# Ministry of Environment of the Slovak Republic





# STATE OF THE ENVIRONMENT REPORT SLOVAK REPUBLIC 2010



**Slovak Environmental Agency** 

#### **ENVIRONMENTAL CARE**

#### ENVIRONMENTAL LAW

The published Slovak legislation in 2010 included 10 acts, 4 SR government regulations, 30 resolutions of the MoE SR, and 1 decree.

#### ♦ Acts

- Act No. 3/2010 Coll. on the national infrastructure for spatial information
- Act No. 4/2010 Coll. which amends Act 205/2004 on collection, storage, and dissemination of information on the environment and amendment to other laws as amended
- Act No. 7/2010 Coll. on protection against floods
- Act No. 110/2010 Coll., which amends Act 569/2007 Coll. on geological works (Geology Act) as amended
- Act No. 134/2010 Coll. which amends Act 364/2004 on water and amendment to the Slovak National Council Act 372/1990 Coll. on offences as amended
- Act No. 117/2010 Coll. which amends Act 543/2002 Coll. on nature and landscape protection as amended, and on amendment to Act 24/2006 Coll. on environmental impact assessment and amendment to selected laws as amended
- Act No. 119/2010 Coll. on packaging which amends Act 223/2001 on waste and amendment to other laws as amended
- Act No. 137/2010 Coll. on air
- Act No. 145/2010 Coll. which amends Act 24/2006 on environmental impact assessment and amendment to other laws as amended
- Act No. 268/2010 Coll., which amends Act 569/2007 Coll. on geological works (Geology Act) as amended

#### ◆ SR Government Regulations

- SR Government Resolution 206/2010 Coll., which amends SR Government Resolution 388/2005 Coll., and sets the limits for the treatment of electric waste, and for recovery and recycling of components, material, and substances
- SR Government Regulation 269/2010 Coll. which stipulates criteria for achieving good water balance
- SR Government Regulation 270/2010 Coll. on environmental quality standards in the area of water strategy
- SR Government Regulation 282/2010 Coll. which stipulates limit values and list of groundwater formations

#### Resolutions of the MoE SR

- MoE SR Resolution 159/2010 Coll., which amends MoE SR Resolution 131/2006 Coll., which sets forth requirements for the national emission caps and total number of pollutants quota as amended by the MoE SR Resolution 203/2008 Coll.
- MoE SR Resolution 187/2010 Coll., which declares the Special protection area of Veľkoblahovské rybníky
- MoE SR Resolution 189/2010 Coll., which declares the Special protection area of Low Tatras
- MoE SR Resolution 192/2010 Coll., which declares the Special protection area of Slovak karst
- MoE SR Resolution 193/2010 Coll., which declares the Special protection area of Slanské hills
- MoE SR Resolution 194/2010 Coll., which declares the Special protection area of Veľká Fatra
- MoE SR Resolution 196/2010 Coll., which declares the Special protection area of Volovské hills
- MoE SR Resolution 202/2010 Coll., which declares the Special protection area of Záhorské Pomoravie
- MoE SR Resolution 203/2010 Coll., which amends MoE SR Resolution 125/2004 Coll., which sets forth details concerning the treatment of old vehicles and selected criteria for the production of vehicles as amended by MoE SR Resolution 227/2007 Coll.
- MoE SR Resolution 204/2010 Coll., which defines details on the implementation of the flood forecasting service
- MoE SR Resolution 251/2010 Coll. which defines details regarding the assessment of expenditures to flood-prevention works, flood rescue works, and flood-related damage
- MoE SR Resolution 252/2010 Coll., which defines details on the submission of interim informative reports on floods and summary reports on the duration and aftermath of floods and on adopted measures
- Resolution 255/2010 Coll. executing the Act on handling of waste from mining industry and amendments to other laws
- MoE SR Resolution 261/2010 Coll., which sets details on the content of the flood plans and their approval
- MoE SR Resolution 262/2010 Coll. which sets forth the contents of public water supply restoration plan, public sewerage systems restoration plan, and the strategy of their development
- MoE SR Resolution 263/2010 Coll., which amends MoE SR Resolution 283/2001 Coll., on the execution of selected legal provisions on waste as amended
- MoE SR Resolution 313/2010 Coll., which sets details on the preliminary flood risk assessment, its revision and updating
- MoE SR Resolution 314/2010 Coll. which sets for the contents of the programme for the reduction of emissions from the stationary air pollution sources and the contents of data and strategies for informing the public
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 340/2010 Coll., which amends MoE SR Resolution 51/2008 Coll., which executes the Geological Act

- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 356/2010 Coll., which executes selected provisions often Air Act
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 357/2010 Coll. which sets forth criteria regarding the keeping of records and other information on stationary air pollution sources
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 358/2010 Coll. which sets the emission limits, technical criteria, and general conditions for the operation of resources and their equipment using organic solvents, and emission monitoring
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 359/2010 Coll. on requirements for limiting the emissions of volatile organic compounds escaping at use of organic solvents in regulated products,
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 360/2010 on air quality
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 361/2010 Coll. which defines technical criteria and general conditions for the operation of stationary air pollution sources that operate equipment used for storing, filling, and transport of gasoline, and the strategy and criteria for the enquiry and proving of data related to their compliance
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 362/2010 Coll. which determines the criteria for the quality of fuel and the operative keeping of records on fuel
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 363/2010 Coll. on monitoring emissions, technological criteria and general conditions for operating stationary air emission sources, and ambient air quality
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 418/2010 Coll., on execution of selected provisions of the Water Act
- Resolution of the Ministry of Agriculture, Environment and Regional Development of the Slovak Republic 419/2010 Coll. which sets forth details on the elaboration of the flood threat maps, on paying the fees for their creation, revision and update, and on proposing and plotting the size of the inundation territory on maps
- MoE SR Resolution 448/2010 Coll. which amends Act 205/2004 on collection, storage, and dissemination of information on the environment and amendment to other laws as amended

#### ◆ Decree

 MoE SR Decree 2/2010 Coll. of September 16, 2012, which sets details on designation of watershed administration areas, environmental objectives, economic analysis, and on water planning (Notice No. 396/2010 Coll.).

#### ENVIRONMENTAL IMPACT ASSESSMENT

The process of environmental impact assessment in the conditions of Slovakia is regulated by **Act** 24/2006 Coll. on environmental impact assessment and on amendment to other laws.

In 2010, this Act **was amended** by Act 145/2010 Coll. as a result of formal notification by the EC, in which Slovakia was cautioned about their faulty adoption of Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment as amended by Council Directive 97/11/EC a Council Directive 2003/35/EC.

Complete documentation (hard copies) from the EIA process of proposed activities carried out and completed by MoE SR since 1994 until 2004 are archived in the **EIA Documentation centre** at Slovak Environmental Agency. Documentation as from January 1, 2005 until the end of 2010, is kept at MoE SR. Information from the documentation may be requested from SEA and MoE SR.

Documentation of the processes carried out by regional and local environment agencies is archived at individual authorities.

Number of completed assessments of the proposed activities (EIA) and strategic documents (SEA) in the SR in 1994–2010

	EIA	SEA
1994	1	•
1995	67	•
1996	75	-
1997	72	-
1998	56	-
1999	35	-
2000	43	•
2001	227	•
2002	345	•
2003	436	•
2004	498	•
2005	526	•
2006	329	16
2007	734	81
2008	889	160
2009	649	99
2010	544	149
Total	5 526	505

Source: MoE SR

#### Outcomes of the EIA and SEA process in 2010

MoE SR level	
Number of assessed buildings and activities - EIA	167
Number of final positions issued - EIA	185
Number of assessed drafts of strategic documents - SEA	5
Number of final positions issued - SEA	7
Number of statements on activities change	63
Environmental authorities level	
Number of assessed buildings and activities - EIA	383
Number of decisions and final positions issued - EIA	368
Number of assessed drafts of strategic documents - SEA	135
Number of decisions and final positions - SEA	143
Number of statements on activities change	98

Source: MoE SR

#### • INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC)

IPPC was introduced into the Slovak legal codes and implemented through **Act No. 245/2003 Coll.** on integrated environmental pollution prevention and control and on amendments of certain laws as amended (Act on IPPC).

**Slovak Environmental Inspection (SEI)** is the administrative body in the process of integrated licensing and issuing of licences. At the same time, the organization also assumes the role of a controlling body in this process.

In 2010, operators submitted **616 applications in total** for obtaining integrated licenses (decision). In 430 cases of all the submitted applications, the operators asked for a change to conditions of the already issued integrated license, 173 applications addressed construction licensing, since SEI has been involved in the IPPC process supervised by a special construction authority, in 13 cases an application for new operation facility was submitted. In 1 case the operator who owns an integrated license pursuant to sect.2(4)(b) of Act on IPPC (voluntary application for the issuance of an integrated license) applied to a change to this license.

Of total number of 537 issued decisions, 370 licenses addressed licensing the changes to operation pursuant to sect.8(7) of the Act on IPPC, and 159 cases dealt with proceeding initiated by the special construction authority pursuant to sect.8(3) of the Act on IPPC. Integrated licenses were issued for 8 cases with new operation. 2 decisions were issued on the elimination of a construction site, and 4 decisions were issued to suspend the proceeding.

Of the total number of 253 executed **inspections** of operations in 2010, 65 operations were shown as non-compliant with the license criteria. Based on the conclusions of the inspections, 260 measures were adopted. In 157 cases the operations were declared compliant to the license criteria, and in 41 cases the operators were asked to take remedial measures within a set time period. In 59 cases the Slovak Environmental Inspection imposed a fine for a discovered administrative infraction, while three operators were ordered to submit an application for integrated licensing change within a set deadline.

#### PREVENTION AND REMEDYING ENVIRONMENTAL DAMAGES

In 2007, Slovak Republic included in its legislation an EP and Council Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage (hereinafter only "directive") through its **Act No. 359/2007 Coll. on the prevention and remedying of environmental damage** and on amendment to other laws.

The law considers **environmental damage** as only **damage to protected species and biotopes, on water and on land**, rather than any damage to environment. Nevertheless, any adverse change to any of the mentioned natural resources is considered damage, regardless of whether such was caused by breaching legal provisions or by acting in compliance with them. Operators carrying out work activities defined by legislation are liable for such environmental damage. This is the case of objective liability, while the operators involved in other work activities fall under subjective liability pertaining only to the damage on protected species and biotopes.

Information system of the prevention and remedying of environmental damage was implemented – www.enviroportal.sk/environmentalne-skody/.

In 2010, there was no environmental damage recorded in Slovakia.

#### PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS

Prevention of major industrial accidents is regulated through the following legislation:

- Act No. 261/2002 Coll. on prevention of major industrial accidents and on amendments to other laws as amended (hereinafter only the Accident Act),
- Resolution No. 489/2002 Coll. which executes several provisions of Act No. 261/2002 Coll. on preventing major industrial accidents and on amendments to other laws as amended,
- Resolution No. 490/2002 on safety administration and on emergency plan as amended.

Act on accidents divides businesses by total volumes of selected hazardous substances present in the plant into A category and B category (so-called SEVESO businesses).

Basic obligations of business operators with present selected hazardous substances include:

- to revise total volumes of selected hazardous substances in the plant and subsequently classify the business into a pertinent category,
- to issue a report on registration of the business by local district environmental authority.

Business registered under a given category should:

- appoint a qualified person,
- develop a programme of prevention of major industrial accidents and introduce safety control system,
- develop risk assessment and safety report,
- develop an emergency plan,
- inform the public,
- engage rescue service,
- make agreement on liability insurance,
- submit documentation for developing a public safety plan.

**Information system of prevention of major industrial accidents** for public together with authorised version for competent organs was put in practice.

In 2010, there was 1 major technological hazard and 2 immediate threats of major technological hazards.

#### • ENVIRONMENTAL ASSESSMENT AND PRODUCT LABELLING

Environmental labelling of products in Slovakia has been carried out since 1997. At that time the Minister of Environment declared the National Programme of Environmental Assessment and Product Labelling (NPEHOV). Gradually, over the subsequent years, environmental criteria for 34 product categories were created by the Slovak Ministry of Environment through its NPEHOV directives, decrees and notices.

On the basis of the expressed interest by producers or importers, it is possible to assess compliance of the registered products with unique conditions for the mentioned product category under the Slovak Ministry of Environment's notice with the objective to grant the right to use the national environmental label of "Environment-friendly product". In total, (1997-2000) as many as 339 products were received the national environmental label, of which 27 national brands in 2010 were labelled as "Environment-friendly product". 146 products had the right to use environmental product labelling in 2010.



Special regulations apply for granting and use of the European Community environmental label. The fundamental legislation is the EU Parliament and Council Regulation (EC) No. 1980/2000/EC (as from February 2010 a new EU Parliament and Council Regulation 66/2010/EC on **EU environmental labelling** came into effect) along with the criteria for specific groups of products published by the European Commission decision.



#### ENVIRONMENTAL MANAGEMENT AND AUDIT

In furtherance of the objectives of environmental policy alongside the traditional instruments of the so-called command and control solid management tools are used more and more so-called soft management tools. They are based on a principle of common and shared responsibility between states and organizations. The tool set also includes environmental management, e.g. the international standard ISO 14001:2004, which establishes the requirements for **environmental management system** (EMS). Higher reliability, efficiency, transparency over a certificate confirming compliance with the standard, organizations can gain registration in the **scheme of the European Community Eco-Management and Audit Scheme** (EMAS).

In the course of 2010, 96 new organisations with introduced and certified EMS started in Slovakia, six organisations lost their EMS certificate, raising the total number of organisations with the valid EMS to 868, as of December 31, 2010. Trend in the increment of newly issued certificates over a single year shows a falling tendency since 2008 (from 189 in 2008 to 96 in 2010), probably caused by the financial and economic crisis.

#### ◆ The European Eco-Management and Audit Scheme (EMAS)

Criteria for participation in the EMAS organisation are set forth by the EU Parliament and Council Regulation (EC) No. 1221/2009 on the voluntary participation by organisations in a Community ecomanagement and audit scheme, the so-called EMAS III.

In the EMAS register as of December 31, 2010, there were 4 542 registered organisations located at 7 794 sites registered within the EU.

#### GREEN PUBLIC PROCUREMENT

**Green public procurement** (GPP) represents one of the effective tools that create demand on the market for environmentally friendly products and thus support their supply and create a pressure leading to their innovations. Inclusion of the environmental aspect into public procurement aims at motivating the producers to design new products and technologies with less adverse impacts on the environment.

The **National Action Plan for Green Public Procurement** in the SR for the years 2007 - 2010 (NAP GPP) suggests a strategic goal to improve environmentally-friendly conduct of the public sector through raising the level of applying green public tendering procedures and thus achieve the level average to 50% of the implemented number of contracts as set forth by the European Commission.

In order to assess the level and the benefit of the GPP, the Slovak Ministry of Environment conducts a survey, assessing 2 basic indicators in particular:

- Indicator 1 share of GPP on total public procurement in relation to the number of contracts (signed contracts and orders) in %,
- Indicator 2 share of GPP on total public procurement in relation to the volume of contracts (signed contracts and orders) in %.

As part of the survey of 2010, 86 subjects responded, of which **82** were **public suppliers** (pursuant to Sect.6 (1) of Act 25/2006 Coll. on public procurement and on amendment to selected laws as amended (hereinafter only "public procurement act") and which included 55 central government authorities and their daughter organisations, 4 regional governments, 23 municipalities, and **4 suppliers** pursuant to Sect. 8 of Act on public procurement, which is a 35.5% response rate.

Of those surveyed in 2010, 50 subjects applied the GPP principles through incorporating the environmental criteria into public procurement, which is 58.14% of all the respondents. 6 subjects did not provide necessary information on total number of public tendering procedures and their total volume; therefore, they were not included into the overall assessment of the average GPP level in the Slovak Republic. 30 subjects that participated in this survey did not implement the GPP principles in 2010. The respondents who sent in their complete data carried out 1 985 contracts at the volume of 311 780 722.24 EUR through applying the GPP principles (the so-called "green contract").

Trend in two fundamental GPP assessment indicators in Slovakia

Year	2007	2008	2009	2010
Indicator 1	11.50	4.98	11.16	9.83
Indicator 2	4.30	39.84	27.91	50.95

Source: MoE SR

Based on the indicator 2 figures we can conclude that in 2010 the NAP GPP indicative target was met - reaching a 50% share of green public tendering procedures on all public procedures in relation to their volume.

#### ENVIRONMENTAL ECONOMY

#### **Expenditure on environmental protection**

Expenditures of the private and public sectors on the environment expressed as a GDP share dropped since the middle 90ties of the 20th century approximately by one half to 1.1% in 2009.

Public and private investments into the environment grew over the assessed period; however, when expressed as percentage, they remained at the level of 0.4% for the assessed period.

Since 2002, public expenditures for environmental protection have dropped from 0.9% down to 0.7% of GDP. Expenditures of the state budget were reduced as part of the decentralization process, while expenditures of local administration have increased significantly and in 2009 they were more than 60% of public expenditures to the environment.

#### The environmental fund and recycling fund

**The environmental fund** was established since January 1, 2005, by Act 587/2004 Coll., on environmental fund and amendment to certain laws.

#### Review of financed grants in 2010

Area of budget grants	Number	€
Protection of air and of ozone layer	14	1 125 996.00
Protection and rational efficiency of water	299	29 755 910.00
Development of waste management	14	1 130 900.00
Protection of nature and lands	8	1 484 000.00
Environmental education and promotion	36	1 029 891.66
Survey, research and development	9	1 150 300.00
Accidents	2	15 160.65
Solution of extremely critical environmental situation	12	1 789 563.74
Programme of rebuilding the village	182	659 528.43
Total	576	38 141 250.48

Source: Environmental fund

Of the total volume of given subsidies in the amount of 38 141 250.48 EUR, 3% of funds were used in the area of air and Earth's ozone layer's protection, 78% of funds were used in the area of water protection and use (of which: 75.9% to WWTPs and sewerages, 21.0% to water supplies, and 3.1% to flood prevention measures), in the area of waste management development - 3%, in the area of nature and landscape protection - 3.9%, in the area of environmental education, formation, and awareness raising - 2.7%, in the area of survey, research and development focused on investigation and improvement of the environment - 3%, in the area of hazards and accidents - 0.03%, in the area of extremely critical environmental situation - 4.7%, and the Village Renewal Programme - 1.7%.

#### Fees for pollution and exploitation of natural resources

In 2010, the highest sum collected for environmental pollution by the Environmental Fund came from air pollution fees (12 931 532 EUR), while the highest sum collected while exploiting natural resources came from fees for ground water consumption (11 762 165.49 EUR).

#### Gains from the Environmental Fund of selected economic instruments applied in 2010 (€)

Charges	€
Charges for pollution of air	12 931 532.00
Fees for wastewater discharge	9 304 557.25
Penalization for the failure to pay air pollution fees	3 840.05
Financial compensation for damage to the habitat of European importance	81 552.50
Fees for groundwater extraction	11 762 165.49
Fees for surveying area	647 758.57
Fees for extracted minerals	1 946 068.02
Charges for storage of gases and liquids	1 183 144.04
Charges for water from a healing natural source or from natural mineral resource	8.00
Total:	37 860 625.92

Source: Environmental fund

#### Fines imposed by the State administration environmental authorities

State administration environmental authorities impose fines for non-compliance with the provisions set forth under generally binding legal policies.

#### Fines imposed by the State administration environmental authorities (thous. EUR)

Sector	2000	2006	2007	2008	2009	2010
Protection of air	54.57	117.67	85.11	162.42	128.01	65.19
Protection of water	200.42	492.33	420.87	396.34	279.13	228.10
Wastes	305.82	319.82	325.73	309.33	550.25	228.91
Protection of nature	49.72	89.72	107.12	1 692.62	73.07	68.46
Penalization	13.84				800.56	
Building law	36.21	8.13		1.59	15.36	0.69
Packaging		10.29		9.96	3.32	20.40
Prevention of gross industrial averages		7.50		0.66	0	6.10
Trading with endangered species of animals and plants		5.31		5.81	2.54	0.01
Public water-supply and sewages		0		0.80	1.49	5.90
Integrated prevention and control		9.43	47.80	104.96	8.44	102.84
Genetic technologies and GMO		1.66	0.10	0.20	0	0.09
Geological works					0	0.30
Fishery		0.10			0	0.01
Total	660.59	1 061.97	986.72	2 684.69	1 862.18	727.16

Source: SEI

In 2010, the highest fined sum was collected in the area of waste management (228.91 thous. EUR) and in the area of water protection. (228.10 thous. EUR).

#### **Environmental tax**

In 2009, revenues from environmental tax were 1.9% of GDP, and 6.6% of total revenues from taxes. Slovakia was way below the average values displayed by the OECD European member states regarding the GDP share. However, as to the share on total revenues, Slovakia was above average.

#### Funding the environmental care within international programmes/projects

#### **♦ Operational Programme Environment**

**Operational Programme Environment** (OPE) is the programming document for Slovakia in order for using the EU funds in the area of environment for the years of 2007-2013. Slovak Ministry of Environment is the supervisory body.

Over the year 2010, the Slovak Ministry of Environment issued **7 calls** for applications for non-refundable financial benefit (NRFB), with total allocated sum of 367 342 883 EUR.

#### List of approved projects, December 31, 2010

Priority axis	Number of approved projects	Sum of approved grants (structural funds/cohesion funds and national budget in EUR)	% of allocation to priority axis
Integrated protection and rational water exploitation	118	604 812 487	56.15
2. Flood protection	36	48 804 526	34.57
Air protection and minimisation of adverse impacts of climate change	109	200 815 114	94.83
4. Waste management	192	313 335 783	54.91
Protection and regeneration of natural environment and landscape	40	55 962 888	93.72

Source: ITMS

Comprehensive lists of registered and approved applications for NRFB are published on the website of the Slovak Ministry of Environment: www.opzp.sk

#### Large-scale projects (exceeding 50 million EUR)

As of 31/12/2010, 3 applications for confirming the assistance were submitted to the EC. These included large-scale projects of: "SKK Ružomberok, and WWTP of Liptovská Teplá, Liptovské Sliače", "Water supply, connection to waste water sewerage system and WWTP in the Ilava district", and "WWTP intensification, connection to waste water supply and drinking water supply in the Trenčín region".

As of 31/12/2010, the Slovak Ministry of Environment received 4 applications for NRFB for the following projects:

- Podunajsko connecting of the lower Danube Bratislava region to waste water sewerage system,
- Water supply and sewerage system construction of the Orava region, 2nd phase,

- Prievidza complex for connection to waste water sewerage system and waste water treatment,
- WWTP North Reconstruction and intensification of WWTPs of Bánovce, Partizánske,
   Topoľčany.

#### Central Europe Operational Programme

For Slovakia, the whole national territory may qualify for this programme. Total financial allocation for Slovakia from this programme for the period of 2007-2013 represents 9.8 mil. EUR. Costs assumed by the Slovak project partners can be supported from the ERDF funds, up to 85%. The partners must fund the remaining part of expenditures out of their own budgets.

The CU OP objectives are achieved through the following Priority axes that are worked down to the level of interventions.

**Priority 1: Facilitating of innovations in Central Europe** 

Priority 2: Improving the accessibility of Central Europe and within it

Priority 3: Responsible use of the environment

Priority 4: Increasing the competition and attractiveness of cities and regions

Priority 5: Technical assistance for the supporting implementation and capacity building

Within the call for project proposals, 29 projects proposals were approved at the total sum of 66.8 mil EUR from the ERDF, with co-funding from the public sources is 15.1 mil. EUR and co-funding from private sources is 2.2. mil. EUR.

Within the second call for proposals, there were total of 37 projects approved with the participation of Slovak project partners in 18 of them.

Within the third call for proposals there were 28 projects approved in the area of innovations, accessibility, environment, and competitiveness of cities and regions. 22 subjects from the SR have been involved in 14 projects.

Budgeted funds of the Slovak projects partners involved in the projects that have not been classified under any of these three calls, total around 12 700 000 EUR. This sum still does not include budgeted funds of 11 project partners from the SR involved in strategic projects that will be approved within the year 2011 under a special call.

#### Programme of supranational cooperation of South-Eastern Europe

For Slovakia, the whole national territory may qualify for this programme. Total financial allocation for Slovakia within the OP SEE for the period of 2007-2013 represents **9.896 mil. EUR**.

The following Priority axes have been defined within the OP JvE programme:

Priority 1: Facilitating of innovations and business activities

Priority 2: Environmental protection and improvement

Priority 3: Improving the accessibility

Priority 4: Development of supranational synergies for sustainable growth areas

Priority 5: Technical assistance for the supporting implementation and capacity building

Priority axes are further developed into the **intervention level areas**. Under the 1st call for project proposals there were 40 projects approved with total budgeted sum of 76 628 855 EUR from ERDF. Of total number of approved projects there are 15 projects involving 23 Slovak project partners; in 2 projects the Slovak partners take the leading partner role.

Under the scheme **Priority 2 Protection and improvement of the environment** there were approved 4 projects with the participation of 5 project partners from all over Slovakia, with the budget of 1 720 445.82 EUR contributed by the ERDF.

Under the 2nd call for proposals in 2010, there were 21 projects approved at total amount of 37 mil. EUR of the contribution applied for. Of total number of approved projects there are 8 projects involving 14 Slovak project partners; in 1 project the Slovak partners including 1 associated partner and 4 watching partners.

#### ◆ Program LIFE+

The LIFE+ program has three main components for which possible funding may be requested: **Nature** and **Biodiversity**, **Environmental Policy and Management**, **Information and Communication**.

Allocation of financial means from the SR in 2007 was 2.857 mil. EUR, in 2008 it was 3.171 mil. EUR, in 2009 it was 3.83 million EUR, and for **2010 it was 3.719 mil. EUR**. This sum is to increase from year to year.

In 2010, the SR proposed 8 projects, while in case of 2 projects the Slovak organisations were only partners. Outcomes of the assessment and approval of proposed projects will be published by the end of 2011.

#### Global Environmental Facility

In the period from 1.7.2006 to 30.6.2010, a new programming period started for the Global Environment Facility initiative (GEF 4), with the priority areas narrowed down to climate changes and biodiversity. In the area of Biodiversity, Slovakia was placed in a group of 93 countries with an average allocation per country up to 3.5 mil. USD by 2010. In the area of Climate changes, Slovakia was assigned an individual allocation of 5.7 mil. USD by 20101; however, the approved projects will be implemented until 2014. For the new fifth programming period (GEF 5), Slovak Republic has not been classified among donor countries.

Slovakia has been taking part in the GEF initiative since 1994. In total, there were 14 national projects approved with the funding of 24.471 million USD. 9 projects were completed before the end of 2010. Slovak organizations continue to participate in 14 international projects, with 3 other international projects in preparation.

#### ♦ Norwegian financial mechanism

Based on the agreement between the EU countries and the EFTA countries, in the period of May 1, 2004 to April 30, 2009, Norway, Island, and Lichtenstein bound themselves to offer Slovakia and other countries a financial assistance of about 67. mil. EUR.

Two separate financial mechanisms were created by signing memoranda of understanding in the beginning of 2005; these are the EEC financial mechanism (EEC FM), and the Norwegian financial mechanism (NFM).

In the priority areas of **Environment protection and Support of sustainable development** there were 11 individual projects approved for each of the areas. SR signed agreements for more than 100 projects, including 7 block grants and 93 individual projects. These projects have taken up more than 99% of net allocation of funds, which is about 65 million EUR. Projects submitted by applicants from the public and third sectors are co-funded up to 15% of the SR national budget. The funds must be used by April 30, 2011.

In October of 2010, Norway, Island, and Lichtenstein signed with Slovakia as the receiving country **Memoranda of understanding for the implementation of the EEC FM/NFM of 2009-2014.** For the years to come, funds contained in the EEC FM/NFM with total allocation of **80.75 million EUR** are to be directed into a number of priority areas, such as adapting to the climate change, protection and revitalisation of the cultural and natural heritage, carbon take-up and storage, green innovations within the industry, support of non-government organisations, scholarships.

The biggest priority areas under the new agreement include the environment and the climate changes. In total, 31 million EUR have been allocated to programmes focusing on adapting to the climate changes, carbon take up and storage, and green innovations within the industry.

#### ♦ Swiss Financial Mechanism

For the SR, the allocated volume of funds is 66 866 000 Swiss franks (CHF), which is around 41 mill. EUR.

Priority axis 2 - Environment and infrastructure contain the following speciality areas:

- 2.1 Renewal and modernisation of the basic infrastructure and improving the quality of the environment,
- 2.2 Nature protection.

### 2.1 Renewal and modernisation of the basic infrastructure and improving the quality of the environment

Total allocated sum for this speciality area is equivalent to 22 941 176 CHF, of which 19 500 000 CHF has been contributed by the Swiss Confederation, which is 85% of total allocated funds. The remaining 15% represent a contribution from the national SR budget.

In February 2010, the call for Renewal and modernisation of the basic infrastructure and improving the quality of the environment was closed. Under this call, 39 proposals for non-refundable financial benefit (NRFB) were received in the quality of project concepts. **Representatives of the National** 

Monitoring Committee for the National Financial Mechanism recommended 9 NRFB proposals in the quality of projects concept to be considered by the Swiss Confederation, with total asked sum for 32 401 370.79 EUR (which means over-budgeting for the specific call by 84%).

#### 2.2 Nature protection

Total allocated sum for this speciality area is equivalent to 5 882 353 CHF, of which 5 000 000 CHF has been contributed by the Swiss Confederation, which is 85% of total allocated funds. The remaining 15% represent a contribution from the national SR budget. State Nature Conservancy (SNC) is the eligible beneficiary within the Slovak Ministry of Environment.

On the basis of a Direct Order under 2009-05, the State Nature Conservancy submitted in 2010 a project concept called **Trend in the conservation of nature and protected areas within the Slovak Carpathians** with total requested NRFB of 1 949 825.18 Eur. In September of 2010, the Swiss Confederation approved the mentioned project concept with specific conditions. The final project was submitted by the State Nature Conservancy in the beginning of December of 2010. Decision of the Swiss Confederation on the final project proposal is expected to take place in August-September 2011.

## • COMPLEX ENVIRONMENTAL MONITORING AND INFORMATION SYSTEM

#### **Environmental monitoring system**

The System of environmental monitoring is an indispensable tool to know the environment and ensure environmental care. The System contains partial monitoring systems (PMS) installed at selected centres. The Information monitoring system (IMS, <a href="www.enviroportal.sk/ism">www.enviroportal.sk/ism</a>) with the goal to create a homogeneous, interconnected information unit consisting of partial IMSs. The unit is able to provide most objective report on the actual state of components of environment and due to interconnected databases is generally accessible through the Internet.

#### Partial monitoring systems

PMS	Guarantor	Centre	Monitored s	subsystem	
Air quality	MoE SR	Slovak Hydro Meteorological Institute	Air quality monitoring     Ground atmospheric level		
Meteorology and climatology	MoE SR	Slovak Hydro Meteorological Institute	<ul> <li>Network of ground synoptic and air stations</li> <li>Network of meteorological radars</li> <li>Meteorological satellite measurements</li> <li>Network of stations with climatology observation programme</li> <li>Network of precipitation measuring stations</li> <li>Network of stations measuring solar radiation and total atmospheric ozone</li> </ul>	Network of phenological stations     Network of measuring soil temperature and soil humidity     Network of measuring in the ground atmospheric level     Aerologic station     Storm detection station network	
Water	MoE SR	Slovak Hydro Meteorological Institute	<ul> <li>Surface water quantitative indicators</li> <li>Groundwater quantitative indicators</li> <li>Surface water quality</li> <li>Groundwater quality</li> </ul>	Thermal and mineral water Irrigation water Recreational water bodies	
Radioactivity	MoE SR	Slovak Hydro Meteorological Institute	Environmental radioactivity - Ground atmospheric level at monitoring sites		
Waste	MoE SR	Slovak Environmental Agency Banská Bystrica	<ul><li>Waste generation and disposal in the SR</li><li>Waste recovery facilities</li></ul>	Waste disposal facilities     Interstate transport of hazardous waste	
Biota	MoE SR	State Nature Conservancy of the SR Banská Bystrica	<ul><li>Fauna</li><li>Flora</li><li>Biotopes</li></ul>		
Geological factors	MoE SR	State Geological Institute of Dionýz Štúr in Bratislava	<ul> <li>Landslides and other slope deformities</li> <li>Soils of unstable volume</li> <li>Effect of mineral exploitation on environment</li> <li>Change to anthropogenic sediments</li> <li>Stability of rock massifs below historic objects</li> </ul>	<ul> <li>Anthropogenic sediments buried</li> <li>Tectonic seismic activity of territory</li> <li>Monitoring of alluvial sediments</li> <li>Volume activity of Radon in geological layers</li> </ul>	

Soil	MoARD SR	Soil Science and Conservation Research Institute in Bratislava	<ul><li>Basic network</li><li>Key locations</li></ul>	lands (31	onitoring of agricultural 8 monitoring areas) nd monitoring (112 areas)
Forests	MoARD SR	National Forest Centre in Zvolen	<ul> <li>Extensive periodical monitoring - 112 permanent monitor areas (I. level)</li> <li>Intensive periodical and continuous monitoring – 7 permanent monitoring areas (II. level)</li> </ul>		ous monitoring – 7
Xenobiotic substances	MoARD SR	Food Research Institute in Bratislava	<ul><li>Coordinated focal</li><li>Consumption pool</li></ul>	•	Monitoring of game and fish

Source: MoE SR

#### Funds invested in environmental monitoring (thous. EUR)

PMS	2002	2004	2005	2006	2007	2008	2009	2010
Air quality	951,04	610,77	560,98	961,66	1 916,88	1 179,11	989,16	566,58
Meteorology and climatology	939,39	1 161,79	864,07	2 523,17	982,84	2 409,55	742,66	361,65
Water	1 474,94	803,03	1 451,14	1 475,37	3 334,00	1 756,57	4 817,57	522,38
Radioactivity	88,56	48,26	49,79	84,48	76,38	49,79	39,43	30,75
Waste	116,18	116,18	126,14	34,52	144,53	79,43	60,51	21,15
Biota	19,92	19,92	33,19	33,19	33,19	17,09	0,00	0,00
Geological factors	331,94	331,94	331,94	331,94	298,75	348,54	348,54	289,39
Soil	305,38	305,38	318,66	302,06	232,36	267,24	206,84	133,51
Forests	57,09	96,26	146,05	265,55	569,57	337,68	369,58	362,0
Xenobiotic substances	897,30	908,88	413,40	507,90	282,15	351,74	387,30	402,0
Total costs	5 181,74	4 402,41	4 295,37	6 519,85	7 870,64	6 796,75	7 961,59	2 689,41
MoE SR costs	3 921,96	3 091,88	3 417,25	5 444,33	6 786,56	5 840,09	6 997,98	1 791,9

Source: MoE SR

#### **Environmental information system**

Environmental information system integrates information from environmental monitoring, information from environmental assessment, and spatial information on territory. Other generated information support activities of environment authorities and subjects that enforce legislation within environmental law. These include mainly the Ministry of Environment of the Slovak Republic and its affiliated organisations, as well as other institutions under different ministries. MoE SR and its daughter organisations maintain other databases, information systems, and internet and intranet portals to support their activities and present their outcomes.

#### ENVIRONMENTAL EDUCATION

In 2010, there were carried out within the environmental education:

#### ♦ Conferences, seminars, workshops, round tables

- **Enviro-i-forum 2010** annual conference on the environmental informatics, with the accompanying events
- Meeting of natural scientific workers VIII. international conference

#### Festivals, exhibitions, presentations

- **ENVIROFILM 2010** XV. international festival of films with the topic of environment creation and protection
- Speleophotography 15. international exhibition of art photography with speleological issue
- Children's Day at the ZOO
- Events for the World Water Day, Earth Day and World Environment Day

#### Other projects for the public

- **ProEnviro -** 6th year of an annual competition looking for the best environmental project organised by the school
- **EnviroQuestions -** VI. annual national correspondence trivia competition for pupils of the higher school classes (5th -9th) dedicated to the topic of environment
- **Hypericum -** naturalistic competition focused on knowledge of natural values and also on the cultural heritage of various regions of Slovakia
- **Ecological footprint** an innovative educational program in progress via a web portal www.ekostopa.sk
- On a hike with NATURA school program for mapping the biodiversity in Slovakia, on the web portal www.snaturou2000.sk
- **BEAGLE an online free biodiversity project open to all schools in Europe**. The schools report dates of flowering, leaf burst and other phenological events along with photos to the web site http://www.beagleproject.org.
- Fair of the environmental educational programmes of ŠIŠKA 2010 XIII. annual fair of the environmental educational programmes for the people dealing with environmental education
- Camp of nature protectors TOP 2010 46. annual camp

#### Building of education paths

Important and highly used elements of the infrastructure of environmental infrastructure are education paths.

#### Overview of building the education paths in 2010

Resort / institution	Number of constructed paths
Environment resort / SEA, SNC SR	126
Agriculture resort / Forests of the SR, NFC	7
Education resort / Primary schools, Secondary vocational schools,	7
Free time centres	
Self-government / Municipal authorities, Information centres,	57
Museums, ZOO	
NGO's	30

Source: MoE SR