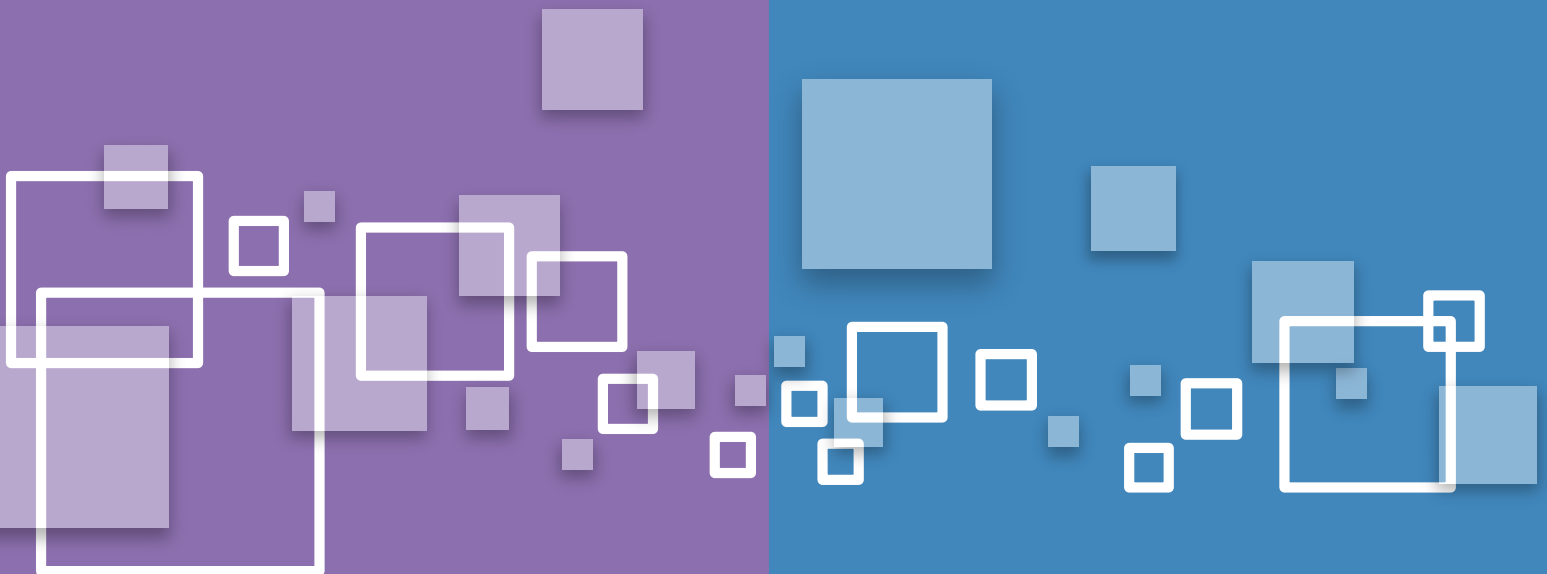


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SITUATION ANALYSIS



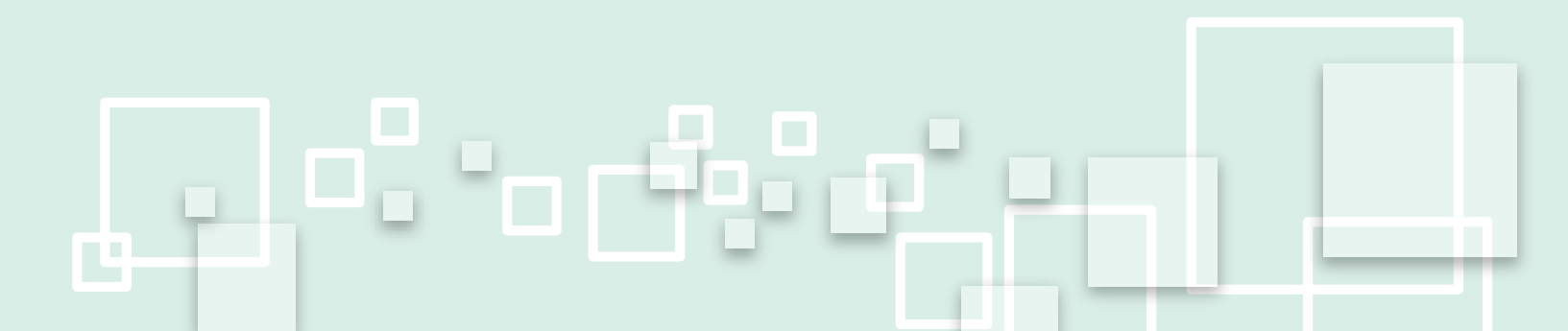


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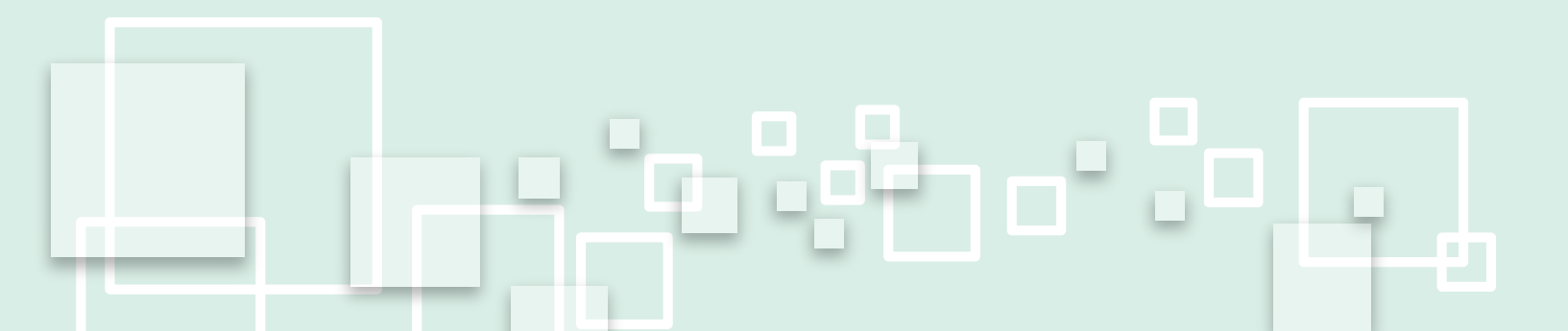
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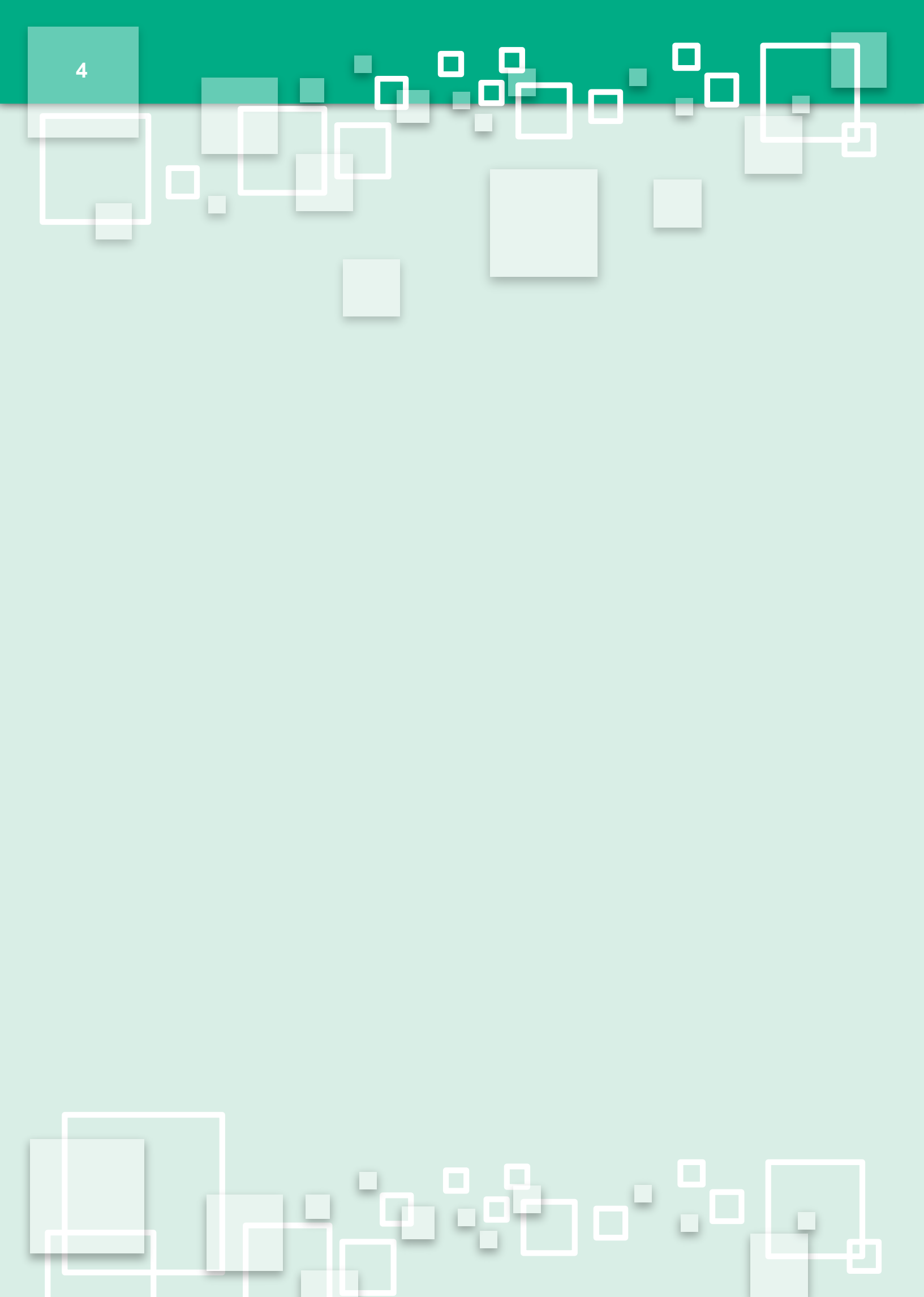
SKOPJE, MAY 2016

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FOREWORD

Center for Ecological Democracy “Florozone” from Skopje and the Association for Development of the Roma Community “SUMNAL” are implementing the project “Development of Environmental Investigative Journalism.”

The project is financially supported by the Delegation of the European Union in the Republic of Macedonia through the grant scheme “Instrument for civil society support, Action 2014 for capacity building of civil society organizations and media freedom -Europe Aid/136-992/DD/ACT/MK”.

The main objective of the project is to strengthen cooperation between civil society organizations and the media, to develop investigative environmental journalism by introducing innovative tools for citizen journalism, networking, exchange of relevant information and creating conditions for financial support.

Expected outcomes from the implementation of the project are:

1. Strengthened capacities of civil society organizations and professional journalists for application of environmental investigative journalism and forwarding relevant information related to the environment to the general public;
2. Established partnership between civil society organizations and the media;
3. Improved access to relevant information in the area of environment through the introduction of effective methods of civil investigative journalism.

The main project activities are aimed at strengthening the capacity of various stakeholders who are directly affected by the environmental investigative journalism especially the media and civil society organizations, in order to increase their advocacy power through networking and established partnerships as well as activities aimed at the general public.

Analysis of the situation provides an overview of the level of development of national legislation for environment protection thus reflecting the real position of the country in terms of European integration. In addition, the document reviews the national investment in the environment in recent years, and it also indicates the presence of the environmental information in the media, the impact of poor governance on the marginalized groups and activities i.e. participation of civil society organizations in environmental protection.

This document will serve to create a strategic approach to the development of relevant issues that I hope as a final result will create a new reality and quality of life in the contemporary Macedonian society.

*Skopje,
May 2016
Kiril Ristovski,
Project Manager*

1. INTRODUCTION

For many environmental protection is the shortest way of our region to the European Union. It is obvious that the European Union will not tolerate unclean environment in its vicinity. That is why the media coverage of the environment, as well as raising awareness and pointing out the importance of the environmental protection is of great importance, and certainly since the environment as an interdisciplinary branch doesn't recognize any borders, cooperation between the countries is of great important.

Processes with broad participation and consultation with public and private stakeholders, non-governmental organizations, printed, electronic and digital media and the interested public are the key elements for developing good and sound basis for decision-making and creation of policies on environment.

Awareness of the environmental problems and knowledge of the issues represent essential factors which ensure the participation of the general public as well as specific actors in such processes, and that they are mutually equal with public bodies, in regard to knowledge and the access to information and decision-making. Transparency in decision making and later on in its implementation is another necessary element in accomplishing the cycle of participation, considering that, such manner provides for accountability in decision-making, implementation and in the enforcement of regulations.

Aarhus Convention, 1998¹ plays an important role in providing the basis for better and institutionalized mechanisms for exchange of information between decision-makers and the general public, amongst the members of the general public and among the general public and other responsible partners and stakeholders. In any case, the full implementation of the Aarhus Convention assumes a certain level of environmental awareness and increasing knowledge about the environment in the society in general.

Also, the involvement of citizens and the non-governmental organization sector is vital in identifying problems and implementation of activities to resolve those problems, as well as in deciding to establish specific measures for environmental protection at the local level.

Press releases, active information on specific environmental problems by local authorities, public hearings on certain issues, the participation of non-governmental organizations in the work of councils and other bodies at local level, as well as reporting on some topical issues in the area of environment, represent good access to environmental information.

An important element in the transmission of environmental information, and making them available to the public are the printed, electronic and digital media.

Environmental Investigative Journalism in Macedonia is still in the phase of development, therefore encouragement through a transparent exchange of information with authorities who possess information on environment is necessary.

Cooperation with non-governmental organizations, the media reporting on the situation with the environment and generally with the interested public is imperative in improving the environment.

In this report is conducted analysis of:

- Institutional setting – status of the implementation of the environmental legislation, main activities of the State Environmental Inspectorate;
- Integration of vulnerable groups in the system for environmental protection, as well as the impact of climate change on vulnerable groups.

¹Law on Ratification ("Off. Gazzette of the RM" 44/99)

- Resources, basis for financing activities in the area of environmental protection;
- Access to environmental information, activities of the Macedonian Information Center for Environment, environmental reporting in the printed and electronic media, and articles on the environment;
- Environmental education and its integration into the education system as an important tool to develop the awareness for environmental protection;
- Activities of non-governmental organizations and civil organizations in the area of environment;

In order to make recommendations for further development of the environmental investigative reporting in Macedonia, are established NGOs (COs) activities for environmental protection and protection of vulnerable groups.

2. INSTITUTIONAL STRUCTURE AND THE ENVIRONMENT

2.1 Status of the implementation of legislation in the area of environment

As is known, in 2005 the European Commission began publishing the so called progress reports to present the path of reforms in each candidate country or a potential Member State candidate. These reports combine completed or unfulfilled reforms in each of the EU acquis chapters summarizing everything that has been done in the previous year, as well as listing recommendations for future steps. Macedonia's progress in the area of environment in these reports is provided in a separate chapter.²

Issues of environmental sector are not high on the agenda of the Macedonian government due to many other problems that are time-consuming and require finances, such as public administration reforms, economic and judicial reforms, police reforms, human rights, rights of minorities, etc. which usually take precedence over the environment.

It should be noted that some progress has been made in some areas, such as the takeover of EU legislation into the national legislation, especially in the areas of waste management, chemicals, civil protection, yet greater efforts primarily on strengthening administrative capacities to manage the quality of air, water, and climate change need to be made.

Macedonia should follow the European Union trend regarding the promotion of strong climate action, sustainable growth and environmental protection. EU legislation contains provisions for tackling climate change, water and air quality, waste management, nature protection, industrial pollution, chemicals, noise and civil protection.

This Chapter gives a brief overview of the progress in the environmental sector in the last 5 years in separate areas, indeed what has been done so far, in which areas the progress has been slow or degraded and which areas have potential for progress and what awaits the future development of environmental protection in the country.

2.1.1 Overview of the EC reports on Macedonia's progress in terms of environment and climate change

In general, preparations in the area of environment and climate change show constant moderate progress.

Several areas of the environmental sector are taken into consideration in the preparation of the reports that the EC considers relevant in assessing the reforms, including:

- Horizontal legislation;
- Air Quality;
- Waste Management;
- Water quality;
- Protection of nature;
- Industrial pollution control, and risk management;
- Chemicals;
- Noise;

² Chapter 27 of the EU acqui – environment and climate change, which until 2012 was called Environment only

- Civil protection;
- Climate change;
- Administrative capacities.

Horizontal legislation

The most balanced progress has been noted in the adoption of the necessary legislation. However, even in the process of adoption of the regulation there are several shortcomings that occur almost every year. In 2010 a multilateral agreement among the Southeast European countries was ratified for implementation of the Convention on the assessment of environmental impact in a transboundary context³, and the Protocol for a Register of pollutants and transfer of pollutant materials⁴. Legislation on strategic assessment of environmental impact (SAEI) and impact assessment on environment (IAE) has been passed, as well as the Law on Ratification of the Protocol on Strategic Assessment of Environment.

In 2013 was established a coordinative body for cooperation and dialogue with the civil society. Access to information and public consultation related to the implementation of directives for IAE and SAEI should be improved. Public consultation and coordination with civil society should be improved.

In 2014, the 9th Progress Monitoring (PM) in the area of environment and climate change was finalized, and it assesses the level of approximation of national legislation of the Republic of Macedonia to the EU legislation, and the extent of its implementation. Progress monitoring was conducted under the Regional network for accession in the area of environment and climate (EKARAN) in collaboration with the European Commission – Directorate General on Environment. “Law on Amendments to the Criminal Code” was adopted, which transposed the EU Directive 2008/99/EC about environmental crime (“Official Gazette” no. 27/2014). “Law on National Infrastructure of Spatial Data” was adopted, which transposed the Directive INSPIRE 2007/2/EU (“Official Gazette” no.38/2014). Amendments to the Law on Environment (“Official Gazette” no. 42/14) related to the license for handling refrigerants and/or products containing refrigerants were made, thus ensuring better implementation of the Montreal Protocol. In May 2014, the State Environmental Inspectorate as a body within the Ministry of environment and physical planning acquired the status of legal entity. The Government of the Republic of Macedonia adopted the Program for Environmental Investments for 2014 (“Official Gazette” no. 7/2014). Within the project “Management of EU accession”, financially supported by the British Embassy in Skopje, was conducted a detailed assessment of progress in the 9 sub-sectors of the chapter 27- Environment, as well as an analysis of shortcomings in the implementation of legislation in this chapter. In December 2014 the project “Right to immediately” started between the MEPP and the non-governmental organization Florozon, a project financially supported by the Norwegian Embassy in Belgrade. The project aims to strengthen the administrative capacities to establish and maintain a Register of emission and transfer of pollutants. Infringement proceedings and mediation procedures were regularly and intensively conducted during the 2014 .

During 2014, were carried out a series of activities for raising public awareness through celebrating the days of the environmental calendar, promotions, presentations, workshops, consultative meetings and broadcasting TV shows with environmental topics.

³ Law on Ratification (“Off. Gazzette of the RM“ no. 157/10)

⁴ Law on Ratification (“Off. Gazzette of the RM“ no. 135/10)

Air Quality

Certain progress has been noted in the area of air quality, and harmonization with *acquis communautaire* still continues, with the adoption of legislation for implementation still continues.

Certain progress has been made in the development of the system for monitoring the air quality, as well as in the reporting and sharing the information on air quality. Most of the system for monitoring the quality of air is put into operation.

Only limited progress in the implementation of the national plan for the protection of air quality has been achieved. Registered levels of air pollution (PM10) are significantly above the EU limits. The lack of sufficient financial resources is an obstacle to normal operation and maintenance of the State network for monitoring the air quality. The country became a full member of the Geteborg Protocol⁵.

In February 2014 was passed the Law to control emissions of volatile organic compounds when using petrols ("Official Gazette" no. 38/2014) in which the provisions of EU measures 31994L0063 and 32009L0126 were transposed. The by-laws resulting from the above Law were passed, too. By-laws in accordance with the Law on Ambient Air Quality were adopted. The program for operation of the State system for monitoring ambient air quality for 2015, which is managed by the MEPP, was adopted. The data inventory KORINER for 2012 was prepared, and it was sent to the Convention on Transboundary Air Pollution transmission as well to the European Environmental Agency.

Waste Management

In the area of management were adopted: Law on Management with the batteries and accumulators, and batteries and accumulators waste, the Law on Management with the electrical and electronic equipment, and electrical and electronic equipment waste, as well as certain laws for implementation in the area of planning of waste management and packaging waste management. Investment in this area is far from enough and it should be increased. The administrative capacity in this area is improved, yet investments are far from adequate and they should be increased, with a particular focus on waste sorting and recycling. A pilot system for data collection, registration and reporting is established.

Implementation of the integrated system for waste management has commenced. In September 2014 were adopted regional plans for waste management in the East and Northeast region, accompanied by procedures for strategic assessment on the environment of these planning documents, financed through the Measure 3.2 Component 3 of the IPA project "Development of regional plans for waste management and strategic environmental assessment for East and Northeast region. The database of the Cadastre of waste producers was upgraded and supplemented. Software for issuing permits for waste management was put in function. Feasibility study for hazardous waste within the project "Capacity Building of the Ministry of environment and physical planning for integrated pollution control and hazardous waste management", funded by the Norwegian government was prepared.

Implementation of the legislation for special waste streams is still lagging behind.

⁵ Protocol to the Convention for longrange and transboundary air pollution from 1979, reduction of air pollution, acidification and eutrophication, and the ground ozone (Geteborg, November 1999), Law on Ratification ("Off. Gazzette of the RM" no. 135/10)

Water quality

In 2011 a specific law to comply with the Directive on waste water and the Framework Directive for Water was adopted, while the transposition process in this area is not so advanced and it has been slow, which is a result of the lack of coordination between competent bodies in the water sector, which hampers the implementation of the legislation. In 2013 was adopted the National Strategy for Waters, along with amendments to the legislation for its implementation.

Steps for drafting plans for river basins management, protection and recovery of water resources were undertaken. The Program for water management for 2013 provides limited financial allocations for investments in infrastructure.

The Program for water for 2014 was adopted, ("Official Gazette of the Republic of Macedonia" no. 8/14). In December 2014 the Project "Development of the national tariff system for supply, drainage and water treatment" financed by IPA was completed. Within this project was adopted the methodology for determining the price of water and Action plan for its implementation.

No attention is paid to important gaps in the water monitoring system. Planning and preparation of infrastructure investments is lagging, while funding is too low, and there's no progress in applying the "polluter pays" principle, no adequate system for determining the price of water is established, and it complicates the operation of treatment plants. Structures for river basins management have been established, but they are not fully functional yet. Preparation of infrastructure investments are lagging, and financing is too low compared to the sector needs.

Nature Protection

In the area of nature protection, the amendments to the legislation for implementation has led to limited increase of the alignment to the acquis, transposition of EU law on natural habitats and of wild fauna and flora is delayed.

Good progress was made in introducing a National information system for biodiversity. In 2014, the activities for declaring protected areas continued. MEPP in cooperation with an expert team prepared the Fifth national report to the Convention on biological diversity.

Crossborder cooperation was enhanced by declaring the Ohrid - Prespa region as a crossborder biosphere reserve. The National strategy for nature protection should be completed.

No progress is made in the identification of future Natura 2000 sites. Plans for protected areas management are developed and they need to be implemented. Certain efforts were made to improve the financing of the implementation of management plans, but the measures in force are still insufficient. Regarding the planned construction of two large hydroelectric plants Lukovo Pole and Boskov Most, concerns remain about the potentially harmful impact on the environment. Investments in hydro power plants should be in accordance to the relevant EU legislation on environment, respecting the assessment of environmental impact, the legislation on water and obligations for nature protection, especially for national protected areas and areas of high natural value, potentially protected areas with a net of areas of nature protection Natura 2000.

All the stakeholders are not sufficiently involved yet, and appropriate requirements for public consultation with stakeholders are not always appropriately applied, respectively the results are not always fully reflected in the decisions

Industrial pollution control and risk management

Progress in this area is very small, and full harmonization represents a significant challenge for the country. The process of issuing IPPC permits is lagging to big extent. Requests for public consultation in relation to the system of issuing IPPC permits are not always applied appropriately. Transposing and implementation of the Directive Seveso II is progressing.

It is necessary to significantly strengthen administrative capacities, especially in the activities for issuing IPPC permits, control and conducting inspections.

Chemicals

Preparations in this area are moderately advanced. The Convention on the import/export of hazardous chemicals (Rotterdam Convention, 1998)⁶ is ratified; a new Law on chemicals in order to transpose the Regulation on the registration, evaluation, authorization and restriction of chemicals is adopted. The Bureau of medicines and chemicals published a list of restrictions and prohibitions on the use of chemicals. The Report on the situation with chemicals and the national plan for a strategic approach and management with chemicals, as well as the National plan for reduction and elimination of permanent organic pollutants is adopted. The administrative capacities are improved. Certain progress in the alignment with the directive on biocide products is achieved.

Noise

Preparations in this area are at an early stage. The transposition of the directive on noise is completed. Administrative capacity is insufficient in terms of personnel and in terms of equipment. The development and implementation of strategic noise maps, as well as the preparation of maps and action plans are lagging.

Civil protection

In terms of civil protection, progress was made with the signing of a memorandum of understanding for the reception of the country in the financial instrument for EU Civil Protection and EU Civil Protection mechanism. Good progress has been made in the form of accession to the EU civil protection mechanism and participation in the IPA - project for cooperation in the area of civil protection.

The National strategy for protection and rescue 2014-2018 was adopted, together with the action plan for establishing the link with the Joint Communication and EU emergency Information System. Trilateral cooperation with institutions from Albania and Kosovo in the area of crisis and emergency situations continued. The country is not yet linked to the Common system for emergency communication of the Civil protection mechanism. Disaster management and risk reduction should be treated as a priority issue, especially in relation to the floods of 2015.

⁶ Law on Ratification ("Off. Gazzette of the RM" no. 83/10)

Climate change

Regarding climate change has been noted a certain progress in the general policy development, but implementation of the legislation is still not efficient. Concrete steps are needed to implement the EU acquis, especially for the scheme of emissions trading in the EU. Environmental protection and the requirement on climate change is not yet sufficiently integrated in policy making and their implementation in other areas.

Third National communication on climate change was submitted to the Framework Convention of the United Nations on climate change. Progress is made in developing an adjustment national plan: indicators of vulnerability to climate change for eight sectors were planned, ten local authorities prepared their socio-economic assessments of the vulnerability of the population, and early warning system against floods was established. The Law on Environment was amended in order to provide a system for data collection and management which is used for the preparation of a national inventory of greenhouse gases. Legislation on consumer information on fuel consumption and CO₂ emissions for new passenger cars is adopted.

The country submitted its first Two-Year updated report to the UN Framework Convention on Climate change and submitted its indicative national contribution and adopted a contribution to the expected climate Paris Agreement 2015.

The roadmap for achieving long-term goals for climate action was adopted, but the country needs to continue paying attention to adaptation to climate change.

The country began a five-year program for green economy development, but the measures, responsibilities, timetable are not defined yet. The country actively participates in climate activities in accordance with Regional Environmental Network for Accession.

The Government, in January 2014, adopted the Third National Communication on Climate change. In addition to this were developed:

- An inventory of greenhouse gases for the years 2011 and 2012 and revised inventories for the years 1990 to 2009 in accordance with the new methodology of the intergovernmental panel on climate change for the sectors of energy, industrial processes and agriculture;
- A study of the potential for mitigation of climate change in the sectors buildings, transport and energy supply;
- A conceptual framework for national monitoring, reporting and verification of actions for mitigation of climate change;
- Report on climate issues and gender aspects;
- Sectors with potential for low-carbon emission growth were defined.

The process of introducing mitigation measures in certain national strategies has started. Programming pilot projects for implementation of the clean development mechanism under the Kyoto Protocol continued ("Off. Gazette" no. 49/2004). Certain effort has been on the ozone layer and fluorinated gases. National plan for the elimination of HCFC was developed, in November 2011, but significant efforts are needed to strengthen the capacity of the country for monitoring, reporting and verification.

It is necessary to develop a comprehensive strategy on climate. Climate aspects are increasingly integrating into the energy policy however significant efforts are needed for full integration of climate change into other sectorial policies and strategies. Although the Treaty of Copenhagen was previously supported, the country has yet not undertaken the responsibility for reducing emissions by 2020. The country should consider undertaking commitments to reduce emissions in the air consistent to those

of the EU and its member - states in order that until 2015 the agreement on climate, which would start to be implemented in 2020, to be reached.

The country has already made the first steps to identify stationary installations out of 40 indicated installations for the purposes of future implementation of the emissions trading system.

The country also is invited to begin to reflect its climate and energy framework for 2030 in line with the Green book of the European Commission "Frame 2030 for policies in the area of climate and energy."

Harmonization of national legislation with the regulations of the monitoring mechanism should be a priority. Measures to increase awareness and promote cooperation between stakeholders were introduced, but they should be further strengthened. Inter-institutional working group on climate change should be significantly strengthened in order to be able to address the need for more effective action on climate issues in a sustainable way, and not based on each project separately only. Negligible efforts to strengthen administrative capacity for implementation and enforcement of legislation have been made, however it still continues to be largely insufficient, both at national and local level. Coordination between relevant bodies continues to remain ineffective. Stakeholders are still not sufficiently involved in decision-making process. The system for environmental monitoring and reporting is not appropriate. Investments in the sector continue to remain low compared to the current needs.

Administrative capacity

In 2011 improvement of the administrative capacity to implement the requirements for assessing the environmental impact assessment (EIA) and Strategic Environmental Assessment (SEA) was observed, however the provisions for public consultation are not properly applied yet. Administrative capacity for air quality, waste management, protection of nature, in the central and local levels is still insufficient. Administrative capacity in the area of chemicals and industrial pollution and risk management should be strengthened, especially the inspection activities. In terms of the noise, both staffing and equipment is insufficient. The coordination between administrative bodies responsible for Environment is not efficient yet. Requirements for environmental protection are still not well integrated into creating policies and their implementation in other areas. The principle of precaution, preventive actions and polluter pays are only partially applied.

Administrative capacity, as well as the technical and financial resources, needs to be significantly strengthened in order to harmonize and implement all the requirements of the EU policy and legislation on climate change.

The involvement of stakeholders in decision-making is improved but it's still insufficient. The Information and environmental monitoring system needs to be further developed. Investing in the sectors remains extremely low compared to the needs. Full utilization of funding from external sources will require capacity building and putting the sector in the foreground.

Based on the conducted analysis of the status on environmental legislation implementation, as well as the implementation of Chapter 27 of the EC Reports on Macedonia's progress in terms of environmental and climate change (2011-2015) the following conclusions can be adopted:

- Limited progress in the areas of environment and climate change has been achieved. Overall, the preparations in the area of environment are moderately advanced, while preparations in the area of climate change continue to remain at an initial stage;
- Strategic planning and significant efforts are needed in order to ensure that the national legislation is harmonized with the acquis, and that this legislation is implemented;
- Further progress in aligning national legislation with the EU acquis on environment has been made, especially in the horizontal legislation, waste management and air quality;
- Considerable efforts are needed to implement the legislation, particularly in the areas of water management, industrial pollution control, environmental protection and climate change;
- The levels of air pollution remain high, and they represent a serious health risk, and they should therefore be urgently addressed;
- Strengthening the administrative capacity, both at central and local level, is of utmost importance. Investing should be significantly increased, especially in the sectors of waste and water;
- Greater cooperation is needed with the civil society and stakeholders as well as improvement involvement of public, environmental COs, NGOs in decision-making process in accordance with the requirements of the Aarhus Convention;
- Full implementation of the “polluter pays” principle is required;
- The environmental monitoring and the information system is inadequate;
- The requirements for environmental protection and climate action is still not well integrated into other areas of policy making and their implementation;
- A comprehensive policy and strategy for climate action, aligned with EU Framework 2030 should be prepared.

The conclusions of the EU Enlargement strategy in terms of environment are:

- Development of a quality statistical system, respectively environmental statistics that will include waste, water, environmental protection, economic accounts in environmental air emissions etc.;
- In terms of climate change, countries aspiring for membership will have to implement important reforms in line with EU2030 framework for climate and energy policy, and to implement their international commitments on climate.

2.2 Functioning of the State Environment Inspectorate

2.2.1 Organization of SEI functioning

State Environment Inspectorate (SEI) is making reforms to modernize and strengthen the capacity of the Inspectorate by increasing accountability in the actions and efficiency in the undertaken steps, as well as enhancement of contacts with the public. SEI conducts inspections and monitoring of the application of technical and technological measures to protect the air, water, land, flora and fauna of degradation and pollution, protection of geo and biodiversity, special natural heritage (national parks, natural monuments, forest, ornithological reserves and other areas protected by law), protection of the ozone layer, protection against hazardous noise in the environment and protection against non-ionizing radiation in protected areas, prevention of environmental accidents.

According to the Law on Organization and operation of the state administration, SEI is a body within the MEPP, and in accordance with the amendments to the Law on Environment ("Official. Gazette" no. 187/13), Article 194, paragraph (7) SEI is a legal entity with its own budgetary account as a first line budget user. According to the state budget for 2016, for the SEI work are planned 15 531 000 denars ("Official. Gazette" no. 209/15).

Within the SEI are the following Sectors:

- Sector for inspection in the environment and nature;
- Section of water management inspection;
- Sector for coordination of the inspectorate work.

The Law on Environment regulates the principles, responsibilities, organization of SEI, as well as the inspection procedure. The operation of this Inspectorate in addition to the Law on Environment is defined and regulated by the Law on Inspection monitoring also, the Law on Nature Protection, the Law on Waters (water management inspectors) as well as by about 30 other laws and more than a hundred by-laws.

According to the existing regulations the environmental inspection is regulated both at central and local level. At the central level, the inspection is performed by the State Environment Inspectorate through the state environmental inspectors, state inspectors for nature and water management inspectors. On local level, the inspection is performed by authorized inspectors.

According to the manner that the inspection is regulated, there is annually planning of inspection activities through the program for inspection of the State Environment Inspectorate. Monitoring of the implementation of the Program at the central level is carried out in accordance to the Law on inspection.

The main activity of the SEI is to conduct **inspections, investigations and audits of the sites**. There are three types of actions:

- Preventive (in the process of approval of the IPPC, the so-called environmental permits, authorizations, limit values of emission);
- Sanctions (imposing fines, decommissioning of operations or activities);
- Remediative (imposing remediation activities for the elimination of deficiencies and their causes).

The following figure (Figure 1)⁷ shows the inspection cycle in the environment

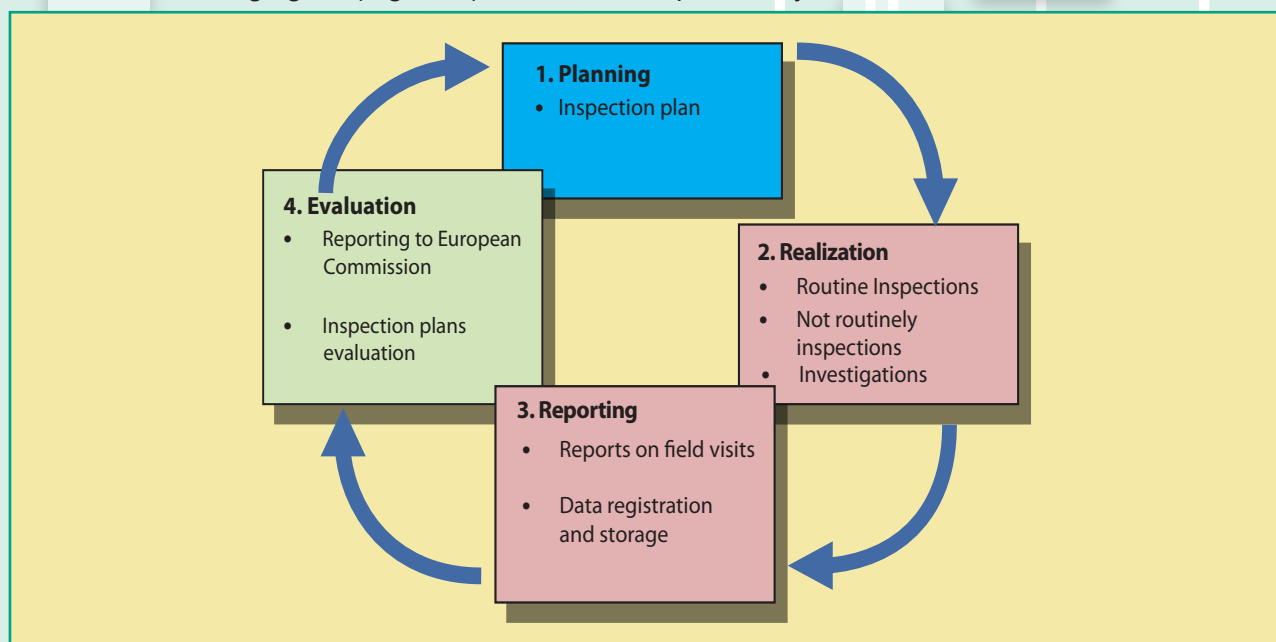


Figure 1 The inspection cycle in the environment

2.2.2 Problems and challenges in the SEI functioning

In 2001 the European Parliament and the European Council adopted the Recommendation on providing minimum criteria for environmental inspection (RMCEI). The objective of RMCEI is to strengthen harmonization, and to contribute to a more consistent implementation and application of the Law on Environment of the Union in all member-states. RMCEI establishes guidelines for inspections in the environmental installations, other enterprises and facilities whose air emissions, discharges in water or activities of recovery or disposal are subject to the requirements of authorization, permit or licensing under the Union law (“controlled installations”). All inspection bodies in the member states of the EU should apply these guidelines. They, among other things, care for the minimum criteria for establishing and evaluating plans for environmental inspections also.

According to RMCEI all inspection activities should be planned in advance, which means that plans for inspection covering the entire territory of each country and of all controlled installations should be in place. Plans should be based on: (i) that the EU legal requirements should be respected, (ii) register of controlled installations, (iii) general assessment of main environmental issues in the area, and (iv) general assessment of the situation and the compliance of controlled installations.

According to the Aarhus Convention and Directive 2003/4 / EC on public access to environmental information, plans for inspections should be made public.

In terms of planning inspection at the local level, there is also an obligation for development of a Program for inspection at the local level. However the monitoring program is not carried out in accordance to the Law on inspection.

⁷ Source Handbook for planning, inspection and implementation of EU Environmental legislation, October 2015

Based on the aforementioned it can be noted that there's a difference in the responsibilities of central and local inspectors, which arise from the Law on inspection respectively the obligations which are stipulated in the Law on Inspection for state inspectors do not apply to local inspectors, too.

In accordance to this it can be concluded that there's no coordination in the planning of inspections in the area of environment at central and local level.

In addition, planning is not carried out on the basis of established criteria, respectively there's no unified planning of the inspection in the whole territory of the Republic of Macedonia. Also, a unified system of monitoring the implementation of the inspection in the whole territory of Macedonia does not exist.

Such conduct of the inspection without coordination of central and local government and lack of mechanism to monitor the implementation of the inspection at central and local level brings into question its efficiency and its results. The implementation of inspection in such a manner does not provide a realistic picture of the implementation and observance of regulations in the area of the environment by the inspection entities who are obliged to observe them. The absence of such data for compliance of entities with the requirements defined in environmental law of inspection is reflected in the further policy-making in the area of environment according to the needs. The absence of all previously mentioned elements impacts on environmental quality because in such manner the necessary measures and activities, which need to be undertaken for its improvement lack.

At EU level environmental inspection is regulated by the Recommendation of the European Parliament and the Council of 4 April 2001 providing for minimum criteria for environmental inspections in the member states. According to this recommendation the inspection is only partially regulated in accordance with the requirements arising from this recommendation. In terms of the organization of the environmental inspection by the EU, in certain directives on the environment specifically in Article 23 of the Directive on industrial emissions 2010/75 / EU such as, Article 20 of the Seveso III Directive is regulated the manner of inspection in environment, while the Regulation 2013/2006 is for transport of waste shipments. This imposes to the EU Member States a mandatory obligation to respect obligations relating to the environment inspection.

Main reasons that the inspection does not meet the requirements arising from EU law are the following:

- Planning of Environmental inspections are not conducted based on multiyear planning that would be consistent with the strategic documents in the area of the environment, and it does not follow the realization of the priorities and objectives defined in the planning documents in the area of environment;
- Multiyear planning for inspection in the environment, which will cover the whole territory of the Republic of Macedonia, respectively planning that will be carried out both at central and local level, and which will take into consideration all the inspection entities whose work has an impact on the environment is missing;
- Criteria for risk assessment that entities have on the environment is missing;
- The criteria defined under the Law for inspection planning and evaluation of the work of the inspectors and inspectors are not in line with the EU best practice;
- Due to the large number of activities that have a significant environmental impact, and which are the responsibility of local authorized environmental inspectors, there is no mechanism for collaboration and control by authorized inspectors and accordingly undertaking measures in case of lack of results;

- Different status and rules that apply to state inspectors and local authorized environmental inspectors in the planning of the inspection and monitoring of the same.
- The State Environment Inspectorate is very limited to act if the local inspectors do not perform their duties they are responsible for.
- Lack of continuous professional development and training of environmental inspectors.

To overcome the current problems on the basis of EU regulations in the area of environmental protection, is the drafting of the Law on Inspection in the environment in order to establish an efficient system of inspection in the environment in the Republic of Macedonia, which will allow increasing the implementation of environmental legislation by inspection entities and compliance of environmental standards that would affect the improvement of the environment.

Main problem due to which the drafting of a new law on inspection in the environment was initiated is the need for establishing a system of planning the environmental inspection in the whole territory of the Republic of Macedonia, which will be based on the criteria for risk assessment that inspection entities have on the environment.

The establishment of the system will be based on:

- examination of the overall significant impact that inspection entities have on the environment;
- multiyear planning of environmental inspection which will include central and local government based on a systematic risk assessment that inspection entities have on the environment;
- increased cooperation and coordination between the central and local level in the environmental inspection , and
- strengthening administrative capacities through continuous planning of the needs for professional development and training.

In January 2016, was prepared the Draft Law on Environmental Inspection.

2.2.3 Completed activities of SEI

According to the Annual Report for carried out inspections and enforcement of measures to protect the environment, nature and water in 2014, the SEI realized the following activities:

- SEI acted on the basis of 3091 cases (prepared a total of 3 091 Minutes by which certain situations were concluded in the course of performing direct inspection on the site);
- in the inspection procedure were adopted 394 decisions, of which 366 are orders, while 28 are decisions prohibiting certain activities of the inspected entities
- 72 requests for initiation of infringement (misdemeanor) proceedings were submitted;
- A total of 141 notifications/requests to various legal and physical entities were adopted;
- 614 conclusions for stopping the proceedings due to payment of compensation were prepared.

According to most laws, proceedings in 2014 (Figure 2) are the following:

- Law on waste management - 1096 inspections;
- Law on Environment 1102 inspections;
- Law on packaging and packaging waste management - 864 inspections;
- Law on waters - 154 inspections;
- Law on nature protection - 165 inspections;
- Law on ambient air quality - 13 inspections;
- Law on protection form noise - 35 inspections;
- Other - 4 inspections.

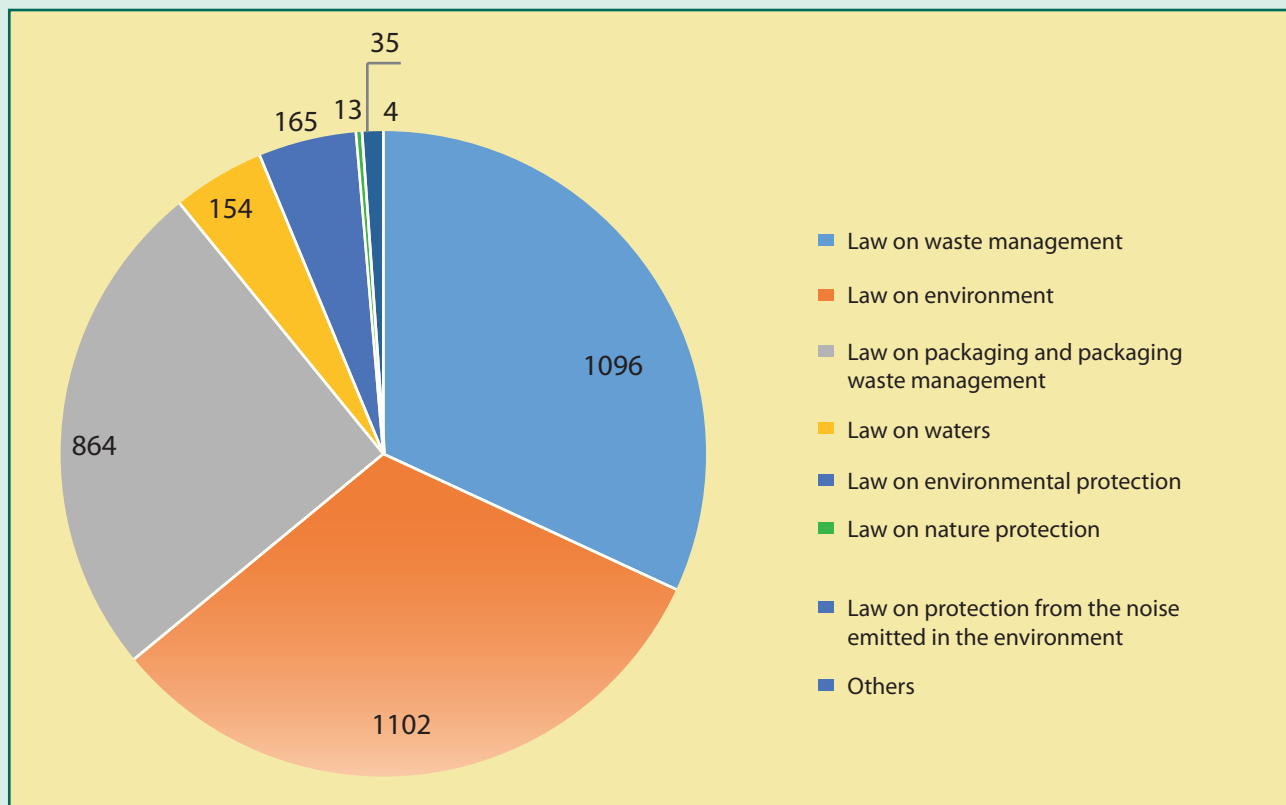
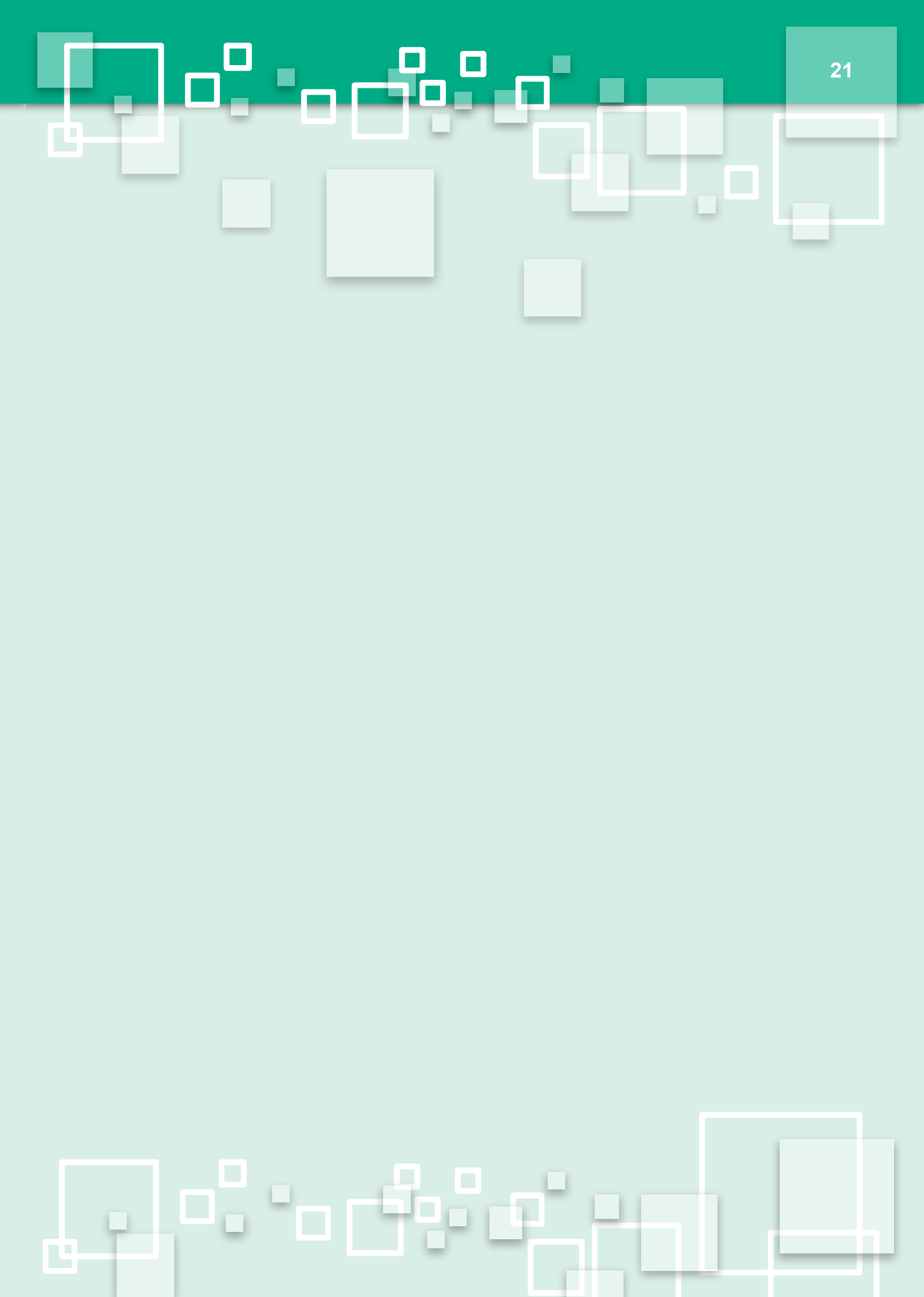


Figure 2 Description of Inspection activities during 2014



3. INTEGRATION OF VULNERABLE GROUPS IN THE ENVIRONMENTAL PROTECTION AND THE CLIMATE CHANGE SYSTEM

Vulnerable groups are all people who suffer major and long-lasting consequences to their health and social welfare as a result of environmental pollution, discrimination on different grounds by institutions due to failing to undertake appropriate preventive measures and enforcement of legislation, as well as people who are exposed at risk periodically or those who are under constant threat of poor social, economic and cultural inequalities associated with the quality of urban living and the environmental protection.

Risks that cause periodic or constant threat are:

- Substandard living conditions;
- Exposure to high levels of air pollution;
- People at risk of flooding as a result of climate change;
- People with occupational diseases due to poor working environment and poor quality of the environment;
- Unavailability of clean drinking and sanitation water;
- Exposure to polluted and contaminated soil;
- Presence of illegal landfills in the vicinity of the residence;
- Exposure to ionizing radiation;
- Exposure to noise;
- People who do not have access to information related to the environment, to the manner of decision-making and access to justice;
- Other risks of periodic or constant threat to life, health and welfare of people.

For the purposes of this Report, and in accordance with the requirements of the project program is given an overview of the socio-economic vulnerability and climate risks and the impact of climate change on the health and on socially vulnerable persons as the most sensitive category of the population.

In Appendix 1 is a list of organizations working with vulnerable groups.

3.1 Institutional structure of the climate change

The Republic of Macedonia is a party of the UN Framework Convention on Climate Changes (UNFCCC), as a country which does not fall under Annex I and a party in the Kyoto Protocol, without quantified obligation for limitation and reduction of emissions (QELRC). However, the country joined the Copenhagen Accord and submitted a list of actions for mitigation (without quantified emission reductions) based on these activities.

The Ministry of environment and physical planning (MEPP) is the key government body responsible for the development of policies related to climate change.

MEPP is designated as the National Central Authority for the UNFCCC and it is the Designated

National Authority (DNA) for the implementation of the Kyoto Protocol, and therefore it's the key government body responsible to coordinate the implementation of the provisions of the Convention and the Protocol. Other ministries with responsibilities related to climate change are: Ministry of Agriculture, Forestry and Water Management, Ministry of Economy, Ministry of Transport and Communications and the Ministry of Finances. Most of these ministries have appointed Central bodies (focal points) for climate change, which are responsible for integrating climate change into relevant policies, strategies and programs. In addition, the Ministry of Health established the National Committee on Climate change and Health in 2009, which functions as the responsible body for monitoring and decision-making in this area.

In January 2000 was established the **Project Office on Climate change** in the MEPP. The Government has also established a **National Committee on Climate change** consisting of representatives of all relevant stakeholders: government bodies, academia, private sector and civil society. The National Committee on Climate change is a platform in which participate many stakeholders in the country, whose goal is to provide high-level support and provide guidance for global policies on climate change. Moreover, the **National Council for Sustainable Development** under the auspices of Deputy Prime Minister in charge of economic affairs was established.

At the legislative level, the issues related to climate change are incorporated in the Law on Environment, including the provisions for preparation of greenhouse gas emissions inventories, as well as an action plan of measures and activities to reduce the increased emissions of greenhouse gas and mitigation of climate change.

The Law on Environment states that a National Plan on Climate change should be adopted, in order to stabilize greenhouse gas concentrations at a level that would prevent any dangerous anthropological influence on the climate system within a certain timeframe, sufficient to allow ecosystems to naturally adapt to climate change, in accordance with the principle of international cooperation and the goals of national, social and economic development. In July 2013 were adopted change to the Law on Environment, and in this occasion a new article (188) was added for the National system of greenhouse gases inventories. This article provides for the establishment of a National system of greenhouse gases inventories, which should provide a database with relevant information to prepare greenhouse gases inventories as well as monitoring the implementation of the agreements on climate change. This system includes the collection, processing, evaluation, verification and quality assurance and security management as well as storage, use and distribution and presentation of the data and information obtained from entities that have at their disposition information for anthropological emissions by sources of greenhouse gases in atmosphere.

It should also be noted that in the context of the accession process to the EU, the Republic of Macedonia has already initiated the process of harmonization of its approach with EU obligations to the UNFCCC and the parts of the EU *acquis communautaire* in relation to climate change.

3.2 Vulnerability to Climate change

In the 2009 report “Adapting to Climate change in Europe and Central Asia”⁸ were prepared a series of indices for evaluating exposure, sensitivity and adaptation capacity of selected countries to climate change. The vulnerability of the Republic of Macedonia on the basis of this index was classified as “average” compared to other countries in the region. In addition, in this report the Republic of Macedonia has been identified among the five countries in the region which are likely to experience increment in the extreme climatic events by the end of the 21st century.

The analysis of impacts, vulnerability and capacity for adaptation in the Third National Plan on Climate change in 2013 was made for eight sectors (agriculture and livestock, biological diversity, forestry, health, tourism, cultural heritage, water resources and socio-economic development) with special focus in the southeast region which, in the two previous national reports was identified as particularly vulnerable to climate change.

3.2.1 Socio-economic vulnerability and climate change

The process of climate change is already underway, and it is necessary to make efforts to assess the vulnerability of the population in the Republic Macedonia in order to make the necessary interventions and adjustments.

Climate change affect everyone, but not everyone is equally vulnerable due to factors such as geographical location, the health system, age, social class and supporting systems to determine the impacts of climate change on people.

The vulnerability of populations to climate change increases when it is under the influence of certain socio-economic factors.

In order to identify the social vulnerability and to determine the index of social vulnerability of the population the following socio-economic indicators⁹ are taken into account:

⁸ World Bank, June, 2009

⁹ Socio-economic vulnerability of the population under risk from disasters and climate change, 2013

Table 6 Factors for determination of the index of the social vulnerability of the population

Socio-economic characteristics	Variable	Social vulnerability effect
Ethnic background ¹⁰	% of Roma population ¹¹ ;	Increases
Age	% under six years, and % older than 65 years	Increases
The basis of using the apartment in which household is living	% owners	Increases
Occupation	% of the profession which mostly affected by the climate change ¹²	Decreases
Households with bigger number of members	% Households composed of two or more families	Increases
Literacy	% of illiterates in the total number of the population in 9+	Increases
Education	% with completed education lower than college	Increases
Increase of the population	Average annual growth of the population Rapid growth of the population	Increases
Access to health services	Doctors per 1000 inhabitants	Increases
Population with special needs	% of population with disabilities % of population with disabilities accommodated in institutions	Increases
Population which requires special treatment in case of a disaster	Tourists per 1000 inhabitants	Increases
Social dependency	% Users of social assistance	Increases

The data for determining the socio-economic indicators are taken from the State Statistical Office from the latest census of population, households and dwellings, the census of agriculture, estimates for population by gender and age, the data for health and nursing facilities, as well as the data of persons who use financial and social assistance and for persons with disabilities, data on employment, statistical data on revenues and expenditures of households, the poverty.

The biggest problem in assessing the vulnerability of different territorial levels is the availability of reliable and accurate data for the calculation of selected indicators and the availability of existing data.

¹⁰ Note: Ethnic background is a subjective dimension, based on free declaration

¹¹ In the Republic of Macedonia, Roma ethnic community has been identified as a vulnerable one and therefore is included in the calculation of the social vulnerability index.

¹² Individuals with specific occupations may be more vulnerable to climate change than the others, for example:

- Agricultural workers, in terms of climate change may lose their agricultural land and job and income. On the other hand agricultural workers given that they work outdoors are more exposed to health risks from heat waves and other phenomena caused by the climate change. Such exposure is existent at the construction workers as well as at some occupations that conduct works and provide services outdoors.

As a result of the impact of the present climatic factors and conditions that are specific to the territory of the Republic of Macedonia as well as the climate change and trends happening on global, regional and local level, the Republic of Macedonia in the recent years is often subject to natural disasters of meteorological character, such as:

- extreme climate conditions in the summer period, expressed by high temperatures, drought and reduced hydro potential;
- extreme climate conditions in the winter period expressed in low temperatures, frosts, snow, etc;
- fires in open space and forest fires of high intensity;
- intensive and torrential rain and hail that cause damage to agriculture, floods, landslides and damage to the infrastructure;
- earthquakes due to geotectonic conditions (quaking area), with disastrous consequences (Valandovo, Gevgelija)
- landslides, erosion and other tectonic disturbances, etc. (Milkovski, Lj. 2013).

Such natural disasters have a negative impact on people or the environment. Natural disasters depending on the extent and severity can impact negatively on the health and economic status of the population: health deterioration, occurrence of certain diseases, psychological trauma after the disaster, economic losses, forced evacuation of residents from their homes and property loss, and some natural disasters involve death or injuries during the event. Vulnerability to natural disasters can be greater under the influence of certain socio-economic factors. The vulnerability of the local population in terms of certain natural incidents and natural disasters increases when it is influenced by certain socio - economic factors.

Socially vulnerable groups are groups of population who are in a living situation due to which they are more likely to be affected by a variety of social, psychological, medical, economic and other problems, and these problems cause them severe consequences compared to the rest of general population. Their living situation is a risk factor that must not be a direct cause, but in combination with other factors increases the likelihood of occurrence of the problem.

Based on individual risk factors (age, gender, presence of the disease, use of medications, obesity, dehydration, reduced capacity for acclimatization and pregnancy) risk - environmental factors (housing, capacity of internal cooling, urban effect "Hot island," air pollution, conditions in the working environment and workplace) as well as social risk factors - (loneliness, inability to use the information systems and services of emergency medical aid) according to analyzes through researches, available literature and guidelines provided in the WHO handbook "Health action plans for heat" under the ACTION PLAN for prevention of the heat waves effects on the population in the Republic of Macedonia are identified the vulnerable population groups and those whose socio-economic status makes them vulnerable. Persons whose socio-economic status makes them more vulnerable due to certain social factors (occupation, social isolation etc.) are vulnerable to the impacts of climate change. This group includes homeless people living in substandard housing, street children, internally displaced persons and others.

Macedonia has a high rate of unemployment and poverty that contributes to large uncertainties. The unemployed persons, who are poor, are not sufficiently involved and their access to goods and services is limited or completely suspended and it negatively affects their standard of living. On the road to find appropriate strategies for dealing with the problems of the poor population, the process was initiated at the national and individual level, although it is difficult to achieve it.

The biggest number of unemployed persons are the ones with lower level of education and without qualifications, vulnerable ethnic groups (such as Roma, 78.5%), the rate of female participation in the labor market is also lower, and especially less represented are the ethnic communities such as Turkish and Albanian.

The programs mostly target the registered unemployed persons who have completed primary education, and the younger ones. The promotion of self-employment is intended to support the poor population in rural and urban areas, with more self-employment programs initiated by the Government or supported by international donors within the project activities. The programs offer training courses and retraining, subsidized employment with special emphasis on the employment of disabled persons, economic reinforcement of women victims of domestic violence, and programs for support of Roma.

It is worth noting that the Law on packaging and packaging waste provides that Individual waste collector is a physical person who occasionally or regularly collects and sells non-hazardous waste to a legal or physical entity who holds a license to conduct the business of storage, treatment and/or processing of waste that the legal or physical entity is registered for.

According to **Article 24** Independent treatment of waste from packaging, of the same law, stipulates that Producers can exercise their obligations under the law independently if they have provided a license for packaging waste treatment and are registered in the records of the professional body as producers that independently provide treatment of packaging waste which they generate.

Based on the authorization, the professional body issues a certificate that the producer is registered in the records of producers as an entity that independently provides treatment of packaging waste that producer generates.

Independent handler of packaging waste is obliged to provide: - regular collection of the packaging waste he generates, - regular taking and collection of packaging waste from the end users and reuse, processing or disposal of taken and collected quantity of packaging waste.

Independent handler of packaging waste is obliged to appropriately fulfill the obligations and to submit reports. In case the state administration body responsible for environmental affairs rejects the application for the permit under the paragraph, the applicant has the right to appeal it to the State Commission for deciding in administrative and employment procedure in the second instance.

Based on these provisions and in accordance with the Law on social protection a large number of civil society organizations activities are undertaken in order to enable registration of informal waste collectors, their education, technical assistance etc.

Grants are the most common mechanism to support civil society, support the innovative ideas and to promote innovative services. They are not effective mechanisms to support ongoing services, since they are based on projects, and they are time limited. On the other hand, grants are usually easier to administer than other financial mechanisms, such as contracts or payments by third parties. Therefore, in countries that are not yet ready to introduce complicated financing scheme in the delivery of social services by non-state actors, grants to civil society organizations can be a good solution in bridging the gap between existing needs and capacities of existing services.

Socio-economic status affects the ability of individuals and communities to absorb losses from hazards. Generally, people with low incomes and those living in poverty are more vulnerable to natural disasters than the rich ones in different ways and for different reasons. Poor people have less money to spend on preventive measures, emergency backup, and recovery efforts. They usually live in worse housing conditions, do not insure their property etc., and if they suffer damages by a natural disaster, due to low incomes they cannot repair the consequences. In case there's a need

for fast evacuation, people who do not own a car are less likely to evacuate. Further there's higher likelihood, people with low incomes to suffer emotional stress and other psychological effects after a disaster, due to economic losses because of fact that it is difficult to make up for the losses. In the part of socio-economic characteristics ethnicity is included as a factor that can increase the social vulnerability. In all societies there are certain racial, ethnic, and religious or other communities which on average have a lower living standard than others.

Age is considered as one of the factors that can increase social vulnerability starting from the fact that in times of disaster, children and the elderly without external support cannot respond to the disaster. Disorders that may occur after the accident may have significant psychological and physical effects on children. Considering the heights of pensions, the elderly generally are more likely not to have adequate physical and economic resources to effectively respond to the disaster. Also, children up to 6 years and elderly persons are health sensitive and are more likely to suffer health problems, while recovery of older people is more difficult. The elderly are more difficult to evacuate not only because of physical difficulties, but also because in times of disaster they do not want to be evacuated from their homes.

Households with a large number of dependents or family members consisting of single parent with children often have limited financial resources and, if affected by a natural disaster it may be more difficult for them to cope with the consequences. Same is the situation with the persons who receive social assistance. Finally, as factors that increase social vulnerability include persons with special needs who live in their families, and persons with special needs who live in specialized institutions or hospitals, given that they need special care, continuous supply with medicines etc., while during an evacuation they need special assistance. The population which needs special attention includes the tourists. Firstly they increase the number of elements which are exposed, and on the other hand, they do not know the place in which they have come, nor do they know where to report in times of natural disaster.

In Macedonia assessment of social vulnerability by municipalities is prepared for the Southeast region only, since in the First national report and in the Second national plan on climate change (MEPP), this region was identified as particularly vulnerable to climate change.

It should be taken into consideration that the quantification of these groups identified as socially vulnerable is very important, but it is also important the manner each of the factors or variables influences or the manner all factors influence each other and create socially vulnerable groups. The listed vulnerable groups may be considered for groups that will be additionally burdened by natural hazards and accidents due to socio-economic status, age, gender, living conditions and circumstances at work or in the family.

Listed vulnerable groups should be more taken as groups in which the burden of natural hazards and disasters will add to the social burden that already exists in these vulnerable groups (due of socio-economic status, age, gender, living conditions, work and family circumstances) and their interaction would contribute to increased vulnerability.

The indices of vulnerability should be considered as an approximation and may be indicative of the need for further qualitative researches by the competent authorities in order to obtain more specific information about the socio-economic vulnerability of areas for concern. The indices themselves (or index supplemented with knowledge) can serve as a guide for the development of policies to reduce social vulnerability in the region and to serve as a means to measure progress toward that specific goal.

3.2.2 Effects on health

The new evidences of the consequences on the human health by climate change show that climate change has affected the change in the distribution of vectors through which certain infectious diseases are transmitted, and that they have changed the seasonal distribution of some allergenic pollen species. The number of deaths caused by extreme weather and heat waves has increased, also. Another problem is the air pollution, the increased intensity of UV radiation, as well as the expected increase of number of people who will pass away or suffer diseases and injuries caused by floods, fires, landslides and droughts.

As the most vulnerable group of people from the climate impact is the poorer population. Economic development is an important component of adaptation, but of essential importance will be the manner of implementation of the economic growth, the distribution of the benefits of that growth, as well as the factors that most directly affect human health, such as education, health care and public health infrastructure.

Climate change is linked in a complex manner with the health. The temperature has a direct influence on diseases and conditions that can result in death. Extreme weather events, as well as the effects of air pollution in the distribution of spores and molds also have an impact on human health. Other impacts follow indirect routes such as those affecting the distribution of diseases associated with drinking water, food or diseases that are vector-borne and zoonotic diseases, or medical conditions that arise due to lack of food and water, or endangering health and life by floods, fires and other disasters due to climate change. Over the next few decades due to climate change in some of the colder months of the year the total average rate of monthly deaths in the country is expected to decline for several percentages (January by 4% October by 4%, November by 2%), while in the warmer part of the year is expected increment by 4-11% (mostly in the months of April, May, June, in an average of 10% more than in the period 1996-2000). On the other hand, as a consequence of climate change, direct health impacts of heat waves could be a significant problem, especially in the context of increasing urbanization. More than 60% of the population lives in cities. According to the projected scenarios of mortality in the country and Skopje for the period after 2035, the expected mortality with change in the average monthly temperature by just 1°C, compared to the period 1996-2000, will significantly affect the change in the distribution of total mortality expressed as a monthly average. This increment in the monthly mortality rate would be higher in the months of April, May, June (4- 11%), while on average 10% compared to the period April, May and June 1995-2004. Persons with chronic diseases, especially of cardiovascular and respiratory nature, have a high risk of increased mortality during heat waves. Especially the frequency of floods is increasing. Five serious floods have been registered in the period 2003 - 2009, which caused damages to homes, roads and bridges, as well as agricultural areas and the water supply systems, which can indirectly lead to increased intensity and frequency of diseases transmitted through contaminated water and food. This change can indirectly lead to a reduction of the sources of food and drinking water, loss of habitats, as well the disappearance of some plant and animal species. The indirect climate effects on food production, water supply and outbreaks of diseases transmitted by vectors may include the impact of climate change on human health.

It is predicted that exposure to climate change, which is important for human health, will lead to:

- Increased malnutrition and related disorders, including disorders related to child growth and development;
- Increased number of people who will fatally suffer or will suffer diseases and injuries due

to heat waves, floods, storms, fires and droughts;

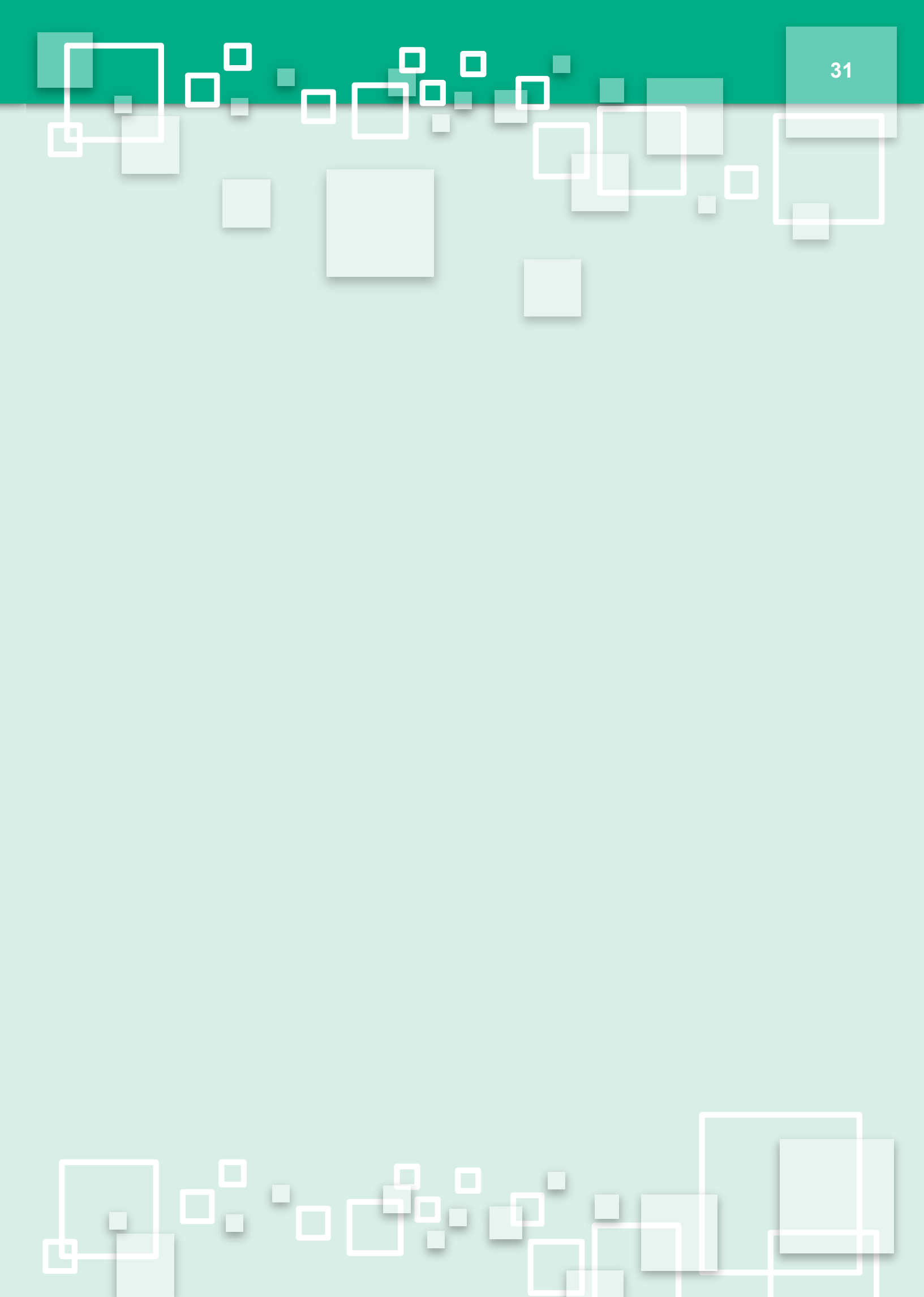
- Changes in the volume of vectors which transmit certain infectious diseases;
- Increasing cardio-respiratory morbidity and mortality associated with tropospheric ozone;
- Some positive health effects (fewer deaths caused by cold), although it is expected such positive effects will be much smaller than the negative effects due to increasing temperatures worldwide, especially in developing countries.

Poor communities, without secured good health care and support by social sector are more susceptible to adverse health effects arising from climate and other environmental change. The assessment of health risk is still insufficiently effective due to the inadequacy of available information on climate change at regional and national level and for the human exposure, as well as the complexity of interactions in case of multimedial and multiple exposures to more risks that act together. Assessment of the risks to the human health from climate change is further complicated by the existence of vulnerable groups of people, such as children, the chronically ill, the elderly, pregnant women, genetic predisposition, poor nutrition, poor socio-economic living conditions etc. The location and size is usually difficult to be determined. The clear identification of these groups and of the level of needed supplementary care for them will become a priority activity in the policies of the two leading sectors - Ministry of Health and Ministry of environment and physical planning.

In accordance with the Strategy of the health sector adaptation to climate change in the Republic of Macedonia with the Action Plan 2011-2015 and based on the analysis of conditions caused by climate change in the Republic of Macedonia are defined the following priority areas of action:

1. Increasing the people's awareness in the Republic of Macedonia about climate change and their impact on the health;
2. Identification, registration and monitoring the risks associated with climate change and their impact on the human health;
3. Improvement of the health system in the promotion, prevention and timely response to risks on human health from climate change;

One of the ways to adapt and reduce the level of vulnerability to climate change in the health sector is strengthening the public institutions; building health systems that will function well, correct treatment of people and providing universal primary health care; providing appropriate education, creating a demand for better and more accessible services, as well as adequate staff to implement the needs. The health system infrastructure should be flexible to extreme events and appropriate training of health professionals to understand the threat of climate change is needed. Adaptation aimed to reduce vulnerability to climate change which already is a reality, as well as further adaptation to respond to the health risks that are envisaged for the coming decades is needed. It is necessary to improve the capacity of adaptation in all sectors and at all levels.



4. LEGAL FRAMEWORK OF THE REPUBLIC OF MACEDONIA

Although progress in the environmental sector has been rather slow, over the years Macedonia passed several laws that regulate various areas such as environmental protection, waste management, air quality, water, noise etc. Macedonia, also adopted several strategies and action plans concerning important issues such as waste management, sustainable development, environmental investments etc.

Legislation, strategies and action plans that take into consideration issues related to environment are:

- Law on Environment ("Official Gazette" no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 44/15, 129/15, 192/15);
- Law on Ambient air quality ("Official Gazette" no. 67/04, 92/07, 35/10, 47/11, 163/13, 100/12);
- Law on Nature protection ("Official Gazette" no. 67/04, 14/06, 84/07, 35/10, 47/11, 148/11, 59/12, 13/13, 163 / 13);
- Law on Protection from environmental noise ("Official Gazette" no. 79/07, 163/13);
- Law on Waste management ("Official. Gazette" no. 68/04, 71/04, 107/07, 102/08, 134/08, 09/11, 123/12, 147/13, 163 / 13);
- Law on batteries and accumulators and waste batteries and accumulators ("Off. Gazette" no. 140/10, 47/11, 148/11, 39/12, 163/13);
- Law on packaging and packaging waste management ("Off. Gazette" no. 161/09, 17/11, 47/11, 136/11, 6/12, 163/13);
- Law on management of electrical and electronic equipment ("Off. Gazette" no. 6/12, 163/13);
- Law on Waters ("Off. Gazette" no. 87/08, 6/09, 161/09, 83/10, 51/11, 44/12, 23/13, 163/12);
- Law on Chemicals (Off. Gazette of RM No.113 / 07);
- Third National report to the UN Framework Convention on Climate change, 2014;
- National strategy for waste management (2008-2020);
- National plan for waste management (2009-2015);
- National strategy for sustainable development (2009-2030);
- National plan for ambient air protection (2013-2018);
- Strategy for energetic development in the Republic of Macedonia (2008-2020) with a vision up to 2030;
- Second National environmental action plan of the Republic of Macedonia;
- National strategy on waters (2011-2041);
- Strategy on environmenta monitoring, 2004;
- Strategy for raising public environmental awareness;
- Strategy on environmental communication;
- National strategy for environmental approximation;
- National strategy for clean development mechanism for the first period of commitments 2008-2012 under the Kyoto Protocol;
- Strategy for environment tdata management;
- National strategy for environmental investments;

4.1 Priorities for the adoption of the EU acquis on environment

According to the National program for the adoption of the European Union acquis 2014 are defined short and medium term priorities for the media and the areas of environment.

Short-term priorities:

- Preparation of a National strategy forenvironment and climate change, which aims to propose activities to strengthen the capacities on central and local level for implementation of the environmental legislation, harmonization with the requirements of the EU legislation, as well as to improve the implementation of environmental legislation;
- Adoption of a National plan on combating desertification and mitigating the effects of droughts;
- Preparation os a Plan for administrative supervision of local self-government work and its implementation;
- Drafting by-laws in the part of the national system to create an inventory of greenhouse gases, as well as development of scenarios for climate change mitigation;
- Launching of the project "Strengthening capacities on local level for implementation of legislation in the area of the environment";
- Update and supplement the statistics on Environment for 2015;
- Establishing of a working group, within the project "To know right now momentarily", for the Register of discharge and transfer of pollutants (RDTP), which will include representatives from the NGO sector and the industry;
- Implementation of campaigns to raise environmental public awareness, as well as encouraging educational, research and development studies, programs and projects for the protection and improvement of the environment and nature;
- Adoption of national regulations that will transpose EU measure 32013R0525 including:
 - List of entities holding data on anthropogenic greenhouse gas emissions in the atmosphere by sources and abysses;
 - Decree on the form, content, method of keeping and maintaining the system of greenhouse gas emissions inventory;
- Survey on the level of public information about climate change;
- Preparation of amendments to the existing by-laws:
 - Regulation for amending the Regulation on the methodology, manners, procedures, methods and tools to measure emissions from stationary sources in accordance with CEN and ISO standards;
 - Regulation for amending the Regulation on the methodology for inventory and determination of the pollutants levels in the atmosphere in tons per year for all types of businesses, as well as other data to establish the program for air monitoring in Europe (EMEP) under the Convention and the Protocol to Convention on long-range trans boundary air pollution from 1979 for long-term financing of the Cooperation program for monitoring and evaluation of the long-range transmission of air pollutants in Europe (EMEP);
- Preparation of the Working program of the State automated monitoring system for ambient air quality for 2015. During this period strengthening of capacities of the bodies that conduct the air monitoring by hiring new staff and implementation of trainings will be provided. It is planned to provide preconditions for initiating the accreditation of Calibration Laboratory, or to obtain reference standard gases and to calibrate certain equipment in accredited laboratory abroad;

- Preparation of a short-term action plan for ambient air protection for the City of Skopje and the commencement of development of the Plan for air quality in Skopje. The preparation of these planning documents is planned within the twinning project for the air in cooperation with the City of Skopje;
- Commencement of implementation of the Twinning project “Further capacity building for effective implementation of the legislation in the area of air quality”. Within this project will begin the revision of the “National program for gradual reduction of emissions by 2020”, as well as preparation of the “Assessment of air quality in the Republic of Macedonia for the period 2010-2014”;
- Within the regular campaigns carried out by the MEPP will be included activities aimed at raising public awareness to improve the air quality by developing brochures and promotional materials for air quality;
- Preparation of the Regulation on the types of waste, the requirements for export, import and transit of waste and certain types of waste, methods of supervision over the export, import and transit of waste, as well as the form and content of the template for export, import and transit of waste that would transpose EU measure 32006R1013;
- Revision of the Strategy on waste management 2008-2020;
- Preparation of necessary documents for establishing an integrated and financially sustainable system for waste management in the East and Northeast region, Vardar, Pelagonia, Skopje and Southwestern region, within the IPA Component 3 - Measure 3.2 of the Operational program for regional development (OPRD) 2007-2009;
- Establishing a system of medical waste management at the central level, for whose realization are competent Ministry of environment and physical planning and the Ministry of Health;
- Adoption of the “Law on Ratification of the Convention on protection and use of trans boundary waters and international lakes” as well as to continue with the adoption of by-laws arising from the “Law on waters” which will ensure further harmonization with the relevant EU legal acts in the area of waters;
- Implementation of the project “Strengthening the institutional capacity for approximation and implementation of legislation in the area of water management” will continue - IPA 2009 Component 1. This project will establish a register of protected areas in the river basin of the river Vardar and draft a monitoring program for the waters of the Vardar river basin will be prepared. Projected activities for the preparation of management plan for the river basin of the river Vardar plan for river basin management of the river Black Drin and plan for river basin management River Strumica will continue. A regional body for determining the price of water in the Republic of Macedonia, through the adoption of a special law, will be established;
- Realization of the project Development of national study on water management, funded by IPA Component 3. This project will develop specific plans to implement the Directives on wastewater and drinking water treatment, a plan for sludge management will be developed, as well as agglomerations and sensitive areas of urban waste water will be defined;
- An analysis and assessment of the status of biodiversity in Macedonia will be conducted;
- Preparation of a new National Strategy on Biological diversity with an Action Plan;
- Training sessions to raise public awareness for the importance of the environmental network Natura 2000 and the implementation of EU measures in the area of nature protection will be conducted;
- Within the twinning project of the IPA Component 1 TAIB2011 is the initiation of activities for the adoption of “Law on Control of emissions from the industry,” which will transpose the new

EU directive on industrial pollution indeed it will prepare an analysis on differences in the level of compliance with the national legislation;

- Revision of the national reference documents (guidelines) for NDT for mineral oil and gas, the forges and foundries, waste management and waste from mines and large combustion plants. In the area of prevention and control of major accidents involving dangerous substances adoption of amendments and supplement to the Regulation on hazardous substances, limit values (thresholds) for the presence of hazardous substances and the criteria or properties according to which the substance is classified as dangerous, by which the existing regulation of Annex I of the SEVESO III Directive 32012L0018 will be adjusted;
- In terms of industrial accidents the existing database will be adapted to the requirements for Registry of systems in which dangerous substances in accordance with Article 152 of the Law on Environment are present;
- In the area of management of substances that deplete the ozone layer is the adoption of the following by-laws that comply with EU measure 32009R1005:
 - Regulation on the form, the content and manner of submission of an annual report on the types and quantities of collected, refurbished and recycled substances and products containing substances that deplete the ozone layer;
 - Regulation on the form and content of the training program on proper handling, servicing, collection, recovery and recycling of substances that deplete the ozone layer;
 - Regulation on the form and content of the certificate of completion training for handling substances that deplete the ozone layer and/or products containing substances that deplete the ozone layer;
 - Amendment of the Regulation on the manner of collection, recovery and recycling of substances that deplete the ozone layer;
- For the purposes of data exchange and integrated management with chemicals the Bureau for medicines will establish the Integral register for chemicals that are put on the market. The system of informing all stakeholders in the area of chemical management by holding educational events will continue to be implemented as a necessary and sustainable way of exchanging information;
- Adoption of a by-law on approximate specific types of noise sources and the conditions for protection against noise caused by road, rail, air and water traffic, which will transpose the following EU measures: 31984L0372, 31989L0629 and 31998L0020. The adoption of this regulation will regulate controlling of the noise coming from road, rail and water traffic and will set standards for protection against environmental noise caused by these sources of noise;
- Development of a Manual for preparation of strategic noise maps which will facilitate the process of making these strategic maps;
- Purchase of equipment relating to the purchase of instruments for measuring noise in the environment that will enable the establishment of noise monitoring, and integration of data for the preparation of strategic noise maps.

Medium-term priorities:

- Preparation of the Law on Environmental Inspection and the Law and Climate change;
- Development of long-term strategy and the “Law for climate action” in the period 2016-2018;
- Preparation of the software solution for reporting greenhouse gas emissions from industry that will be legally supported by a by-law in which would be incorporated provisions of the

regulation on the monitoring mechanism arising from the “Law on Environment” in the part of precise definition of the provision on the National system for inventory of greenhouse gas emissions;

- Development of Statistics on environment and environmental indicators for 2016;
- Preparation of a Program for raising public awareness;
- Upgrading and updating the established Registry, and the internet portal for discharge and transfer of PRTR pollutants;
- Realization of LGU projects for infrastructure facilities construction in the areas of waste and water as well as in other areas funded through annual programs for environmental investments through the MEPP and MTV, as well as through EU funds and other bilateral and multilateral resources;
- Upgrade of the State network for monitoring the media and areas in the environment;
- Preparation of proposals for drafting the Second bi-annual updated report on climate change;
- Evaluation of the technology needs for easier handling climate change and Fourth national plan on climate change which are obligations under the requirements of the Framework Convention on climate change of the United Nations (UNFCCC);
- Adoption of a Regulation to amend the Regulation on limit values for permissible emission levels and types of pollutants in waste gases and vapors which are released from stationary sources into the air;
- In accordance with the adopted planning documents in the area of air (National plan for ambient air protection, the National program for emission reductions in the air and plans for air quality prepared by LGUs) will provide institutional strengthening of the DE to monitor their implementation;
- Preparation of four regional plans for waste management for Vardar, Pelagonia, Skopje and Southwest regions and implementing their strategic evaluation;
- Implementation of workshops to strengthen the State Environment Inspectorate, the authorized Inspectors of Environment and the State Trade Inspectorate capacities in terms of supervision over the special laws on waste management. Workshops related to the sectors concerned in terms of the legal obligations arising from the management of waste electrical and electronic equipment and Management Act batteries and accumulators and waste batteries and accumulators will also be implemented;
- Preparation of Plans for management with the river basin of the river Vardar, Plan for river basin management of the river Black Drin and Plan for management of the river basin of the river Strumica;
- Within the project “Technical assistance for preparation of the national studies on waters” will be defined agglomerations and sensitive areas of urban waste water;
- In mid of 2017 is expected to be completed the construction of treatment plants for the towns of Strumica, Radovis and Kicevo, as well as the expansion and rehabilitation of the sewerage network for Berovo and Kumanovo, under the IPA Component 3;
- Preparation of technical documentation for construction of wastewater treatment plants and expansion of the sewerage network Kavadarci, Bitola, Tetovo, Gostivar, Debar, Stip and Veles;
- Completion of the project “Strengthening of institutional capacities for approximation and implementation of the register of protected areas of the river basin of the river Vardar and a draft program for monitoring water in the river Vardar will be prepared;

- Amendments to the “Law on Nature Protection” in order to harmonize it with EU directives on habitats and birds will be adopted;
- Establishment of the National Environmental Network comprised of environmentally important areas, the system of environmental corridors, the system of protected areas and proposed areas for conservation and environmentally important areas for the EU - Natura 2000 which will enable EU measures 32009L0147, 31992L0043 and 31997D0266 to be transposed;
- Preparation of bylaws that will determine the types of habitats, including the type and degree of their endangerment and significance, as well as the manner of their labeling, the method of preparation, maintenance and identification of habitat types on the map, the method for determining the level of threat, the manner of conducting the assessment of the situation and endangered habitat types, as well as habitat types that in respect to their conservation is necessary to determine special areas of conservation and measures for preservation of such habitat types in a favorable conservation status
- Preparation of Red list for at least one taxonomic group;
- Conducting training sessions to raise awareness about the significance of the European environmental network Natura 2000 and the implementation of EU measures in the area of nature protection;
- Within the twinning project of the IPA Component 1 TAIB 2011 is adoption of the Law on control of emissions from industry that will transpose this new directive;
- In the area of prevention and control of major accidents involving dangerous substances is adoption of Regulation on closer criteria on basis of which will be determine in which cases a certain incident is considered to be a disaster (a major incident), which will transpose the provisions of the SEVESO II Directive (31996L0082 and 32003L0105). The development and revision of national reference documents (guidance) for BAT will continue, and they will represent guidelines for the application of BAT in A integrated environmental permits for each industrial sector separately;
- During this period will continue transposition of EU measures into national legislation in the section of the chemicals whereby it is planned adoption of a by-law that would stipulate the categories of licenses for handling refrigerants and/or products containing refrigerants EU measure 32014R0517;
- Until the end of 2016 and 2017 will begin activities on establishing GIS of data from environmental noise in order to fully implement the requirements of the EU Directive on the establishment of the Infrastructure for Spatial Information in the EC (INSPIRE). The Directive provides legal framework for the implementation of the European spatial data infrastructure, and it will be one of the major components of the European Information System Environment (SEEIS);
- Until the end of 2016 will be carried out activities related to the preparation of strategic noise maps and action plans on noise, which will provide a complete picture of the level of noise in the environment, and measures to be undertaken in order to reduce the level of noise thereby reducing the harmful effects arising from it. In this period will commence activities for establishing the information system on the situation of the environmental noise as part of the overall information system on environment in the Republic of Macedonia, which will cover data obtained from monitoring the noise, strategic maps and action plans and other relevant data obtained by individual measurements of noise. Activities on establishing and maintaining cadastre of environmental noise generators will begin.

5. SITUATION AND BASIS FOR FINANCING ACTIVITIES IN THE AREA OF ENVIRONMENTAL PROTECTION

5.1 Basis for financing activities in the area of environment

According to Chapter XVIII¹³ of the Environmental Law for financing activities for the promotion, preservation, sustainable use, protection and improvement of the environment, as well as for preparation, implementation and development of programs and projects for the protection and improvement of the environment, will be provided by fees that will be paid by legal and physical entities that:

- have sources that pollute the environment;
- pollute the environment through use of products and substances;
- are users of natural resources;
- burden the environment with wastes;
- import certain used products in the Republic of Macedonia, and
- manufacture or import products and goods that are harmful or contain harmful substances for the environment and nature

and funds from:

- the Budget of the Republic of Macedonia;
- funds acquired on the basis of international cooperation programs and projects;
- donations from domestic and foreign legal and physical entities ;
- foundations and gifts and other sources.

5.2 Fees and revenues form fees

Fees for import and export fees for woodcutting, fees for waste management, fees for oil products and compensation for energy production from the fossil fuels are income to the Budget of the Republic of Macedonia and are paid in the appropriate account within the treasury account.

Funds collected by the compensation for motor vehicles and vessels are revenues of the state administration body responsible for environmental affairs and are paid in an appropriate account within the treasury account.

According to **Article 163** of the law, taxpayers obliged to pay fees are both legal and physical entities that:

- 1) have sources that create pollution and with their activity, directly or indirectly, they cause environmental pollution or are responsible for emission into the environment in terms of the Cadastre of Environment and Register of pollutants and their characteristics, as well as in terms of special laws and international agreements which are ratified by the Republic of Macedonia;
- 2) pollute the environment by using motor vehicles and vessels; by manufacturing or importing petroleum products and import of substances that deplete the ozone layer;

¹³ Financing – Law on Environment (“Official Gazzette of the Republic of Macedonia” no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 42/14, 44/15, 129/15, 192/15)

- 3) are users of natural resources by using the forests for wood cutting, collection and export of plants and parts of plants, branches and other parts of plants and collection and export mollusks with or without shells;
- 4) with their activity burden the environment with wastes through production of industrial non-hazardous waste or by generating hazardous waste; plastic products and packaging of plastics; import of waste and scrap of lead, ashes and waste, residues containing mainly lead, residues and of leftovers of primary cells, primary batteries and electric accumulators and waste and residues containing lead and the production and importation of petroleum residues or oils and waste oils;
- 5) import second-hand products, and second-hand passenger cars and other motor vehicles, motor vehicles for transport of goods, technical goods, refrigerators and other cooling and freezing equipment, protected and used tires, tape recorders and other appliances for sound recording, television sets, video monitors and video projectors, and
- 6) produce or import products and goods that are harmful or contain harmful substances for the environment and nature.

5.2.1 Basis for determination of the compensation amount

The compensation amount payable by legal and physical entities possessing sources of pollution shall be determined according to: the quantity, type and scope of environmental impact and emission of pollutants, heat, noise, vibration, light, ionizing and non-ionizing radiation in the environment and the manner of waste and waste materials treatment products or items that, directly or indirectly, after their use reach the environment or other activities or events that are unfavorable for the environment.

The compensation amount payable by legal and physical entities who pollute the environment is determined by:

- whether the motor vehicles and vessels have catalyst or not, respectively based on the amount of basic insurance,
- the type and quantity of produced or imported petroleum derivatives, and
- the type and quantity of imported substances that deplete the ozone layer.

The compensation amount payable by legal and physical entities who use natural resources shall be determined according to the amount of cut trees, type and quantity of plants and parts of plants, branches and other parts of plants that are collected or exported, quantity of mollusks with without shells that are collected or exported.

The compensation amount payable by legal entities and physical entities burdening the environment with waste is determined by:

- the quantity of generated industrial non-hazardous waste, the type and quantity of generated hazardous waste,
- the quantity of imported used products,
- the type and quantity of imported and produced plastic products and packaging plastic,
- the type and quantity of waste and scrap of lead, ashes and residues containing mainly lead, residues and leftovers of used primary cells, primary batteries and electric accumulators which are imported and waste and scrap containing lead, and

- the type and quantity of petroleum residues, oils and waste oils which are imported or created.

The compensation amount payable by legal entities and physical entities importing used products shall be determined according to:

- operational capacity and power of the engine, respectively the amount of gross mass of the vehicle,
- the type, quantity and the volume of used technical goods which are imported: refrigerators, freezers and other refrigerating and freezing devices, tape recorders and other sound recorders, television sets, video monitors and video projectors, and
- the amount of the used or protected tires which are imported.

The compensation amount payable by legal and physical entities producing or importing products and goods that are harmful or contain harmful substances for the environment is determined according to the price or customs value of the product, the goods and the amount and extent of the harm or unfavorable impact on environment.

Grounds for exemption from payment of fee

Based on **Article 165** of the Law on Environment legal and physical entities that create industrial non-hazardous waste, in the amount of the fee for the type of waste being delivered to process, or is processed by legal and physical entities who possess a permit for waste processing, the taxpayer for payment of the compensation can submit, to the state administration body responsible for environmental affairs, an application for exemption from the payment of compensation for the amount of waste they have delivered. Also, legal and physical entities that have exported waste, scrap and waste from the Republic of Macedonia are released from the payment of compensation in the compensation amount that would be paid for the quantity and type of exported waste, residues and leftovers for which compensation is paid (the taxpayer for payment of this compensation can submit, to the state administration responsible for environmental affairs, an application for reimbursement for the exported quantity, indeed the amount of waste that is exported for processing or recycling of waste).

The Government of the Republic of Macedonia on the proposal of the minister heading the state administration body responsible for the affairs of environment in accordance with the minister heading the state administration body responsible for the affairs of finances shall stipulate the procedure and documentation necessary for exemption from payment and reimbursement.

Manner and procedure of determination, calculation, payment, as well as the deadlines for calculation and payment of the fees

The method and procedure of determination, calculation, payment, as well as the deadlines for calculation and payment of the fees is prescribed by the minister heading the state administration body responsible for environmental affairs (MEPP) in accordance with the minister heading the state administration responsible for the affairs of finances. In the procedure for determination, calculation, payment of compensation and setting deadlines for calculation and payment, are applied the

provisions of the Law on general administrative procedure, the Law on tax procedure and the Law on personal income tax, if the Law on Environment unless it is differently stipulated. Responsible to controlle the determination, calculation and payment of the fee, exemption from payment of future compensation, as well as deadlines for payment of the fees is the Public Revenue Office.

Determination and calculation of the charges shall be performed by the state administration body responsible for environmental affairs, when granting the license for import or export, except for the export of endangered or strictly protected plants and parts of plants, branches and other parts of plants collected from nature as well as export of mollusks with or without shell and for snails collected from nature and other protected species collected in nature when calculation of the compensation is done by the customs authority in the customs procedure for export, based on the net quantity of the export which is realized and the export license issued by the state administration body responsible for environmental affairs.

MEPP is responsible to keep records of the taxpayers that are obliged to pay fees.

The amount of import and export fees

1. The compensation amount payable for obtaining an import permit for protected or used tires amounts:

- for passenger cars 60.00 den/piece, and
- for buses, trucks and other vehicles 150,00 den/piece.

2. The compensation amount payable for obtaining an import permit for import of used refrigerators, freezers and other cooling and freezing appliances, is following:

- volume of 250 liters 200 den/piece,
- volume of 250 to 340 liters 300 den/piece,
- volume of 340 to 900 liters 400 den/piece, and
- 250 den per kW cooling capacity of air conditioning systems

3. The compensation amount payable for export of endangered or strictly protected plants and parts of plants, branches and other parts of plants collected in nature, amounts for:

- blue spruce 1.30 den/kg,
- oak moss 1.00 den/kg,
- the bear ear 3.00 den/kg,
- wort 0.80 den/kg,
- fresh mushrooms 1.00 den/kg,
- canned mushrooms 2.00 den/kg,
- dried mushrooms 4.00 den/kg and other plants 1,00 den/kg.

4. The compensation amount payable to obtain permit to import substances that deplete the ozone layer, and which are classified with annexes of the Montreal Protocol shall be:

- substances in Annex A, group I and II
- substances in Annex B, group I, II and III, and
- substances from Annex C, Group II 64,00 den/kg,
- substances in Annex E, Group I 100,00 den/kg
- substances from Annex C, Group I 62,00 den/kg.

5. The compensation amount payable to obtain license for import of waste and scrap of lead, ashes and residues containing mainly lead, residues and leftovers of used primary cells, worn out primary batteries and worn out electric accumulators and waste and residues containing lead, amounts for:

- ashes and residues 20.00 den/kg,
- wastes and residues 25.00 den/kg
- waste and scrap of primary cells, primary batteries and electric accumulators, worn out primary cells, worn out primary batteries and worn out electric accumulators 200.00 den/ton.

6. The compensation amount payable for export of:

- mollusks with or without shell and for snails collected in nature 1.00 den/kg
- other protected species collected in nature 1.00 den/kg.

7. The compensation amount payable on the importation of:

- 1) used motor vehicles for transportation of ten or more persons, including the driver, with piston internal combustion engine with ignition by compression or spark plugs, is 3.000,00 den/piece;
- 2) used passenger cars and other motor vehicles principally designed for the transportation of persons, except vehicles in paragraph 1, with piston engine (except rotation piston engine) with internal combustion started by spark plugs:
 - cylinder capacity not exceeding 1,000 cm³ is 1.500,00 den/piece,
 - cylinder capacity exceeding 1,000 cm³ but not exceeding 1,500 cm³ and amounts 2.000,00 den/piece,
 - cylinder capacity exceeding 1,500 cm³ but not exceeding 3,000 cm³ amounts 2,000.00 den/piece, and
 - cylinder capacity exceeding 3,000 cm³ amounts 3.500,00 den/piece;
- 3) used passenger cars and other motor vehicles principally designed for the transport of persons, except vehicles in paragraph 1, with piston internal combustion engine ignition by compression (diesel and semi-diesel):
 - cylinder capacity not exceeding 1,500 cm³ amounts 2,500.00 den/piece
 - cylinder capacity exceeding 1,500 cm³ but not exceeding 2,500 cm³ amounts 3000.00 den/piece, and
 - cylinder capacity exceeding 2,500 cm³ amounts 3.500,00 den/piece;
- 4) used motor vehicles for transport of goods, with piston internal combustion engine ignition by compression (diesel and semi-diesel):
 - gross weight not exceeding 5 t shall 5.000,00 den/piece,
 - gross weight exceeding 5 tons but not exceeding 20 t day was 7000.00/piece and
 - gross weight exceeding 20 tons, is day 8,000.00 / piece and
- 5) used motor vehicles for transport of goods, with piston engine with internal combustion and ignition with spark plugs:
 - gross weight not exceeding 5 t amounts 3.000,00 den/piece, and
 - gross weight exceeding 5 t amounts 4500.00 den/piece.

8. The fee is payable for he compensation amount payable for obtaining import permit for used tape recorders and other sound recorders, television sets, video monitors, video projectors amounts 200.00 den/piece.

Taxpayer obliged to pay compensation for the above items may be legal entity requiring a permit for import of products and/or legal or physical entity importing the products and the legal entity that requires export of products.

Amount of fees for motor vehicles and vessels

The compensation amount payable for domestic legal and physical entities that pollute the environment by using motor vehicles for a period of one year shall be determined by the Government upon the proposal of the minister heading the state administration body responsible for environmental affairs.

The compensation amount is determined depending on the vehicle category, year of the vehicle production, loading capacity and/or the volume and strength of the engine, as well as the type of propulsion of the vehicle. In determining the compensation amount will be taken into account the negative impact caused by the vehicle on the environment in terms of the type of fuel used in the vehicle and the age of the same. The compensation amount payable for domestic legal and physical entities that pollute the environment by using vessels in registration in a period of one year is 3% of the basic insurance.

Compensation amount for wood cutting

The compensation amount payable for wood cutting is defined by the Law on forests.

Compensation amount for waste management

The compensation amount payable for industrial non-hazardous waste amounts 0,5% of the estimated price for the waste collection service.

Compensation is calculated by the service provider for waste collection and the provider charges it with the collection of charges for the completed service of waste collection and presents it separately in his account. The service provider is obliged once a month to pay the collected fee to the appropriate account under the treasury account.

Compensation amount for petroleum products

The compensation amount payable for importing petroleum products or production of petroleum derivatives amounts for:

- 1) motor gasoline, that is: motor petrol with lead content higher than 0.013 g/l and aircraft petrol 0.15 den/l, and unleaded gasoline with a lead content up to 0.013 g/l, amounts 0.08 den/l;
- 2) gas oil for use , that is use as: fuel for diesel engines amounts 0.03 den/l, and extra light oil 0.04 den/l.
- 3) fuel Oil M1, M2 (heavy oil) amounts 0.05 den/kg.

Taxpayer obliged to pay this compensation is the legal entity that produces or imports petroleum derivatives.

Compensation for production of energy from fossil fuels

The amount for the production of energy produced by burning fossil fuels amounts: 0,007 den per kilowatt-hour (kWh) produced energy.

Taxpayer obliged to pay compensation are legal and physical entities that manage installations which produce energy produced by fossil fuel combustion.

Government of the Republic of Macedonia, on the proposal of the minister heading the state administration body responsible for the affairs of energy and, in concurrence with the minister heading the state administration body responsible for environmental affairs on 01.07.2007 determined the type and the volume of installations with *the Decree on the type and the volume of installations that produce energy produced by fossil fuel combustion (Official Gazette no. 84/07)*.

Installations depending on the line of the energy they produce by the fossil fuels combustion are determined as installations operated by one manufacturer for:

- production of electrical energy; or
- production of heating energy; or
- combined production of electrical and heating energy.

Installations that produce energy which is produced by fossil fuels combustion with are the ones with the total installed capacity equal to or greater than 10MW. The compensation is revenue of the Budget of the Republic of Macedonia and it's paid in the appropriate account under the treasury account.

The funds collected from the fee are used to fund programs and activities for environment management in relation to the impacts of the energy sector and in the areas of municipalities in proportion to the income generated from the collection of this compensation.

The Government of the Republic of Macedonia, on 02.08.2008, at the proposal of the minister heading the state administration body responsible for the affairs of the local government, in accordance with the minister heading the state administration body responsible for the affairs of Energy and the minister heading the state administration body responsible for environmental affairs adopted *a Decree on methodology for distribution of assets realized as revenue from the fee for energy production from fossil fuels ("Official Gazette" no. 12/08)*.

According to the above mentioned methodology allocation of resource is performed according to the following criteria:

- The area of the municipality where the taxpayer, who should pay the fee for the production of energy from fossil fuels, performs his activity
- The number of the inhabitants of the municipality on whose territory the taxpayer who should pay the fee for the production of energy from fossil fuels performs his activity
- The number of inhabitants of the neighboring municipalities of the municipality on whose area taxpayer who should pay the fee for the production of energy from fossil fuels performs his activity
- The area of the neighboring municipalities of the municipality on whose area taxpayer who should pay the fee for the production of energy from fossil fuels performs his activity

The funds are allocated to municipalities on whose area the taxpayer, who should pay the fee for the production of energy from fossil fuels, performs his activity and the neighboring municipalities

of the municipality in whose territory the taxpayer, who should pay the fee for the production of energy from fossil fuels, performs its activity in an air radius of 10km from the location of the installation both through fixed and variable portion.

A Cluster represents all the municipalities that will be beneficiaries of funds from a single taxpayer who should pay the fee for the production of energy from fossil fuels. Fixed part of the funds in the amount of 15% is allocated to the municipality where the taxpayer who should pay the fee for the production of energy from fossil fuels performs his activity, while the variable portion amounting to 85% will be allocated proportionally, depending on the area and number of residents of all municipalities including the municipality on whose territory the taxpayer who should pay the fee for the production of energy from fossil fuels performs his activity.

5.3 Program for investment in environment

The basis for funding and procedure for adoption of the program for investment in the environment

Financing and implementation of activities in the area of environment shall be based on an annual program of environmental investment (hereinafter: Program) adopted by the Government of the Republic of Macedonia on proposal of the Ministry of environment and physical planning.

Beneficiaries of funds from the program are legal and physical entities, including the organs of state government and municipal authorities, the City of Skopje as well as the municipalities in the city of Skopje and the bodies of the local units in the municipalities that implement programs, projects and other similar activities for the protection and improvement of the environment and nature.

The Program is prepared in accordance with the National action plan for environmental protection, Spatial plan of the Republic of Macedonia, other strategies, programs and legislation regarding the environment, and in accordance with international conventions ratified by the Republic of Macedonia.

The program for a given fiscal year is submitted to the Government within 30 days of the publication of the Budget for the same fiscal year in the "Official Gazette of the Republic of Macedonia". The program is adopted by the Government of the Republic of Macedonia on proposal of the state administration body responsible for environmental affairs. The Program is published in the Official Gazette.

The state administration body responsible for environmental affairs shall implement the program through allocation of funds for full or partial financing of programs, projects and other activities.

Programs, projects and other activities eligible for financing with funds of the Program are considered: supply of equipment for direct protection of the environment and protection and promotion of human health, development of investment documentation and of feasibility studies and their implementation, preparation of operational plans and implementation of individual phases of operational plans under the adjustment permit, conducting construction works for the direct protection of the environment, encouraging the sorting, recycling and disposal of waste, harmonization with regulations and environmental standards, preparation of studies and planning documents for the protection and promotion of biodiversity, education and personnel training and other similar activities for protection and promotion of the environment.

Dedication of the funds

According to **Article 174** of the Law on Environment, the funds shall be used for financing preparation and implementation of programs, projects and other activities, as well as undertaking preventive measures and measures for the promotion, preservation, sustainable use, protection and improvement of the environment, especially for:

- protecting, preserving and improving the quality of air, soil, climate change mitigation, protection of the ozone layer and radiation protection;
- rehabilitation and construction of landfills, encouraging reduction of waste production; waste recycling and sorting of waste;
- promotion and protection of biological diversity;
- promotion and protection of human health;
- encouragement of cleaner production;
- replacement of the fossil fuels use with natural gas, biological fuels and other environmentally acceptable fuels;
- raising public awareness of the environment;
- improving the monitoring and evaluation of environmental conditions and introduction of environmental management;
- encouraging the sustainable use of natural resources;
- encouragement to meet environmental standards in carrying out economic works and activities;
- promoting educational, research and development studies, programs, projects and other related activities for protection and improvement of the environment and nature;
- support of non-governmental and non-profit organizations in the area of environment;
- support the development of local action plans for environmental protection, and
- sustainable development of rural areas.

When awarding the funds of the program, the state administration body responsible for environmental affairs particularly evaluates whether the programs, projects and activities will produce notable and measurable environmental effects, whether they are aligned with the strategies, plans and programs of the Republic of Macedonia and of the state administration body responsible for environmental affairs, whether they are in accordance with the priorities and objectives of environmental protection or priorities of certain medium protection or improvement of the situation in a particular area of the environment and whether they are compatible with obligations under international agreements ratified by the Republic of Macedonia.

Allocation of the program funds is performed by an open public competition that is published and implemented by the state administration body responsible for environmental affairs.

As an exception, the funds from the program may be awarded by decision of the Government on the proposal of the state administration body responsible for environmental affairs, if:

- funds are intended for construction of infrastructure facilities for environmental protection of wider public interest,
- construction of facilities is envisaged in the planning documents in the area of environment, and
- allocation of funds is defined in the program of the Article 172 of the Law on Environment.

Co-financing

MEPP as a business party with the funds of the program, and in accordance with the Law on environment, can participate in co-financing programs, projects and other similar activities organized and financed by a municipality, the City of Skopje and municipalities in the City of Skopje, local units, legal and physical entities as well as international organizations, financial and other similar institutions.

In cases where funds are awarded in the form of co-financing, the beneficiary of the funds shall issue a public call for selection of the most favorable bidder.

The funds from domestic and foreign donors are allocated for implementation of programs, projects and other related activities in a manner and under conditions specified by the donor.

For granting funds from the program, an agreement between the MEPP and fund user is signed. The fund user is obliged to use the allocated funds in the manner, under conditions and for the purposes specified in the agreement and in accordance with the Law on Environment. During the implementation and after completion of the contract, the user is obliged to submit to MEPP a report with an audit on the realization of funds from the agreement, and a report on the environmental effects achieved with the implementation.

5.3.1 Analysis of a program for environmental investment in the past 10 years

This chapter includes an analysis of programs for environmental investment for the period 2007-2016 year. The basis for provision and implementation of the program, purpose and amount of funds by purpose and potential beneficiaries of the program (amount of funds from the program by types of users who are target group of the needs analysis of the project) are presented in it.

Program for environmental investments for 2007

The funds provided under **Article 180** of the Law on Environment in 2007 are in the amount of 90,000,000 denars. The program is implemented in accordance with **Article 172** of the Law on Environment and funds are for the following purpose:

1. Preparation of plans and programs for waste management - 6,000,000 den;
2. Preparation of project documentation for integrated waste management (sorting, collection centers, processing of waste and waste disposal, etc.) (for integrated solid waste management, agglomerations, cities or regions with over 50,000 inhabitants according to the national plan for waste management only) - 30.000.000 denars;
3. Support the preparation and/or implementation of projects for collection, sorting and recycling of waste - 6,000,000 denars;
4. Implementation of projects to clean up illegal dumps - 7,000,000 denars;
5. Implementation of projects for rehabilitation of landfills for municipal waste - 10,000,000 denars;
6. Development of local action plans for environmental protection (LEAP) 3,000,000 denars;
7. Protection, preservation and improvement of water quality - 3.000.000 denars;
8. Protection of nature and biodiversity - 4,000,000 denars;
9. Public awareness and education in the area of the environment - 3.000.000 denars;

10. Promoting education, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 3.000.000 denars;
11. Implementation of training of LGUs enforcement of environmental - 2,000,000 denars;
12. Support of projects and activities of non-governmental organizations established for environmental protection - 3.000.000 denars;
13. Funds for civil servants education and training - 3.000.000 denars.
14. Costs for the program implementation - 7.000.000 denars.

Legal and physical entities may use funds from item 2 to item 13 of the Program. The remaining items for using funds are intended for LGUs, and the City of Skopje.

The media could request funds only under items 9 Raising public awareness and education in the area of environment, 10 Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature with a total budget of 6.000.000 denars or maximum availability of 6,66% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of item 3 to item 13 or 45.000.000 denars, indeed maximum availability up to 50% of the funds from the program. Non-governmental organizations established for environmental protection under paragraph 12 could use 3.000.000 denars or 3.33%.

The following figure (Figure 3) is a graphic representation of the funds and the beneficiaries under the program of investments:

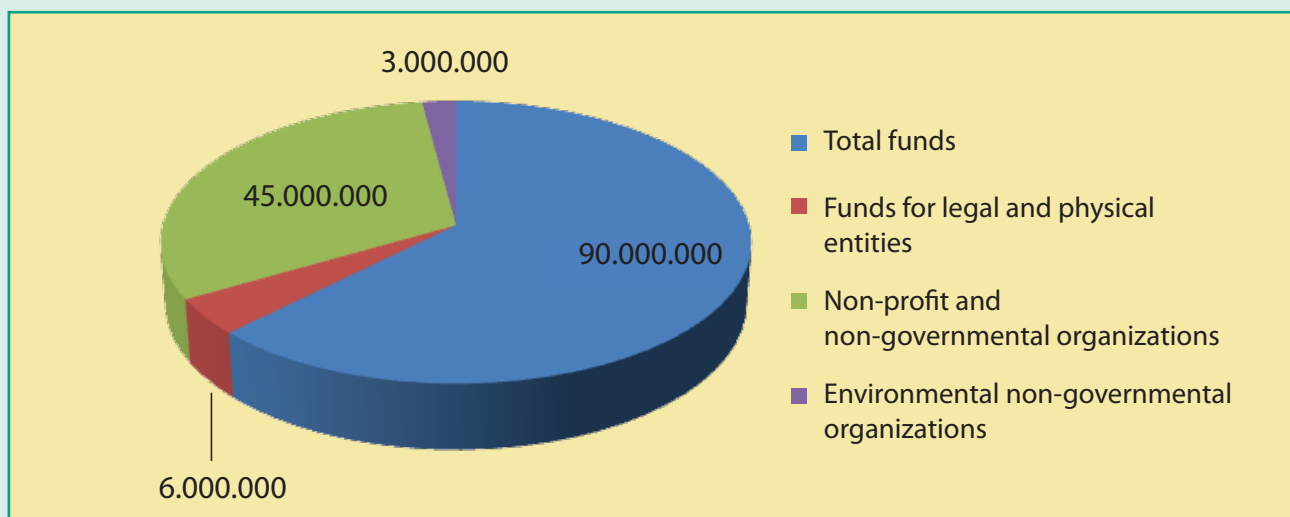


Figure 3 Funds and dedication by user type

Program for environmental investments for 2008

Funds for implementation of the program for environmental investment in 2008 are provided under **Article 162** of the Law on Environment and they amount to 152 million denars, for the following:

1. Preparation of plans and programs for waste management - 4.000.000 den;
2. Preparation of project documentation for integrated waste management (sorting, collection centers, processing of waste and waste disposal, etc.) support of projects for the collection, sorting

- and recycling of waste - 10,000,000 denars;
3. Implementation of projects to clean up illegal dumps - 10,000,000 denars;
 4. Implementation of projects for rehabilitation of landfills for municipal waste - 10,000,000 denars;
 5. Development of local action plans for environmental protection (LEAP) 3,000,000 denars;
 6. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 60,000,000 denars;
 7. Implementation of projects and activities for nature protection and biodiversity - 4,000,000 denars;
 8. Implementation of projects and activities to raise public awareness and education in the area of the environment - 4,000,000 denars;
 9. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 4,000,000 denars;
 10. Support the projects and activities of non-governmental organizations established for environmental protection - 4,000,000 denars;
 11. Implementation of projects and activities for civil servants education and training at central and local level - 2.000.000 denars;
 12. Support in the preparation of Permits for harmonization with the operational plan for landfills - 3.000.000 denars;
 13. Support in the implementation of the Operational Plans of Permits for harmonization with the operational plan for landfills - 2,000,000 denars;
 14. Implementation of projects and activities approved under the Investment Program for 2007 - 30,000,000 denars.
 15. Costs for the program implementation - 2.000.000 denars.

Legal and physical entities may use funds from item 2, 6, 7, 8, 9, 11 and 13 of the Program. The remaining items for using funds are intended for the local units, LGUs and the City of Skopje, regional associations of LGUs and public enterprises.

The media could apply for funds only under items 8 Implementation of projects and activities to raise public awareness and education in the area of environment and 9 Promoting educational, research and development studies, programs and projects and similar activities to protect and promote environmental natural environment with a total budget of 8.000.000 denars or maximum availability of 5.26% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of items 2, 7, 8, 9, and 11 or 24,000,000 denars - maximum availability of 15.78% of the funds from the program. Non-governmental organizations established for environmental protection under paragraph 10 could use 4.000.000 denars or 2.63%. The following figure (Figure 4) is a graphic representation of the assets and the beneficiaries under the program of investments:

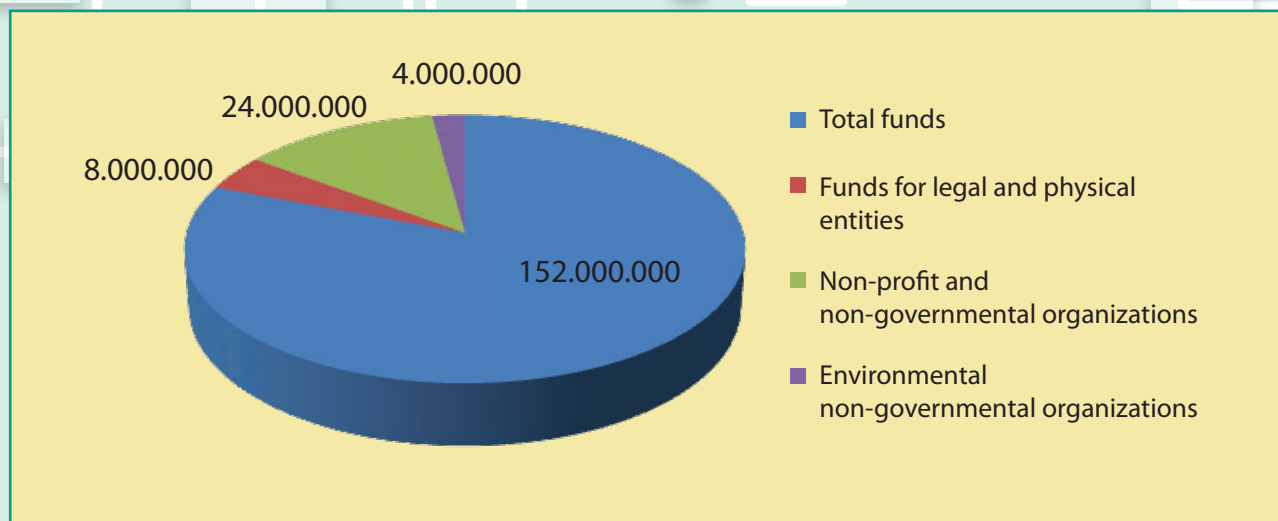


Figure 4 Funds and dedication by users type for 2008

Program for environmental investments for 2009

Funds for implementation of the program for environmental investment for 2009 are provided under Article 162 of the Law on Environment and they amount 163 million denars.

1. Realization of projects and activities for waste management:

1.1. Preparation of plans and programs for waste management;

1.2. Preparation of project documentation for integrated waste management (sorting, collection centers, processing of waste and waste disposal, etc.) And support for realization of projects for the collection, sorting and recycling of waste;

1.3. Realization of projects to clean up illegal dumps;

1.4. Implementation of projects for remediation of landfills for municipal waste;

Export of item 1 - 53,000,000 denars.

2. Development of Local Action Plan for Environmental Protection (LEAP) in the amount of 2.000.000 denars.

3. Preparation of technical documentation and implementation of projects and activities to protect, preserve and improve the quality of water – 46.000.000 denars.

4. Implementation of projects and activities for nature and biodiversity protection- 10.000.000 denars

5. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 3.000.000 denars

6. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 2.000.000 denars.

7. Support of projects and activities of non-governmental organizations established for environmental protection - 2.000.000 denars.

8. Implementation of projects and activities approved under the Investment Program for 2007 and 2008 - 45.000.000 denars.

Legal and physical entities may use funds from item 1 (subsection 1.2), 4, 5 and 6 of the program. The remaining items for using funds are intended for local units, LGUs and the City of Skopje, regional associations LGUs and public enterprises.

The media could apply for funds only under items 5 Realization of projects and activities to raise public awareness, education and training in environmental and 6 Promoting educational, research and development studies, programs and projects and similar activities to protect and promote environment and nature with a total budget of 5.000.000 denars or maximum availability of 3.06% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of item 1 (subsection 1.2), 4, 5 and 6 more precisely 15.000.000 denars not including item 1 (section 1.2) that has no designated amount of funds. Without the amount of funds of item 1 (subsection 1.2) afore mentioned organizations would have maximum availability of funds to 9.20% of the program.

Non-governmental organizations established for environmental protection under item 1 (subsection 1.2), 4, 5, 6 and 7 could use 19,000,000 denars or 11.65%.

The following figure (Figure 5) is a graphic representation of the assets and the beneficiaries under the program of investments:

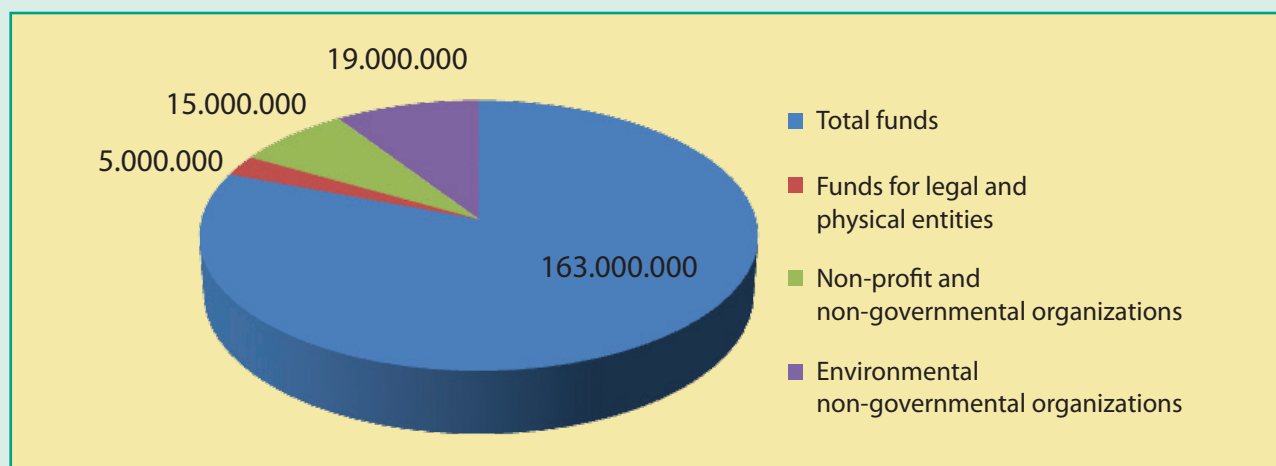


Figure 5 Funds and dedication by users type for 2009

Program for environmental investments for 2010

Funds for implementation of the program for environmental investment for 2010 are provided under Article 162 of the Law on Environment and they amount 122.5 million denars.

The program includes funds for co-financing of ongoing projects in the area of environment.

1. Realization of projects for clearing illegal dumps - 5,000,000 denars;
2. Development of Local Action Plan for Environmental Protection (LEAP) in the amount of 2,000,000 denars;
3. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 15.000.000 denars;
4. Implementation of projects and activities for nature and biodiversity protection- 9,000,000 denars;
5. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 10,000,000 denars;
6. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 10,000,000 denars;

7. Support of projects and activities of non-governmental organizations established for environmental protection - 10,000,000 denars;
8. Co-financing of ongoing projects in the area of the environment - 15.000.000 denars;
9. Implementation of projects and activities approved under the Investment Program for 2009 - 26.5 million denars;
10. Costs for the program implementation - 20.000.000 denars.

Legal and physical entities may use funds from items 4, 5, 6 and 7 of the Program. The media could apply for funds only under items 5 Realization of projects and activities to raise public awareness, education and training in environmental, and 6 Promoting educational, research and development studies, programs and projects and similar activities to protect and promote environment and nature with a total budget of 20.000.000 denars or maximum availability of 16.32% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for purposes of items 4, 5 and 6 more precisely 29.000.000 denars, which means maximum availability of 23.67% of the funds from the program.

Non-governmental organizations established for environmental protection under items 4, 5, 6 and 7 of the program could use 39.000.000 denars or 31.83%.

The following figure (Figure 6) gives a graphic representation of the assets and the beneficiaries under the program of investments:

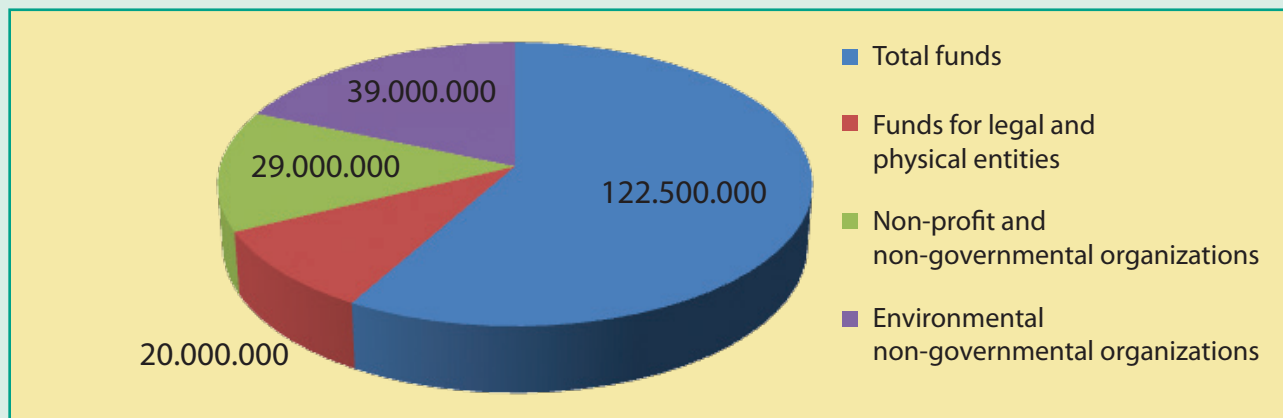


Figure 6 Funds and dedication by users type for 2010

Program for environmental investments for 2010

Funds for implementation of the program for environmental investment for 2010 are provided under Article 162 of the Law on Environment and they amount 122.5 million denars.

The program includes funds for co-financing of ongoing projects in the area of environment.

1. Realization of projects for clearing illegal dumps - 5,000,000 denars;
2. Development of Local Action Plan for Environmental Protection (LEAP) in the amount of 2,000,000 denars;
3. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 15.000.000 denars;
4. Implementation of projects and activities for nature and biodiversity protection- 9,000,000 denars;

5. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 10,000,000 denars;
6. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 10,000,000 denars;
7. Support of projects and activities of non-governmental organizations established for environmental protection - 10,000,000 denars;
8. Co-financing of ongoing projects in the area of the environment - 15.000.000 denars;
9. Implementation of projects and activities approved under the Investment Program for 2009 - 26.5 million denars;
10. Costs for the program implementation - 20.000.000 denars.

Legal and physical entities may use funds from items 4, 5, 6 and 7 of the Program. The media could apply for funds only under items 5 Realization of projects and activities to raise public awareness, education and training in environmental, and 6 Promoting educational, research and development studies, programs and projects and similar activities to protect and promote environment and nature with a total budget of 20.000.000 denars or maximum availability of 16.32% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for purposes of items 4, 5 and 6 more precisely 29.000.000 denars, which means maximum availability of 23.67% of the funds from the program.

Non-governmental organizations established for environmental protection under items 4, 5, 6 and 7 of the program could use 39.000.000 denars or 31.83%.

The following figure (Figure 6) gives a graphic representation of the assets and the beneficiaries under the program of investments:

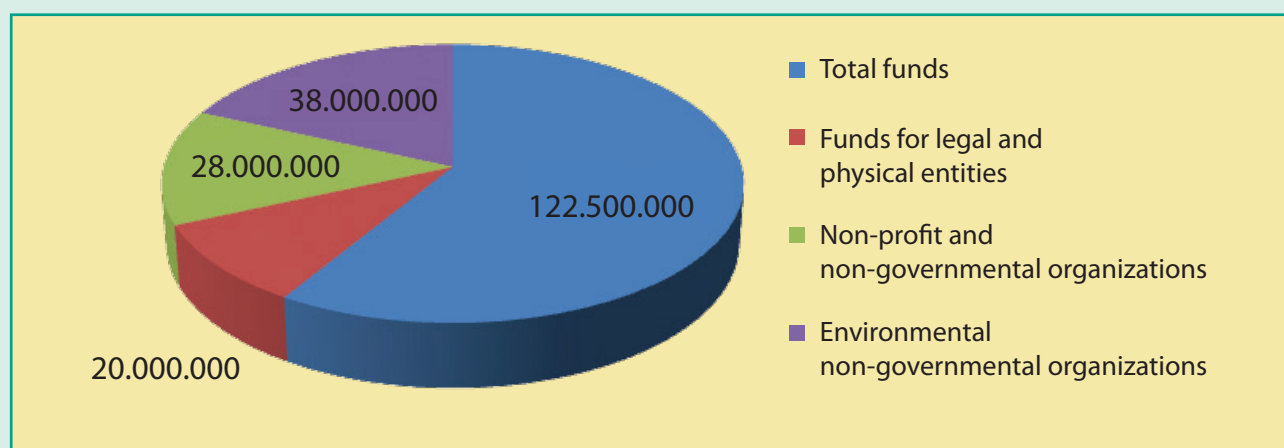


Figure 7 Funds and dedication by users type for 2011

Program for environmental investments for 2012

Funds for implementation of the program for environmental investment for 2012 are provided under Article 162 of the Law on Environment and the amount is 122.000.000 denars.

The program includes funds for co-financing of ongoing projects in the area of environment.

1. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 30.000.000 denars;

2. Implementation of projects and activities for nature and biodiversity protection - 5,000,000 denars;
3. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 5,000,000 denars;
4. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 5,000,000 denars;
5. Support of the projects and activities of non-governmental organizations established for environmental protection - 4,000,000 denars;
6. Co-financing of the ongoing projects in the area of the environment - 20,000,000 denars;
7. Implementation of projects and activities approved under the Investment Program for 2010 and 2011 - 40,000,000 denars;
8. Costs for the program implementation - 13.000.000 denars.

Legal and physical entities may use funds from item 3 and 4 of the Program.

The media could apply for funds under items 3 Realization of projects and activities to raise public awareness, education and training in the area of environment and 4 Promoting educational, research and development studies, programs and projects and similar activities on the protection and promotion of environment and nature with a total budget of 10.000.000 denars or maximum availability of 8,19% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of items 2, 3 and 4 more precisely 15.000.000 denars which means maximum availability of 12.29% of the funds from the program.

non-governmental organizations established for environmental protection under items 2, 3, 4 and 5 could use 19,000,000 denars or 15.57%.

The following figure (Figure 8) is a graphic representation of the funds and the beneficiaries under the program of investments:

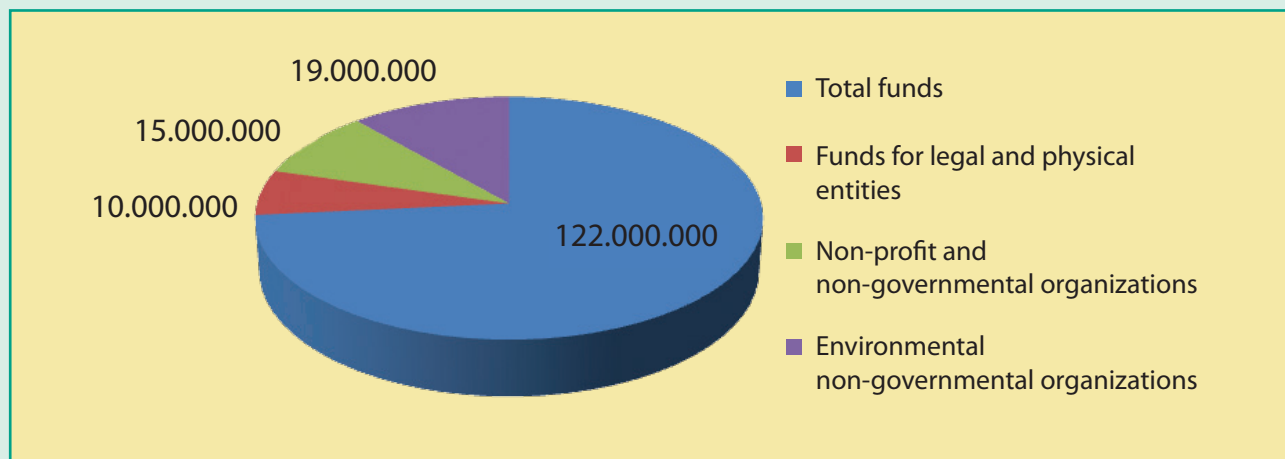


Figure 8 Funds and dedication by users type for 2012

Program for environmental investments for 2013

Funds for implementation of the program for environmental investment for 2013 are provided under Article 162 of the Law on Environment and they amount of 122.8 million denars.

The program includes funds for co-financing of ongoing projects in the area of environment.

1. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 31,000,000 denars;
2. Implementation of projects and activities for nature and biodiversity protection - 6,000,000 denars;
3. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 6,000,000 denars;
4. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 5,000,000 denars;
5. Support the projects and activities of non-governmental organizations established for environmental protection - 7,000,000 denars;
6. Funding for the project for preparation of the Report on the situatin of the environment in the Republic of Macedonia - 7,000,000 denars;
7. Co-financing of the ongoing projects in the area of the environment - 30.000.000 denars;
8. Implementation of projects and activities approved under the Investment Program for 2011 - 20,000,000 denars;
9. Costs for the program implementation - 10.8 million denars.

Legal and physical entities may use funds from item 3 and 4 of the program. The media could apply for funds on the same items, item 3 Realization of projects and activities to raise public awareness, education and training in the area of environment and 4 Promoting educational, research and development studies, programs and projects and similar activities protection and improvement of the environment and nature with a total budget of 11.000.000 denars or maximum availability of 8.95% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of items 2, 3 and 4 more precisely 17,000,000 denars, which means maximum availability of 13.84% of the funds from the program.

non-governmental organizations established for environmental protection under items 2, 3, 4 and 5 could use 24 million denars or 19.54%.

The following figure (Figure 9) is a graphic representation of the funds and the beneficiaries under the program of investments:

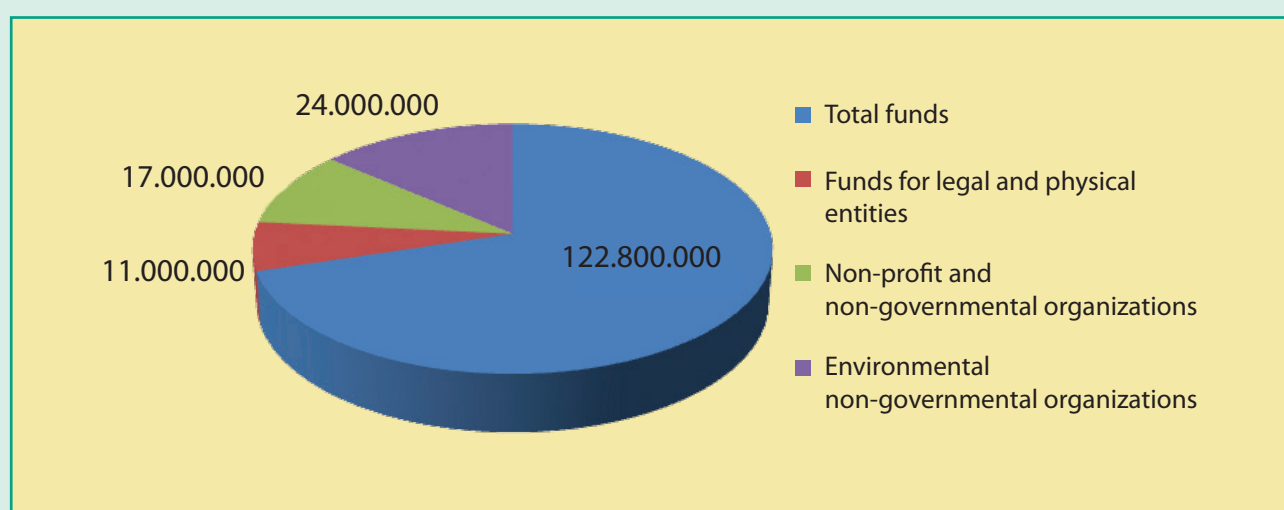


Figure 9 Funds and dedication by users type for 2013

Program for environmental investments for 2014

Funds for implementation of the program for environmental investment for 2014 are provided under Article 162 of the Law on Environment and they amount 122.800.000 denars.

The program includes funds for co-financing of ongoing projects in the area of environment.

1. Preparation of technical documentation and implementation of projects and activities for the protection, preservation and improvement of water quality - 31,000,000 denars;
2. Implementation of projects and activities for nature and biodiversity protection - 5,000,000 denars;
3. Implementation of projects and activities to raise public awareness and education and training in the area of the environment - 8,000,000 denars;
4. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 8,000,000 denars;
5. Support of the projects and activities of non-governmental organizations established for environmental protection - 8,000,000 denars;
6. Co-financing of the Project for strengthening the institutional capacities of the LGUs by developing strategies for environment and climate change - 6,000,000 denars;
7. Co-financing of the ongoing projects in the area of the environment - 23,000,000 denars;
8. Implementation of projects and activities approved under the Investment Program for 2013 - 30.000.000 denars;
9. Costs for the program implementation - 3.800.000 denars.

Legal and physical entities may use funds from item 3 and 4 of the program. The media could apply for funds under the same items 3 Realization of projects and activities to raise public awareness, education and training in the area of environment, and 4 Promoting educational, research and development studies, programs and projects and similar activities to protect and promote environment and nature with a total budget of 16.000.000 denars or maximum availability of 13.02% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of items 2, 3 and 4, more precisely 21,000,000 denars, which means maximum availability of 17.10% of the funds from the program.

non-governmental organizations established for environmental protection under items 2, 3, 4 and 5 could use 29 million denars or 23,61%.

The following figure (Figure 10) is a graphic representation representation of the funds and the beneficiaries under the program of investments:

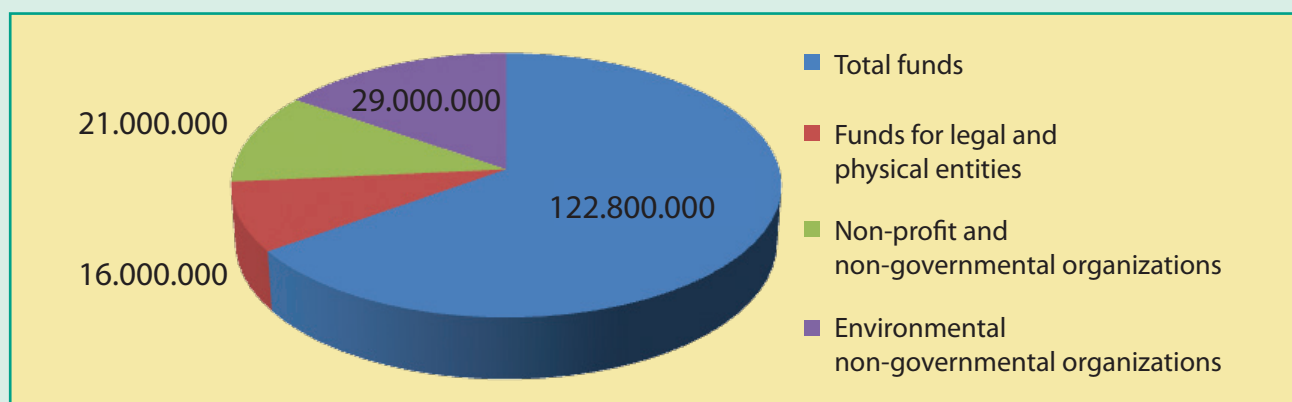


Figure 10 Funds and dedication by users type for 2014

Program for environmental investments for 2015

Funds for implementation of the program for environmental investment for 2015 are provided under Article 162 of the Law on Environment and they amount 122.800.000 denars. The program includes funds for co-financing of ongoing projects in the area of environment.

1. Preparation of technical documentation and implementation of projects and activities to protect, preserve and improve the quality of water – 49.000.000 denars;
2. Realization of projects and activities for nature protection and biodiversity - 2,000,000 denars;
3. Implementation of projects and activities to raise public awareness and education and training in the field of the environment - 4,000,000 denars;
4. Promoting educational, research and development studies, programs and projects and similar activities for the protection and improvement of the environment and nature - 4,000,000 denars;
5. Support of the projects and activities of non-governmental organizations established for environmental protection - 4,000,000 denars;
6. Co-financing the Project for strengthening the institutional capacities of the LGUs by developing strategies for environment and climate change - 3,000,000 denars;
7. Co-financing the ongoing projects in the area of the environment - 33,000,000 denars;
8. Implementation of projects and activities approved under the Investment Program for 2014 - 20,000,000 denars;
9. Costs for program implementation - 3.800.000 denars.

Legal and physical entities may use funds from item 3 and 4 of the program.

The media could apply for funds on the same items, item 3 Realization of projects and activities to raise public awareness, education and training in the field of environment and 4 Promoting educational, research and development studies, programs and projects and similar activities for protection and improvement of the environment and nature with a total budget of 8.000.000 denars or maximum availability of 6.51% of the funds from the program.

The non-profit and non-governmental organizations (including universities and other scientific institutions) can use the funds for the purposes of items 2, 3 and 4 more precisely 10.000.000 denars, which means maximum availability of 8.14% of the funds from the program.

Non-governmental organizations established for environmental protection under items 2, 3, 4 and 5 could use 14,000,000 denars or 11.40%.

The next Figure (Figure 11) is a graphic representation of the assets and the beneficiaries under a program of investments:

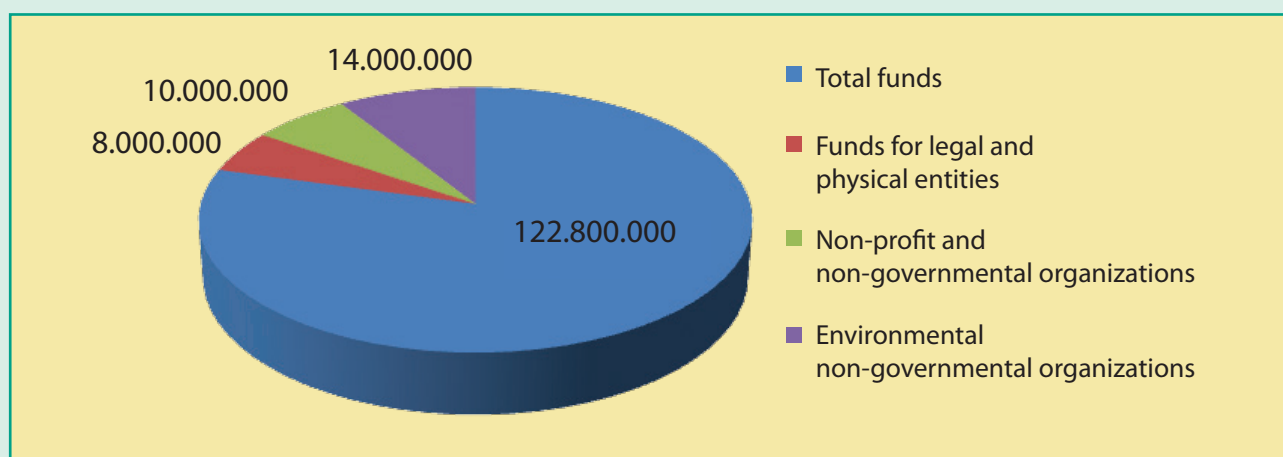


Figure 11 Funds and dedication by users type for 2015

Environmental programs for 2016

Program for improving the environment for 2016

With this program (for improvement of the environment for 2016) under the **Article 50** of the Law on Execution of the Budget of the Republic of Macedonia for 2016 ("Official Gazette" no. 209/2015), the Government of the Republic of Macedonia in the session of 01.05.2016, determined the purpose of the funds of Item 121.01-Ministry of environment and Physical Planning Sub-Program C1 Improving the environment and resources from donations with a total amount 40,971,000.00 denars.

Funds for implementation of the Program for improvement of the environment for 2016 are provided from:

donor funds - account 785 in total amount of 40,971,000.00 denars from the following revenues:

- 742 111 - Income from the United Nations in the amount of 20,198,000.00 denars
- 742 114 - Income from the European Union in the amount of 20,500,000.00 denars
- 742 115 - Income from European States in the amount of 273.000,00denari

Funds will be implemented based on public procurement and public calls for engagement of legal and physical entities (experts in different areas) that will be published and implemented by the Ministry of environment and physical planning, according to the Law on public procurement. Funds from this program are allocated for the following purposes:

1. Financing of the Project Office Ozone, donation by the United Nations in the total amount of 381,000.00 denars;
2. Financing the Project for efficient energy distribution – Component 4, donation by the State Secretariat for Economic Affairs of Switzerland, SECO, Swiss Government to complete payment of the invoices from 2015 in the total amount of 123.000,00 denars;
3. Financing of the Project POPs donation by the Global Environment Fund of the United Nations, in the total amount 1,230,000.00 day;
4. Financing the Project for stabilization of POPs in landfills, donation by the Global Environment Fund of the United Nations to complete the payment of invoices from 2014 amounting to 237,000.00 denars;
5. Financing the Project Strengthening the capacity for participation in the clearing house, donation by the Global Environment Fund of the United Nations in the amount of 18,200,000.00 denars;
6. Financing the project Monitoring of rivers, donation by the Swiss Government to pay invoices from 2014 totaling 150,000.00 denars;
7. Financing of the Project UNESCO donated by the United Nations, in the amount of 125.000,00 denars;
8. Financing Project Cooperation in Environment and Sustainable Development (SubProject "Integrated Prevention of Pollution and Control of Pollution in Macedonia" and , Strengthening the capacity to facilitate the implementation of the European scheme for emissions trading in the Republic of Macedonia "), donation by the Kingdom of Norway in the amount of 20,500,000.00 denars;
9. Financing Project Emerald Network donation by the United Nations in the amount of 25.000,00 denars.

Funds from this program can be used by legal and physical entities on the basis of public procurement and competition.

Program for environmental investments for 2016

With this program the Government of the Republic of Macedonia determines the purpose of the budget, based on **Article 26** of the Law on Execution of the State Budget for 2016 ("Official Gazette" no. 209/15), Item 121.01 of Ministry of environment and physical planning Sub-Program 21- Investments in environment for 2016.

Funds for implementation of the Program for investment in the environment 2016 are provided from the Budget of the Republic of Macedonia for 2016 from the account 637-12, amounting to 192,000,000.00 denars. The funds will be implemented based on:

- (1) Public procurement published by the Ministry of environment and physical planning, under the Law on public procurement. The funds will be used to finance ongoing projects and co-finance the ongoing donor projects in the area of environment;
- (2) Earmarked grants for the municipalities of funds received on the basis of compensation for energy production from fossil fuels for 2015. The funds will be used to finance projects in the field of Environment, submitted by municipalities Novaci, Bitola, Mogila, Kicevo, Gazi Baba, Aerodrom, Centar, Kisela Voda and Cair;
- (3) Capital grants to LGUs to build a treatment plant for Demir Hisar and the surrounding settlements and construction of the plant for filtering drinking water for village Dobridol, Vrapciste municipality that will be implemented on the basis of public procurement that will be implemented by municipality Demir Hisar and municipality Vrapciste.

The program funds are allocated for the following purposes:

1. Financing the project for construction of sewerage treatment plant for the settlement Trpejca, Ohrid municipality (with a total estimated value of the Project from 78,356,514.00 denars) and the amount of 10.000.000,00 denars for 2016;
2. Co-financing of the Project for Wastewater treatment in Kocani, with a donation by the State Secretariat for Economic Affairs of Switzerland, SECO - Swiss Government, and budgetary funds amounting to 30,000,000.00 denars for 2016;
3. Financing multiyear Project for cleaning the river bed of the river Vardar in Tudence, municipality Jegunovce, by the Government Conclusion no. 42-924/1 from 17.02.2015, (with a total estimated value of the project 401,000,000.00 denars) in the amount of 100.000.000,00 denars for 2016;
4. Earmarked grants to municipalities Novaci, Bitola, Mogila, Kicevo, Gazi Baba, Aerodrom, Centar, Kisela Voda and Cair of projects in the area of environment in the amount of 29,000,000.00 denars for 2015;
5. Capital grants to municipality Demir Hisar to build a treatment plant for Demir Hisar and the surrounding settlements in the amount of 18,000,000 denars;
6. Capital grants to municipality Vrapciste to build a plant for filtering drinking water for village Dobridol in the amount of 5.000.000 denars.

Funds from this program can be used by legal entities on the basis of public procurement for purposes of items 1, 2 and 3 of this program.

The funds of this program can be used by municipalities Novaci, Bitola, Mogila, Kicevo, Gazi Baba, Aerodrom, Centar, Kisela Voda and Chair on the basis of earmarked grants and conducted public procurement by the municipalities, for purposes of item 4 of this program.

The next Figure (Figure 12) is a graphic representation of the funds and the beneficiaries under a program of investments:

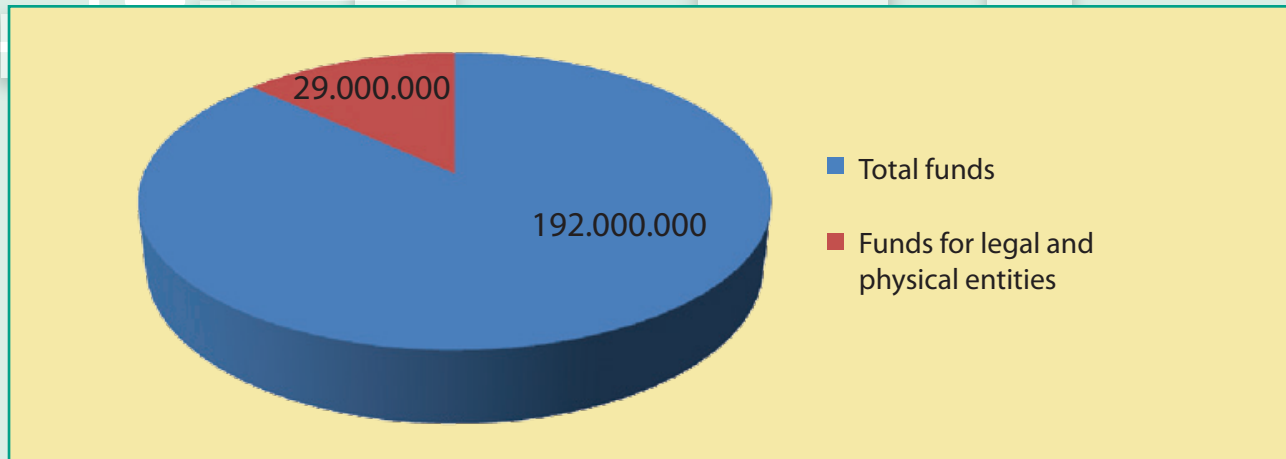


Figure 12 Funds and dedication by users type for 2016

Funds from this program can be used by municipalities Demir Hisar and Vrapchishte, on the basis of conducted public procurement for purposes of items 5 and 6 of the program.

Considering that in both programs the purpose of the funds is strictly defined and it will be conducted on the basis of public procurement and competition by the beneficiaries (which are published by the Ministry of environment and physical planning, according to the Public procurement and local government units who receive grants), it is not possible to do a more detailed analysis about the amount of funds that will be earmarked for services in the form of projects, research and activities to protect the environment, raise public awareness and education that could be used by the media, non-governmental or non-profit organizations (including the educational institutions) as well as non-governmental organizations established for activities to protect the environment.

The following figure (Figure 13) is a graphic representation of funds and beneficiaries of the funds provided by the investment program and the program for improving the environment.

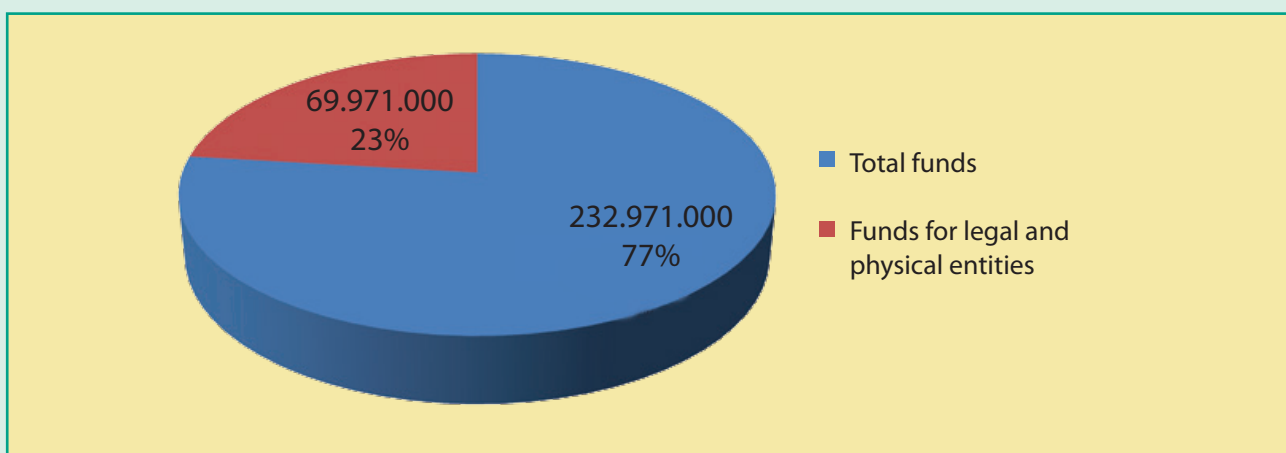


Figure 13 Funds and users of the funds provided by the investment program and the program for improvement of the environment

The following table presents data on the total funds provided by the Programs for environmental investments over the last 10 years as well as the amounts available to legal and physical entities including funds allocated for preparation of technical documentation, non-profit and non-governmental organizations and non-governmental organizations established for environmental protection.

Table 1 Funds provided by the Program of investment in environment in the last 10 years

Year	Total funds	Funds for legal and physical entities	Non-profitable and non-governmental organizations	Environmental non-governmental organizations
2007	90.000.000	6.000.000	45.000.000	3.000.000
2008	152.000.000	8.000.000	24.000.000	4.000.000
2009	163.000.000	5.000.000	15.000.000	19.000.000
2010	122.500.000	20.000.000	29.000.000	39.000.000
2011	122.500.000	20.000.000	28.000.000	38.000.000
2012	122.000.000	10.000.000	15.000.000	19.000.000
2013	122.800.000	11.000.000	17.000.000	24.000.000
2014	122.800.000	16.000.000	21.000.000	29.000.000
2015	122.800.000	8.000.000	10.000.000	14.000.000
2016 The Program Promotion	40.971.000	40.971.000	40.971.000	40.971.000
2016 The Program Investments	192.000.000	29.000.000	29.000.000	29.000.000
Total 2016	232.971.000	69.971.000	69.971.000	69.971.000

In the following pictures are the results of the analysis of the funds available under the Program for investment over the past 10 years, as well as the funds allocated for the target groups of the analysis of needs of the Project Development Environmental investigative journalism in the Republic of Macedonia represented in Table 1.

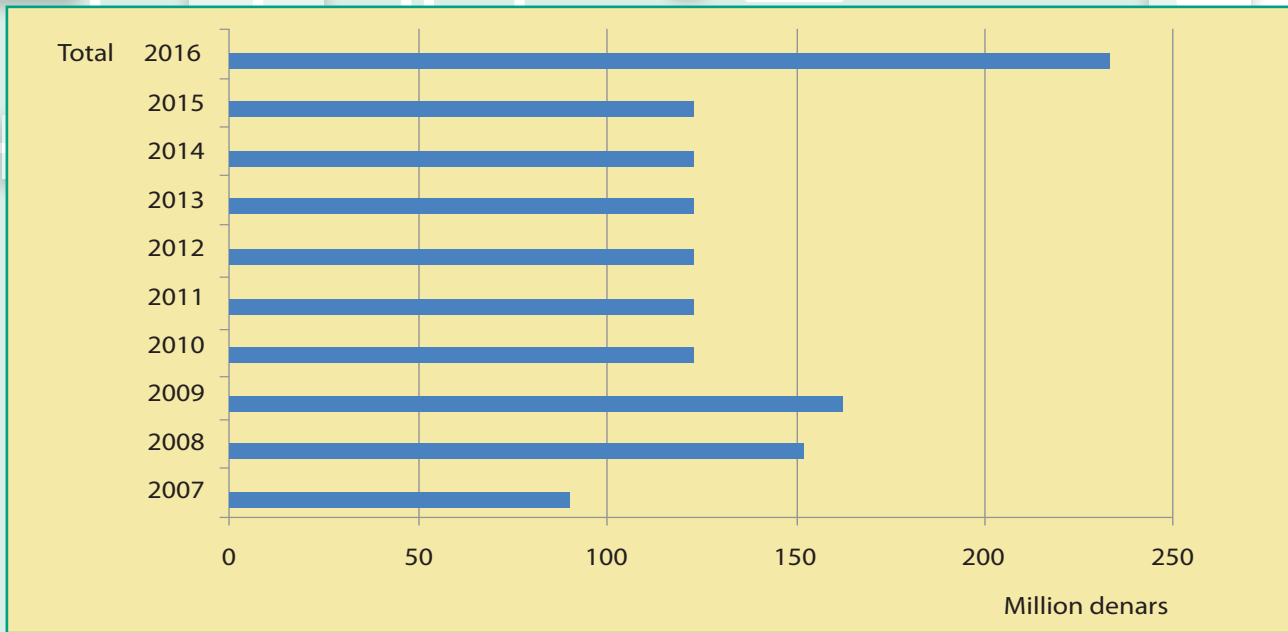


Figure 14 Funds of the Programs for investment in environment (for 2016 are included both investment programs and environmental promotion)

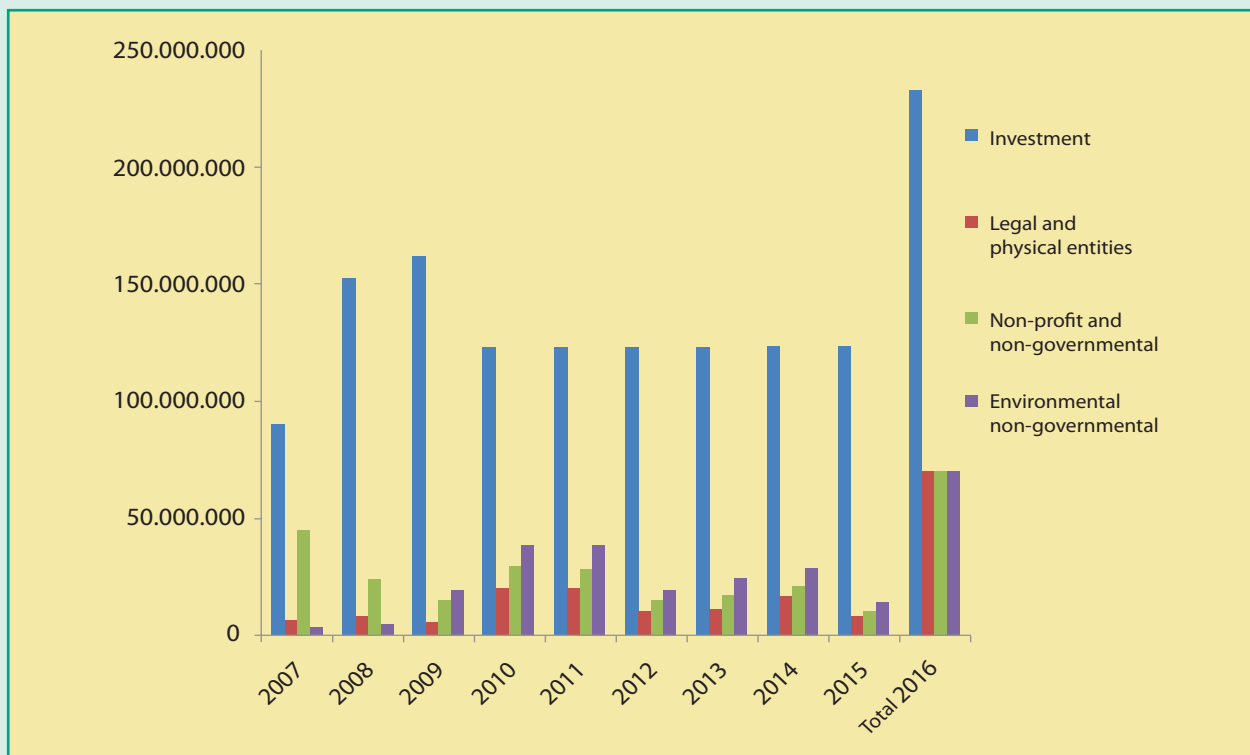


Figure 15 Funds for the Program Investment in environment and the dedication of the funds

From the analysis of Programs for environmental investment can be seen that there is a major overlap of use of the funds by type of users such as: legal and physical entities, including in this group also media with the groups of non-governmental organizations, and non-profit organizations and non-governmental organizations which are established for environmental protection. In other words, certain items of the programs are dedicated for only one type of users of funds.

By comparing the amount of the funds of Programs for environmental investment, it can be concluded that in the recent years their level is the same with the exception of 2016 when for the first time was introduced the Program for improvement of the environment which regulates donations of the United Nations, European Union and European countries with concrete means and purpose by projects.

Also by comparing only the Program of environmental investments for 2016 with the programs from past years it can be noted increment of funds. It can also be noted that for the first time used the methodology under the Decree on methodology for allocation of funds generated as income from compensation for energy production from fossil fuels ("Official Gazette" no. 12/08), although this Decree became effective the day after publication in the Official Gazette of the Republic Macedonia (24.01.2008). The program locates funds according to pre-determined purposes: financing of ongoing projects and co-financing donor projects, capital grants to build infrastructure and donations for LGUs based on projects to protect the environment.

For non-governmental organizations for environment and vulnerable groups protection and the media are available donations to LGUs only, which will be subject to public procurement by the municipalities.

Allocation of funds in this way results in inability to directly receive funds for activities to protect the environment, but also an opportunity for closer cooperation between regional and local media, non-governmental and non-profit organizations and non-governmental organizations established for environmental protection on one side and the municipalities- beneficiaries of the funds.

The distribution of the funds of the Program investment environment in 2016, can directly affect the improvement of vulnerable groups in affected areas (clusters of municipalities) as well as the capital grants to municipalities from the budget of the Republic of Macedonia according to predetermined priorities set out with the planning documents.

Improvement of the quality of life through investments in infrastructure (technical documentation to improve water quality, integrated waste management, etc.) are typical for programs for environmental investments of the recent years in which they were given as separate purposes.

However, further analysis will be needed to determine the purpose of the funds (projects for environmental protection) provided by the compensation for energy production from fossil fuels for clusters of municipalities listed in the program which will be subject to public procurement carried out by the municipalities that receive funds. So far in programs for environmental investment had no separate purpose of funds for projects and activities for the protection and improvement of air quality. With donations under this item to municipalities for projects to protect the environment can be expected realization of projects that will contribute to the improvement of environmental quality, including air as an environment medium.

During the analysis of the Programs it was found out that certain funds are with the purpose to pay funds for financing projects provided by investment programs from previous one or two years (Annual investment program for environment for 2009, 2010, 2011, 2012, 2013 2014 and 2015). This is due to the implementation of long-term projects, however it means that the availability of funds for other purposes envisaged by current programs is lower (from 20,000,000 to 40,000,000 denars), which represents a significant percentage of funds allocated for investment (16 to 30 %).

5.4 Foreign Donations for environmental projects

Based on the analysis of the central database for foreign assistance for the Government of the Republic of Macedonia have been determined registered projects/donations in Macedonia funded with non-refundable funds from foreign donors (grants/donations), and in which are represented issues in the area of environmental protection, environmental education, projects related to vulnerable groups, which are intended for the non-governmental organizations sector for the period 2010 - 2014. The list of registered environmental projects funded by foreign donors is given in Annex no. 2. The funds are distributed in the following sectors:

- Water supply and sanitation;
- Tourism;
- Education and training on environment;
- Environmental policy and administrative management;
- Rural development;
- Biodiversity;
- General environmental protection;
- Environmental research;
- Urban development and management

The next Figure (Figure 16) is a graphic representation of the distribution of foreign donations for projects for environmental protection by Sectors.

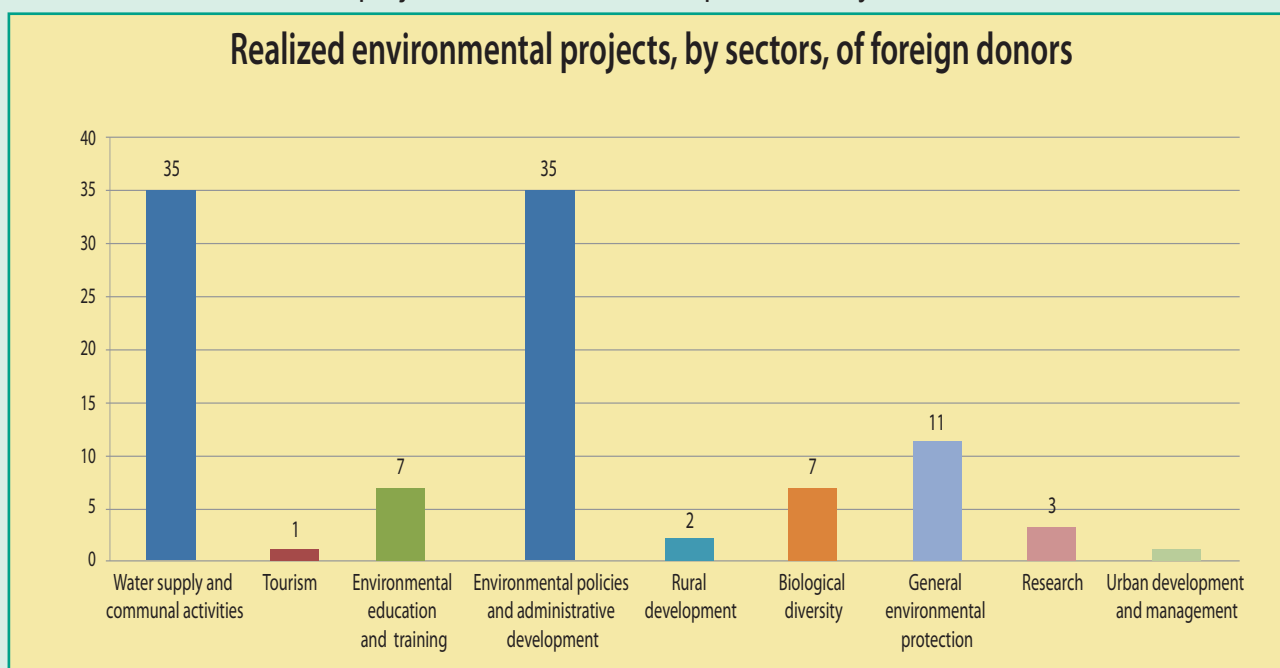


Figure 16 Realized environmental projects, by sectors, of foreign donors

The graphic display shows that the biggest number of donations is for realization of infrastructural projects, respectively construction, rehabilitation of sewerage infrastructure, management of water resources, waste management, as well as realization of projects for implementation of environmental policies.

In terms of specific projects relating to capacity building of NGOs and vulnerable groups, the number of projects is very modest, in fact funds for implementation of two projects were allocated only.

5.5 Costs for environmental protection

Besides the funds intended for investment in the environment, an important indicator of the situation of the environment is also the allocation of costs, respectively the principal purpose of the allocated funds. Cost analysis can help to determine the relevance of the media and the areas of environment and the measures taken to overcome the problems identified in the environment.

The costs of environmental protection consist of two components: investment in equipment for environmental protection and costs for maintenance of equipment for environmental protection.

According to the analysis of the published statistics for the Environment from 2007 to 2015, cost analysis was conducted only for the year 2013 - Statistics of the Environment, 2015 the Republic of Macedonia, State Statistical Office. In 2013, the largest share is for waste treatment costs (43.0%), the share of costs for the circulatory system for water supply (29.8%) and the costs of air (10.4%) - Figure 17.

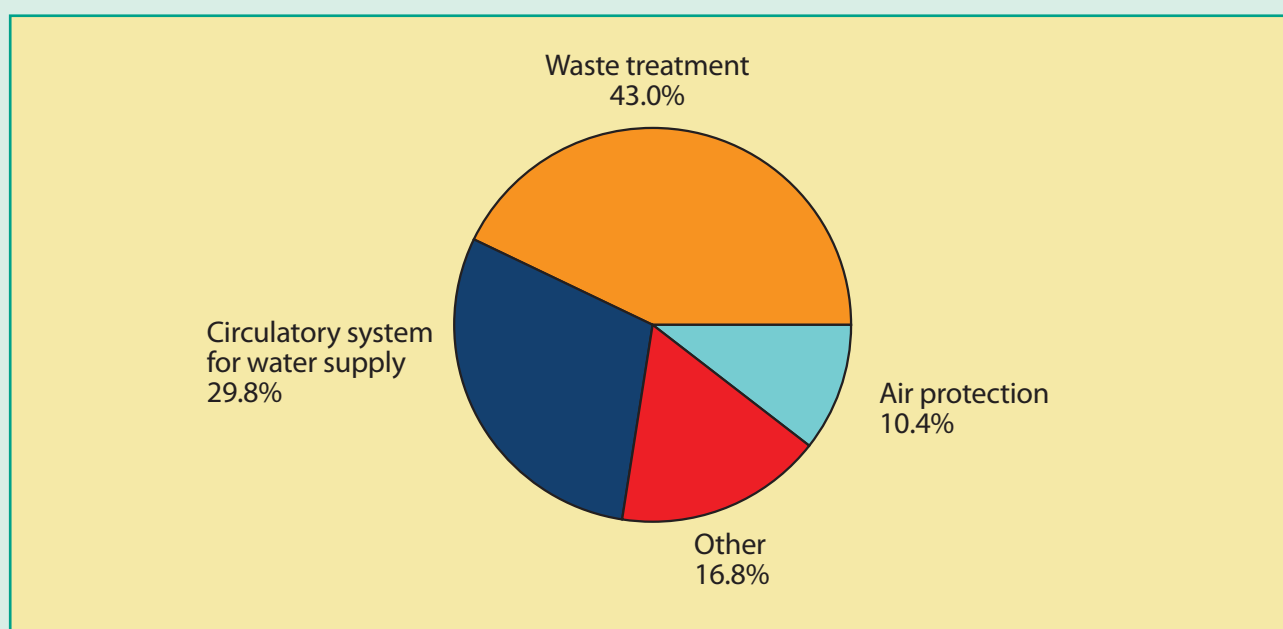


Figure 17 Distribution of costs for environmental protection in 2013
(Source: State Statistical Office)

The following Table (Table 2) presents the share of costs for environmental protection as intended

Costs according their dedication	Total (in 000 denars)	Share in the costs accordind their dedication
Total	7 556 048	100.0
Waste water menagement	730 197	9.7
Circulatory system for water supply	2 250 512	29.8
Protection of air	784 894	10.4
Protection of soil, surface and ground waters	247 562	3.3
Protection of forests	160	0.0
Protection of biodiversity and the nature	77 457	1.0
Waste managment	3 248 888	43.0
Protection of noise	57 110	0.8
Research and development activities	26 173	0.3
Educational and other similar activities	903	0.0
Administrative activity	2 398	0.0
Equipment for monitoring, control, analysis and costs for equipment maintenance	123 721	1.6
Assessment of the effect on environment and assessment of the consistency	6 026	0.1

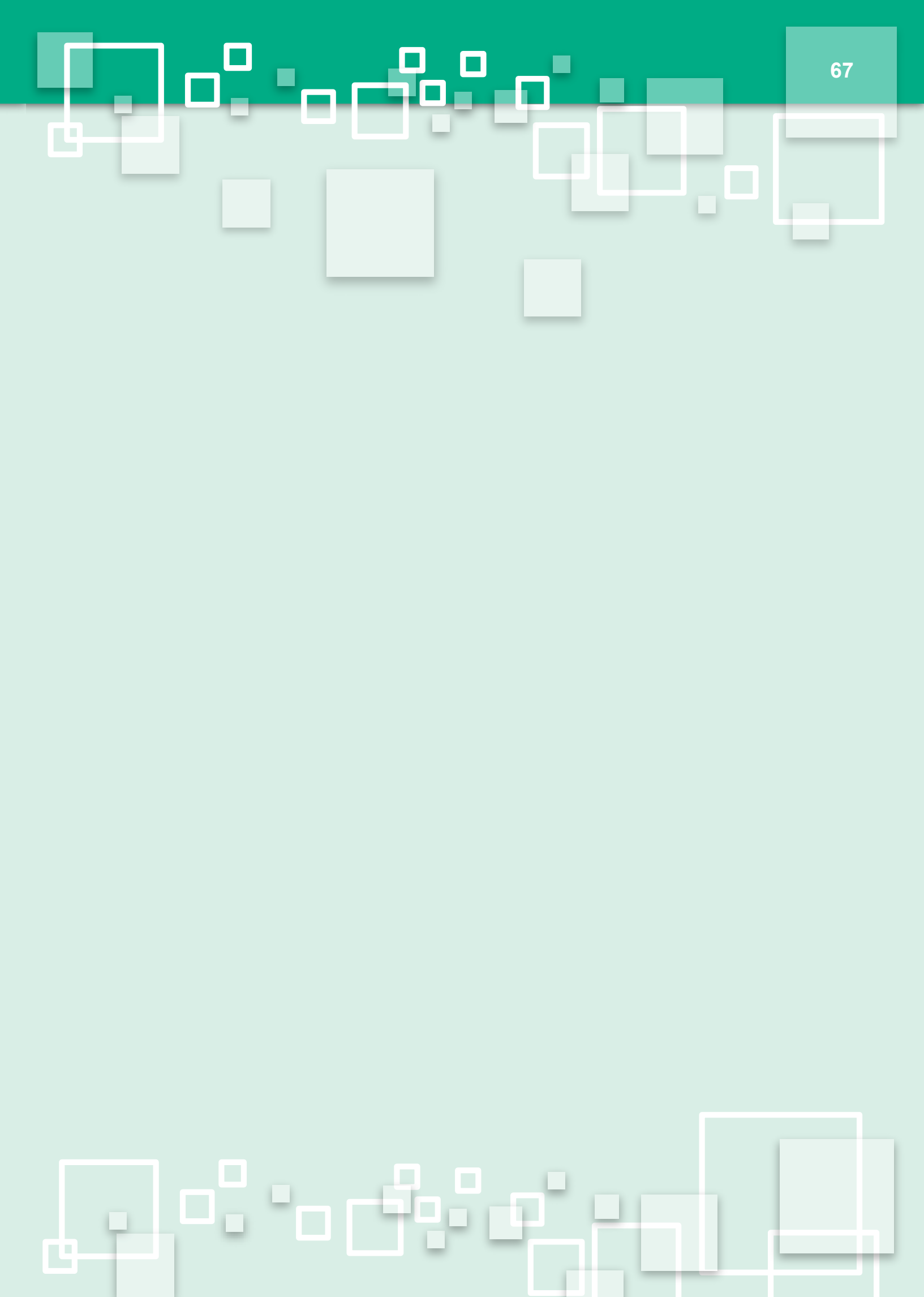
Source: State Statistical Office

The tabular and graphic display do not provide a complete picture of the distribution of costs, or whether a part of the planned funds in the Program for investment in environment has been spent on the implementation of projects by non-governmental and non-profit sector and civil society organizations for environment, as well as for the support of vulnerable groups. However, it can be noted that in the dedication that were analysed, costs dedicated to Circulatory system for supplying water and Waste management are allocated over 70% of funds which can be an indicator that investments in new and in the maintainece of the existing public infrastructure are a priority. Such use of funds will increase the level of access to drinking water, improved hygiene conditions and waste management, which in the long term would improve the conditions and quality of life of vulnerable groups.

Identification of the environmental protection costs will enable the determination of the response of society to the risks to the environment by providing and requiring services for environmental protection, as well as through the adoption of production and consumption practices aimed at protecting the environment.

This information may help to analyze the scope of activities to protect the environment as well as to determine and emphasize the changea in key areas such as the costs of prevention and reduction of pollution, contribution of the activities for environmental protection, for the economy and transition in technologies to prevent pollution.

A more detailed allocation of investment costs and maintenance costs needs to be done, in order to identify the involvement of NGOs (COs) in the implementation of projects for improvement of the environment with funds obtained from the Program for environmental investments, as well as allocation of funds for printed and electronic media.



6. ACCESS TO ENVIRONMENTAL INFORMATION, PRINTED AND ELECTRONIC MEDIA AND THE ENVIRONMENT

6.1 Access to environmental information

Information in the area of the environment is any type of information in written, visual, electronic or other material form.¹⁴

Free access to information and environmental data is a longstanding desire of the public in almost all European countries, while it dates since the UN Conference on the Human Environment in Stockholm in 1972, if not before.

The right of access to environmental information is constitutionally¹⁵ guaranteed and it's one of the fundamental principles of the Law on Environment¹⁶ as well as the requirement of the Aarhus Convention on access to environmental information, public participation in decision-making and access to justice.

Conditions, manner and procedure for exercising free access to public information is stipulated in the Law on Free Access to Public Information ("Official. Gazette" no. 13/06, 86/08, 6/10, 42 / 14, 148/15).

Everyone has the right of access to environmental information without having to prove their interest. The right of access to information is exercised in the manner specified by the Law¹⁷ on Environment, and this right belongs to all applicants in the same manner and under the same conditions and they are equal in their accomplishment.

The right of access to environmental information shall be exercised in respect of all information in written, visual, audio, electronic or any other available form, pertaining to:

1. The situation of the mediums and the areas of the environment, such as air and atmosphere, water, soil, land, biological and landscape diversity, including genetically modified organisms, as well as the interaction among these elements;
2. Factors such as materials, energy, nuclear fuels and nuclear energy, noise, radiation or waste, including radioactive waste, emissions and other forms of releases into the environment that affect or could affect the mediums and areas of environment and human life and health;
3. The measures, including administrative measures, such as policy, legislation, plans, programs, contracts relating to matters related to the environment and the activities that can directly or indirectly influence on the mediums, areas and factors of environment, as well as the measures or activities designed to protect those elements;
4. Reports on the implementation of laws and other regulations and acts regarding the environment;
5. The cost-benefit analysis, and other financial and economic analysis and assumptions which are used within the framework of the undertaken measures and activities for protection and promotion of the environment, and
6. Conditions related to the life, health and safety of people, food safety including the impact

¹⁴ **Article 5** ("Off. Gazette of the RM" no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 44/15)

¹⁵ **Article 16** (3) – Free access to information, freedom to receive and to transfer information is guaranteed

¹⁶ The Principle of public participation and access to information

¹⁷ **Article 51** – Access to information

of pollution in the food chain, living conditions of people, sites of importance to culture and built structures, the extent to which they are under the influence or could be under the influence by the mediums and the areas of environment or through the impact of such mediums and areas on any condition of the aforementioned elements and factors.

Obligation to provide information on the environment have all subjects that possess environmental information, such as the Government and the state administration, bodies of the municipality, the City of Skopje and the municipalities in the City of Skopje, legal and physical entities, who in accordance with the law, are entrusted with public authorizations, including special duties, activities and services in the environmental and/or legal and physical entities who, by virtue of a contract, conduct activity or service of public interest in the area of environment. Entities, depending to their competence, are obliged to ensure dissemination, public accessibility and maintenance of information on environmental issues which they possess or which are held on their behalf in forms and formats that are easy to reproduce and to become available through electronic communication networks.

The Government of the Republic of Macedonia, upon proposal of the state administration body responsible for environmental affairs, publishes and maintains a list of entities who own or who possess information concerning environmental in the Decision for publishing the list of entities who possess or for whom are possessed information on the environment ("Off. Gazette" no. 82/07). The List specifies the information which is possessed by each of these entities.

According to this decision the Department of Public Communication (DPC) is responsible for sharing information with the public and for cooperation with printed and electronic media, governmental and non-governmental organizations, as well as for raising public awareness and education. DPC was established in January 1999 as the Office of Public Relations at the recommendation and with financial support from the European Union. It consists of divisions: Division of Public Relations and Division for raising public awareness and education. The main role of DPC is: to

- Ensure transparency and public availability of information on various aspects of environmental protection;
- Promotion of the education in the area of environmental protection, a better understanding of it, by involvement in various scientific and educational programs;
- Increase the public awareness and understanding of key environmental issues and options for possible solutions in order to improve environmental conditions;
- Obtain useful information from citizens and organizations that have personal and specialized knowledge of the resource and environmental problems, which otherwise cannot be obtained;
- Inform for approved decisions on environmental priorities and solutions, and to involve the public in the decision-making;
- Develop a database of relevant institutions, organizations, businesses and individuals, necessary information and implementation of certain processes in the environment;
- Prepare information and to inform the media on activities by: preparing announcements, public addresses, information from events and photos and their distribution to the media.
- Organize meetings with the NGOs

The basic principle of work of the Division is two-way communication, respectively providing and receiving information from the public, based on the **Aarhus Convention and the Law on Free Access to Public Information**.

The non-governmental sector established the so called Coalition - Aarhus family in the Republic

of Macedonia (a network of non-governmental organizations that work in the implementation of the Aarhus Convention) in order to implement the objectives of the Convention and to strengthen the role of non-governmental organizations in its implementation.

The Aarhus Convention as an international agreement is one of the most important instruments for the protection of citizens right to healthy environment. The public has the right and need to be informed, to participate in deciding on issues of environmental protection and to have free access to them. The implementation of the Aarhus Convention enables improved access to information, increasing public participation in decision-making, thus improving the quality of decisions, and that will result in improved quality of the environment. The implementation of the Aarhus Convention contributes to the protection of the right of every person of present and future generations to live in an environment which is proper to his health and well-being and to provide access rights to information, public participation in decision making and access to justice on issues related to environmental protection.

MEPP cooperation with NGOs (COs) which operate in the area of environment is realized in a number of ways: by financial support of their projects, technical assistance, and provision of information and data for their needs. It is also carried out by the involvement of COs in working groups drafting new legislation, programs, policies, projects and activities.

The request for information can be rejected in certain cases only. The bodies specified by the Law have the obligation to collect and release environmental information within the scope of their operations.

The minister heading the state administration body responsible for environmental affairs shall prescribe the manner and procedure of providing access to information about environmental in the Regulation on the manner and procedure for providing access to information concerning the environment ("Official Gazette of the RM" no. 93/07).

MEPP has a legal obligation to disseminate information about the environment in accordance with the Law on waste, Law on nature protection; Law on air quality and the Law on waters.

Macedonian public, whose awareness of the environment is growing, demands to be informed about their environment, about issues related to the environment and the measures taken to prevent, mitigate and eliminate the environmental problems. Taking into consideration the public nature of the information, such request should be answered not only by providing relevant information in a timely manner, but also by their active promotion and interpretation, with the ultimate goal to educate the public and build the awareness of public about the situation around them, as well as to encourage their participation in the protection and preservation of the environment. In order to coordinate all relevant information, to implement systematization and standardization of such information, and to ensure the necessary transparency as well as delivery to the end user, the Macedonian Information Centre for Environment was established in April 1998 (MICE).

MEPP is the focal point for environmental data in the country. Therefore, various methods of information dissemination are needed. MEPP has reporting obligations towards international bodies: EEA, UNECE, DENARSTAT, WHO. Reporting obligations, both national and international, are conducted by MICE.

MICE is trying to introduce Macedonian EIONET node as a general tool for the exchange of information with all institutions, NGOs, stakeholders and others.

The work of the Macedonian Information Centre of Environment is implemented through four divisions:

- Division for monitoring of ambient air quality

The Division for monitoring ambient air quality manages with the State Automatic Monitoring System for Air Quality (SAMSAQ). SAMSAQ consists of 17 *automatic monitoring stations* for ambient air quality that are installed in the following cities: 5 in Skopje, two in Bitola, Veles and Ilinden municipality one in Kicevo, Kumanovo, Kocani, Tetovo and Kavadarci and village Lazaropole. Within SAMSAQ operate also 10 samplers monitoring of suspended particles with size of 10 micrometers and a calibration laboratory.

- Unit for cadastre and modeling
- Unit for analysis and reporting
- Unit for Information Technology

Macedonian Information Centre for Environment every two years prepares, updates and amends the adopted National environmental indicators.

MICE sends, on daily basis, general information on air pollution obtained by the automatic monitoring system of air pollution to the City center for information and alert in Skopje. MICE also prepares monthly and annual reports on the basis of the processed data. Printed reports are submitted to the RBPH and DHM. Official reports are available in the Department of Public Communication (DPC) for different stakeholders and on the web site of the MEPP. Macedonian Information Centre for Environment in cooperation with the State Statistical Office prepares Statistics on environment. MICE, in accordance with the Law on Environment, is obliged to prepare a National list of indicators. Indicators are publicly available. Reports are often prepared at the request of non-governmental organizations, students, scientists and others.

Presentation of the data and information relating to the environment is done through the web site of the MEPP - www.moepp.gov.mk.

On the web site are found: Reports (monthly, annual) of all mediums that are processed in the MICE, Events/Campaigns organized by the Ministry, Laws/Bylaws in the area of environment, News - Daily information on air quality, announcements etc.

An analysis of the web site of the MEPP for the period 2014 to 2016 (the period when the new web site of the MEPP) has been made, and below are the results for the number of reported events and press releases for the same period.¹⁸

¹⁸ **Source:** Archive of the MEPP web site until 11.03.2016

Table 3 Events published in the MEPP web site

Year	Number of published events in the MEPP web site	Summary (selection) of the published events
2014	40	<ul style="list-style-type: none"> • Launching of the System for wastewater management in the Prespa Lake • Intensifying the cooperation with China in environmental protection • Environmental Quiz in Kavadarci • Third public presentation of the Plan for watershed of Bregalnica management • CONFERENCE: Packaging and packaging waste management – How to fulfill National objectives? • Plan for management with the watershed of river Strumica is being prepared
2015	144	<ul style="list-style-type: none"> • The Government adopted conclusions and recommendations related to air pollution • RECOMMENDATIONS of the Ministry of environment and physical planning in case of exceeding the PM10 particle concentrations by 50 µg/m³ in five consecutive days • SHORT-TERM MEASURES in case of exceeding the PM10 particle concentrations by 50 µg/m³ in five consecutive days • Strengthening the cooperation between the local and central government in dealing with the air pollution • Launching of the implementation phase of the Project for cross-border management with the basin of river Drim • The Minister Izairi participates in 76th session of the Committee on Housing and Land Management of UNECE
2016	18	<ul style="list-style-type: none"> • Opening the workshop on cross-border implementation of the legislation on waters and protected natural areas • Construction of another section of the secondary sewage network in Saraj • Meeting of the Steering Committee of the project for construction of wastewater treatment plant in Kocani • Presentation of the Initial Report for the characterization of Prespa, Ohrid and Skadar Lake • Launch of the project for strengthening the administrative capacities for transposition of the New Directive on industrial emissions

Table 4 Press releases published in the MEPP web site

Year	Number of published events in the MEPP web site	Summary (selection) of published press releases
2014	16	<ul style="list-style-type: none"> • Information related to the bags for transportation of goods • Press Release – Decision for implementation of the strategic assessment of the planning document – National Strategy on Biodiversity with the Action Plan • Information for Media - Activities of Minister meetings, activities and actions, starting the operation of infrastructural facilities, speeches at conferences and related meetings
2015	144	<ul style="list-style-type: none"> • Information for Media - Activities of Minister meetings, activities and actions, starting the operation of infrastructural facilities, speeches at conferences and related meetings, press conferences • Information for photo contest on the topic: effects of the climate change • Organized public debate about declaring the Shar Mountain a National Park • Initial meeting of the Project “Stabilization of greenhouse gases emissions from road transportation through double reduction of fuel consumption: regional implementation of the global initiative for fuel management“ • Visit of parties of the United Nation Framework Convention on climate change (COP 21) • Award of the prizes for best works of the participants in the photo contest “Act Now” and the competition for media “Combating climate change”
2016	14	<ul style="list-style-type: none"> • Information on the photo contest on the topic effects of climate change • Information about a public hearing on the Assessment Study of influence on the environment for the Project: Wastewater treatment plant in the territory of Kicevo • Public debate on the Report on strategic environmental assessment of the implementation of the Strategy for Environment and Climate Changes (2014-2020) (draft) • Notification of amendments to the Law on Waste Management • Call for a public debate 13.03.2015. • PUBLIC INVITATION For collecting bids for the concession to use the water for electrical energy production from 37 small hydro plants in the basins of the rivers Vardar, Treska, Bregalnica, Strumica and Black Drin • Competition for the allocation of funds for financing and implementation of programs, projects and other activities in the area of environment for 2016 • Decision to perform a strategic assessment

In the context of participatory democracy, public participation, non-governmental organizations, civil environmental organizations in order to improve the environment requires significant communication efforts.

In the broadest sense, the purpose of effective communication environment between the MEPP as a leading state and government institution of environment and environmental NGOs (COs) is to facilitate the process of environmental protection and to improve the current environmental situation. The needs of communication range from understanding the environmental situation in the country to transposition of the environmental standards of the EU: explanation of the new legislation meaning, reception of comments from the public, the implementation of legislation, assessing the impact on

the environment, providing funds for investments in environment, motivating the public to change their behavior and many others.

In accordance with the Strategy for environmental communication in assessing communication in the environment sector, there are two basic types of communication: (1) informal communication that takes place as a result of the current need for certain information necessary to complete a specific task; (2) strategic communication for general institutional issues, current projects, strategic issues etc.

According to the Strategy, the most often identified problem by the key participants in this communication is the lack of information on the activities taking place in the area of environment. Heads of sectors at the MEPP do not consider themselves well informed about current projects, while the other horizontal stakeholders claim to be even less familiar with the activities of the others about issues in the area of environment. Another problem is the apparent lack of coordination in the MEPP as well as in the country at large.

6.2 Media, news (articles) and environmental protection

The work of the media in the Republic of Macedonia is regulated by the Law on media ("Official Gazette of the Republic of Macedonia" no.184/2013 and 13/2014) and the Law on Audio and Audiovisual Media Services ("Official Gazette" no. 184/2013, 13/2014, 44/2014, 101/2014 and 132/2014).

This analysis is not intended to comment or interpret the implementation of the two laws and by-laws arising from these laws by the considered media, but it aims to establish the number of published news (articles) and to some extent to evaluate them (sort) according to topics, the content and source of information in the news (articles) related to environmental protection, published in electronic, printed and digital media in Macedonia.

A prerequisite for a quality story of environment is that the selected article should contain a group of specifications that serve as signs of recognition:

- **Sources of information:** access to information (primary, secondary source), level of information of the journalist, use of multiple sources;
- **Accuracy:** the reliability of the source the information are obtained from, credibility of the source;
- **Extensiveness:** comprehensiveness of the topic with precise data, graphics, photographs, not too professional so that everyone can understand it;
- **Impartiality:** willingness to speak openly about environmental issues, particularly those that cause problems to human health;
- **Quality of the title** – approximation to readers and attracting more attention;
- **The relevance of the topic** – tracking the modern trends in the area
- Complete or partial transfer of news (article) from other media - the cases of plagiarism are not considered in terms of copyright but as an indicator of the relevance of the topic among the population and the possibility of increasing the number of articles in the field of environment published in the media .

Environmental stories are often political and economic by nature. The media represent a powerful communication channel through which companies, government organizations and LGUs

and environmental organizations influence on the public, in order to have truthful transmission of information to the general population it is necessary the news (article) to have the above mentioned specifics.

While the big news come from large companies, well-known scientists, most vibrant news mostly come from the communities and individuals that contribute to improvement or face with the problem of a healthy environment.

6.2.1 Released news (articles) in the media related to environmental protection and analysis of topics in the area of environment in the published articles

In order to prepare the analysis of the situation in the field of environmental investigative journalism, an analysis of the number of news related to environmental protection published in digital (web), printed and electronic media was conducted.

The analysis contains the number and topics of published articles, related to environmental protection, in the media in Macedonia in the period February 2015 to March 2016 (a period of 1 year). Given the limited time for this activity and the inability to monitor contributions published in the longer term, the method of exploring digital (web) archives of electronic, printed and digital media was applied.

Analysis of the number and topics of published articles on these media (detailed list of investigated media is given in Annex no. 3 of this report to analyze the situation) was conducted:

- 14 national and local TV stations (in Macedonian and Albanian language)
- 7 printed media that published nationally (in Macedonian and Albanian language), and
- 92 digital media (Macedonian and Albanian language).

Regarding the topic of the published articles related to environmental protection, they were divided into several groups in order to determine the quantitative presence of the following topics:

- Activities of NGOs (COs) for environmental protection;
- Activities of LGUs and MEPP;
- Political conferences on environmental protection and the environment mediums;
- Environmental education;
- Modern techniques and technologies for environmental protection;
- Climate change;
- Urban and physical planning;
- Protection of air;
- Protection of water (capture and wastewater treatment);
- Protection of waters (drinking water and water management);
- Waste management, and
- Protection of natural resources and biodiversity

In the analysis were found 1813 news (articles) related to environmental protection (partial or full articles transferred from other media were not taken into account).

The number of news by **the media type is as follows:**

1. National and local TV stations (number of tested media: 14): 309 news,
2. Press media (number of examined media: 8) 278 news,
3. Digital media (web pages) 1236 news.

Taking into consideration that environmental protection is an interdisciplinary area, many of the

news can be distributed in more than one group (thematic area) so in the next section is a conclusion about the scope and coverage of the thematic areas by the media according to the dominance of theme in the story. Display of the percentage of stories in the media according to the above topics is presented in the next Figure (Figure 18).

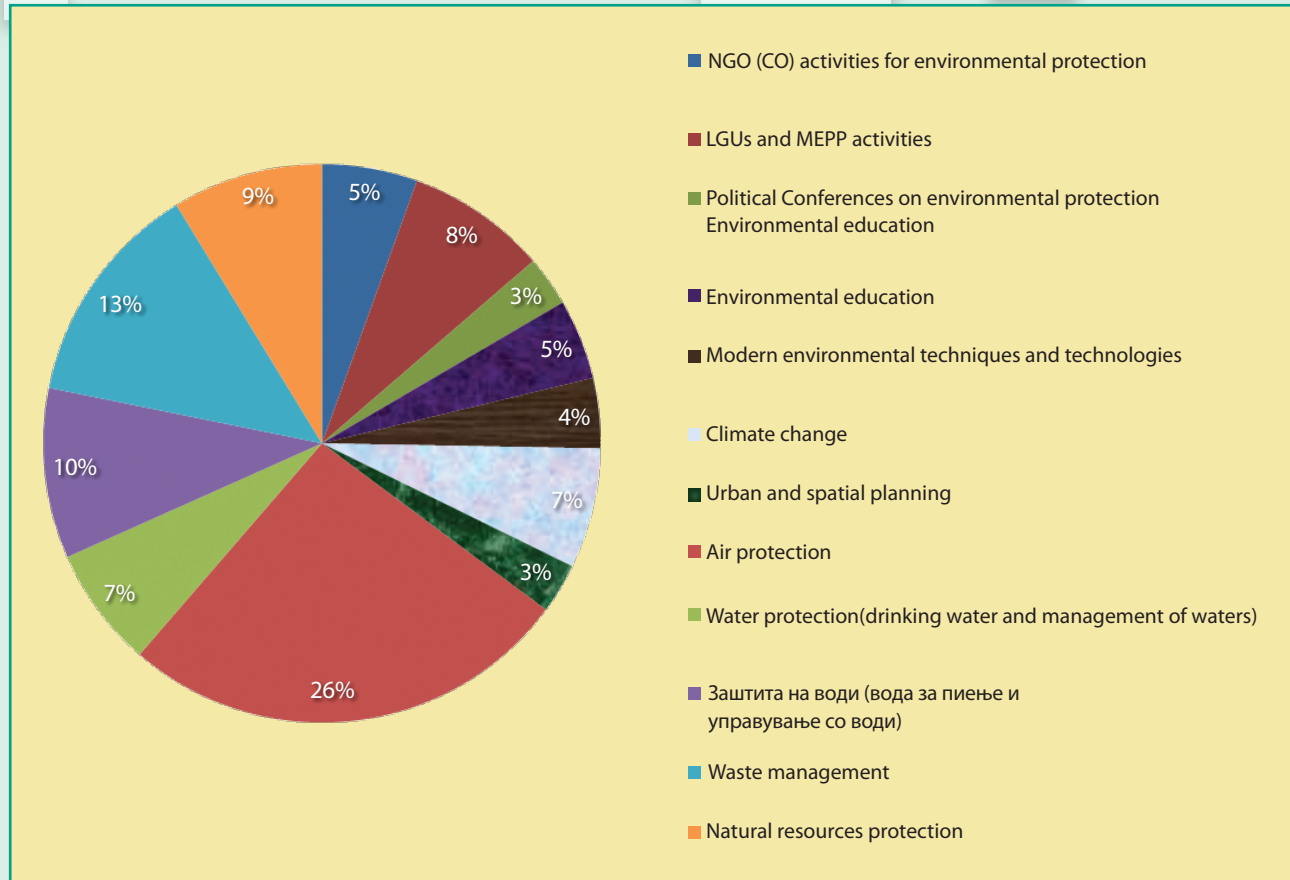


Figure 18 Display of the percentage of stories in the media according to the above topics

Most common are the news (articles) for the protection and the quality of air especially in the months of winter season (November 2015-219 news, December 2015-267 news, in February 2016-293 news). The news is almost daily announcement of the values of monitored parameters of air pollutants, their exceedings, based on results from the State automatic monitoring system for air quality (SAMSAQ)¹⁹. They are followed by recommendations and measures for protection of the population in the days when the limit values are exceeded, comments on the impact of air pollution on the human health based on the recommendations of the World Health Organization, the Institute for Public Health and representatives of primary and secondary health care, and non-governmental organization representatives. In that context, considering the daily values of air quality (air pollutants) in Skopje, Tetovo, Kicevo, Bitola and the connection of the industry with the air quality in cities. Most of the articles provide information about the activities of the competent authorities related to emissions from the plant in Jegunovce (Jugohrom Ferroalloys Ltd.), for which were prepared detailed comparisons of emissions with the impacts on human health based on the annual reports of the Institute of Public Health, notifications for the actions of the authorities and the process of obtaining integrated environmental permit. A large number of articles that report the statements

¹⁹ <http://airquality.moepp.gov.mk/>

about the measures taken against pollution (emissions of pollutants in the air) and for the process of meeting the requirements of MEPP for Integrated Control and Prevention of Pollution of the factory in the grounds of the former Skopje Iron Works – Maksteel, as well as about the impacts of the operation of facilities for electricity production from fossil fuels AD ELEM in Bitola and Kicevo. Some articles are encouraged by the activities (protests, conferences and debates) and the requirements of the non-governmental organizations (COs) against air pollution, initiatives for monitoring ambient air quality and precise requirements for measures to tackle air pollutants (stationary and mobile sources of emissions).

The analysis confirmed that a large number of articles of this group (protection and air quality) are transmitted partially or entirely from other media not including additional sources of information and using sensational headlines.

Climate change and greenhouse gas emissions from industry, traffic and transportation are usually not subject to review and comparison of emissions and concentrations of pollutants in the air. For achievements of certain industries in meeting required standards for obtaining Integrated Environmental Permits and best available techniques (BAT) is reported affirmatively but there's a lack of detailed information about reductions and savings, as well as ways of achieving the set up goals.

Climate change is present in reports on activities of non-governmental organizations for implementation of projects (partly supported by donor agencies) for encouraging the public awareness (quizzes, photo contests, etc.), or they are parts of presented results of energy efficiency projects in the industry, reports, plans and strategies for dealing with climate change, combat against desertification by the competent authorities in collaboration with donor agencies and COs are the most often source of information in the articles.

Second most present topic in the area of environmental protection in the media articles is the waste management. Wild dumps and the absence of conditions for waste disposal and lack of environmental culture and behavior in the urban areas and in the nature are usually present in the local electronic and digital media. Problems with the disposal of municipal and other waste in several cities are a regular topic of reporting in the local media articles (the cities of Tetovo, Ohrid, Struga, etc.). However, it should be noted that waste management in these areas is the subject of activities, actions and press conferences of NGOs (COs) and the competent authorities and the operation and management of public communal enterprises, which results in a larger local presentation of the current situation in the area of waste management. Articles in the area of waste management at the local level are also often partly or fully transmitted (taken) from other media (in most of the digital media).

Projects for integrated waste management, for innovative techniques to reduce the amount of waste through reuse and recycling as well as the activities of companies authorized to manage packaging waste are also represented and they are source of information for the articles. Risks and financial resources to deal with hazardous waste and historical waste from former industrial sites are less present and mostly this issue is reported during the presentation of results of implemented projects of COs, MEPP, LGUs and foreign donors that appear as sources.

The topic for the protection of water (drinking water and water management) with the topic of protecting waters (capture and treatment of waste water) is present in the media in approximate proportion with the topic Waste management. Articles related to these two topics for water protection (access to drinking water and water management and the capture and treatment of wastewater) can be described as a promotion aimed for presentation about the construction of infrastructure projects

and preparation of technical documentation by the relevant institutions at the state level, LGUs and donor agencies. Critical reviews about the quality of surface and ground water and the quality of drinking water are scarce and most often they present information on emissions of wastewaters above the permissible limits and the effects of those exceeding of the permissible levels of pollutants and reports by the relevant institutions (SEI authorized inspectors for environment and IPH) and COs for the unavailability or poor quality of drinking water in urban areas (Struga and Gevgelija).

The articles on water management are partially related to the articles on the protection of natural resources and biodiversity that were transmitted by the media. Most of the news dedicated to this topic were supported with sources of information: interviews with representatives of non-governmental organizations, professional and educational institutions or details of the listed studies and researches on the importance of natural resources and protected species and rarities. Articles relate to protected areas in the Republic of Macedonia and the development of planning and project documentation for the construction of power facilities, road and communal infrastructure, development of tourist offer and urbanization (Projects for the construction of dams Lukovo Pole and Boskov Most, urbanization and road infrastructure National Park Galicica and the coastline of lake Ohrid).

Reason and/or source are the viewpoints, decisions and statements of the international financial institutions to finance projects and of the international organizations and associations for protection of biodiversity and environmental protection in general. Small is the presence of contributions to projects for the promotion and ongoing protection of natural resources and protected areas other than the proclaimed National Parks in the Republic of Macedonia.

Urban and spatial planning and arrangement of space is covered by a small number of articles and in cases when there are reactions of citizens and civil society organizations about the manner of deciding or the content of the urban planning documentation. Sources of information are those who prepare and adopt planning and urban documentation through mechanisms of inclusion and consultations with the public and stakeholders, civil society organizations for environmental protection, professional associations of architects and urban planners.

Certain digital and printed media that are specializes in specific areas periodically publish original articles for modern techniques and technologies for environmental protection (Porta 3, web page Build.mk etc.) when planning and construction of buildings, traffic and transport solutions, spatial and urban planning based on applied experience worldwide, energy production from renewable sources and reuse and recycling of waste types. In general the analysis observed that there are media, primarily digital and printed, who treat the topic of environmental protection from their point of view in details. The media usually do not follow up with further analysis of the results of the activities that have been subject of the articles (Legal perspective: web pages - Pravdiko, Academic, economic benefits and policies – Capital, BiznisInfo, Ekonomija 24, impacts of pollution on human health - Zdravstvo24, motor vehicles and environment - Dodajgas, etc.).

Articles reporting on promotional events, activities and actions of the MEPP, independently or in collaboration with donor agencies and non-governmental organizations provide information about events organized on the occasion of the Day of Planet Earth, the Hour of Planet Earth, International day of the environment, biodiversity, the day of tree etc. which are usually announced and marked with video clips, campaigns to raise public awareness and environmental education in the form of lectures, actions in educational institutions, contests, quizzes etc.

Activities and the actions of non-governmental organizations have a larg portion in informing

the public and most often they occur as a source of information in the articles of all analyzed topics for environmental protection. Non-governmental organizations (COs) are the initiators who animate the public by presenting information on the current conditions in the environment, pollution of the environment mediums and the potential impacts of certain projects on the environment. CO activities for environmental protection which are not related to possible or real serious exceedences of emission of pollutants or negative impacts on protected areas and species and are part of the activities for environmental education, the effects of climate change, raise public awareness environmental, health and vulnerability of vulnerable groups due to the lack of quality of life and lack of access to clean environmental media (air, water and soil) are underrepresented in the media.

Reporting on the implementation of activities for environmental protection (excluding the financing of technical documentation and construction of infrastructure facilities for environmental protection that are treated as an opportunity for promotion by investors), control of implementation, inspection supervision and allocation of funds intended for environmental investment by the competent state and local authorities are underrepresented. Underrepresented are also articles on political reactions to the current situation and (lack of) activities for environmental protection and urban planning as well as information submitted draft laws in the field of environmental protection. The prevalence of contributions from public presentations of Studies for assessment of the certain projects effects on the environment and Reports on Strategic Environmental Assessment on draft plans, programs and strategies depends mainly from the location of the planned activities, while the comments (articles) for national strategies for specific areas eg. Strategy for Development of Energy, National Energy Efficiency Strategy, National Biodiversity Strategy and Action Plan are not sufficiently represented.

Educational articles and articles on environment, health and tackling the climate change are less present. There should be greater representation of practical advices through information campaigns and raising public awareness. Articles of savings and benefits of proper waste management, transport and communication, the importance of protecting biodiversity and water and general natural wealth and resources, and practical advices on the right of access to information and guidance for an easier way to access to public information can contribute to further actualization and participation in activities to solve the problems with the environmental protection.

7. ENVIRONMENTAL EDUCATION

7.1 Integration of the Environment in the educational system in Macedonia

The reasons for low environmental awareness are numerous and complex, one of the reasons is the manner and extent of environmental integration into the educational system in Macedonia.

According to the survey conducted within the project “Development of environmental investigative journalism in the Republic of Macedonia” to the question - What is the reason for low awareness of environmental protection in the Republic of Macedonia? 16.67% respondents replied - the under-representation of environmental topics in education.

This chapter gives a brief overview of the integration of environment in the educational system, which are the main factors for this integration, as well as the identification of representation of environmental protection in all areas of education.

Although the development of environmental education (EE) is a relatively long process, the first definition appears in the seventies of the last century (1969).

According to Srbinovski (2004) environmental education is a developmental active learning process in which individuals and groups acquire the necessary knowledge, understanding, attitudes and skills for resolute, motivate, responsible and above all joint action aimed to achieving and maintaining a dynamic equilibrium in the environment.

Environmental education is vital for raising public awareness of environmental protection.

In European Union countries, environmental education took a strong momentum after the Conference in Stokhlom (1972), Belgrade (1975) and in Tbilisi (1977), under which environmental education is essential.

The expression often implies education in the education system, however sometimes it includes efforts to educate the public and other stakeholders (civil organizations, non-governmental sector etc.) via the printed and electronic media, campaigns etc.

A great influence on the quality of the environment has also the culture of the population, and the level of environmental awareness. The level of environmental awareness depends a lot not only on the domestic education/upbringing and culture of living, but also on its representation in the education system; therefore the schools have a major impact on increasing awareness of environmental concerns.

Considering the need for integration in the European Union, our country takes an array of activities, different in scope and content.

One activity is the introduction of the so-called eco-standards in primary schools, which results from the objectives of the Law on primary education (“Official Gazette” no. 103/08, 33/10, 116/10, 156/10, 18/11, 42/11, 51/11, 6/12, 100/12, 24/13, 41/14, 116/14, 135/14, 10/15, 98/15, 145/15) for environmental protection promotion.

Eco-standards that should be integrated in primary education through various curricula and courses include:

- Water;
- Energy;
- Maintenance of the building and healthy environment in school/kindergarten;
- Settled (tidy) yard;
- Waste;

- Biodiversity;
- Transport;
- Health;
- Sustainable development

The level of integration in teaching subjects is not universal indeed it's different for each primary school. Namely every elementary school produces its own environmental curriculum.

The Ministry of education and science on the basis of the conclusions of the Government (December 2009):

- Raising the level of environmental activities in kindergartens and in primary and high schools;
- Introduction of environmental topics in the curricula in line with the appropriate subjects;
- Development of new media products for student participation in the process of environmental education.
- Development of Program "Integration of environmental education in the Macedonian educational system".

The main objective of the Program is successful implementation of the theory into daily practice at work in educational institutions that would influence to raise environmental awareness among current and future generations, for sustainable environmental and financial development and savings not only for kindergartens and schools but also for all those involved, such as municipalities, the Ministry of education and the general public. Successful implementation of the Program that leads to concrete and measurable results requires cooperation and involvement of all institutions, non-governmental organizations, media and individuals involved in the educational process.

The need to strengthen environmental awareness has been recognized also in the Strategic plan of the Ministry of education and science (2015 - 2017).

Encouraging civil society organizations, NGOs for more active cooperation with the MEPP, MTC and MES in the preparation of projects to raise environmental awareness through education about environmental protection is necessary.

8. ACTIVITIES OF THE ENVIRONMENTAL NON-GOVERNMENTAL AND CIVIL ORGANIZATIONS

8.1 Environmental non-governmental and civil organizations

In order to valorize the contribution of civil society in the development of society, the encouragement of pluralism, tolerance and democratic development, Government the Republic of Macedonia in June 16, 2012 adopted the Strategy for cooperation between the Government and civil sector with an Implementation Action Plan 2012-2017. The Strategy for cooperation with civil society 2012-2017 was adopted in accordance with the National Strategy for Integration of the Republic of Macedonia in the European Union where a significant factor in the process of reforms in the country is emphasized the level of realization of cooperation and partnership between government and civil society as well as the government's commitment to develop the sector and strengthen mutual trust. The Strategy is an important document which contains guidelines for the reform processes to be implemented in the next six years and the objectives to be achieved in order to promote, support and advancement of the partnership between government and civil society (associations and foundations) by measures for mutual cooperation strengthening. In 2011 the Government of the Republic of Macedonia established a code of good practices for civil participation in the policy making process whose implementation is followed up by the General Secretariat - organizational unit for cooperation with civil society organizations (hereinafter: the Division for cooperation with the NGOs). Every second year after beginning with the implementation the Code its implementation is evaluated and recommendations for improving the cooperation are made.

The following areas are as determined as priority targets for the period 2012-2017:

1. Developed and sustainable civil society sector
2. Participation in the processes of policy making, adoption of legislation and European Integration
3. Economic development and social cohesion
4. Civic activism and community support
5. Strengthened institutional framework and cooperation practices.

Non-governmental organizations working in the field of environment are very active in Macedonia and they represent the largest single segment of the non-governmental sector. There are between 70 and 100 registered NGOs, but the number of active ones is probably lower. Many of these NGOs carry out numerous projects in the field of environment, usually at the local level, and receive funds from domestic and foreign donor sources. Some NGOs work for decades in the field of the environment, as a result of the established good organizational structure, and they are well organized and active. On the other hand, there are many smaller, less-developed NGOs that do not have the appropriate level of organization.

Uninterrupted flow of relevant, timely and unbiased information and stable, transparent communication with entities holding environmental information will allow some of the less prominent non-governmental organizations get more central and more active role. In order to help the less developed non-governmental organizations, it is necessary to provide capacity building activities,

training and information. Many of them are not part of any “umbrella” group, so they are excluded from many of the available sources of information.

Furthermore, there is obvious rivalry between various NGOs and groups of NGOs, therefore, a central, neutral source of information that will provide a wide range of information on all non-governmental organizations, regardless of their association, is crucial to ensure their effective functioning. Many NGOs seek basic information about project management, organizational details, structures, public relations, training, presentation of information, how to get funds, how to collect information, how to increase public participation in the discussions and decision-making in relation to the environmental issues etc.. Many NGOs are not well informed about the issues in this area in general. Material for sustainable development, climate change, the system of environmental management, consumer behavior, environmental awareness, waste, water, air, hazardous substances etc should be provided to them.

Annex no. 1 provides a list of NGOs.

9. CONCLUSIONS

Based on the above the following conclusions and recommendations aimed to improve the current situation with the institutional structuring, environmental investigative journalism, the NGOs activities, Environmental COs, vulnerable groups and climate change:

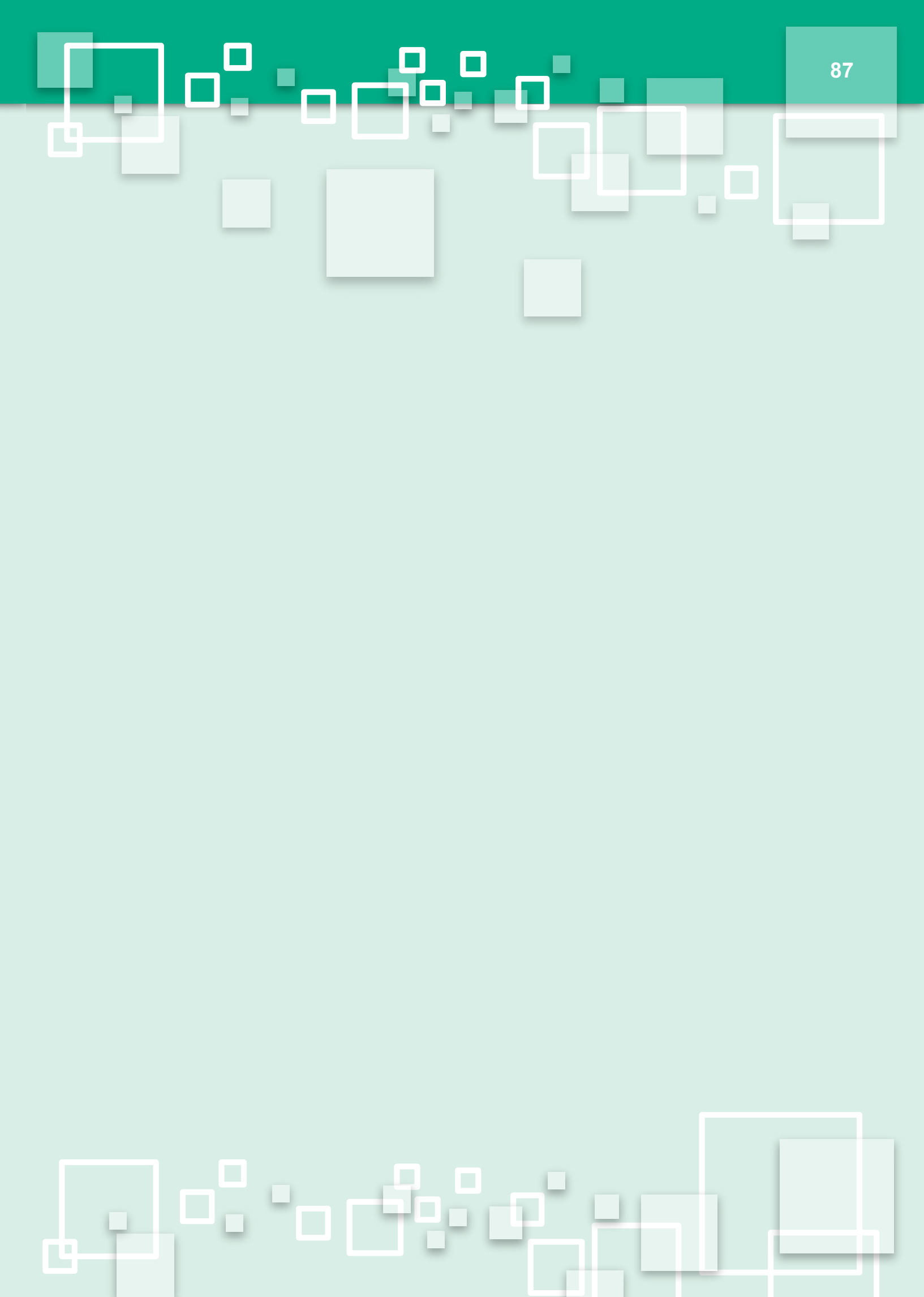
- Greater involvement and information about activities for full implementation and operation of the principle of precaution, preventive actions and the polluter paya and the use of part of the received funds to finance projects to support project activities of environmental NGOs, COs and vulnerable groups;
- It is necessary to establish an adequate system for environmental monitoring and information for quick dissemination (distribution, spreading) of information and their availability to the stakeholders;
- Increased cooperation with civil society and the stakeholders and improvement of public involvement, environmental COs, NGOs in the decision-making process in accordance with the requirements of the Aarhus Convention;
- Integration of the requirements for environmental protection and climate action in other areas of policy making and implementation;
- Further development of activities to raise public awareness through celebrating the days of the environmental calendar, promotions, presentations, workshops, consultative meetings and broadcasting TV programs with environmental topics;
- Monitoring the work of SEI by the media respectively the availability of plans for inspection to the public in accordance with the requirements of the Aarhus Convention and Directive 2003/4/EC on access of the public to environmental information;
- Evaluation of the socio economic vulnerability to climate change in the territory of the entire country in order to undertake adequate measures to mitigate the effects of climate change;
- Based on the estimated vulnerability at the local level non-governmental organizations need to undertake activities for lobbying, implementation, financing and monitoring the implementation of combined measures and activities by MTC and the MEPP for intersectoral collaboration and the creation of so-called "Green" solutions;
- The establishment of inter-municipal cooperation (IMC) will contribute to the strengthening of administrative capacities to reduce the vulnerability of population to climate change. According to the Decision on determining the activities of wider significance and interest for which financial funds will be allocated to encourage IMC ("Off. Gazette" no.71 / 10) there is a possibility of allocating funds to care for socially vulnerable groups. Given that there is an opportunity for IMC in the field of communal (public) works, the connection in many areas can contribute to a greater capacity of authorities at local and regional level (decentralization) and concretization of measures to reduce the vulnerability at the local level;
- The preparation and implementation of local Strategies for tackling climate change will create conditions for the recognition of the priority targets for tackling climate change and reducing vulnerability at the local level according to the identified vulnerable groups (categories of population and communities);
- Introduction of innovative techniques for implementation of social services can be a good example to strengthen cross-sectoral collaboration at national, regional and local level (green support services, green food distribution - day kitchens, green services for companionship

and socialization, green living centers and re-socialization and juveniles etc.).

- With regard to the adoption and enforcement of environment legislation it requires coordination of NGOs and media for participation, implementation and monitoring of the short- and medium-term objectives of the National pProgram for the adoption of the European Union legislation, especially for:
 - National strategy for environment and climate change, i.e. actions to strengthen the capacities in central and local level to implement environmental legislation, compliance with the requirements of EU legislation and to improve implementation of environmental legislation;
 - Preparation of bylaws regarding the national system for inventory of greenhouse gases, as well as development of scenarios for climate change mitigation and finalization and implementation of a national plan to deal with the desertification and mitigating of the effects of drought;
 - Preparation of a analysis of differences in the level of compliance with the national legislation;
 - Monitoring the implementation of the LGU projects for construction of infrastructure facilities in the area of waste and water as well as in other areas funded through annual programs for environmental investments through the MEPP and MTC, as well as through EU funds and other bilateral and multilateral funds;
 - Implementation of campaigns to raise public awareness in the environment, and encouraging educational, research and development studies, programs and projects for the protection and promotion of the environment and nature;
 - Implementation of activities which will be aimed at raising public awareness to improve air quality by developing brochures and promotional materials for air quality;
 - Participation in the preparation of a Program for raising public awareness
- Further researches are needed on the amount and purpose of the fees for the environment. Increment of transparency of purpose and use of fees for the Environment by the MEPP has a visible improvement yet it must be supported and promoted through cooperation with non-governmental organizations and the media;
- Cooperation with Ministry of Environment for transparent determination of uses of fund, such as campaigns to raise public awareness of the environment and improving the quality of ambient air, through the preparation of brochures and promotional materials for air quality, as well as promoting educational, research and development studies, programs and projects for the protection and improvement of the environment and nature;
- Cooperation with LGUs for transparent setting of uses of funds, earmarked donations for municipalities from the funds provided on the basis of compensation for energy production from fossil fuels;
- It's required a detailed analysis of the right of access to environmental information by environmental NGOs and organizations of journalists and media based on the:
 - The situation of the media and the are of environment;
 - Factors that affect or could affect the media and the environment as well as human life and human health;
 - Measures related to matters which are connected to the environment and the activities that can directly or indirectly influence the media, areas and environmental factors, as

well as measures or activities designed to protect those elements;

- Reports on the implementation and analysis of the costs and benefits of the measures and activities for protection and promotion of the environment;
 - Situations related to life and health and safety of people;
 - The manner of presentation of the situation and identification of opportunities and gaps in the communication and dissemination of environmental information under the Aarhus Convention;
- It is necessary to strengthen cooperation with the DCP and the MICE in terms of broader daily reporting about the monitoring and taking measures to protect the environment and human health;
 - It is needed additional education and exchange of experiences for the presentation of information in the area of dealing with the climate change and reducing the socio-economic vulnerability to climate change of the journalists and media by non-governmental organizations in order to increase public awareness and strengthen environmental education at local level;
 - It is necessary to encourage the civil society organizations, non-governmental organizations for more active cooperation with the MEPP, MTC and MES in the preparation of projects to raise environmental awareness through education about environmental protection;
 - Establishment of a central neutral source of information on the situation of the environment which will provide a wide range of information for all non-governmental organizations, regardless their affiliation, which will contribute to their effective functioning;
 - Balanced representation of all media and environmental areas in news articles;
 - Organization of a series of seminars and workshops for journalists who report on environmental topics in order the journalists to improve their skills and publication of environmental articles in the media in order to attract greater public attention for all existing and emerging environmental problems.



ANNEX 1

LIST OF NON-GOVERNMENTAL ORGANIZATIONS (CIVIL ORGANIZATIONS) IN THE REPUBLIC OF MACEDONIA

List of environmental non-governmental organizations (civil organizations) in the Republic of Macedonia

Environmental NGO/CO	Address	Phone	Contact person
EA Areal - Struga	Proleterski brigadi 49, 6330 Struga	046/780-209 070/671-886	Nestor Jauleski
EA Grashnica - Ohrid	Dimitar Vllahov 60, Ohrid	075/842-385 075/557-377 075/142-525	Lazar Nedanoski
EA Natyra - Struga	Karaorman 11, 6330 Struga	046/781-043 070/355-419 070/551-572	Berat Seklja
Scout Association Krste Jon -Green Center- Struga	Partizanska nn, 6330 Struga		Marjan Glavincheski
EA Radozhda - Struga	Radozhda	046/782-815 070/577-247	Skrceski Jovan
Association for activism and development, Aqua	Vlado Maleski nn, Struga	046/782-755 077/884 455	Dime Golabovski
EA Enhalon - Struga	Vojdan Chernodrinski 24, 6330 Struga	046/782- 881 046/786 -740; 075/362-245	Mate Gogoski
EA Zdravec- Berovo	Marshall Tito 100, Berovo	070/771-075 033/471-157	
EA Brica - Berovo	Mosha Pijade 42, Berovo	033/471-314 071/259-758	
Pro Aktiva - Skopje	Korushka 8, F.P. 695	2465-963 076/404 077; 076/404 076	Vlatko Karchichki
Biosfera - Bitola	Dimo Hadzi Dimov 3/	047/550-558 071/578-060	Neshad Azemovski
Molika – Environmental movement, Bitola	F. Postal 17, Bitola	070/547-281	Petar Andonov
Pelagonija - Bitola	Komuna Novaci	047/207-826 071/235-401	Peco Shurbevski
Izvor - Bitola	Pero Nakob nn	047/226-964; 2551-707 070/207-178	
EA Villa Zora - Veles	Dimitar Vlahov nn, Veles	070 606 069	Nenad Kochik
EA Виножите - Stip	Bracha Miladinovi 6, Stip		Zoran Zarinski

G.E. Green Power - Veles	Trajko Panov 22	071 669-226 043-529-682	Igor Smilev
DEM - Skopje	Vasil Gjorgov 39, Skopje	3220-518	Ruska Miceva
European Center for Connection - Gostivar		075/203-061	
Eco Vision - Gostivar		075/202-444	Genci Saliu
PPC - Gostivar		078/352-433 070/534-282 042/216-999	Pajtim Saiti
Ideal - Tetovo		070/632-818	Nesim Velju
Ecolag		071/218-180 046/266-327	Suzana Blazhevaska
Association for nature protection, Skopje	Gorce Petrov no. 26/4-6, Skopje	2035-326	
EA Planetum - Strumica	22 Dekemvri nn, Strumica	034/331-416; 078 374 - 679	Aleksandar Lazarov
EA Ozon - Strumica	Leninova 134	034/331-450 075/428 -205	
EA Echo (Odek) - Kavadarci	Square Marshal Tito, nn Kavadarci		
Bio Eco - Skopje	Briselska 12, Skopje	02/3073-588 3077-077; 070/369-587	Svetozar Petkovski
Macedonian Ecological Association (MEA) - Skopje	F. Postal 162, Skopje	078/393-436; 2402-773; 2402-774	Robertina Brajanovska
Association NOVINA - Skopje	Apostol Guslarot 3, Skopje	02/3124-327 02/3133-765	
Association for research and protection of birds in Macedonia	PMF- Gazi Baba nn, Skopje	02/3117-055 078/254-736	Branko Micevski
Eco-awareness, Skopje	Bul. 11 Oktomvri 125/12	3217-247 ф.3217-246; 072 726-104	Ana Cholovic
Eco-mission Skopje	Naroden Front 25/59	02/3211-965	
Macedonian Green Center		2460-876	Meto Sazdov
Celor and MZC, Radovis		078/462-262	Stole Georgiev
E.A. Eco Vel, Veleshta	Veleshta	070/394-663	Urim Kaba
C.O. Knowledge Harvest, Prilep		070/367-976	Natalija Aceska
EA Pellagonija, Novaci	Novaci	047/207-826; 047/203-060 071/235-401	Peco Shurbevski
Macedonian Ecological Association			Prof. D-r. Mitko Karadelev
Association for protection of animals in the environment – PEACOCK- Skopje	F. Postal 270, Skopje	075/543-836	

EA Studenchica Kichevo	Pirinska 3	045/221-879 ф.045/221-817	
EA Center for permaculture and micro construction, Stip		032/388-325 071/375-200	
Mileucontact		2460-876 075/212-557	Igor Slavkovski
ORT-Training for sustainable development - Skopje	Bul. Jane Sandanski 61/47	3079-235 070/359-882	Biljana Stevanovska
Florozon-Environmental protection and sustainable economic development - Skopje		2779-028 078/430-251	Kiril Ristovski
HA Zelezara - Skopje		070/350-270	Marjan Kalimanovski
Analytica - Skopje	Dame Gruev 7-8/3	3121-948 070/556-821	
CeProSARD-Center for promotion of sustainable agricultural practices and agricultural development – Skopje	Orce Nikolov 175-5/2	3061-391 072/253-004 070/285-001 071/250 901	Svetlana Petrovska Dejan Filipovski
Green Leaf - Bitola	Naselba Klanica 1/15	075/348-322	Blagojche Bozhinovski
Flora-Romanovce	Done Bozhinov 24, Kumanovo		Nako Nikollovski
Civil Committee for development - Probistip	Lenin Square no 2	032/480-200 032/483-131	
Rural development network of the RM		070/343-513	Vesela Lambevskaa
Macedonian Center for environmental protection and promotion		070/276-605	Vesna Strumenikovska
Southern Gate		071/540-042	Katerina Gacevska
Front 21 42		078/433-713	Aleksandra Bujaroska
Eco-awareness The Coalition Natura 2000		3217-245	Nevena Smilevska
Foundation Metamorphozis		3109-325	Filip Stojanovski
ADKOM		2461-971 070/390-964	Lolita Stojanovska
Spring (Izvor) - Kratovo		076/662-266	Milosh Dimitrovski
Center for climate changes - Skopje		071/240-809	Fani Hristovska
Farmers' Federation of the RM		078/678-362	Marija Gosheva

Doser Global Bitola		075/575-088	Tome Krstevski
MDC TI NET		070/367-731	Adrian Toska
Green-box		078/454-640	Jane Dimevski
4x4x4 66 SK		070/34-636 075/428-358	Dushko Hristov Sllobodan Ristevski
Justina - Skopje	str. 55 Skopje		Zegiria Ismaili
Association ADRIATIC BASIN- Ohrid	Bulevar Turistichka 4/1-1, Ohrid	046/268-157 076/40- 381	Radovan Dimitrievski
Association for protection of owls	str. Juri Gagarin 28-5/3	070/999-859	Ana Arsovska
Eco - Natura	str. 184 no. 56a, Tetovo	071/363-764	Nedzmedin Haliti
Golden Hand	str.185, no.7, Tetovo	044/331-902 070/321-269	Gezime Hajredini
Center for Ecological Education (CEE)	Tearce	070/838-148	Metin Muaremi
PLANKTONIUM - Skopje	str. Dositej Obradoviq no. 17/5	072/272-467	Daniela Nelepa Dameska
MRK DIALOGUE	str. Orce Nikollov no. 81/3-2 Skopje	070/786-872	Jasmina Boeavska
Research Association „Ursus speleos“	str. Dobromir Hrs no. 20a- Skopje	5201-147 02/5201-147	Ali Samet
Center for cultural and environmental development	str. Nikolla Teslla no. 16-1/2, Skopje	3072-798 076/461-619	Dragica Llazareviq
ECO GUERILA	Tetovo	072 763 660	Arjanit Dzaferi
Mother and Child (Nëna and fëmija)	Tetovo	071 572 121	Igbale Ferati
Shoq. ECO TEAM EAST	str. Marshall Titov no. 45, Kochani	077/501-757	Goran Hristovski

List of Civil Organizations working with vulnerable groups identified by the project implementers

1. Association Balkan Egyptians in the Republic of Macedonia, Ohrid
2. Center for the Roma community development „The light of Bair“, Bitola
3. Roma Humanitarian Association „Moon“, branch in Debar
4. Association for the rights of Roma women „Trust“, Kichevo
5. Initiative for Social changes, INSOK, Skopje
6. Roma National Center, Kumanovo
7. Ecological Association „Grashnica“, Ohrid
8. Ecological Association „Ohrid“ SOS, Skopje
9. Association for Environmental protection and love of the Dojran lake- Dojran
10. Association for protection of the Katlanovo mud, Katlanovo
11. Citizens Association for small and medium enterprises support „RISIA“ – Skopje
12. Macedonian Center for energetic efficiency- Skopje
13. Center for community development - Tetovo
14. Regional Center for environmental protection RCE - Skopje
15. UNDP, GEF Program or small grants- Skopje
16. UNDP, Skopje

No	Organization	Contact person	Contact info
1	Association for development and integration of young Roma REVIVAL Kichevo	Emin Mamudoski	ro.nvo.prerodba@t-home.mk
2	Center for community support - Resen	Engin Bahtijar	ebahtijar@sonet.com.mk
3	Association for animal and environmental protection "EQUALITY DIGNITY EMPATHY NATURALISM" - Skopje	Elena Nikollovska	eden.org.mk@gmail.com
4	Center for community development – Kichevo	Elizabeta Risteska	ngoscki@sonet.com.mk
5	Regional Center for sustainable development – Gevgelia	Katerina Hadzi Nikolova	khadzinikolova@sonet.com.mk
6	R.R.O.M.A.	Daniela Janevska	romassn@ymail.com
7	Association for cultural identity protection of the Egyptians IZIDA -Resen	Zizo Ljamkovski	izidaresen@gmail.com
8	Humanitarian Organization „HADZEGAN“-Resen	Ferat Shemshadinovski	haceganresen@yahoo.com
9	Association education, culture, arts and sport „Nijazi Bej“-Resen	Dzemaal Mehmed	neksad@yahoo.com
10	Center for sustainable development „Porta“ –Strumica	Mitko Nikolov	mnikolov@sonet.com.mk
11	Macedonian Association for education and socialization – ROMACES Stip	Uljushi Kadriev	romaces_mkd@yahoo.com
12	Center for sustainable development ALKA Skopje	Sueda Bajraktar	alka@alka.org.mk
13	CO for full development of Turks in Eastern part of the RM -Stip	Jonuz Ali	emstip2002@yahoo.com
14	Roma Educational and Cultural Center „TERNIPE“ Delchevo	Ermira Redzepova	ternipemk@yahoo.com
15	Association of Balkan Egyptians in Macedonia	Adnan Ashimovski	zdruzenie.egipcanite@yahoo.com

List of Non-governmental Organization (Civil Organizations) of the journalists and media

No	Organization	Contact preson	Contact
1	Association of Journalists of Macedonia – Skopje	Gazmend Ajdini	gajdini@mdc.org.mk
2	Center Civil Communications – Skopje	German Filkov	gfilkov@ccc.org.mk
3	Center for Media development	Dejan Georgievski	info@mdc.org.mk
4	Council for Ethics in the Media of the Republic of Macedonia	Mirche Adamchevski	info@semm.mk
5	Macedonian Association of Journalists	Slagana Dimiskova	manmkd@mail.com
6	Macedonian Institute for Media	D-r Jasmina Mironski	http://www.mim.org.mk/mk/kontakt
7	Institute for Communication Studies	Bojan Georgievski	info@iks.edu.mk
8	Independent Union of the Media Workers - IUMW	Tamara Chaushidis	ssnm.info@gmail.com
9	Progres – Institute for Social Democracy - Skopje	Sasho Dodovski	saso.dodovski@progres.org.mk

ANNEX 2

LIST OF REGISTERED ENVIRONMENTAL PROJECTS FINANCED WITH FOREIGN DONATIONS

Project	Donor	Amount	Starting Year	Status	Sector
Replacement of the main water pipe made of asbestos-cement in str. Neretva in Berovo and reconstruction of the Water pump in village Rusinovo.	Switzerland	2.500.000,00 MKD	2014	Completed	Water supply and communal activities
Reconstruction of the wastewater sewage system in the settlement Makedonka	Switzerland	2.500.000,00 MKD	2014	Completed	Water supply and communal activities
Modernization and upgrade of the Treatment plant for drinking water in Sivirtepe in Sveti Nikole	Switzerland	2.500.000,00 MKD	2014	Completed	Water supply and communal activities
Increasing the level of Bregalnica river with the construction of a rubber dam	Switzerland	2.500.000,00 MKD	2014	Completed	Water supply and communal activities
Rehabilitation of the Water supply system for village Dolni Lipovik with the reconstruction of two water intakes and construction of a new distribution water pipe	Switzerland	2.254.260,00 MKD	2014	Completed	Water supply and communal activities
Regulation of the river Moroska riverbed and protection from floods in village Morodvis	Switzerland	2.500.000,00 MKD	2014	Completed	Water supply and communal activities
Construction of a new well in Grdovski Orman that will be used for water supply of Kochani	Switzerland	2.468.359,00 MKD	2014	Completed	Water supply and communal activities
Grant scheme for Southwest region support	Germany	3.065.000,00 MKD	2014	Completed	Water supply and communal activities
Technical support to strengthen institutional capacities for approximation and implementation of the environmental legislation in the area of water management	EU Programs - IPA	1.665.400,00 EUR	2013	Completed	Water supply and communal activities
Rivers Without Borders	EU Programs - IPA	499.987,00 EUR	2013	Completed	Water supply and communal activities

Project	Donor	Amount	Starting Year	Status	Sector
Improvement of the water supply of the city of Gostivar	Switzerland	14.475,00 EUR	2013	Completed	Water supply and communal activities
Property management in the water and waste water sector in Southeast Europe	Germany	402.219,00 EUR	2013	Completed	Water supply and communal activities
Supervision of work performance for the investment project for sewage and waste water treatment plant in Prilep, Macedonia	EU Programs - IPA	999.460,00 EUR	2013	Activ	Water supply and communal activities
Improvement of the water supply of the city of Gostivar	Switzerland	2.314.000,00 CHF 196.705,00 CHF 196.705,00 CHF	2013	Completed	Water supply and communal activities
Recycling organic waste and green entrepreneurship in the urban environment to provide public health safety	EU Programs - IPA	125.001,00 EUR	2013	Completed	Water supply and communal activities
Rehabilitation and extension of the sewerage network in Prilep	EU Programs - IPA	6.263.363,73 EUR	2013	Activ	Water supply and communal activities
Reconstruction and rehabilitation of the water treatment plant for drinking water in Stip	Slovenia	415.400,00 EUR	2013	Completed	Water supply and communal activities
Knowledge transfer for Municipality Dojran and adaptation of DEYAK to a new status created by „Kalikratis“ for waste water management in the area of intervention – improvement of citizens life	EU Programs - IPA	309.734,00 EUR	2013	Completed	Water supply and communal activities
Development of mechanisms for sustainable management with the river basins as a precaution measure against the torrential phenomena	EU Programs - IPA	162.054,00 EUR	2013	Completed	Water supply and communal activities
Development of regional plans for waste management and strategic environmental assessment for the east and north-east planning region	EU Programs - IPA	1.140.000,00 EUR	2013	Completed	Water supply and communal activities
Project for development of National Study on water tariffs	EU Programs - IPA	785.000,00 EUR	2013	Completed	Water supply and communal activities

Project	Donor	Amount	Starting Year	Status	Sector
Construction of treatment plant for drinking water in Probitip Municipality	Slovenia	480.000,00 EUR	2013	Completed	Water supply and communal activities
Trans-boundary water resources management	EU Programs - IPA	166.935,22 EUR	2012	Completed	Water supply and communal activities
Management plan for river basin of river Bregalnica	Switzerland	5.270.000,00 CHF	2011	Completed	Water supply and communal activities
Consultant services for the project Waste water treatment plant in Gevgelia	Switzerland	243.860,00 EUR	2011	Activ	Water supply and communal activities
Project for waste oil planning and management	Germany	1.808.350,00 MKD	2011	Completed	Water supply and communal activities
Project for solid waste management improvement in Gevgelia Municipality	Japan	64.000,00 EUR	2011	Completed	Water supply and communal activities
Continuation of activities for underwater cleanup of unexploded ordnances in the Ohrid Lake	USA	73.796,00 USD	2011	Completed	Water supply and communal activities
MEAP – Assistance in the PSOV implementation in Kumanovo	EBOR	25.000,00 EUR	2011	Completed	Water supply and communal activities
Pilot project of biodegradable waste in the Prespa region	Switzerland	781.000,00 CHF	2011	Completed	Water supply and communal activities
Installation of hydraulic stoppers in the Old Bazaar, Chair Municipality	EU Programs - IPA	116.221,00 EUR	2010	Completed	Water supply and communal activities
Purchase of a vehicle for solid waste collection and transportation for the needs of Lozov Municipality	Germany	797.550,00 MKD	2010	Completed	Water supply and communal activities
Plastic recycling project, phase 3	USA	150.000,00 USD	2010	Completed	Water supply and communal activities
Waste water treatment path in Gevgelia	Switzerland	8.663.000,00 EUR	2010	Completed	Water supply and communal activities

Project	Donor	Amount	Starting Year	Status	Sector
Capacity building for implementation of the EU directives on landfills and closure and inspection of illegal landfills	Sweden	1.827.075,00 SEK	2010	Completed	Water supply and communal activities
Promotion of sustainable tourism and environmental protection through partnership	EU Programs - IPA	147.763,00 EUR	2013	Completed	Tourism
Green future for our children	EU Programs - IPA	496.500,00 EUR	2014	Activ	Environmental education and training
Be green, be part of the Guerilla garden Team	EU Programs - IPA	4.498,00 EUR	2014	Completed	Environmental education and training
Education for Nature conservation in the Bregalnica region 2012-2015	Switzerland	31.174.521,00 MKD	2012	Completed	Environmental education and training
Reforestation and environmental activities with students of primary schools in Petrovec Municipality	Japan	208.485,00 EUR	2011	Completed	Environmental education and training
Organization of information campaign: Let me tell you a secret about environment	EU Programs - IPA	9.850,00 EUR	2011	Completed	Environmental education and training
Education, Environment, Europe – united Europe	EU Programs - IPA	299.680,00 EUR	2011	Completed	Environmental education and training
Project for integration of environmental education in the Macedonian educational system	Switzerland	1.970.037,00 CHF	2010	Completed	Environmental education and training
Valorization of renewable energy sources in the cross border area	EU Programs - IPA	94.500,00 EUR	2013	Completed	Environmental policy and administrative management

Project	Donor	Amount	Starting Year	Status	Sector
Nature and people for nature	EU Programs - IPA	77.159,84 EUR	2013	Completed	Environmental policy and administrative management
Project for investment in clean energy	USA	1.725.745,00 USD	2013	Activ	Environmental policy and administrative management
Improvement of the national and natural parks in the cross border area	EU Programs - IPA	203.335,00 EUR	2013	Completed	Environmental policy and administrative management
Solid waste management to a healthier environment in Demir Kapija	Japan	65.684,00 EUR	2013	Completed	Environmental policy and administrative management
Solving the problem of solid waste collection in the Municipality of Kocani	Japan	51.541,00 EUR	2013	Completed	Environmental policy and administrative management
Donation truck for garbage collection	Turkey	53.672,00 EUR	2013	Completed	Environmental policy and administrative management
Enabling activities for facilitation of early action on the implementation of the Stockholm convention on persistent organic pollutants	UNIDO	86.184,00 EUR	2013	Completed	Environmental policy and administrative management
Integrated prevention and control of pollution in Macedonia	Norway	5.130.000,00 NOK	2012	Completed	Environmental policy and administrative management
Inclusion of informal waste collectors into the formal waste management system in Macedonia	EU funds	73.178,00 EUR	2012	Completed	Environmental policy and administrative management
Common structures for monitoring the quality of water resources and public health protection	EU Programs - IPA	137.720,00 EUR	2012	Completed	Environmental policy and administrative management

Project	Donor	Amount	Starting Year	Status	Sector
USAID Project on Municipal strategies of climate change	USA	1.500.000,00 USD	2012	Completed	Environmental policy and administrative management
Bio Rural Tourism	EU Programs	30.968,00 EUR	2012	Completed	Environmental policy and administrative management
Preparation for the conference Rio+20	UNDP	20.000,00 USD	2012	Completed	Environmental policy and administrative management
Financial model development for solid waste management, Southeast Europe	Germany	110.000,00 EUR	2012	Completed	Environmental policy and administrative management
Local communities in the Environmental actions-ENVI	EU Programs - IPA	111.556,00 EUR	2012	Completed	Environmental policy and administrative management
Activities to enable facilitation of early action in the implementation of the Stockholm convention for persistent organic pollutants	UNIDO	86.184,00 USD	2012	Completed	Environmental policy and administrative management
Laboratory for monitoring the measurement data from the highways in the area of environment	EU Programs - IPA	103.173,00 EUR	2011	Completed	Environmental policy and administrative management
Energy is a source for all	UNDP	540.000,00 MKD	2011	Completed	Environmental policy and administrative management
Utilization of the Bulgarian experience in monitoring, reporting and verification of greenhouse gas emissions that are a condition for participation in the schemes with emissions trade in the EU	UNDP	40.000,00 EUR	2011	Completed	Environmental policy and administrative management

Project	Donor	Amount	Starting Year	Status	Sector
Third National Report to the United Nation Convention on climate change	GEF	500.000,00 USD	2011	Completed	Environmental policy and administrative management
Together we built multi eco trust	UNDP	900.000,00 MKD	2011	Completed	Environmental policy and administrative management
Together for Natura 2000	EU Programs - IPA	34.891,00 EUR	2011	Completed	Environmental policy and administrative management
Together for a cleaner environment	UNDP	900.000,00 MKD	2011	Completed	Environmental policy and administrative management
Purchase of equipment for a waste management information system	EU Programs - IPA	130.313,00 EUR	2010	Completed	Environmental policy and administrative management
Inter-municipal center database for environmental management and monitoring, updating and printing a updated LEAP for the Municipalities Negotino and Demir Hisar	UNDP	612.700,00 MKD	2010	Completed	Environmental policy and administrative management
Increased capacities of the municipal administration to enforce the competences in the area of environment in the Municipalities Dolneni and Krivogastani	UNDP	563.000,00 MKD	2010	Completed	Environmental policy and administrative management
Implementation and ratification of the Protocol on Heavy metals and Goteborg POP protocol – implementation phase	Netherlands	94.500,00 USD	2010	Completed	Environmental policy and administrative management
Strengthening the capacities in central and local level for environmental management in the area of air quality	EU Programs - IPA	1.000.000,00 EUR	2010	Completed	Environmental policy and administrative management

Project	Donor	Amount	Starting Year	Status	Sector
Plan for HCFC elimination	Multilateral Fund of the Montreal Protocol	1.030.000,00 USD	2010	Activ	Environmental policy and administrative management
Realization of a university campus with low emissions of gas through implementation of a Climate action plan	Italy	400.000,00 EUR	2010	Completed	Environmental policy and administrative management
EU environmental policies and strategies in Southeast Europe: Capacity building for implementation of the EU policies and strategies in Macedonia, Montenegro and Serbia	EU Programs - IPA	11.929,00 EUR	2010	Completed	Environmental policy and administrative management
Integration of EU technical standards in the area of environment	Germany	250.000,00 EUR	2010	Completed	Environmental policy and administrative management
Advisory services for the implementation of the Law on waters	Germany	250.000,00 EUR	2010	Completed	Environmental policy and administrative management
Support for implementation of strategic assessment of the environmental impact in Macedonia	Netherlands	295.000,00 EUR	2010	Completed	Environmental policy and administrative management
Environmentally sustainable socio-economic development of the rural areas	EU funds	56.816,00 EUR	2012	Completed	Rural development
Enjoying the unique nature – bicycle tourism for nature support	EU Programs - IPA	98.964,00 EUR	2012	Completed	Rural development
Support of Macedonia's revision of the National strategy for biological diversity with an Action plan and preparation of the Fifth National report to the Convention on biological diversity	GEF	220.000,00 USD	2013	Completed	Biological diversity
Traditional knowledge on the cross-boundary network for utilization and protection of the wild and cultivated plant diversity in Eastern Macedonia and Southwest Bulgaria	EU Programs - IPA	88.525,68 EUR	2012	Completed	Biological diversity

Project	Donor	Amount	Starting Year	Status	Sector
Promotion and protection of the biodiversity in the Malesevo mountains		99.953,00 EUR	2012	Completed	Biological diversity
Project for the Prespa Lake protection	Switzerland	4.100.000,00 CHF	2012	Activ	Biological diversity
Biodiversity, Bioinformatics and Biotechnology of marine micro-MciroBi3	Union Programs	295.120,00 EUR	2012	Completed	Biological diversity
Contribution to the biodiversity conservation and enhancement of regional co-operation in the transboundary Pelagonija/Prespa/Ohrid Region	EU Programs - IPA	42.819,00 EUR	2011	Completed	Biological diversity
Wings over the Balkans: Preparation of the Western Balkan countries to implement the EU directive on wild birds	EU Programs - IPA	21.484,00 EUR	2010	Completed	Biological diversity
Environmental recovery for better quality of life	EU Programs - IPA	499.199,96 EUR	2012	Completed	General environmental protection
Joint research for applicable usage of the natural resources preservation and environmental protection in the cross-border region between the municipalities Pehchevo and Simitli	EU Programs - IPA	99.244,74 EUR	2012	Completed	General environmental protection
Program for nature conservation in Macedonia	Switzerland	4.888.635,00 CHF	2011	Activ	General environmental protection
Reasonable utilization of the eco resources in the mountains Golak and Vlaina	EU Programs - IPA	74.663,00 EUR	2011	Completed	General environmental protection
UNEP/GEF Project "Support for the implementation of the national framework on biosafety in the RM"	GEF	407.000,00 USD	2011	Completed	General environmental protection

Project	Donor	Amount	Starting Year	Status	Sector
Integrated sustainable management of the environment by using the system for decision making support	EU Programs - IPA	43.040,00 EUR	2011	Completed	General environmental protection
Activism at work – Enhancement of Macedonian NGO participation in adoption of policies and laws in the area of environment and in monitoring their implementation	EU Programs - IPA	42.973,00 EUR	2011	Completed	General environmental protection
Purchase of integrated system for management of the air quality. Lot 3	EU Programs - IPA	131.000,00 EUR	2011	Completed	General environmental protection
Purchase of monitoring stations for air quality, lot 1	EU Programs - IPA	329.600,00 EUR	2011	Completed	General environmental protection
Purchase of equipment for air quality, lot 2: Purchase of equipment for meteorological monitoring	EU Programs - IPA	62.340,00 EUR	2011	Completed	General environmental protection
Global Environmental Fund: Program - Small grants for Macedonia – GEF PMG Macedonia	GEF	1.200.000,00 USD	2010	Completed	General environmental protection
The role of natural resources in the sustainable rural living in the Western Balkans – distribution of shortcomings and benefits	Norway	360.000,00 NOK	2011	Completed	Environmental research
PROSID	The Union programs	46.729,00 EUR	2011	Completed	Environmental research
Status, environment and utilization of the area of the critically endangered Balkan Lynx (<i>Lynx lynx martionoi</i>) in Macedonia and Albania	Switzerland	66.400,00 CHF	2010	Completed	Environmental research
Study of the seismic hazard for animal systems crossing through the Macedonian-Bulgarian border	NATO (North Atlantic Alliance)	20.000,00 EUR	2010	Completed	Urban development and management

ANNEX 3

LIST OF INVESTIGATED MEDIA

Number	Media	Number of articles
Elektronic Media		
1	MRTV	19
2	Kanal 5	67
3	Alsat M	25
4	Alfa	26
5	TV ART	6
6	Telma	20
7	Stiel	87
8	21 TV	6
9	MRTV 2	4
10	Spektra TV	5
11	Orbis	8
12	24 NEWS	30
13	TVM	6
14	Tera	12
Printed Media		
1	Nova Makedonija	21
2	VEST	11
3	Dnevnik	36
4	Večer	60
5	Utrinski	81
6	Sloboden Peçat	30
7	Lajm	27
8	Koha	12
Digital Media		
1	Mia.mk	138
2	Libertas.mk	17
3	Inbox7.mk	2
4	Emagazin.mk	25
5	A1on.mk	41
6	mkd.mk	28
7	Novatv.mk	11
8	Scoop.mk	1
9	Fox.mk	32
10	Makfax.com.mk	40
11	Factor.mk	13
12	Localno.mk	23
13	Build.mk	8
14	Plusinfo.mk	43
15	Porta3.mk	21
16	Iris.mk	1

17	Telegraf.mk	24
18	Kapital.mk	6
19	Biznisvesti.mk	5
20	Republika.mk	17
21	Biznis info	10
22	Lider.mk	83
23	Kurir.mk	43
24	Denesen.mk	12
25	Almakos.com	22
26	Setaliste.com.mk	8
27	Tocka.com.mk	28
28	Netpress.mk	37
29	Press23.mk	20
30	Radiomof.mk	15
31	Zdravstvo24.mk	10
32	Yllpress.mk	33
33	ldividi.com.mk	37
34	Tetovasot.mk	71
35	1.mk	2
36	Puls24.mk	25
37	Zhurnal.mk	9
38	Ina.com.mk	3
39	Portalb.mk	22
40	Akadenik.mk	1
41	Albeu.mk	3
42	Shkupi24.com	2
43	Shprehja.mk	2
44	Makdenes.org	12
45	Cooltura.mk	6
46	Vistina.mk	3
47	Kirilica.mk	3
48	Skopjeinfo.mk	8
49	Denar.mk	21
50	popularno	4
51	365.mk	1
52	Ohridnews.com	11
53	Botasot.info	4
54	10bez10.com.mk	2
55	Sky.mk	9
56	Pravdiko.mk	4
57	Mknews	3
58	Karas4training.com	3
59	Zase.mk	1
60	Falanga.mk	1
61	Undp.org	1
62	okno	4
63	Shkipmedia.com	8
64	Reporter.mk	24
65	brkajrabota	1
66	Off.net.mk	10
67	Aktuale.mk	2

68	mk.voanews.com	3
69	Ekonomija24.mk	4
70	24strumica.mk	2
71	On.net.mk	2
72	Dodajgas.mk	1
73	Brif.mk	3
74	Telegraf.mk	4
75	Kajgana.com.mk	1
76	Kumanovonews.com	3
77	It.com.mk	2
78	Duma.mk	5
79	Pozitiv.mk	2
80	Motika.mk	4
81	Focus.mk	6
82	Automedia.mk	1
83	Fakulteti.mk	4
84	Kumanovskimuabeti.mk	2
85	dv.com.mk	1
86	Avtomagazin.mk	2
87	Zazabava.mk	1
88	Enauka.mk	1
89	Think.mk	1
90	Radiovala.com	7
91	Kanal77.mk	11
92	RadioMk.com	3
	Total	1813

Analysis period: February 2015- March 2016 (as of March 13, 2016)

Sources: Digital (web) archives of the electronic, printed and digital media that are in this list

