

Finance, technology and capacity building needs and support received

Skopje, December 2019

5. Climate finance in the Republic of North Macedonia in the period 2018 - 2019

5.1 Introduction

Providing funding for climate activities on a consistent basis is essential. In this regard, international support for financing climate activities is crucial for North Macedonia as a developing country and recognizes the enormous benefits of the inflow of foreign resources. As a non-Annex I country to the Convention, North Macedonia is a recipient of international support and is therefore required to report the amount of support received in the subsequent two-year period. In the last two-year period, the bilateral support from the European Union has the highest contribution to financing climate activities. In particular, the Instrument for Pre-Accession Assistance has enabled many municipalities, NGOs and ministries to implement projects, especially in the field of energy efficiency, and thus contribute to the global fight to reduce greenhouse gas emissions and mitigate the adverse effects of climate change. people's lives. In fact, much of the support that has been received has been used to finance projects predominantly to mitigate the effects of climate change. But it must be emphasized that the amount of support we receive is far from sufficient to meet the needs of undertaking other significant mitigation and adaptation activities, which is a commitment to greater engagement in the future.

Also, as a developing country, North Macedonia allocates a considerable amount of its own budget funds for financing climate activities, which is still below the required level. The adverse effects of climate change are becoming an almost everyday topic that is increasingly awakening to the need for proactive action, implementing change and allocating as many resources as possible for climate action.

This biennial report provides an overview of the support received in 2018 and 2019 in updating information from the previous Second Biennial Climate Change Report. The following text gives an overview of the support received in many respects, the channels through which it has been received (bilateral, multilateral or other), the type of funding (grant, credit, capital, etc.), the sectoral structure in which the assistance is targeted, the purpose of funding (mitigation, adaptation or mixing), and how much is climate-specific (CS) or climate-relevant (CR). CSs are those projects that are fully climate-targeted projects, while CRs are those that are not labeled as climate, but with their implementation have significant climate benefits either for mitigation or adaptation.

In particular, the domestic public climate finance from the sectoral ministries and the City of Skopje will be elaborated to the extent that we have been able to obtain analysis data.

Here, it is recognized that there is no assessment of private climate finance, which is the most complex information to collect. Monitoring private climate finance will remain a commitment in the preparation of future biennial update reports.

5.2 Estimation of International Financial Support Received

5.2.1 Methodology for Monitoring Financial, Technical, Technological and Capacity Building Support

Given that there is no single centralized system for automatic data collection of received support, amount of support and source i.e. provider of it, the biggest challenge is the way to obtain relevant, reliable and comprehensive data so that accurate support assessment can be made. The approach used to collect data on international support received was through a survey that was sent to all potential support users (government institutions, line ministries, municipalities, NGOs, etc.). As usual, some of the respondents did not respond. Therefore, much of the data was collected from research on the websites of beneficiaries of the international support, and in particular from the websites of funders (donors and lenders). Most of the support received was in the form of project financing, so support for climate activities was assessed at project level. All amounts are expressed in US dollars.

In our survey, entities were required to provide more detailed information on projects, including the purpose of the project, the description of the project, the organization implementing it, especially the amount of the total budget, and separately how much was spent in 2018 and 2019. Not all respondents provided complete data on the amount of funds spent by years, so the assessment was conducted as a combination of committed / received funds, according to the data provided. An even bigger problem in the assessment was that there are projects that started before 2018 and that have not yet been completed, but also projects that were started in 2018 or 2019 and will continue after 2019.

All of the information provided in this report covers all active and ongoing projects, most by the amounts received and spent in this two-year reporting period, whereas where we did not have such information, the committed amount was taken. North Macedonia is a beneficiary of significant amounts of funds from the EU Instrument for Pre-Accession Assistance, especially in the area of cross-border cooperation. For these EU IPA funded projects, which relate to funding two or more countries, we managed to extract and allocate only the amount committed / spent in North Macedonia for each project. All those projects where only the committed amount was reported, but without any realization in this two year period, were excluded. For some of the projects, where there is only a contract with the funder (donor or lender), with a commitment to the amount, but for which funds have not yet been received in the analyzed period. They have been excluded and will be shown in the next biennial report if implemented.

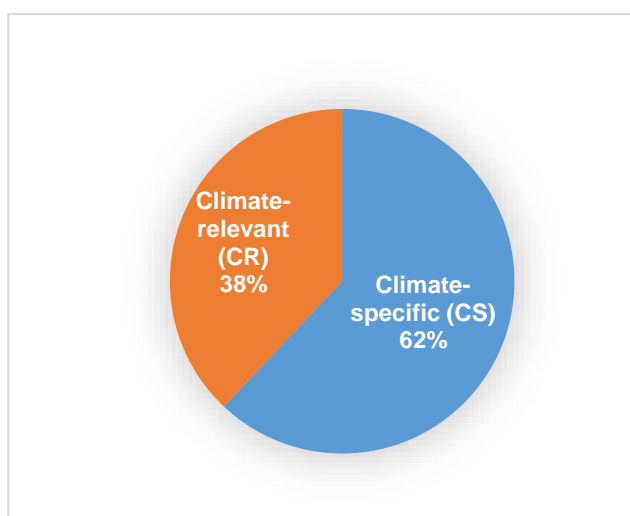
Closer specification of climate relevance and weighting of amounts by climate relevance was almost impossible given the quality of the data provided. In this sense, in order to apply appropriate weighting, such as the OECD DAC Rio Methodology (100%, 40% or 0%), it is necessary to break down projects in depth into activity level, which in this case is impossible.

5.2.2 Summary of Donor Funds Committed to Climate Change Projects in North Macedonia for the Reporting Period 2018-2019

In the period 2018 and 2019, we registered a total of 38 climate-related projects that are funded with international support. A detailed overview of all projects is given in *Annex I. International financial support received*. The support to the Republic of North Macedonia committed / received during this period is estimated at US \$ 25.14 million. Of these, 21 projects are climate specific (CS) projects, accounting for as much as US \$ 15.6 million, which is 62% of the total support received. The remaining US \$ 9.5 million, or 38%, relates to climate relevant (CR) projects.

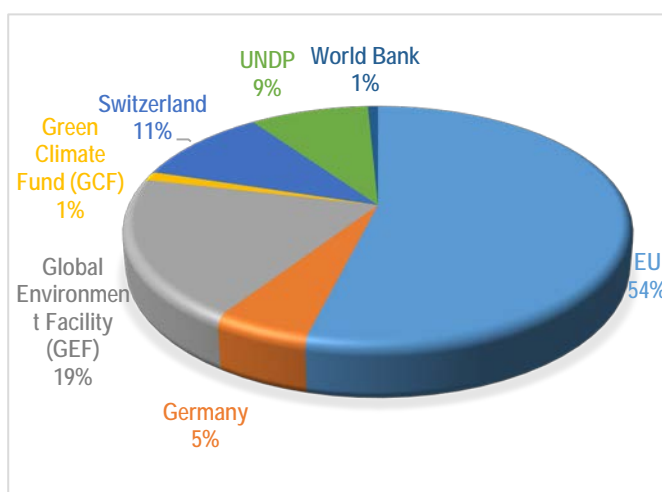
Climate-specific (CS) or Climate-relevant (CR)

Climate relevance	Amount (in US\$)
Climate-specific (CS)	15,602,294
Climate-relevant (CR)	9,543,118
Total	25,145,413



Regarding the source of funding, most of the support has been received from the European Union. The largest share of 54%, according to the sources, is the support received from IPA cross-border cooperation funds. The second largest support provider is the Global Environment Facility (GEF) of 19%.

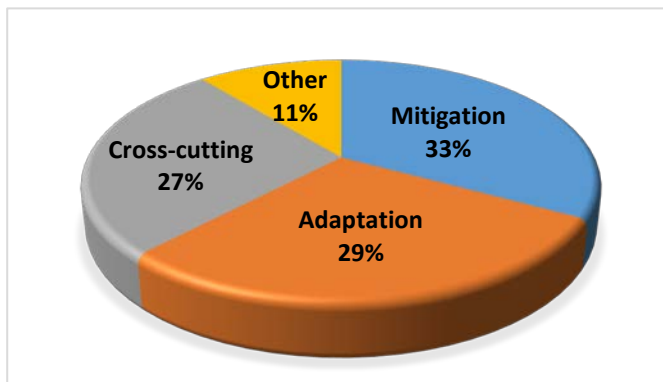
Funder	Amount (in US\$)
EU	13,566,181
Germany	1,355,824
Global Environment Facility (GEF)	4,858,638
Green Climate Fund (GCF)	300,000
Switzerland	2,614,360
UNDP	2,258,990
World Bank	191,419
Total	25,145,413



Almost the entire amount, or more specifically 98.8% of the support received, is in the form of grants (US \$ 24.8 million) and only 1.2% (US \$ 0.3 million) is in the form of loans. Here we point out that JSC Power Plants of North Macedonia has contracted two large loans with the German KfW Bank to finance two major energy projects that will greatly contribute to climate change mitigation: i) Project: District Heating of Bitola, Mogila and Novaci - first stage, total budget 46.3 mil. EUR (EUR 39 million from KfW and EUR 7.3 million own funds), and ii) Extension of the Wind Park – Bogdanci, phase II, with a total budget of EUR 21 million. EUR (EUR 18 million from KfW and EUR 3 million own funds). Despite the signed loan agreement, the projects have not yet started in this two-year period we are reporting on, and therefore have not been included. If this report include this committed amount, it would unrealistically overestimate the amount of support received, although under the contract this amount will be relevant and if realized, will be shown in the following report.

According to the purpose of the financing (mitigation, adaptation, cross-cutting), there is almost an equal division between them. One third of the aid received relates to mitigation activities that would have a global impact.

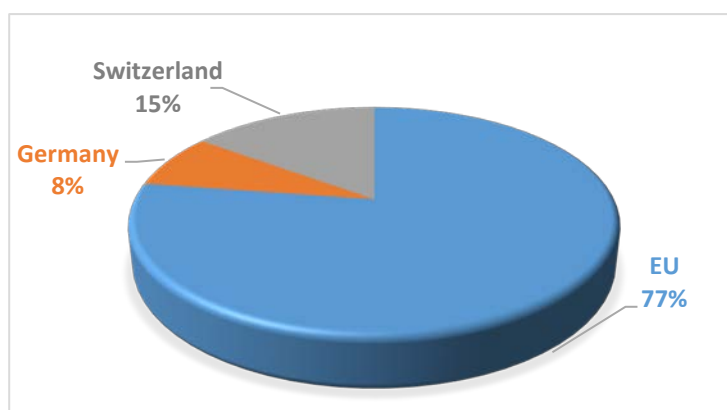
Purpose of funding	Amount (in US\$)
Mitigation	8,289,508
Adaptation	7,328,659
Cross-cutting	6,778,944
Other	2,748,302
Total	25,145,413



The analysis, in terms of bilateral or multilateral support received in the reporting period 2018 - 2019, shows that the majority is bilateral support, amounting to US \$ 17.5 million which is 70%. The remaining 30% is multilateral support of 7.6 million US \$.

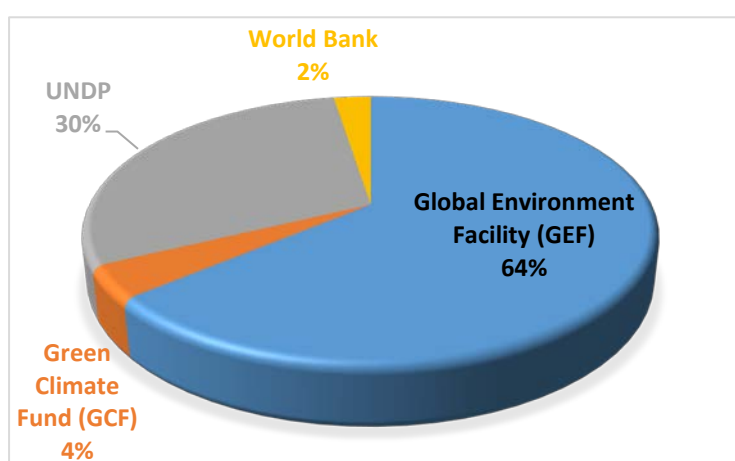
Bilateral support committed / received

Funder	Amount (in US\$)
EU	13,566,181
Germany	1,355,824
Switzerland	2,614,360
Total	17,536,366



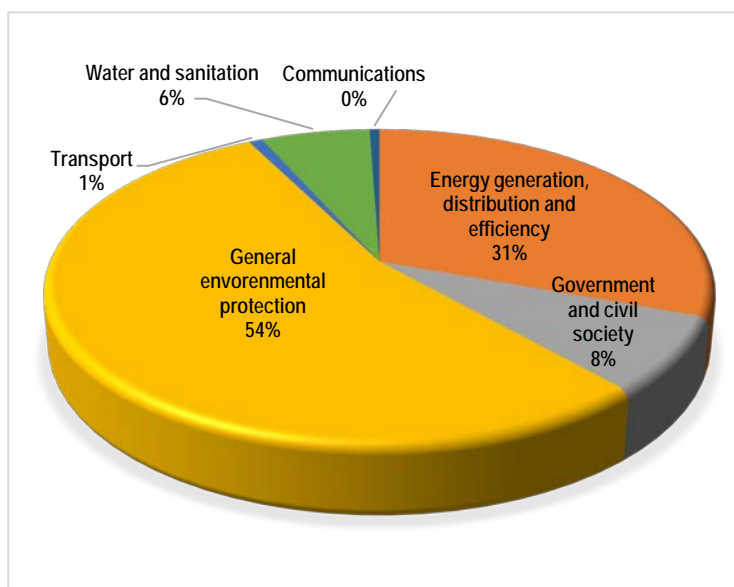
Multilateral support committed / received

Funder	Amount (in US\$)
Global Environment Facility (GEF)	4,858,638
Green Climate Fund (GCF)	300,000
UNDP	2,258,990
World Bank	191,419
Total	7,609,047



The structure of the distribution of the international support according to the sectors is shown in the following chart. The sector definition used in this analysis is according to the OECD DAC Rio Markers methodology. Analysis of the sector structure shows that most of the international support received is in the sector - General environmental protection, followed by the sector Energy generation, distribution and efficiency. In fact, a great deal of emphasis is now being placed on strengthening energy efficiency in the Republic of North Macedonia.

Sector	Amount (in US\$)
Communications	138,935
Energy generation, distribution and efficiency	7,685,864
General environmental protection	13,604,286
Government and civil society	1,970,255
Transport	191,419
Water and sanitation	1,554,654
Total	25,145,413



5.2.3 Non-monetised Support Received

The Republic of North Macedonia also received non-monetary support in the form of capacity building, technical support and technology. There are 14 projects registered in this category. The summary of non-monetary international climate support received for the period 2018-2019 is shown in the following Table.

Table: Non-monetised support received in the Republic of North Macedonia in 2018 – 2019

INFORMATION ABOUT THE PROJECT						PURPOSE OF FUNDING					
Type of funding	Donor	Implementing organization	Project name	Description of the project (Specific purpose of funding)	Implementation period / Start and closing date	Mitigation	Adaptation	Capacity Building	Technical Support	Technology support	General
Technical assistance	EBRD	Ministry of Economy	Review of primary Energy Efficiency Law and Article 7 policy support	Review of primary Energy Efficiency Law and Article 7 policy support	2018/2019				X		
Technical assistance	EBRD	Ministry of Economy	ESCO Project Pipeline preparation in the public sector in th western balkan countries, except Croatia	In order to meet requirements as defined in Article 18 of the Directive on energy efficiency for promotion of the enrgy services market, it was developed energy service contract. Additionally the muicipalities will engage ESCO companies for public lighting and district heating services trough open tenders.	2019/2020			X	X		
Technical Cooperation	Food and Agriculture Organization (FAO)	Ministry of Agriculture, Forestry and Water Economy	Assessment of agriculture production through NAEZ and LRIMS and scenario development in the Republic of North Macedonia	The main goal of the project TCP/MCD/3602 is to improve agricultural production and increase the adaptive capacity of the Republic of North Macedonia, by establishing National Agro-Ecological Zoning (NAEZ), a Land Resources Information Management System (LRIMS) and Scenario Development to better inform policy at national level, and reduce climate risk through adaptation at local level.	2019		X		X		

Technical assistance	GIZ	Ministry of Economy	Open Regional Fund for South-East Europe - Energy Efficiency	Development of the forth National Energy Efficiency Action Plan	2019/2020
Technical assistance	GIZ	Ministry of Economy	Open Regional Fund for South-East Europe - Energy Efficiency	Development of the National Energy and Climate Plan	2019/2020
Technical assistance	GIZ	Ministry of Economy	Open Regional Fund for South-East Europe - Energy Efficiency	Development of the Rulebook for MVP and organizing trainings for the municipalities in order to meet requirements as defined in the Directive on energy efficiency	2019/2020
Technical Cooperation	Japan International Cooperation Agency (JICA)	Crisis Management Center Public Enterprise Macedonian Forests Ministry of Agriculture, Forestry and Water Economy	The Project on Capacity Building for Ecosystem Based Disaster Risk Reduction through Sustainable Forest Management in North Macedonia	By Eco-system based Disaster Risk Reduction (Eco-DRR) measures and activities in synergy with sustainable forest management, disaster risk of floods, landslides, soil erosion and forest fire on a long-term basis is reduced in North Macedonia.	2017 - 2022
Technical assistance	UK Embassy	Ministry of Economy	Strategy for Energy Development of the Republic of North Macedonia until 2040	Development of the Strategy for Energy Development of the Republic of North Macedonia until 2040	2019
Technical assistance	UNIDO	Ministry of Economy	Overview and Policy Recommendations for Transposition of Articles 8 and 16 EED	Development of the Energy Efficiency Law	2018/2019
Technical assistance	USAID	Ministry of Economy	USAID Energy Sector Legal Reform Project	Development of the Energy Efficiency Law	2018/2019
Technical assistance	USAID	Ministry of Economy	USAID Energy Sector Legal Reform Project	Development of the Energy Law	2018/2019
Technical assistance	USAID	Ministry of Economy	USAID Energy Sector Legal Reform Project	Development of the Renewables energy sources bylaws	2018/2019
Technical assistance	USAID	Ministry of Economy	USAID Energy Sector Legal Reform Project	Development of the tender procedures for PV and off taker	2019
Technical assistance	USAID	Ministry of Economy	USAID Energy Sector Legal Reform Project	Development of the bylaws for NEMO designation	2019

X			X		
X			X		
			X		
	X		X		
X			X		
			X		
			X		
			X		
			X		
			X		

5.3 Domestic Financial Flow for Climate Change Response Actions

5.3.1 Methodology for Tracking the Provision of Own Financial Resources and Technical Support Provided by Themselves

For the monitoring of public climate finance provided from own sources, national and municipal budgets, the methodology of OECD/DAC “Rio Marker definitions for climate change adaptation and climate change mitigation” is applied.

Data collection on the climate markers is based on a scoring system with three values:

- principal objective (2);
- significant objective (1);
- not targeted to the policy objective (0).

An activity can be marked as “**principal**” when the objective (climate change mitigation or climate change adaptation) is explicitly stated as fundamental in the design of, or the motivation for, the activity. Promoting the objective will thus be stated in the activity documentation to be one of the principal reasons for undertaking the activity. In other words, the activity would not have been funded (or designed that way) but for that objective.

An activity can be marked as “**significant**” when the objective (climate change mitigation, climate change adaptation, biodiversity, combating desertification) is explicitly stated but is not the fundamental driver or motivation for undertaking and designing the activity. The activity has other prime objectives but has been formulated or adjusted to help meet the relevant environmental concerns.

The score “**not targeted**” (“0”) means that the activity was examined but found not to target the objective in any significant way. For activities that have not been assessed with the Rio markers in mind, the “0” value should not be used, but rather the marker field should be left empty. This way, there is no confusion between activities that do not target the objective (score = “0”), and activities for which the answer is not known (score = “null”). This important distinction has implications for statistical presentations of Rio marker data.

For most activities (projects/programmes), the OECD/DAC Rio Markers are used to provide an approximate quantification of domestic climate finance:

- If an activity is marked as “principal” for mitigation or adaptation, 100% of the support is considered and reported as climate finance.
- If an activity is marked as “significant” for mitigation or adaptation, 40% of the support is considered and reported as climate finance. Together with other donors, we consider this percentage to be a reasonable estimate of the average climate contribution by projects that have climate change adaptation or mitigation as a significant objective.

If more than one climate Rio Marker is assigned to an activity, double counting is avoided as follows:

- If an activity has 2 “principal” markers, both are counted for 50%.
- If an activity has 2 “significant” markers, both are counted for 20%.
- If an activity has 1 “principal” and 1 “significant” marker, the “principal” marker is counted for 60% and the “significant” marker for 40%.

5.3.2 Climate Finance of the City of Skopje

5.3.2.1 Climate Change Strategy - Resilient Skopje

The capital of the Republic of North Macedonia, the City of Skopje, has in recent years placed more emphasis on investing in environmental protection, with special emphasis on investments in tackling and adapting to the adverse effects of climate change. For this purpose, each subsequent year allocates an increasing amount of funds in its own budget for the implementation of climate activities. The UNDP Office in Skopje has a particularly important role to play in supporting and identifying and implementing a range of climate activities.

The City of Skopje, in its Environmental Protection Program, recognizes that protecting and enhancing the quality of life of Skopje citizens by implementing sustainable development, helping citizens and institutions prepare for the consequences of climate change and extreme weather conditions and perceptions climate change mitigation activities is one of the most important. Climate change is the biggest global threat of the 21st century. They are reality and inevitability of the way the developed world works. The consequences of climate change are unpredictable, and certainly large, devastating and fatal. Urban areas have the greatest impact, with the highest concentration of people and the biggest contributors to climate change. Only cities that succeed in planning their climate change activities will have a prosperous future. The City of Skopje in cooperation with UNDP has developed a *Climate Change Strategy - Resilient Skopje*. The implementation of the measures foreseen in the Strategy is phased, by years. These activities are aimed at achieving multiple benefits: i) increasing the green fund; ii) air purification; iii) a decrease in summer temperatures; iv) bringing freshness into the space created by the green mass; v) public awareness raising; vi) an aesthetic element.

5.3.3 Assessment of Climate Finance of the City of Skopje

The City of Skopje shows a high level of transparency regarding its financial statements. Quarterly reports are presented both by budget spending function and project / activity level presentation. This is the only case so far, which in this way contributes to a much clearer overview of the money spent on functional item levels, by programs and by projects. Moreover, the Environment Sector Budget 2018 is prepared by activities / projects where each activity / project has a detailed explication and a clear indication of the purpose and purpose of the funds. This is particularly important because the consistent application of Rio's climate finance methodology requires that the activity be pre-designated for climate change (mitigation or adaptation) either as principal or significant to be eligible for climate finance. Promoting the objective is to be stated in the activity documentation to be one of the principal reasons for undertaking the activity. The quarterly reports of the realized budget are publicly available on the City of Skopje website, and the Department of Finance and Budget has also fully met our needs to obtain the necessary climate finance assessment data.

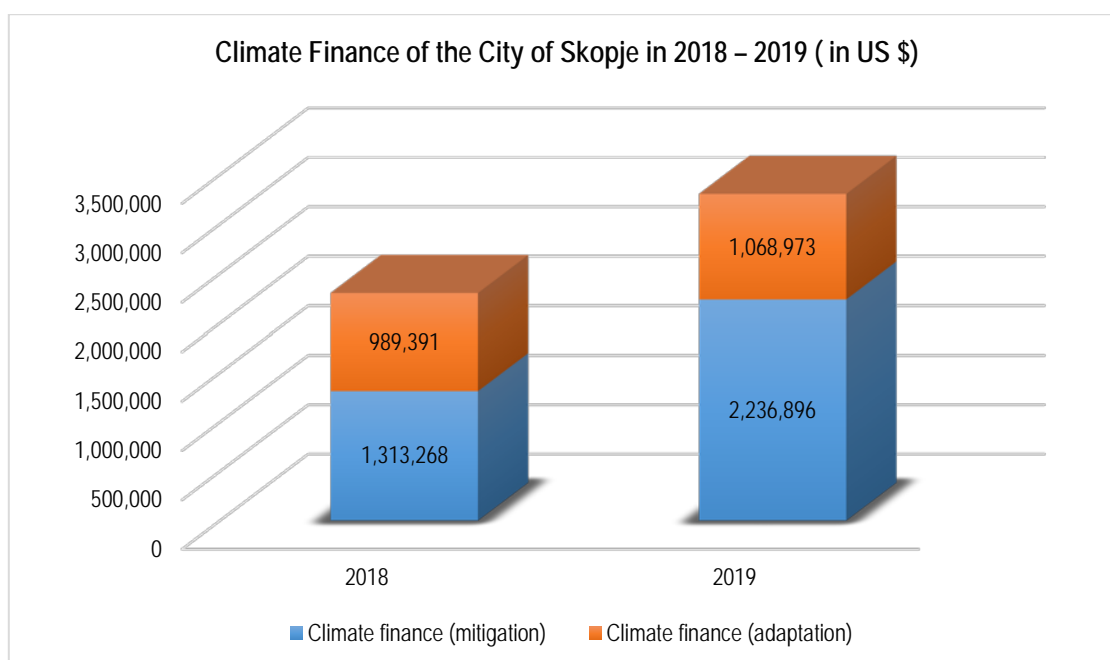
In the analyzed period, the City of Skopje has implemented 37 climate related projects, 17 projects in 2018 and 20 projects in 2019. The total amount of own source funds allocated in these projects was US \$ 8,928,109. By applying the Rio methodology the projects were evaluated in terms of climate relevance and weighted accordingly. According to this methodology, the total amount of climate finance of the City of Skopje for 2018 and 2019 is estimated at US \$ 5,608,527. Climate finance in 2018 amounted to US \$ 2,302,659 and represents 4.65% of total budget expenditure in that year. Whereas, in 2019, climate finance had a significant absolute increase of US \$ 1 million, amounting to US \$ 3,305,869, representing 5.17% of total spending in its own budget. This high growth, in the scope of

projects and activities, in the \$ amount and in the percentage of own budget, indicates the strong commitment of the City of Skopje in the fight against climate change. The following table gives a clear overview of the City of Skopje climate finance for 2018 and 2019, in total, and separately by mitigation and climate change adaptation finance. It is obvious that the amount of climate finance mitigation is higher in both years and is 57% in 2018 and 68% in 2019.

Climate Finance of the City of Skopje in 2018 – 2019 (in US \$)

Climate Finance of the City of Skopje	2018	2019	TOTAL
Climate finance (mitigation)	1,313,268	2,236,896	3,550,164
Climate finance (adaptation)	989,391	1,068,973	2,058,363
TOTAL	2,302,659	3,305,869	5,608,527

The following chart shows the climate finance movement of the City of Skopje for the two consecutive years analyzed.



Most of the climate finance is implemented through two programs: the parks and greenery program and the environmental protection program. The following is an overview of climate finance by individual programs for the two years separately and in total.

Climate Finance of the City of Skopje in 2018 (in US \$)

Budget program title	Climate finance	
	Mitigation	Adaptation
Supporting local economic development	966	0
Parks and greenery (capital expenditure)	531,367	487,329
Education (capital expenditure)	331,502	0
Environmental protection	449,433	502,062
TOTAL	1,313,268	989,391

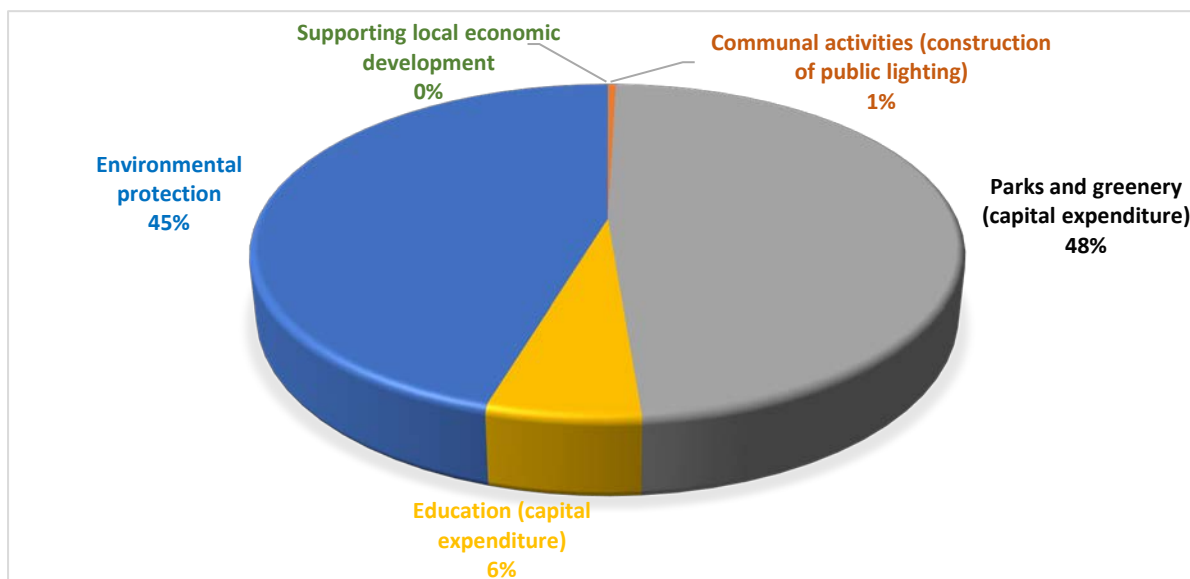
Climate Finance of the City of Skopje in 2019 (in US \$)

Budget program title	Climate finance	
	Mitigation	Adaptation
Communal activities (construction of public lighting)	23.860	0
Parks and greenery (capital expenditure)	1.172.657	516.750
Environmental protection	1.040.379	552.223
ВКУПНО	2.236.896	1.068.973

Climate Finance of the City of Skopje in 2018 – 2019 (in US \$)

Budget program title	Climate finance	
	Mitigation	Adaptation
Supporting local economic development	966	0
Communal activities (construction of public lighting)	23.860	0
Parks and greenery (capital expenditure)	1.704.024	1.004.079
Education (capital expenditure)	331.502	0
Environmental protection	1.489.812	1.054.284
ВКУПНО	3.550.164	2.058.363

Sectoral structure of the climate finance of the City of Skopje for 2018 – 2019



5.3.4 Climate Finance Provided by the National Budget

At the national level, we were unable to provide adequate data to carry out a precise and relevant climate finance assessment.

The Ministry of Environment and Physical Planning provided incomplete information, which could not accurately quantify the amount of own resources it has spent on climate change activities. But in the table in Annex I, it can be seen that this ministry is one of the largest implementers of climate change projects at national level funded by international bilateral and multilateral support.

Annex I. International Financial Support Received

Project name	Description of the project (Specific purpose of funding)	Donor	Implementation period / Start and closing date	Amount USD	Type of funding	Implementing organization
1	2	3	4	5	6	7
Communities Communicating Climate Change (CCCC)	The proposed action is contributing to the specific objective of the call by strengthening the impact and involvement of civil society in decision-making processes and key reforms for support of the eu accession process. Objectives: to establish a nationwide climate change coalition for enhanced involvement in the creation of public opinion, increased influence in policy development to raise awareness of North Macedonian citizens about the importance of tackling climate change issues	EU	2018-2020	468.255	Grant	ECO- Svest, Skopje
Municipal services improvement project	Installing photovoltaic systems solar panels on the municipalities public buildings	EU	2018/2019	1.800.000	Grant	Ministry of Finance

<p>Preparation of long-term Strategy and the Law on Climate Action</p>	<p>To carry out the necessary analyses of the current situation and conditions in the Beneficiary country and assessments in preparation of the long-term Strategy and the Law on Climate Action, and in support of the adoption and implementation.</p> <p>To establish a strong and sustainable framework for coordinating climate action by development the national strategic and legal framework for climate action through the long-term Strategy and Law on Climate Action (Law), including the Action Plan for the initial phase of implementation.</p> <p>To establish the monitoring mechanism of GHG emissions in line with the EU Monitoring Mechanism Regulation No 525/2013 and its implementing provisions.</p> <p>To strengthen the administrative capacity in line with EU accession in achieving low carbon competitive economy and climate resilient society/economy.</p> <p>To raise awareness on climate action, support the stakeholders' consultations and facilitate inter-ministerial and inter-sectoral cooperation on the Strategy and Law.</p>	<p>EU</p>	<p>15.02.2019 - 15.08.2020</p>	<p>1.287.780</p>	<p>Grant</p>	<p>Ministry of Environment and Physical Planning</p>
<p>Development of Environmental Monitoring and Information System</p>	<p>The purpose of the Operation is to strengthen capacities for monitoring, data collection, data management and reporting through establishment of national environmental information system and monitoring network structure.</p> <p>The main activities of the project are:</p> <ul style="list-style-type: none"> • Development of Macedonian National Environmental Information System (MNEIS) • Development of National Environmental Monitoring Network (NEMN) • Strengthening the capacity for implementation of MNES and National Environmental Monitoring Network; 	<p>EU</p>	<p>2019 - ongoing</p>	<p>1.615.479</p>	<p>Grant</p>	<p>Ministry of Environment and Physical planning</p>

Supply of appropriate equipment to exchange and manage information and monitoring for water, waste, air management, nature and climate change (Lot 4 - Air Quality Management)	Supply, delivery, unloading, installation, putting into operation, testing and training of equipment to exchange and manage information and monitoring for water, waste, air management and nature for the Ministry of Environment and Physical Planning and National Hydro-meteorological Service - LOT 4 - Air quality management	EU	2017-2018	219.534	Grant	Ministry of Environment and Physical Planning (MoEPP); National Hydro-meteorological Service (HMI)
Supply of appropriate equipment to exchange and manage information and monitoring for water, waste, air management, nature and climate change (Lot 2 - Vehicles)	Supply, delivery, unloading, installation, putting into operation, testing and training of equipment to exchange and manage information and monitoring for water, waste, air management and nature for the Ministry of Environment and Physical Planning and National Hydro-meteorological Service - LOT 2	EU	2016-2018	34.692	Grant	Ministry of Environment and Physical Planning (MoEPP); National Hydro-meteorological Service (HMI)
Integration of Green Transport in Cities	The main project's objective is to design and apply an energy-efficient, regional intelligent transportation system-ITS that will support the efficient realization of both the tourist promotion of the cross-border area, the student's daily transport and the facilitation of residents in their daily transport.	EU	01/07/2019–30/06/2021	692.031	Grant	Munic. of Bitola, Munic. of Resen, Mun. Enterprise of Prespa

<p>Building ENergy Efficiency Improvement: Demonstration for public buildings</p>	<p>Project aims to address the demanding requirement to increase the energy-efficiency of public buildings and stimulate their retrofit towards Nearly Zero Energy Buildings. The main common cross-border challenge of BENEFIT is to tackle the insufficient capacities of public administrations in this area to develop reliable cost-effective energy efficiency action plans for their public buildings' stock, the lack of expertise to apply advanced energy modelling methodologies, the difficulty in the collection of buildings' energy data, the lack of specific methodology to categorize them in typologies and the lack of specific decision-support system for planning energy retrofits.</p>	<p>EU</p>	<p>01/11/2018 – 31/10/2020</p>	<p>631.828</p>	<p>Grant</p>	<p>Municipality of Bitola Public enterprise for urban planning, architectural design and engineering Bitola</p>
<p>Zero-waste-energy-efficient agricultural communities in the Greece- Republic of North Macedonia crossborder area</p>	<p>By implementing pilot installations for bio-gas production, indirect interventions will be made in the segments of environmental protection, better air quality, increased food safety, more efficient use of available resources and renewable energy sources. The increased use of bio-waste as a resource for energy production, at the expense of the use of fossil fuels, will lead to a cleaner and healthier environment.</p>	<p>EU</p>	<p>2018 - 2020</p>	<p>497.789</p>	<p>Grant</p>	<p>Municipality of Dojran</p>

<p>Sustainable management of cross-border water resources</p>	<p>The common need that triggered the need for this project is the protection of the water resources of Axios-Vardar River, the sustainability of the ecosysteme and the ptotection of its habitats. The AQUA-M II Project idea was formulated by the common understanding of all Partners, of the environmental problems that Axios – Vardar River is facing. Axios/Vardar River represents one of the main aquatic resources of the cross-border area of Greece. These sensors will be establish in the river's water nearby their sewage treatment plants. This equipment will monitor and provide essential data for water quality in a continuous way (24h/7d) and in real time. It will be able to detect abnormalities in water physicochemical parameters and toxicity levels even in very low concentrations. More over the Laboratory Equipment for the PP3 can analyse water samples from the river and detect the majority of pollutants (like pesticites, pharmaceuticals, organic and inorganic pollutants).</p>	<p>EU</p>	<p>2018-2020</p>	<p>755.562</p>	<p>Grant</p>	<p>Municipality of Gevgelija Public Communal Enterprise of Gevgelija Aristotle</p>
<p>Energy Efficiency in the cross border area as an indicative factor for environmental policy</p>	<p>The main objective of the project is to highlight the importance of the energy efficiency as a factor of the protection of the environment, in two axis; 1st: Public spaces, 2nd: Private spaces. Each axis is supported with the following outputs that improve the energy efficiency factor of the cross border area, with the decrease of GHG (in precise tons of CO2/year) and decrease of annual consumption (in KWh/year)</p>	<p>EU</p>	<p>25/05/2018 - 24/05/2020</p>	<p>475.208</p>	<p>Grant</p>	<p>Municipality of Negotino, Secondary Municipal School "St.Kiril and Metodij"- Negotino</p>

<p>Agrowaste supply chains for sustainable growth</p>	<p>Agricultural residues such as straw, bank canes and trees pruning constitute a significant load of green waste in rural areas from both sides of the borders. Those wastes are poorly managed causing severe environmental impacts. At the same time local authorities use expensive fossil fuel for space heating of public buildings, and due to the current economic recession, very often the amount of heat generated cannot satisfy the real needs of the building users. The sustainable management of the green waste can offer a real solution in both of the above problems.</p>	<p>EU</p>	<p>29/05/2018-28/05/2020</p>	<p>315.077</p>	<p>Grant</p>	<p>Municipality of Novaci , National Extension Agency</p>
<p>Development of an Action Plan for the Management of Bio-wastes at the Cross-Border Region</p>	<p>The overall objective of LESS-WASTE-II is waste prevention through the joint development and implementation of actions for the better management of bio-wastes in the cross-border area. The project directly contributes to the Programme's objective for the sustainable management of waste, which contributes to: the conservation and protection of the natural environment, the improvement of the quality of life in the cooperation area and the sustainable development of the area in general. The project's activities relate directly to the application of relevant European policies in the field of waste management, specifically waste prevention with the aim to minimise waste going to landfill and management of food waste, as they are adopted in the official Regional and Local Waste Management Plans of the areas involved</p>	<p>EU</p>	<p>2018-2020</p>	<p>275.583</p>	<p>Grant</p>	<p>Municipality of Resen, Public Communal Enterprise "Proleter"</p>
<p>Evaluating Energy Efficiency Measurements</p>	<p>The overall objective of the project "3Em" is implementation of energy efficiency measures in the public buildings run by the local government units in the border region of both countries. The overall objective is closely linked and directly contributes towards Priority Axis 2. Protection of Environment-Transportation, the Programme's Specific objective 2.1 Upgrade public infrastructure to improve road travel time, safe border crossing and promote energy efficiency towards green transport.</p>	<p>EU</p>	<p>22.06.2018 – 21.02.2020</p>	<p>798.545</p>	<p>Grant</p>	<p>Municipality of Valandovo</p>

Zletovica Project: Electricity Production and Irrigation Components	Construction of small hydroelectric power plants. The Zletovica project will contribute to the social and economic development in the region by providing new employment and reducing poverty. Irrigation will encourage agricultural development through increased product quantity and quality. The production of hydroelectricity will increase renewable energy supply, so reducing CO2 emission of the country, and contributing to actions mitigating climate change.	EU	2015-ongoing	1.180.000	Grant	Public Enterprise HS Zletovica
Symbiotic Networks of Bio-Waste Sustainable Management	The project's main objective is to set up an integrated, sustainable, bio-waste management and trading scheme between the partner regions of Western Macedonia in Greece (former Prefecture of Florina) and the municipality areas of Bitola and Novaci in the former Yugoslav Republic of Macedonia, following the Industrial Symbiosis concept.	EU	09/05/2018-08/05/2020	188.162	Grant	Public Enterprise KOMUNALEC Bitola
EU Floods Recovery Programme	The goal of the EU Floods Recovery Programme was to assist the country's recovery efforts in the aftermath of the floods that occurred in early 2015 by reconstructing damaged transport and water/flood control infrastructure. The "building back better" approach was applied to maximize resilience to future floods and mitigate the risk of floods in the most sensitive regions throughout the country.	EU	2018	2.330.656	Grant	UNDP
Open Regional Fund for South-East Europe - Energy Efficiency	Strengthening regional stakeholders' cooperation in the area of energy and climate, hence supporting the process of achieving the national climate and energy efficiency targets in the Western Balkan Countries	Germany	04.2017 - 03.2020	400.000	Grant	GIZ (with Ministry of Economy, Cabinet of the DPM, Energy Agency, City of Skopje and Municipalities)
Adaptation to Climate Change through Transboundary Flood Risk Management in the Western Balkans	Strengthening transboundary flood risk management with regard to climate change in the Drin Basin. Project outputs: Output 1: Implementation of the EU Floods Directive. Output 2: Partner institutions have the tools, capacity and processes for early warning. Output 3: Capacities of the partner institutions are strengthened.	Germany	10.2018 - 09.2021	460.000	Grant	GIZ and Ministry of Environment and Physical Planning (MOEPP); Hydrometeorological Service;

Consultancy services for post-construction avian & bat monitoring for the wind park Bogdanci	Consultancy services for post-construction avian & bat monitoring for the wind park Bogdanci	Germany	2017-2019	198.218	Grant	JSC ESM
Consultancy services for Preparatory Phase Bogdanci	Updating an environmental impact assessment study and securing other consulting services for an expansion of the Bogdanci wind farm	Germany	2019-2020	188.959	Grant	JSC ESM
District Heating of Bitola, Mogila and Novaci - first stage	Heating system by using the heating energy from REK Bitola. The benefits are reduction of emissions from combustion of wood, household and coal fuel in small domestic stoves as well as in furnaces of public and commercial buildings, SOx, NOx, CO, etc. ; Reduction of CO2 emissions at the level of R. Macedonia; Improving the quality of ambient air; Improving the quality of the agricultural arable land; etc.	Germany	2017/2022	108.647	Loan	JSC ESM
Reduction of the CO2 emission in the Municipal Primary School Goce Delcev in Bosilovo by replacing fossil fuel with biomass	Reduction of the greenhouse gases in in the school building in the village of Bosilovo by instaling heating stations using biomass (pellet) and Training to raise the public awareness on greater usage of the renewable energy sources.	Global Environment Facility (GEF)	01.01.2017 - 31.12.2017	28.750	Grant	Association CEOR, Bosilovo
Improving of the energy efficiency of Municipality of Mavrovo and Rostushe	The aim of the project is to create conditions for reducing climate change in the rural municipalities of Polog – Municipality of Mavrovo and Rostushe through improved energy efficiency in street lighting, awareness raising and capacity building of stakeholders involved in issues related to energy efficiency	Global Environment Facility (GEF)	01.01.2017 - 31.03.2018	49.440	Grant	Association for Local and rural Development ZLRR, Tetovo

<p>Promoting the protection of plant diversity, energy efficiency and education in the Botanical Garden at the Faculty of Natural Sciences and Mathematics</p>	<p>The project objective: the reconstruction of the stagnated Botanical garden in Skopje (established in 1948) within the Department of Botany at the Institute of Biology, integral to the Faculty of Mathematics and Natural Sciences. The project provided adequate conditions for the survival and further development of the subtropical domestic autochthonous plant species that have been conserved for years and improved the thermal insulation and reduce the losses of thermal energy. Forecasted reduction in emissions of greenhouse gases by at least 1.709 tones of CO₂/annually and reduced heating costs for app 800 USD/annually</p>	<p>Global Environment Facility (GEF)</p>	<p>01.09.2017 - 01.03.2019</p>	<p>49.866</p>	<p>Grant</p>	<p>Macedonian Biological Society /Makedonsko Biolosko Drustvo MBD, Skopje</p>
<p>Catalyzing market transformation for industrial energy efficiency and accelerate investments in best available practices and technologies in the Former Yugoslav Republic of Macedonia</p>	<p>The project contributes to accelerating the transformation of the Macedonian market for industrial energy efficiency towards the increased use of, and demand for, best available practices and technologies such as energy management systems in line with ISO 50001, and a greater offer in terms of related consultancy services. During the project lifetime, annual GHG emissions reductions of 133,000 tonnes of CO₂eq are anticipated.</p>	<p>Global Environment Facility (GEF)</p>	<p>31.12.2014 - 31.01.2019</p>	<p>560.042</p>	<p>Grant</p>	<p>Ministry of Environment and Physical Planning, Ministry of Economy, Energy Agency of the Republic of Macedonia</p>
<p>CO₂ reduction as a result of the replacement of the street lighting</p>	<p>This project offers new technology for the generation and storage of low-carbon energy, supplying of economical street lamps that through their use reduces greenhouse gases, generate new revenue through energy savings and dramatically reduces maintenance costs.</p>	<p>Global Environment Facility (GEF)</p>	<p>2017-2018</p>	<p>26.540</p>	<p>Grant</p>	<p>Municipality of Vasilevo</p>

Stabilizing GHG Emissions from Road Transport through doubling of Global Vehicle Fuel Economy	<p>To support the development of national fuel economy policies in 20 countries, 6 countries through GEF-5 STAR Allocations and 14 without GEF funding, using existing tools developed with GEF-4 support (examples are the fuel economy baseline calculation methodology and online GFEI toolkit). In addition, to support coordination of the 20 country projects at the regional level to ensure that results are disseminated to other countries within the region. This will result in reduced vehicle fleet CO2 emissions in these 20 countries inline with the Global Fuel Economy Initiative's target of a 50% improvement of the overall global fleet fuel economy by 2050.</p>	Global Environment Facility (GEF)	May 2015 - June 2018	212.000	Grant	REC
Strengthening Institutional and Technical Macedonian Capacities to Enhance Transparency in the Framework of the Paris Agreement	<p>To meet enhanced transparency requirements as defined in Article 13 of the Paris Agreement by strengthening institutional and technical capacity for measuring and reporting on emissions, mitigation and adaptation activities, and support received.</p>	Global Environment Facility (GEF)	12.06.2019 - 15.04.2022	2.730.000	Grant	UNDP and Ministry of Environment and Physical Planning (MOEPP)
Fourth National Communication and Third Biennial Update Report on Climate Change under the UNFCCC	<p>Assist the Macedonian Government to prepare the Fourth National Communication and the Third Biennial Update Report on Climate Change for the fulfilment of its obligations towards the United Nations Framework Convention on Climate Change (UNFCCC)</p>	Global Environment Facility (GEF)	11.05.2018 -	1.202.000	Grant	United Nations Development Programme
Support for the management of an effective national coordinative mechanism regarding the Green Climate Fund	<p>Establishing and strengthening national designated authorities or focal points. The project aim was to support the country in developing its capacities to engage with the GCF with focus on strengthening the institutional capacities of the NDA/ NFP to effectively fulfil its roles and responsibilities related with the Fund and to start discussions with national stakeholders to engage them into the process and to start preparation of Country program.</p>	Green Climate Fund (GCF)	31.07.2018-30.10.2019	300.000	Grant	FAO and the Cabinet of the Deputy President of the Government for economic affairs

Improvement of the Solid Waste Management Services in the Polog Region, Phase 1	<p>The first phase of the project will support preparation of local and regional waste management plans, preparation of designs and tender documents for short term measures and setting up the organisational and financial scheme for regional solid waste management services. The overall objective of the project (phase 1 and 2) is to contribute to the protection of human health and environment, as well as to the responsible utilisation of natural resources in the Polog region.</p>	Switzerland	2017 - 2019	1.090.909	Grant	Center for Development of the Polog Planning Region
Improving Resilience to Floods in the Polog Region	<p>The project's ambitious goal is to instigate transformational change in managing flood risk in the region, accelerating the shift from purely reactive responses to floods to integrated systems to manage hazards, vulnerabilities and exposure of communities and assets to prevent/mitigate losses and alleviate the impact of future floods.</p>	Switzerland	2018-2019	1.523.451	Grant	Ministry for Environment and Physical Planning
Resilient Skopje: Scaling-up for Sustainability, Innovation and Climate Change	<p>UNDP assists the City of Skopje to become more resilient to climate change and other environmental threats, and to work with the public administration to help it design and deliver better services for its citizens. The project will pursue these aims by assisting the City of Skopje in implementing a set of priority measures identified in the Climate Change Strategy – Resilient Skopje and the Skopje Innovation Framework.</p>	UNDP	2018-2020	1.020.369	Grant	City of Skopje
Restoration of Strumica River Basin	<p>The overall objective of this project is to introduce a set of comprehensive measures that will help restore Strumica River Basin's socio-ecological functions and its overall resilience against the complex pressures resulting from human activities and global changes. Aligned with the key principles of the EU Water Framework and Floods Directives and the underlying concept of Integrated Water Resources Management, this project aims at addressing the main types of pressures in the Basin (point source and diffuse pollution, as well as hydro-morphological modifications), maximizing at the same time the possibilities for mitigating flooding risk.</p>	UNDP	2018-2019	867.514	Grant	Ministry for Environment and Physical Planning

Reducing Flood Risk in Kumanovo and Lipkovo Municipalities	UNDP supports efforts to significantly reduce flood risk in communities along Lipkovska River in the City of Kumanovo and central parts of Lipkovo.	UNDP	2018	232.172	Grant	Ministry for Environment and Physical Planning
ICT for Urban Resilience	The risk of disaster are increasing throughout the world as more people than ever before live in urban areas. At the same time, new technologies are revolutionizing social behaviour and entire industries. Unfortunately, city planning and development have given little consideration to the consequences of earthquakes, hydro-meteorological risks and other disasters. The main objective of this project is to help build greater disaster and climate resilience in Skopje by increasing institutional capacity, mobilizing knowledge and transferring appropriate best-practice innovation technologies.	UNDP	2018-2019	138.935	Grant	UNDP
Technical assistance for preparation of climate resilience design guidelines for the public enterprise for state roads	These guidelines and the associated methodology statement have been produced for PESR to enable the organisation to better understand the impacts of climate related events on North Macedonia's road network, the appropriate courses of action that are available and the priorities in terms of investment. The guidelines have been designed as a series of linked documents, each of which is targeted at a different audience within PESR and North Macedonia's road sector organisations. The main purpose of these Guidelines is through their application PESR to advance the overall design process at all stages of the project management. The resilient designs of the new and the roads to be reconstructed, need to be informed by the climate effects as well as be adopted to the international best practices.	World Bank	19.10.2018 - 15.08.2019	191.419	Loan	Public Enterprise for State Roads

