



# EU structural and cohesion funds

A report for the Norwegian Ministry of the Environment  
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Report prepared by The Brussels Office SA for the Norwegian Ministry of the Environment

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## 1. Introduction

This report has been prepared by The Brussels Office SA on request from the Norwegian Ministry of the Environment with the aim of obtaining a better understanding of the Structural Funds and how they are used on environmental and cultural heritage issues in the following ten EU Member States; Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

The underlying objective of this report is to provide insights into the procedures connected to the mechanism governing the European Union's Structural Funds and how the projects are carried out. The report may also be useful for Norwegian representatives in the ten selected Member States in strengthening the relationship at an operational level.

First, the report is an introduction to the EU Structural Funds providing background information about how the EU distributes the funds. Second, the report examines how each of the ten respective Member States distributes these funds. The findings are presented in a country report, one for each of the respective Member States. For more information on the structure of the country reports please see chapter "The structure of the country reports".

### 1.1. What are the Structural Funds?

The Structural Funds were established by the European Union in order to reduce the gap in the different regions' levels of development within the EU. The Structural funding period for 2007-2013 follows and thus enhances the Lisbon Strategy. The Lisbon Strategy, put down by the European Union in 2000, aims at making the EU *"the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010"*. The Structural Funds are divided into three entities. These are:

1. **The Cohesion Fund (CF)** - its main purpose is to reduce economic and social shortfall, as well as to stabilise the economy in Member States with a Gross National Income (GNI) per inhabitant which is 90 % less than the Community average. The Cohesion Fund therefore finances Trans-European Transport Networks and activities related to the environment<sup>1</sup>.
2. **European regional development fund (ERDF)** – its main purpose is to strengthen the economic and social cohesion within the EU by correcting imbalances between regions. The ERDF finances aid related to the creation of sustainable employment, infrastructure, financial instruments to support regional and local development and technical assistance measures.
3. **European social fund (ESF)** – aims at improving employment and job opportunities in the EU. The ESF finances activities related to adapting workers and enterprises, helping job seekers finding employment, combating discrimination, supporting social integration of disadvantaged people and strengthening human capital.

The Structural Funds have laid down three objectives for the period 2007-2013. These objectives are:

- » Convergence
- » Regional competitiveness and employment
- » European territorial cooperation

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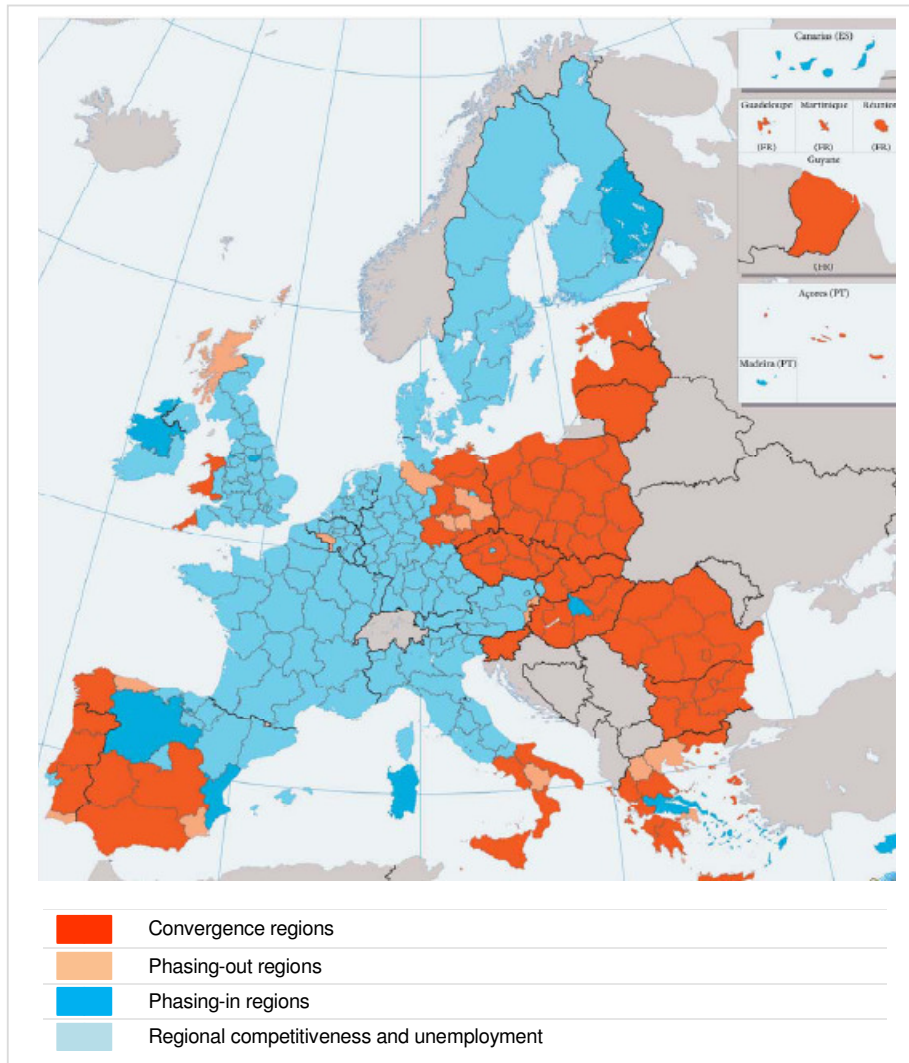
<sup>1</sup> [http://ec.europa.eu/regional\\_policy/funds/cf/index\\_en.htm](http://ec.europa.eu/regional_policy/funds/cf/index_en.htm)

### 1.1.1. Convergence

The convergence objective aims at stimulating growth and employment in the least developed regions of the European Union. The regions whose per capita gross domestic product (GDP) is less than 75 percent of the Community average, will receive funding under this objective. These regions are referred to as the Nomenclature of Territorial Units for Statistics (NUTS)<sup>2</sup> regions<sup>3</sup>.

Some European regions would fall under NUTS 2 region criteria for the 2007-2013 period, if the average GDP was measured among the EU-15 members and not the EU-25. These regions will for the 2007-2013 period be categorized as phasing-out regions. A phasing-in region on the other hand, is a region which were covered by the convergence objective but whose GDP exceeds 75 percent of the EU-15 GDP average. These regions are eligible for the transitional support of the regional competitiveness and employment objective. The Structural Funds represent the EU's chief instrument for financing the convergence objective. The map below shows the regions which receives funding for the convergence objective for the 2007-2013 period. The regions marked with red are within the scope of the convergence objective. The orange regions are phasing out-regions, while the dark blue regions are phasing in. The blue coloured regions will receive funding under the regional competitiveness and employment objective.

**Figure 1. Cohesion policy 2007-2013: Phase-in and phase-out** (Source: European Commission)



<sup>2</sup> NUTS was created by the European Office for Statistics (Eurostat) in order to create a single and coherent structure of territorial distribution. It has been used in the Community legislation pertaining to the Structural Funds since 1988.

<sup>3</sup> [http://ec.europa.eu/eurostat/ramon/nuts/basicnuts\\_regions\\_en.html](http://ec.europa.eu/eurostat/ramon/nuts/basicnuts_regions_en.html)

### 1.1.2. Regional competitiveness and employment

The regional competitiveness and employment objective aims at reinforcing the regions' competitiveness, attractiveness as well as employment. The objective covers all regions within the European Union which is not eligible for the convergence objective. This objective is funded by the European Regional Development Fund and the European Social Fund, but not the Cohesion Fund.

### 1.1.3. European territorial cooperation

The European territorial cooperation objective aims at reinforcing cooperation at a cross-border, transnational and interregional level, commonly known as INTERREG IV. There are different eligible levels for the different goals. The interregional cooperation fund is eligible for all European regions while cross-border cooperation and transnational cooperation are subjugated to other criteria, creating the basis for eligibility (Commission decision 2006/770/EC). The latter objective is financed only by the European Regional Development Fund. The aim of INTERREG IV is to strengthen economic and social cohesion throughout the European Union, by fostering a balanced development of the continent through cross-border, transnational and interregional cooperation. Special emphasis has been placed on integrating remote regions and those which share external borders with the candidate countries.

## 1.2. The structure

For the 2000-2006 period, the Structural Fund consisted of four different funds: (1) the European regional development fund (ERDF); (2) the European social fund (ESF); (3) the European Agricultural Guidance and Guarantee Fund (EAGGF) and finally (4) the Financial Instrument for Fisheries Guidance (FIFG). For the period 2007-2013 the EAGGF and FIFG have been replaced by European Agriculture Fund for Rural Development (EAFRD) and European Fisheries Fund (EFF) which are funds now separated from the Structural Funds. The ERDF and ESF are still part of the Structural Funds and the Cohesion Fund is a new entity of the Structural Funds.

For activities concerning the environment or cultural heritage, the CF and the ERDF are of greatest relevance on an operational level. The EU also contributes with other funding systems which do not form part of the Structural Funds, but which concern environmental and cultural heritage aspects. Once the National Strategic Reference Framework (NSRF) and Operational Programmes (OP) are adopted by the European Commission it is mainly up to the Member States to distribute and control the financial aid within the scope of the different NSRFs and OPs.

## 1.3. The process

A Structural Fund period lasts six years where each period follows guidelines particularly developed for the specific programme and objectives outlined in the Community Strategy Guidelines (CSG). Roughly, the process is divided into three levels; the European Community level, the regional level and the local level.

On the European Community level the *Community Strategic Guidelines* (CSG) are defined. Each Member State then proceeds to make *National Strategic Reference Framework* (NSRF) within the frame of the Community guidelines put forth in the CSG. The NSRF consist of a wide analysis made by the respective country on how the situation can be defined, compared with goals referred to in the CSG. Based on this analysis, the respective countries define their main goals and strategic priorities to be achieved during the programme period. The strategic objectives and priorities put forth in the NSRF are then translated into Operational Programmes (OP) which more specifically explains which projects and regions the Member State will distribute the EU funds to.

The NSRF and the OPs from each Member State has to be adopted by the European Commission before implementation. If a Member State shows excessive public deficit and if the country in question does not show signs of resolving the situation or shows no signs of taking appropriate action to do so, the Council can suspend the financial aid if a qualified majority decision is produced.

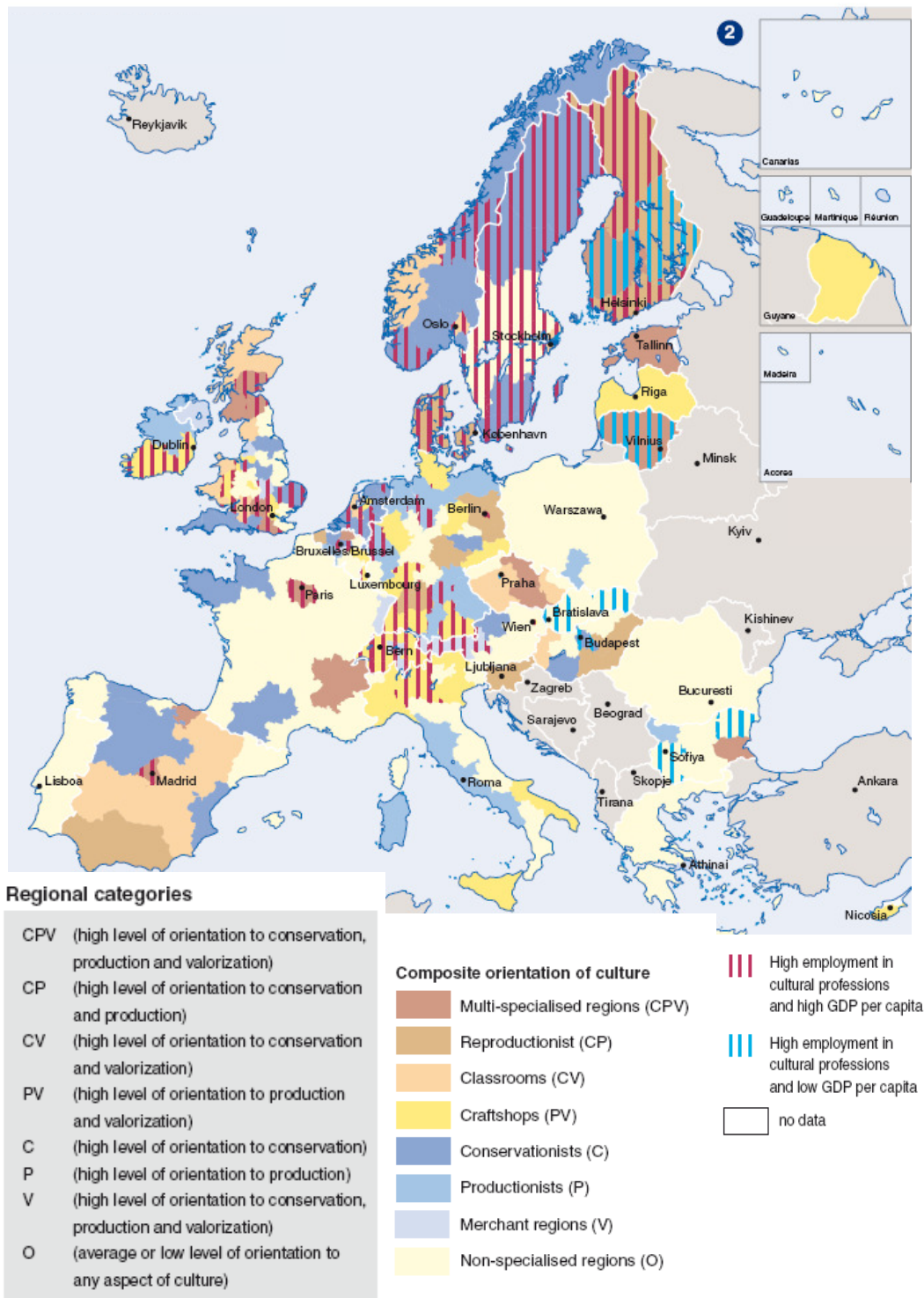
### 1.3.1. Cultural heritage

Cultural heritage is of direct importance for many regions' economies and often play an important role for territorial cohesion, for instance through increased tourism and tourist-related services. However, poor towns and regions often meet challenges due to lack of financial capabilities when trying to invest in their heritage and opportunities for development in the tourism sector may therefore be lost. By allocating necessary funding from the Structural Funds

to maintain and develop their heritage, production and valorisation of the heritage can provide jobs and economic growth, in particular through tourism. Allocations for cultural heritage can therefore help achieving the Lisbon Strategy.

By the EU enlargement in 2004, 49 sites on the UNESCO World Heritage List were added to the EU cultural heritage. In 2007 with Romania and Bulgaria joining the EU another 16 sites were added. There are mainly three ways to make use of cultural assets. The first is to conserve (C) the culture in the face of pressures from markets or other factors, e.g. in conserving a language that is in decline. Secondly culture can also be actively produced (P), for example through creative industries. Third, culture can be valorised (V) by active promotion of identity to enhance recognition of the region in order to promote e.g. tourism. The map below outlines how the different regions use their cultural assets.

**Figure 2. Cultural heritage policies in Europe.** (Source: ESPON 2006)

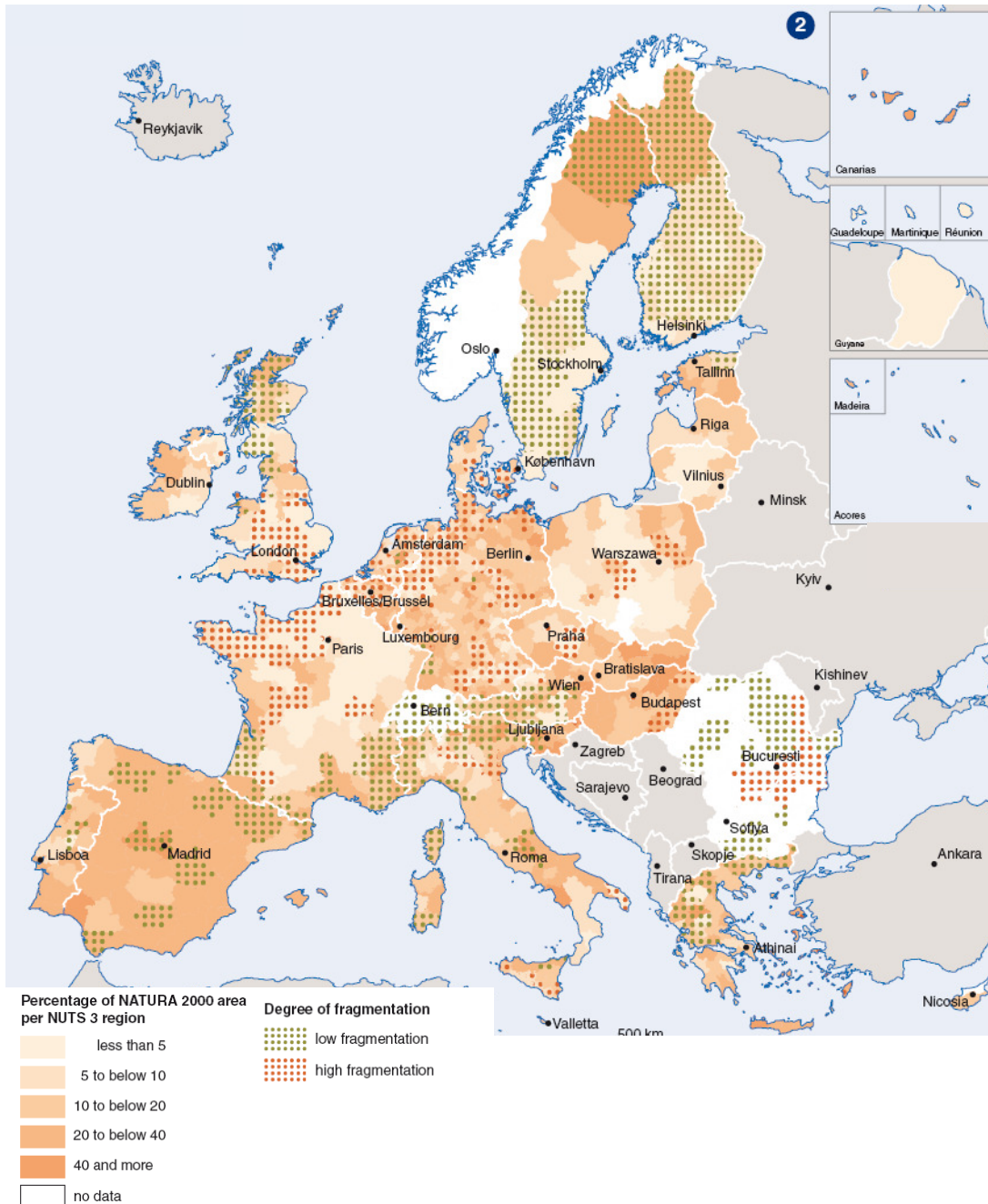


### 1.3.2. The environment

At the 2001 Gothenburg Summit, the European Council devised a Strategy for Sustainable Development. The Strategy was aimed to meet the needs of the present generation without compromising those of future generations and it was included into the Lisbon Strategy.

Effective management of the natural heritage is crucial for future conservation and in 2004 the NATURA 2000 network was set up to facilitate such management. Today about 20 % of the European territory are categorised NATURA 2000 areas. The map below shows the percentage of NATURA 2000 area per NUTS 3 region. Among the countries treated in this report, Slovakia, Slovenia, Estonia and Hungary in particular, have a high percentage (>10 %) of NATURA 2000 network areas.

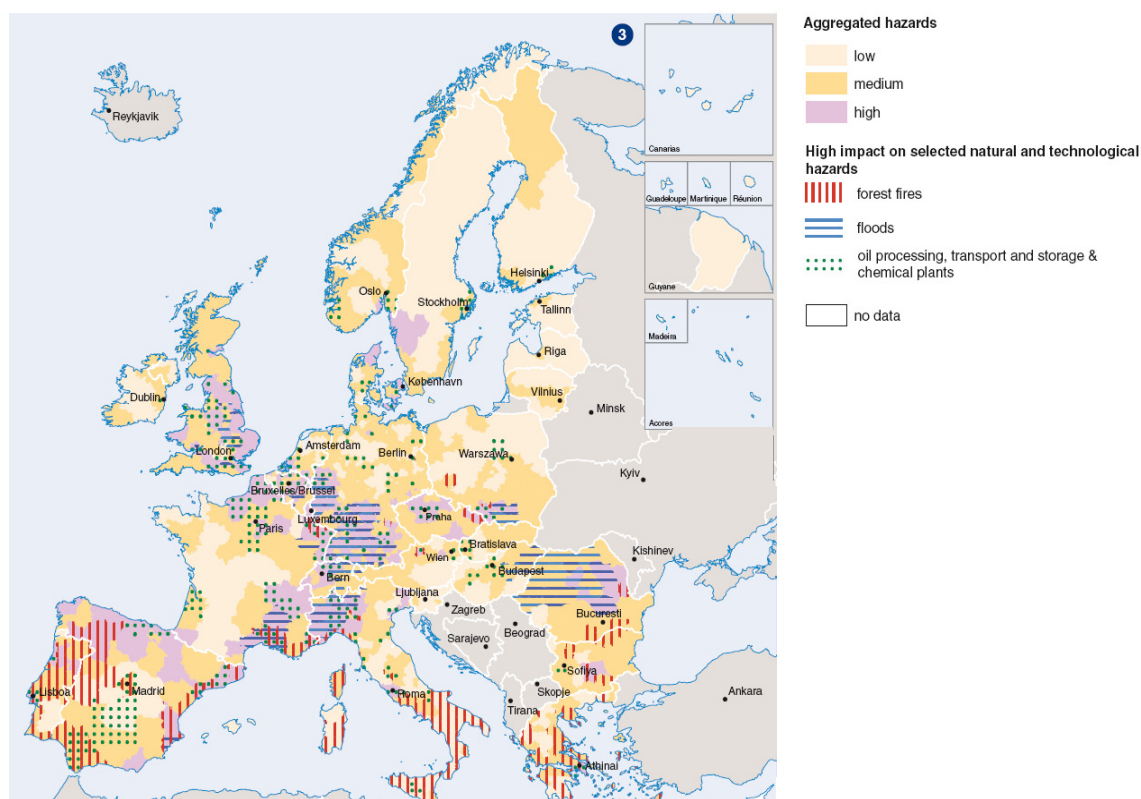
**Figure 3. Natural assets** (Source: ESPON 2006)



Strong economic growth may result in increased pressure on the natural environment. Due to the intensification of agriculture, urban spread, tourism and climate change, conservation may therefore in some circumstances be in conflict with economic development. The balance between conservation and economic development is a challenge for the European Commission when allocating the funding.

CEE Bankwatch Network and Friends of the Earth Europe published a report in April 2007 criticising the allocation of Structural Funds in the transport sector<sup>4</sup>. The four countries which by far received most of the EU funding per capita in 2007 (for the previous period) – Spain, Portugal, Greece and Ireland – have also witnessed the greatest increases in greenhouse gas emissions among the EU countries, mainly due to increased demand for energy and growth in the transport sector. The report criticised the Commission for not having done enough to ensure that the Structural Funds were used to create a climate-friendly development plan.

**Figure 4. Natural and technical hazards<sup>5</sup>.** (Source: ESPON 2006)



Hazards defined as contributing to Climate change can potentially increase the risk and magnitude of other hazards, such as flooding. Among the selected countries, Romania and the northern part of the Czech Republic in particular see patterns of high and very high hazardous areas. It is a major concern that storage facilities and production plants to a large extent are located in areas of high hazard potentials. This increases the risk of oil spills, escape of chemical gas or the leakage of liquids and such accidents are severe for flora, fauna, water and soil as well as for humans. The Structural funds are designed to help limiting such hazards.

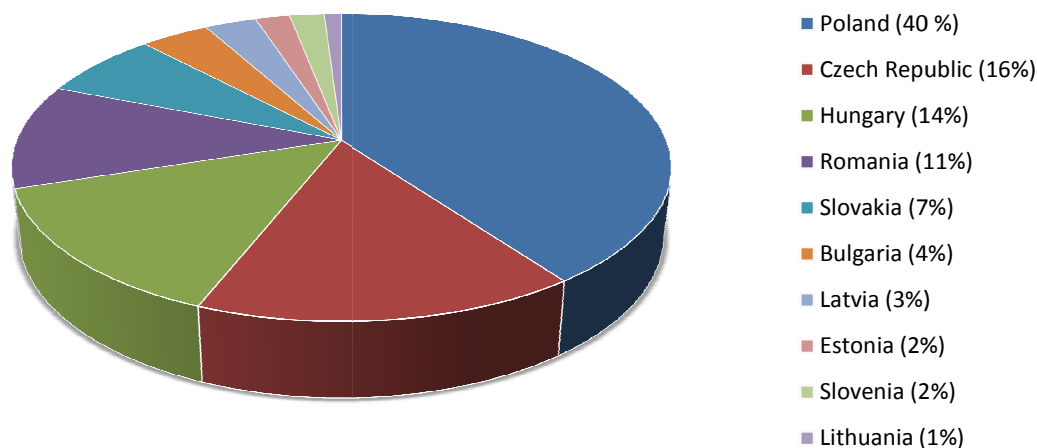
<sup>4</sup> [http://www.foeeurope.org/publications/2007/EU\\_cash\\_climate\\_clash.pdf](http://www.foeeurope.org/publications/2007/EU_cash_climate_clash.pdf)

<sup>5</sup> Oils spills, the escape of chemical gas or the leaking of liquids, as well as storages and production plants located in areas of high hazard potentials. In the old states these are mostly in areas where flood events occur.

## 1.4. The budget

The total budget for the Structural funds for 2007-2013 is amounting to 308.041 billion euro (in 2004 prices) or 347.41 billion euro (current prices). This is the largest investment ever made by the EU. The total budget is distributed between the different funds where 81.5 % allocated for the convergence objective, 16 % for the Regional competitiveness and employment objective and 2.5 % for European territorial cooperation objective. € 162.062 billion is allocated to the concerned countries. Of this 20.8 % or € 33.677 billion is allocated to environmental protection and risk prevention and 1.9 % or € 3.149 billion on culture.

**Figure 5. Distribution of funding**



**Table 1. Total funding by country**

Country	Total funding	Culture		Environmental protection and risk prevention	
	Amount in €	Amount in €	Percent	Amount in €	Percent
Bulgaria	6 673 628 244	133 million	2.0 %	1 862 million	27.9 %
Czech Republic	26 302 604 484	605 million	2.3 %	4 997 million	19.0 %
Estonia	3 403 459 881	78 million	2.3 %	854 million	25.1 %
Latvia	4 530 447 634	50 million	1.1 %	902 million	19.9 %
Lithuania	2 305 235 743	74 million	3.2 %	376 million	16.3 %
Hungary	22 890 071 092	458 million	2.0 %	6 455 million	28.2 %
Polen	66 553 157 091	1 198 million	1.8 %	10 515 million	15.8 %
Romania	17 976 384 517	234 million	1.3 %	5 429 million	30.2 %
Slovakia	11 360 619 950	261 million	2.3 %	2 147 million	18.9 %
Slovenia	4 101 048 636	103 million	2.5 %	943 million	23.0 %
<b>Total</b>	<b>162 062 485 149</b>	<b>3 149 million</b>	<b>1.9 %</b>	<b>33 678 million</b>	<b>20.8 %</b>

The Council Regulation (EC) No 1083/2006, Annex III sets the ceilings applicable to co-financing rates, in other words how much the respective country has to contribute in percentage of the total costs of the projects set forth in the NSRF and OPs. For the ten concerning countries the ceiling for funding from the three funds are 85 % of the total costs.

## 1.5. This report

All the country reports have a similar structure for easy navigation and comparison. Each country report consists of four chapters. The first chapter of this report describes how the National Strategic Reference Framework (NSRF) and Operational Programmes (OP) are funded; in other words how much is being allocated from the Structural Fund and how much the respective Member State have contributed. In the first chapter there is also a sector chart showing how the budget has been allocated on the following sectors:

- » Culture
- » Energy
- » Environmental protection and risk prevention
- » Improving access to employment and sustainability
- » Improving human capital
- » Improving the social inclusion of less-favoured person
- » Increasing the adaptability of workers and firms, enterprises and entrepreneurs
- » Information society
- » Investment in social infrastructure
- » Mobilisation for reforms in the fields of employment and inclusion
- » Research and technological development (R&TD), innovation and entrepreneurship
- » Strengthening institutional capacity at national, regional and local level
- » Technical assistance
- » Tourism
- » Transport
- » Urban and rural regeneration

The second chapter draws a picture of the respective country's main goals and strategic objectives set forth in the NSRF, and how these objectives have been translated into various OPs.

The third chapter of the country report takes a closer look on the OP concerning the environment. The third chapter is divided into four sub-chapters. The first sub-chapter summarises the current situation drawn up in the OP on environment. This gives a picture of what the main issues for the respective country is. The second sub-chapter takes a closer look on the OP, drawing up the main priorities, and furthermore how the different priorities are financed in comparison between EU funding and national contributions.

The third sub-chapter consists of a matrix showing the beneficiaries and which activities which will be supported within the priority axis. The matrix also shows how much money is allocated from the Structural Funds to this Priority axis. Below is a standard model of an OP matrix. The model shows what information may be found in the different columns and how the colour codes explain the typology activities.

All figures in the report are in from 2007 unless another date is explicitly stated.

Priority # Title of priority	Percentage of the total OP budget:	From ERDF/CF fund	
	00 %	From which fund is the contribution funded ?	The total amount for this priority axis within the respective OP
<b>Typology activities within the axis/priority</b>		<b>Beneficiaries</b>	
The colour of this column tells what type of investments the funding attributes.		Who might be beneficiaries and who might apply for the funding	
» A sky blue colour as shown in this column indicates that the funding attributes physical investments or infrastructure projects.			
» A light green colour indicates that the funding attributes to competence and capacity building			
» Typology activities will also indirectly show the criteria on how to apply for funding, as these activities have been selected and approved by the European Commission.			

The fourth sub chapter is also a matrix, but this shows Major Projects which has been approved by the European Commission. Major Projects are operations comprising a series of works, activities or services which has clearly identified goals and whose total cost exceeds EUR 25 million. For Major Projects the European Commission has to approve the project before the funds are allocated. For more information see Council Regulation (EC) No 1083/2006.

The fourth sub chapter of the country report is about funding allocated to the cultural heritage sector. Unfortunately, as information concerning this policy area is often limited, this sub chapter will sometimes be short or omitted altogether.

It is important to bear in mind that this report is mainly based on facts represented in the NSRF and OPs. For instance, in the *main issues* part of the report, only issues revealed in the NSRF and OPs are mentioned. The data described in the NSRF and OPs are often dating back a couple of years. Nevertheless the main findings represented in this report are what the Commission based their decisions on when they approved the NSRFs, OPs and Major Projects for the current countries.

#### Sources:

- » Cohesion Policy 2007-13. National Strategic Reference Framework
- » Cohesion policy 2007-13. Commentaries and official texts;
- » EU cash in climate clash – How the EU funding plans are shaping up to fuel climate change
- » ESPON ATLAS – Mapping the structure of the European territory October 2006
- » Territory matters for competitiveness and cohesion, facets of regional diversity and potentials in Europe.



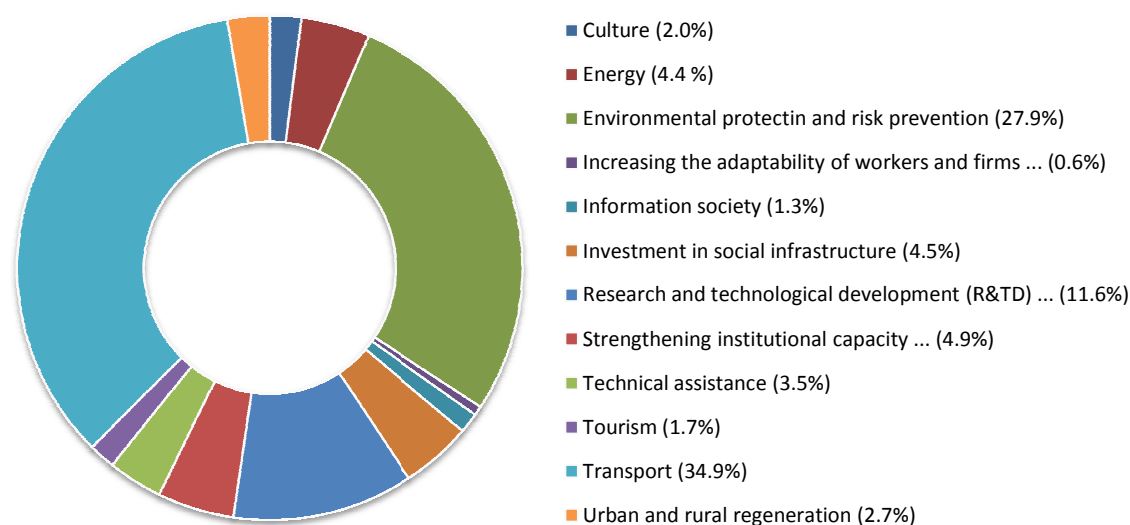
## 2. Bulgaria

### 2.1. Introduction

For the period of 2007-2013 Bulgaria has been allocated € 6.673 billion in total from the EU Structural Funds. The EU demands that the receiving country contribute with at least 15-50 % of the total amount depending on the objective. Bulgaria will therefore contribute with at least € 1.345 billion for the 2007-2013 period.

Bulgaria. Total spending 2007-2013	
EU Funds	€ 6.673 bn
National contribution	€ 1.345 bn
<b>Total</b>	<b>€ 8.019 bn</b>

Figure 6. European Regional Development Fund/Cohesion Fund 2007-2013. Bulgaria.



### 2.2. Strategic Objectives

The long term goal for Bulgaria is to become a competitive EU country with high quality of life, income and social awareness by 2015. For the duration of the 2007-2013 programme period Bulgaria has identified two medium-term goals;

1. Strengthen the competitiveness of the economy to achieve high and sustainable growth
2. Develop human capital to ensure higher employment, income and social integration

To reach these goals, Bulgaria has established four strategic objectives and priorities in the National Strategic Reference Framework<sup>6</sup>:

1. Improving basic infrastructure

<sup>6</sup> <http://www.eufunds.bg/docs/NSRF%20Bulgaria%202007-2013%20-%20very%20last%20ENG.pdf>

2. Increasing the quality of human capital with focus on employment
3. Fostering entrepreneurship, a favourable business environment and good governance
4. Supporting balanced territorial development

The strategic objectives have been translated into seven Operational Programmes:

1. OP Transport<sup>7</sup>
2. OP Environment<sup>8</sup>
3. OP Human Resources Development<sup>9</sup>
4. OP Development of the Competitiveness of the Bulgarian Economy<sup>10</sup>
5. OP Administrative Capacity<sup>11</sup>
6. OP Regional Development<sup>12</sup>
7. OP Technical assistance<sup>13</sup>

Among these, the Operational Programme of Environment 2007-2013 and OP Regional Development, Priority axis 4, focuses on the environment. OP Regional Development also focuses on cultural heritage in priority axis 3

## 2.3. Environment: Main issues

The analysis on which this report is based was prepared within the framework of the National Environmental Strategy 2005-2014 which has since been implemented. This analysis is based on data from the period 1999-2004 and takes into account different challenges regarding pollution and biodiversity.

### 2.3.1. Water infrastructure

There are sufficient water resources to supply the population in Bulgaria. In 2004 98.8 % of the population was secured water through water supply systems. The main issue here is water loss during transportation to the final consumers. During the evaluation period the loss was between 40 % - 79 % (average 59.5 %) depending on the age, type of pipelines and the pressure in the network.

Water quality in the country is good, except in specific regions where problems are of a local character. The main pollutants of the surface water are the domestic-faecal water from the urban sewerage system in the larger populated areas and the industrial waste water which is discharged untreated into the rivers. The main pollutant of underground water is nitrates which is due to liquidation of old stores of pesticides.

The sewerage network is on the other hand poorly developed. In 2004 69.2 % of the population was connected to sewerage networks, this represented only an increase of 2.2 % from 2000. From 2003 to 2004 there was a significant increase in the total volume of the generated waste water, mainly due to the rapid development of the industrial sector.

In 2005 there were 68 urban wastewater treatment plants (UWWTP), 14 of which were solemnly provided with mechanical treatment and the remaining 54 equipped with biological treatment equipment. Unfortunately the UWWTP only operated with 53 % of the capacity they were designed for, due to the lack of or incompleteness of sewerage systems.

### 2.3.2. Waste management

From 2003 to 2004 the quantity of waste generated increased with 7.3 %, mainly due to the growth of industrial waste because of increased economic activity. In 2004 84.2 % of the population was served by waste collections.

The quantity of industrial and hazardous waste have been relatively constant during the analysis period. Recycling of hazardous waste is limited to the buy-back of lead-acid batteries, spent oils and waste petroleum products. During

<sup>7</sup> [http://www.eufunds.bg/docs/sopt%20final\\_11.10.2007\\_1.pdf](http://www.eufunds.bg/docs/sopt%20final_11.10.2007_1.pdf)

<sup>8</sup> <http://www.eufunds.bg/docs/OPE-Final%20comm.-21.pdf>

<sup>9</sup> <http://www.eufunds.bg/docs/Final%20Draft%20OPHRD%20September%202007%20ENG1.pdf>

<sup>10</sup> [http://www.eufunds.bg/docs/OP%20Competitiveness%20ENG\\_FINAL\\_2007.pdf](http://www.eufunds.bg/docs/OP%20Competitiveness%20ENG_FINAL_2007.pdf)

<sup>11</sup> [http://www.eufunds.bg/docs/OPAC\\_Final\\_September\\_EN.pdf](http://www.eufunds.bg/docs/OPAC_Final_September_EN.pdf)

<sup>12</sup> [http://www.eufunds.bg/docs/OPRD\\_29August\\_FINAL\\_Revised.pdf](http://www.eufunds.bg/docs/OPRD_29August_FINAL_Revised.pdf)

<sup>13</sup> [http://www.eufunds.bg/docs/OPTA\\_En\\_approved.pdf](http://www.eufunds.bg/docs/OPTA_En_approved.pdf)

the analysis period about 60 % of the total quantity of hazardous waste was landfilled. None of the 18 landfills which disposed hazardous waste met the legislative requirements. Stocks of obsolete pesticides have been stored in BB-cubes (reinforced steel concrete containers), due to this, the stocks have been diminished from 772 to 492.

For 2004 the overall quantity of recovered waste in the country is 2175 thousand tonnes, which is equivalent to approximately 15 % of the total waste generated. Waste recovery alludes to processes which convert waste into either usable form or energy, for further information see the EU framework directive on waste<sup>14</sup>. Composting and incineration of waste with energy recovery are not yet a widely spread practice in the country.

The total capacity for recycling paper and cardboard, plastic, waste glass, accumulators and used tires are higher than the actual recycling activity. Regeneration of waste oils is on the other hand insufficient to recycle the entire quantity of this type of waste.

Of the various methods of treatment of waste, landfills are the most common, and the only method for treatment of municipal waste, in Bulgaria. In 2004 86.5 % of the total quantity of generated waste was landfilled. A significant number of the existing landfills for household waste do not meet the requirements of the national and EU legislation. During the analysis period 59 existing landfills of waste serving population of over 20 000 inhabitants were categorised. Of these 12 landfills were grouped as very high risk, 17 landfills were categorised as high risk, 28 as medium risk and 2 landfills as minimum risk. 12 of these landfills were expected to be closed in 2006. By 2004 there were at least 1581 illegal dumpsites.

### 2.3.3. Air

The four major pollutants falling within the scope of Directive 2001/81/EC<sup>15</sup> on the national emissions ceiling for certain atmospheric pollutants sulphur oxides (SO<sub>2</sub>), nitrogen oxides (NO<sub>2</sub>), ammonia (NH<sub>3</sub>) and non-methane volatile organic compounds (NMVOC)) remained steady through the analysis period, with a relative decrease of sulphur oxides.

### 2.3.4. Greenhouse gas emissions

Generally the inventory of the emissions of greenhouse gases (GHG) has decreased since the base year (1988). In 2002 the GHG was reduced to 44.02 % compared with the base year. Unfortunately in 2003 the GHG emissions increased for the first time since 1988.

### 2.3.5. Biodiversity

Bulgaria holds one of the richest biological diversities in Europe. 5 % of the entire flora consists of higher plants native to Bulgaria – a relatively high percentage for Europe. For invertebrates, excluding insects, 8.8 % are native to Bulgaria. For insects the percentage is 4.3 %. A complete inventory and assessment of the natural habitats' diversity had not been made in 2004. According to The Red Book of Bulgaria (1984) (the work of a new book was started in 2004), 158 species of higher plants are threatened and 574 species are rare. The surface of virgin forests in Bulgaria is 103.356 ha<sup>16</sup>.

In 2004 there were 858 protected areas in Bulgaria which is equivalent to 4.9 % of Bulgaria's total area, but only 2.1 % is highly protected areas. The goal is to protect 15 % of the country's territory by 2010. Of the protected area in 2004, 45 % was natural parks, 27.6 % were national parks, reserves accounted for 14.1 % and 0.8 % were managed reserves. Note that in 2003, Bulgaria began the development of its national contribution to the NATURA 2000 network.

### 2.3.6. Noise

One of the major environmental problems in residential areas is noise. 80-85 % of the noise in larger populated areas comes from traffic. The main reason for this is the lack of noise abatement barriers, shortcoming of urban planning, inefficient traffic organisation and poorly maintained road networks. Large industrial facilities on the other hand do not add to the acoustic load of the environment.

<sup>14</sup> <http://www.grc.cf.ac.uk/Im/resources/waste/management/recovery/index.php>

<sup>15</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:309:0022:0030:EN:PDF>

<sup>16</sup> <http://www.veenecology.nl/data/VirginForestsBulgaria.pdf>

### 2.3.7. Operational Programme of Environment 2007-2013

The Operational Programme of the Environment has four main priorities:

1. Improvement and development of water and wastewater infrastructure in populated areas with over 2000 PE<sup>17</sup> (population equivalent) and in populated areas below 2000 PE within urban agglomeration areas
2. Improvement and development of waste treatment infrastructure
3. Preservation and restoration of biodiversity
4. Technical assistance

All of the priorities, except priority number 3, are funded with 85 % of the total budget from the EU structural funds. Priority number 3, approximately 80 % of the total budget derives from the EU structural funds.

### 2.3.8. OP matrix overview

PRIORITY 1  Improvement and development of water and wastewater infrastructure in settlements with over 2000 PE and in settlements below 2000 PE within urban agglomeration areas	Percentage of the total OP budget	From ERDF/CF fund	
		CF	€ 1 027 366 273
	71.3 %	CF	€ 1 027 366 273
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Construction/reconstruction/modernization of wastewater treatment plant, incl. introduction of tertiary treatment, and construction/extension/reconstruction of sewage networks for agglomerations of settlement with more than 10,000 PE		<ul style="list-style-type: none"> <li>» Municipal administrations</li> <li>» Water Supply and Sewerage Companies (WSSC)</li> <li>» River Basin Management Directorates</li> </ul>	
Construction/reconstruction/modernization of wastewater treatment plant and construction/extension/reconstruction of sewage networks for agglomerations of settlement with PE between 2,000 and 10,000			
Operations containing only part(s) of the following components: <ul style="list-style-type: none"> <li>» Construction/reconstruction/modernization of wastewater treatment plants as well as extension/reconstruction of sewage networks in agglomerations of settlements with more than 10,000 PE and with PE between 2,000 and 10,000</li> <li>» Construction/reconstruction/extension of water supply networks, new water storage tanks, main water supply pipes connecting the water supply networks with the water sources for ensuring provision of required water quantity and/or quality, pumping stations, as well as</li> </ul>			

<sup>17</sup> Population Equivalent: The unit of measure used to describe the size of a waste water discharge. Population equivalent is the biodegradable load (matter) in waste water having a 5-day biochemical oxygen demand (BOD) of 60g of oxygen per day. Population equivalent doesn't necessarily reflect the actual population of a community, <http://www.defra.gov.uk/environment/water/quality/uwwtd/report02/09.htm>

construction/reconstruction/modernization of drinking water treatment plants in agglomerations of settlements with more than 10,000 PE and with PE between 2,000 and 10,000	
Construction/reconstruction/modernization of wastewater treatment plant and construction/extension/reconstruction of sewage networks for agglomerations of settlement with PE below 2,000 located within urban agglomeration areas	
activities, related to supply of equipment for the detection and measurement of leakages, as well as to the provision of the facilities for sludge treatment from urban waste water treatment plants within the framework of the above mentioned activities	
Development and updating of river basins management plans	
Development of investment projects for subsequent financing within priority 1 of OP Environment 2007-13	

<b>PRIORITY 2</b> <b>Improvement and development of waste treatment infrastructure</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	20.4 %	ERDF	€ 311 732 038
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
Completion of construction of affordable regional facilities/installations for municipal waste treatment having sufficient capacity for the country's purposes in the 54 waste management regions (for example regional landfills and transfer stations)	» Municipal administrations » Regional associations/ associations of municipalities		
Construction of affordable facilities for pre-treatment including composting, sorting, and separation of waste, in parallel with putting into operation of the newly constructed municipal waste regional landfills			
Construction of waste recycling centres in parallel with putting into operation of the new municipal waste regional landfills			
Construction of installations for recovery of the emitted gas emissions (methane) from the municipal waste landfills for the production of electricity			
Construction of regional facilities for recycling of construction and demolition waste			

Staged decommissioning and consequent rehabilitation and closure of existing municipal landfills that do not comply with the requirements of the legislation and the modern technical standards. The closure of these municipal landfills will be considered together with putting into operation of the relevant new regional facility/installation of municipal waste treatment	
Preparation/review and update of regional/municipal waste management plans	
Development of investment projects for subsequent financing within the priority 2 of OP Environment 2007-2013	

<b>PRIORITY 3</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>ERDF</b>	<b>€ 87 811 841</b>
<b>Preservation and restoration of biodiversity</b>	<b>5.8 %</b>	<b>ERDF</b>	<b>€ 87 811 841</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Development and update of the management plans for protected areas and zones of NATURA 2000 network		» Municipal authorities » Associations of municipalities » Directorates within the Ministry of environment and water and within the Ministry of Agriculture and Food Supply that are responsible for managing national and natural parks respectively, as well as other units within these two ministries that are involved in/responsible for the management of NATURA 2000 sites and protected areas	
Increasing the awareness of municipalities and the public on the NATURA 2000 network			
Establishment of the management bodies for designated NATURA 2000 sites and their further support with a view to strengthen the administrative capacity and the efficiency of the public administration		» NATURA 2000 management administrations » non-governmental organizations	
Implementation of activities in line with the identified needs in approved management plans of protected zones of NATURA 2000 network protected areas related to preservation and restoration of habitats and regulated use of species			
Financing actions related to protection and restoration of the biodiversity in the country			
Implementation of activities reducing the climate change impact on biodiversity			
Development of future projects for subsequent financing within priority 3 of OP Environment			

<b>PRIORITY 4</b> <b>Technical Assistance</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	2.5 %	<b>ERDF</b>	<b>€ 39 515 329</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Activities providing the necessary support for the OP implementation		» OP Managing Authority » Intermediate Body, Monitoring Committee/subcommittees	
Activities providing the necessary support for publicity and promotion of the OP		» Project Selection and Coordination Committee » Internal Audit Directorate within the Ministry of Environment and Water » Working groups established for the purposes of the OP » Beneficiaries under Priorities 1, 2 and 3	

### 2.3.9. Major projects

<b>PRIORITY 1</b>		
<b>Improvement and development of water and wastewater infrastructure in settlements with over 2000 PE and in settlement below 2000 PE within urban agglomeration areas</b>		
	<b>EU funding, €</b>	
<b>Name</b>	<b>CF</b>	<b>ERDF</b>
Vratza integrated water project	20 113 327.20	
Gabrovo integrated water project	29 567 055.20	
Integrated project for improvement of the water supply and sewage network - Dobrich	32 554 896.80	
Integrated project for improvement of the water supply and sewage network - Vidin	20 166 672.00	
Integrated project for improvement of the water supply and sewage	21 676 626.40	

network - Pernik		
Integrated project for improvement of the water supply and sewage network - Kurdjaly	26 033 204.80	
Integrated project for improvement of the water supply and sewage network - Jambol	24 931 710.40	
Integrated project for improvement of the water supply and sewage network - Plovdiv	39 955 353.60	
Integrated project for improvement of the water supply and sewage network - Assenovgrad	20 000 000.00	
Integrated project for improvement of the water supply and sewage network - Gotze Delchev	20 000 000.00	
Integrated project for improvement of the water supply and sewage network - Bansko	20 000 000.00	
	<b>274 998 846.40</b>	

<b>PRIORITY 2</b>		
<b>Improvement and development of waste treatment infrastructure</b>		
	EU funding, €	
Name	<b>CF</b>	<b>ERDF</b>
Kocherinovo - Construction of regional waste management center		€ 29 006 924.05
Construction of regional waste treatment facilities in Stara Zagora region		€ 32 648 752.45
Construction of regional waste treatment facilities in Varna region		€ 26 143 767.05
Management of municipal solid waste of Sofia municipality		€ 111 464 058.95
		<b>€ 199 263 502.50</b>

## 2.4 Cultural Heritage

The funding allocated for cultural heritage is limited. The only OP mentioning cultural heritage is OP Regional Development. Cultural heritage is mentioned as one of many typology activities under Priority Axis 3 Sustainable Tourism Development. For the Priority Axis 3, 185 379 579 euro has been allocated from the ERDF, in addition to the funding contributed by Bulgaria amounting to 32 714 043 euro<sup>18</sup>.

Further Information:

- » National Strategic Reference Framework 2007-2013<sup>19</sup>
- » Sectoral Operational Programme Environment 2007-2013<sup>20</sup>
- » Sectoral Operational programme Cultural Heritage 2007-2013<sup>21</sup>
- » [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

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<sup>18</sup> OP Regional Development: [http://www.eufunds.bg/docs/OPRD\\_29August\\_FINAL\\_Revised.pdf](http://www.eufunds.bg/docs/OPRD_29August_FINAL_Revised.pdf)

<sup>19</sup> <http://www.eufunds.bg/docs/NSRF%20Bulgaria%202007-2013%20-%20very%20last%20ENG.pdf>

<sup>20</sup> <http://www.eufunds.bg/docs/OPE-Final%20comm.-21.pdf>

<sup>21</sup> [http://www.eufunds.bg/docs/OPRD\\_29August\\_FINAL\\_Revised.pdf](http://www.eufunds.bg/docs/OPRD_29August_FINAL_Revised.pdf)



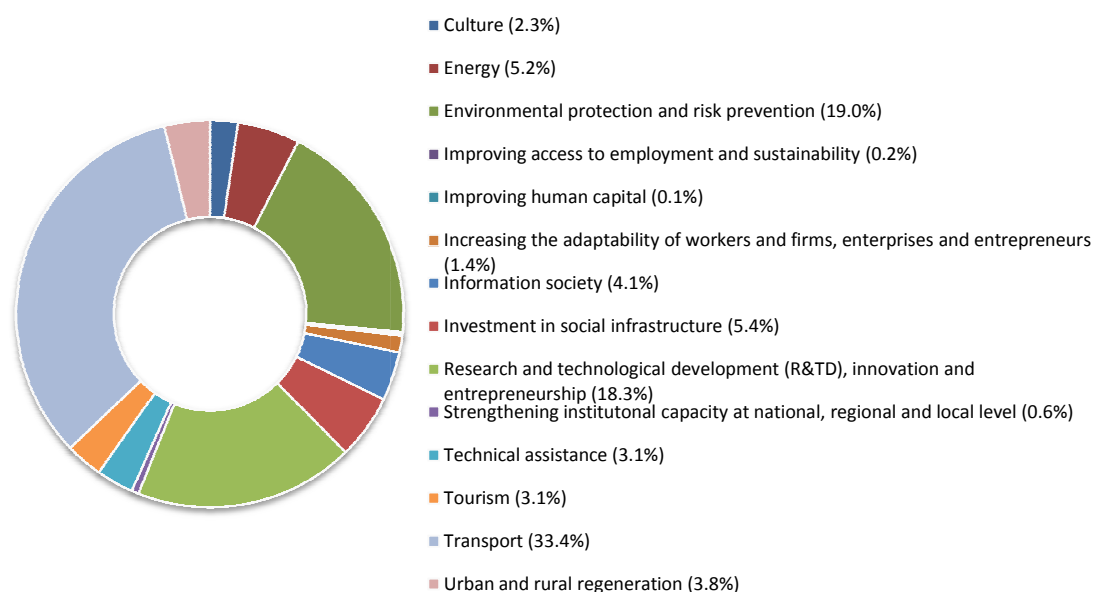
## 3. Czech Republic

### 3.1. Introduction

For the period of 2007-2013 the Czech Republic has been allocated € 25.8 billion in total from the EU Structural Fund. The EU demand that the receiving country contributes with at least 15-50 % of the total amount depending on objective. The Czech Republic will therefore contribute with at least € 4.5 billion for the 2007-2013 period.

Czech Republic. Total spending 2007-2013	
EU Funds	€ 25.8 bn
National contribution	€ 4.5 bn
<b>Total</b>	<b>€ 30.3 bn</b>

Figure 6. European Regional Development Fund/Cohesion Fund 2007-2013: Czech Republic



### 3.2. Strategic Objectives

The Czech Republic's underlying objective is to "transform the socio-economic environment in compliance with the principles of sustainable development, so as to make an attractive location for investment as well as for the work and life of its citizens. By means of incessant strengthening of the country's competitiveness, a sustainable development will be achieved in order to attain the country's level of EU-25. The Czech Republic will strive to boost employment and to pursue a balanced and harmonised regional development, which will result in enhancing the quality of life of the country's population."

To reach these goals, the Czech Republic has established four strategic objectives and 15 strategic priorities:

#### 1. A competitive Czech economy

- » Competitive business sector
- » Support of Research & Development capacity for innovation
- » Development of a sustainable travel and tourism sector and utilisation of the potential offered by the cultural heritage

## 2. An open, flexible and cohesive society

- » Education
- » Increasing employment and employability
- » Strengthening social cohesion
- » Development of the information society
- » Smart administration

## 3. An attractive environment

- » Protection and improvement of the environment quality
- » Improved access to transport, for instance by increasing the share of railway transport and developing combined transport solutions:

## 4. Balanced territorial development

- » Balanced regional development
- » Development of urban areas
- » Development of rural areas
- » Regional Competitiveness and Employment – the Capital City of Prague
- » Territorial Cooperation

The strategic objectives and priorities have been converted into 17 Operational Programme (OPs). Of these, two focus on the environment: OP Environment<sup>22</sup> and OP Prague – Competitiveness<sup>23</sup>.

Meanwhile a number of programmes focus on cultural heritage:

- » Integrated Operational Programme<sup>24</sup>
- » Regional Operational Programmes<sup>25</sup> (ROP):
  - » ROP NUTS II Southwest<sup>26</sup>
  - » ROP NUTS II Southeast<sup>27</sup>
  - » ROP NUTS II Central Moravia<sup>28</sup>
  - » ROP NUTS II Northwest<sup>29</sup>
  - » ROP NUTS II Northeast<sup>30</sup>
  - » ROP NUTS II Moravia Silesia<sup>31</sup>
  - » ROP NUTS II Central Bohemia<sup>32</sup>

Only the OP Environment will be evaluated in this report. For more information on the other OPs, online references are provided in the footnotes.

### 3.3. Environment: Main issues

#### 3.3.1. Environmental components

All though there has been an improvement in nearly all components of the environment during the 1990s, the current environment situation in the Czech Republic cannot be regarded as satisfactory. In the period 2000-2006 the level of emissions emitted into the water was reduced, but the quantity of emission emitted into the air stagnated. The air quality in the Czech Republic is not improving, in the case of some contaminants (PM10 and benzo(a)pyrene) it is

<sup>22</sup> <http://www.strukturalni-fondy.cz/opzp>

<sup>23</sup> <http://www.strukturalni-fondy.cz/opkonkurenceschopnost>

<sup>24</sup> <http://www.strukturalni-fondy.cz/iop>

<sup>25</sup> <http://www.strukturalni-fondy.cz/regionalni-op>

<sup>26</sup> <http://www.strukturalni-fondy.cz/rop-jz>

<sup>27</sup> <http://www.strukturalni-fondy.cz/rop-jv>

<sup>28</sup> <http://www.strukturalni-fondy.cz/rop-jv>

<sup>29</sup> <http://www.strukturalni-fondy.cz/rop-sz>

<sup>30</sup> <http://www.strukturalni-fondy.cz/rop-sv>

<sup>31</sup> <http://www.strukturalni-fondy.cz/rop-ms>

<sup>32</sup> <http://www.strukturalni-fondy.cz/rop-sc>

getting worse. In the past two years, the level of pollution by fine dust particles (PM2.5) exceeded the proposed limit in approximately half of the sites where the PM2.5 pollution levels were measured.

The main problems and risk to the quality of the environment are as follows:

- » Exceeding the emission limits and target emission limits with regard to human health protection and ecosystems and vegetation protection.
- » The negative impact of growing automobile traffic
- » The negative impact of energy production
- » Contamination of the environment by dangerous substances from industry, agriculture, households and agglomerations, emergency leaks of hazardous substances to the surface and underground waters
- » A poor condition of the running surface-water in terms of their environmental cleaning functions, a low retention capacity of landscape with relatively high risks of flooding
- » A high degree of fragmentation of the landscape
- » Numerous localities suffering from old environment burdens
- » A high percentage of land threatened by water erosion
- » High green field construction activity
- » Forests threatened by atmospheric depositions and degraded soils, and the unsatisfactory health condition
- » The danger of a further reduction in biodiversity
- » The unsuitable structure of traditional fuels (with regards to the environment)

The overall production of waste is declining but the municipal waste has been growing moderately since 1995. Effective tools are either missing or have not been implemented to prevent environmentally unfriendly handling of waste, causing burdens to the landscape due to the presence of uncontrolled and unmanaged waste dump sites.

Nature and landscape development are threatened by old burdens, facing problems particularly in connection with extensive areas devastated by mining (coal, uranium) and in connection with industrial sites fallen into disuse (brownfields).

### **3.3.2. Environmental and technological risks**

The level of risk posed by natural disasters, industrial accidents and leakages of hazardous substances has mounted greatly in the Czech Republic.

In case of natural disasters (floods in particular) the basic prerequisite to decreasing the risks to such calamities occurring, is to implement environmentally friendly measures in the landscape (to boost the retention capacity of the land, etc.). Other weaknesses to the present system of protection against these risks and of protecting the environment include the lack of modern technical equipment for the integrated rescue system and of means of protection for the population.

### **3.3.3. Operational Programme of Environment 2007-2013**

The Operational Programme of the Environment has eight priority axes:

- » Improvement in water utilisation infrastructure and reduction of flood risks
- » Improvement in quality of atmosphere and emissions reduction
- » Exploitation of sustainable energy resources
- » Improvements in waste handling and clearing old environmental pollution
- » Reducing industrial pollution and risks to the environment
- » Improvements in natural surroundings and landscape
- » Development of infrastructure for environmental education, consultancy and enlightenment
- » Technical Assistance

The OP Environment is funded with 85 % of the total budget from the EU Structural Funds.

### 3.3.4. OP matrix overview

<b>PRIORITY 1</b> <b>Improvement in water utilisation infrastructure and reduction of flood risks</b>	Percentage of the total OP budget	From ERDF/CF fund	
	40.4 %	CF	€ 1.99 billion
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Sub-priority 1a: Waste management</b>		» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others	
Building, reconstruction or intensification of waste treatment plants and draining systems			
Building, reconstruction or intensification of water preparation plants			
Building, reconstruction or intensification of drink water distribution piping			
Building, reconstruction or intensification of building systems for comprehensive monitoring			
Monitoring and evaluation of the quality and amount of surface and underground waters			
Polder building			
Watershed adaptations			
Joining other water supply systems, establishment of regional systems			
Combinations of the solutions above			
Reconstruction of drinking water pipeline system			

<b>PRIORITY 2</b> <b>Improvement in quality of atmosphere and emissions reduction</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>12.9 %</b>	<b>CF</b>	<b>€ 0.63 billion</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Reconstruction and purchase of combustion sources for reducing consumption and limiting emissions		» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others	
Purchase of eco-friendly combustion furnaces			
Planting out and regeneration of insulating greenery that separates residential properties from industrial facilities, commercial areas or busy roads			
Measures that prevent or reduce emissions of volatile organic matter into the atmosphere through the use of water-soluble paints, installing catalytic or thermo-oxidizing units			
Etc			

<b>PRIORITY 3</b> <b>Exploitation of sustainable energy resources</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>13.7 %</b>	<b>ERDF</b>	<b>€ 0.67 billion</b>
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
Installation of wind power plants	» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others		
Application of waste heat technologies			
Insulating systems for buildings			
Construction and reconstruction of central and block boiler houses			
Installation of renewable sources of energy especially heating and warm water preparation – solar systems, biomass furnaces, heat pumps etc			
Etc			

<b>PRIORITY 4</b> <b>Improvements in waste handling and clearing old environmental pollution</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	15.8 %	<b>ERDF</b>	<b>€ 0.78 billion</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Construction of systems for separated refuse collection		» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others	
Developing facilities for waste exploitation, especially facilities that sort, adapt and recycle waste			
Reclamation of old dumping grounds			
Redevelopment of seriously contaminated locations			
Etc			

<b>PRIORITY 5</b> <b>Reducing industrial pollution and risks to the environment</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	1.2 %	<b>CF</b>	<b>€ 0.06 billion</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
The disclosure of information on the environment to internet users		» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others	
Infrastructure for the REACH program			
Developing the institutional infrastructure for BAT (Best Accessible Techniques) research			
Etc			

<b>PRIORITY 6</b> <b>Improvements in natural surroundings and landscape</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>12.2 %</b>	<b>CF</b>	<b>€ 0.60 billion</b>
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
Measures for the preservation and increase in the numbers of species	» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others		
Renewal and construction of visitors infrastructure in protected areas, bird sanctuaries, important locations in Europe, wildlife reservations and geo-parks			
Implementations of measures in accordance with the NATURA 2000 system			
Planting out and redevelopment of avenues, garden lanes, solitary trees, wind barriers, increasing the retaining features of the landscape			
Planting out and revitalisation of significant urban greenery			
Stabilisation or redevelopment of landslides and rock faces			
Etc			

PRIORITY 7	Percentage of the total OP budget	From ERDF/CF fund	
<b>Development of infrastructure for environmental education, consultancy and enlightenment</b>	0.9 %		€ 0.04 billion
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
The purchase, reconstruction and building of, and technical equipment for, facilities in new centres and existing consultancies		» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others	
Making up informative expert materials, educational and methodical aids, on the environment			
Etc			

<b>PRIORITY 8</b> <b>Technical Assistance</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>2.9 %</b>		<b>€ 0.14 billion</b>
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
Financing activities connected with program management, e.g.;	» Municipalities, regions, public organisations and firms, contributory organisations and organisational departments of municipalities, regions and the state, private non-profit organisations, natural persons, businesses, associations of unit owners, public research institutions and others		
Salaries of officials controlling the Environmental Operational Programme			
Selection of projects			
Monitoring of projects and the program			
Elaboration of project studies and analyses			
Program publicity			
Support for potential recipients' ability to draw assets from the program			
Etc			

### 3.4. Cultural Heritage

The Integrated OP and all the Regional OPs focus on cultural heritage. In the Integrated OP in the priority axis "National Support for regional development" there are many typology activities, one of which focuses on "presentation and promotion of cultural and natural heritage". For the whole axis € 481.4 million is allocated from the ERDF. The following are beneficiaries in accordance with the Integrated OP:

- » Schools and school institutions
- » educational and career consultancy organisations
- » scientific and research institutions
- » national administration institutions and organisations controlled by them
- » municipalities
- » regions
- » health institutions
- » independent non-profit organisations
- » professional associations
- » employers
- » permanent residents in CR
- » others

When it comes to the Regional OPs (ROPs) they all have a fairly similar structure. All, except ROP NUTS II Moravia-Silesia, has a priority axis focusing on tourism whereof one of many activities which will be supported is revitalisation or reconstruction of cultural heritage. Some of the ROPs also have other priority axes of which cultural heritage are one of many activities which will be supported. See the matrix below for further information on beneficiaries and how much is allocated for the respective priority axes.

<b>Regional funding</b>			
<b>OP</b>	<b>Priority axis</b>	<b>Allocation from ERDF</b>	<b>Beneficiaries</b>
ROP NUTS II Northwest	Integrated support for local development	€ 53.9 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions or municipalities, school and educational institutions with a legal entity, listed in school register, professional and special interest groups, independent non-profit organisations, businesses and others.
	Sustainable development of tourism industry	€ 142.9 million	
ROP NUTS II Moravia-Silesia	Support for Regional Prosperity	€ 194.8 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions or municipalities, Railway Infrastructure Administration, owners of public transportation stops, Moravia-Silesian Regional Fire Brigade, state companies, health care facilities, schools and educational institutions, independent non-profit organisations, businesses, professional associations, citizens and others
ROP NUTS II Southeast	Development of Sustainable Tourism Industry	€ 133.8 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions or municipalities, railway operators, independent non-profit organisations, small- and medium-sized businesses, citizens and others
ROP NUTS II Northeast	Development of town and country areas	€ 223.2 million	Regions, municipalities, groups of municipalities, state, organisations established or founded by regions, municipalities, or state, professional and special interest groups, health and social service suppliers, independent non-profit organisations, businesses and others
	Tourism Industry	€ 144.4 million	

ROP NUTS II Central Moravia	Tourism Industry	€ 121.6 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions or municipalities, Railway Infrastructure Administration, railway operators, interest groups, independent non-profit-making organisations, businesses, owners of real estate in protected areas and others
ROP NUTS II Southwest	Development of Tourism Industry	€ 123.9 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions or municipalities, clerical corporate bodies, schools, independent non-profit organisations, businesses, professional groups, citizens and others
ROP NUTS II Central Bohemia	Tourism Industry	€ 100.6 million	Regions, municipalities, groups of municipalities, organisations established or founded by regions, municipalities, professional and special interest groups, independent non-profit organisations, businesses, public research institutions and others

Further information:

- » National Strategic Reference Framework 2007-2013<sup>33</sup>
- » Sectoral Operational Programme 2007-2013<sup>34</sup>
- » [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>33</sup> [http://www.strukturalni-fondy.cz/uploads/documents/NOK/NSRF\\_en\\_170707\\_bez\\_zmen\\_db\\_fin.tabulka.pdf](http://www.strukturalni-fondy.cz/uploads/documents/NOK/NSRF_en_170707_bez_zmen_db_fin.tabulka.pdf)

<sup>34</sup> <http://www.strukturalni-fondy.cz/opzp>

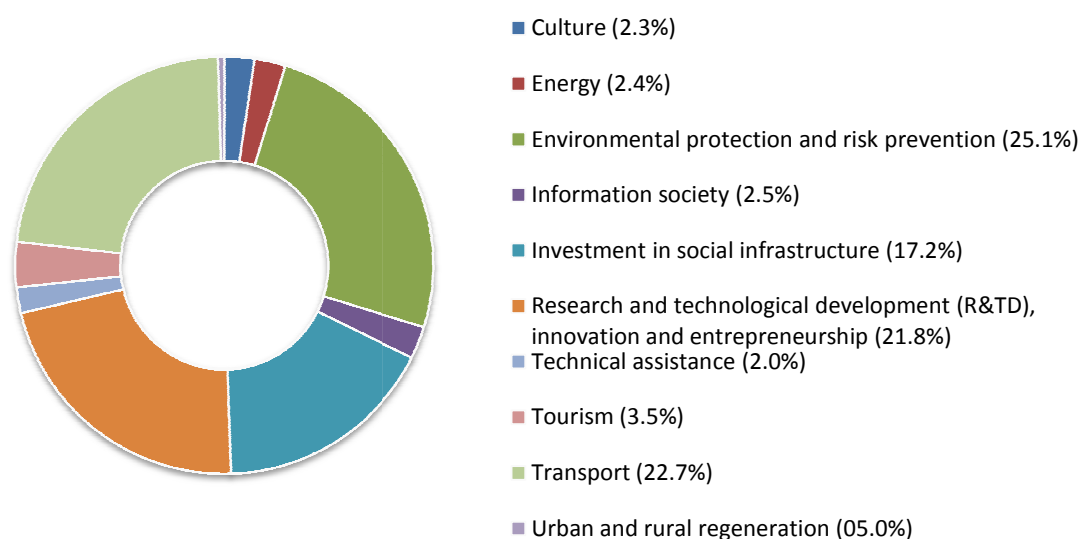
## 4. Estonia

### 4.1. Introduction

For the period of 2007-2013 Estonia has been allocated € 3.403 billion in total from the EU Structural Fund. The EU demand that the receiving country contributes with at least 15-50 % of the total amount depending on objective. Estonia will therefore contribute with at least € 0.442 billion for the period 2007-2013.

Estonia. Total spending 2007-2013	
EU Funds	€ 3.403 bn
National contribution	€ 0.442 bn
<b>Total</b>	<b>€ 3.845 bn</b>

Figure 7. European Regional Development Fund/Cohesion Fund 2007-2013: Estonia



### 4.2. Strategic Objectives

The long term goal for Estonia is to ensure a fast and sustainable development. For the years 2007-2013 Estonia has established three strategic objectives in the National Strategic Reference Framework:

- » Rise of competitiveness of the economy
- » Increased social cohesion
- » More sustainable use of environment

To reach these objectives the following activities are deemed to be the most important:

- » To educate and active people
- » To increase the research and development capacity and the innovativeness and productivity of enterprises
- » To improve communication

- » To ensure sustainable use of the environment
- » To ensure an integral and balanced development of the regions
- » To ensure a higher administrative capacity

Estonia has translated their strategic objectives and their evaluation of activities of importance into three Operational Programmes; OP Human Resource Development, OP Development of the Economic Environment and OP Development of the Living Environment. Of these only the OP Development of the Living Environment focuses on the environment. There is not allocated any money for cultural heritage.

### **4.3. Environment: Main issues**

The environmental burden of economic activity is relatively large, primarily due to the ageing or insufficiency of environmental infrastructure (water supply, sewage treatment, landfills, and external air protection facilities), but also to the character of the production technologies used.

#### **4.3.1. Water**

Estonia is facing a problem with improving the ecological status of water bodies and securing adequate drinking water for the population. Only 65 % of all water bodies are in a good ecological status (as of 2004). The ecological status of water bodies is affected first of all by the discharge of inadequately treated wastewater into water bodies, both non-point source and point source pollution originated mostly from agriculture, and modification of water bodies as a consequence of human activity. The main reason for the discharge of inadequately treated wastewater into water bodies is worn-out treatment plants and sewage pipelines. The main source of agricultural point source pollution is large farms whose manure management is not yet in compliance with EU environmental requirements.

The surface water and groundwater in Estonia continue to be at risk from contaminated sites (dumps of waste from the oil shale industry, such as fly ash, semi-coke, etc.; old asphalt concrete factories, waste oil disposal sites), whose remediation requires great expenditures. Liability to clean-up of past contamination needs to be further specified in the relevant legislation.

At the end of 2004, approximately 72 % of the population of the country as a whole is connected to public sewerage. 67 % of the sewage treatment plants were operating in compliance with the requirements.

Nearly 77 % of the population was consuming water from public water supply at the end of 2004. There have not been group illnesses from drinking water in the last decade thanks to the measure applied and to national supervision.

#### **4.3.2. Waste management**

Estonia is one of the world's biggest generators of waste per capita, but this is due mostly to the oil shale based power production and oil shale chemical industry. In Estonia a great share of municipal waste is still landfilled without prior sorting and into inadequate landfills. In 2004, 11.5 million tonnes of waste were landfilled. The total volume of municipal waste which was landfilled has decreased from 85 % in 1999 to 65 % in 2004, but still Estonia is higher than the EU25 average on municipal waste landfilled per capita. In Estonia this is measured to 283 kg per 2004, while the average in EU25 is 247 kg.

In order to bring waste management into conformity with EU requirements, it is important to put an end to the illegal dumping of waste and littering of landscapes with waste; improve the collection, sorting and recovery of waste; establish new environmentally sound landfills and close all landfills. As of 2005, there were 24 operating non-hazardous waste landfills, but only five of them have been built the last few years and meet EU environmental standards.

The hazardous waste management system of Estonia has been significantly improved since the beginning of the 1990's with substantial support of foreign aid, in particular funds from the EU "Phare programme". At the same time, the ash removal technology of oil shale fuelled power plants is still yet to be reorganised and the existing ash fields closed.

### 4.3.3. Air

Although ambient air quality remains high in Estonia, and the country is still a significant polluter of the ambient air given the small size of its economy and small population and therefore needs to effectively reduce its emissions. The per capita emissions of CO<sub>2</sub> are nearly twice higher than the EU average – 14.2 t in Estonia (2004) and 8.5 t in EU25 (2003). A significant part of the reduction of emissions and reason for their relative growth is related to the refurbishment of oil shale fuelled power plants, which is so far been financed from state owned resources of Eesti Energia AS (Estonia Energy Ltd.) and credits.

Among greenhouse gases affecting the climate, the most important one is carbon dioxide, whose per capita emissions in Estonia are among the highest in the EU.

### 4.3.4. Natural resources

A major strength from Estonian natural resources lies in the fact that the forest resources are sufficient, both to yield timber and to provide other benefits. The weakness of the sector lies in low profitability. In 2004 the total cutting area was 16 800 ha, of which only 3600 ha were reforested, and predominantly in state forests. The problem is aggravated partly also by an insufficient system of paying compensation for areas with environmental restrictions (nearly 26 % of forest land is subject to various conservation regimes).

The most important mineral resource is oil shale. In 1999-2005, extraction permits were issued for the total of 23.75 million tonnes per year, while the actual production volume in 2005 was 14.51 million tonnes. Peat is the second most important strategic energy resource in Estonia. The natural peat accumulation process does not recover in most cases in these areas and the peat reserve is destroyed through mineralisation, with big quantities of carbon dioxide being released in the process. Unvegetated peat cutting also represents a high risk of wildfires.

Natural regeneration of fish stocks depends first of all on the quality of the aquatic environment and on the proper management of the fishing sector. Water quality has improved in recent years but the spawning grounds of many species have been destroyed by human activity and have not yet recovered.

### 4.3.5. Biodiversity

Estonian heritage cultural landscapes with their semi natural communities have the highest species diversity among the habitats within their geo-botanical zone. Biological diversity is relatively well preserved in Estonia compared to several countries of the central regions of the EU. Estonia hosts significant populations of big game (brown bear, lynx, wolf, etc.). Protected areas cover 16 % of Estonian territory, of this there were as of 1 November 2005 5 national parks, 80 nature reserves, and 116 landscape conservation areas, 186 areas with a non-revised conservation regime and 127 special areas of conservation. In addition there were 544 parks and forest stands and 1172 protected single natural features. One of the threats to the maintenance of biological diversity is the invasion of non-native species. A national programme has been initiated for the control of invasive hogweeds, in particular *Heracleum Sosnowski*.

Estonia has high degree of diversified landscape due to the country's location and formation history. The greatest risk facing Estonian countryside is the threat of being damaged or completely destroyed by the extraction of earth resources and the establishment of industrial plants, but also the degradation of deserted agricultural lands and, in some regions, uncontrolled building activity. Mires constitute an important part of our natural landscape. Yet unfortunately most of them are no longer in their natural state. Mires once covered more than 20 % of the territory of Estonia but 2/3 of them have been either damaged or destroyed by now.

Concerning EU instruments, the greatest amount of nature conservation support has so far come from the LIFE-Nature fund. The use of ERDF has remained lower than expected.

### 4.3.6. Prevention and management of environmental emergencies

Awareness of marine pollution is currently insufficient in Estonia, in particular given the continuous growth in oil production and chemical transportation by vessels in the Baltic Sea and Gulf of Finland. The existing structures of rescue systems is found inadequate for detecting, localizing and cleaning up major marine spills.

Other emergencies with a high probability of occurrence and severe consequences are natural disasters, major fires and rail accidents. Accidents involving the transportation of dangerous chemicals by rail represents important risk

source. In recent years there have been several rail transport related fires and other accidents that remained without serious consequences just by chance.

The most likely causes of natural disasters in Estonia are storms, storm-induced coastal floods and floods due to excessive precipitation (rain, snow).

### Operational Programme of the Living Environment

The OP of the Living Environment has eight priority axes:

- » Development of water and waste management infrastructure
- » Development of infrastructure and support systems for sustainable use of the environment
- » Development of energy sector
- » Integral and balanced development of regions
- » Development of education infrastructure
- » Development of health and welfare infrastructure
- » Horizontal technical assistance

#### 4.3.7. Technical assistance

Of these the priority axes 1 and 2 concerns environmental issues. Priority 3 concerns environmental issues within the energy sector. As the energy sector was not intended for inclusion in the report, we have not made a matrix of the energy sector, but more information can be found in the OP of Living Environment chapter 5.3.

The priority axes 1 and 2 are divided into various sub-priorities which contents will be described in the matrixes below. The sub-priorities are marked bold in the matrix.

Priority axis 1: Development of water and waste management infrastructure has the following sub-priorities;

- » Development of water management
- » Development of waste management

Priority axis 2: Development of infrastructures and support systems for sustainable use of the environment

- » maintenance of biological diversity
- » Development of environmental education infrastructure
- » Development of environmental monitoring
- » Improvement of preparedness for environmental emergencies
- » Development of environmental supervision

The Priority Axis has the following co-financing rates between community funding and national contributions:

- » Priority Axis 1: has a maximum financing rate at 85 %
- » Priority Axis 2: has a maximum financing rate at 90 %
- » Priority Axis 7: has a maximum financing rate at 85 %
- » Priority Axis 8: the whole priority is financed by the EU Structural Funds.

#### 4.3.8. OP matrix overview

PRIORITY 1 Development of water and waste management infrastructure	Percentage of the total OP budget	From ERDF/CF fund	
		CF	€ 626 334 156
	38.6 %		

Typology activities within the axis	Beneficiaries
<b>Sub-priority 1a: Development of Water Management</b>	» Ministry of the Environment, Local authorities, Non-profit associations and foundations and companies
Development of water supply systems: <ul style="list-style-type: none"> <li>» Construction and reconstruction of drinking water supply systems</li> <li>» Construction and reconstruction of drinking water treatment plants</li> </ul>	» Local authorities, Companies, Non-profit associations and foundations, Ministry of Economic Affairs and Communications and Ministry of the Environment
Development of water protection infrastructure: <ul style="list-style-type: none"> <li>» Construction and reconstruction of wastewater collection systems</li> <li>» Construction and upgrading of sewage treatment plants</li> </ul>	
Operations directed to achieving a good ecological status of water bodies: <ul style="list-style-type: none"> <li>» Operations to secure a near-natural state, high water quality and supply of surface waters (rivers, lakes and coastal waters), including the removal of dams blocking the migration of migratory fish to their spawning grounds or construction of fish ladders</li> <li>» Clean-up or decontamination of contaminated sites affecting the status of water bodies (both surface and groundwater)</li> <li>» Operations to maintain the quality and supply of groundwater</li> </ul>	
Clean-up of past contamination in former military and industrial sites <ul style="list-style-type: none"> <li>» Clean-up, localisation and decontamination of contaminated sites</li> </ul>	
<b>Sub-priority 1b: Development of Waste Management</b>	
Closure and remediation of inadequate waste dumps of oil shale industry and oil shale based power industry <ul style="list-style-type: none"> <li>» Closure and remediation of waste dumps of oil shale industry and oil shale based power industry</li> </ul>	
Closure of inadequate non-hazardous waste landfills <ul style="list-style-type: none"> <li>» Closure and remediation of landfills</li> </ul>	
Construction of new landfills <ul style="list-style-type: none"> <li>» Construction of new non-hazardous waste landfills</li> </ul>	
Reduction of waste generation, development of waste collection, sorting and	

recovery			
<ul style="list-style-type: none"> <li>» Establishment of waste recovery companies (incl. waste incineration and biological recycling)</li> <li>» Establishment of waste stations (waste handling sites)</li> <li>» Operations directed to reducing waste generation</li> </ul>			
<b>PRIORITY 2</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>Development of infrastructure and support systems for sustainable use of the environment</b>	5.3 %	<b>ERDF € 92 032 774</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Sub-priority 2a: Maintenance of Biological Diversity</b>		<ul style="list-style-type: none"> <li>» State Nature Conservation Centre</li> <li>» Non-profit associations and foundations engaged in nature conservation by their statute</li> <li>» Educational establishments and organisations providing nature education and environmental education</li> <li>» Local authorities</li> <li>» Ministry of the Environment</li> <li>» State companies</li> <li>» Estonian Environmental Information Centre</li> <li>» Border Guard Administration</li> <li>» Other organisations to be engaged in emergency response training etc.</li> </ul>	
Preparation and implementation of management plans for protected areas and action plans for threatened species: <ul style="list-style-type: none"> <li>» Preparation of management plans and action plans along with carrying out the preparatory applied studies and inventories</li> <li>» Implementation of management plans and action plans, including restoration of semi-natural communities and other threatened habitats, restoration of the habitats of threatened species, restoration of the populations of threatened species; control of non-native species</li> <li>» Assessment of the effectiveness of implementation of the plans and analysis of monitoring data</li> </ul>			
Establishment and maintenance of nature conservation infrastructure in protected areas: <ul style="list-style-type: none"> <li>» Establishment or reconstruction of infrastructure necessary for the maintenance or restoration of habitats</li> <li>» Procurement of equipment and livestock necessary for the maintenance or restoration of habitats</li> <li>» Establishment or reconstruction of infrastructure creating visitor opportunities</li> <li>» Creation of infrastructure and procurement of equipment necessary for the administration of nature conservation</li> </ul>			
<b>Sub-priority 2b: Development of Environmental Education Infrastructure</b>			
Development of a network of environmental education support centres			
Extension of possibilities for displaying nature (nature trails, permanent			

displays, information stands, etc.)	
<b>Sub-priority 2c: Development of Environmental Monitoring</b>	
Creation of a monitoring system at the national, county, local authority and company level	
<ul style="list-style-type: none"> <li>» Preparation of monitoring programmes in harmony with environmental action plans at all levels</li> </ul>	
Creation of a rational and flawless environmental monitoring network	
<ul style="list-style-type: none"> <li>» Application of new methods for increasing the quality and frequency of monitoring</li> <li>» Application of uniform methodologies at all levels of monitoring and upgrading of equipment to ensure the sensitivity of analysis; implementation of a quality and control system at all levels</li> <li>» Upgrading of monitoring programmes for air, waste, soil and biodiversity, taking into account the requirements of directives, conventions, etc.</li> </ul>	
Creation of a uniform computerised information system	
<ul style="list-style-type: none"> <li>» Identification of information technological solutions to ensure and enhance the capacity of the Environmental Register</li> <li>» Creation of a client-friendly system for the transmission, use and storage of monitoring data in the Environmental Register</li> </ul>	
<b>Sub-priority 2d: Improving Preparedness for Environmental Emergencies</b>	
Enhancement of capacity for monitoring and clean-up of marine pollution	
<ul style="list-style-type: none"> <li>» Enhancement of spill response capacity through improving the infrastructure and procurement of gear and equipment (incl. containment vessels)</li> <li>» Procurement of coastal spill response equipment</li> <li>» Procurement of remote sensory monitoring equipment for pollution monitoring aircraft</li> <li>» Setting up of a field hospital for birds along with the necessary installations and procurement of vehicles necessary for the functioning of logistics</li> <li>» Organisation of training for organising marine spill response in connection with the above operations</li> </ul>	
Enhancement of preparedness for major accidents on land	
<ul style="list-style-type: none"> <li>» Procurement of equipment for repair of damages caused by natural disasters</li> <li>» Procurement of equipment for extinguishing forest, landscape and ground fires</li> <li>» Procurement of special gear and equipment for increasing the</li> </ul>	

<p>capacity for rescue work in poorly accessible areas (small islands, forests, bogs and other wetlands)</p> <ul style="list-style-type: none"> <li>» Procurement of equipment for response to industrial, transport and oil product accidents (incl. hazardous substance related accidents)</li> <li>» Procurement of a logistic supply and means of command (incl. IT) for major accidents and construction/reconstruction and furnishing of infrastructure</li> <li>» Procurement of means for localising and cleaning up oil product pollution on land and inland water bodies</li> <li>» Organisation of training related to the above operations</li> </ul>	
<p><b>Sub-priority 2e: Development of Environmental Supervision</b></p>	<p>» Environmental Inspectorate</p>
<p>Construction and putting into operation the supervision operational and training centre of the Environmental Inspectorate</p>	
<p>Procurement of vehicles fitted with special equipment for implementing the sampling scheme (sampling gear, balances and other measuring equipment)</p>	
<p>Procurement of weather-proof computers and means of communication for ensuring operational access to databases</p>	
<p>Procurement of video and photographic equipment for recording evidence for offence proceedings</p>	
<p>Procurement of special gear</p>	

<b>PRIORITY 7</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>ERDF</b>	<b>€ 28 553 498</b>
<b>Horizontal Technical Assistance</b>	1,8 %		
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Preparation and adaption of the systems necessary for the operational programmes and their implementation		Institutions and persons dealing with the implementation of structural instruments	
Preparing the necessary legal framework for the use of structural instruments, developing criteria for the formal appraisal of the project			

Coordinating the appraisal and selection of projects	
Organising the monitoring and evaluation of the operational programmes	
Activities related to audits	
Activities associated with management checks (including on-site checks)	
Activities associated with the payment procedures and with declaring expenditures	
Development(administration of the register of structural support, and the implementation of e-solutions to simplify the administration of the structural instruments	
Activities associated with personnel management and development, including the training of officials dealing with the administration of structural instruments	
Carrying out studies necessary for the more effective implementation of the programmes	
Activities associated with the publicity and information provision regarding the structural instruments	
Supporting activities to help the beneficiaries to prepare and manage projects, including offering consultations, as well as the preparation of necessary guidelines and information materials	
Other activities necessary for supporting the successful implementation of the operational programmes as well as the realisation and completion of the previous programming period	

<b>PRIORITY 8</b> <b>Technical Assistance</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>0.2 %</b>	<b>ERDF</b>	<b>€ 2 759 832</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Research and evaluations supporting the implementation of the Operational Programme		Agencies and persons involved in the implementation of structural instruments	
Information and publicity work related to the implementation of the Operational Programme			
Organisation and servicing of the meetings of the Monitoring Committee and Steering Committee of the Operational Programme			
Other operations required under the Operational Programme and eligible for technical assistance			

#### 4.3.9. Major Projects

<b>Environment and Energy OP</b>		
<b>Pri 1: Development of water and waste management infrastructures</b>	<b>EU funding, € (Not available)</b>	
	<b>CF (Not available)</b>	<b>ERDF (Not available)</b>
Põltsamaa-Pedja water management project		
East Harju and Keila-Vasalemma water management project		
Vääna water management project		
Water project for the municipalities of Viljandi County		
Lääne-Viru water management project		
Water project of Pärnu sub-basin		

Development of public water supply and sewerage in Pärnu city		
Improvement of the ecological status of watercourses		
Water project of the municipalities of Valga County		
Clean-up of past contamination in former military and industrial sites		
Drinking water project of Ida-Viru small settlements		
Sewerage project of Narva, Narva-Jõesuu, Sillamäe, and 5 villages in Vaivara Municipality		
<b>Pri 1b: Development of Waste Management</b>		
Closure of semi-coke dumps		
Modernisation of ash removal system and sealing of ash field at Narva Power Plants		

#### 4.4 Cultural Heritage

Estonia has not allocated any funding through their National Strategic Reference Framework, aimed at cultural heritage-preservation or restoration.

Further information:

- » Sectoral Operational Programme Environment 2007-2013<sup>35</sup>
- » 'Cohesion Policy 2007-2013. National Strategic Reference Framework'<sup>36</sup>
- » [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>35</sup> [http://www.strukturifondid.ee/public/elukeskond\\_ENG.pdf](http://www.strukturifondid.ee/public/elukeskond_ENG.pdf)

<sup>36</sup> [http://www.strukturifondid.ee/public/Estonian\\_NSFR\\_21June07\\_ENG.pdf](http://www.strukturifondid.ee/public/Estonian_NSFR_21June07_ENG.pdf)



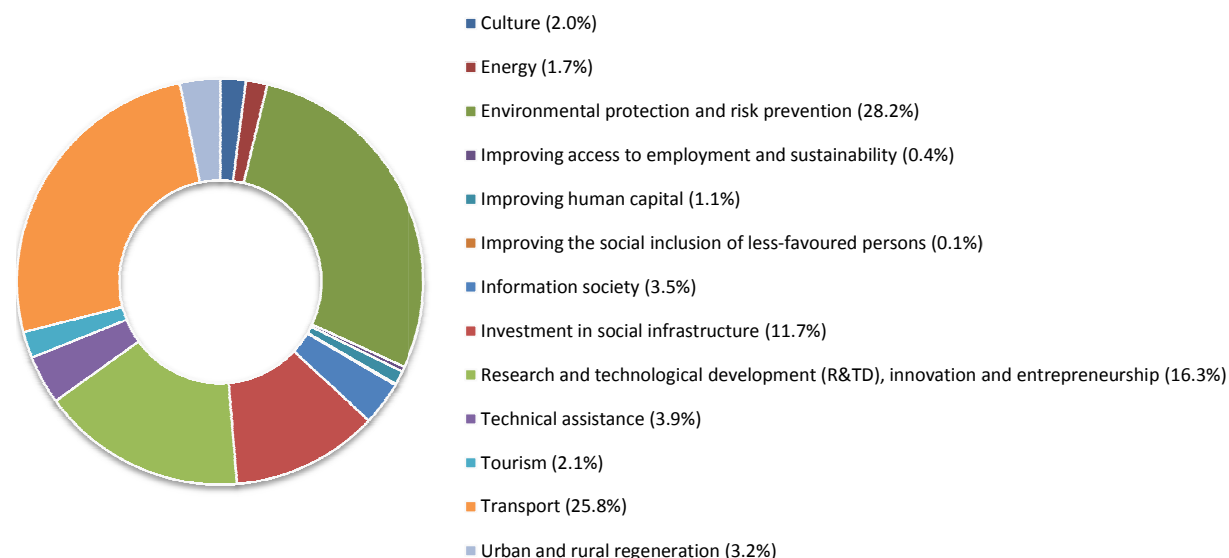
## 5. Hungary

### 5.1. Introduction

For the period of 2007-2013 Hungary has been allocated € 22.890 billion in total from the EU Structural Funds. The EU demands that the receiving country contributes with at least 15-50 % of the total amount depending on the objective. Hungary will based on this contribute with at approximately € 4.4 billion for the 2007-2013 period.

Hungary. Total spending 2007-2013	
EU Funds	€ 22.890 bn
National contribution	€ 4.4 bn
<b>Total</b>	<b>€ 26.929 bn</b>

Figure 8. European Regional Development Fund/Cohesion Fund 2007-2013: Hungary



### 5.2. Strategic Objectives

The long term goal for Hungary is to increase employment and promotion of long-term growth. To accomplish increased employment the following specific objectives have been set forth in the National Strategic Reference Framework:

- » Improving the employability and activity of individuals on the labour market, through coordinated actions adjusted to regional conditions
- » Increasing labour force demand, that is promoting the creation of more and better jobs (especially in disadvantaged regions) and
- » The development of a labour market environment that ensures the balance between supply and demand

To accomplish sustained long-term growth the following specific objectives has been set down:

- » The improvement of competitiveness, including strengthening knowledge, economy and innovation, and increasing productivity
- » Broadening the foundation of the economy, involving reduction of regional differences, development of the capacities for capital involvement, market extension, connection to a higher level of market integration and wider spread of modern technologies
- » Developing the business environment, including improved accessibility, improved regulatory environment and more efficient state services

All these objectives have been translated into six thematic and territorial priorities:

- » Economic development
- » Transport development
- » Social Renewal
- » Environment and energy development
- » Regional development
- » State reform

The objectives and priorities have resulted in 15 operational programmes; 7 regional and 8 sectoral programmes:

- » Economic development<sup>37</sup>
- » Transport<sup>38</sup>
- » Social Renewal<sup>39</sup>
- » Social Infrastructure<sup>40</sup>
- » Environment and Energy<sup>41</sup>
- » State reform<sup>42</sup>
- » Electronic Public Administration<sup>43</sup>
- » Implementation<sup>44</sup>
- » South Great Plain<sup>45</sup>
- » South Transdanubia<sup>46</sup>
- » North Great Plain<sup>47</sup>
- » North Hungary<sup>48</sup>
- » Central Transdanubia<sup>49</sup>
- » Central Hungary<sup>50</sup>
- » West Pannon<sup>51</sup>

## 5.3. Environment: Main issues

### 5.3.1. Water

93.7 % of all households are connected to drinking water supply. 62.3 % of households were connected to the wastewater collection network in 2004. This was an increase by 2.5 – 3 % since 2002. Of the collected wastewater,

<sup>37</sup> [http://www.nfu.hu/download/1781/GOP\\_070702\\_EN.pdf](http://www.nfu.hu/download/1781/GOP_070702_EN.pdf)

<sup>38</sup> [http://www.nfu.hu/download/1787/TOP\\_070712\\_en.pdf](http://www.nfu.hu/download/1787/TOP_070712_en.pdf)

<sup>39</sup> [http://www.nfu.hu/download/2737/T%C3%81MOP\\_adopted\\_en.pdf](http://www.nfu.hu/download/2737/T%C3%81MOP_adopted_en.pdf)

<sup>40</sup> [http://www.nfu.hu/download/1786/TIOP\\_070702\\_en.pdf](http://www.nfu.hu/download/1786/TIOP_070702_en.pdf)

<sup>41</sup> [http://www.nfu.hu/download/1783/KEOP\\_070628\\_ENG.pdf](http://www.nfu.hu/download/1783/KEOP_070628_ENG.pdf)

<sup>42</sup> [http://www.nfu.hu/download/2593/AROP\\_EN\\_adopted.pdf](http://www.nfu.hu/download/2593/AROP_EN_adopted.pdf)

<sup>43</sup> [http://www.nfu.hu/download/1779/ekop\\_070703\\_en.pdf](http://www.nfu.hu/download/1779/ekop_070703_en.pdf)

<sup>44</sup> [http://www.nfu.hu/download/1795/VOP\\_070704\\_EN.pdf](http://www.nfu.hu/download/1795/VOP_070704_EN.pdf)

<sup>45</sup> [http://www.nfu.hu/download/1776/DAOP\\_070705\\_en.pdf](http://www.nfu.hu/download/1776/DAOP_070705_en.pdf)

<sup>46</sup> [http://www.nfu.hu/download/1777/DDOP\\_070705\\_en.pdf](http://www.nfu.hu/download/1777/DDOP_070705_en.pdf)

<sup>47</sup> [http://www.nfu.hu/download/1778/EAOP\\_070705\\_EN.pdf](http://www.nfu.hu/download/1778/EAOP_070705_EN.pdf)

<sup>48</sup> [http://www.nfu.hu/download/1780/EMOP\\_20070705\\_en.pdf](http://www.nfu.hu/download/1780/EMOP_20070705_en.pdf)

<sup>49</sup> [http://www.nfu.hu/download/1782/KDOP\\_070705\\_en.pdf](http://www.nfu.hu/download/1782/KDOP_070705_en.pdf)

<sup>50</sup> [http://www.nfu.hu/download/1784/KMOP\\_070629\\_EN.pdf](http://www.nfu.hu/download/1784/KMOP_070629_EN.pdf)

<sup>51</sup> [http://www.nfu.hu/download/1785/NYDOP\\_070704\\_en.pdf](http://www.nfu.hu/download/1785/NYDOP_070704_en.pdf)

only 66.5 % was biologically treated before being conducted into the recipient. At the same time, the utilisation rate of the treatment capacity of plants is very low. The fact that in Hungary, the public utility gap (sewer length per 1 km long drinking water supply pipe), was still over 30 % in 2004, continues to pose a challenge.

95 % of the water supply relies on underground sources and this proportion is higher than in most European countries. The underground water resources represent an outstanding natural asset, but 60 % of them are vulnerable. Overall, the quality of underground water is good down to a few thousand meters' depth. Groundwater close to the surface and to populated areas is however generally contaminated, due to pollution from settlements (lack of sewer network, failure to get connected to sewer network, wastewater septic tanks, municipal landfills), agricultural activities (unsatisfactory treatment of manure on animal farms) or industrial activities (red mud reservoirs, storage of power plant slag and ash, mining waste and not properly constructed solid and liquid waste storage facilities).

All the Hungarian facilities and 600 of their operating water bases are located in ecologically and geographically vulnerable areas. Almost 6 million people are affected by vulnerable water supplies, which is more than 60 % of the total capacity. 2.5 million people or 25.1 % of the population is supplied with "unsatisfactory" water.

### 5.3.2. Waste

The amount of municipal solid waste generated has increased, although there has been an increase in reuse and recycling. In 2004, about 4,591 million tons of municipal solid waste was generated, of which 84.9 % was disposed in landfills (3,896 million tons), 11.7 % was used for material recovery (540 million tons) and 3.4 % was used for thermal recovery (155 million tons). 91 % (2004) of the population is involved in regular waste collection. Unfortunately only 11.7 % (in 2004) of total municipal solid waste was collected selectively.

Pharmaceutical waste is being collected separately by the pharmacies, based on producer responsibility. Electrical and electronic waste, including batteries and rechargeable batteries, are being collected through systems operating in accordance with the applicable government regulations. Tyres are being collected at expected levels, due to product charge (green tax).

In 2002, it was produced about 6 million tons of construction and demolition waste, of which only 21.8 % was re-used and recycled, 76.8 % was disposed in landfills and 1.4 % was abandoned. Since 2004 a number of micro-region level investments have been started to reach the highest possible level of re-use and recycling of construction and demolition waste. Removal of asbestos based insulation has started in the residential and community buildings.

A major concern is that in the past municipal waste management simply meant deposition. It is therefore necessary to create regional sanitary landfills which fulfil EU-standards, to replace old, improperly built and ill-handled local landfills. 2232 landfills still need to be re-cultivated and closed.

### 5.3.3. Air

The most serious environmental problem in the inner areas of settlements is the significant burden caused by traffic (air and noise pollution). 20 % of the population is affected with allergies, caused by high amounts of dust and pollen pollution and invasive and aggressive spread of species as well as air pollution caused by traffic. The areas with polluted air cover only 6.3 % of the country, but affect 35.9 % of the population.

Besides transport, one of the major polluters is the power plant sector, responsible for 30 % of carbon dioxide emissions, about 68 % of sulphur emissions, 16 % of nitrogen dioxide emissions and 10 % of particulate matter. Greenhouse gas emissions have however remained constant.

When it comes to noise pollution 100,000 people were affected by daytime noise levels above 75 dB(A) and 1.9 million by levels above 65 dB(A) in 2004. Most of the people affected by noise pollution live in Central Hungary region.

### 5.3.4. Biodiversity

Hungary has very varied geographical conditions with landscape variations and biological diversity. Hungary covers almost the entire Pannon geo-biographical region and in the Carpathian basin there are presently 4,200 known caves.

9 % of Hungary is defined as nature protection areas. In addition there are 89 botanical gardens, approximately covering 1500ha. Many species and habitats are unique to the Hungarian territory. According to legislation in force, there are 632 plant-, 828 animal-, 35 mushroom- and 5 lichen species that are protected. Also, 63 plant and 137 animals are highly protected.

A large part of the natural value is in agricultural land and forests. The natural values of these areas are therefore abliant/depending on to human action. Close to-nature agriculture and forestry needs special habitat friendly technologies.

Environmental consciousness necessary to preserve and enrich biological diversity and the natural environment is being perceptibly improved.

**5.3.5. Natural risks**

Floods are one of the major threats for Hungary. Area threatened by floods covers 23 % of the country's territory. Flood waves remain for 5-10 days in the upper sections of rivers, while on the lower sections of low gradients they can remain for up to 50 to 120 days. Other European rivers do not have such long lasting floods. Especially by North Tisza and its tributaries, and the Kőrös Rivers, water is a big problem. There levels can rise 8-10 meters within 24 to 36 hours following precipitation. The situation is further exacerbated by the fact that 35 % of the dams, the main line of defence against flooding, are not tall enough (measured flood levels plus 1 to 1.5 m, which is the specific safety height).

**5.3.6. Environment and Energy Operational Programme**

The Environment and Energy Operational Programme has eight main priorities:

1. Healthy and clean settlements
2. Wise management of waters
3. Wise management of natural assets
4. Increase use of renewable energy sources
5. Efficient energy use
6. Sustainable lifestyle and consumption patterns
7. Project preparation
8. Financing the management of the OP (technical assistant)

In the matrixes below all priority axes of the Environment and Energy OP will be evaluated, except priority axes 4 and 5. The priority axes are divided into various sub-priorities which contents will be described in the matrixes below. The sub-priorities are marked bold in the matrix. All of the Priority Axes are funded with 85 % of the total budget from the EU structure funds.

**5.3.7. OP matrix overview**

<b>PRIORITY 1</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>CF</b>	<b>€ 2 217 569 580</b>
<b>Healthy and clean settlements</b>	<b>53.1 %</b>	<b>CF</b>	<b>€ 2 217 569 580</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 1a: Waste management</b>		(Not available)	
Promotion of municipal waste recycling:			
» Selective collection, introduction and modernisation of			

<p>collection and pre-treatment systems and methods</p> <ul style="list-style-type: none"> <li>» Treatment of waste of animal origin (by-products) belongs to the responsibility of municipalities</li> <li>» Technology complementing investments of regional, municipal waste treatment systems</li> <li>» Establishment of incinerators which can serve waste management units of more than one region, able to burn new and left-over municipal waste for electricity production and thermal recovery purpose, and treat incineration remnants</li> </ul>	
<p><b>Pri 1b: Water treatment</b></p>	
<p>Wastewater collection, treatment and municipal liquid waste treatment, disposal in agglomerations over 2000 PE<sup>52</sup>:</p> <ul style="list-style-type: none"> <li>» Construction of new wastewater collection systems/wastewater treatment plants</li> <li>» The extension of existing wastewater collection systems/wastewater treatment plants, including network reconstruction connected to building and development (max. 5 %) and implementation of semi-natural wastewater treatment</li> <li>» As part of complex projects the development of environmentally friendly, cost efficient, professional, unique wastewater treatment solutions in populated areas or part thereof, which are not connected to the network for economic reasons</li> <li>» Implementation of developments aimed at creating the conditions for reception, transportation, and treatment/disposal of municipal liquid waste (e.g., works for receiving solid municipal waste, waste collecting vehicle)</li> <li>» Procurement in connection with operation of wastewater collection systems/wastewater treatment plants (e.g. sewerage cleaning vehicle)</li> </ul>	
<p>Sludge treatment, utilisation:</p> <ul style="list-style-type: none"> <li>» Regional and urban investments aimed at utilising wastewater sludge as renewable source in connection with the construction/extension of wastewater treatment plants</li> <li>» Construction of facilities for sludge treatment at wastewater treatment plants, or establishment of regional wastewater sludge utilisation plants</li> <li>» Investment into wastewater sludge utilisation in agriculture</li> </ul>	
<p>Closure and re-cultivation of municipal liquid waste storage sites and sludge ponds</p>	
<p><b>Pri 1c: Improvement of drinking water quality</b></p>	

<sup>52</sup> Population Equivalent: The unit of measure used to describe the size of a waste water discharge. Population equivalent is the biodegradable load (matter) in waste water having a 5-day biochemical oxygen demand (BOD) of 60g of oxygen per day. Population equivalent doesn't necessarily reflect the actual population of a community, <http://www.defra.gov.uk/environment/water/quality/uwwtd/report02/09.htm>

Drinking water treatment technologies	
Switching to other water bases	
Joining other water supply systems, establishment of regional systems	
Combinations of the solutions above	
Reconstruction of drinking water pipeline system	

<b>PRIORITY 2</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>Wise management of waters</b>	<b>28.7 %</b>	<b>CF</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Formation of good flood protection practices:</b>		(Not available)	
Implementation of the Vásárhelyi Re-Development Plan (VRDP) objectives			
Flood protection development of the Danube			
Development of other flood protection lines			
Development of municipal owned flood protection lines			
<b>Complex river catchment development</b>			
Complex water protection investments for high priority water protection areas (Balaton, Little-Balaton, Velence Lake, Fertő Lake, Tisza Lake, Upper Danube, flood plain and safe side water recharge in the area of Szigetköz, Ráckeve-Soroksár Danube section)			
Drinking water base protection operations:			
» In the diagnostic phase (2007-2009): building up the monitoring system, making a status report, identifying sources of pollution,			

<p>hydro-geological modelling, preparing a plan on insuring safety of water bases, elaborating an economy study by adapting the methodology to complex applications on the water bases. In the preparation phase, carefully optimising the number, the placement and the type of the necessary monitoring wells, and defining the steps and the timing of the works according to this method.)</p> <ul style="list-style-type: none"> <li>» In the phase of insuring safety (2007-2012): Measure prescribed by legally binding resolutions issued by the authorities regarding the drinking water protection areas, on the inside, the outside and in hydro-geological protection zones of water bases for drinking water supply.</li> <li>» In the diagnostic phase, the ranking of the tenders can be based on the level of vulnerability, the capacity of the water corks, (that has to be protected), and the number of the supplied inhabitants.</li> </ul>	
<p>Development of monitoring systems to track and regularly assess surface water bodies, groundwater, water bodies and in relation to them the status of protected areas in order to achieve environmental objectives.</p>	
<p><b>Recultivation of municipal solid waste landfills</b></p>	
<p>Strengthening prevention against adverse effects of municipal waste, the reduction of adverse effects of solid waste by closing and recultivating municipal solid waste landfills.</p>	
<p><b>Remediation of polluted areas</b></p>	
<p>Implementation of environmental remediation in the polluted areas (technological intervention)</p>	
<p>Reduction of actual and potential pollution of subsurface waters, soil and geological medium by remediation</p>	
<p><b>River basin management plans</b></p>	
<p>River basin management plans on all sub-basins in Hungary</p>	
<p>Risk management tasks recording to the Flood Directive (preliminary risk evaluation, risk analysis using flood disaster maps, creation of risk management plans, main riverbed management plans)</p>	
<p>Strategic plans and concepts which serve as a basis for the development of flood protection system and the harmonised operation of the system of the completed facilities</p>	

<b>PRIORITY 3</b> <b>Wise management of natural assets</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>2.8 %</b>	<b>ERDF</b>	<b>€ 114 989 621</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 3a: Restoration, preservation and development of protected natural assets and areas</b>		(Not available)	
Habitat protection, restoration, development			
Preservation and restoration of inanimate assets (caves, geological assets)			
Preservation and restoration of botanical gardens, arboreta and protected historical gardens			
Environmentally aware restructuring and increasing the safety of power lines (with the objective of bird protection, landscape protection, etc.)			
Environmentally aware reconstructing of infrastructure (roads, railways)			
<b>Pri 3b: Creation of the infrastructure basis for habitat-conserving agriculture and forestry (investments)</b>			
Investments serving the introduction of close to nature forestry practices (protected, NATURA 2000)			
Investments serving the introduction of close to nature meadow land practices (protected, NATURA 2000)			
<b>Pri 3c: Development of the forest school network</b>			
Infrastructure development of forest schools			

<b>PRIORITY 6</b> <b>Sustainable lifestyle and consumption patterns</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	1.6 %	ERDF	€ 65 928 350
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
<b>Promotion of sustainable consumption</b>	(Not available)		
Campaigns (awareness raising, informing) presenting the environmental and social impacts of consumption and sustainable lifestyle and consumption:			
<ul style="list-style-type: none"> <li>» Spreading sustainability related issues, values by means of campaigns</li> <li>» Research and strategy development supporting the above activities</li> </ul>			
Investments and pilot projects presenting and promoting a more sustainable lifestyle and consumption alternatives, and facilitating their distribution. With a primary focus on:			
<ul style="list-style-type: none"> <li>» Providing the necessary conditions and elaborating the procedures for sustainable communities (e.g. use of consumer durables, application of energy savings opportunities, strengthening cooperation and community ties, strengthening ties to the place of residence and local community etc.)</li> <li>» Establishing pilot systems promoting durable and “green” products (e.g. bio products, environmental friendly products) and services</li> <li>» Initiatives aiming at the prevention of waste generation, the moderation of generated waste hazardousness and increasing recycling in its material</li> <li>» Reconstruction of public buildings and other highly frequented buildings in order to ensure their sustainability</li> <li>» Improving the conditions of product certification processes (organisational development, accreditation)</li> <li>» Presenting the results of the above activities, ensuring the accessibility and distribution of information</li> </ul>			
<b>Pri 6b: Developments targeting e-environmental protection</b>			
Development of local EIONET (European Environment Information and Observation Network) network			
Development, management and information supply of information technology and geographic information systems, operations applicable for the entire OKIR (National Environment Protection and Information System) and its subsystems (especially including the further development of information supply to the public)			

Information technology support for rural and regional co-operations	
Development of IT systems related to the implementation of WFD (Water Framework Directive)	

<b>PRIORITY 7</b> <b>Project preparation</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>4.0 %</b>	<b>CF</b>	<b>€ 167 571 738</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Preparation of projects adjoining the priority axes within the Environment and Energy OP		(Not available)	

<b>PRIORITY 8</b> <b>Financing the management of the OP (technical assistance)</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>1.6 %</b>	<b>CF</b>	<b>€ 67 129 212</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<p>Technical-administrative administration of the OP (tasks of intermediate bodies. Most significant tasks are:</p> <ol style="list-style-type: none"> <li>1. Take part in the shaping and modification of OP or priority axis and action plan</li> <li>2. Draft an annual work plan about the administration of the OP</li> <li>3. Receive project proposals and evaluate them</li> <li>4. Carry out secretarial duties of the juries of award</li> <li>5. Drafting and modifying grant agreements and, if necessary, the security contracts</li> <li>6. Keeping track of the realisation and progress of projects</li> <li>7. Authorising grant payments</li> </ol>		(Not available)	

8. Payment of grants	
9. Implementation of non-site reviews	
10. Observing and reporting non-compliance	
11. Continuous registering of data in the single monitoring information system, as well as providing an up-dated and reliable database	
12. Drafting quarterly reports about the progress of the programme	
13. Carrying out OP specific information supply an public related tasks	
14. Elaboration of sectoral strategies promoting elaboration of call for proposals	
15. Development of integrated climate change concepts and to prepare action plans	
Fulfilment of specific tasks in relation with the administration of the OP	(Not available)
All activities that can be connected specifically and exclusively to the realization of the OP and does not go in under the Implementation OP. Mainly; <ul style="list-style-type: none"> <li>» Operating the OP monitoring committee and implementing its secretarial duties</li> <li>» Drafting annual progress reports, studies and analyses regarding OP implementation</li> </ul>	(Not available)

### 5.3.8. Major Projects

<b>Environment and Energy OP</b>		
Name	EU funding in Hungarian Florint (mill.)	
	HUF	
Békéscsaba wastewater collection system for the city and external areas, and wastewater treatment	HUF 300	
Makó and vicinity waste water collection system	HUF 112,8	
Székesfehérvár and vicinity waste water collection system	HUF 127,5	
Tápió vicinity waste water collection system and treatment	HUF 296	
Dél-Buda agglomeration waste water collection system and wastewater treatment	HUF 525	

Sewage treatment of South Balaton settlements falling under the scope of the Balaton Act	HUF 377	
Nyíregyháza and peripherals waste water collection system and wastewater treatment	HUF 380	
Nagykanizsa and vicinity waste water collection system and wastewater treatment	HUF 177,3	
South Great Plain region drinking water quality improvement	HUF 1524	
North-Great Plain region drinking water quality improvement 2 <sup>nd</sup> phase	HUF 750	
Mecsek-Dráva region waste management	HUF 250	
Central-Transdanubia region waste management	HUF 190	
Győr Sopron waste management	HUF 378,6	
Sopron waste management		
Sustainable development of the Danube-Tisza interfluvia sand ridge	HUF 500	
Ráckeve Danube-sector improving water management and water quality	HUF 1000	
Tisza flood plains project (Expansion of Vásárhelyi plan – VRDP (Vásárhelyi Re-Development Plan))	HUF 351,5	
Kis-Balaton water protection system, Stage II	HUF 389,3	
Reservoir for flood level decrease at Hany-Tiszasüly	HUF 113,3	
Nagykunsági Reservoir for flood level decrease	HUF 95,3	
Reservoir for flood level decrease of Szamos-Kraszna interfluvia	HUF 110	
Duna-project (flood protection structures, building of solid covering at some sections of the flood protection structures)	HUF 497	
Szabolc-Szatmár-Bereg county municipal solid waste management systems recultivation programme		

Middle-Duna waste management systems recultivation programme		
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## 5.4. Cultural heritage

The Operational Programmes for Hungary are in addition to the seven OPs divided according to sectors, also divided in to eight regional OPs; one for each region. The regional Operational Programmes for each region are structured identically. Only the regional OPs include activities such as the preservation of cultural heritage.

The regional Operational Programmes include the preservation of cultural heritage in one of the six, notably priority axis nr 2 under Tourism-related developments. How much will be allocated to the preservation of cultural heritage under priority axis 2 is hard to single out because the cultural heritage policy is described as a part of an overall strategy to improve tourism.

Regional Operational Programmes:		
Name	EU funding	National funding
South Great Plain	€ 137, 134,092	€ 24,200,134
South Transdanubla	€ 130,895,586	€ 31,267,639
North Transdanubla	€ 177,183,290	€ 31,267,639
North Hungary	€ 188,191,882	€ 33,210,332
Central Transdanubla	€ 115,315,875	€ 20,349,861
Central Hungary <sup>53</sup>	€ 186,492,093	€ 32,910,369
West Pannon <sup>54</sup>	€ 109,573,497	€ 19,336,497

West Pannon also includes the preservation of cultural heritage in one of six activities under one of three sub-priorities as part of priority axis 3; 'Urban Development'. (Financial framework: EU funding € 88,293,607, national funding: € 15,581,225.)

Further information:

- » 'Cohesion Policy 2007-1. National Strategic Reference Framework'<sup>55</sup>
- » 'Environment and Energy OP 2007-13'<sup>56</sup>

<sup>53</sup> For OP Central Hungary the relevant priority axis is called; 'Development of the Region's attractiveness' (nr. 3) Similar to the other regional OPs; cultural heritage is part of the broad strategy for improved tourism.

<sup>54</sup> Priority axis 2; Tourism development includes cultural heritage similar to the other regional OPs

<sup>55</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>56</sup> [http://www.nfu.hu/download/1783/KEOP\\_070628\\_ENG.pdf](http://www.nfu.hu/download/1783/KEOP_070628_ENG.pdf)



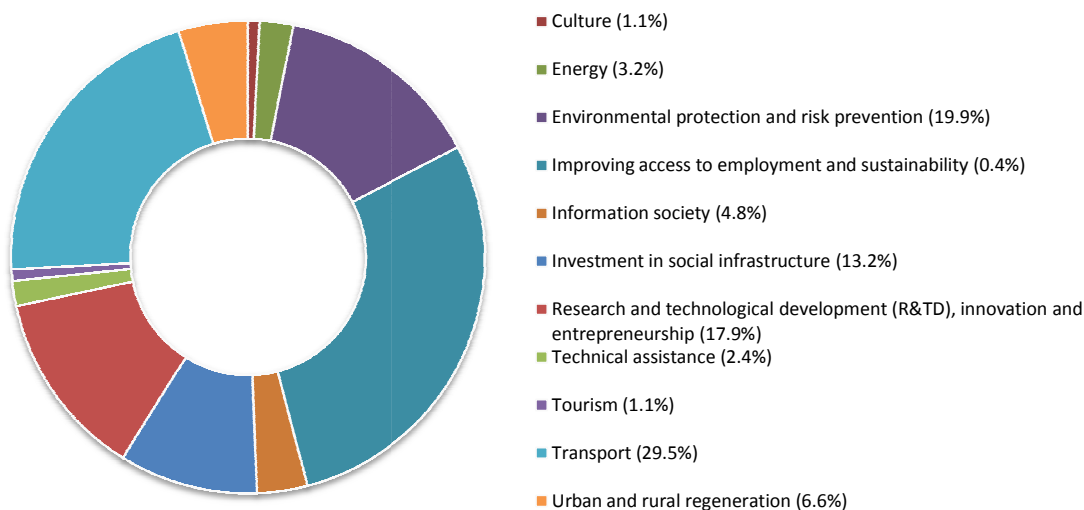
## 6. Latvia

### 6.1. Introduction

For the period of 2007-2013 Latvia has been allocated € 4.530 billion in total from the EU Structural Funds. The EU demand that the receiving country contributes with at least 15-50 % of the total amount depending on the objective. Latvia will therefore contribute with at least € 5 753 billion for the 2007-2013 period.

Latvia. Total spending 2007-2013	
EU Funds	€ 4.530 bn
National contribution	€ 0.774 bn
<b>Total</b>	<b>€ 5.753 bn</b>

Figure 9. European Regional Development Fund/Cohesion Fund 2007-2013: Latvia



### 6.2. Strategic Objectives

The long term goal for Latvia is to foster accelerated economic growth of the nation and approaching the average EU level of welfare. To reach this goal, Latvia has established three strategic objectives:

- » Development of an efficient utilisation of human resources
- » Strengthening competitiveness and progress towards a knowledge-based economy
- » Improvements in public services and infrastructure as a precondition for balanced national and territorial development

In addition Latvia has established six horizontal objectives:

- » Balanced territorial development
- » International competitiveness of the city of Riga
- » Macroeconomic stability
- » Equal opportunities
- » Sustainable development

- » Information society

The strategic objectives have been translated into the following three operational programmes:

- » OP Human Resources and Employment<sup>57</sup>,
- » OP Entrepreneurship and Innovations<sup>58</sup>,
- » OP Infrastructure and Services<sup>59</sup>,

Of these, only the OP Infrastructure and Services concerns the environmental and cultural heritage sectors.

### 6.3. Environment: Main issues

#### 6.3.1. Infrastructure and Water Management Services

Latvia has large resources of surface water and the possibility to provide the entire population with drinking water from groundwater resources. However, only 46 % of the population is provided with high-quality drinking water. In accordance with the monitoring data of the Public Health Agency as to 2005 quality of the drinking water supplied to consumers did not comply with the standard in terms of chemical indicators in 72.63 % of the cases on average, and in terms of biological indicators – in 3.4 % of cases. Due to leakages, approximately one third of the water obtained is lost during transportation in water supply systems.

Residents that do not have access to services of the centralised water supply system make use of groundwater from shallow wells, which, in general, are poorly protected from pollution.

Despite the fact that the amount of waste water treated, compared to the total amount of waste water collected has increased, considerable part of the produced public waste water is not being collected and treated, especially in the small populated areas. Services of centralised sewerage systems are accessible to approximately 74 % of residents living in the cities where the number of residents is from 10,000 to 100,000 but to 60 % of residents, living in towns where number of residents is smaller than 10,000. There is also poor technical condition of sewerage systems. Only slightly more than 10 % of 1100 waste water treatments plants, from which information was gathered, use technology that complies with the requirements of the environmental protection. Insufficient and ineffective waste water treatment leads to the flow of untreated waste water to the environment.

#### 6.3.2. Waste Management

There is an increase in the volume of waste generated each year. Latvia generated an average of 360kg of waste per person each year, and 50-60 % of generated waste is collected. For municipal solid waste, approximately 1.137 million tonnes were generated in 2004, of which only approximately 24 % were recycled. For hazardous waste approximately 27 000 tonnes were generated by enterprises in 2004.

The highest municipal solid waste indicators are generated from the food, drinks and tobacco production industries – approximately 24 % of all waste collected in 2004. When it comes to hazardous waste, approximately 62 % was generated by the metal products manufacturing industry.

By 2005, four municipal solid waste landfills had been built; accordingly approximately 57 % of the population can now dispose municipal waste in landfills that meet environmental standards. By 2009 there will be a total of nine landfills, reaching 94 % of the population. The collection of bio-gas generated at the “Getliņi” and “Šķēde” landfills has already begun, and will be used to generate electricity.

One of the main problems regarding waste management is the large number of small municipal solid waste dumps and their negative impact on the environment. More than 500 waste dumps were identified throughout the territory of Latvia. During the period from 1998 to 2004 inclusive, 176 were remediated, i.e. 33 % of all waste dumps. By 2009 further 196 dumps will be remediated with financing from the Cohesion Fund, and 50 dumps will be remediated with financing from the ERDF.

<sup>57</sup> [http://www.esfondi.lv/upload/04-kohezijas\\_politikas\\_nakotne/op/1\\_op\\_2007-10-07\\_draft\\_EN.pdf](http://www.esfondi.lv/upload/04-kohezijas_politikas_nakotne/op/1_op_2007-10-07_draft_EN.pdf)

<sup>58</sup> [http://www.esfondi.lv/upload/04-kohezijas\\_politikas\\_nakotne/op/2\\_dp\\_2007-07\\_DRAFT\\_EN.pdf](http://www.esfondi.lv/upload/04-kohezijas_politikas_nakotne/op/2_dp_2007-07_DRAFT_EN.pdf)

<sup>59</sup> [http://www.esfondi.lv/upload/04-kohezijas\\_politikas\\_nakotne/op/3\\_op\\_2007-10-01\\_projekts.pdf](http://www.esfondi.lv/upload/04-kohezijas_politikas_nakotne/op/3_op_2007-10-01_projekts.pdf)

Sorted waste collection have been carried out in Latvia for several years already, and the amount of recycled raw materials, which have been collected, keeps increasing every year. However, large amount of materials, which could be recycled, is conveyed to various dumpsites.

### 6.3.3. Biodiversity

Attention should be paid both to protecting species and habitats of EU importance in specially protected nature territories NATURA 2000 and to preserve collections of species and educating society in the field of conservation of the biological diversity during the period spanning between 2007 and 2013.

In order to protect nature values in NATURA 2000 areas and at the same time making these areas available for development of tourism, corresponding infrastructure is required (like trails, footbridges, view towers, signs and parking places). Issues regarding biological diversity are defined as priorities in the National Environmental Policy Plan (2004)<sup>60</sup>.

### 6.3.4. Historically Polluted Areas

The register of polluted and potentially polluted sites contained 3528 registered sites as of 1 December 2005. Polluted sites are included in the register irrespective of possibility to apply the polluter pays principle, e.g. remediation of municipal solid waste dumpsites that is under the responsibility of municipalities or the pollution left by former USSR industrial enterprises where the polluter does not exist anymore and polluter pays principle cannot be applied. The most polluted sites include the sulphuric acid goudron ponds around Incukalna, the former Rumbula airport, the areas around Mīlgrāvis and Sarkandaugava, the Olaine toxic waste dump, Jelgava liquid hazardous waste dumpsite "Kosmos" and Liepāja Karosta canal. The soil pollution in these areas filters into the underground and surface water and poses a threat to human health.

### 6.3.5. Environmental Risks

There are particular areas in Latvia where the environmental risk is high. These territories include river and lake flood-lands that periodically are flooded from floods and tides of the sea. Erosion is also a major concern in Latvia. Approximately 62 % of the Latvian coastline which is 495 km long is defined as an area with high risk of erosion.

### 6.3.6. Operational Programme Infrastructure and Services

The Operational Programme Infrastructure and Services has established eight main priority axes:

- 3.1 Infrastructure for Strengthening Human Capital
- 3.2 Promotion of Territorial Accessibility
- 3.3 Development of Transport Network of European Significance and Promotion of Sustainable Transport
- 3.4 Quality Environment for Life and Economic Activity
- 3.5 Promotion of Environmental Infrastructure and Environmentally Friendly Energy
- 3.6 Polycentric Development
- 3.7 Technical Assistance for ERDF Implementation
- 3.8 Technical Assistance for the CF Implementation

Of these priority axes 3.4 and 3.5 concerns environmental issues. Priority 3.3 has some importance on environmental issues due to its focus on public transportation, but the main focus in priority 3.3 is transport which falls outside the scope of this report focusing solemnly on environment and cultural heritage. Priority axes 3.4 and 3.5 are divided into various sub-priorities which contents will be described in the matrixes below. The sub-priorities are written in bold in the matrix.

Priority axis 3.4: Quality Environment for Life and Economic Activity:

- » Environment
- » Tourism
- » Socio-Economic Impact of Cultural Environment
- » Energy Efficiency of Housing

<sup>60</sup> <http://pdc.ceu.hu/archive/00002996/01/Envpp04.pdf>

Priority axis 3.5: Promotion of Environmental Infrastructure and Environmentally Friendly Energy:

- » Infrastructure of Environmental Protection
- » Energy

The Priority Axis has the following co-financing rates:

- » Priority Axis 3.4: has a maximum financing rate at 79.26 %
- » Priority Axis 3.5: has a maximum financing rate at 64.90 %
- » Priority Axis 3.7 and 3.8: has a maximum financing rate at 85 %

**6.3.7. OP matrix overview**

PRIORITY 3.4 Quality Environment for Life and Economic Activity	Percentage of the total OP budget	From ERDF/CF fund	
	11.1 %		€ 358 409 436
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 3.4a: Environment</b>		» Public service providers – local governments, administrations of local governments and agencies, as well as companies which have sign an agreement with municipality on provision of water management service  » The Nature Protection Board, administrations of specially protected areas, local governments, associations of local governments (cooperation associations), state institutions, commercial companies  » State and municipal institutions responsible for implementation of Ramsare, Washington or Rio de Janeiro conventions	
Development of water management infrastructure in populated areas where number of residents is up to 2000			
Developing infrastructure in the areas of NATURA 2000			
Development of infrastructure for conservation of biological diversity			
Rehabilitation of inherited contaminated sites			
Reduction of environmental risks			
Development of a system of environmental monitoring and control			
<b>Pri 3.4b: Tourism</b>		» State or local government institutions or agencies, administrations of special economic zones  » State and municipal institutions, which according to legislations of the Republic of Latvia provide the	
Development of tourism product of national importance			
Development of tourism information system			
<b>Pri 3.4c: Socio-economic impact of cultural environment</b>			

Establishment of a network of multifunctional halls of national and regional importance	flood prevention measures » Latvian Environment, Geology, and Meteorology Agency » State Environmental Service » State and local government institutions, legal persons owning or managing sites in which the investments are made, Latvian Tourism Development Agency » Latvian Tourism Development Agency » State and municipal institutions of national and regional importance development centres » State and municipal institutions, religious organisations, foundations, associations, whose property and/or possession are objects which comply with investment aim of activity » Physical and legal persons, whose property and/or possession are cultural monuments » Loan fund for energy efficiency of multi-apartment residential buildings » Municipalities
Renovation of objects of important cultural and historical heritage	
Assistance to private owners of cultural monuments in monument conservation and in the effective use of their socio-economic potential	
<b>Pri 3.4d: Energy efficiency of housing</b>	
Improvement of heat insulation of multi-apartment residential buildings	
Improvement of heat insulation of social residential buildings	

<b>PRIORITY 3.5</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
<b>Promotion of Environmental Infrastructure and Environmentally Friendly Energy</b>	<b>25.5 %</b>		<b>€ 676 400 000</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 3.5a: Infrastructure of environmental protection</b>		» Water management public service providers – municipalities, institutions of local governments and agencies, as well as	
Development of water management infrastructure in agglomerations with more than 2000 residents			

Development of regional systems for waste management	<p>enterprises, which have signed an agreement with municipality on provision of water management service</p> <p>» Municipalities, state institutions, medical treatment institutions, companies</p> <p>» Licensed providers of public services – enterprises operation centralised heat supply systems, municipal institutions providing public services for heat supply</p> <p>» Licensed providers of public services – enterprises operating centralised heat supply systems</p> <p>» Licensed public services providers of electric energy production</p> <p>» State Ltd Company “Latvenero”</p>
<b>Pri 3.5b: Energy</b>	
Measures regarding the increase of efficiency of centralised heat supply systems	
Development of cogeneration power plants utilising renewable energy sources	
Development of wind power stations	
Development of dam spillways for Daugava hydroelectric power plant	

<b>PRIORITY 3.7</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
<b>Technical Assistance for ERDF Implementation</b>	<b>1.8 %</b>	<b>ERDF</b>	<b>€ 57 610 045</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 3.7a: Assistance for Management of the Operational Programme Infrastructure and Services ERDF Co-Financed Measures</b>			
Ensuring programme management and support			

<b>PRIORITY 4</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
<b>Technical Assistance</b>	<b>2,5 %</b>	<b>ERDF</b>	<b>€ 87 811 841</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	

<b>Activities providing the necessary support for the OP implementation</b>	OP Managing Authority, Intermediate Body, Monitoring Committee/subcommittees, Project Selection and Coordination Committee, Internal Audit Directorate within the Ministry of Environment and Water, working groups established for the purposes of the OP, Beneficiaries under Priorities 1, 2 and 3
<b>Activities providing the necessary support for publicity and promotion of the OP</b>	

### 6.3.8. Major Projects

<b>PRIORITY 3.4</b>		
<b>Quality Environment for Life and Economic Activity</b>		
	Total EU funding for Major Projects, € 309 600 000	
Name	<b>CF</b>	<b>ERDF</b>
<b>Pri 3.4a: Environment</b>		
Rehabilitation Project for Inčukalns Acid Tar Ponds and Olaine Liquid Hazardous Waste Dump Site		
Remediation Project for Liepāja Karosta Channel		

<b>PRIORITY 3.5</b>		
<b>Promotion of Environmental Infrastructure and Environmentally Friendly Energy</b>		
	Total EU funding for Major Projects, € 309 600 000	
Name	<b>CF</b>	<b>ERDF</b>
<b>Pri 3.5a: Infrastructure of Environmental Protection</b>		
Development of water management services in Jūrmala		
Development of water management services in Riga		
Development of water management services in Jelgava, stage II		
Development of water management services in Ventspils, stage III		

## 6.4. Cultural Heritage

It is only the OP Infrastructure and Services that mention cultural heritage. Priority 3.4 "Quality Environment for Life and Economic Activity" has four sub-priorities, sub-priority 3.4.3 "Socio-economic Impact of Cultural Environment", has three activities where "renovation of objects of important cultural and historical heritage" is one priority and "assistance to private owners of cultural monuments in monument conservation and in the effective use of their socio-economic potential" is another. The second activity aims to provide assistance to preserve cultural monuments that are defined as private property. For the whole priority axis 3.4 € 358,409,436 is allocated from the Structural Fund, the Latvian state will co-finance with € 93,801,380.

More information:

- » "Cohesion Policy 2007-13. National Strategic Reference Framework"<sup>61</sup>
- » The sectoral Operational Programme Environment 2007-2013<sup>62</sup>
- » [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

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<sup>61</sup> [http://www.esfondi.lv/upload/NSRF\\_2007-07-10\\_draft.pdf](http://www.esfondi.lv/upload/NSRF_2007-07-10_draft.pdf)

<sup>62</sup> [http://www.esfondi.lv/upload/04-kohezijas\\_politikas\\_nakotne/op/3\\_op\\_2007-10-01\\_projekts.pdf](http://www.esfondi.lv/upload/04-kohezijas_politikas_nakotne/op/3_op_2007-10-01_projekts.pdf)

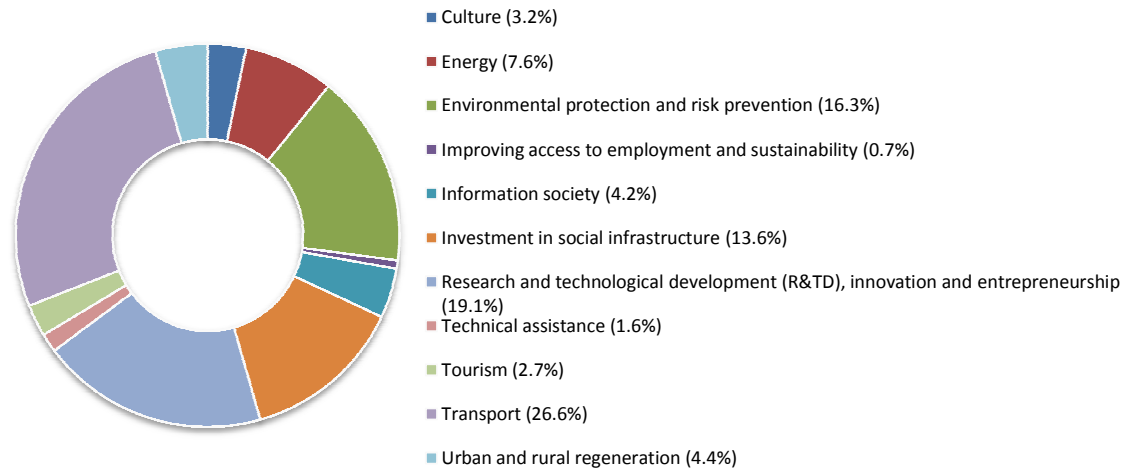
## 7. Lithuania

### 7.1. Introduction

For the period of 2007-2013 Lithuania has been allocated € 6.775 billion in total from the EU Structural Funds. The EU demands that the receiving country contribute with at least 15-50 % of the total amount depending on the objective. Lithuania will thus contribute with at least € 0.950 billion for the 2007-2013 period.

Lithuania. Total spending 2007-2013	
EU Funds	€ 6.775 bn
National contribution	€ 0.950 bn
<b>Total</b>	<b>€ 7.725 bn</b>

Figure 10. European Regional Development Fund/Cohesion Fund 2007-2013: Lithuania



### 7.2. Strategic Objectives

The main goal for Lithuania for the period 2007-2013 is to rapidly improve the conditions of investing, working and living in Lithuania ensuring the benefit provided by the economic growth reaches all Lithuanian residents. To reach this goal, Lithuania has established ten main priorities and three strategic objectives in the National Strategic Reference Framework<sup>63</sup>:

1. Productive human resources in order to create a knowledge society
  - » Attract and retain people in the labour market
  - » More active lifelong learning
  - » Develop a labour force with high level qualifications
  - » More efficient public administration
2. Competitive economy
  - » Increase business productivity, notably by creating a favourable environment for small and medium-sized enterprises and innovation
  - » Increase the comparative share of high added value business
  - » Make the economic infrastructure more effective

<sup>63</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/NSRF\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/NSRF_1.doc)

3. Life quality and cohesion
  - » Make better use of local potential
  - » Provide quality and accessible public services
  - » Ensure better environmental quality

The strategic objectives have been translated into four Operational Programmes:

1. OP Development of Human Resources<sup>64</sup>
2. OP Economic Growth<sup>65</sup>
3. OP Cohesion Promotion<sup>66</sup>
4. OP Technical Assistance<sup>67</sup>

Of these the Operational Programme Cohesion Promotion focuses on both the environment and cultural heritage. The Operational Programme Economic Growth focuses also to a certain extent on cultural heritage.

## 7.3. Environment: Main issues

### 7.3.1. Water infrastructure

63 % of the population is provided with centralised supply of drinking water. The drinking water comes from underground water sources and the quality of the water is therefore deemed acceptable in relation to water quality criteria. The water supply infrastructure is however in a poor state due to the quality of used supplied water is decreasing, while water losses, number of accidents, net cost of water etc. is increasing. Outdated infrastructure endangers environment and residents' health. Of the residents not connected to the public water supply network, there are approximately 1 million residents who use ground water from wells or individual bores which are often polluted and do not meet the requirements needed as drinking water. Only 62 % of all residents are connected to centralised collection and wastewater management systems. However, only 77 % of wastewater collected by centralised systems is cleaned in accordance with EU requirements and the sludge is mainly not properly managed, and only stored.

When it comes to surface water bodies, conditions are poor. 64 % of surface water bodies in Lithuania are affected by economic human activity. According to preliminary data, even 88 % of water bodies are attributed to potential risk group. The greatest number of water bodies at risk (75 %) is determined by pollution of towns and wastewater from industrial companies; however, water bodies at risk because of agricultural pollution (22 % of all water bodies in risk) constitute the greatest part of water bodies at risk according to the territory they occupy. Considering the fact that a numerous water bodies in Lithuania are very sensitive to anthropogenic effects, stricter requirements of reducing more pollution than provided for in the directives will have to be applied. Eliminating consequences of past effects and the implementation of stricter requirements is extremely expensive; therefore, more efficient water management systems allowing selecting optimal means for achieving water protection aims must be created in the near future<sup>68</sup>.

### 7.3.2. Waste management

Approximately 5 million tons of waste is produced in Lithuania per year. Of this 120 tons are hazardous waste. Industrial waste has increased, but the increase has been much lower in comparison with growth of GDP (gross domestic product) during recent years. Lithuania aims at continuing this development as well as increasing the recycling of waste.

<sup>64</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/OP\\_DoHR\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/OP_DoHR_1.doc)

<sup>65</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/OP\\_EG\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/OP_EG_1.doc)

<sup>66</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/OP\\_PoC\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/OP_PoC_1.doc)

<sup>67</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/OP\\_TA.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/OP_TA.doc)

<sup>68</sup> Source: Environmental Protection Agency, 2006.

The main waste management is landfilling, approximately 48.7 %, while 27.4 % is stored, 10.5 % is exported and 2.8 % is burned. Only 6 % of the waste is recycled and 4.6 % is used in other ways (used in construction, repair of roads, as soil fertilizers or animal food etc).

There are 700 waste landfills registered in Lithuania. The majority of these do not meet environmental protection requirements and are heavy polluters. The management of hazardous waste is receiving important priority, both to the management of new hazardous waste, but also the management of waste accumulated in the past and from heavily polluted territories. Studies show that there are approximately 5200 potentially polluted territories – these territories need to be prioritised.

When it comes to communal waste management, development of collection and recycling of secondary raw material as well as management of biologically decomposing waste will be given the greatest priority.

### **7.3.3. Air**

Greenhouse gases have decreased by over 3 times since 1991. The amount of pollutants emitted to the air has hardly increased, although the economy of the country has developed rapidly. A certain increase of greenhouse gas and pollutants emitted into the atmosphere cannot be avoided in the future due to planned rapid growth of economy and the shutdown of Ignalina atomic power plant in 2009. The biggest emitters of greenhouse gases and pollutants to the atmosphere are from energy sector, transport and industry. Since 2000, only the amounts of nitrogen oxides and volatile organic compounds have increased slightly.

In major cities, solid particles smaller than 10 microns and NO<sub>x</sub> has become a major concern during the recent years. The expanding transport sector emits a great amount of such pollutants. One of the most serious problems of pollution is due to the consumption of traditional energy sources such as oil products and natural gas without proper clean technology hindering pollutants being emitted into the air. Due to these, twice as many pollutants per one unit of produced energy are emitted compared to the average of EU-15.

To monitor the changing development of pollution and condition of the environment, especially in the most sensitive ecosystems, it is necessary to develop and improve monitoring systems.

### **7.3.4. Biodiversity**

15 % of the country's territory is protected area consisting of: 6 reserves (5 state reserves and 1 small reserve area), 373 state and municipal preserves, 5 national parks, 30 regional parks, one biosphere reserve, 26 biosphere grounds and about 450 heritage objects. Lithuania aims at making 17 % of the country's territory into protected areas, inter alia by further developing the Natura 2000 network. An important function of the protected area is making the society aware of environmental protection and to introduce protected natural and cultural values. A problem is the poorly developed infrastructure of cognitive tourism and ecological education among the majority of the protected areas which limits availability of the protected values to the society.

Biodiversity is endangered by changing farming traditions in agriculture and forestry as well as the spread of invasive species. Also abandoned buildings and other objects spoiling landscape is a problem both in protected areas and in the rest of the country. Unused quarries, unfinished buildings, unused industrial sites, agriculture production centres and other abandoned buildings visually pollute landscape of the country; reduce recreational potential and attractiveness as well as endangering visitors.

The growth of the marine industry has produced a negative influence on the processes of formation of the coasts of Lithuania. It is therefore important to protect the biodiversity and landscape along the coast of the Baltic Sea.

### **7.3.5. Operational Programme for Promotion of Cohesion for 2007-2013**

The Operational Programme for Promotion of Cohesion has four main priorities:

1. Local and urban development, preservation of cultural heritage and protection of nature and its adaptation to development of tourism
2. Quality and availability of public services: health care, education and social infrastructure
3. Environment and sustainable development
4. Technical assistance for implementing operational programme for promotion of cohesion

Only priority axis 3 focuses on the environment. The priority axis is divided into various sub-priorities which contents will be described in the matrixes below. The sub-priorities are marked bold in the matrix. The priority axes are funded with 84.25 % of the total budget from the EU Structural Funds.

## 7.3.6. OP matrix overview

PRIORITY 3 Environment and sustainable development	Percentage of the total OP budget	From ERDF/CF fund	
	42.1 %		€ 1 128 119 555
Typology activities within the axis		Beneficiaries	
<b>Pri 3.1: Renovation and development of water supply and wastewater management system</b>		(Not available)	
Modernisation and development of infrastructure of wastewater management (wastewater collection, transportation, cleaning, discharge, stocktaking, control, management of waste produced during initial cleaning of sludge)			
Development of infrastructure of surface wastewater management			
Creation of infrastructure of cleaning sludge produced while during wastewater management			
Implementation of the measure of increasing efficiency of wastewater from agglomerations cleaning facilities from which wastewater is discharged into pollution-sensitive water bodies			
Completion of implementation of investment programs for development of watershed water supply and wastewater management infrastructure, i.e. for renovation and development of infrastructure designed for public water supply and wastewater management in cities and towns			
Supply of suitable-quality drinking water and creation of wastewater management infrastructure to villages and small settlements			
Construction of cleaning facilities in existing surface wastewater collection systems belonging to municipalities (or enterprises controlled by municipalities)			
Create wastewater sludge management infrastructure enabling to use existing accumulations of and newly obtained sludge for the needs of energetics			
<b>Pri 3.2: Creation of a modern waste management system</b>			
Complete creation of regional waste management systems according to prepared plans for regional modern waste management system			

Completion of closing and recultivation works of old landfills	
Construction of an appropriate waste collection and sorting infrastructure	
Development of infrastructure of biologically decomposing waste management and separate collection of flow of specific waste ( Electrical and Electronical Equipment, packaging, domestic hazardous waste etc)	
<b>Pri 3.3: Improvement of air quality</b>	
Implementation of pollution cleaning and control (monitoring) systems in enterprises of energetics; special attention will be given to installing equipment designed for eliminating solid particles (KD <sub>10</sub> ) and nitrogen and sulphur oxides.	
An economically strong public transport system, especially development of infrastructures of clean public transport related to using alternatives fuels and biofuel	
Strengthening the control of environmental pollution by vehicles	
<b>Pri 3.4: Increase of efficiency of energy production and use as well as use of renewable energy sources</b>	
Increasing energetic efficiency in buildings of public sector by repairing and/or reconstructing external walls of the building and improving their thermal characteristics	
Repair and/or reconstruction of energetics systems (engineering or technological engineering) by improving thermal characteristics of the buildings in the public sector	
Development of highly efficient and renewing heating plants	
Modernising boiler plants supplying heat to centralised heating networks	
Assessment of the possibility to implement electricity production by efficient district heating	
Use of renewable energy sources and waste in energy production	

### 7.3.7. Major projects

<b>PRIORITY</b> (Not available)		
<b>Project title</b> (Not available)		
	EU funding: € 606 000 000	
Name	<b>CF</b>	<b>ERDF</b>
Modernisation of Mžeikiai power plant	€ 127,000,000	
Modernisation of Vilnius power plant No. 2	€ 116,000,000	
Construction of an incineration station in Vilnius	€ 191,000,000	
Construction of an incineration station in Kaunas	€ 172,000,000	

## 7.4. Cultural Heritage

It is mainly the OP for Promotion of Cohesion which focuses on cultural heritage. Priority axis 1 in the OP is "Local and urban development, preservation of cultural heritage and protection of nature and its adaptation to development of tourism". The priority axis has four sub-priorities:

1. To reduce differences in the quality and environment of life in the main and the rest of the towns of the country by giving special attention to improvement of housing conditions in problematic areas
2. To provide conditions for more rapid diversification of economic activity in rural areas
3. To promote incoming and local tourism by using natural resources, cultural heritage and creating conditions more favourable to active recreation
4. To promote protection of natural resources (first of all, of water resources, landscape and biodiversity) by providing conditions for their effective adaption to the needs of residents and economy

For the whole of priority axis 1 the sum of 755 127 250 euros is allocated from the EU Structural Funds, but as shown above, only one of the sub-priorities focuses on cultural heritage, notably sub-priority number 3. In this sub-priority the greatest attention will be given to tourism infrastructure, but restoration of public heritage objects (manor houses, water mills, inns archaeological monuments etc), rebuilding of past heritage and other objects possessing remaining value (castles, fortresses, inns) will also be supported. For protection and conservation of cultural heritage a financial proportion of 66,023,891 euro will be provided.

In OP Economic Growth priority axis 3 focuses on "Information Society for all". The priority axis contains two sub-priorities; develop electronic solutions to increase efficiency of public sector institutions and to enforce e-business initiatives in the country and to establish an even, secure electronic network infrastructure in Lithuania. Lithuania seeks among many other activities to digitalise and disseminate the Lithuanian cultural heritage. For priority axis 3 it is allocated 240,086,875 euro from the EU Structural Funds. Lithuania will co-finance with 15 % of the total costs, approximately 42 million euro. The contribution to cultural heritage from the OP Economic Growth is therefore very limited.

- » Cohesion Policy 2007-13 National Strategic Reference Framework<sup>69</sup>,
- » NSRF Lithuania, OP for Promotion of Cohesion for 2007-2013<sup>70</sup>,
- » Operational Programme for Promotion of Cohesion for 2007 2013<sup>71</sup>

<sup>69</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>70</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/NSRF\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/NSRF_1.doc)

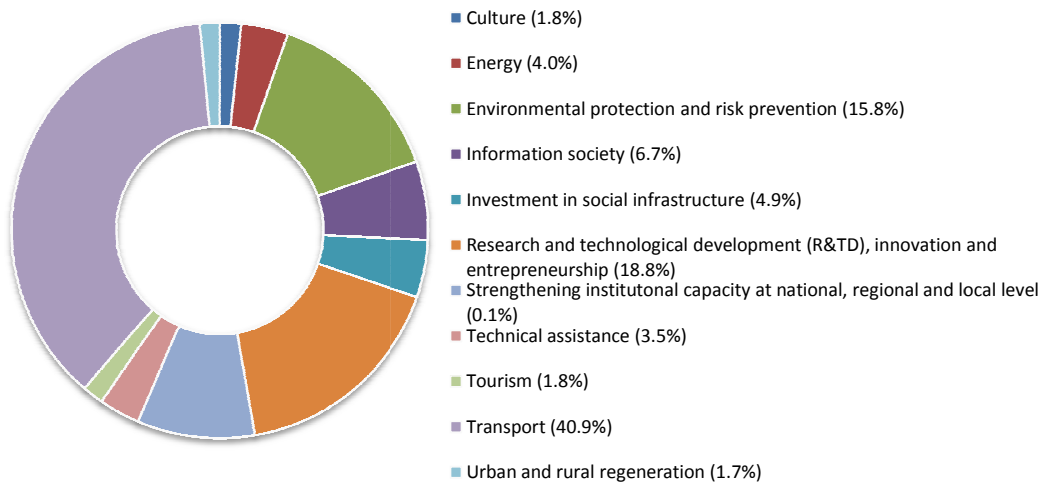
## 8. Poland

### 8.1. Introduction

For the period of 2007-2013 Poland has been allocated € 65.221 billion in total from the EU Structural Funds. The EU demands that the receiving country contribute with at least 15-50 % of the total amount depending on the objective. Poland will based on this contribute with at least € 14.1 billion for the 2007-2013 period.

Poland. Total spending 2007-2013	
EU Funds	€ 65.221 bn
National contribution	€ 14.108 bn
<b>Total</b>	<b>€ 79.329 bn</b>

Figure 11. European Regional Development Fund/Cohesion Fund 2007-2013: Poland



### 8.2. Strategic Objectives

EU funding will be invested in Poland to achieve the following overall objective: “Creation of those conditions for growth of competitiveness and of a knowledge based economy and entrepreneurship, assuring an increase in employment and in level of social, economic and territorial cohesion.”<sup>72</sup> In order to implement this overall objective, Poland has established the following six horizontal strategic objectives in the National Strategic Reference Framework<sup>73</sup>:

1. Improved functioning standards for the public administration and development of partnership mechanisms
2. Improved quality of human capital and enhanced social cohesion
3. Development and modernisation of technical and social infrastructure of fundamental importance for growth in Poland’s competitiveness
4. Improved competitiveness and innovativeness of enterprises, including a special focus on the production sector and high added value as well as development of the services sector
5. Increased competitiveness of Polish regions and counterbalancing of their social, economic and geographic marginalisation
6. Balanced development opportunities and support for structural changes in rural areas

<sup>71</sup> [http://www.esparama.lt/ES\\_Paramam/angliskas\\_medis/programming\\_for\\_2007\\_2013\\_tree/front\\_page/files/OP\\_PoC\\_1.doc](http://www.esparama.lt/ES_Paramam/angliskas_medis/programming_for_2007_2013_tree/front_page/files/OP_PoC_1.doc)

<sup>72</sup> <http://europa.eu/bulletin/en/200705/p115003.htm>

<sup>73</sup> [http://www.funduszezstrukturalne.gov.pl/NR/rdonlyres/733590C1-490B-4902-B242-42E946DC315B/21234/NSRF\\_140206r.pdf](http://www.funduszezstrukturalne.gov.pl/NR/rdonlyres/733590C1-490B-4902-B242-42E946DC315B/21234/NSRF_140206r.pdf)

The strategic objectives have been translated into twenty one Operational Programmes, five national programmes and sixteen regional programmes:

#### National programmes

1. OP Infrastructure & Environment<sup>74</sup>
2. OP Innovative Economy<sup>75</sup>
3. OP Human Capital<sup>76</sup>
4. OP Development of Eastern Poland<sup>77</sup>
5. OP Technical Assistance

#### Regional programmes

1. ROP Dolnośląskie
2. ROP Kujawsko-pomorskie
3. ROP Lubelskie
4. ROP Lubuskie
5. ROP Łódzkie
6. ROP Małopolskie
7. ROP Mazowieckie
8. ROP Opolskie
9. ROP Podkarpackie
10. ROP Podlaskie
11. ROP Pomorskie
12. ROP Śląskie
13. ROP Świętokrzyskie
14. ROP Warmińsko-mazurskie
15. ROP Wielkopolskie
16. ROP Zachodniopomorskie

(It should be mentioned that the Polish Regional Operational Programmes are only available for the public in polish.)

Of the National Operational Programmes, only OP Infrastructure and Environment focuses on environment and cultural heritage.

### 8.3. Environment: Main issues

#### 8.3.1. Water

Poland suffers from poor water resources. Water resources per km<sup>2</sup> are 5.4 l/s/km<sup>2</sup> which are twice as low as the European average amounting to 9.6 l/s/km<sup>2</sup>. The amount of water per inhabitant amounts on average to 1600 m<sup>3</sup>/per year and is almost three times lower than the European average, which equals to approx. 4560 m<sup>3</sup>/per year. The quality of the water resources is also unsatisfactory. In 2004, out of the 131 water quality tests, there were 106 cases of failure to fulfil the necessary EU quality requirements of drinking water. Only 7.5 % of the examined water resources have been rated as class I (the highest standard of purity), while 20 % of water is excessively polluted. However this percentage has decreased substantially.

The amount of sewage discharged into the water or soil is systematically decreasing. In 2004, 90 of sewages requiring treatment were purified. There has been a gradual improvement in the quality of water in Poland from 1999-2002, but investments in water-sewage infrastructure and improved water-sewage management are still needed. In 2004 59 % of the population used sewage treatments plants, in Western Europe the average is 78 %.

For industrial sewage discharging, approximately 6 % is discharged without the proper treatment or purification, into the water or soil. Nearly 63 % is only mechanically purified.

<sup>74</sup> [http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008\\_POliS\\_ENG.pdf](http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008_POliS_ENG.pdf)

<sup>75</sup> <http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46527/innowacyjnagospodarkaang1704.pdf>

<sup>76</sup> [http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/42511/H COP\\_EN\\_18January2008\\_final1.pdf](http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/42511/H COP_EN_18January2008_final1.pdf)

<sup>77</sup> <http://www.mrr.gov.pl/NR/ronlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/43805/PORPWenfinal1.pdf>

### 8.3.2. Waste management

In 2004 256 kg waste was collected per person. This is significantly lower than the average of EU 25 (518 kg/person in 2001) and the EU-15 (556 kg/per person).

As of 2004, 95 % of the municipal waste is stockpiled, of which approximately 48 % accounts for biodegradable waste. Of the 795 waste stockpiles, 480 fail to fulfil the technical and organisational requirements specified in the Council Directive *On the landfill of waste* (1999/31/EC)<sup>78</sup>. In addition there were 2538 "wild stockpiles" in 2005, these are not stockpiles in the meaning as with reference to the directive and they are not intended for waste stockpiling. The municipal authorities are obliged of their removal.

Dangerous waste produced in households, which then is mixed with regular municipal waste deposits, poses a serious threat. The inhabitants in local municipalities should themselves isolate the dangerous waste from the municipal waste, but dangerous waste disposed in waste stockpiles is rising.

### 8.3.3. Soil

The most important factors deteriorating the quality of soil in Poland are: harmful effects of the mining industry and the effect of dust and gas emission from industry and transport. The total estimated area of land under degradation in Poland exceeds 8.000 km<sup>2</sup> or approximately 2.6 % of the country's total area. Despite a significant reduction of the pressure of environmentally harmful mining and industrial activities, the slow pace of the rehabilitation process does not contribute to a quick improvement of the soil quality in Poland. Another significant problem is land deserted after completing economic activities, including industrial areas. Furthermore, due to the greenhouse effect, increasing sea levels are causing erosion of the coastline; this challenge requires action<sup>79</sup>.

### 8.3.4. Air

The main causes for air pollution caused by human activities are the energy sector, industrial sector, the public utilities sector and transport. SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> are decreasing, while suspended dust PM10 is frequently exceeding acceptable norms. There is also a high concentration of ozone. Poland has decreased the emissions of greenhouse gases with 30 % from 1989 to 2004. Poland has therefore fulfilled their obligations to reduce the emissions of greenhouse gases noting a significant surplus in this area. The main acoustic hazards are traffic noise, railway noise, industrial noise and air noise.

### 8.3.5. Biodiversity

32.5 % of Poland's territory is under protection. This include: 23 national parks, 1368 nature reserves, 120 landscape parks and 448 regions of protected landscape. In addition there were created 265 "Nature 2000" regions in Poland in 2005, covering 9.64 % of the land's surface.

There are sanctuaries for 267 species of birds, 46 species of plants and 88 species of animals, among them many endangered and rare species in Europe. When it comes to plants there are 485 plant groups in Poland, of which 76 types are endangered. The threat to the flora is significant and the threat to trachea plants is estimated to 19 % of the species. Still this is lower than in Europe as a whole where the numbers are estimated to 30-40 % of species.

The forest plays a significant role. In 2004, 28.7 % of the country's territory was covered with forest. However, the forest is fairly young (41.9 % is 41-80 years old) and mono-cultured, resulting in diseases, invasions of vermin and a higher risk of trees dying.

### 8.3.6. Natural hazardous and threats

The main threats to the natural environment are natural hazards like floods, fires, hurricanes and ice jams, and serious chemical or ecological disasters. Every year the number of incidents concerning increased water level in rivers ranges from several hundred to several thousand cases. A long-term lack of financial support for water economy has resulted in even higher flood risks. The pollution of the Baltic Sea and the degradation of its coastlines constitute a serious concern. Apart from the pollution produced by ships, the source of pollution in the coastal areas

<sup>78</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:182:0001:0019:EN:PDF>

<sup>79</sup> [http://www.mrr.gov.pl/NR/rdonlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008\\_POIIS\\_ENG.pdf](http://www.mrr.gov.pl/NR/rdonlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008_POIIS_ENG.pdf)

is mainly landbased, and mainly due to lack of sanitary sewage systems for carrying rain and snow water in coastal agglomerations.

The risk of fire in forests and other open spaces are very imminent. Also the industrial sector is causing fires and in several hundred cases every year, fires are accompanied by explosions (e.g. in 2005 there were 238 gas explosions, 31 dust explosions and 23 explosions of explosive materials).

There are 341 industrial plants in Poland, which may cause serious industrial disaster due to the amount of dangerous substances stored. The risk of serious industrial disasters affects mostly the southern part of Poland.

### 8.3.7. Operational Programme Infrastructure and Environment

The Operational Programme Infrastructure and Environment has fifteen main priorities:

1. Water and sewage management
2. Waste management and the protection of earth
3. Resource management and counteracting environmental risks
4. Initiatives aimed at adjusting enterprises to the requirements of environment protection
5. Environment protection and promotion of ecological habits
6. Ten-t road and air transport network
7. Environment-friendly transport
8. Transport safety and national transport networks
9. Environment-friendly energy infrastructure and energy efficiency
10. Energy security, including diversification of the energy sources
11. Culture and cultural heritage
12. Health security and improving the efficiency of the healthcare system
13. Infrastructure of higher education
14. Technical assistance – European Regional Development Fund
15. Technical assistance – Cohesion Fund

Of these, priority axes 1 to 5 will be closer examined in the matrixes below. Of the respective priorities all, except priority axis 4, are funded with 85 % of the total budget from the EU Structural Funds. For priority axis 4, approximately 30 % of the total budget comes from the EU Structural Funds.

### 8.3.8. OP matrix overview

PRIORITY 1 The water and sewage management	Percentage of the total OP budget	From ERDF/CF fund	
	8.7 %	CF	€ 2 783 942 550
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Initiatives aimed at providing efficient and effective systems of municipal sewage collection and treatment in agglomerations above 15,000 PE <sup>80</sup> (population equivalent)		» Local government and their associations » Enterprises/entities on which the local governments has assigned its duties in water and sewage services (councils,	
Projects with only one beneficiary of funds and referring to a comprehensive solution to water and sewage management in agglomerations between			

<sup>80</sup> Population Equivalent: The unit of measure used to describe the size of a waste water discharge. Population equivalent is the biodegradable load (matter) in waste water having a 5-day biochemical oxygen demand (BOD) of 60g of oxygen per day. Population equivalent doesn't necessarily reflect the actual population of a community.

2,000 and 15,000 PE will also be taken into account	boroughs)
Elimination of certain dangerous substance constituting a direct life and health hazard for the population, and maintaining safe emission rates concerning other substances constituting a threat to the water ecosystem	
Projects including (but not only) activities regarding water supply and construction of a rain drain system	
Preparation of documentation necessary for submitting applications and performance of the project (technical documentation for the projects)	
KPOSK – Implementation of directives in relation with water and sewage management	

<b>PRIORITY 2</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>CF</b>	<b>€ 1 215 740 049</b>
<b>Waste management and the protection of earth</b>	<b>3.8 %</b>	<b>CF</b>	<b>€ 1 215 740 049</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Reducing the amount of municipal waste disposal and increasing the amount of municipal waste which has been recycled or neutralised with other methods than disposal and elimination of risks resulting from waste disposal, according to the national and voivodeship waste management plans		<ul style="list-style-type: none"> <li>» Local governments and their associations</li> <li>» The army</li> <li>» Voivodeship governors</li> <li>» The National Forests Enterprise and its organisational units (concerning land rehabilitation)</li> <li>» Marine offices</li> <li>» Enterprises responsible for implementing the tasks specified in the indicative list</li> </ul>	
Increasing the surface of areas restored to proper condition by rehabilitating degraded land, protecting landslides and sea coasts from erosion			

<b>PRIORITY 3</b> <b>Resource management and counteracting environmental risks</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>1.7 %</b>	<b>CF</b>	<b>€ 556 788 510</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Increasing protection against effects of natural hazards through appropriate conservation of existing anti-flood protection objects, construction of polders, the so-called dry anti-flood tanks and modernisation of flood banks		» The Regional Water Management Boards » The Voivodeship (Provincial) Drainage and Water Equipment Boards	
Prevention of serious accidents and improvement of technical safety condition of existing objects, including water tanks and barrages, as well as other objects used for periodical swelling of water		» Marine offices » The Marine Search and Rescue Service » Institute of Meteorology and Water Management	
Construction and modernisation of infrastructure used for purifying and discharging rain and snow water into sea basins		» Units of local self-government and their associations » The National Forests Enterprise and its organisational units	
Modernisation and construction of new multiple task tanks used for water swelling (in accordance with EC guidelines <sup>81</sup> )		» The Central Headquarters and voivodeship (provincial) stations of the National Fire Brigade Headquarters » The Head Inspector of Environment Protection » The Voivodeship Inspectorates of Environment Protection	
Increasing natural retention of river valleys while preserving the balance of the ecological and technical condition of rivers, e.g. through reconstruction of old river beds, forestation and shrub expansion, utilisation of retention capabilities of natural reservoirs and marshlands, as activities constituting elements of big projects			
Drafting planning documents – water management plans and plans of anti-flood protection actions, resulting from Water Law Directive, framework water directive and directive on evaluation of flood-related risk and its management			
Strengthening systems for the generation and dissemination of environment data, necessary for decision-making processes concerning environment protection through improvement of environment monitoring			

<sup>81</sup> Letter of Commissioner Wallstrom and Commissioner Barnier of 23 June 2003 (HA/MS/DG (03) 6249) to Permanent Representations.

<b>PRIORITY 4</b> <b>Initiatives aimed at adjusting enterprises to the requirements of environment protection</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	1.8 %	ERDF	€ 200 000 000
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Promoting certified environment management systems		(Not available)	
The rationalisation of natural resources and waste management, including reducing the amount of generated waste other than municipal waste and increasing the level of waste reclamation and recycling			
Preventing and reducing the pollution of various components of the environment by adjusting the existing installations to the requirements of the Best Available Techniques (BAT)			
Reducing the amount of pollution (in particular dangerous substances) discharged into water by industry and reducing the amount of not purified industrial sewage discharged into water or land			
Improving the quality of fresh air by reducing the emission of polluting substances from fuel burning plants, with priority to installations with power exceeding 50MW			
Increasing the amount of post-utility and dangerous waste which is reclaimed			

<b>PRIORITY 5</b> <b>Environment protection and the promotion of ecological habits</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	0.3 %	ERDF	€ 89 800 000
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Restoring the proper conditions of natural habitats (ecosystems) and sanctuaries for species within protected areas, preserving endangered		<ul style="list-style-type: none"> <li>» National parks</li> <li>» Entities managing protected</li> </ul>	

species and the genetic variety of flora, fauna and fungi	areas » Landscape parks » Forest inspectorates » Non-government organisations » Research institutions
Restoring ecological corridors to a passable condition in order to enable the movement of animals and proper functioning of the population in the scale of the country	
Supporting the process of drafting protection plans for protected areas	
Increasing awareness concerning the need for and methods of environment protection and the conservation of nature and landscape	

### 8.3.9. Major projects

<b>PRIORITY (Not available)</b>		
<b>Title (Not available)</b>		
		EU funding, € 5 914 520 000
Name (Not available)*	<b>CF</b>	<b>ERDF</b>

\* The funding has been allocated to Poland, but projects have not yet been decided upon.

(Regarding Poland, only the amount allocated for major projects has been identified. Neither the beneficiaries nor the name of the foreseen projects have been successfully identified.)

## 8.4. Cultural heritage

Of the National Operational Programmes the OP Infrastructure and Environment focuses on cultural heritage. Poland is one of the few countries which have prioritised a total axis for culture and cultural heritage, priority axis XI (11). Priority axis 11 has been allocated € 490 million from ERDF. The allocated funding is divided into three specific priority axis objectives:

- » The protection, preservation and efficient use of trans-regional cultural heritage
- » Improving the condition of cultural infrastructure of trans-regional significance and increasing the access to culture
- » Developing the infrastructure of art schools

21 % of the allocation is earmarked for the first objective, amounting € 102.9 million. The second objective is also to a certain degree related to cultural heritage, this objective will receive 62 % of the total amount allocated, approximately € 303.8 million.

Further information:

- » Cohesion Policy 2007-13 National Strategic Reference Framework<sup>82</sup>
- » NSRF Poland<sup>83</sup>
- » OP Infrastructure and Environment<sup>84</sup>

<sup>82</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>83</sup> [http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/733590C1-490B-4902-B242-42E946DC315B/21234/NSRF\\_140206r.pdf](http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/733590C1-490B-4902-B242-42E946DC315B/21234/NSRF_140206r.pdf)

<sup>84</sup> [http://www.mrr.gov.pl/NR/rdonlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008\\_POIIS\\_ENG.pdf](http://www.mrr.gov.pl/NR/rdonlyres/FA094722-1B90-44B1-AFD4-8B4E7F529C81/46855/7122008_POIIS_ENG.pdf)

## 9. Romania

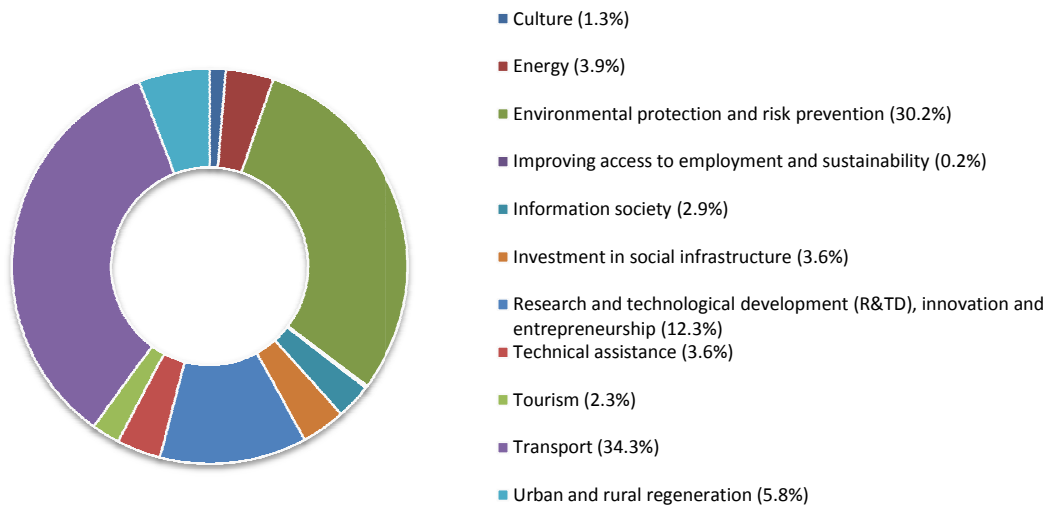
### 9.1. Introduction

For the period of 2007-2013 Romania has been allocated € 19.213 billion in total from the EU Structural Funds. The EU demand that the receiving country contributes with at least 15-50 % of the total amount depending on objective. Romania will therefore contribute with at least € 4.038 billion at current prices for the 2007-2013 period.

**Figure 1. Romania. Total spending 2007-2013**

EU Funds	€ 19.213 bn
National contribution	€ 4.038 bn
<b>Total</b>	<b>€ 23.251 bn</b>

**Figure 12. European Regional Development Fund/Cohesion Fund 2007-2013. Romania.**



### 9.2. Strategic Objectives

The long term goal for Romania is to become a competitive, dynamic and prosperous country. For the duration of the 2007-2013 programming period Romania has identified the following NSRF objective: "To reduce economic and social development disparities between Romania and the EU Member States, by generating a 15-20 % additional growth of the GDP by 2015." To reach these goals, Romania has established four thematic priorities and one territorial priority in the National Strategic Reference Framework<sup>85</sup>:

1. Development of basic infrastructure to European standards
2. Increasing the long term competitiveness of the Romanian economy
3. Development and more efficient use of Romania's human capital
4. Building an effective administrative capacity
5. Promote balanced territorial development (territorial priority)

The strategic priorities have been translated into seven Operational Programmes:

<sup>85</sup> <http://www.fonduri-ue.ro/upload/118786170647.pdf>

1. Sectoral Operational Programme Transport<sup>86</sup>
2. Sectoral Operational Programme Environment<sup>87</sup>
3. Sectoral Operational Programme Increase of Economic Competitiveness<sup>88</sup>
4. Regional Operational Programme<sup>89</sup>
5. Sectoral Operational Programme Human Resources Development<sup>90</sup>
6. Operational Programme Administrative Capacity Development<sup>91</sup>
7. Operational Programme Technical Assistance<sup>92</sup>

Of these the Sectoral Operational Programme Transport (SOP) and Sectoral Operational Programme Environment focuses on the environment, while the Regional Operational Programme focuses on cultural heritage. In this report only the SOP Environment will be evaluated. For more information on the other programmes, please see the links.

### 9.3. Environment: Main issues

The analysis which forms the basis for this report was carried out in the second half of 2006, the situation may have developed to some extent since the analysis was undertaken. As described in the introduction we still feel that this is important information since it was on this premises that both Romania and the European Commission approved the NSRF and OPs.

#### 9.3.1. Water infrastructure

The usable water resource is 2,660 m<sup>3</sup> water/inhabitant/year, compared to the European average of 4,000 m<sup>3</sup> water/inhabitant/year, Romania is one of the relatively poor countries in water sources.

Only 52 % of the Romanian population is connected to both water and sewage services. In addition 63.4 % of the 1 310 wastewater treatment plants and storage installations which existed in 2005 functioned inadequately. The main reasons for the inadequately function is old pipes and wastewater networks, modifications in their treatment capacity without being adapted to initial design parameters, low managing capacity and poor financial situation on local water services operators. The wastewater treatment plants also only covers 77 % of the total flow evacuated through the public sewerage networks. Due to these factors 79 % of the wastewater are untreated or insufficiently treated and flows directly into the natural receivers, mainly rivers. In addition up to 70-75 % of the current pipes have to be replaced because the supply systems today are mainly made of non-adequate materials like asbo-cement and lead.

The population benefiting of drinking water supply from public network is a little bit higher with distribution to 65 % of the population. On the other hand 65 % of the population benefits of drinking water supply from public network, but there is still 32 % of the population which neither benefits from water supply nor from sewerage system. In the rural areas the situation worsens; 90 % are not connected to sewage systems and 67 % do not have access to water supply. Pollution with nitrates from agricultural sources of surface and ground waters has been reviewed and identified vulnerable zones categorised by "A", "B" and "C-zones";

- » "A zones" are potentially vulnerable zones due to the run-off of nitrates into surface water bodies: An area of 5,650 km<sup>2</sup>, i.e. 2.37 % of the area of the country and 3.82 % of farmland is categorised in this zone.
- » "B zones" are potentially vulnerable (with a medium vulnerability risk) from percolation of nitrates to free aquifers: an area of 13,759 km<sup>2</sup>, i.e. 5.77 % of the area of the country, or 9.30 % of farmland is categorised in this zone.
- » C zones are of high vulnerability risk from percolation of nitrates to free aquifers: 1,200 km<sup>2</sup>, i.e. 0.50 % of the area of the country, or 0.81 % of the farmland.

<sup>86</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/POS\\_Transport\\_final\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/POS_Transport_final_EN.pdf)

<sup>87</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/POS\\_Mediu\\_final\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/POS_Mediu_final_EN.pdf)

<sup>88</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/POS\\_Competitivitate\\_final\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/POS_Competitivitate_final_EN.pdf)

<sup>89</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/POR\\_final\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/POR_final_EN.pdf)

<sup>90</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/POS\\_Dezv\\_resurs\\_eumane\\_proiect\\_iulie2007\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/POS_Dezv_resurs_eumane_proiect_iulie2007_EN.pdf)

<sup>91</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/PO\\_Dezv\\_capacitate\\_admin\\_proiect\\_iulie2007\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/PO_Dezv_capacitate_admin_proiect_iulie2007_EN.pdf)

<sup>92</sup>[http://www.mefromania.ro/wps/PA\\_1\\_1\\_15H/static/amcsc/fond\\_structural/fonduri\\_structurale/fonduri\\_Romania/PO\\_Asistenta\\_tehnica\\_final\\_EN.pdf](http://www.mefromania.ro/wps/PA_1_1_15H/static/amcsc/fond_structural/fonduri_structurale/fonduri_Romania/PO_Asistenta_tehnica_final_EN.pdf)

### 9.3.2. Waste management

Generation of municipal waste has in the last 6 years in general been ascending. In comparison with EU countries, municipal waste generated in Romania in 2005 measured in kg/person is below EU-27 average. As opposed to the majority of EU developed countries, the municipal waste generated in Romania is mainly landfilled and only 2 % is recycled. The household waste and similar waste represents the biggest part of the total municipal waste, amounting to 5,161 million tonnes. In rural areas, there are no organized services for waste management, except a few rural areas localities situated near urban centres.

In 2005, 252 landfills for municipal waste were functioning, out of which 18 were complying landfills, while 234 were non-complying landfills. The investment costs necessary to ensure compliance of the existing municipal landfills have been estimated to Euro 1,775 million. Currently there are no installations for thermal treatment of solid municipal waste. Apart from the landfills in urban areas there are 2,686 dumping sites in rural areas, the most having a surface of 1 ha.

According to the country report on Romania of the Strategic Evaluation on Environment and Risk Prevention, carried out by Ecolas & GHK on behalf of the European Commission, for municipal solid waste investments needed for 2007-2013, Romania is ranked the third among the respective ten Member States.

When it comes to production waste, which is industrial and agriculture waste, there are very few companies that deal with this type of waste. The services they provide are also limited. In 2004, the total quantity of waste generated by industry was about 355 million tons.

There are seven incinerators for hazardous waste belonging to four private operators. The inventory of industrial landfills was in 2004 169 landfills – of them only 15 are in accordance with the provisions of the Directive no 1999/31/ED.

When it comes to soil pollution and contaminated sited the most important types of soil pollution investigated by the National Institute of Pedology and Agrochemistry (ICPA) are:

1. Soil pollution (degradation) by mining and quarry activities
2. Pollution caused by ponds, mining dumps, non-complying landfills
3. Pollution produced by inorganic residues and waste (minerals, inorganic material, metals, salts, acids, alkalis)
4. Pollution caused by substances carried by the air – hydrocarbons, ammonia, sulphur dioxide, chlorides, fluorides, nitrogen oxides, lead compounds
5. Pollution caused by salted waters from petroleum extraction, petroleum pollution.

### 9.3.3. Air

The main pollutants emissions decreased in Romania since 1989, as a result of the political and economic changes. The reduction on a large scale of the economic production from the most industrial areas and the closure of many large pollutant installations led to the decrease with over 50 % of the industrial emissions for many pollutants during 1989-2004.

Particulate matters are the main pollutants which for the exceeding of the maximum admissible concentration (MAC) is significant. The most affected localities with particulates matter pollution are Resita, Bistria-Nasaud, Campulung, Brasov, Zalau, Vaslui, Miercurea Ciuc, Gheorghieni, Rovinari, Motru, Constanta and Iasi. One of the main sources of air pollution in many municipalities is represented by combustion activities, especially from large combustion plants (LCPs), which produce power and heat. Out of the total number of LCPs, 7 LCPs are in compliance with the requirements of Directive No 2001/80/EC, 157 are non-compliant, and 10 LCPs are closed or in closing procedure.

### 9.3.4. Biodiversity

Romania has a very high biodiversity level, both at ecosystems level and species level. The natural and semi-natural ecosystems cover around 47 % of the country's areas. The country also has a unique natural heritage, offered by Carpathian Mountains (65 % of the Carpathian eco-region) as well as by one of the most important wetlands in Europe, Danube Delta (the second as size in Europe). Romania has also more than one third of the large carnivore population in Europe and about 300,000 ha of virgin forests.

Due to development of economic activities in Romania during the last decades, many plants and animal species are in danger and the modification of the land landscape is an important indicator for environmental deterioration.

There are 13 National Parks, 1,687,512 ha (121,780 ha), and 935 scientific reserves, nature monuments and nature reserves, total surface approximated at 180,000 ha. The total terrestrial surface of the natural protected areas represents around 8 % of the total terrestrial country surface at the end of 2005. By the end of 2013, this percentage should reach 15 %.

It is important to emphasise that the existing protected area network, that will incorporate a significant part of the NATURA 2000 network, is lacking the infrastructure needed for efficient management. Currently, because of economic pressure and lack of management resources, protected areas are confronted with high pressure from illegal exploitations, uncontrolled tourism and construction development and illegal hunting, leading to irreversible losses of biodiversity in Romania.

### 9.3.5. Natural risks

Romania has faced, in time, severe natural phenomena like earthquakes, drought, floods, forest or land fire and numerous accidents due to human activities that lead to significant material losses and impact on the environment. Floods have a yearly frequency. Taking into consideration the frequency and intensity of the natural risks mentioned above, both in term of lives losses as of material damages, Romanian authorities have decided that the most important natural risk to be addressed through specific and significant intervention is represented by floods.

### 9.3.6. Sectoral Operational Programme of Environment 2007-2013

The SOP of the Environment has five objectives:

1. Improvement of quality and access to water and wastewater infrastructure, by providing water supply and wastewater services in most urban areas by 2015
2. Development of sustainable waste management system, by improving waste management and reducing the number of historically contaminated sites in min. 30 counties by 2015
3. Reduction of negative environmental impact and mitigation of climate change caused by urban heating plants in most polluted localities by 2015
4. Protection and improvement of biodiversity and natural heritages by supporting protected areas, including NATURA 2000 implementation by 2015
5. Reduction of the incidence of natural disasters affecting the population, by implementing preventive measures in most vulnerable areas by 2015

In order to achieve the above mentioned objectives, Romania has identified the following priority axis:

1. Extensions and modernisation of water and wastewater systems
2. Development of integrated waste management systems and rehabilitation of historically contaminated sites
3. Reduction of pollution and mitigation of climate change by restructuring and renovating urban heating systems towards energy efficiency targets in the identified local environmental hotspots
4. Implementation of adequate management systems for nature protection
5. Implementation of adequate infrastructure of natural risk prevention in most vulnerable areas
6. Technical assistance

The Priority Axis has the following co-financing rates:

- » Priority Axis 1: has the highest financing rate from EU Structural Funds with a maximum rate at 85 %
- » Priority Axis 3: has the lowest maximum financing rate from EU Structural Funds with only a 50 % rate
- » Priority Axes 2 and 4: has a maximum financing rate from EU Structural Funds at 80 %
- » Priority Axis 5: has a maximum financing rate from EU Structural Funds at 82 %
- » Priority Axis 6: has a maximum financing rate from EU Structural Funds at 75 %

All of these financing rates are within the maximum co-financing rates set forth in Council Regulation No 1083/2006/EC<sup>93</sup> Article 53, see Annex III.

**9.3.7. OP matrix overview**

<b>PRIORITY 1</b> <b>Extension and modernisation of water and wastewater systems</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	58.2 %	CF	€ 2 776 532 160
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Construction/modernisation of water sources intended for drinking water abstraction		» Local authorities (County Councils and Local Councils) through Regional Operating Companies	
Construction/rehabilitation of water treatment plants			
Extension/rehabilitation of water and sewerage networks			
Construction/upgrading of wastewater treatment plants			
Construction/rehabilitation of sludge treatment facilities			
Metering, laboratory equipment, leakage detection equipment etc.			
Technical assistance for project preparation (including tender documents), management and publicity (including public awareness), institutional governance improvement.			

<sup>93</sup> [http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l\\_210/l\\_21020060731en00250078.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_210/l_21020060731en00250078.pdf)

<b>PRIORITY 2</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>ERDF</b>	<b>€ 934 223 079</b>
<b>Development of integrated waste management systems and rehabilitation of historically contaminated sites</b>	<b>20.8 %</b>	<b>ERDF</b>	<b>€ 934 223 079</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Acquisition and installation of selective collection systems		» Municipalities, County Councils or	
Construction of sorting, recycling and composting facilities		» Associations of municipalities	
Acquisition of waste transport vehicles			
Construction of municipal waste disposal facilities and transfer stations			
Recovery of gas from landfills, where appropriate			
Construction of adequate facilities for municipal hazardous waste (medical waste, electric and electronics waste, etc.) and other specific municipal waste streams (construction and demolition waste, etc.)			
Closure of non-compliant landfills			
Technical assistance for project preparation, management and supervision, publicity and awareness campaigns (on selective collection, sorting, recycling, composting), institutional governance improvement, tendering and selection of waste services operators			
Land restoration and cleaning using appropriate methods for specific type of contaminated sites			
Technical assistance for project preparation, option studies, management and supervision and publicity			

<b>PRIORITY 3</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
<b>Reduction of pollution and mitigation of climate change by restructuring and renovating urban heating systems towards energy efficiency targets in the identified local environmental hotspots</b>	<b>8.2 %</b>	<b>CF</b>	<b>€ 229 268 644</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Introduction of BAT (best available techniques) for SO <sub>2</sub> , NO <sub>x</sub> and dust reduction (de-SO <sub>2</sub> , de-NO <sub>x</sub> and reduction of dust emissions)		» Local authorities of the selected municipalities » or their wholly owned urban-heating operating companies	
Rehabilitation of boilers and turbines			
Introduction of improved metering			
Rehabilitation of non-compliant slag and ash landfills			
Rehabilitation of heat distribution networks (including redesign of networks if justified by more cost-efficient reasons)			
Technical assistance for project preparation, elaboration of option studies, management, supervision and publicity, including public awareness campaigns			

<b>PRIORITY 4</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
<b>Implementation of adequate management systems for nature protection</b>	<b>3.8 %</b>	<b>ERDF</b>	<b>€ 171 988 693</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	

Assistance in the preparation of management plans, scientific studies, inventories, mapping	<ul style="list-style-type: none"> <li>» Administrators or custodians of protected areas</li> <li>» National Agency for Protected Natural Areas and Biodiversity Conservation (NAPNABC)</li> <li>» Biosphere Reserve "Danube Delta" Administration</li> <li>» Public administrations</li> <li>» NGOs</li> <li>» Research institutes</li> <li>» Universities</li> <li>» Museums</li> </ul>
Training and institutional capacity building of the NATURA 2000 sites and protected areas management bodies	
Ecological restoration of habitats and the reinforcement of species population	
Construction and improvement of infrastructure of national protected areas and NATURA 2000 sites (building of visitors' and informational centres and information panels, risk management – fire prevention and control, etc.)	
Biodiversity support: reducing impact of infrastructure improvements on species affected by fragmentation of landscape (realisation of measures designed to overcome barriers on rivers and motorways)	
Setting up the monitoring systems for the NATURA 2000 sites and protected areas, including infrastructure and equipment for monitoring of the natural habitats and flora and fauna species conservation status	
Preparation of information and publicity materials, awareness raising for the protected areas and NATURA 2000	
Acquisition of high biodiversity value land in order to become state public property	

<b>PRIORITY 5</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
		<b>CF</b>	<b>€ 270 017 139</b>
<b>Implementation of adequate infrastructure of natural risk prevention in most vulnerable areas</b>	<b>5.9 %</b>	<b>CF</b>	<b>€ 270 017 139</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Infrastructure for flood prevention and reduction of the destructive consequences of floods		» The National Administration of Romanian Waters (NARW)	
Development of hazard and flood risk prevention maps, plans and measures, including public information and training in reducing risks			

Technical assistance for project preparation, management, supervision and publicity	
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<b>PRIORITY 6</b> <b>Technical Assistance</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>3.1 %</b>	<b>ERDF</b>	<b>€ 130 440 423</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Support related to Monitoring Committee meetings		» Managing Authority » Intermediate Bodies	
Preparation of the necessary documents/strategies for project identification and justification			
Preparation, appraisal and monitoring of the Programme and of individual operations, including the support of Intermediate Bodies for such activities, using consultancy services when needed			
Preparation of audits and control missions and “on the spot” checks			
Evaluation of the SOP Environment, including on-going evaluations			
Preparations of studies, analyses and reports focused on the monitoring of the impacts of the programme implementation, analyses of the effectiveness of the implementing structures, identification of the programme bottlenecks with the aim to formulate recommendations for operative improving effectiveness of the programme management			
Training activities on the management of structural fund projects for the MA, IBs, beneficiaries			
Acquisition of specific IT applications for SOP Environment			
Remuneration of contractual staff to implement the above mentioned task			
Thematic studies linked to SOP Environment implementation; thematic studies needed for preparation of environmental strategy for the next programming period			
Demonstration activities aiming to apply state of the art concepts of			

integrated water management solutions and innovations technologies in environmental fields connected to key areas of intervention of the SOP Environment	
Support for establishment of dissemination and information exchange platforms	
Development and implementation of training and education programmes for staff adaption to innovation technologies	
Elaboration and implementation of the Communication Plan of SOP Environment	
Consultancy services for elaboration of information materials, preparation of assessment reports for the SOP Environment	
Publicity and information activities – organisation of workshops, preparation of information materials, development and update of the SOP's web site, dissemination of the information materials, brochures, etc. for the general public as well as potential beneficiaries for SOP interventions	

### 9.3.8. Major projects

<b>PRIORITY 1</b>		
<b>Extension and modernisation of water and wastewater systems</b>		
Name	Total EU funding for Major Projects, € 1 602 000 000	
	CF	ERDF
Teleorman: Modernisation of water/wastewater infrastructure in the main agglomerations from Teleorman county		
Giurgiu: Modernisation of water/wastewater infrastructure in the main agglomerations from Giurgiu county		
Calarași: Modernisation of water/wastewater infrastructure in the main agglomerations from Calarași county		
Tulcea: Modernisation of water/wastewater infrastructure in the main agglomerations from Tulcea county		
Codlea, Rupea, sârnești area, Brașov county*: Modernisation of water/wastewater infrastructure in the main agglomerations from Codlea, Rupea, Zărnești area, Brașov county		
Turda-Câmpia Turzii area, Cluj county: Modernisation of water/wastewater infrastructure in Turda-Câmpia Turzii area, Cluj county		

Mediaș, Agnita, Dumbrăvni, Copșa Mică area, Sibiu county: Modernisation of water/wastewater infrastructure in the main agglomerations from Mediaș, Agnita, Dumbrăvni, Copșa Mică area, Sibiu county		
Gorj: Modernisation of water/wastewater infrastructure in the main agglomerations from Gorj county		
Cluj-Sălaj: Modernisation of water/wastewater infrastructure in the main agglomerations from Cluj-Sălaj counties		
Olt: Modernisation of water/wastewater infrastructure in the main agglomerations from Olt county		
Covasna*: Extension and modernisation of water supply and sewerage system in Covasna county		
Harghita*: Extension and modernisation of water supply and sewerage system in Harghita county		
Dâmbovița: Extension and modernisation of water supply and sewerage system in Dâmbovița county		
Iași: Extension and modernisation of water supply and sewerage system in Iași county		
Timiș: Extension and modernisation of water supply and sewerage system in Timiș county		
Alba: Extension and modernisation of water supply and sewerage system in Alba county		
Prahova: Extension and modernisation of water supply and sewerage system in Prahova county		
Mureș: Extension and modernisation of water supply and sewerage system in Mureș county		
Satu Mare: Extension and modernisation of water supply and sewerage system in Satu Mare county		
Neamț: Extension and modernisation of water supply and sewerage system in Neamț county		
Vâlcea: Extension and modernisation of water supply and sewerage system in Vâlcea county		

Buzău: Extension and modernisation of water supply and sewerage system in Buzău county		
Bacău: Extension and modernisation of water supply and sewerage system in Bacău county		
Jui Valley, Hunedoara county: Extension and modernisation of water supply and sewerage system in Jui Valley, Hunedoara county		
Victoria, Fagaras area, Brasov county: Extension and modernisation of water supply and sewerage system in Victoria, Fagaras area, Brasov county		
Arad: Rehabilitation and modernisation of water supply and sewerage systems for Arad county		
Bistrița-Năsăud: Rehabilitation and modernisation of water supply and sewerage systems for Bistrita county		
Dolj: Rehabilitation and modernisation of water supply and sewerage systems for Dolj county		
Region I, Galați county: Rehabilitation and modernisation of water supply and sewerage systems for region I, Galați county		
Ialomița: Rehabilitation and modernisation of water supply and sewerage systems for Ialomița county		
Ifov: Rehabilitation and modernisation of water supply and sewerage systems for Ifov county		
Region I, Mehedinți county: Rehabilitation and modernisation of water supply and sewerage systems for Region I, Mehedinți county		
Vrancea: Rehabilitation and modernisation of water supply and sewerage systems for Vrancea county		
Constanța: Rehabilitation and modernisation of water supply and sewerage systems for Constanța county		
Brăila: Rehabilitation and modernisation of water supply and sewerage systems for Braila county		
Sibiu: Rehabilitation and modernisation of water supply and sewerage systems for Sibiu county		
Bihor: Rehabilitation and modernisation of water supply and sewerage		

systems for Bihor county		
Maramures: Upgrading the water and waste water infrastructure in Maramures county		
Region II, Galati county: Upgrading the water and waste water infrastructure in region II, Galati county		
region II, Mehedinti county: Upgrading the water and waste water infrastructure in region II, Mehedinti county		
Hunedoara: Upgrading the water and waste water infrastructure in Hunedoara county		
Bistrita: Upgrading the water and waste water infrastructure in Bistrita county		
Suceava: Upgrading the water and waste water infrastructure in Suceava county		
Caras: Upgrading the water and waste water infrastructure in Caras county		

*Note: For projects marked with \*, there is a possibility for preparation of more than one application for funds. This decision will be subject to individual project preparation, based on technical, financial and institutional assessment of the specific project conditions (relief, infrastructure, beneficiary institutions, etc).*

<b>PRIORITY 2</b>		
<b>Development of integrated waste management systems and rehabilitation of historically contaminated sites</b>		
	Total EU funding for Major Projects € 1 602 000 000	
Name	<b>CF</b>	<b>ERDF</b>
Giurgiu: Solid waste integrated management system in Giurgiu county		
Maramureş: Solid waste integrated management system in Maramureş county		
Bistriţa-Năsăud: Solid waste integrated management system in Bistria Nasaud county		
Vrancea: Solid waste integrated management system in Vrancea county		

Harghita and Covasna: Solid waste integrated management system in Harghita and Covasna counties		
Alba: Solid waste integrated management system in Alba county		
Botoşani: Solid waste integrated management system in Botoşani county		
Călăraşi: Solid waste integrated management system in Calarasi county		
Cluj: Solid waste integrated management system in Cluj county		
Olt*: Solid waste integrated management system in Olt county		
Sălaj: Solid waste integrated management system in Salaj county		
Suceava: Solid waste integrated management system in Suceava county		
Vaslui: Solid waste integrated management system in Vaslui county		
Caraş Severin: Solid waste integrated management system in Caraş Severin county		
Jiu Valley, Hunedoara county: Solid waste integrated management system in Jiu Valley, Hunedoara county		

*Note: For the projects marked with \*, there is a possibility for preparation of more than one application for funds. This decision will be subject to individual project preparation, based on technical, financial and institutional assessment of the specific project conditions (relief, infrastructure, beneficiary institutions, etc).*

#### 9.4. Cultural heritage

The only OP concerning cultural heritage is Regional OP. Cultural heritage is mentioned as one of three key areas of intervention under Priority Axis 5 Sustainable development and promotion of tourism. For the Priority Axis € 5 558 903 264 is allocated from the ERDF, in addition the Romanian state has provided € 57 862 924.

Further information:

- » Cohesion Policy 2007-13 National Strategic Reference Framework<sup>94</sup>
- » The National Strategic Reference Framework 2007-2013 for Romania<sup>95</sup>
- » The Sectoral Operational Programme Environment 2007-2013

<sup>94</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>95</sup> <http://www.fonduri-ue.ro/upload/118786170647.pdf>



## 10. Slovakia

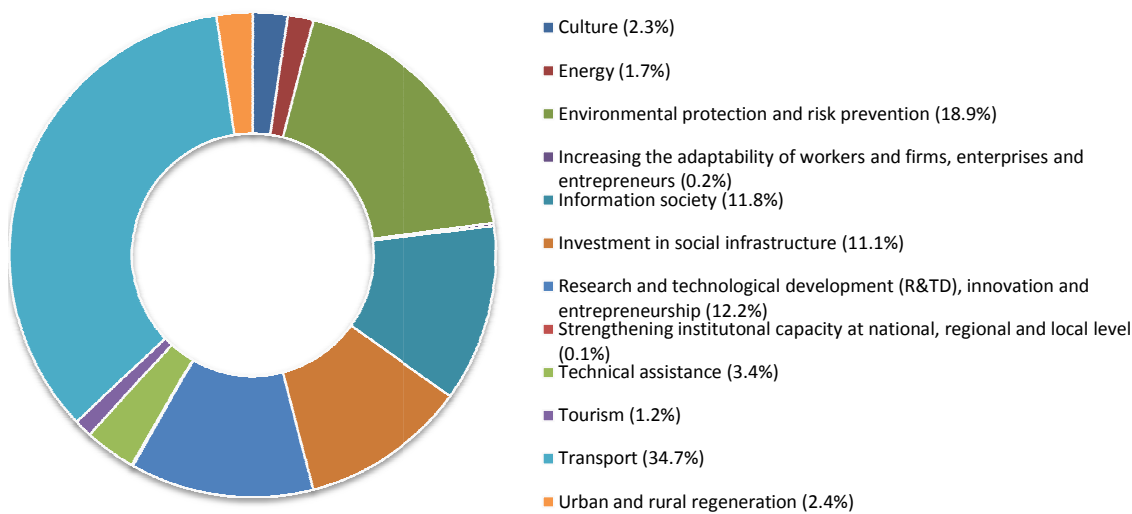
### 10.1. Introduction

For the period of 2007-2013 Slovakia has been allocated € 10.911 billion in total from the EU Structural Funds. The EU demands that the receiving country contribute with at least 15-50 % of the total amount depending on the objective. Slovakia will thus contribute with at least € 1.998 billion for the period 2007-2013.

**Figure 1. Slovakia. Total spending 2007-2013**

EU Funds	€ 10.911 bn
National contribution	€ 1.998 bn
<b>Total</b>	<b>€ 12.910 bn</b>

**Figure 13. European Regional Development Fund/Cohesion Fund 2007-2013: Slovakia**



### 10.2. Strategic Objectives

The overall objective of Slovakia, as set forth in the National Strategic Framework<sup>97</sup> for 2007-2013, is to “significantly increase the competitiveness and performance of regions, the Slovak economy and employment by 2013, while respecting the principles of sustainable development”.

To reach this goal, Slovakia has established three strategic objectives:

1. Infrastructure and regional accessibility
2. Innovation, information society and knowledge economy
3. Human resources and education

The strategic objectives have been translated into ten Operational Programmes:

1. OP Environment<sup>98</sup>

<sup>97</sup> <http://www.nsrr.sk/download.php?FNAME=1210870605.upl&ANAME=NSRR290607.zip>

<sup>98</sup> [http://www.nsrr.sk/download.php?FNAME=1209455879.upl&ANAME=OP\\_Environment\\_final.doc](http://www.nsrr.sk/download.php?FNAME=1209455879.upl&ANAME=OP_Environment_final.doc)

2. OP Information of Society<sup>99</sup>
3. OP Research and Development<sup>100</sup>
4. OP Employment and Social Inclusion<sup>101</sup>
5. OP Bratislava Region<sup>102</sup>
6. OP Education<sup>103</sup>
7. OP Transport<sup>104</sup>
8. OP Health<sup>105</sup>
9. N/A
10. OP Regional<sup>106</sup>

Among these, the Operational Programme Environment focuses on the environment. It is mainly the Regional OP that focuses on cultural heritage, but allocations have also been made available through the OP Information of Society and OP Bratislava.

### 10.3. Environment: Main issues

#### 10.3.1. Water infrastructure

84.8 % of the population was linked to the public drinking water supply system at the end of 2004, but there were still 710 municipalities without public drinking water supply connections. In comparison 55.9 % were connected to public sewer network systems. This is significantly below the EU-average. Approximately 96.5 % of discharged wastewater was treated in municipal Waste Water Treatment Plants (WWTP). Of the water treated, approximately 95 % was treated in biological WWTP.

All municipalities larger than 10 000 EI (equivalent inhabitants) have structured systems of collection and treatment of wastewaters, but according to the EC Directive concerning urban waste water treatment (91/271/EEC)<sup>107</sup>, agglomerations larger than 10 000 EI located in sensitive areas need to remove nutrients. In 2004, only 8 of 87 WWTP in this category of agglomerations met the Directive's requirements.

In agglomerations with less than 2000 EI, only 90 out of the existing 2054 have proper sewer systems and urban wastewaters are treated in WWTP. In 58 agglomeration there are sewer systems, but without urban wastewaters treatment in WWTP.

Currently, towns and municipalities are the major shareholders in water utility companies. Major operators of public sewer systems in Slovakia are water utility joint stock companies. Prices for production, distribution and supply of drinking water and collection and treatment of wastewater are set annually by the Office for Network Distribution Regulation.

#### 10.3.2. Waste management

In 2005, 289 kg of municipal waste was generated per year per capita in average, of which 92 % was disposed. However, only 3 % was treated as recovered waste, while approximately 79 % were landfilled. Slovakia seeks to adopt a system of separate waste collections for 50 kg of separated municipal waste per capita by 2010. To reach this goal, they need better waste management structures and a higher interest and environmental awareness among the citizens. Biodegradable waste is generated in large amounts and at several sources. Unfortunately the recovery of biodegradable waste is low, and does not satisfy EU levels.

When it comes to waste from the health-sector, the most frequent method is to incinerate the waste, smaller volumes are landfilled and part of the waste is recycled metals. A major concern is related to technically outdated incineration facilities which are gradually being decommissioned. Only 7 health-sector waste incinerators operating in hospitals

<sup>99</sup> [http://www.nsrr.sk/download.php?FNAME=1209470421.upl&ANAME=OPIS\\_aj.pdf](http://www.nsrr.sk/download.php?FNAME=1209470421.upl&ANAME=OPIS_aj.pdf)

<sup>100</sup> [http://www.nsrr.sk/download.php?FNAME=1209467158.upl&ANAME=OP\\_VaV\\_aj.zip](http://www.nsrr.sk/download.php?FNAME=1209467158.upl&ANAME=OP_VaV_aj.zip)

<sup>101</sup> [http://www.nsrr.sk/download.php?FNAME=1209467715.upl&ANAME=OP\\_ZaSl\\_Aj.zip](http://www.nsrr.sk/download.php?FNAME=1209467715.upl&ANAME=OP_ZaSl_Aj.zip)

<sup>102</sup> [http://www.nsrr.sk/download.php?FNAME=1209467979.upl&ANAME=OP\\_OPBR.zip](http://www.nsrr.sk/download.php?FNAME=1209467979.upl&ANAME=OP_OPBR.zip)

<sup>103</sup> [http://www.nsrr.sk/download.php?FNAME=1209469958.upl&ANAME=OP\\_Vzdelavanie\\_english\\_version.zip](http://www.nsrr.sk/download.php?FNAME=1209469958.upl&ANAME=OP_Vzdelavanie_english_version.zip)

<sup>104</sup> [http://www.nsrr.sk/download.php?FNAME=1209470152.upl&ANAME=OPD\\_aj.doc](http://www.nsrr.sk/download.php?FNAME=1209470152.upl&ANAME=OPD_aj.doc)

<sup>105</sup> <http://opz.health-sf.sk/?file=306e9194914616f3defadb4519201bd2>

<sup>106</sup> [http://www.nsrr.sk/download.php?FNAME=1209450948.upl&ANAME=ROP\\_EN\\_version.zip](http://www.nsrr.sk/download.php?FNAME=1209450948.upl&ANAME=ROP_EN_version.zip)

<sup>107</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31991L0271:EN:HTML>

with policlinics meet EU technical requirements. The producers of such waste thus need to find alternative dispose solutions.

Based on a wide inventory control (in 2000 and 2002) it can be assumed that there exist approximately 3,500 tons of polychlorinated biphenyl's (PCB) in Slovakia. Equipment with PCB needs to be destroyed or decontaminated by 2010. When it comes to pesticides, an inventory done in 2005 showed that there are approximately 300 tons of pesticides in Slovakia, but the number would probably be higher if financial support would be allocated to the disposal of these pollutants. Information on location of "storage facilities" of different chemicals (pesticides) in former farms and state farms is being updated. These sites are source for potential risk of pollutants leakages from unsecured storage facilities that are often easily accessible.

Infrastructure for waste recovery improved in 2002-2005, but the situation is still not fully in compliance with EU requirements regarding this sector. The target is to recover 70 % of all waste by 2010. In 2005 55 % of the overall volume of waste was recovered. 3 % of the overall volume of generated waste was used for energy recovery.

Landfills and incinerators are the main infrastructure disposing of waste. 80 % of the overall amount of generated municipal waste was disposed of in landfills. However, many of the landfills, especially in the area of hazardous waste disposal, do not comply with EU legislation and will have to end their operations.

Based on studies and estimations, there are approximately 30,000 old and potentially dangerous waste disposal landfills in Slovakia, many of which (approximately 5 %) poses a serious threat to both human health and ecosystem. In the case of contaminated sites evolving into environmental burdens, the "polluter pays" principle may not be applied, since the responsible legal person is unknown, or ceased to exist without a legal successor. The current situation is insufficient social and political recognition of old environmental burdens, absence of legislation governing such structures and proper information systems. Lack of projects for remediation and insufficient funds to remedy is also a concern in connection with old environmental burdens in Slovakia.

### 10.3.3. Air

At present<sup>108</sup>, there exists 20 air quality management fields where the levels of polluting substances are known to exceed limit values. The level of air pollution by SO<sub>2</sub> is considerably lower than stipulated by quotas, except for the Trenčín region. The main reason for the decrease in particulate matters and SO<sub>2</sub> since 1990 is mainly due to a change in fuel base in favour of better-fuel usage with better quality rate. When it comes to NO<sub>2</sub> the air pollution from stationary measuring sources in given areas are acceptable. In 2003, 2004 and 2006 the value of NO<sub>2</sub> has transgressed at one of the stations in each of the respective years, but it occurred in different stations each year. The main reason for transgressing the quotas in all the stations were emissions from transport.

PM<sub>10</sub> transgressed quotas in all zones and agglomerations in 2004 and 2005. The cause is synergy of several types of polluting sources, inter alia secondary dust particles (construction, cleaning of accessible routes and infrastructure), transport emissions (gas emissions especially from petrol motors, emission from the break coverage, bad organisation of transport, etc.) and local heating facilities. Ground level of ozone was at annual average in polluted municipal and industrial areas represented an interval of 38-58 µg.m<sup>-3</sup> in 2004, and in the remaining areas an interval of 59-91 µg.m<sup>-3</sup>. One of the possible areas of improvement is supporting the emission of ozone precursors (NO<sub>x</sub>, volatile organic compounds – VOC, etc.).

NO<sub>x</sub> have been experiencing a slightly decreasing tendency since 1990. Reduction was mainly caused by denitrification (Power station in Vojany), improved technological equipment and the use of new technology in burning procedures and reduction in the usage of firm fuels.

The CO emissions have likewise experienced a decreasing tendency since 1990 as a result of reducing the usage as well as a change in the composition of fuels for small users. The CO emissions from large suppliers on the other hand have decreased only minimally.

The Kyoto protocol conditions will be successfully met. From 1990 to 2000, the total emissions of green house gas, presented as CO<sub>2</sub> equivalents, decreased with almost 33 %. The most important share of green house emissions is linked to the energy field, representing almost an 80 % share in 2003.

<sup>108</sup> Time of publishing the OP, August 2007

The monitoring system is insufficient in many ways, inter alia: insufficient technical level, conditions for exploiting the data are not met (due to old monitoring technical equipment) and the quality of obtained results is insufficient (the network is not accredited).

#### 10.3.4. Biodiversity and natural environment

Slovakia possesses a high number of protected species. There are 12 541 species of flora of which 1368 are protected. Of the protected species, 518 are species of European importance of which 51 species are native to Slovakia. There have been registered 24 511 types of animals in Slovakia. 257 of these species are of European importance from annex of the Biotope Directive (79/409/EEC)<sup>109</sup>, of which 164 species are native to Slovakia. 111 species of birds living in Slovakia are of European importance. Among these 40 taxons are extinct and 2078 are at risk of being extinct. In 2005 there were prepared conservation programmes for 13 of these. The main peril factors are fragmentation and decrease of species habitats and invasive flora.

There is also a Habitat Directive (92/43/EEC)<sup>110</sup> list of 208 types of natural habitats, thereof 66 occurring in Slovakia. Besides habitats of European importance, there are 25 habitats of national importance which are protected and 480 trees or alleys that are of cultural, scientific, ecologic, landscape, esthetical or another importance and were declared as protected trees.

23 % of the country's territory is protected area, where 14 protected landscape areas, 9 national parks, 181 protected sites, 219 national natural reservation, 381 natural reservation, 2 private natural reservation, 60 national natural monuments and 230 natural monuments have been established. There are also 13 wetlands of international importance pursuant to the Ramsar Convention in Slovakia, 4 biosphere reservations within UNESCO programme and 2 areas which were awarded the European Diploma by the Council of Europe. The main problem with regard to protected areas is their degradation and endangerment, insufficient and inadequate care, or inappropriate utilisation and ineffective application of certain nature protection tools (Management and Conservation Programmes). Missing information on species and habitats are also a problem. Farming forests also form part of protected areas. Limiting the farming at sites located in protected areas require financial compensations to their owners.

#### 10.3.5. Natural risks

In the last ten years, Slovakia has suffered from extensive floods each year. Impacts from the floods are bigger due to erosion of the natural retention capacity of soil, and therefore it is necessary to mitigate it by implementing preventive measures aimed at its improvement. The Slovak Government has therefore started the "Flood Protection Programme 2010". The overall budget for the programme was in 2003 20.9 billion SKK, but the project is already lagging behind financially with more than 6 billion SKK. The Programme aims at preventing damages caused by floods or mitigation and limitation of its range by technical measures and adjustments directly at watercourses and in river basins with a warning and forecasting system.

#### 10.3.6. Operational Programme Environment

The Operational Programme Environment has six main priorities:

1. Integrated Protection and Rational Utilisation of Water
  1. Drinking water supply to citizens from public drinking water supply network
  2. Municipal waste collection and treatment pursuant to Slovakian commitments towards EU
  3. Facilitation of adequate underground and surface water quality monitoring and evaluation
2. Flood Protection
  1. Preventive flood protection measures
  2. Development of flood warning and forecasting systems
3. Air Protection and Minimisation of Adverse Effects of Climate Change
  1. Air Protection
  2. Minimisation of adverse effects of climate change including support of renewable energy sources
4. Waste Management
  1. Support of activities in separated waste collection
  2. Support of waste recovery activities
  3. Environmentally friendly treatment of hazardous waste
  4. Addressing the issue of environmental burdens, including their removal

<sup>109</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31979L0409:EN:HTML>

<sup>110</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:HTML>

5. Closure and rehabilitation of landfills
5. Protection and Regeneration of Natural Environment and Landscape
  1. Ensuring favourable status of habitats and species via elaboration and implementation of management plans of protected areas, including NATURA 2000 sites and conservation programmes for critically endangered fauna and flora species and areas including monitoring of species and habitats
  2. Improvement of nature and landscape conservation infrastructure by constructing and developing nature and landscape conservation facilities including introduction of monitoring systems in order to comply with national and international commitments
  3. Improvement of public information and environmental awareness, including improvement of cooperation and communication with stakeholder groups
6. Technical assistance

All of the priorities axes are funded with 85 % of the total budget from the EU Structural Funds.

### 10.3.7. OP matrix overview

PRIORITY 1 Integrated Protection and Rational Utilisation of Water	Percentage of the total OP budget	From ERDF/CF fund	
	50.9 %	CF	€ 915 643 065
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 1.1: Drinking water supply to citizens from public drinking water supply network</b>		(Not available)	
Construction of municipal public water distribution systems only in case of concurrent construction of public sewage systems according to the SR National Plan for the implementation of EC Directive 91/271/EEC			
Completion or efficiency improvement of water sources and superior water distribution systems to be used for already established water consumption points within the reach of the superior system to improve quality and quantity parameters of drinking water supplied by public water distribution system			
Reconstruction of water distribution networks, their existing structures and equipment will be supported as part of the above mentioned activities only if their capacity with respect to real new drinking water consumers connection will increase, and this only in the scope adequate to the stated increase			
<b>Pri 1.2: Municipal waste water collection and treatment pursuant to Slovakia's commitments towards EU</b>			
Construction of sewage networks and construction and reconstruction of waste water treatment plants with the removal of nutrients in agglomerations over 150,000 EI (equivalent inhabitants)			

Construction of sewage networks and construction and reconstruction of waste water treatment plants with the removal of nutrients in agglomerations between 15,000 to 150,000 EI	
Construction of sewage networks and construction and reconstruction of waste water treatment plants with the removal of nutrients in agglomerations between 10,000 and 15,000 EI	
Construction of sewage networks and construction and reconstruction of waste water treatment plants while securing secondary treatment of waste waters in agglomerations between 2,000 and 10,000 EI	
Construction of waste water treatment plants in places with existing sewage network in agglomerations up to 2,000 EI	
Construction of sewage networks in agglomerations of up to 2,000 EI in case of projects focusing measures implementation as defined in a resolution of state water management bodies, trying to avoid underground and surface water quality and quantity compromising and prevent any threat to their use	
Reconstruction of sewage networks, structures and WWTP equipment will be supported as part of the above stated activities, provided the real connection capacity of new waste water generators will increase and this only in the scope of the stated increase and will also provide for the compliance with commitments resulting from the Slovakian EU Accession Treaty	
<b>Pri 1.3: Facilitation of adequate underground and surface water quality monitoring and evaluation</b>	
Monitoring and assessment of surface water status in line with the EU requirements	
Monitoring and assessment of underground water status in line with the EU requirements	
Reconstruction of the underground water monitoring network	

<b>PRIORITY 2</b> <b>Flood Protection</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	6.7 %	CF	€ 120 000 000
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 2.1: Preventive flood protection measures</b>		(Not available)	
Preventive measures for protection of Slovakian territory from floods			
Measures resulting from the new European Parliament and Council Directive on assessment and management of flood risks			
<b>Pri 2.2: Development of flood warning and forecasting systems</b>		(Not available)	
Completion and operation of Flood Warning and Forecasting System (POVAPSYS)			

<b>PRIORITY 4</b> <b>Waste Management</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	26.9 %	CF	€ 485 000 000
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 4.1: Support of activities in separated waste collection</b>		(Not available)	
Introducing new systems and increasing efficiency of existing systems used for separated municipal waste collection based on creation of separated waste policies			
Final sorting of separated fractions from municipal waste and mixed municipal waste			

<p><b>Pri 4.2: Support of waste recovery activities</b></p>	
<p>Treatment of separated waste fractions before of their recovery or environmentally friendly disposal</p>	
<p>Waste recovery including mechanical-biological and thermal treatment</p>	
<p>Increasing the rate of recycling by supporting new ones or increasing quality of output products by completion of existing BAT (Best Available Technology) technologies in the area of waste recovery</p>	
<p>Energy recovery of waste</p>	
<p><b>Pri 4.3: Environmentally friendly treatment of hazardous waste</b></p>	
<p>Reducing hazardous waste qualities based on relevant strategic solutions</p>	
<p>Hazardous waste treatment including construction and reconstruction of facilities aiming at their environmentally sound disposal</p>	
<p><b>Pri 4.4: Addressing the issue of environmental burdens, including their removal</b></p>	
<p>Environmental burden monitoring, survey and risk analysis</p>	
<p>Remedy of the highest-risk environmental burdens</p>	
<p>Completion of information system on environmental burden</p>	
<p><b>Pri 4.5: Closure of rehabilitation of landfills</b></p>	
<p>Closure and rehabilitation of landfills</p>	

<b>PRIORITY 5</b> <b>Protection and Regeneration of Natural Environment and Landscape</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	2.8 %	<b>ERDF</b>	<b>€ 50 756 935</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Pri 5.1: Ensuring favourable status of habitats and species via elaboration and implementation of management plans of protected areas, including NATURA 2000 sites and conservation programmes for critically endangered fauna and flora species and areas including monitoring of species and habitats</b>		(Not available)	
Developing management plans			
Implementing management plans			
Monitoring of species and habitats			
<b>Pri 5.2: Improvement of nature and landscape conservation infrastructure by constructing and developing nature and landscape conservation facilities including introduction of monitoring systems in order to comply with national and international commitments</b>			
Support of nature and land protection infrastructure (buildings and premises of nature and land protection authorities, information centres, educational paths and locations, including caves opening, cave visitor centre, expositions and other promotion forms, technical infrastructure, including the introduction of monitoring and information systems).			
<b>Pri 5.3: Improvement of public information and environmental awareness, including improvement of cooperation and communication with stakeholder groups</b>			
Preparation and publication of brochures and other forms of public awareness raising			
Seminars and specialised events			

<b>PRIORITY 6</b> <b>Technical Assistance</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	2.7 %	CF	€ 48 600 000
<b>Typology activities within the axis</b>	<b>Beneficiaries</b>		
Support to the processes of management, programming, implementation, monitoring, evaluation, financial management, financial control and system audit, including harmonisation of financial control and system audit	(Not available)		
Information, propagation, publicity and exchange of experience including creation of contact points networks, activities connected with development and implementation of a communication plan, as well as with increasing the absorption capacity of applicants			
Development of IT monitoring systems			
Preparation of the next programming period			
Provision of the activities of the Monitoring Committee and working or coordination groups and commissions			
Personnel training (e.g. seminars, trainings, courses, expert stays, business trips) and wage provision of the staff participating in the programming, management, implementation, evaluation, monitoring, publicity, information, financial management, control and audit			
Material and technical, operational and expert provision of the programming, management, implementation, evaluation, monitoring, publicity, information, financial management, control and audit: <ul style="list-style-type: none"> <li>» Technical provision and equipment</li> <li>» Running costs, operation and maintenance</li> <li>» Strategic and methodological documents, expertise, studies, analyses, reviews, counseling, translations, software support</li> </ul>			
External expert services related to the programming, management, implementation evaluation, monitoring, publicity, information, financial management, control and audit			

### 10.3.8. Major projects

<b>PRIORITY Not available</b>		
		Total EU funding for major Projects, € 1 209 110 000
Name	<b>CF</b>	<b>ERDF</b>

(For Slovakia, only the amount allocated for major projects has been identified. Neither the beneficiaries nor the name of the foreseen projects have been successfully identified.)

### 10.4. Cultural heritage

Compared to other countries in this report, Slovakia has prioritised cultural heritage. In the Regional OP priority 3 there is allocated € 190.4 million from ERDF to activities supporting cultural heritage and tourism. There is also allocated € 163 541 9458 to priority 2 in the OP Information of Society, but activities connected to cultural heritage is just one of many typology activities of which the money has been allocated. The same goes for the OP Bratislava, where there have been made available allocations of € 45 932 540 to priority 1, but again activities supporting cultural heritage is just one of several typology activities.

Further reading:

- » Cohesion Policy 2007-13 National Strategic Reference Framework<sup>111</sup>
- » National Strategic Reference Framework<sup>112</sup>
- » Sectoral Operational Programme Environment<sup>113</sup>

<sup>111</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>112</sup> <http://opz.health-sf.sk/?file=177ec381dcffc271a80c0eb375dbb60>

<sup>113</sup> [http://www.nsr.sk/download.php?FNAME=1209455879.upl&ANAME=OP\\_Environment\\_final.doc](http://www.nsr.sk/download.php?FNAME=1209455879.upl&ANAME=OP_Environment_final.doc)

## 11. Slovenia

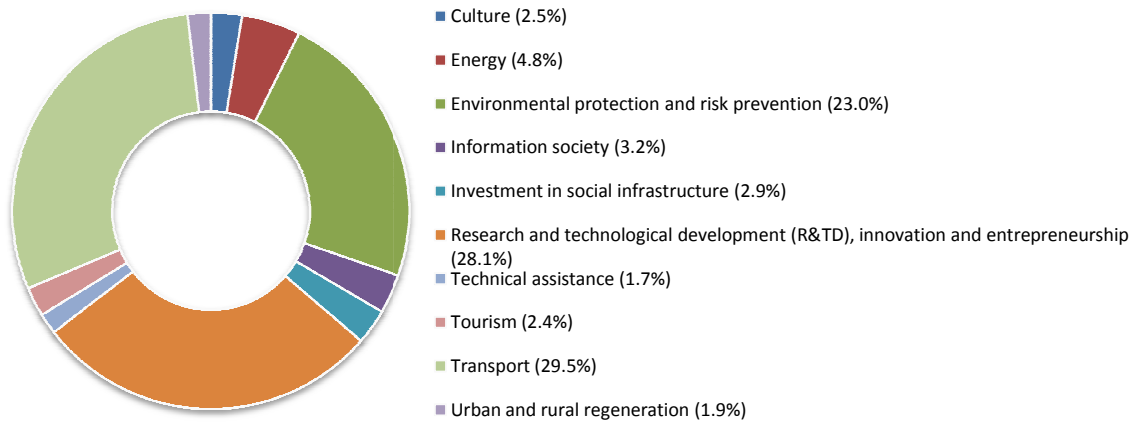
### 11.1. Introduction

For the period of 2007-2013 Slovenia has been allocated € 4.101 billion in total from the EU Structural Funds. The EU demands that the receiving country contribute with at least 15-50 % of the total amount depending on the objective. Slovenia will therefore contribute with at least € 0.723 billion for the 2007-2013 period.

**Figure 1. Slovenia. Total spending 2007-2013**

EU Funds	€ 4.101 bn
National contribution	€ 0.723 bn
<b>Total</b>	<b>€ 4.824 bn</b>

**Figure 14. European Regional Development Fund/Cohesion Fund 2007-2013: Slovenia**



### 11.2. Strategic Objectives

The long term goal for Slovenia is to improve the welfare of Slovenian citizens by promoting economic growth, job creation, strengthening of human capital and guaranteeing a balanced and harmonious development, in particular of the regions. To reach this goal, Slovenia has established five strategic thematic and territorial priorities in the National Strategic Reference Framework<sup>114</sup>:

1. Promotion of entrepreneurship, innovation and technological development
2. Improvement of the quality of educational and training systems as well as research development activities
3. Improved labour market flexibility along with guaranteeing employment security in particular by creation of jobs and the promotion of social inclusion
4. Ensuring condition for growth by providing sustainable mobility, improving quality of the environment and providing relevant/appropriate infrastructure
5. balanced regional development

<sup>114</sup>[http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJ/Programski\\_dokumenti/NSRF\\_Slovenia\\_18\\_06\\_07\\_Unoff\\_eng\\_trasl.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJ/Programski_dokumenti/NSRF_Slovenia_18_06_07_Unoff_eng_trasl.pdf)

The strategic objectives have been translated into three Operational Programmes:<sup>1</sup>

1. Strengthening regional Development Potentials<sup>115</sup>,
2. Human resources development<sup>116</sup>,
3. Environmental and Transport Infrastructure<sup>117</sup>,

Of these the Operational Programme of Environment and Transport Infrastructure and the OP for strengthening regional Development Potentials focuses on the environment and cultural heritage.

### 11.3. Environment: Main issues

#### 11.3.1. Water

Slovenia is relatively rich with water in an EU perspective, due to the large quantity of precipitation. There are yet concerns with availability caused by uneven timing and spatial distribution of surface water reserves and considerable oscillations in the ground water reserves. As a result of efforts made to improve the quality of water flows; the quality has (slowly) improved since 1992. Due to the inclusion of more restrictive measures for ground water quality; contents of nitrates and pesticides in groundwater have decreased during the last decade, but still; excessive values can be traced in some areas. In 25 water samples the concentrations of pesticides exceeded the permitted value and 30 % of the inhabitants were supplied with water of which at least one sample contained the presence of E.coli.

The quality of potable water in Slovenia is overall good. The number of hydric epidemics and people turning ill from drinking water is low. There exist challenges related to various water systems and the supply to areas with less than 1000 inhabitants. A long-term solution is to connect such users to bog systems with an operator, regular maintaining and control. Surface water is mostly used for non-potable water supply while groundwater is the main source of drinking water. The future of water sources is highly vulnerable. Human intervention in the past has affected ground water reserves, reflected in ground water fluctuations. There exist severe problems preserving ground water reserves because of the porosity in most of the ground water areas.

Wastewater treatment in Slovenia is improving, but major investments are needed to meet EU environmental standards. As for all water supplies in Slovenia, the low populated regions make up the greatest challenge.

Currently<sup>118</sup>, none of the waste water purification plants have the proper facilities for the removal of sewage sludge and since the properties of sewage sludge do not permit disposal onto land (regulations). Due to the establishment of several large regions with status as water protection area or NATURA 2000 area or special protected area (SPA) in Slovenia, it is necessary to regulate the management of sludge from the treatment plants.

New systems for water distribution, preservation of reserve water sources and long-term reduction of vulnerability brought by climate change are needed to face Slovenia's water related challenges in the future.

#### 11.3.2. Waste management

Slovenia faces a problem of full landfills for disposal of municipal waste. This problem is getting worse with the constant increase of generated waste. Another concern is reflected from the fact that 86 % of mixed urban waste is not treated before landfilled. The problems concerning communal waste management are being improved through

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<sup>115</sup>[http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski\\_dokumenti/OP\\_Strength\\_regional\\_dev\\_potentials\\_FINAL.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski_dokumenti/OP_Strength_regional_dev_potentials_FINAL.pdf)

<sup>116</sup>[http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski\\_dokumenti/OP-HRD-Slovenia\\_FINAL.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski_dokumenti/OP-HRD-Slovenia_FINAL.pdf)

<sup>117</sup>[http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski\\_dokumenti/OP\\_Environmental\\_and\\_Transport\\_Infrastructure\\_FINAL.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski_dokumenti/OP_Environmental_and_Transport_Infrastructure_FINAL.pdf)

<sup>118</sup> July 2007

an efficient system of waste management. To satisfy basic needs of separate waste collection, an assessment was made according to which 200-250 collection centres should be constructed, indicating one collection centre in each municipality. 95.5 % of the population is involved in the system of regular collection and disposal of municipal waste.

Total quantity of non-hazardous waste has been slightly reduced since 2002, but still this is measured too high. Separate waste management in centres should be encouraged because the majority of non-hazardous waste is represented by municipal waste, and the current situation is unsatisfactory. Improvement of the situation when treating hazardous waste is precarious due to increased emissions leakages into ground water. Slovenia has also been faced with the problem of old landfills of industrial waste, where the polluter can no longer be identified and in some cases polluters are in a bad economic situation. The remediation of old burdens, some of which are owned by municipalities and some by companies is necessary due to significant impact on the environment.

### **11.3.3. Air**

Comprehensive national plans need to be carried out to improve the air quality on local and national level in Slovenia. The country experiences too high emissions from the most damaging pollutants to human health, such as ozone and nitrogen dioxin, and more generally exceed of air quality standards. Generally the inventory of the emissions of greenhouse gases (GHG) has decreased since the base year (1988). In 2002 the GHG was reduced to 44.02 % compared with the base year. However, in 2003 the GHG emissions increased for the first time since 1988.

### **11.3.4. Biodiversity**

Compared to other EU states, Slovenia has an unusually well preserved nature, flora and fauna. Slovenia has included the principles of planetary and intergenerational environmental responsibility.

### **11.3.5. Natural risks**

Natural characteristics make Slovenia particularly vulnerable to floods, which due to climate change is a problem likely to increase. 30 000 ha of land is threatened by floods. In order to reduce such threats, area planning within the flooding areas must be adapted to cope with floods by inter alia preventing pollution of waters and counter-flood measures including containing excess quantities of water. The building of counter-flood construction should be limited to protection of life and more important material goods.

### **11.3.6. Operational Programme of environmental and transport infrastructure development 2007-2013**

The Operational Programme of environmental and transport infrastructure development has three main sections; Transport, Environment and Sustainable use of Energy. Each section is divided into various priorities as shown below:

1. Transport
  - » Railway infrastructure
  - » Road and maritime infrastructure
  - » Transport infrastructure
2. Environment
  - » Municipal waste management
  - » Environment protection – water sector
3. Sustainable use of Energy
  - » Sustainable use of energy

Allocations have also been made available in order to ensure funding for technical assistance. In the matrixes below, only the Environment section will be evaluated. For further information about the other sections, please see the Operational Programme of environment and transport infrastructure development. All of the priorities are funded with 85 % of the total budget from the EU structure funds.

## 11.3.7. OP matrix overview

<b>PRIORITY 4</b> <b>Municipal waste management</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>12.6 %</b>	<b>CF</b>	<b>€ 205 568 426</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
Setting-up more than 200 new collection centres		(Not available)	
Building of regional centers of waste management			
Technological supplementation of the existing regional centers by equipping them with devices for processing waste prior to disposal and for monitoring and treatment of leachate (hazardous and non-hazardous waste dumping depots)			
Construction of one or two plants for energy processing – incineration of waste and sludge			
Rehabilitation of landfills and old burdening due to depositing of waste oils, pesticides and PCB			

<b>PRIORITY 5</b> <b>Environment protection – water sector</b>	<b>Percentage of the total OP budget</b>	<b>From ERDF/CF fund</b>	
	<b>19.9%</b>	<b>CF</b>	<b>€ 325 483 339</b>
<b>Typology activities within the axis</b>		<b>Beneficiaries</b>	
<b>Collection and treatment of urban waste water</b>		(Not available)	
Activities are based on the implementation of the primary, first and second phase of the National Operational programme for collection and treatment of urban waste water. Main activities are construction and modernization of			

sewage networks and water treatment plants	
<b>Drinking water supply</b>	
Connection water supply systems to bigger common water sources	
Ensuring reserve water sources on major water distribution systems supplying more than 50,000 habitants	
Rehabilitation of insufficient water sources (quantity. Especially lateral region), retention of water and rehabilitation of main systems	
Active protection of potable water catchments against polluted water	
<b>Reducing damaging effects of water</b>	
Detailed plan on water management for reducing damaging effects of water in the Donava river basin and the rivers of Adriatic	
Modernisation of the Slovene system of water condition monitoring	
Construction of new embankments in the Mura River basin	
Construction of retarding basins to regulate the flow of water into the Ljubljana River basin	
To ensure protection against floods in the Savinja River Basin the following measures have been suggested: <ul style="list-style-type: none"> <li>» Construction of several retarding basins to control the flooding wave</li> <li>» Elevation of the existing embankments and stabilization of the novelette</li> <li>» Setting up flow openings in frequently flooded area</li> <li>» Construction of safety embankments to protect urban areas</li> <li>» Remediation of already existing high-water level embankments and bank protection on the Savinja River</li> <li>» Water measurement stations and their management</li> </ul>	
Protection against floods to all infrastructure and settlements along the Sava River	
Protection against floods in the Drava and Dravinja River basins	

## 11.3.8. Major projects

<b>PRIORITY 4</b>		
<b>Municipal waste management</b>		
Name	EU funding, €	
	CF	ERDF
Regional waste management centre – Dolenjska – II. phase	12 million	
Regional waste management centre – Koroška	20 million	
Regional waste management centre – Ljubljana	144 million	
Regional waste management centre – Gorenjska	23 million	
Regional waste management centre – Istra, Kras	23 million	
Regional waste management centre, Notranjska	23 million	
Regional waste management centre – Štajerska region (two sub-projects)	40 million	
Regional waste management centre – Pomurje – II. Phase	12 million	
Regional waste management centre – Zasavje – II. Phase	10 million	
Thermal treatment of waste (two sub-projects)	50 million	
	<b>357 million</b>	

<b>PRIORITY 5</b>		
<b>Environment protection – water sector</b>		
Name	EU funding, €	
	CF	ERDF
<b>Collection and treatment of urban waste water</b>	301 million	
Collection and treatment of waste water in the basin of Upper Sava and in the area of Kranjsko and Sorško polje	50 million	
Collection and treatment of waste water in the basin of Middle Sava	12 million	
Collection and treatment of waste water in the basin Sora	25 million	
Collection and treatment of waste water in the basin of Krka	30 million	

Collection and treatment of waste water in the basin of Ptujsko polje	12 million	
Collection and treatment of waste water in the basin of Drava	12 million	
Collection and treatment of waste water in the basin of Dravinja	12 million	
Collection and treatment of waste water in the basin of Maribor	20 million	
Collection and treatment of waste water in the Šaleška valley	12 million	
Collection and treatment of waste water in the basin of Meža	12 million	
Collection and treatment of waste water in the basin of Savinja	12 million	
Collection and treatment of waste water in the area of Pomurje	10 million	
Collection and treatment of waste water in the basin of Soča (WWTP Nova Gorica)	10 million	
Collection and treatment of waste water in the basin of Vipava	10 million	
Collection and treatment of waste water in the basin of Idrija	10 million	
Collection and treatment of waste water in the area of the aquafico stratum of the Ljubljansko polje	20 million	
Collection and treatment of waste water in the basin of Ljubljana (area of Vrhnika, Logatec, Pivka)	20 million	
Collection and treatment of waste water in the area of Domžale – Kamnik	12 million	
<b>Drinking water supply</b>	<b>334 million</b>	
Protection of the water source Mrzlek	20 million	
Integral protection and regulation of supplying Bela Krajina with drinking water	25 million	
Integral protection and regulation of supplying the Coastal and Karst region with drinking water	40 million	
Integral protection and regulation of supplying Pomurje with drinking water	30 million	
Integral protection and regulation of supplying Suha Krajina with drinking water	20 million	
Integral protection and regulation of supplying the area of Sodražica-Ribnica-Kočevje with drinking water	15 million	
Integral protection and regulation of supplying the basin of Sotla with drinking water	12 million	
Integral protection and regulation of supplying Šaleška valley with drinking water	12 million	

Integral protection and regulation of supplying the basin of Ljubljana with drinking water	12 million	
Integral protection and regulation of supplying the basin of Sora with drinking water	20 million	
Integral protection and regulation of supplying the basin of Drava and Dravinja with drinking water	30 million	
Integral protection and regulation of supplying the basin of Meža with drinking water (Črna na Koroškem)	12 million	
Integral protection and regulation of supplying the area of Domžale-Kamnik with drinking water	12 million	
Integral protection and regulation of supplying the area of Upper Sava with drinking water	12 million	
Integral protection and regulation of supplying the area of Haloze with drinking water	2 million	
Integral protection and regulation of supplying the area of NE Slovenia with drinking water	25 million	
Hydraulic improvement of the sewerage system in the Coastal region	10 million	
Hydraulic improvement of sewerage system in the Central Dolenjska and Posavje area	25 million	
<b>Reducing damaging effects of water</b>	<b>185 million</b>	
Ensure the protection against flood in the Savinja river basin	60 million	
Ensure the protection against flood in the Ljubljana river basin	15 million	
Ensure the protection against flood in the Sava River basin	30 million	
Ensure the protection against flood in the Drava and Dravinja river basin	20 million	
Reconstruction of embankments along river Mura	35 million	
Upgrading the system for monitoring and analysing of water environment status	25 million	
<b>Total</b>	<b>820 million</b>	

#### 11.4. Cultural heritage

OP for Strengthening Regional Potentials includes activities for the preservation of cultural heritage under the Priority axis for Integration of natural and cultural potentials (chapter 3.5.3 in the OP). This axis has the following three sub-priorities:

- » Increasing competitiveness in the tourism-sector
- » Networking for cultural potentials
- » Sports-recreational infrastructure

Only the "Network for cultural potentials" has activities that focus on cultural heritage. Taking into account that the whole priority axis is allocated € 263 235 116 from Community funding and € 46 453 259 from the Slovenian state, while there are three sub-priorities with many activities to be supported under each, the amount of funding to cultural heritage is not that much.

Under OP Environmental and Transport Infrastructure Development, Cultural heritage is mentioned under; “demarcation of fisheries”. Activities will be initiated to develop the coastal fishing areas by diversifying the activities and connect fisheries with tourism, *cultural heritage* and tradition.

Further information:

- » Cohesion Policy 2007-13 National Strategic Reference Framework<sup>119</sup>
- » National Strategic Reference Framework<sup>120</sup>
- » OP of environmental and transport infrastructure development for the period 2007-13<sup>121</sup>

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<sup>119</sup> [http://ec.europa.eu/regional\\_policy/atlas2007/fiche/nsrf.pdf](http://ec.europa.eu/regional_policy/atlas2007/fiche/nsrf.pdf)

<sup>120</sup> [http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski\\_dokumenti/NSRF\\_Slovenia\\_18\\_06\\_07\\_Unoff\\_eng\\_trasl.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski_dokumenti/NSRF_Slovenia_18_06_07_Unoff_eng_trasl.pdf)

<sup>121</sup> [http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski\\_dokumenti/OP\\_Environmental\\_and\\_Transport\\_Infrastructure\\_FINAL.pdf](http://www.svlr.gov.si/fileadmin/svlrsp.gov.si/pageuploads/KOHEZIJA/Programski_dokumenti/OP_Environmental_and_Transport_Infrastructure_FINAL.pdf)