Budget Donors			Existing proposal	
9.5.1.2	Construct small sewerage treatment plants for 2-3 villages.	Plants are built	Public Services, Environment and Emergencies Directorate	MESPI Urban and Spatial Planning Directorate Property and Cadaster	2023-2027	5,000,000.00	Municipal budget Central Budget Donors			New proposal	
9.5.1.3	Construct the collector for the treatment of agri-industrial waters in the Agri-Zone	Collector is built	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Property and Cadaster	2023-2024	218,500.00	Municipal budget			Provided in the MZP	

	19,892,220.0 0	
Overall estimated investment cost for the Public Services Sector:	42,627,033. 00	

11. Rural development

Rural regions have an essential role in the transition to a zero-emission economy and in dealing with climate change. The following areas of action can support and accelerate the transition to an environmentally sustainable, net zero emission economy in rural regions to overcome challenges and take advantage of opportunities⁵⁰:

- Strengthen the evidence base by collecting and consolidating regional and local data assessing how opportunities and challenges related to climate change will play out in all types of rural areas.

Develop indicators capable of informing policy makers and facilitating communication to more effectively support the transition of rural areas. In that process, local and regional actors should be involved in partnership with central level policies, ensuring that their views are taken into account at all institutional levels.

- In accordance with the principle of “Just Transition”, rural regions should be empowered to develop and implement effective transition strategies, ensuring that they are included and have sufficient enabling conditions.

This includes building knowledge, institutional capacities, good governance, data, digital infrastructure and financing, to adapt and build resilience to climate change, as well as to ensure that climate change mitigation measures that can create favourable situations for rural development, are taken. Facilitate attraction of private investment for innovative climate solutions when public funding is insufficient.

There are five areas for action through which investors make just transition part of their operational practices: Investment strategy, investor engagement, capital allocation, policy and partnership advocacy, and learning and revision of best practices, as shown in the figure below.

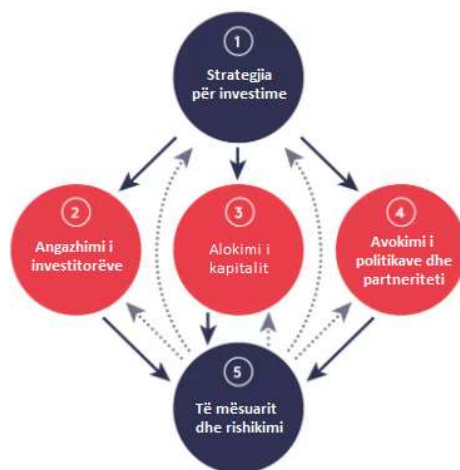


Figure 10. Just transition: five action areas for investors ⁵¹

⁵⁰ OECDs Rural Agenda for Climate Action

⁵¹Climate change and the just transition - A guide for investor action. Grantham Research Institute on Climate Change and the Environment. London School of Economics and Political Science. London, 2018

- Build competitive advantages of rural regions in the production of renewable energy, creating local innovation ecosystems and connecting with new initiatives.

Ensure that local communities benefit from partnering with private investors through meaningful co-ownership or benefit-sharing arrangements.

- Support sustainable management of natural capital, sustainable land management practices and value creation from restoring, preserving and enhancing ecosystems for rural development.

Establish integrated spatial planning for land use across functional territories to minimize unsustainable development patterns (such as urban sprawl and loss of biodiversity) and enhance sustainable development with high carbon sequestration and socio-economic development potential, such as agri-forestry, climate-smart agriculture, eco-tourism and sustainable forestry. Critically, the process requires: inclusion of local rural voices (e.g., local traditional knowledge); investing in nature-based solutions (e.g., flood and drought risk management); and development of innovative market mechanisms such as certification and payments for ecosystem services schemes (PES).

- Support transition to a circular and bio-economy to minimize environmental pressures and promote resource efficiency to provide opportunities for new rural business models and create new markets.

This includes exploring rural-urban linkages and supporting the engagement and buy-in of local communities in the process.

- Contribute to the decarbonisation of transportation in rural regions by accelerating the transition to more sustainable and innovative mobility options, as well as smartly developing and connecting the necessary physical and digital infrastructure (e.g., renewable energy generation, fast internet connectivity, etc.).

11.1. Actions to reduce GHG emissions and adaptation actions for the rural development sector

In this document, in the plan of measures for implementation, rural development is divided according to the following sub-sectors and objectives for each sub-sector:

- Agriculture sub-sector with the objective: Develop sustainable, efficient and climate resilient agricultural system;
- Biodiversity sub-sector with the objective: Protect biodiversity on the entire territory of the Municipality;
- Forestry sub-sector with the objective: Capture (absorb) CO₂ through sustainable forest management;
- Rural tourism sub-sector with the objective: Plan and develop sustainable and climate resilient tourism;

This plan determines measures related to the reduction of GHG emissions (mitigation of climate change) and certain adaptation measures for the rural development sector. The accurate calculation of GHG emissions reduction can only be made after the design of the bills of quantities and the implementation of the proposed measures, and therefore it is not fully accounted for in this plan.

11.2. Plan of Measures for the Rural Development Sector

Sector: Public Services	Success indicators	Responsible institution	Related sectors	Timeline for implementation	Financial costs	Funding source	CO2 reduction (tonnes/year)	Status	Sectoral Project/Plan	Priority
<p>Gender considerations priorities</p> <p>The application of water-saving cultivation systems should consider the specific needs and concerns of women, who may be responsible for water management in agriculture and may have limited access to water resources.</p> <p>Raising public awareness about food loss and waste can promote gender equality by recognizing the role of women in food production, processing, and distribution, and by encouraging their participation in reducing food waste.</p> <p>Avoiding deforestation from agriculture can preserve natural resources that women may rely on for food, fuel, and other livelihood needs.</p> <p>Developing early climate warning systems can benefit women by providing advance notice of climate-related risks, which may disproportionately affect them due to their gender roles and responsibilities.</p> <p>Investing in drought-tolerant seeds can support women farmers who may have limited access to water resources and may be more vulnerable to drought.</p> <p>Investing in improving soil health can benefit women farmers who may rely on small-scale agriculture for their livelihoods and may face challenges related to soil quality and productivity.</p> <p>Enhancing climate risk-informed policy planning in the rural development sector can promote gender equality by recognizing the specific needs and concerns of women in rural areas and ensuring their participation in policy development.</p> <p>Subsidizing farmers to access climate-resilient agriculture products can benefit women farmers who may have limited financial resources to invest in climate-resilient technologies and practices.</p> <p>Including women in decision-making regarding rural development can ensure that their perspectives and needs are taken into account and can promote gender equality in the sector.</p>										
Sub-sector: Agriculture										
Objective 10.1: Develop sustainable, efficient and climate resilient agricultural system										
Measure 10.1.1: Adapt to climate change by increasing security of supply through increased local agricultural production										
10.1.1.1	Feasibility study for the identification of areas for the construction of rural road infrastructure for agriculture on the entire territory of the Municipality. The study will also identify increased opportunities and benefits for agricultural development.	Feasibility Study Report	Municipal Agriculture Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster Directorate	2022-2023	218,500.00	Municipal budget			New proposal

10.1.1.2	Construct rural road infrastructure for agriculture in the entire territory of the Municipality, based on the recommendations of the Feasibility Study.	Length of newly opened rural roads (in km)	Municipal Agriculture Directorate	Urban and Spatial Planning Directorate Public Services, Environment and Emergencies Directorate Property and Cadaster Directorate	2024-2025	218,500.00	Municipal budget			Provided in the MZP	
10.1.1.3	Supply of sapling material Grape vine - Plum - Walnut - Hazelnut	Number of saplings planted	Municipal Agriculture Directorate	Property and Cadaster Directorate	2022-2025	134,000.00	Municipal budget			Provided in the MZP	
10.1.1.4	Development projects for the processing of agricultural products	Number of projects supported	Municipal Agriculture Directorate	Property and Cadaster Directorate	2022-2025	210,000.00	Municipal budget			Provided in the MZP	
10.1.1.5	Development projects for Horticulture	Number of projects supported	Municipal Agriculture Directorate	Property and Cadaster Directorate	2022-2025	100,000.00	Municipal budget			Provided in the MZP	
10.1.1.6	Development projects for beekeeping, poultry, fishing	Number of projects supported	Municipal Agriculture Directorate	Property and Cadaster Directorate	2022-2025	100,000.00	Municipal budget			Provided in the MZP	
10.1.17	Development projects for Rural Agri-Tourism	Number of projects supported	Municipal Agriculture Directorate	Property and Cadaster Directorate	2022-2025	100,000.00	Municipal budget			Provided in the MZP	
10.1.1.8	Establish the map of agricultural land for the territory of the Municipality, which will determine the zoning of lands based on the highest studied yield of agricultural crops.	Agricultural land zoning map	Municipal Agriculture Directorate	Property and Cadaster Directorate	2023-2027	100,000.00	Municipal budget			New proposal	
						1,181,000.00					
Measure 10.1.2: Water conservation and efficient use of water for irrigation of agricultural land											

10.1.2.1	Feasibility Study for the construction of water storage points for their use for irrigation and by firefighters in the case of field/forest fires. The study analyzes the possibility of refilling the reservoirs with pumps driven by solar PV energy.	– Feasibility Study Report	– Agriculture, Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Urban and Spatial Planning Directorate	2023-2024	15,000.00	– Municipal budget – Donors			New proposal	
10.1.2.2	Construction of surface dams for storage of water for irrigation and extinguishing fires.	– Number of dams built	– Agriculture, Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Urban and Spatial Planning Directorate	2023-2027	350,000.00	– Municipal budget – Central Budget, – Donors			New proposal	
10.1.2.3	Promote drip irrigation system by supporting farmers with such irrigation systems	– Number of irrigation systems installed and the area of land irrigated with the drip system	– Agriculture, Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Property and Cadaster Directorate	2023-2027	180,000.00	– Municipal budget – Central Budget, – Donors			New proposal	
						545,000.00					
Measure 10.1.3: Reduce GHG emissions through increasing EE and use of RES in agriculture											
10.1.3.1	Prepare and implement outreach campaign on benefits for farmers from the use of high energy efficiency technologies (e.g., high-efficiency refrigerators, etc.), as well as on the possibilities of using renewable energy sources in agriculture (e.g., use of solar PV energy for pump irrigation, energy production from organic animal waste, etc.)	– Number of farmers involved	– Agriculture, Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate	2023-2026	20,000.00	– Municipal budget – Central Budget, – Donors			New proposal	

10.1.3.2	Establish the subsidy scheme to promote the replacement of inefficient technologies with high energy efficiency technologies and equipment for the use of renewable energy sources in agriculture, (including high efficiency refrigerators, solar PV energy, etc.)	Reduced amount of GHG emissions from the subsidy	Agriculture , Rural Development and Forestry Directorate	Finance Directorate	2023-2026	200,000.00	Municipal budget Central Budget, Donors			New proposal	
						220,000.00					
Measure 10.1.4: Reduce GHG emissions through recycling of organic animal waste and composting of agricultural waste											
10.1.4.1	Study of the potential for the production of food for carnivorous pets from the organic waste of animals slaughtered in the territory of the Municipality.	Study Report	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Eco-region Private Sector	2023-2024	10,000.00	Municipal budget Central Budget, Donors Private Sector			New proposal	
10.1.4.2	Feasibility Study for the potential of generating biogas and organic waste - composted fertilizing material for plant fertilization	Study Report	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Private Sector	2023-2025	15,000.00	Municipal budget Central Budget, Donors Private Sector			New proposal	
10.1.4.3	Construct small plants for recycling animal manure to produce biogas and organic waste – composted fertilizing material for plant fertilization that reduces the use of herbicides.	Number of plants constructed	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Eco-region Private Sector	2025-2027	100,000.00	Municipal budget Central Budget, Donors Private Sector			New proposal	

10.1.4.4	Composting waste from fruit, vegetables, trees and grape vines. Produced compost is used to fertilize the soil.	Number of composters	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Eco-region Private Sector	2025-2027	100,000.00	Municipal budget Central Budget, Donors Private Sector			New proposal	
						225,000.00					
Measure 10.1.5: Protect agricultural produce from the effects of extreme weather changes											
10.1.5.1	Establish the Unit (Station) for the support of the farmers of the Municipality. This Unit should be equipped with professional staff and technical equipment for monitoring, identification and prevention of plant diseases, and it should also advise farmers on the correct use of pesticides in agriculture, as well as on increasing agricultural productivity.	Unit (Station) established and operational	Agriculture , Rural Development and Forestry Directorate	Finance Directorate Ministry of Finance of Kosovo	2023-2027	120,000.00	Municipal budget Central Budget, Donors			New proposal	
10.1.5.2	Coordinate with the central level for the construction of the hail protection station for the territory of the Municipality of Suhareka	The hail protection station built and operational	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate MESPI	2023-2027	200,000.00	Municipality of Suhareka Central Budget, Donors			New proposal	
						320,000.00					
Total for Agriculture Sub-sector						2,491,000.00					
Sub-sector: Biodiversity											
Objective 10.2: Protect biodiversity on the entire territory of the Municipality											
Measure 10.2.1: Establish a database for biodiversity in the territory of the Municipality											

10.2.1.1	Establish the fauna inventory for the entire territory of the Municipality, including the identification of the locations of wild animals (and those at risk of extinction/under protection).	– Inventory Report completed and published	– Agriculture , Rural Development and Forestry Directorate	– MAFRD – MESPI	2023-2027	250,000.00	– Municipality of Suhareka – Central Budget, – Donors			New proposal	
10.2.1.2	Establish the flora inventory, including identifying the locations of the extent of certain plants.	– Inventory Report completed and published	– Agriculture , Rural Development and Forestry Directorate	– MAFRD – MESPI	2023-2027	200,000.00	– Municipality of Suhareka – Central Budget, – Donors			New proposal	
						450,000.00					
Measure 10.2.2: Improve conditions for free movement of animals (migration corridors) and protection of animals from diseases											
10.2.2.1	Study to identify sites along existing vehicle roads to create green corridors (overpasses or underpasses) for wildlife migration.	– Study Report	– Agriculture , Rural Development and Forestry Directorate – MAFRD	– MESPI	2023-2027	100,000.00	– Municipality of Suhareka – Central Budget, – Donors			New proposal	
10.2.2.2	Construction of overpass or underpass corridors for wildlife migration on existing road axes.	– Number of corridors constructed	– Agriculture , Rural Development and Forestry Directorate – MAFRD	– Urban and Spatial Planning Directorate – MESPI	2023-2027	350,000.00	– Municipality of Suhareka – Central Budget, – Donors			New proposal	

10.2.2.3	Measures to protect animals from various diseases, especially vaccination through food for protection against rabies and other diseases.	<ul style="list-style-type: none"> - Amount of vaccines given to wild animals - Monitored animal diseases, statistics on diseases, and the effect of vaccines, presented 	<ul style="list-style-type: none"> - Agriculture , Rural Development and Forestry Directorate - MAFRD 	<ul style="list-style-type: none"> - Urban and Spatial Planning Directorate - MESPI 	2023-2027	100,000.00	<ul style="list-style-type: none"> - Municipality of Suhareka - Central Budget, - Donors 				New proposal	
						550,000.00						
Total for Biodiversity Sub-sector						1,000,000.00						
Sub-sector: Forestry												
Objective 10.3: CO2 capture through sustainable forest management												
Measure 10.3.1: Maintain existing forest area and increase forest area												
10.3.1.1	Coordinate with the central level for afforestation and reforestation of barren forest areas in the territory of the Municipality.	<ul style="list-style-type: none"> - Afforested and reforested area - Number of tree saplings planted 	<ul style="list-style-type: none"> - MAFRD 	<ul style="list-style-type: none"> - MESPI - Directorate of Agriculture 	2023-2027	200,000.00	<ul style="list-style-type: none"> - Municipality of Suhareka - Central Budget, - Donors 				New proposal	
10.3.1.2	Protect forests from DISPARI - an insect that harms and dries trees, it is especially harmful to oak, apple, plum, vine, white poplar, dogwood, etc. (Treatment with mimic insecticide and mechanical cutting)	<ul style="list-style-type: none"> - Forest surface treated for protection from DISPARI 	<ul style="list-style-type: none"> - Agriculture , Rural Development and Forestry Directorate 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate - Kosovo Forestry Agency 	2023-2027	150,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Budget, - Donors 				New proposal	

10.3.1.3	Production of woody biomass should be done within the forest management process, which includes thinning, elimination of broken trees, taking branches from cut oaks and clearing the terrain. This, at the same time, helps eliminate the risks of spreading wild fires in forests.	<ul style="list-style-type: none"> - Cleared forest area - Amount of woody biomass benefited from forest clearing and management 	Kosovo Forestry Agency	<ul style="list-style-type: none"> - Agriculture, Rural Development and Forestry Directorate 	2023-2027	0,000.00	<ul style="list-style-type: none"> - Private Sector 			New proposal	
						350,000.00					
Measure 10.3.2: Protect forest from fires											
10.3.2.1	Coordinate with the central level of government and the Emergency Management Agency (EMA) for the creation of an automated system for monitoring and real time early warning of forest fires. Such a system is based on sensors located at specific points in the forest that detect the location of the fire in the forest and present this on the monitoring screen through the application of GIS coordinates on the topographic map.	<ul style="list-style-type: none"> - Forest fire monitoring system established and operational 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate 	<ul style="list-style-type: none"> - Agriculture, Rural Development and Forestry Directorate - MAFRD - MESPI 	2023-2027	250,000.00	<ul style="list-style-type: none"> - Municipality of Suhareka - Central Budget, - Donors 			New proposal	
10.3.2.2	Coordinate with the central level of institutions and the EMA for the construction of surface dams for water storage for protection from forest fires in mountainous areas	<ul style="list-style-type: none"> - Number of dams built - Amount of water in storage (in m³) 	<ul style="list-style-type: none"> - Agriculture, Rural Development and Forestry Directorate 	<ul style="list-style-type: none"> - Public Services, Environment and Emergencies Directorate - Urban and Spatial Planning Directorate - Kosovo Forestry Agency 	2023-2025	180,000.00	<ul style="list-style-type: none"> - Municipal budget - Central Budget, - Donors 			New proposal	

10.3.2.3	Establish volunteer teams for extinguishing wild fires in forests and fields. Volunteer teams should be trained and equipped with the appropriate tools for extinguishing fires in mountainous and plain terrains.	– Number of volunteer firefighting teams – Number of registered, equipped and trained volunteer firefighters	– Public Services, Environment and Emergencies Directorate	– Firefighting unit of Municipality of Suhareka	2022-2024	80,000.00	– Municipal budget – Central Budget, – Donors				Ongoing	
						510,000.00						
Measure 10.3.3: Protect forests from common diseases and those related to climate change												
10.3.3.1	Enhance responsibilities for the prevention of new diseases that appear in the forests of the territory of the Municipality	– Number of diseases identified and prevented	– MAFRD	– Agriculture, Rural Development and Forestry Directorate	2022-2027	Organizational measure	– MAFRD – Municipal budget					
Total for Forestry Sub-sector						860,000.00						
Sub-sector: Rural tourism												
Objective 10.4: Plan and develop sustainable and climate resilient tourism												
Measure 10.4.1: Strategic planning and promotion of tourism in Suharekë/Suva Reka												
10.4.1.1	Draft municipal tourism strategic development plan	– Strategic Plan Document	– Agriculture, Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Culture, Youth, Sports, and Diaspora Directorate	2022-2023	15,000.00	– Municipal budget				Existing (Concept Notes, tourism (2021-2026))	

10.4.1.2	Design tourism promotion materials (leaflets, brochures, stickers) informing tourists about the preservation of the environment and biodiversity in tourist areas	Promotional materials	Agriculture , Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate	2022-2023	4,000.00	Municipal budget			Existing (Concept Notes, tourism (2021-2026))	
10.4.1.3	Development documentary film promoting tourism as well as informing tourists about the preservation of the environment and biodiversity in tourist areas	Documentary produced and published	Agriculture , Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate	2022-2023	5,000.00	Municipal budget			Existing (Concept Notes, tourism (2021-2026))	
10.4.1.4	Develop website for the promotion of tourism, including rural ecotourism, in several languages, and promotion on Facebook and Instagram, with photos from ecotourism spots.	Website is developed and functional	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Culture, Youth, Sports, and Diaspora	2022-2023	1,000.00	Municipal budget			Existing (Concept Notes, tourism (2021-2026))	
10.4.1.5	Establish digital tourist information centre. The digital centre will also have information on rural tourism related to care in: garbage disposal, drinking watering points on walking and cycling paths, health care points, information on care for prevention and protection from wild fires in forests and fields, etc.	Provide digital equipment for informing and orienting tourists	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Culture, Youth, Sports, and Diaspora Directorate	2022-2023	4,000.00	Municipal budget MTI			Existing (Concept Notes, tourism (2021-2026))	
10.4.1.6	Establish centre for the promotion of tourism and cultural and natural heritage (Tourism Museum).	Tourism Museum completed within the town museum	Agriculture , Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate	2022-2024	100,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	

10.4.1.7	Train/qualify 3 tourist guides in the Municipality. Guides will be trained to promote green tourism, educate tourists through the behaviour of the guides themselves regarding the removal of waste during visits, the care they will show towards not using open fire in nature, not smoking, taking care of tourists who throw cigarette filters in	3 guides trained/qualified	Agriculture, Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate Private Sector	2022-2023	5,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.1.8	Promote local tourist products through supporting the development of handicrafts/souvenirs	Key trades identified and supported	Agriculture, Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate Private Sector	2023-2024	30,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	
						164,000.00					
Measure 10.4.2: Develop infrastructure to support eco-tourism in the territory of the Municipality of Suharekë/Suva Reka											
10.4.2.1	Promote eco-tourism through the improvement of the infrastructure for the growth of rural tourism by preparing the site for summer camping at the "Gurra e Kadise" in Budakova. The infrastructure will include: placing wooden tables and seats, arranging paths in the space of 3 ha, provision of running drinking water, supply of containers for waste collection, installation of lighting with solar PV panels.	Camping site with fixed infrastructure	Agriculture, Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Private Sector	2022-2023	25,000.00	Municipal budget MTI Private Sector Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.2	Identify and renovate old mills as cultural heritage sites	Renovate and preserve identified mills.	Agriculture, Rural Development and Forestry Directorate	Culture, Youth, Sports, and Diaspora Directorate Private Sector	2022-2023	100,000.00	Municipal budget MTI Private Sector Donors			Existing (Concept Notes, tourism (2021-2026))	

10.4.2.3	Identify households interested in providing services for rural eco-tourism and train households for potential guesthouses for the development of rural eco-tourism. Promote renovation of guesthouses with environmentally friendly construction material, with high energy efficiency, and use of RES	– Renovate 10 rural houses as guesthouses, with co-financing.	– Agriculture , Rural Development and Forestry Directorate	– Urban Planning Directorate – Private Sector	2022-2024	100,000.00	– Municipal budget – MTI – Private Sector – Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.4	Open hiking paths and install signage in Delloc, Gradanc, Budakova, Mushtisht, Grejkoc. The hiking trails will have built-in rest areas supplied with running water to cool off from heat waves and will be equipped with containers for	– 5 hiking trails completed in the Municipality	– Agriculture , Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Private Sector	2022-2023	200,000.00	– Municipal budget			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.5	Fix the infrastructure in Delloc for the parking lot of camper vans. The parking lot will be equipped with infrastructure to promote the development of eco-tourism and reduce GHG emissions: charging stations for electric cars, motorcycles, bicycles and electric scooters, efficient lighting and lighting with solar PV panels at key points of tourist movement in hiking areas where there is no electricity grid. The parking lot will be supplied with containers for waste collection.	– Camping vans parking completed with accompanying infrastructure	– Agriculture , Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Private Sector	2022-2026	500,000.00	– Municipal budget – Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.6	Mark hiking paths and place informational signs on wild animals, signs for caution against the use of open fire in recreational areas throughout the territory of the Municipality.	– Hiking trails marked with instructions for the protection of wild animals and protection from the	– Agriculture , Rural Development and Forestry Directorate	– Public Services, Environment and Emergencies Directorate – Private Sector	2022-2026	100,000.00	– Municipal budget – Donors			Existing (Concept Notes, tourism (2021-2026))	

10.4.2.7	Plan and construct hiking paths and bicycle paths for the entire territory of the Municipality, taking into account the creation of rest points with drinking water and measures to prevent open fires.	Length of planned/constructed hiking and cycling paths	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Private Sector	2023-2027	200,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.8	Promote transportation without GHG and smoke emissions through the construction of charging stations for electric cars, electric motorcycles, bicycles and electric scooters, in recreational areas and tourist villages.	Number of charging stations for electric cars, motorcycles, bicycles and scooters in the territory of the Municipality.	Agriculture , Rural Development and Forestry Directorate	Public Services, Environment and Emergencies Directorate Private Sector	2023-2027	150,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.9	Establish the system for the protection of residents and tourists in cases of emergencies as well as in cases of group or individual casualties, by establishing a search and rescue team with a special emphasis on hiking and mountain biking trails as well as in dangerous points of high movement and areas with great potential for wild mountain fires.	Search and rescue team established and operational	Public Services, Environment and Emergencies Directorate	Agriculture, Rural Development and Forestry Directorate Private Sector	2023-2024	50,000.00	Municipal budget Donors			Existing (Concept Notes, tourism (2021-2026))	
10.4.2.10	Promote rural tourism without pollution through the expansion of the existing system for waste management in the territory of the Municipality, the creation of a special plan for the collection of waste for rural tourist areas, which will also include the placement of containers for waste collection at rest points on hiking and biking trails, as well as at all recreational picnic sites and tourist villages.	Document of the Plan for waste collection in rural tourism areas	Public Services, Environment and Emergencies Directorate	Firefighting unit of Municipality of Suhareka	2023-2024	40,000.00	Municipal budget Donors			New proposal	

10.4.2.1 1	Promote safety of tourist movement through the use of solar PV energy for public lighting in tourist areas where there is no electricity distribution grid. Prior analysis should be done to identify key sites that include picnic areas, crossroads in extended tourist villages where there is no electricity grid, crossroads frequented by tourists in various mountainous areas, frequented sites on hiking and cycling trails.	PV lighting is functional PV for the key areas of movement of mountain tourists	Public Services, Environment and Emergencies Directorate	Urban and Spatial Planning Directorate Kosovo Forestry Agency	2023-2024	120,000.00	Municipal budget Donors				New proposal	
10.4.2.1 2	Promote local agri-tourism through subsidizing farmers with greenhouses, bees, small livestock, etc.	Number of subsidies awarded, Amount of local products placed in the market	Agriculture, Rural Development and Forestry Directorate	Property and Cadaster Directorate		150,000.00	Municipal budget Donors				New proposal	
Cost of measure implementation						1,645,000.00						
Total for Rural Tourism Sub-sector						1,809,000.00						
Overall estimated investment cost for the Rural Development Sector:						6,160,000.00						

12. References

- Climate Change 2022, Impacts, Adaptation and Vulnerability; Summary for policy makers
- Suhareka Municipal Development Plan 2021-2029
- Kosovo Census of population, family economies and flats, 2011
- Draft Suhareka Municipal Zoning Map 2022-2030
- <https://kk.rks-gov.net/suhareke/asambleistet/>
- <https://kk.rks-gov.net/suhareke/>
- Annual Energy Balance in Kosovo 2018, 2019 and 2020. Kosovo Agency of Statistics
- Annual Energy Balance in Kosovo, 2020. Kosovo Agency of Statistics
- Wind Resources Assessment, NEK Umwelttechnik AG, 2010
- Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2019
- Kosovo Municipal Waste Management Report. Kosovo Environmental Protection Agency. Reporting Year - 2020
- Regulations on Waste Management in the territory of Suhareka, 2020
- Municipal Waste Management Plan 2016-2021, Municipality of Suhareka, 2016
- Prizren Cross-Sectoral Intervention Plan (CSIP) for Climate Change 2020-2025. October 2019
- Municipal Waste Management Plan 2016-2021, Municipality of Suhareka, 2016
- Report, State of Hotspots in Kosovo, KEPA 2012
- Kosovo's Environment, 2020. Environmental Indicators Report. KEPA, 2020.
- Transportation and Telecommunication Statistics, Q1 2021. KAS 2021.
- Report on greenhouse gas emissions in Kosovo 2014-2019. KEPA 2021.
- OECDs Rural Agenda for Climate Action
- Climate change and the just transition - A guide for investor action. Grantham Research Institute on Climate Change and the Environment. London School of Economics and Political Science. London, 2018

13. Annexes

13.1. Nationally Appropriate Mitigation Actions (NAMAs)

Nationally Appropriate Mitigation Actions refer to a set of policies and actions that countries take as part of a commitment to reduce greenhouse gas emissions. NAMAs can be policies for transformation within an economic sector, or actions across sectors. The implementation of NAMAs is enabled by technology, funding, and capacity building. Climate change mitigation NAMAs must be in line with the capabilities and objectives of individual countries. The concept of NAMAs acknowledges the reality that not all countries have the same capacities and opportunities to invest in activities aimed at mitigating climate change. Therefore, it also stresses financial assistance from developed countries to developing countries to reduce emissions

NAMAs were first employed in the Bali Action Plan as part of the Bali Roadmap agreed at the United Nations Conference on Climate Change in Bali in December 2007.

13.2. Working group:

The members of the working group will collaborate and work together with the Green Development Centre and the “Strengthening Local Action for Climate” Project implemented by the UNDP, to compile a Greenhouse Gases (GHG) inventory, a Measurement, Reporting and Verification (MRV) system; to develop the Cross-Sectoral Intervention Plan (CSIP); and to implement pilot projects for NAMAs for the Municipality of Suharekë/Suva Reka in order to reduce overall GHG emissions.

The members of the Working Group appointed by the Mayor of the Municipality of Suharekë/Suva Reka are listed below:

Mr. Enver Shabani	Director - Public Services, Environment and Emergencies Directorate
Ms. Mihrije Suka	Deputy Mayor of the Municipality of Suhareka
Mr. Berat Kabashi	PSEED
Mr. Isuf Hajdaraj	PSEED
Mr. Fisnik Tahiri	PSEED
Ms. Florinda Isufaj	PSEED
Mr. Halit Buqa	Inspections Directorate
Mr. Beqir Berisha	Inspections Directorate
Mr. Hajrush Suka	Agriculture and Tourism Directorate
Ms. Doruntina Elshani	Urban and Spatial Planning Directorate
Ms. Blerina Hajdari	Urban and Spatial Planning Directorate
Mr. Urim Bytyqi	Hydro-region
Mr. Ismet Krasniqi	Eco-region
Ms. Zana Gashi	Handikos
Mr. Valon Gashi	KEDS
Mr. Valon Elshani	Civil Society - Efficiency
Mr. Emir Morina	Traffic Engineer - Ministry of Infrastructure
Mr. Refki Zogaj	Business Centre
Ms. Besa Kuqi	Director – Health and Social Welfare Directorate
Ms. Shegë Bajraktari	Municipal Education Directorate
Mr. Bajram Tutaj	Community Representative – Civil Society
Mr. Atdhe Buzhala	Geodetics and Cadaster Directorate
Mr. Lorika Gashi	Director – Culture, Youth, Sports, and Diaspora Directorate
Mr. Rinor Zyrapi	Information Office, Municipality of Suhareka

Mr. Bexhet Basha	NGO (Agriculture)
Mr. Arsim Rexhepaj	Efficiency Officer - PSEED
Mr. Muharrem Krasniqi	Traffic Engineer
Mr. Latif Krasniqi	PhD in tourism
Mr. Shkelzen Avdyli	Architecture Student
Ms. Drita Kabashi	Farmer
Ms. Merita Koqi,	Coordinator of the Green Growth Centre, Suhareka

The working group was supported by:

Ms. Xheva Berisha, Project Manager, UNDP
Ms. Elza Zhaveli, Project Officer, UNDP
Mr. Maliq Pireci, Local Consultant, UNDP