

Sector fiche – IPA National programmes / Component I

1. IDENTIFICATION

Title	Environment and Climate Change Sector
MIPD Sector Code	6. Environment and Climate Change
ELARG Statistical code	Measure 1.1:27 Environment Measure 1.2: 27 Environment Measure 2.1: 27 Environment
DAC Sector code	41010
Total cost (VAT excluded) ¹	14,603,466 EUR
EU contribution	12,650,000 EUR
Management mode	Decentralised
Responsible Unit or National Authority/Implementing Agency(ies)	Decentralised mngmt: Central Finance and Contracting Unit (CFCU) - Ministry of Finance and Economy, Department for Contracting and Financing of EU Funded Projects Programme Authorising Officer (PAO) – Assistant Minister at the Ministry of Finance and Economy, Head of Department for Contracting and Financing of EU Funded Projects Mrs. Nataša Šimšić
Implementation management	Ministry of Energy, Development and Environmental Protection SPO: Dejan Trifunović, Assistant Minister Ministry of Agriculture, Forestry and Water Management SPO: Milanka Davidović, Assistant Minister Ministry of Natural Resources, Mining and Spatial Planning
Implementing modality	Sector Based Approach
Zone benefiting from the action(s)	The Republic of Serbia

2 RATIONALE

Overview of results and measures

Result 1: Ensured further alignment with EU environment Aquis, with the specific focus on development of institutional capacities and enforcement of national legislation and strategic planning

Measure 1 - Support for transposition, implementation and enforcement of environmental acquis through further implementation of principles from Environmental Approximation Strategy

¹ The total cost should be net of VAT and/or of other taxes. Should this not be the case, clearly indicate the amount of VAT and the reasons why it is considered eligible.

Result 2: Ensured alignment with EU climate Acquis and fulfilment of the UNFCCC requirements through introduction of a mechanism for monitoring and reporting GHG emissions and for reporting other information relevant to climate change on regular basis

Measure 2 - Establishment of a mechanism for monitoring, reporting, reviewing and verifying GHG emissions and other information relevant to climate change

Result 3: Development and improvement of waste management system

Measure 3 - Further development of waste management

Result 4: Upgraded environmental infrastructure through investments into wastewater treatment facility

Measure 4 - Further development of water infrastructure

In addition to the strategic framework

Results and measures have been identified based on the strategic framework presented in the SF sections 2.1 and 2.2. In addition, they are also compliant with recommendations from the EC 2012 Serbia Progress Report, as well as from other relevant policy documents:

EC 2012 Serbia Progress Report for Environment and Climate Change sector (Chapter 27) concludes that Serbia has been achieved some progress in the area of the environment and little progress was achieved in alignment with the climate acquis.

Serbia adopted its National Environmental Approximation Strategy in October 2011. A Strategy for the Implementation of the Aarhus Convention was adopted in December 2011. The National Strategy for Sustainable Use of Natural Resources and Goods was adopted in May 2012.

Some progress can be reported with regard to air quality. The Law ratifying the Protocol on heavy metals and the Law ratifying the Protocol on persistent Organic Pollutants have been adopted in January and March 2012 respectively. The Law on Mining and geological Research resulting the management of mining waste was adopted in November 2011. Implementing legislation on environmentally sound disposal of waste containing persistent organic pollutants was adopted in September 2011. However, Serbia still needs to fully align with the Waste Framework Directive.

According to the EC 2012 Serbia Progress Report some progress can be reported in the area of water quality. Serbia has aligned its legislation with EU acquis on emission limit values (ELVs) for water pollutants and deadlines for complying with them, as well as on parameters of ecological and chemical status of surface and of chemical and quantitative status of ground waters. The process of characterising the Serbian part of the Danube River Basin Management Plan has been completed in line with the Water Framework Directive. The Law on Public Utility Services is largely in line with the tariff principles of the Water Framework Directive. However, cost-covering tariffs for water remain to be introduced in the Water Law. The development of the groundwater monitoring network needs to advance.

Furthermore, in the area of climate change, no progress was made on general policy development and comprehensive climate strategy is still to be developed, according to the EC 2012 Serbia Progress Report. Limited progress was achieved in alignment with climate acquis, but significant efforts are required to strengthen the country's monitoring, reporting and verification capacities because the respective EU legislation sets the foundation for progress with the entire EU climate acquis.

The World Health Organization's 2006 assessment placed Serbia (with Montenegro) as 35th out of 48 selected European and CIS countries for access to a treated water supply. On the

other hand, access to wastewater system is poor. The length of the public sewage system network in Central Serbia is 10,123km, of which 1,648 km are main collectors (data from 2009 “Statistical Pocketbook 2010”), but the percentage of households connected to the public sewage network is 35.8% in Central Serbia and only 23,4% in Vojvodina.

Handbook on implementation of EC environmental legislation, *funded by EU and prepared by REC, provides planning framework and step by step guidance on the approaches and specific activities required to ensure the effective and legally compliant implementation of EC environmental legislation. The report „Guiding Principles for Reform of Environmental Enforcement Authorities in Transition Economies of Eastern Europe, Caucasus and Central Asia”, prepared by OECD, provides strong verification of the relevance of some identified environment results/measures.

Key rationale

The four measures identified in this SF take into account the results of past assistance and the specific lessons learnt. The focus is on further alignment of Serbia’s legislation with acquis, including development of institutional capacities for strategic planning and enforcement of national legislation; fulfilment of the United Nations Framework Convention on Climate Change (UNFCCC) requirements through introduction of a mechanism for monitoring and reporting on greenhouse gas emissions; improvement of the waste management system; and upgrading environmental infrastructure through construction of a wastewater treatment plant.

Key background

Although there has been progress on water quality the country still faces many challenges in terms of **water** pollution. Untreated industrial and municipal wastewater, agricultural drainage water, as well as pollution related to river shipping and thermo power plants (TPP’s) are major sources of pollution. Surface water quality is problematic, notably in the tributaries to the big rivers Danube and Sava. Only 13.6% of municipal wastewater discharged in 2010 is treated² out of which 3% is only put through tertiary treatment. In the Republic of Serbia, about 75% of urban population is connected to public sewage system, while this indicator related to rural population amounts only to 9%. EU also suggested that the Law on Water should be revised and that it should also transpose the Directives on Discharges of Dangerous Substances, on Fresh Waters supporting Fish Life, on Bathing Waters, on Urban Waste Water Treatment and on Nitrates, which currently have no equivalent in Serbian law.

The total quantity of **waste** generated in the Republic of Serbia, according to Annual report of Serbian Environmental Agency of the Republic of Serbia, was 2.65 million tonnes in 2010, and the quantity of collected and disposed waste was around 1.59 million tonnes. About 0.98 kg of waste per capita is generated daily, while 360 kg annually. The collection rate in 2010 was increased from 60% to 72% mainly in urban areas and disposed at 164 officially registered municipal landfills. Around 28 % of municipal waste is disposed on illegal landfills, which therefore represent a great risk to environment. Main challenge is still to increase waste collection rates in rural communities. Amount of hazardous waste that is produced in Serbia, and comes from all plants, including facilities that are required to obtain an integrated permit, is about 100,000 t / year. In the Republic of Serbia there is no hazardous waste treatment facility.

According to the EC Progress Report for 2012, good progress can be reported in the area of **chemicals**. The Law amending the Law on Chemicals and the Law amending the Law on Biocidal Products were adopted in December 2011. The downstream legislation with regard to the REACH, CLP and BPD has been updated to follow the changes in the EU legislation.

² Statistical Office of the Republic of Serbia, Statistical Pocketbook 2012

Complementarities and synergies with other needs and directly linked forms of assistance

IPA 2007 project „Technical Assistance to Develop an Environmental Approximation Strategy (EAS)” supported one of the most challenging Accession Chapters to complete. Further support to this Strategy in 2013 will complete development of EAS principles in order to implement proposals for multi-annual investment and compliance programmes and the design of new financial instruments. Complementarities between proposed activity in 2013 with MB IPA 2008 project “Regional Environmental Network for Accession (RENA), will make strong synergy on both, national and regional level.

Activities within the operation 1.1 will be complementary with activities planned to be performed through ENVAP2 project funded by SIDA, which will start in May 2013. So, though ENVAP2 all preparatory work has to be done and short term objectives (until 2014) defined in the EAS strategy should be achieved to the great extent. EAS Mid-term goals will be achieved through the IPA 2013 funded operation 1.1

IPA 2008 on Hazardous waste management is in direct correlation with proposal for this year. Also, chemical management issue is addressed as a continuation of IPA 2008 project.

Other Needs Assessment Document relevant measures, such as **ensuring conservation, sustainable use, and improvement of management of natural resources and developing and improving waste management systems** will not be supported by this SF, since they are covered by SF 2012.

MIPD objectives concerning climate change will be covered through operation 2.1. Furthermore, Environment and Climate Regional Accession network (ECRAN), MB IPA 2013 will help the beneficiaries to build their capacity for a correct planning, transposition, implementation and enforcement of climate acquis.

2.1 LINKS WITH NATIONAL SECTOR OBJECTIVE(S) AND MIPD SECTOR OBJECTIVE(S)

The Environment and Climate Change sector corresponds to the Environment, Climate Change and Energy sector in the MIPD, and encompasses exploitation of Serbia’s natural resources, municipal waste, chemicals, water and air.

The environment sector is important for the economic development of the Republic of Serbia, in terms of contribution to the country’s development through the creation of employment and introduction of new technologies. **Needs of the Republic of Serbia for International Assistance 2011-2013** within the sector Environment and Energy (page 117) defines the following priorities for the environment sector: to create and strengthen policy, regulatory, financing and monitoring mechanisms for ensuring sustainable development, to ensure effective environmental protection, as well as to enable sound management of natural resources and reduction of pollution.

In the **Multi-annual Indicative Planning Document (MIPD) 2011-2013 of the Republic of Serbia** (3.6 Environment, Climate Change and Energy, 3.6.3 Sector Objectives for EU support over next three years), “Focus will be on water and air quality, waste water treatment, waste management, mitigation of and adaptation to climate change, renewable energy sources, energy efficiency and security.” The specific objectives that IPA assistance will focus on are (page 30) to help Serbia align with the EU environmental and climate acquis. One of the main objectives in this sector, which is in line with MIPD, is to improve environmental infrastructure and environmental standards in air quality, waste water and waste management, and to prepare overarching financing strategies for the sub-sectors, viable projects for investment and attract FDI.

The Stabilization and Association Agreement (Title VIII, Cooperation policies, Article 111 – Environment) states that cooperation shall be established with the aim of strengthening administrative structures and procedures to ensure strategic planning of environmental issues and coordination between relevant actors and shall focus on the alignment of Serbia's legislation to the Community acquis. Cooperation could also centre on the development of strategies to significantly reduce local, regional and trans-boundary air and water pollution, to establish a framework for efficient, clean, sustainable and renewable production and consumption of energy, and to execute environmental impact assessment and strategic environmental assessment. Special attention shall be paid to the implementation of the Kyoto Protocol. Under **Article 116**, financial assistance may cover all sectors of co-operation, paying particular attention to “approximation of legislation, economic development and environmental protection”. Title VIII, Cooperation policies, Article 109 – Energy states that cooperation shall focus on priority areas related to the Community Acquis in the field of energy and be based on the Treaty establishing the Energy Community, with a view to the gradual integration of Serbia into Europe's energy markets. Cooperation may include: The formulation and planning of energy policy, including modernisation of infrastructure; The formulation of framework conditions for restructuring energy companies and cooperation between undertakings in this sector.

EC 2012 Serbia Progress Report for Environment sector (Chapter 27) concludes that Serbia has been achieved some progress in the area of the environment. Serbia adopted its National Environmental Approximation Strategy in October 2011. A Strategy for the Implementation of the Aarhus Convention was adopted in December 2011. A law ratifying Serbia's accession to the Pollutant Release and Transfer Register (PRTR) of the UN Economic Commission for Europe was adopted in October 2011. The National Strategy for Sustainable Use of Natural Resources and Goods was adopted in May 2012.

Some progress can be reported with regard to air quality. The Law ratifying the Protocol on heavy metals and the Law ratifying the Protocol on persistent Organic Pollutants have been adopted in January and March 2012 respectively. Air quality monitoring was further enhanced with the commissioning of a national calibration laboratory for air monitors and an analytical laboratory for air pollutants at SEPA. However, SEPA's capacity and budget for air quality-related work alone is largely insufficient.

The Law on Mining and geological Research resulting the management of mining waste was adopted in November 2011. Implementing legislation on environmentally sound disposal of waste containing persistent organic pollutants was adopted in September 2011. With the adoption of implementing legislation on procedures for the management of TiO₂-containing waste, alignment with the acquis on hazardous waste legislation has been largely completed. However, Serbia still needs to fully align with the Waste Framework Directive. Preparation of the national plans for specific hazardous waste streams, e.g. asbestos, batteries, accumulators, electrical and electronic equipment, waste oil is progressing well. The collection rate of household waste has increased from 60% to 72%. Pilot projects for primary waste segregation have been launched in selected communities. A system of data collection, registration and reporting on waste is operational as part of the national register of pollution sources. However, disparities between urban and rural areas remain. The participation of waste generators in providing relevant data needs to be improved. So far, four landfills were built under a concession agreement.

According to the EC 2012 Serbia Progress Report some progress can be reported in the area of water quality. Serbia has aligned its legislation with EU acquis on emission limit values (ELVs) for water pollutants and deadlines for complying with them, as well as on parameters of ecological and chemical status of surface and of chemical and quantitative status of ground

waters. The process of characterising the Serbian part of the Danube River Basin Management Plan has been completed in line with the Water Framework Directive. Progress has been made in the construction of wastewater treatment plants: one waste water treatment plant in Subotica has been completed while the construction of plants in Vrbas, Kula, Leskovac and Sabac is on-going. Funds and own resources are allocated with priority to waste water collection and treatment. However, the service levels continue to be very low. The capacity of the Ministry of Agriculture's Water Directorate needs to be substantially enhanced. The Law on Public Utility Services is largely in line with the tariff principles of the Water Framework Directive. However, cost-covering tariffs for water remain to be introduced in the Water Law. The development of the groundwater monitoring network needs to advance.

Furthermore, in the area of climate change, no progress was made on general policy development and comprehensive climate strategy is still to be developed, according to the EC 2012 Serbia Progress Report. The Climate Strategy will be developed within the Unallocated envelop for 2012 which will fully integrate climate change into sectoral policies and strategies. Limited progress was achieved in alignment with climate acquis, but significant efforts are required to strengthen the country's monitoring, reporting and verification capacities because the respective EU legislation sets the foundation for progress with the entire EU climate aquis. That was also the suggestion of DG CLIMA which will be fully respected - measure 2 within this SF will develop economy wide MRV. The administrative structure on climate change will be considerably strengthened according to the recently made changes within the Ministry of Energy, Development and Environmental Protection which includes the Climate Change Unit.

2.2 SECTOR ASSESSMENT – POLICIES AND CHALLENGES

2.2.1 National sector policy, strategy and context

Serbia has very good strategic framework in terms of environmental issues, but still poor environmental indicators remain: Serbia has a CO₂ footprint twice the size of economies with a comparable GDP per capita. A number of problematic air pollutants exceed EU ambient air quality standards by a considerable margin, around 90% of domestic and household waste water remain untreated and 40% of the population is not connected to public solid waste collection systems. Orderly treatment and disposal of hazardous waste is not assured. Drinking water quality is problematic in parts of the country and more than 600 animal and plant species are considered to be under threat.

The national framework for environment and Climate change policy consists of the following main strategy documents:

The **National Programme for Integration with the European Union (NPI)** foresees accelerating harmonisation of laws and standards with the EU acquis; implementation of the adopted laws, in particular in the area of chemical management, waste management, air quality, protection against noise; commencement with the Kyoto Protocol implementation; strengthening administrative capacities of bodies in charge of planning, licensing, controlling, monitoring and project management; strengthening local level capacities and ensure operational coordination between local and central levels. NPI has been annually updated in regard to the legislative framework (adoption of national legislation which transposes EU Directives). The process of adoption has been monitored quarterly and the estimation of the adopted legal acts is provided in accordance to the priorities set up for the previous period. It was foreseen that NPI will become NPAA – National Programme for the Adoption of the Acquis after Republic. of Serbia obtained Candidate Status for the Accession to the EU. This process is expected to start by the end of 2012.

The **National Sustainable Development Strategy of the Republic of Serbia (NSDS)** (Official Gazette of the Republic of Serbia, no. 57/08), is a key document in establishing a balance between sustainable economic growth, economic and technological progress, sustainable social development and environmental protection, together with a rational use of natural resources. NSDS defines as strategic objective, among else, mitigation on climate change. These include the preparation of relevant institutions for the implementation of EU climate change policy and for fulfilment of Serbia's international obligations (the UNFCCC and the Kyoto Protocol etc.). The NSDS sets broad objectives supported by an institutional framework, covering both the short-term (2009-2011) and longer term (2009-2017), and is accompanied by an Action Plan.

The broad framework for implementing environmental policy is set by the **National Programme for Environmental Protection 2010-2019** (Official Gazette of the Republic of Serbia, no. 12/10), which lays down a set of objectives for Government policy over 2010-2019 at three levels: short-term (2010-2014); continuous (over the whole period of the National Programme); and medium-term (applying to the 2015-2019 period only). The NPEP covers all aspects of environmental policy and planning, financing and economic instruments, institutional capacity-building, education, legislation, monitoring and enforcement, and policy in the areas of water quality, waste management, chemicals and risk management, air quality & climate change, nature protection, biodiversity and forests, fisheries, soil protection, noise, radiation, industry, energy, agriculture, forestry and hunting.

Concerning environment sector, the following strategies were adopted based on the Law on Environmental Protection and Strategy for Sustainable Development of Serbia: **National strategy of sustainable usage of natural goods and resources** and **Strategy of biological diversity of the State**.

The **Environmental Approximation Strategy 2011-2019 (EAS)** was adopted in October 2011. EAS includes legislative, institutional and financial components and addresses the complexity of the challenge of applying EU environmental legislation in Serbia and providing a sound basis for the accession negotiations on Chapter 27. It aims to address the challenges that approximation will pose to legislation (including the response to deficiencies in the current legislative process in Serbia), the extent of change that will be required in organizing and operating institutions responsible for environmental protection, and the approach to closing the economic gap between 'business as usual' and full compliance with the *acquis*.

Republic of Serbia gained the status of "Candidate Country" for membership in the EU in March 2012. In view of the candidate status of the Republic of Serbia, for the EU Membership, and forthcoming process of opening the negotiations, the EAS Strategy is one of the most important documents in terms of European integrations in the field of environment. It will be the basis for accession negotiations in connection with the **Chapter 27** (Environment). Bearing in mind the experience of other countries, this chapter is considered one of the most difficult and complex in negotiations, therefore it is of great importance to join this process prepared in the best possible way. According to the EAS Strategy, overcoming this challenge requires sustained progress in three particular areas: transposition of the EU's environmental legislation into national legislation; putting in place the administrative capacity to implement, monitor and enforce that legislation; and establishing the infrastructure required to be able to comply with the legislation.

The **Waste Management Strategy 2010-2019** (Official Gazette of the Republic of Serbia, no. 29/10) is the basic document that provides conditions for rational and sustainable waste management at national level, and establishes fundamental principles. The Strategy proposes establishment of 12 regional waste management centres in Serbia by the end of 2013, and defines 26 waste management regions. It also proposes to refurbish existing unsanitary

landfills, which represent the greatest risk to the environment, and environmental "hot spots" of historical hazardous waste pollution, and to establish a hazardous waste management system.

Strategy for development of energy sector of the Republic of Serbia stipulates EU accession as a main political objective. It implies meeting EU standards in terms of environmental protection, by transposition of relevant directives.

The Republic of Serbia has taken some steps in the field of climate change. The National Sustainable Development Strategy and its Action Plan for 2009 – 2017, as well as the National Environmental Protection Programme identify climate change as a key risk and put forward some actions related to adaptation to and mitigation of climate change. Other key strategic documents include the Energy Development Strategy until 2025, with an outlook until 2030, the Forestry Development Strategy, the Strategy of Scientific and Technological Development, the Strategy of sustainable usage of natural goods and resources and Strategy of biological diversity.

Also, the Republic of Serbia is an Article 5 Party to the Montreal Protocol on substances that deplete the ozone layer (ODS) and has ratified all amendments to it. The Country has to comply with less demanding phase-out schedules for different groups of substances than the EU and its Member States and has a satisfactory level of compliance with the Protocol.

The Republic of Serbia is a non-Annex 1 Party to the United Nations Framework Convention on Climate Change (UNFCCC), and has ratified the Kyoto Protocol. Serbia associated itself with the Copenhagen Accord, and indicated a preliminary assessment of mitigation potential of emission limitation from 29% on 18% until 2020 compared to 1990 levels under the business as usual scenario, but indicated that this is dependent on financial support from foreign investors. Serbia has not yet put forward a mitigation commitment by 2020.

Serbia submitted its Initial National Communication in November 2010, with GHG inventories for 1990 and 1998, as well as projections for 2012 (business-as-usual being +12,2% and with measures +10,6% compared to 1990 levels) and for 2015 (business-as-usual being +20,4% and with measures +11,7% compared to 1990 levels). Its total GHG emissions - not taking into account the amounts removed by forests - decreased by around 17.9% between 1990 and 1998. When the amounts removed by forests are taken into account, the decrease is estimated at 22.2%. Serbia is currently preparing its second national communication to the UNFCCC (to cover GHG emissions for 2000 - 2010).

The **National Strategy for the inclusion of Serbia in the Clean Development Mechanism under the Kyoto Protocol** was adopted by the Government in February 2010 for the agriculture, forestry and waste management sectors, and identifies how to use opportunities offered by the Kyoto CDM. According to the UNFCCC website six (6) CDM projects have been registered till June 2013. In April 2013 a list of ten (10) Nationally Appropriate Mitigation Actions (NAMAs), which are seeking support for implementation, were submitted to UNFCCC NAMA Registry³.

The Law on Mining and Geological Exploration ("The Official Gazette RS", No. 88/2011) regulates the issues of geological exploration and exploitation of mineral raw materials. According to Article 121, Directive 2006/21 on mining waste is implemented and Article 141 provides for setting-up of the Cadastre of mining waste. The laws and regulations concerning the mining sites are considered as the instruments of the resource sustainable development. In chapter on Environment the part covering Waste Management harmonisation of national legislation with EU Directive on Mining Waste Management was recognized as mid-term

³ With the support of Japan

priority. Directive 2006/21/EC on the management of waste from extractive industries is published by the European Parliament and Council on 15 March 2006. This Directive applies to waste resulting from the extraction, treatment and storage of mineral resources and the working of quarries. The National Programme for Environmental Protection 2010-2019, describes problems with mining waste (Chapters 6.2. and 7.7.2.).

Directive 2002/49/EC on assessment and management of Environmental noise has been fully transposed in the Serbian legislation with the following:

- **Law on Environmental Noise Protection** ("Official Gazette of RS", No. 36/2009 and 88/2010)
- Regulation on Noise Indicators, limit values, assessment methods for indicators of noise, disturbance and harmful effects of limit values, assessment methods for indicators of noise, disturbance and harmful effects of noise in the environment ("Official Gazette of RS ", No. 75/2010)
- Rulebook on the methods of development and contents of the strategic noise maps and the manner of presentation of the strategic noise maps to the public ("Official Gazette of RS ", no. 80/2010) Rulebook on the methodology for action plants development ("Official Gazette of RS", No. 72/2010)

According to the Law, noise mapping shall be made in two rounds. It shall be ensured that no later than 30th of June 2015 first round of strategic noise maps shall be made, and no later than 31st of December 2020, second round shall be made. According to the Law action plans shall be made in two rounds as well (2016 and 2020). This means that the full implementation of the Directive will be achieved. Before strategic noise mapping started it is necessary to identify competent authorities and to identify areas that are to be mapped.

Chemicals management

The Law on **chemicals** and Law on biocidal products were both amended in 2010, adhere to the principal concepts of the corresponding EU legislation (REACH Regulation, Regulation on classification, labelling and packaging of substances and mixtures and Directive concerning the placing of biocidal products on the market). The Law on Biocidal Products introduces into national legislation the procedure of issuing of authorization for placing of the biocidal products on the market, which includes risk assessment of the biocidal products. There is a lack of expertise in the area of the risk assessment of the biocidal products, and it is necessary to build capacities within the sectors dealing with risk assessment and biocidal product risk management in order to prepare them for evaluation of the data from the technical dossier in the procedure of issuing of the authorization for placing of the biocidal product on the market. Also, there is a new EU Biocidal Products Regulation (EU) No 528/2012 that will apply from 1 September 2013 in the EU and will replace the old Biocidal Products Directive 98/8/EC, and since it will be transposed to national legislation, it will be necessary to prepare the new system for financing administration of the biocidal products management in line with the provisions of this new EU Regulation. In order to adequately prepare for REACH implementation after Serbia's accession to EU, it is necessary to build knowledge within all competent authorities on REACH, especially related to those obligations in REACH that are related to centralised procedures which are not transposed in national legislation.

Climate Change

The Republic of Serbia is a Party to the United Nations Framework Convention on **Climate Change** (UNFCCC), since 2001 and to the Kyoto Protocol (the Protocol) since 2008. A non-Annex I status means that the Republic of Serbia does not have quantified emission reduction commitments in the period 2008-2012, but has an obligation to report on its emissions and

mitigation actions, every four years, through national communication. New obligation on biannual reporting came from the UNFCCC negotiation process.

Initial National Communication (INC) of the Republic of Serbia was adopted by the Government and submitted to the UNFCCC in 2010, while preparation of the Second National Communication, on a project basis, started in September 2012 and it should be finalized not later than in June 2015. According to the UNFCCC requirements first biannual report Serbia shall submit not after the end of 2014.

Preliminary assessment made for the purpose of associating with the Copenhagen Accord indicates that it is feasible to begin reducing emissions in Serbia before 2020, while under the INC willingness of the Government to contribute to emissions reduction until 2015 is shown. The Serbian Government is therefore committed to combating climate change and limiting GHG emissions in the period up to the end of 2020, but there is a need for certain additional analyses, including on those that go beyond what is required under the UNFCCC for non-Annex I countries. This is particularly relevant because of EU *acquis* requirements being more stringent than those for non-Annex I Parties under the UNFCCC.

Even though the national Regulation on methodology for collection of data needed for preparation of GHG inventory has been adopted by the Serbian Government, a system for economy-wide and systematic data collection on GHG emissions and other information relevant to climate change is not yet fully established, and needs to be improved to align with EU requirements on monitoring, reporting and verification, more precisely Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC and the Implementing Provisions (Commission Decision 2005/166/EC).

Waste management

Although there has been significant progress in **waste management sector** in terms of harmonised legislation, the implementation is still a challenge. Serbia has aligned its legislation with the key EU policies on waste and hazardous waste management, introducing the principles of waste prevention, reuse, recycling and recovery. Legislation providing for waste separation is likewise in place. However, law enforcement is hampered by low waste collection rates in rural communities, thousands of illegal dumpsites and the absence of treatment facilities for hazardous waste.

Waste Management Strategy (Official Gazette of RS, no. 29/10) stipulates the construction of 12 regional waste management centres, which would include regional sanitary landfills in short-term period (2010-2014). Out of the twelve regional waste management centres proposed by the national strategy to be established in Serbia by the end of 2013, seven regional sanitary landfills have been constructed so far. Out of these seven, four regional waste management centers are public private partnership (Leskovac, Kikinda, Jagodina and Lapovo) and three are municipal-public (Pirot, Duboko, Srem- Macva). Regional landfill on the territory of Pancevo is not operational yet. Additional two regional landfills (Nova Varos and Indjija) are at their initial phase of construction and other three regional landfills are planned for construction, out of which two (Kalenic and Subotica RWMCs) have their technical documentation completed and one (sanitary landfill already constructed in Vranje) is getting its technical documentation prepared for upgrading into a regional waste management centre.

According to Waste Management Strategy (2010-2019) it is realistic to estimate that the amount of **hazardous waste** that is produced in Serbia, and comes from all plants, including facilities that are required to obtain an integrated permit is about 100,000 t / year. Currently

the collection system for hazardous wastes is based on the economic value of the waste. For example collections of used car lead acid batteries ongoing very well. On the other hand collection system for wastes not having a positive economic value (button cells batteries, oil emulsions (low heating value)) in practice almost doesn't exist. Very similar situation like with collection is in part of storage and treatment facilities. In Republic Serbia existing permitted companies for storage and treatment hazardous waste but mainly dealing with waste with positive economic value (lead acid batteries, waste oils, hazardous packaging). Also, existing permitted companies which after collection and transport making storage of hazardous waste before export. In the Republic of Serbia there is no hazardous waste treatment facility and according to national legislation, hazardous waste is being exported, so there is an urgent need of environmentally sound and efficient hazardous waste management.

Current situation regarding collection of data of generated waste quantities: The Serbian Law On Waste Management ("Official Herald RS, No 36/09, 88/10") regulates: types and classification of waste; waste management planning; waste management entities; responsibilities and obligations in the management of waste; organization of waste management; specific waste stream management; permit conditions and procedure; licensing terms and procedure; cross-border movement of waste, waste reporting and database; the financing of waste management, supervision, as well as other matters relevant to waste management and is mainly transposing Directive 2006/12/EC on waste. Law and bylaws which arising from LWM prescribing in details management for particular hazardous waste streams and in general they are in accordance with *acquis communautaire*. The new law on waste management is in the procedure and its adoption is expected in third quarter of 2013.

It is very important to mention that **waste generated by the non-ferrous metal mining industry**, may contain large quantities of dangerous substances, such as heavy metals. Through the extraction and subsequent mineral processing, metals and metal compounds tend to become chemically more active, which can result in the generation of acid or alkaline drainage. Extractive industries for resources to satisfy energy and raw material requirements may alter the composition of the landscape, disrupting land-use and drainage patterns, contaminating soil and water resources, removing habitats for wildlife, and generate huge amounts of waste. This particular waste must be managed in specialized facilities in accordance with specific rules or may cause adverse effects on the environment, in particular water, air, soil, fauna and flora and landscape, and pose risks to humans who live near mining areas. Pollution is mainly caused by untreated mining waste waters and improperly deposited mining waste, changing the landscape etc.

Serbia is endowed with good energy (lignite), industrial and construction materials, and export-oriented metallic minerals such as copper, zinc, lead and gold. Unlike many other developing countries that use mineral endowment for nation-building, Serbia has yet to undertake all the necessary reforms to foster growth and derive full resource rents. Annual Production of coal is over 40 million ton, oil and gas are 1.5 million ton equivalent oil, non-metallic mineral raw materials are produced over 40 million tons (cement, burnt brick, ceramic, industrial minerals, technical-construction stone, etc....), metallic mineral raw materials produced around 10 million tons. Based on this, annual production of mining waste is about 130 million m³ of waste rock and about 10 million tons of waste from flotation.

There is no official cadastre of mining waste and amount of mining waste generated in them and therefore no clear picture of the potential environmental risk.

Water management

As we already mention in the section key background, the country faces many challenges in terms of water pollution. Only 13.6% of municipal wastewater discharged in 2010 is treated,⁴ out of which 3% is only put through tertiary treatment. In the Republic of Serbia, about 75% of urban population is connected to public sewage system, while this indicator related to rural population amounts only to 9%. Waste water treatment is essentially lacking in Serbia.

The World Health Organization's 2006 assessment placed Serbia (with Montenegro) as 35th out of 48 selected European and CIS countries for access to a treated water supply. On the other hand, access to wastewater system is poor. The length of the public sewage system network in Central Serbia is 10,123km, of which 1,648 km are main collectors (data from 2009 "Statistical Pocketbook 2010"), but the percentage of households connected to the public sewage network is 35.8% in Central Serbia and only 23,4% in Vojvodina. EU legislation requires agglomerations of 2,000 people and over to be connected to an appropriate wastewater treatment plant. In Serbia, there are 434 agglomerations with 2,000 PE (population equivalent). Most municipalities have planned, in their General Urban Plans, the extension of the present sewerage systems and the construction of new sewerage systems in numerous villages. In practice, the execution of these plans is severely delayed and dependent on the availability of funds.

On-going projects within the MISP 2008 and 2010 dealing with Waste Water Management Systems are the projects in the following municipalities: Vrbas-Kula, Šabac, and Leskovac. Furthermore, through MISP 2008 two Feasibility Studies have been prepared for Novi Pazar and Čačak Waste Water Management Systems. Also, within the Energy SF for 2013, operation 2.2.1 will cover construction of Industrial Wastewater Treatment Facility in TPP Kostolac B which will reduce the amount of harmful substances discharged into River Danube by the treatment of waste waters which include: oily waters, atmospheric waters containing oil and oil derivatives (heavy oil), as well as waste waters to be generated by flue gas desulphurisation (FGD), via wet limestone process prior to the discharge into the recipient.

In order to complete the idea of improving the water quality, infrastructural focus for the SF Environment for the programming year 2013 will be construction of at least one more wastewater treatment plant, because environmentally sound wastewater collection, transfer, treatment and disposal shall further contribute to achieving the adequate protection of surface waters, improved protection of ground water, and in general improved protection of public health.

2.2.2 Sector and donor coordination

The coordination and harmonisation of donor activities in Serbia, with a particular focus on country ownership over coordinating aid-funded activities, is ensured under the leadership of the Serbian European Integration Office (SEIO) – Sector for Planning, Programming, Monitoring and Reporting on EU funds and Development Assistance.

Coordination of programming at the highest policy level is the responsibility of the Commission for Programming and Monitoring of EU Funds and Development Assistance. The Commission meets annually and is chaired by Vice Prime Minister in charge for European Integration. The Commission is composed of 11 ministers and the Director of the SEIO. The task of the Commission is to review draft documents that will be presented to donors, suggest priorities for use of resources of international development assistance, and consider and make proposals to the Government on other significant issues related to the use

⁴ Statistical Office of the Republic of Serbia, Statistical Pocketbook 2012

and management of EU funds and development assistance. As a monitoring tool, the EU Delegation and NIPAC have also created monthly “bottleneck meetings” between the DEU, NIPAC and line ministries to discuss the progress of IPA funded projects and to ensure their smooth implementation.

The NIPAC and NIPAC Technical Secretariat have eight Sector Working Groups (SWGs) that prepared the Needs Assessment Document (NAD) for international assistance in 2011-13, as the basis for identifying annual IPA I programmes, multi-annual IPA III-V programmes and bilateral donor projects. These SWGs comprise representatives from Line Ministries and other beneficiaries as the main actors in programming and project identification. The SWGs contribute to the identification and prioritisation of projects, ensuring sector and donor coordination, co-financing and analysis of project implementation. SWG for environment and energy covers/corresponds to the MIPD environment, climate change and energy sector.

Within the recently improved Aid Coordination Mechanism, informal donor coordination groups (previously mostly donor driven) have been rearranged and their work formalised based on increased national leadership. In the environment national sector, Aid coordination group on environment is led by Ministry in charge for Environment (Ministry of Energy, Development and Environmental Protection) with SIDA as lead donor and WB, EBRD, KfW, JICA, GIZ, Netherlands, Norway, Czech, etc. as participating donors, members of the Group. Within the Environment Aid Coordination Group, Waste Management Sub Group has been established, in order to improve dialogue in specific subsector which has been identified as the priority. In addition to sectoral aid coordination groups, the mechanism envisages the following four cross-sector groups: Local Development, Regional Development, Roma Integration and Gender Equality.

Aiming to include Serbian civil sector in development assistance planning in a substantial way, SEIO decided to establish a consultation mechanism with civil society organisations in the end of 2010. The so-called Sector Civil Society Organisation (SECO), where each SECO was to represent one sector, has been established in the following 7 sectors that corresponds to the NAD classification: Rule of Law, Public administration reform, Civil society, media and culture, Human resources development, Agriculture and rural development, Environment and energy and Competitiveness. During 2012 SECOs as representatives of their associated networks participated in development of SIFs by taking part in sectoral working group meetings composed of line ministries and other state bodies by providing inputs for identification of the needs and development of sector (gap) analysis.

The action plan for programming and reporting on international assistance is prepared annually by the NIPAC Technical Secretariat to ensure synchronisation with national planning and budgeting processes and to consider IPA programming specific requirements. By defining activities, timeframes and roles and responsibilities of relevant institutions, it serves as a tool for coordination and an instrument for aligning donor activities. ISDACon, as both a website and database of development assistance and priority projects, serves as a programming, reporting and communication tool.

2.2.3 Sector budget and medium term perspective

With the aim of increasing predictability of public financing for the budget users, as well as of improving transparency of the planning process in general, the Budget system Law prescribes the obligation of presenting the medium term expenditure framework as the three-year expenditure limits for budget users. According to the adopted Fiscal Strategy 2013-2015, based on the medium-term macroeconomic projections and the targeted deficit for the respective years, the following funds are planned to be allocated from the state budget to the

state institutions associated with the Environment subsector of the Energy, Environment and Climate Change Sector⁵:

Budget expenditure limits for 2013-2015 (in EUR)*

Institution	2013	2014	2015
Ministry of Natural Resources, Mining and Spatial Planning**	7.389.139	7.684.699	7.992.090
Ministry of Energy, Development and Environmental Protection**	65.527.149	68.148.244	70.874.181
Ministry of Agriculture, Forestry and Water Management**	310.533.119	322.954.457	335.872.625
State Administration for Hydrometeorology	7.944.958	8.262.751	8.593.261
State Administration for Geodesy	36.372.960	37.827.885	39.340.995

* Converted at the agreed budgeting rate of 119.6 RSD: 1 EUR

**Total budgets are presented referring to the general competences of Ministries and not only to area of Environment

The **strategic goal** of the Government economic policy on the medium-term 2013-2015 as outlined in the Draft Fiscal Strategy is the **acceleration of the European integration process** of the Republic of Serbia, by undertaking activities leading to the initiation of accession negotiations and by implementing systemic reforms leading to the fulfilment of the Copenhagen criteria. To this end, the adoption of the necessary systemic laws shall be accelerated, as well as the implementation of the adopted legislation with the aim of establishing market economy, macroeconomic stability and suppression of the corruption and the organized crime. The document further clarifies that in order to fulfil economic and political criteria for membership to the EU, the resources shall be provided for strengthening of the administrative capacities and for the stability of institutions guaranteeing democracy, the rule of law and the protection of minorities, for the development of market economy and of its potentials to respond to the competition and market pressures from the EU, as well as for creating the stable economic and monetary surrounding.

Having in mind the above strategic goal of the country, the focus of the economic policy in the medium-term perspective shall be on the economic recovery of the country and on the creation of conditions for the sustainable and balanced economic growth based on the increase of investments and export, and leading towards the increase in employment and of the living standard.

2.2.4 Sector monitoring system

Sector performance should be monitored by sector outputs and consequent impacts that will be continuously monitored based on the existing strategies and action plans. Sector monitoring is currently under development. For time being sector monitoring for Environment and Energy Sector is based on two key mechanisms: system of performance indicators which have been developed to accompany the document "Needs of the Republic of Serbia for International Assistance 2011-2013" and on periodical review of the implementation of strategies and action plans relevant for the sector.

Result-based system of indicators accompanying document "Needs of the Republic of Serbia for International Assistance" defines baseline and target values (benchmarks) for a four-year period and will be revised annually. Indicators are linked with the relevant sector priorities

⁵ The data presented herewith originate from the Fiscal Strategy adopted by the Government of Serbia in November 2012.

and measures defined in the document, and are, to the extent possible, taken from sector performance frameworks described in the first paragraph. It is intended that this system of indicators is used in planning and monitoring of EU funds and development assistance and integrated in the relevant planning/ programming documents (including sector/ project fiches).

The monitoring system under decentralised management of IPA (DIS) is defined in detail in relevant Manuals of Procedures. System is based on a set of monitoring committees examining relevant monitoring reports - IPA Monitoring Committee, Sectoral Monitoring Committees (TAIB MC being one of them) and Sectoral Monitoring Sub- Committees (SMSCs). SMSCs will be examining IPA monitoring reports on activities funded through first IPA component per sector (it is envisaged that 8 SMSCs will be functional in the following sectors: rule of law; public administration reform; civil society, media and culture; transport; energy, environment and climate change; competitiveness; human resource development and agriculture and rural development). Progress in achieving the target values per indicator set in the relevant sector / project fiches will be included in the relevant monitoring report and examined at the SMSC and TAIB MC meetings.

2.2.5 Institutional setting

According to the Law on Ministries, the environmental policy of the Republic of Serbia is predominantly addressed by the following institutions: the Ministry of Energy, Development and Environmental Protection (MEDEP), the Ministry of Natural Resources, Mining and Spatial Planning, the Ministry of Agriculture, Forestry and Water Management, the Ministry of Health, Ministry of Regional Development and Local Self-Government, Statistical Office of the Republic of Serbia, the Republic Hydro meteorological Service, Institute for Nature Protection, Agency for Traffic Safety, the Regional and National Public Health Institutes, the Secretariat for Environmental Protection of the Province of Vojvodina, Provincial Secretary for Urban Planning, Construction and Environment, the Statistical Office of the Republic of Serbia, City Secretariat for Environmental Protection, Public Utility Companies and municipalities. In addition, MEDEP is the UNFCCC Focal Point.

Institutional capacity

Water issues are split across several ministries and agencies, so the cooperation between actors should have coordinated approach especially between the Water Directorate of the Ministry of Agriculture and the MEDEP. Having in mind restricted number of employees at the Water Directorate, the implementation of the water related operations could also be a challenge.

After adoption of the new systematisation at the Ministry of Energy, Development and Environmental protection, the Climate Change Unit has been strengthened and in that regard the topic of economy wide MRV will be addressed within this Sector Fiche (Operation 2.1). Climate Change unit has 11 employees in total. Furthermore, the competences, as well as the staff from the Chemical Agency are transferred into the MEDEP. According to the current Systematization of MEDEP, Unit in charge for chemicals has total of 21 working posts and the operation 1.2 will be completely implemented by the line Ministry.

Operation 3.2 (Mining waste) will be implemented by the Ministry of Natural Resources, Mining and Spatial Planning. The competences between the Ministries regarding different types of waste are explained at the page 46 (ANEX 2). Open issue regarding establishment of the IPA Unit within the Ministry of Natural Resources, Mining and Spatial Planning will be done before actual implementation of the Operation.

Furthermore, regarding the national co-financing commitments, it is important to highlight that Serbia does not have multiannual budgetary planning, and that the line Ministries will incorporate their obligations into the budget lines in accordance with the guide for planning of the national budget which clearly recognises such obligations.

2.2.6 Macro-economic context and Public Financial Management

According to the adopted Fiscal Strategy 2013-2015 and the macro-economic indicators presented therein, it is obvious that at the end of the year 2012 Serbian economy is in the recession. In general, the negative tendencies started with the second wave of economic crisis in the second half of year 2011, and continued throughout 2012 (the evident slow-down of the economic activities and of export and import of goods, the increase of fiscal and current account imbalances, growth of inflation, decrease of employment, dinar deterioration, decrease of foreign exchange reserves and of crediting activities in the banking sector, the increase of the share of the non-performing loans in the debt portfolio, etc.). The stagnation of economic activities at the EU Member states, the recession in the countries of EURO-zone, and particularly in the countries of the region, strongly affected Serbian economy being heavily dependent exactly on those trade partners. This shall continue to represent major external risk for the national economy, but the comparative anticipations are such that the recession shall decelerate during 2013, while modest growth in economic activities and employment can only be foreseen in the horizon of year 2014. The Draft Fiscal Strategy forecasts a macroeconomic scenario with real GDP growth at average rate of 3.2% per year over the period 2013-2015.

The prospects of economic recovery and growth are based on the projections and expectations of the increase of export, of savings in public sector, of productivity and of competition, as well as on the anticipation of the economic recovery of the markets of EURO-zone. As presented in the Draft Fiscal Strategy, the macro-economic stability is the key pre-condition for fulfilling the outlined **priorities of economic growth and the increase of employment and of the living standard** in the Republic of Serbia. In that sense, a strict coordination of fiscal and monetary policy in the following three years is of crucial importance for macro-economic stability and for the decrease of macro-economic imbalances (inflation, fiscal deficit, current account deficit). The prevailing orientation is therefore towards undertaking rational economic policies and on the acceleration of structural reforms. Fiscal policy shall focus on the decrease of fiscal deficit by introducing changes in tax policy and mostly through fiscal adjustments on the expenditure side in line with the rules of fiscal responsibility. Monetary policy shall aim at attaining targeted inflation and on carrying out the floating exchange rate regime. In parallel, structural policy shall promote reforms leading to increasing productivity and export capacities, improving the business environment and attracting potential foreign investors, as well as reforms in the public sector. With this regards, a particular challenge for the economic policy shall be to ensure the financial incentives for the most effective programs, particularly in agriculture, energy sector and in infrastructure. By strengthening the rule of law, suppressing the systemic corruption and with mitigation of the rigidity on the labour market, a better investment climate is to be created. Complementary special economic policies to be emphasized in the medium-term perspective are: policy of protection of competition, active population policy increasing birth-rates, balanced regional development policy, social policy (guaranteeing social rights and inclusiveness); Key sector policies towards which more substantial financial resources are going to be allocated, are again closely interlinked with the aims of economic growth and employment and presented as follows: agricultural policy, mining and energy, transport, telecommunications, tourism, health policy, education and science.

Envisaged structural reforms of the public sector are of great influence to the efficient **management of public finances**. The principal legal bases for the public financial management in the Republic of Serbia are set out with the Budget System Law which is assessed rather positively in terms that it “provides for many of the essential components of a sound budget system⁶”. In the recent years (2010/2011), important new institutes such as medium-term expenditure framework and fiscal responsibility rules, have been introduced to streamline the management system. However, the implementation of those new concepts has not been fully exercised, largely because of the challenges the state faced with the financial crisis, and due to incremental approach in introducing the changes in practice. In addition to this, a significant reform potential is to be seen in the recent amendments of the Budget System Law (BSL)⁷. One of the major changes concerns the broadening of the definition of public finances, which previously referred exclusively to budget (local and central level) funds and did not encompass the totality of revenues/incomes (for example, the so-called own, or proper revenues of some public sector institutions were left out of the system of managing the public finances and of the treasury single account). The system and the Law as amended in September 2012 now provide for a more comprehensive approach in planning, spending and reporting on public funds and as such create conditions for a better control of spending in the public sector. Likewise, the amended BSL has incorporated system changes concerning the approach in establishing and charging of various taxes, levies and duties affecting particularly the private sector. Namely, the assessments carried out with this regards, revealed that much of the fiscal duties were being introduced in opaque and unpredictable manner. The amended BSL establishes fairly transparent principles in introducing such financial charges and obliges for the subsequent adjustment of other pieces of legislation not aligned with the outlined principles; Further on, in line with the recommendations of the EC DG BUDGET, the definition of the managerial accountability has been adjusted, while in anticipation of the conferral of management powers for decentralized management of EU Funds, a new budget reserve has been introduced in order for Serbia to cope with the requirements of accreditation criteria.

Notwithstanding those improvements in the budget system, the public expenditure management still remains short of a consolidated plan for reforming the public expenditure management, which would focus exactly on implementing reforms that have already been agreed and launched. In 2010 Public Financial Management in the Republic of Serbia has been reassessed in accordance with the Public Expenditure and Financial Accountability (PEFA) methodology⁸. A basis is therefore now available for information and monitoring of PFM, for planning of the reform strategy and capacity development programme. Assessment of the PFM institutions, processes and systems, has been carried out in several important areas: budget credibility; transparency and comprehensiveness; policy-based budgeting; predictability and control in budget execution; accounting, recording and reporting; external scrutiny and audit; and donor practices. A standardised scoring system is applied in the structure (sub-elements) of each of the topics, so that weaker scoring directly signals the necessity to concentrate efforts on improvements in a medium-term perspective. The PEFA Report recognises the dependency between PFM reforms and the EU accession agenda and recommends a more systematic approach and stronger specific leadership to ensure consistency of future PFM reforms.

⁶ SIGMA Assessment for Serbia, published in March 2012.

⁷ The Law on Amendments to the Budget System Law was adopted by the Parliament on September 25th and published in the Official Gazette No. 93/12, September 28th, 2012.

⁸ The Republic of Serbia PEFA Assessment and PFM Performance Report 2010 has been published in November 2010

2.2.7 Sector assessment

The Government of Serbia is firmly committed to support implementation of relevant environment and climate Acquis, strengthening institutional capacity, and improving environmental infrastructure within the Environment and Climate Change sector, in pursuit of its national policy objectives and reform agenda, and the path to European integration and accession to the EU. The needs for international assistance in Environment and Climate Change sector for 2011-2013 have been fully articulated by the Sector Working Group for Environment and Energy, and described in the "Needs of the Republic of Serbia for International Assistance 2011-2013 (NAD)", adopted by the Government in February 2011. Apart from the consultations with relevant national institutions (held within the abovementioned eight sector working groups), the process of drafting the sector chapters of the NAD included consultations with representatives of civil society organisations, the donor community and local self-government. The consultation process was based on a number of sector-specific meetings, in order to present draft documents and discuss recommendations and input provided by CSOs, donor community representatives and local self-government. Recommendations provided were taken into consideration and are reflected in the final text of the document.

The process of IPA 2013 programming extended the already established consultation process developed on a sector basis during the preparation of the NAD 2011-2013 and the IPA 2012 programme preparation. Strategic approach to the programming process has been improved through more systematic approach in identification of the priority needs and earlier involvement of all relevant stakeholders in programming process, including civil society organisations.

A strategic (or gap) analysis has been conducted to identify priority areas relevant for the IPA 2013 programme. The strategic (or gap) analysis has been conducted through a range of actions including analysis of the correlation between the NAD 2011-2013, the MIPD 2011-2013, the analysis of EC Opinion on Serbia (Analytic Report) 2012 and correlation with ongoing and proposed 2012 assistance. Analysis has been carried out through the framework of Sector Working Groups (SWG) (SEIO, Line ministries, the EUD representatives and Civil Society Organisations) that have discussed the key messages derived from the abovementioned strategic documents. On the basis of this cross-checking strategic analysis, SWGs during the consultation process have identified a number of IPA I 2013 priority areas for this sector (also commented by the EUD and DG Enlargement) which have been used as basis for development of the SIF.

According to the document "Analysis of strategic documents in Serbia" published by General Secretariat of the Government, some of the environment and energy related strategies should be integrated with future Strategy on economic development/competitiveness. Besides, the analysis also recognizes the need for defining the outcomes more precisely. Such is the case of Strategy on clean production introduction. Overall remark is that there is the need for sector strategies improvement.

In general terms, besides already implemented improvements, for full implementation of the sector approach it will be necessary in the coming period to create a unified methodology for the development of strategies, review existing strategic framework in relation to the new financial perspective 2014-2020, improve monitoring and evaluation requirements with a focus on results and consequently contribute to improvement of the strategic planning, improve planning of the national budget by linking strategies and action plans with the budget planning and avoid any overlap of responsibilities between different institutions. Finally, it is

necessary also to ensure a constant development of project documentation, since without ready projects strategy cannot be implemented.

3 DESCRIPTION

3.1 OVERALL OBJECTIVE OF THE IPA SECTOR SUPPORT

The overall objective of IPA sector support in 2013 is **to assist Serbia to meet environmental and climate Acquis through institutional building and improvement of environmental infrastructure.**

3.2 SPECIFIC OBJECTIVE(S) OF THE IPA SECTOR SUPPORT

MIPD sector objectives:

- To help Serbia align with the EU environmental and climate acquis and the requirements of the Energy Community Treaty;
- To improve environmental standards in air, water and waste management;
- To improve environmental infrastructure;
- *To contribute to Europe 2020 targets in energy and climate change.*

Indicators:

- *Percentage of adopted legislation in accordance with EU environment and energy Acquis comparing to Report on Implementation of the National Programme for Integration (NPAA)*

3.3 RESULTS

IPA intervention in the environment sector is expected to lead to the following results:

Result 1: Ensured further alignment with EU environment Acquis, with the specific focus on development of institutional capacities and enforcement of national legislation and strategic planning

Indicators:

- *Action Plane for implementation of Strategy on developing administrative capacities in the environment sectors adopted in a given year;*
- *At least 5 DSIPs adopted and operational;*
- *Recommendations prepared and adopted for transposition of the Biocidal Products Regulation;*
- *Guidance/handbooks prepared and adopted for further implementation of REACH.*

Result 2: Ensured alignment with EU climate Acquis and fulfilment of the UNFCCC requirements through introduction of a mechanism for monitoring and reporting GHG emissions and for reporting other information relevant to climate change on regular basis

Indicators:

- *The number of adopted reports stemming from the new system.*

Result 3: Development and improvement of waste management system

Indicators:

- *At least 5 national plans for specific waste streams adopted and operational;*

- *Integrated Hazardous Waste Management Plan adopted and operational;*
- *Platform for cooperation between MEDEP and local authorities adopted and operational;*
- *Guidance on-site inspection, sampling plan and questionnaire for mining waste locations adopted and operational.*

Result 4: Upgraded environmental infrastructure through investments into wastewater treatment facility

Indicators:

- *WWTP in Raška, constructed and operational;*
- *The Ibar River water quality in terms of pollutants prescribed for Class II of watercourses.*

3.4

3.5 MEASURES/OPERATIONS⁹ TO ACHIEVE RESULTS

Measure 1: Support for transposition, implementation and enforcement of environmental acquis through further implementation of principles from Environmental Approximation Strategy

This measure will support further implementation and development of Environmental Approximation Strategy principles in order to enforce standards of priority sectors stipulated in the Strategy such as transposition and implementation of EU legal acts, proposals for multi-annual investment and compliance programmes and the design of new financial instruments. This IPA2013 project will follow up on the results of the IPA 2007 EAS project resulting in preparation of EAS strategy and six sectoral strategies (draft strategies for the approximation of horizontal sector, the sector of industrial pollution and noise, chemicals and GMO sector, the sector of air quality and climate change, nature protection sector, sector for waste management and water sector prepared) as well as first drafts of six Directive specific implementation plans (DSIPs) for Emissions Ceiling Directive, Emissions Trading Directive, IED Directive, Landfill Directive, Noise Framework Directive and Urban Wastewater Directive. These drafts are in their early stage of development and should be substantially improved and modified, except DSIP for the Directive 1999/31/EC (Landfill of waste) which is being prepared under the EISP project. So this will be the link with following directives 91/271/EEC (UWWT), 2010/75/EU (IED), 2001/81/EC (NEC), 2009/29/EC (ETS), 2002/49/EC (Noise).

The next steps would include further preparation of DSIPs, and related supporting documents. DSIPs are most important documents that will be utilised for formulation of negotiating position of the Republic of Serbia. These documents will be the basis for the negotiation of the transitional periods in specific cases of heavy investment directives (landfills, UWWT, IED etc.). In order to define final position for negotiations as well as to evaluate necessary transitional periods, it is important to provide overview of current situation of transposition and implementation for specific directive, calculate costs of implementation/investments (e.g. closure of dumpsites and construction of landfills etc.), prepare studies and assessments for particular components etc. also, DSIP will be the base for preparation of multiannual investment financing plan and will support programming process for the period 2014-2020.

⁹ As defined in Article 6(2) of the IPA Implementing Regulation No 718/2006. IPA Component I programmes are subdivided into sectors (priorities), each of which define a global objective to attain and which shall be implemented through measures, which may be subdivided into operations, or directly through operations. Operations shall comprise a project or a group of projects (implemented by the Commission or the beneficiary country).

In addition, targeted training for the organization unit in charge for chemical management to adequately prepare all relevant staff and experts for participation in the work of different committees and bodies of the European Chemical Agency and other EU chemicals management bodies and also to improve the current knowledge of employees in areas of regulatory toxicology as well as risk assessment before placing biocidal products on the market will be ensured. Activities proposed in the scope of this IPA 2013 Twinning project are closely linked to the outputs of the IPA 2008 Twinning project “Strengthening Administrative Capacities for Implementation of Chemical Management System in Serbia”, which contributed, among others, to: improved knowledge on chemical safety issues; development of training policy and plan for sustainable education and trainings in chemicals management; development of manuals for implementation of legislation for different stakeholder groups; and establishment of cooperation with ECHA. This project provided assistance in establishing of the new national system for the chemicals management in Serbia and cooperation with ECHA and EU Competent Authorities for chemicals and biocidal products management bodies, as well some basic training on risk assessment for the staff of the Competent Authority.

This measure will be implemented through two operations:

Operation 1.1: Further implementation of Environmental Approximation Strategy will be implemented through one service contract. To make EAS document operational, it would require the assistance in the following areas:

Institutional set up - Assist the MEDEP in strengthening the institutional framework, at national and local level, procedures, public participation and administrative capacity for the approximation of the EU environmental acquis and in fulfilling its obligations under the SAA and NPI/NPAA. MEDEP is leading Institution of the Subgroup 27 – Environment (Subgroup of the Governmental Coordination Body for the EU Accession Negotiation Process). With this regard, it is important not only to strengthen its capacities as coordinating body, but also to raise awareness and develop capacities of other members of the Subgroup 27 and all relevant stakeholders. This particular component of the project would build upon activities envisaged under the ENVAP 2 project (Support to preparations for negotiations for chapter 27 – environment, in cooperation with Swedish Environment Protection Agency), as well as under the ECRAN. Formal Working groups of the negotiating chapter 27 – environment build under the ENVAP 2 project, will be chaired by competent institutions and organizational units of MEDEP and their priority task would be development of documentation necessary for the accession negotiations. For example, Water Directorate will be main stakeholder in the Water Working Group responsible for defining the content of the DSIP for UWWT as well as for formulating Negotiating Position for water related issues. While ENVAP 2 project would focus primarily on strengthening capacities of other stakeholders, in particular representatives of local self-governments and civil society, this IPA project would further support capacity building of the members (working groups) of the subgroup 27. As a result, the Subgroup 27 will be strengthened in its capacities, restructured and operational, and there is full involvement of all stakeholders, members of the Subgroup 27.

Furthermore, one of the expected requirements under the process of negotiations would be to formulate Strategy on developing administrative capacities at all levels of governance. This will, most probably be posed as an opening benchmark for Serbia’s accession negotiations in the field of environment (based on recent experiences of Croatia and Macedonia). ENVAP 2 project will deliver assistance in preparation of the Strategy on developing administrative capacities but without action plan. However, the Action Plan for implementation of the Strategy on developing administrative capacities with financial plan will be prepared through this IPA project. Project will further support organization of seminars, workshops and

trainings on development of some of the documents under the competency of sub group 27 – environment in the EU accession process.

Preparation of relevant documentation for implementation of EAS and for the Process of Accession Negotiations with the EU - Main goal would be to make the EAS document operational through preparations of documents required for negotiation process in specific parts of the Acquis (directives); so, through IPA 2013 project the expected outcomes are the following:

- Development of the Directive Specific Implementation Plans (DSIPs), particularly for heavy investment Directives (further elaboration of the draft DSIPs developed under the previous EAS 2009-2011 project);
- Preparation of multiannual investment financing plan for implementation of Directives based on all DISPs prepared under IPA and other relevant documents;
- Development of accompanying documentation necessary for fulfilment of DSIP's and for formulating negotiating position (e.g. action plans, reference guidelines, studies, proposals for, and the design of new financial instruments etc.);

Activities within this project will be complementary with activities planned to be performed through ENVAP2 and EISP projects funded by SIDA, which will start in third quarter of 2013. So, though ENVAP 2 all preparatory work has to be done. ENVAP 2 project would also focus on strengthening capacities of other stakeholders such as local self-governments, civil society organizations etc. Also, ENVAP 2 project will serve for preparation of the Strategic document for strengthening of the administrative capacities and continuation of strengthening administrative capacities, in particular through the process of development of the implementation plans for the EAS Sectoral strategies, development of draft position papers and templates for Directive Specific Implementation Plans - DISPs (besides those draft DSIPs developed for six heavy investment directives under previous EAS 2009-2011 project). During the workshops that will be organized under the ENVAP 2 project, additional directives will be considered and evaluated as potential candidates for development of DSIPs. Sector specific seminars are organized for the purpose of development of DSIPs;

Based on all DISPs, prepared under EISP, ENVAP 2 and through this IPA project, the multiannual investment financing plan will be prepared. This multiannual investment financing plan will be the base for Department for project management in the future programming process and this department will coordinate these related activities.

DSIP development is not that much about strengthening administration capacities. It is very much related to identification of infrastructure projects, which is the task of Department for project management within the MEDEP (from the central level – as a part of Operating DIS structure). To identify infrastructure needs, Department for project management need to use support of local expert inputs besides inputs of end beneficiaries and local self-government. The infrastructure planning also requires involvement of various categories of experts for infrastructure needs identification and cost assessment.

So, in the process of development of DSIPs, senior economist and other experts from the field of economy and finance will be needed. Considering that preparation of DSIP would require collection of different type of data and many on site visits, technical assistance of local and external experts would be necessary and twinning arrangement is not the most suitable. Service contract provides compensation of the lack of capacities in the MEDEP taking into account that for project identification and costing, central institutions in the Member States used to outsource, when such need appeared.

Besides that, process of development of DSIPs will require substantial engagement of sector specific experts to support the MEDEP. This will additionally strengthen the capacities of the

sectoral departments but will also allow them more time to deal with their day-to-day operations.

Operation 1.2: This operation will help to strengthen administrative and professional capacities of the Unit in charge for chemicals management and other stakeholders to improve effective implementation of EU harmonized legislation on chemicals (particularly for REACH) and biocidal products (BP).

Appropriate legislation on chemicals and BP and their implementation is necessary to protect human health and environment from chemicals and other products which contain chemicals. Also this legislation is necessary to establish trade of chemicals and other products between Serbian and EU market. Without demanding knowledge related to chemicals legislation Serbian industry will not be competent for EU market.

National legislation regulating chemicals and BP management is harmonized with the relevant EU legislation and has been updated regularly to follow the changes in the EU legislation. However, many procedures for placing of chemicals and BP on the market are centralised, these procedures are performed by European Chemicals Agency, EC or MS CAs for centralized decisions (such as substance evaluation, preparation of dossiers for identification of the substances of very high concern, preparation of new restrictions) and these centralized procedures are not transposed in Serbian legislation. Nevertheless transposed provisions of EU legislation in Serbian legislation prescribe completely new approach in chemicals management that was previously unknown to Serbian Competent Authorities working in this field, and in order to enable its successful implementation and enforcement, it was necessary to build capacities within state institutions and other stakeholders responsible for it. This was achieved through extensive and comprehensive trainings organized for the staff of the Competent Authorities and relevant stakeholders related to implementation and enforcement of this new (national without centralized procedures) chemicals legislation in the scope of the on-going IPA 2008 Twinning project. Additional training within the new project is necessary for centralized procedures.

Also, some basic trainings on risk assessment were as well organized within the scope of mentioned IPA 2008 project but it is not enough to fulfil all obligations related to chemicals and biocidal products management. Since education on risk assessment (purely scientific field) is not included in the education programmes in Serbia and risk assessment was not obligation in previous legislation system, this kind of expertise does not exist in Serbia. On the other hand, knowledge on risk assessment is very important as authorization of BP, evaluation of chemicals substances, restriction and authorization according to REACH are based on it. This is the reason why future projects in the chemicals management field are necessary. In order to adequately prepare to perform risk assessment Core administrations have to achieve some in-house competence making them able to engage the proper expertise. Central staffs of core administration have to have capacities in regulatory toxicology and other areas of risk assessment. These staffs could be supported by toxicologists staying back in the scientific field. However, Regulatory risk assessment differs very much from working on academic research and training grounds. Risk assessors in the regulatory context do not work as traditional toxicologists but acquire very special skills. Their competences are unique to their risk assessment schemes and skills are mostly earned through practice. Therefore it is necessary to have extensive trainings with real examples on different topics related to risk assessment (e.g. regulatory (eco)toxicology (groundbase for hazard assessment) with the

special emphasis on the classification of mixtures according to CLP Regulation which shall become mandatory in 2015, exposure assessment and risk characterization.

Special emphasis within the new project will be on implementation of the provisions of the Law on Biocidal Products related to procedure of issuing of authorization for placing of the biocidal products on the market, which includes risk assessment of the BP (i.e. evaluation of data from Technical Dossier that should be submitted by applicant). Main use of the BP is to destroy and control unwanted organisms, and they pose potential risk for other organisms, humans and environment. Therefore, it is necessary that these products are assessed in details before issuing of authorization for placing them on the market, based on numerous data and test results which are the integral part of the Technical Dossier. Since first authorization applications are expected to be submitted in the near future, it is necessary to improve the current knowledge of the Competent Authority for effective implementation of EU harmonized legislation on BP. First step, as a preparation of CA to be able to assess the Technical Dossier and issue the authorization in future, the extensive trainings are needed in order to provide better understanding of administrative procedures (e.g. dossier completeness check) on Technical Dossiers. Before starting authorisation procedures for BP in Serbia it is necessary to consider with EC and ECHA mutual recognition of authorized BP in Serbia, as in national legislation mutual recognition of BP authorized in EU countries is prescribed (as it was in the case for Switzerland).

Also, since all transitional periods for registration of chemicals according to REACH (2018) will expire by the time Serbia becomes EU member, it will be necessary to prepare staff of the Serbian Competent Authority for negotiations of the transitional periods for registration of chemicals placed on the Serbian market at the time of Serbia's accession to EU.

The new Biocidal Products Regulation (EU) No 528/2012 will be in force in the EU from September 1, 2013 and will replace the old Biocidal Products Directive 98/8/EC, and it will be transposed to the national legislation. Support from experienced (legal)experts within this new capacity building project is essential for successful transposition. Also it will be necessary to prepare the new system for financing administration of the biocidal products management in line with the provisions of this new EU Regulation. Within this project proposal for sustainable financial arrangements should be prepared.

With a help from the EU experts engaged on the IPA 2008 Twinning project Competent Authority established collaboration with ECHA and EU Competent Authorities for chemicals and biocidal products management bodies. The next step will be to adequately prepare staff of the Competent Authority for participation in the work of the different committees and bodies of the European Chemicals Agency¹⁰ and other EU chemicals and biocidal products management bodies¹¹. Since negotiations regarding preparation of a new legislation in this area are centralised, most decisions regarding these procedures are prepared and adopted on the meetings of the above mentioned committees and bodies. Therefore, it is of great importance for the MS CAs to be prepared for participation on those meetings in order to be introduced to decision making processes on EU level, to be adequately prepared for the negotiation process and to learn how international meetings are prepared and organized.

The main outputs of the above proposed activities, in the scope of this operation, should be:

¹⁰ Member States Committee, Committee for Risk Assessment, Committee for Socio-economic Analysis, Forum for Information Exchange on Enforcement, HelpNet

¹¹ Competent Authorities for REACH and CLP – CARACAL, REACH Committee, Competent Authorities for Biocides Products and Product Authorisation and Mutual Recognition Facilitation Group, Mid-European Group on Biocides

- Improved administrative and professional capacities of the Serbian institutions and bodies responsible for certain aspects of the chemicals and biocidal products management to effectively implement national legislation on biocidal products and other legislation regulating placing of chemicals on the market, harmonized with relevant EU legislation (Biocidal Products Directive 98/8/EC, Biocidal Products Regulation (EU) No 528/2012, REACH Regulation 1907/2006, CLP Regulation 1272/2008/EC, etc.);
- Strengthened administrative and professional capacities of the Serbian institutions responsible for risk assessment of biocidal products and chemicals ;
- Cooperation with ECHA and EU Competent Authorities for chemicals and biocidal products management bodies is further developed and staff from the Competent Authority for chemicals management is prepared to participate in their work.

Since the abolishment of the Serbian Chemicals Agency (SHemA) on 29th September 2012 based on the adoption of the Law on Amendments to the Law on Chemicals, its competencies, duties and tasks, as well as the most of employees were taken over by the MEDEP – the Sector for Environmental Protection.

Within the Sector for Environmental Protection, there is the Department for Chemicals with total of 21 employees according to current Systematization of working posts. The Department consists of three divisions while Former Serbian Chemicals Agency' Sector for Risk Assessment (4th Sector) was abolished:

- Division for Chemical Management- the Division is in charge for: placing chemicals on the Serbian market; restrictions and bans of production, placing on the market and use of chemicals; import and export of some hazardous chemicals; permits for placing on the market and permits for use of particularly hazardous chemicals; placing detergents on the market; systematic monitoring of chemicals; National help-desk which is responsible for providing all relevant information and guidelines to industry and to all relevant stakeholders, answer to all their questions and help them in fulfilling the numerous obligations prescribed in national legislation, etc;
- Division for Integrated Chemicals Register – the Division is in charged for development and management of Integrated Chemicals Register; Registration of chemicals, biocides and pesticides into the Register, etc.;
- Division for Management of Risk from Biocidal Products – the Division is in charged for: Participation in the drafting of regulations that are in the jurisdiction of the Division; enforcement of the licensing procedures for placing the biocidal product on the market; enforcement of procedures for issuing temporary licenses for putting biocidal products to the market; development of projects for the systematic monitoring of biocidal products and putting them on the market; preparation of training programs for advisors for chemicals in the part relating to biocidal products, etc.;

In order to strengthen current capacities for risk assessment establishment of additional Division for Risk Assessment is under consideration.

Regarding costs of implementation of this operation that should be provided from the Serbian national budget, the Beneficiary should bare costs of organization of all trainings, rent of the equipment necessary for translation, travel and accommodation costs for the inspectors from other parts of Serbia participating on the trainings organized in the scope of this operation, as well.

This operation will be implemented through one twinning contract.

Measure 2 - Establishment of a mechanism for monitoring, reporting, reviewing and verifying GHG emissions and other information relevant to climate change

The purpose of Measure 2 is contribution to enforcement of EU Acquis in a climate change field and fulfilment of obligations under the UNFCCC. More precisely, measure will ensure quality increase of reporting to the UNFCCC through implementation of Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change (MMR) and the Implementing Provisions (Commission Decision 2005/166/EC) .

The main goal of the measure is establishment and maintaining of a system and processes for collection and storage of and report on climate change related data and information. The measure will contribute to more efficient assessment of sectors' contribution to emissions reduction and improvement of policy planning related to GHG emission reduction and combating climate change, in general. Recommendations for selection of indicators for both annual and projected emissions and methodology for estimation of policies effects will be prepared. Mandatory electronic reporting templates will be developed.

In order to ensure sustainability and fulfilment of the UNFCCC obligations proposal for institutional set up and timeframe for reporting will be developed. Necessary draft legislation will be developed.

This measure will support MEDEP as Serbian UNFCCC Focal Point and institution in charge for climate change to establish a system for economy-wide and systematic data collection on GHG emissions and other information relevant to climate change. Additionally, measure 2 will contribute to strengthen administrative and professional capacities of other organizations in charge for data collection and reporting as well as the better cooperation and exchange of information among themselves. Also, data owners will be involved in realization of the measure, in order to ensure sustainability of the system. *Operation 2.1:* The main aim of this Operation is to align with EU requirements on monitoring, reporting and verification, more precisely Regulation No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change (MMR) and the Implementing Provisions (Commission Decision 2005/166/EC) . In compliance with the Kyoto protocol and the UNFCCC, these legislative acts set out details for reporting of greenhouse gas emissions by sources and removals by sinks and for providing information as regards national programmes to reduce emissions, greenhouse gas emission projections and policies and measures.

Operation 2.1: Will take into account the requirements of the MMR. In compliance with this findings and results of two IPA 2012 projects, namely: "Creation of a monitoring, reporting and verifying system for the successful implementation of the EU Emissions Trading System" (there and after: ETS project) and "Preparation of Second Energy Efficiency Action Plan and Development of Energy Indicators" (there and after: SEEAP project), as well as already existing structure will be taken into account. This to ensure more efficient and better quality assurance/quality control provisions and introduces streamlined reporting formats and guidance to increase the quality and completeness of the data provided and to simplify existing reporting requirements without imposing an undue administrative burden.

ETS project will establish system for monitoring and reporting of the part of emissions that come from facilities covered by the ETS Directive. At the same time, the Project "Establishment of a mechanism for monitoring, reporting, reviewing and verifying GHG emissions and other information relevant to climate change" will include monitoring and reporting of all anthropogenic emissions by sources and removals by sinks of greenhouse gases (not controlled by the Montreal Protocol), including monitoring, reporting, reviewing and verifying of GHG and other information pursuant to Article 6 (Reporting, evaluation of progress, amendments and review) of Decision No 406/2009/EC, reporting on the use of revenues generated by auctioning, monitoring and reporting on the actions to adapt to the inevitable consequences of climate change in a cost-effective manner, reporting on low-carbon development strategies, etc. as it is required by the monitoring mechanism legal act. Also, the same piece of legislation requires that competent inventory authorities have need to have access to data and methods reported for activities and installations under Directive 2003/87/EC – ETS. However, during establishment of these systems linkage between two systems should be taken into account or otherwise access to data and methods reported for activities and installations under Directive 2003/87/EC – ETS by national inventory authority should be ensured. Therefore, the Project does not require complete finalization of the ETS project before its beginning.

The Republic of Serbia supported the Copenhagen Accord expressing its willingness to deal on GHG emissions limitation until 2020. The Republic of Serbia signed and ratified the Energy Community Treaty in 2006, which endorses the implementation of the EC acquis communautaire on energy, environment, competition and renewable energy sources. Chapter III of the Treaty recognises the importance of the Kyoto Protocol and emphasizes the importance of signatories acceding to it.

SEEAP project as project for development of Energy Efficiency Action Plan will have as one of results survey on energy consumption, not CO₂ emissions reduction, in residential, agricultural commercial and public services, transport and industry sectors and as one of activities mapping and analysis of measures for improving energy efficiency and development of the methodology for their evaluation taking into account energy saving potentials, CO₂ reduction and financial implications but based on specific measure and only in energy consumption sectors.

On the other hand, the operation 2.1 will include all sectors and beside evaluation of data it will include evaluation of legal instruments that contribute to CO₂ emissions reduction. It will ensure: evaluation of progress made concerning emissions and their removal, reporting on projections, policies and measures and consistency with other legal instruments targeting air pollutants. It will support establishment of national system for the development of new mitigation and adaptation instruments and more efficient implementation of the UNFCCC and the Kyoto Protocol.

For realization of this operation certain structure and legal framework is already in place, these mostly related to the data collection and reporting, that should be future evaluated and improved in compliance with the MMR. In that context beside MEDEP, participation of the Ministries in charge for agriculture, water, forestry, economy, but as well national statistical office and hydro meteorological institute will be crucial. Even, the MEDEP/Environmental Protection Agency has responsibility on preparation and maintaining of the GHG inventory, direct and more efficient cooperation need to be developed with the statistical office, and energy related sectors of the MEDEP.

The most important outputs of this operation are:

- Development of sustainable national reporting procedure;

- Development of methodology for estimation of policies effects and its improvement;
- Development of necessary draft legislation;
- Strengthening administrative and professional capacities of MEDEP and other organizations in charge for data collection and reporting and data owner as well as their better cooperation and exchange of information.

This operation will be implemented through one twinning contract.

Measure 3: Further development of waste management

This measure will cover activities regarding hazardous waste and mining waste.

Operation regarding hazardous waste will follow up on the results of the IPA 2008 twinning project resulting in preparation of Communication strategy in the field of hazardous waste developed, National Plans for specific hazardous waste streams designed (Asbestos containing Waste, Waste Batteries and Accumulators, Waste Electrical and Electronic Equipment (WEEE) and Waste Oil). Also, Manuals for Garage Waste Management is in preparation and manuals for waste oils, incineration, waste batteries and accumulators are finished. Manuals will support national plans for specific waste streams.

Also, the following facts sheets are prepared under IPA2008 twinning:

1. Analysis of the different systems of management WEEE used in EU countries and benchmarks of Serbian practices and options for improvement
2. Analysis of the different systems of management hazardous packaging used in EU countries and benchmarks of Serbian practices and options for improvement
3. Analysis of different systems for management of POPs waste used in EU countries, benchmarking of Serbian practices and options for improvement.

Further assistance will be beneficial to support and ensure the sustainability and success of the already developed national plans for specific hazardous waste streams in order to make a link with management of other hazardous wastes streams, including industrial hazardous waste.

This measure will moreover help to improve the awareness and level of knowledge regarding the mining waste management as well as develop the inventory – cadastre of mining waste, which includes risk assessment, categorisation and classification of the mine waste facilities.

This measure will be implemented through two operations.

Operation 3.1: In order to establish a nationwide system for proper, environmentally sound management of hazardous waste, it is essential to develop an Integrated Hazardous Waste Management Plan in line with an integral requirement of the Framework Directive on Waste EC 2008/98 (Chapter V, Plans and programmes article 28 and 30) . It would be essential that all individual plans for the management of few specific waste streams (WEEE, Batteries and accumulators, waste oils and asbestos), that are developed through ongoing twinning IPA 2008 project “Strengthening Institutional Capacity in Hazardous Waste Management” are correlated as well as with few additional individual plans for specific waste streams that needs to be developed (End of life vehicles, PCB, POPs waste, Construction and demolition waste). Also, these individual plans for the management of specific waste streams already prepared will be upgraded to reflect new model of managing and financing the management of waste streams. Considering that the Fund for environmental protection is abolished, until the establishment of a dedicated budget fund, managing special waste streams will be financed from the budget of the Republic of Serbia. Considering that establishment of new model of financing will be finished during 2013, it will not have impact on timing of the proposed IPA 2013 project. Additional individual plans for specific waste streams will be developed through this IPA project and supporting documents. Integrated Hazardous Waste

Management Plan will consolidate all specific hazardous waste streams and hazardous waste from industry. This Integral plan will define measures on how to manage hazardous waste including collection, treatment, disposal, export, public awareness and participation. Also, Integral plan will contain recommendations on adjustments to laws and by-laws if required. So, if necessary, preparation of legislation will be done through this project after finalisation of Integrated Hazardous Waste Management Plan.

Management of hazardous waste is presently a part of the general responsibilities of the Waste Management Department of MEDEP. As the management of hazardous waste requires special skills and experience and institutional organization, it is necessary to make a Study on the institutional organization of hazardous waste management. The study should analyse the activities of all authorities involved in the management of hazardous waste, arising from the legislation of the Republic of Serbia. The study will make recommendations on the institutional organization, including human resource development plan.

According to present legislation only central authorities (line ministries and the Autonomous Province) have jurisdiction regarding management of hazardous waste. However, many hazardous waste streams are generated at the level of local authorities and in practice PUCs performs collection of hazardous waste from households. To solve this problem, it is suggested that central and local authorities cooperate on the establishment of proper hazardous waste management systems and have to be involved in trainings. To solve this issue a common platform should be established to deal with this issue.

This platform shall ensure that:

- Central and local authorities cooperate on the issues described above to establish proper hazardous waste management system;
- Local authorities to be consulted regarding permitting of such systems;
- Local authorities can participate in inspections related to hazardous waste management where it is related to local activities (e.g. small and medium sized enterprises, household hazardous waste, etc.).

Based on the assessment of training needs and in accordance with Study on the institutional organization, training plans will be developed and actions will be identified to strengthen the capacity of the authorities:

- A number of training courses for relevant staff involved with hazardous waste management and for other relevant stakeholders;
- Study visits to MS countries to observe and get familiarised with best practises within hazardous waste management;
- Internships in MS countries for selected staff dealing with hazardous waste management.

So, through IPA 2013 project the expected outcomes are the following:

- Additional individual plans for specific waste streams and Integrated Hazardous Waste Management Plan;
- Legislation to provide implementation of hazardous waste management;
- Capacities of the relevant authorities will be trained in accordance with recommendation defined in Study on the institutional organization.

This operation will be implemented through one twinning contract.

Operation 3.2: This operation will help to improve the awareness and level of knowledge regarding the mining waste management as well as develop the inventory – cadastre of

mining waste, which includes risk assessment, categorisation and classification of the mine waste facilities.

Large -scale and long-term mining operations inevitably produce a significant amount of

waste. The volume and cost of mining waste produced depends on geological and technological characteristics such as: geological settings, reserve characteristics, the type of mining operation (surface or underground mine), mining methods (recovery, dilution, etc.), the volume of the operation, applied processing methods as well as waste management activities, tailing dump closure design and post closure cost. The other costs of waste management depend on countries' legislation. To identify all costs of waste management and to develop a transparent methodology for waste management full Life Cycle Assessment analysis (including Life Cycle Cost calculation) for several mining waste locations should be prepared. The calculation and methodology of cost of waste management has been presented using the example of the Serbian mining industry through developing of three case studies - rehabilitation programs for mining waste sites depending on the type of mining waste (for non-hazardous, inert and hazardous waste) based on which is possible to roughly calculate funds for each location of mining waste rehabilitation program.

Because of the specific nature of waste from the extractive industries, it is necessary to decrease their impacts. Those impacts can have lasting environmental and socio-economic consequences and can be extremely difficult and costly to address through remedial measures. Wastes from the extractive industries have therefore to be properly managed in order to ensure in particular the long-term stability of disposal facilities and to prevent or minimise any water and soil pollution arising from acid or alkaline drainage and leaching of heavy metals.

Ministry of Natural Resources, Mining and Spatial Planning (MNRMSPP) is the responsible institution on implementation of all mine waste management at national level. Due to the limited capacity and financial resources, some of the activities could not be fulfilled. There is no official cadastre of mining waste and amount of mining waste generated in them and therefore no clear picture of the potential environmental risk. The prediction of the quality and quantity of the waste from mining facilities is a complex task which receives increasing attention. MNRMSPP needs help to ensure that a variety of arrangements regarding rehabilitation of mining waste facilities will be surveyed in this project and that all mining waste locations in Serbia would be covered by the cadastre. Our expectation for the site visits is app. 200÷250 locations (only abandoned, passive and unknown mine locations where should be taken app. in total 3500-4000 samples – min 5 per/dump), but whereas the entire cadastre should include over 600 mining sites including the waste from active mines (that mines should fulfil questioners, take samples and make laboratory analysis by thyself). Costs for app 4000 samples are around 1.050.000€: a) core drilling (650.000€) b) laboratory analysis per sample 100€ (400.000€ total).

All data's collected from the mining waste sites will be analysed, classified and stored into database program Module.

Cadastre of mining waste does not overlap with the Cadastre of waste in the case of hazardous waste. The Law on Waste Management exclude waste from extractive industry and it is treated by the Law on Mining and Geological Exploration ("The Official Gazette RS", No. 88/2011) and this law regulates the issues of geological exploration and exploitation of mineral raw materials. According to Article 3, paragraph 35 is clearly outlines the definition

of mining waste (transposed from Directive 2006/21/EC), the Article 121, Directive 2006/21/EC on the management of waste from extractive industries is implemented and the Article 141 provides for setting-up of the Cadastre of mining waste. The Mining Waste refers to the complete exploitation of mineral resources, and therefore coal. The law also includes in mining waste the ash produced by the thermo power plants as well as smelting slag as a product of the processing of mineral raw materials or concentrates. To be clear, there are mines which are in accordance with the type of waste are treated by the Law on Waste Management and they are the part of the Register of waste.

Cadastre of mining waste could be complementary with the Cadastre of waste, but it will be created as a database program Module with interface and the Central Information System for Geology and Mining (link with IPA 2010 – project of IMIS development) should be upgraded with this Module. Required databases could have the necessary link-connection between two cadastres or different information systems. Ministry of Natural Resources, Mining and Spatial Planning (Department for mining and geology) is responsible for updating of the System.

Outcomes of this operation will be:

- Mining waste location sites guidance and scope of works prepared;
- Inventory of active, closed and abandoned mining waste facilities prepared;
- Enhancing the administrative capacity and improvement of knowledge and experience of the main stakeholders responsible for the management of waste from extractive industry;
- Rehabilitation projects for mining waste site prepared.

This operation will be implemented through one service contract during the period of 3 years and will not have an influence on changes to the legislation during and after implementation.

Measure 4: Further development of water infrastructure

In order to continue with the idea of improving the water quality, infrastructural focus for the SF Environment for the programming year 2013 will be construction of at least one more wastewater treatment plant, because environmentally sound wastewater collection, transfer, treatment and disposal shall further contribute to achieving the adequate protection of surface waters, improved protection of ground water, and in general improved protection of public health. The improvement will contribute in upgrading conditions in the National park Kopaonik and all the downstream area of Ibar, Morava, West Morava and Danube. West Morava River Basin is a sub-basin of the Danube River Basin. It is important to mention that the Ibar River is the main water supply source for the City of Kraljevo (Raška District). A large part of drinking water samples analysed by public health services are not compliant with health standards with respect to both physical-chemical and microbiological parameters. Pollution of water reaches a critical, but still reversible level which should be possible to improve by appropriate environmental management measure.

The City of Raška is located in the West Morava river basin on the Kopaonik Mountain below the area of the National Park of Kopaonik. WWTP Raska has been prepared for financing under the IPA project West Morava strategic Master plan for sewage and wastewater treatment. The municipality of Raška belongs to the West Morava River Basin. Sewage & Wastewater Strategic Master Plan for the West Morava River Basin analysed agglomerations located within following municipalities in the abovementioned area: Trstenik, Pozega, Ivanjica, Vrnjacka Banja and Raska. Based on considered aspects (social, technical, environmental and administrative), the proposal under the Master Plan was that agglomeration of Raska be used as a model for preparation of project documentation. It is necessary to emphasize that municipal administration of Raska demonstrated the highest level of readiness for implementation of such project. Furthermore, the review of environmental

impact of lack of sanitation led to the same conclusion. The Environmental Impact Review showed that the lack of effective sanitation within the WMB causes negative impacts on public health and aquatic ecosystems to a rather concerning but still reversible situation. However, with the increasing demand of population to a safe environment and health, this situation is likely to become quickly unacceptable and non-compliant with the emerging environment and water related legislation of the Republic of Serbia. Moreover, the present situation does not comply with the EU *acquis communautaire* with respect to public health and environment.

The construction of WWTP in Raska will meet Urban Waste Water Directive (91/271/EEC) and Sewage Sludge Directive (86/278/EEC), and requirements of Serbian legislation, with the overall objective to protect and improve water quality of the River Ibar, a main tributary to the West Morava River. Currently, the collected industrial and communal wastewater from the area is discharged, without any prior treatment.

This measure will be implemented through two operations.

Operation.4.1: Construction of Waste Water Treatment Plant (WWTP) with reconstruction of existing sewage network, construction of sewage network and pumping station and rehabilitation of the main pressure pipeline for raw water in Raska, will be carried out through one works contract. Works contract will include construction of WWTP including main collectors and sewage network in Raska and an improvement of the water supply, and training of PUC staff for maintenance. For the purpose of obtaining sustainability and optimal operation of the WWTP in Raska a necessity of extension of the existing sewage network occurred. For the purpose of this extension and rehabilitation a Main design shall be produced through a Framework Contract. The delivery of the Main design shall take place in 2013. The water supply part consist of rehabilitation of the main pressure pipeline for raw water for which the main design is existing.

Spatial Plan for the municipality Raska includes extension of the sewage network, location of the WWTP and main collector. The land expropriation for the WWTP site is finished.

The economic activities in the Raska municipality that are including National Park and ski centre with developed services represent a model that proves sustainability of the proposed project.

For the Raška municipality with surface area of 669.1 km² and surface area of agglomeration which covers 6.38 km² the following data are important - number of inhabitants connected to public sewerage (2010) is 10,351, while the total number of inhabitants in the agglomeration is 12,039. It is important to mention that the current sewage system is separated. The projection for 2037 is that total number of inhabitants in the agglomeration will be 11,441. Current volume of wastewater including infiltration (2010) discharged in the sewerage (m³/day) is 3,074, while the total wastewater discharged from the agglomeration (m³/day) is 3,275. Capacity of planned WWTP for the phase 1 is 16,500 P.E. FS prepared under MISIP IPA 2008 analysed following issues: water supply system, WWTPs / sewerage from Kopaonik and WWTP / sewerage from agglomeration of Raska. FS prepared through SMP WM was dealing with urban WWTP – Raska. According the Law on planning and construction Location permit for the WWTP with capacity of 15.000 population or discharged water quantity of 40 l/s should be issued by the Ministry. Capacity of planned WWTP in urban area of Raska municipality is 16.500 P.E. but the calculated water discharge quantity is 36,3 l/s, which indicate that the Location permit will be issued by local self-government until the end of September 2013.

According to Law on water, three water districts have been formed on the territory of the Republic of Serbia which are: Danube, Sava and Morava districts. Public Water Management

Company Srbijavode (PVMC) in order to perform activities in the water districts have been established following water management centres: PVMC "Srbijavode", Belgrade, "Sava – Dunav" water management centre and PVMC "Srbijavode", Belgrade, "Morava" water management centre. Raska municipality discharge waste waer in the river Ibar which belongs to the river basin of West Morava, and West Morava is in the river basin of Velika Morava meaning that the PVMC "Srbijavode", Belgrade, "Morava" water management centre in Nis is competent water management authority in that area.

In the municipality of Raska agriculture, as main source of diffuse pollution, is not dominant activity which leads to the conclusion that the greatest impact on the water pollution is waste water as point source.

The main findings of the Environmental Impact Review of the West Morava River Basin management Plan are as follows:

- Heavy pollution loads are discharged into the water courses of the Central Serbia West Morava Basin (CSWMB), due to (i) the almost total lack of domestic wastewater treatment works and (ii) the lack of effective pre-treatment system in the industrial facilities.
- Pollution to the groundwater with nutrients (mainly N) and pathogens is of concern because a large part of the population (almost 40%) is still not connected to sewerage, a smaller part (around 10%) still uses informal wastewater disposal systems and several tens of thousands people not connected to sewage networks live in very high and high groundwater vulnerability areas. Moreover, groundwater is abstracted for drinking water production in many places.

Existing documentation for the proposed facility are the following:

- Spatial plan of the Municipality of Raska;
- Conceptual Design with the Pre-Feasibility Study of Discharge and Treatment of Wastewater from the Territory of the Municipality of Raška (2009),
- Sewerage and Wastewater Strategic Master Plan for the West Morava River Basin (2012),
- General Design prepared for two variants of urban WWTP - Raska (Conventional activated-sludge process and SBR / Sequencing batch reactor),
- Prefeasibility Study prepared in order to select variant which shall be developed through Preliminary Design,
- Preliminary Design developed for chosen variant of urban WWTP - Raska,
- Feasibility Study for urban WWTP - Raska,
- Environmental Impact Assessment urban WWTP - Raska,
- Tender documents urban WWTP - Raska (in accordance with FIDIC Yellow Book)
- Main design for pressure pipeline for row water.

Operation 4.1 will be done through one works contract with 2 lots. Lot 1 includes construction of WWTP, while lot 2 includes: 2a) Construction of Sewage Main Collector, 2b) Extension of the Sewage Network to small settlements, 2c) Rehabilitation of existing Sewage Network, and 2d) Reconstruction of raw supply water pipeline.

The missing documentation for Lot 2 will be done through one Framework Contract, as well as preparation of the Tender Dossier for both lots. The ToR for the FwC is currently under preparation. It is important to mention that gender equality principles will be encouraged throughout drafting of tender documentation, detailed description of actions, as well as within implementation process.

Operation 4.2: Supervision and preparation of the Financial and Operational Performance Improvement Programme for Raska WWTP will be done through one service contract.

The estimated budget for the construction of WWTP (phase I without removal of nitrogen and phosphorus, tertiary treatment), together with the costs for the rehabilitation and extension of sewage network in urban area of Raska is € 5,864,940 (+ € 625.100 for contract management and supervision). The budget for rehabilitation of the main pressure pipeline for raw water is € 676.626 (+ € 36.800 for contract management and supervision). Total investment is € 7.203.466.

More detailed information for operations 4.1 and 4.2 is provided in Annex 4.

3.6 OVERVIEW OF PAST OR ON-GOING ASSISTANCE, LESSONS LEARNED, MECHANISMS FOR DONOR COORDINATION/SECTOR WORKING GROUP AND/OR POLICY DIALOGUE

Strengthening of Environment Sector, design and construction of waste transfer station in Valjevo is financed by the Czech Development Agency (for your information the amount of Czech donation is planned to reach € 570.000 for the period of 2010-2012).

According to the ISDACON database, in the period 2007-2012, it is estimated that a total amount of €180 million was actually disbursed in assistance from the international donor community to the environment sector in Serbia. The needs of this sector considerably exceed the amount of international assistance received.

In the six annual programmes 2007-2012, **IPA component I** is financing projects in the environment sector around **€129,5 million**, waste water treatment, preparations for hazardous waste management, capacity building which together account for almost 80% of funding. IPA is helping approximate Serbian legislation with the EU environmental acquis and increasing the capacity of the Serbian Environmental Protection Agency (SEPA) as a national focal point for cooperation with European Environment Agency in the realisation of Serbia's international environmental protection obligations. On capacity-building, IPA assistance is strengthening the institutional framework and administrative capacities for implementation of air quality management system, for protected areas in Serbia according to Natura 2000, for chemicals management system, for environmental inspection at national, provincial and local levels to enforce regulations. In addition, IPA has financed a study of flood prone areas to aid policy development, and the production of a sewerage and wastewater master plan for the West Morava river basin. IPA supported projects aimed at reducing emissions from thermal power plants in Serbia in line with EU directives, by decontaminating facilities and replacing equipment. Construction of Waste Water Treatment Facility at the Thermal Power Plant (TPP) Nikola Tesla B to contribute to the protection of environment by assisting the public enterprise "Electric power industry of Serbia" improve water and soil quality; Municipal Environment Grant-Loan Investment Programme will support the execution of municipal environmental projects that will improve service delivery to citizens and compliance with the EU acquis in the environmental field, while building municipal capacity to plan capital investments, formulate and manage projects and operate and maintain installations; Law enforcement in the field of industrial pollution control, prevention on chemical accidents and establishing the EMAS system will enhance capacity for enforcement of regulations aligned with the EU environmental directives, specifically for Industrial Pollution Prevention and Control (IPPC), prevention of chemical accidents and the Eco-Management and Audit Scheme (EMAS); In the area of hazardous waste, IPA has contributed to the harmonisation of EU legislation and institutional strengthening, and provided technical assistance to introduce a hazardous waste treatment facility, which has also been supported by the Norwegian Government.

In the **IPA 2012** plan for financing projects in the sector of environment and energy worth € 69.5 million and will include the following: Capacity-building to implement Acquis standards and conventions in nature protection to support NATURA 2000 network and implementation of CITES convention, creation of the monitoring, reporting and verifying system for the successful implementation of the EU Emission Trading Scheme, establishment of an integrated environmental monitoring system for air and water quality, construction of the Regional Waste Management Centres Kalenic and Subotica and Reconstruction of Electrostatic precipitators at TPP Nikola Tesla A3 and TPP Morava.

The **bilateral donor** community has been prominent in resourcing projects in this sector: Sweden has aided chemicals risk management, implementation of the National Sustainable Development Strategy, Strategy for Sustainable Development Natural Resources and Goods, preparation for EU negotiation process in environment sector, support to Duboko regional Landfill and environmental waste and wastewater infrastructure, while Spain funded preparation of the feasibility study for the construction of the Kolubara District Regional Landfill and feasibility study for GHG emission reduction, as well as Development of capacities to use and promote the solar energy in Serbia. The UNDP has been active in strategies and studies for biodiversity, preparation of national communication, Vlasina Lake Ecotourism Promotion and Environment Protection, strengthening capacities of protected areas managers and promoting renewable energy and sustainable transport, and helped with the remediation and strengthening of capacities in Bor and helped with recovery of Grand Backa Channel project, by finalising communal and industrial wastewater collection for the municipalities of Vrbas and Kula. Soft loans have been provided by EBRD, KfW and the World Bank. The German Government has been most active in the water sector, with €92 million of subsidised loan and grant finance (actual and committed) for water supply projects in 17 municipalities to date. GIZ supports waste and wastewater sector in 5 pilot municipalities. UNECE will support Wood-based energy for sustainable rural development. Central-European Initiative supports BIOM ADRIA project. Design and construct waste transfer station Koceljeva is financed by PSO project Holland.

Coordination across institutions in charge of environment, energy, health, agriculture, forestry, water management and regional development with local level is a crucial factor in better identification and targeting of environmental problems, in order to maximise the impact and synergies of assistance. Serbia also participates in cross-border cooperation, where environmental problems are one of the top priorities. Ministry of Energy, Development and Environmental Protection participate in Joint Monitoring Committees for each programme within IPA cross border cooperation.

Reflection on the last wave of EU enlargements shows that negotiations on Chapter 27 are amongst the most difficult ones. The sheer volume of legislation and its cross-cutting character are not the only reasons. Taking into consideration the extent of environmental problems in Serbia and the state of environmental infrastructure, this arguably will be the most expensive part of the Acquis to implement. Serbia will need to negotiate a number of transitional periods to address this economic challenge. And the chapter also has its politically sensitive aspects, such as the response to trans-boundary pollution, relations to the internal market rules and external trade issues.

According to the Outlook for Macro-Economic Development in the Western Balkans and Implications for the WBIF investments in key socioeconomic sectors – energy, environment, transport, social issues and private sector development – are crucial for the successful reinvigoration of these economies.

Related to lessons learned, deriving from analysis at municipal level, it became evident about severe lack of resources for the rehabilitation of basic infrastructure and the provision of new infrastructure needed to support environment development.

The project pipeline (the quality and number of projects in preparation) is increasing, but not rapidly and with insufficient achievement of the standards expected for EU public of private investments. There is also a tendency towards very large projects, with the crucial medium-size under-represented. PPF IPA 2008 and 2010 has continuously been improving project documentation and maturity of projects. But the need for this kind of activities, especially in the environment sector should be addressed further.

Co-financing municipal infrastructure is another key issue. While there is a huge need for investment in municipal infrastructure, financial resources are limited. Prudent selection of the projects and identifying the best financing mechanisms has often proved to be one of the main conditions of success.

For the donor coordination mechanism and the system of SWGs, please refer to section 2.2. (Paragraphs 2 and 4).

1.6. SUSTAINABILITY

The stipulated results include capacity building as an essential element to developing an effective and sustainable sector. The envisaged measures will contribute to enforcement of national legislation and further alignment with EU aquis in the environmental sector.. The successful implementation will not be limited only to specific results, but also will multiply its effect by strengthening the administrative capacity of implementing similar activities.

Sustainability will be ensured through further harmonisation of a legal framework and establishment of the institutional mechanisms for the implementation and full enforcement of the transposed legislation. Providing advisory services to the competent government institutions in structuring the environment sector will be based on the principle of sustainability.

Selected support will also improve environmental infrastructure through construction of wastewater treatment plants, which will contribute to fulfilling EU environmental standards in Serbia, and better health of the population.

Operations under this SF will be strengthen national and local institutions and improve their proficiency in planning, management and monitoring of operations, which should improve the environment for policy-making and directing further investment in the environment and energy sectors. Available local experts should be used during project planning, implementation and operation of facilities.

Ministry of Energy, Development and Environmental Protection would provide means for co-financing of envisaged activities through Ministry's budget for the appropriate years.

3.7. ASSUMPTIONS AND PRECONDITIONS¹²

On the policy level of Sector support, the proposed objective and results are based on the following assumptions:

- Continued political support to reforms in environment policy;

¹² Assumptions are external factors that have the potential to influence (or even determine) the success of a project but lie outside the control of the implementation managers. Such factors are sometimes referred to as risks or assumptions but the Commission requires that all risks shall be expressed as assumptions. Pre-conditions are requirements that must be met before the sector support can start.

- Government continuous commitment to the fulfilment of EU integration priorities in environment sector;
- On the level of measures of Sector support, assumptions identified in relation to sector support are the following:
- National authorities committed to fulfil EU environmental standards and implement relevant acquis;
- Existence of absorption capacities for EU funds to enable efficient distribution of funds under environmental protection programmes;
- Serbian Government continues to be oriented towards improving environmental management and monitoring system of Serbia;
- Good inter-sector communication and cooperation between different stakeholders and experts is necessary.

In relation to technical assistance measures and operations, significant group of stakeholders should be included in the educational and training programmes. Availability and relevant knowledge of experts involved in training activities as well as availability of sufficient number of trainees on beneficiary side should be assured. Regarding measures related to investment contract operations such as works and supply, they must correspond to national/regional/local planning documents such as spatial plans, sufficient level of readiness of technical and planning documentation and available indicative list of equipment to be procured.

A preparatory contract will finalise the preparations of technical specifications.

For the measure 4 it is a pre-condition that a steering group for the contracts to be concluded that a steering group is set up and operational that includes all local and national stakeholders and has agreed on a written Memorandum of Understanding indicating responsibilities and commitments made in relation to the project implementation.

4 IMPLEMENTATION ISSUES

It will be implemented under Decentralised Management mode.

Partners in the implementation of all the envisaged measures/operations will be the Ministry of Energy, Development and environmental protection, the Ministry of Agriculture, Forestry and Water Management (Directorate for Water), the Ministry of Natural Resources, Mining and Spatial Planning, as well as the Municipality of Raška.

4.1 INDICATIVE BUDGET

Indicative budget (amounts in EUR) (for Decentralised management)

SECTOR TITLE					SOURCES OF FUNDING								
			TOTAL EXPENDITURE	TOTAL PUBLIC EXPENDITURE	IPA CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION					PRIVATE CONTRIBUTION	
	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Measure 1													
Support for transposition, implementation and enforcement of environmental acquis through further implementation of principles from Environmental Approximation Strategy			3,000,000	3,000,000	2,750,000	92	250,000	8	250,000				
Operation 1.1													
Service contract for further implementation of EAS and preparation of DSIPs	x		2,000,000	2,000,000	1,800,000	90	200,000	10	200,000				
Operation 1.2													
Twinning contract for support of CA for further development	x		1,000,000	1,000,000	950,000	95	50,000	5	50,000				

of chemicals and BP management													
Measure 2 Establishment of a mechanism for monitoring, reporting, reviewing and verifying GHG emissions and other information relevant to climate change			1,200,000	1,200,000	1,000,000	83	200,000	17	200,000				
Operation 2.1 Twinning contract for establishment of the system for reporting on GHG emissions	x		1,200,000	1,200,000	1,000,000	83	200,000	17	200,000				
Measure 3 Further development of waste management			3,200,000	3,200,000	2,930,000		270,000		270,000				
Operation 3.1 Twinning contract for preparation of national plans for specific waste streams and integrated hazardous waste management plan	x		1,000,000	1,000,000	950,000	95	50,000	5	50,000				
Operation	x		2,200,000	2,200,000	1,980,000	90	220,000	10	220,000				

3.2 Service contract for preparation of mining cadastre													
Measure 4 Further development of water infrastructure			7,203,466	7,203,466	5,970,000	83	1,233,466	17	615,733	615,733			
Operation 4.1 Works contract for construction of WWTP in Raška municipality		x	6,541,566	6,541,566	5,374,290	82	1,167,276	18	582,638	582,638			
Operation 4.2 Service contract for supervision of works in Raška municipality		x	661,900	661,900	595,710	90	66,190	10	33,095	33,095			
TOTAL IB			7,400,000	7,400,000	6,680,000	90	720,000	10					
TOTAL INV			7,203,466	7,203,466	5,970,000	82	1,233,466	18					
TOTAL SECTOR SUPPORT			14,603,466	14,603,466	12,650,000	87	1,953,466	13					

NOTE: DO NOT MIX IB AND INV IN THE SAME OPERATION ROW. USE SEPARATE ROWS

Amounts net of VAT

- (1) In the Operation row, use "X" to identify whether IB or INV
- (2) Expressed in % of the **Public** Expenditure (column (b))
- (3) Expressed in % of the **Total** Expenditure (column (a))

4.2 INDICATIVE IMPLEMENTATION SCHEDULE (PERIODS BROKEN DOWN PER QUARTER)

Dates indicated in the schedule cannot go beyond the contracting and execution deadlines in the financing proposal

Operations	Start of Tendering/ Call(s) for proposals	Signature of contract(s)	Activity Completion
Operation 1.1 (Service contract for further implementation of EAS and preparation of DSIPs)	T+1Q	T+4Q	T+12Q
Operation 1.2 (Twinning contract for support of CA for further development of chemicals and BP management)	T+1Q	T+4Q	T+12Q
Operation 2.1 (Twinning contract for establishment of the system for reporting on GHG emissions)	T+1Q	T+4Q	T+12Q
Operation 3.1 (Twinning contract for preparation of national plans for specific waste streams and integrated hazardous waste management plan)	T+1Q	T+4Q	T+12Q
Operation 3.2 (Service contract for preparation of mining cadastre)	T+1Q	T+4Q	T+16Q
Operation 4.1 (Works contract for construction of WWTP in Raška municipality)	T+3Q	T+5Q	T+13Q
Operation 4.2 (Service contract for supervision of works in Raška municipality)	T+1Q	T+3Q	T+13Q

Measure 1 - Support for transposition, implementation and enforcement of environmental acquis through further implementation of principles from Environmental Approximation Strategy will be implemented through two operations: 1 Service contract and 1 Twinning contract.

Service contract (Operation 1.1) will start in the first quarter following the signature of the FA. Operation which will help to strengthen administrative and professional capacities of organization in charge for chemical management (Operation 1.2) will be implemented through one twinning contract.

Measure 2 - Establishment of a mechanism for monitoring, reporting, reviewing and verifying GHG emissions and other information relevant to climate change will be implemented through one twinning contract and it will start in the first quarter following the signature of the FA.

Measure 3 - Further development of waste management will be implemented through one twinning contract for the operation dedicated to development of an Integrated Hazardous Waste Management Plan (Operation 3.1) and through service contract (Operation 3.2.) for mining waste.

Measure 4 - Further development of water management and water infrastructure will be implemented through 2 operations.

Development of waste water treatment infrastructure will be implemented through two operations - Construction of Waste Water Treatment Plant (WWTP) in Raska, and the main collectors will be carried out through one works contract (Operation 4.1). Works contract will

include construction of WWTP including main collectors, sewage network and rehabilitation of the main pressure pipeline in Raska and training of PUC staff for maintenance. Supervision and preparation of the Financial and Operational Performance Improvement Programme for Raska WWTP will be done through one service contract (Operation 4.2), as explained (see page 36).

4.3 CROSS CUTTING ISSUES

4.3.1 Equal Opportunities and non-discrimination

Based on the fundamental principles of promoting equality and combating discrimination, participation in the project will be guaranteed on the basis of equal access regardless of sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation. All contractors shall be requested to provide monitoring data recording the participation of men and women in terms of expert inputs (in days), as a proof of equal participation of men and women during the implementation phase.

4.3.2 Environment and climate change

The SF directly relates to environment issues at the national and local levels. It will improve the quality of information available to monitor progress in the implementation of EU legislation and thus directly contribute to improved environmental protection.

4.3.3 Minorities and vulnerable groups

Considering the fact that this SF is for Environment and will deal with environmental issues, its outcomes will be beneficial to all citizens' especially national minority and underprivileged social groups, having in mind that these groups often live in areas where solving environmental problems is one of the top priorities. Further improvements in environmental protection and management will assist in poverty reduction, and increase the potential for economic activity.

4.3.4 Civil Society/Stakeholders involvement

Although the project preparation team could not find the opportunity to work on the project fiche together with the representatives of the civil society, environmental protection is a subject where support and assistance of stakeholders and civil society could be of great help, in the organisation of campaigns, actions on the collection as well as dissemination of information and implementation of the environmental objectives. Representatives of non-governmental organizations and civil society will be consulted and involved in the project activities. It is worth mentioning that their support and assistance will contribute to the project especially in the implementation phase.

4.4 SECTOR MONITORING, EVALUATION AND AUDIT

Monitoring of the progress in sector support implementation will be done in accordance with the rules and procedures for monitoring under Decentralized Management (DM), as specified in the DM Decree and DM Manuals of Procedures. Manuals of procedures include detailed procedure for monitoring on different levels (contract, sector support/ project, IPA TAIB Sub-Committees, IPA TAIB Committee, IPA MC), with clear responsibilities and deadlines in the monitoring process. Specifically, it is envisaged that on the spot checks (monitoring visits, verification checks and supervisory checks) will be performed throughout the implementation process by the SPO and CFCU, as part of the contract management activities, while regular monitoring of the implementation will be done through the Steering Committee meetings and regular reporting by the Contractor. In addition, IPA monitoring process organized and lead by the NIPAC/ NIPAC TS includes regular meetings of Monitoring Committees on different

levels, examining relevant monitoring reports and providing recommendations for ensuring delivery of planned results, as well as follow up of their implementation. With regards to the monitoring of sector support, it is envisaged that responsible SPO submits a Sector Support Monitoring Report to NIPAC twice a year, in a prescribed template. After quality check, NIPAC TS prepares the TAIB Sub-Sector Monitoring Report to be examined by the relevant Sector Monitoring Sub-Committee (SMSC), in this case- SMSC for Energy and Environment. Report examined by the SMSC is envisaged to include information on status and progress in implementation of all relevant sector support/ projects in that respective sector. Depending on the issues/ problems identified, conclusions and recommendations of the SMSC may be taken forward to the TAIB MC and ultimately, the IPA MC. Monitoring process envisages participation of various stakeholders such as EC/EUD, NIPAC/ NIPAC TS, SPO/IPA Unit, CFCU, NF, AA and other institutions and civil society organizations per need.

Evaluation and audit of sector support will be done in accordance with the Decentralized Management rules and procedures, defined in the DM Decree and DM Manuals of procedures. In line with IPA IR, Manuals of procedures envisage responsibility of the national authorities to provide for the IPA Interim evaluation, while other types of evaluation (ex ante, ex post, thematic, etc) may be initiated by national institutions on ad hoc basis and per need. With regards to the audit, procedures on internal controls under decentralized management regulate in detail various types of audit to be performed (internal and external), audit planning, carrying out of audits, following up on audit recommendations and reporting on follow up activities.

