Project Fiche – IPA National programmes / Component I

1 IDENTIFICATION

Project Title	Support to improvement of Energy Efficiency
CRIS Decision number	2012/022-967
Project no.	09
MIPD Sector Code	5. Energy 6. Environment and Climate Change
ELARG Statistical code	03.15
DAC Sector code	23010
Total cost (VAT excluded)[1]	EUR 2.0 m
EU contribution	EUR 2.0 m
Management mode	Centralised
Centralised mngmt: **EU Delegation in charge** *Decentralised mngmt:* **Responsible Unit or National Authority/Implementing Agency**	EU Delegation to the Republic of Serbia
Implementation management	Ministry of Energy, Development and Environmental Protection
Implementing modality	Stand alone project
Project implementation type	Project-type interventions
Zone benefiting from the action(s)	Republic of Serbia

[1] The total project 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.

RATIONALE

1.1 PROJECT CONTEXT: ISSUES TO BE TACKLED AND NEEDS ADDRESSED

Serbia is a high energy intensity country and one of the priorities in the national strategic documents is reduction of energy consumption and improvement of energy efficiency. It is recognised in the MIPD 2011-2013 that IPA assistance will be focused on reforming energy policy, increasing competition in the sector and helping Serbia fulfil its obligations under the Energy Community Treaty. On the basis of its commitments under the Energy Community Treaty and EU Directive 2006/32/EC on Energy End-use Efficiency and Energy services, the Republic of Serbia adopted the first Energy Efficiency Action Plan in 2010 (hereinafter: NEEAP) which covers the period 2010 – 2012. The NEEAP sets out national energy savings targets of a 1.5% reduction of the final domestic energy consumption by 2012 and 9% by 2018 compared with a 2008 baseline. The NEEAP covers the following sectors: residential, commercial and public services, transport and industry. The proposed project is a follow up of the first NEEAP according to the commitments under the Energy Community Treaty, as Serbia must prepare the second NEEAP in 2013.

The first NEEAP lacks reliable and verifiable estimates of the energy savings of its proposed measures due to insufficient data on energy consumption in energy consumption sectors. In the process of preparing the second NEEAP, a detailed survey on energy consumption must be conducted, covering all energy consumption sectors in Serbia that are covered by the NEEAP.

The purpose of the survey is to supplement the energy balance sheet with the data on energy consumption in these energy consumption sectors, as this data is not officially monitored and registered in Serbia. Detailed analysis of the situation in final energy consumption sectors is possible if there is a good and detailed database of energy data/indicators. This analysis is crucial for the proper identification and evaluation of the effects of measures to increase energy efficiency. This project will directly strengthen the capacity for improvement of energy efficiency. Implementation of this project will result in a detailed analysis of energy consumption, and preparation of the second NEEAP.

Justification of this project comes from the Republic of Serbia's commitment under the Energy Community Treaty to implement Directive 2006/32/EC on energy services. This calls for annual energy savings of final energy consumption of 1% through the implementation of energy saving measures in all energy consumption sectors stipulated in the National Energy Efficiency Action Plans, and preparation of a detailed database of energy data/indicators essential for the appropriate identification and evaluation of the measures to increase energy efficiency.

1.2 LINK WITH MIPD AND NATIONAL SECTOR STRATEGIES

This project will contribute to the implementation of **MIPD 2011-2013** in the area related to the energy sector. In the MIPD 2011-2013 (*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 on which IPA assistance will focus are (*page 30*): To reform energy policy and increase competition in the sector; To help Serbia align with the EU environmental and climate change *acquis* and the requirements of the Energy Community Treaty; To contribute to Europe 2020 targets in energy and climate change.

This project will conduct a survey of the appropriate energy consumption sectors in Serbia and will establish measures for energy efficiency improvement, that will contribute to implementation of the European Energy Community Treaty.

Needs of the Republic of Serbia for International Assistance 2011-2013 within the sector Environment and Energy (*page 117):* **Priority 1**: Create and strengthen policy, regulatory, financing and monitoring mechanisms for ensuring sustainable development. **Measure 1.1**: "*Strengthening strategic planning and implementation through legal reforms and institution-building in the environment and energy sectors"* and will support alignment and implementation of national legislation *in the fields of energy efficiency,* action plans, fulfil its international duties regarding environment and energy (Energy Community Treaty, Kyoto Protocol etc).

The amended **National Programme for Integration of the Republic of Serbia into the European Union from December 2009 (hereinafter: NPI)** as short term priorities identifies the adoption of the Law on Rational Use of Energy. *NPI notes that Serbia has undertaken the obligation to give incentives for the application of energy efficiency measures.* Three Directives that the signatories of the Treaty should apply are: Directive 2010/31/EC on the energy performance of buildings, Directive 2006/32/EC on energy end use efficiency and energy services, and Directive 2010/30/EC on energy labelling of household appliances.

The National Sustainable Development Strategy defines the rational utilisation of energy and increasing of energy efficiency as key elements of sustainable development.

The Energy Sector Development Strategy o**f the Republic of Serbia until 2015** (Chapter 2 – Priority Directions of the Energy Sector Development of Serbia by 2015), *page 34*, emphasises projected energy needs and sector development scenarios, sets objectives, and describes a priority programme for energy efficiency, using new renewable energy sources, environmental protection, and energy statistics. *One of five priorities in the energy sector development is the rational use of energy sources and increase of energy efficiency in the generation, distribution and utilisation of energy for end users.* This priority is significant for the adjustment of power generation to the real needs of the energy consumption sector, but also for reducing the impact of the energy sector on the environment. This project is fully in line with this priority.

The **Implementation Programme of the 2015 Energy Development Strategy until 2015 for the period 2007–2012** explicitly states the need to achieve harmonisation with the EU Energy *acquis. The Programme establishes the conditions, methods and timeframes for realising the Energy Development Strategy including energy efficiency in energy consumption sectors: industry, transportation, construction, as well as the establishment of Energy Efficiency Fund, as well as developing energy indicators.*

The First Energy Efficiency Action Plan for 2010-2012 is based on the requirements of the EU Directive 2006/32/EC on energy end-use efficiency and energy services, and the recommendation of the Energy Community Secretariat. This is the first action plan to cover the 2010 – 2012 period and sets out national energy savings targets of a 1.5% reduction of the final domestic energy consumption by 2012 and 9% by 2018 compared with a 2008 baseline. The plan covers the following sectors: residential, commercial and public service, transport and industry. This project is a direct follow up to this action plan.

The National Environmental Protection Programme defines the strategic objectives of the energy sector as follows: *To increase energy efficiency of the energy sector and reduce waste generation.* This project is related to improving energy efficiency in all sectors.

1.3 LINK WITH ACCESSION PARTNERSHIP (AP) / EUROPEAN PARTNERSHIP (EP) / STABILISATION AND ASSOCIATION AGREEMENT (SAA) / ANNUAL PROGRESS REPORT

This project is linked to the priorities identified in the European Partnership through fulfilling commitments deriving from the Energy Community Treaty. **The European Partnership with Serbia of 18 February 2008 (2008/213/EC)** (*Title: Sectoral policies, subtitle: Energy)* sets out the sector priorities as: Adopt and implement a long-term strategy for an environmentally sustainable energy policy; Strengthen the administrative capacity within the relevant ministries; Continuing to implement regional and international commitments with a view to establishing a competitive regional energy market.

The Stabilisation and Association Agreement (*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:

a) the formulation and planning of energy policy;

b) the promotion of energy saving, energy efficiency, renewable energy and studying the environmental impact of energy production and consumption.

The European Energy Community Treaty, signed in 2005 multilaterally by the European Commission and Balkan countries including the Republic of Serbia introduces the legal requirement for Serbia to implement the EU Environmental *acquis*. *Article 35 of the Treaty, Chapter VI – Renewable Energy Sources and Energy Efficiency*, deals with energy efficiency. The proposed project will directly contribute to fulfilling the requirements of the Treaty related to energy efficiency, and contribute to Europe 2020 targets in energy and climate change.

EC 2011 Serbia Analytical Report SEC (2011) 1208 in the section 3.15 Energy, noted that "Serbia's economy is highly energy-intensive, consuming 2.7 times more energy per unit of output than the OECD average''. In the Conclusion of 3.15, it is mentioned that "Special attention needs to be paid to meeting the objectives for improving energy efficiency and promoting renewable energy in electricity generation, transport, heating and cooling. Serbia will need to reinforce its administrative capacity in order to ensure effective implementation and enforcement of its legal obligations in the energy sector. Serbia also needs to comply with its Energy Community Treaty obligations. Overall, Serbia will have to make additional efforts to align with the EU *acquis* on energy and to implement it effectively in the medium term." (*page 85*).

The proposed project will contribute to Europe 2020 targets in energy and climate change. Sustainable growth is one of three priorities of the Europe 2020 strategy for smart, sustainable and inclusive growth - promoting a more resource efficient, greener and more competitive economy. An increase in energy efficiency to 20% by 2020 represents one of critical targets in reaching the goals of Europe 2020. The proposed project will contribute to meeting this target.

1.4 PROBLEM ANALYSIS

Based on rough estimates, energy intensity in Serbia is 2-3 times higher than in EU15 countries as result of the drop in industrial activities during the 1990s, the slow recovery of industry, low energy prices and a conflict between the price of energy and energy sources. In all sectors of final energy consumption: residential, commercial and public services, transport

and industry, there is a significant difference in energy efficiency compared with developed European countries and also some neighbouring countries.

According to a Decision of the Ministerial Council of the Energy Community 2009/05/MC-EnC, the Republic of Serbia must implement Directive 2006/32/EC on energy services which calls for annual energy savings of final energy consumption of 1%, through implementation of energy saving measures in all energy consumption sectors stipulated in the National Energy Efficiency Action Plans. Based on the requirements of Directive 2006/32/EC the Government of the Republic of Serbia adopted the first National Energy Efficiency Action Plan 2010-2012 (hereinafter: NEEAP) and submitted it to the Energy Community Secretariat.

According to the methodology required in Directive 2006/32/EC, the energy saving target should be calculated on the basis of official data on final energy consumption for each energy consumption sector for the most recent period of 5 years. However, due to the lack of data, for the purpose of the first NEEAP preparation, the energy saving target for Serbia was set and measures defined on the basis of data on final energy consumption (aggregated data for residential, commercial and public services and agriculture) for the year 2008 (from the official Energy Balance for 2010), based on the available statistical data. This means that a very rough estimate was made. The main challenge in calculating the energy saving target and making an estimate of savings by sector (residential, commercial and public sectors) was the statistical gap and lack of proper historical data. It was mentioned in the first NEEAP that Serbia will improve its existing data collection system.

The first NEEAP contains basic information on the required actions, targets and specific measures that Serbia intends to implement to ensure that national energy saving targets are achieved. The first NEEAP also had the role of demonstrating how in practice Serbia intends to improve energy efficiency, to contribute to energy saving and to achieve national energy saving targets. The greatest energy saving potential lies in buildings. The plan focuses on instruments to trigger the renovation process in public and private buildings and to improve the energy performance of electrical appliances. It promotes the role of the public sector mainly through the introduction of the energy management system, implementation of energy efficiency criteria in public spending and implementation of the Energy Services Company (ESCO) concept. This package of instruments also aims to increase awareness about energy use and energy savings, and provide incentives to home owners to take measures to improve the efficiency of their houses and addresses regulations for new building construction and renovation. Transport has the second largest potential, but due to the lack of data and expertise in this area, measures are broad and mainly aligned with the NEEAPs of EU member states. Among other things, measures promote the use of public transport and attempt to change drivers' behaviour. Energy efficiency in industry will mainly be tackled through obligatory energy audits and energy management systems for large energy consumers upon adoption of the Law on the Rational Use of Energy. Capacity building for industry is also foreseen as well as subsidies through feed-in tariffs for high efficiency combined heat and power generation, and existing favourable credit-lines provided through commercial banks by German Government (KfW) and EBRD. The NEEAP is expected, when implemented, to create the necessary conditions for the development and promotion of a market for energy services and the delivery of energy efficiency to end-users – the two main objectives of the Directive.

The NEEAP has a great potential to help with focusing and streamlining energy policy, legal and support actions aimed at saving energy in a cost-effective way, thus reducing emissions of greenhouse gases, increasing the competitiveness of industry and improving energy security. However, it is also clear that the NEEAP can become effective only when it stands for real action: it should set quantitative, measurable targets with a time schedule and concrete

steps on who will do what and the budgetary and human resources available. Based on this, the second NEEAP will:

- include a thorough analysis and evaluation of the preceding NEEAP;
- include the final results with regard to the fulfilment of the energy savings targets;
- include plans for - and information on the anticipated effects of – additional measures which address any existing or expected shortfall vis-à-vis the target;
- use and gradually increase the use of harmonised efficiency indicators and benchmarks, both for the evaluation of past measures and estimated effects of planned future measures;
- be based on available data, supplemented with estimates.

The second NEEAP for the period 2013-2015 should be submitted to the Energy Community Secretariat in 2013. One of the main challenges is the definition and elaboration of the method of monitoring and evaluating energy efficiency activities. In order to meet its priorities in terms of reducing energy consumption and increasing energy efficiency, Serbia needs reliable data on energy consumption by sector and a set of measures for the period of three years to achieve the saving targets.

In the process of preparing the second NEEAP a detailed survey on energy consumption per energy consumption sector must be conducted. The purpose of the survey is to supplement the energy balance sheet with the data on final energy consumption in the residential, commercial and public services, transport and industry sectors, because these data are not officially monitored and registered in Serbia. The system for the collection of this data must also include questionnaires and surveys. Detailed analysis of the situation in the final energy consumption sectors is possible if there is a good and detailed database of energy data/indicators. In the Republic of Serbia such a database does not yet exist. After its creation and the regular creation of energy indicators it will be possible to: a) understand in detail the consumption of energy sources (according to the structure and type of energy services) in the required sectors; b) monitor the effects of implemented measures with regard to rational use of energy in those sectors. Most of these sectors are the stakeholders most affected by the lack of reliable final energy consumption data. Besides the MEDEP, and Serbian Energy Efficiency Agency (SEEA), international financial institutions and civil society organisations will be invited to actively participate in the development and successful implementation of the Energy Efficiency Action Plan.

The project is closely linked to ongoing and past activities related to energy efficiency: for public buildings, educational programmes, combined heat and power (CHP) development, energy management and planning in municipalities, ESCO development, etc., but there is no overlapping of the activities.

1.5 LINKED ACTIVITIES AND DONOR COORDINATION

The IPA 2007 project: *Supporting the Implementation of the Energy Community Treaty.* The purpose of the project was to strengthen the capacity and technical skills of the Serbian institutions and energy industries to meet the legal and technical requirements deriving from the Energy Community Treaty and the Regional Energy Market.

The IPA 2010 project: *Implementation of the Energy Component of the National Sustainable Development Strategy.* Result 5 of this project is: Enhanced existing IT system for monitoring and sustainable planning in the energy sector - establish the Integrated Management

Information Systems (IMIS) which could support the work of the Ministry and promote efficient inter-institutional collaboration.

European Commission IPA Multi beneficiary 2007 Energy Efficiency Finance Facility is built to financially assist the IPA countries to promote investments in energy efficiency and renewable energy generation in order to improve the energy performance of the building and industry sectors offering opportunities for the highest savings in energy and reduction in CO_2 emissions. The programme is being implemented by joint management with the EIB, the EBRD, and the CEB in co-operation with German Government (KfW).

The bilateral donor community complementing IPA assistance has been prominent in financing projects in the energy efficiency sector such as the following: introduction of a new energy efficiency policy and establishment of energy planning on a local level, implementation of Kyoto Protocol, energy balance, building for monitoring and evaluation of energy efficiency policy, foundation for the draft Law and foundations for a Law on Rational Use of Energy with accompanying bylaws, improving municipal planning in energy efficiency, "Monitoring, Verification and Evaluation of NEEAPs" in the Balkans, new energy efficiency measures from German Government (GIZ, KfW), $49 million loan from the World Bank, accompanied by $6 million from Serbia for energy efficiency in heat production and public buildings, energy management (Japan), financing energy efficiency investment for climate change mitigation (United States & UNECE).

The Republic of Serbia financed from the *national budget* activities under the preparation of the *First Energy Efficiency Action Plan 2010-2012.*

1.6 LESSONS LEARNED

One of the principal lessons learned from past energy sector projects is the need for close consultation with multiple stakeholders to ensure that they develop 'ownership' of capacity building and reform projects. Consensus amongst these stakeholders is particularly vital given the high capital intensity of investments required in the sector, and thus difficulties involved in ensuring that such investments are properly prioritised and the corresponding economic and social benefits are realised. The MEDEP must have the necessary human resources and budgetary commitments in place to provide institutional building and strategic development support.

Another important lesson learned from the past is that proper monitoring and evaluation of the implementation of strategic documents is of key importance for their further successful improvement and implementation. To properly monitor and evaluate the effects of implementing a strategic document, good baseline, monitoring and evaluation tools and methods must be defined. Financial implications of strategic documents must not be neglected.

2 DESCRIPTION

2.1 OVERALL OBJECTIVE OF THE PROJECT

Energy savings and reduced CO_2 emissions, through a higher level of energy efficiency and reduced energy consumption.

2.2 SPECIFIC OBJECTIVE(S) OF THE PROJECT

Effective implementation of the energy saving and energy efficiency measures by the Serbian authorities; reduced energy consumption and CO_2 emissions.

The specific objective will contribute to implementation of the MIPD priorities in the area of environment, climate change and energy, and Commission Opinion recommendations, since harmonisation and implementation of the *acquis*, and management of IPA are continuous processes relevant for overall reforms in Serbia and its socio-economic development.

2.3 RESULTS

Result 1: Comprehensive survey on energy consumption in residential, agricultural commercial and public services, transport and industry sectors in Serbia is published

Objectively verifiable indicators related to Result 1:

- Methodology concept for survey adopted by MEDEP;
- Energy consumption structured by energy services and energy sources for each sector;
- Energy database as a module of IMIS with energy indicators, implemented and fully functional;
- Final report on Survey on energy consumption adopted by MEDEP;
- Proposals for improvement of the existing system of reporting and collecting data.

Result 2: Second Energy Efficiency Action Plan developed

Objectively verifiable indicators related to Result 2:

- Developed methodology for evaluation of energy efficiency measures;
- Identified measures in the Energy Efficiency Action Plan with main priorities in line with Energy Community Treaty and the EU *acquis* and EU policies on energy efficiency;
- Institutional responsibilities and financing plan for the Action Plan developed;
- Identified list of undertakings to be involved in categories of activities in Serbia in accordance with Annex I to Directive 2009/29/EC amending Directive 2003/87/EC on Emission Trading Scheme;
- Identified indicators and methodology for monitoring, verification and evaluation of Action Plan progress;
- Draft Energy Efficiency Action Plan with clear targets indicated adopted by MEDEP;
- Proposals for possible priority assistance in the field of energy efficiency.

2.4 MAIN ACTIVITIES

Activities related to Result 1: Comprehensive survey on energy consumption in residential, commercial and public services, transport and industry sectors in Serbia is published

1.1. Preparation of methodological concept of conducting the survey on energy consumption;

1.2. Organisation and conducting of the survey (questionnaires, field trips);

1.3. Creating an energy data base as a module of IMIS, entering data into IMIS, data processing, calculating energy indicators and publishing through web interface;

1.4. Preparation of Final report on survey;

1.5 Preparation of proposals for the improvement of existing system of reporting and collecting data.

Activities related to Result 2: Second Energy Efficiency Action Plan developed

2.1. Analysis of potentials for energy savings in the various energy consumption sectors;

2.2. Mapping and analysis of measures for improving energy efficiency in energy consumption sectors and development of the methodology for their evaluation taking into account energy saving potentials, CO_2 reduction and financial implications of each measure;

2.3. Identification of the undertakings to be involved in categories of activities listed in Annex I to Directive 2009/29/EC amending Directive 2003/87/EC on Emission Trading Scheme;

2.4. Analysis of the results of the first NEEAP and lessons learned;

2.5. Identification of indicative target of efficient use of energy of the Republic of Serbia for the period of three years, taking in the account results achieved by the first NEEAP;

2.6. Identification of technical, financial, legal and other measures and instruments needed in order to achieve the indicative energy saving target for each sector;

2.7. Analysis on financial implication of NEEAP and its implications for CO_2 emission reduction;

2.8. Preparation of methodology for monitoring, verification and evaluation of the Action Plan progress and identification of the relevant indicators;

2.9. Development of comprehensive Second NEEAP;

2.10. Preparation of the proposal for possible priority assistance in the field of energy efficiency.

The project is not starting from base zero and will not operate in a void. There will be a significant number of other current and planned initiatives, within the lifetime of this contract, to support the Serbian administration in the context of the European integration process and pre-accession funds, with which the project team will need to, consult and coordinate.

The project will be implemented over 18 months through one service contract.

2.5 ASSESSMENT OF PROJECT IMPACT, CATALYTIC EFFECT AND CROSS BORDER IMPACT (WHERE APPLICABLE)

Project Impact

A good and detailed database of energy data/indicators would allow detailed analysis of the situation in final energy consumption in the residential, commercial and public services, transport and industry sectors. Moreover, it will enable monitoring of the effects of implemented measures with regard to rational use of energy in these sectors. NEEAP introduced a balanced portfolio of policies, instruments and programmes: combining regulation, voluntary agreements, market-based instruments, financing and fiscal tools, and information measures. The project results are therefore expected to have an impact on society with respect to energy saving and promotion of the reduction of energy consumption and energy efficiency, better housing and building heating.

The project will ensure that the energy sector is better prepared for new initiatives in the area of energy efficiency. The project will directly contribute to implementing MIPD priorities related to energy efficiency and to environmental protection.

The Project is a direct follow up of the first NEEAP, meaning that the first NEEAP will be thoroughly analysed and evaluated from the aspect of the fulfilment of energy saving targets

and applicability of the foreseen measures. Evaluation of the first NEEAP implementation will be performed in accordance with the methodology developed through the GTZ - OPEN REGIONAL FUND project "Capacity building for monitoring, verification and evaluation (hereinafter: MVE) system of the energy efficiency policy in SEE countries in terms of the EU accession process" (in the following "the MVE project"). It is expected that monitoring and verification of the first NEEAP savings will be performed through the integrated IT system for MVE that should be implemented in accordance with the methodology developed in the MVE Project, with Norwegian assistance in 2012 (if approved by the Norwegian Government). Within this project, the MVE methodology would be upgraded in order to enable MVE of the second NEEAP, particularly in respect of the top-down methodology that was not covered by the MVE Project. If developed through Norwegian assistance, the integrated IT system for MVE should also be upgraded for the purpose of the second NEEAP monitoring and verification and, if not, it should be developed within this project.

The project will also raise consumers' awareness of the benefits of energy efficiency, empower them to make informed energy choices and encourage market actors, including those at local level, in saving energy in a cost-effective manner. It will thus reduce emissions of greenhouse gases, increase the competitiveness of businesses, create jobs and retain jobs and improve energy security. Equally important, the NEEAP will provide a means for developing synergies among the strategies and measures adopted.

Catalytic Impact

The financial assistance to be provided by the EU will have a catalytic effect on the implementation of the related *acquis*. This project will bring long-term catalytic effects in terms of energy efficiency in Serbia. The MEDEP will provide leadership in assisting and supporting the preparation of the survey and the NEEAP, and will also be the responsible authority for implementation of the adopted NEEAP. The project itself and its complete implementation will act as a catalyst for additional investment in the energy sector. The increase of energy efficiency will directly lead to CO_2 emission reduction. It will also have a positive impact in terms of economic growth and job creation. Energy savings free up financial resources that can be reinvested in the economy and can help alleviate public budgets that are under strain. For individuals, energy efficiency means paying less on their energy bills.

Strategically, high energy intensity can be tackled by taking energy efficiency improvement measures. Finally, producing more with less energy will improve Serbian industries' competitiveness. Energy efficiency and savings will benefit the Serbian economy as a whole, the public sector, business and private individuals.

2.6 SUSTAINABILITY

The proposed project will produce sustainable results in the short run since all relevant structures are in place and the need for technical assistance is likely to increase proportionally to the challenges ahead. The methodology will be defined and the data base will be created as a module of the IMIS - the Ministry energy information system. The methodology and database can be used for the following surveys. The staff involved in the implementation of the project will improve its skills and proficiency in planning, management and monitoring of operations. The MEDEP is fully committed and capable of supporting project implementation. Successful implementation will not be limited to specific results, but will also multiply their effect by strengthening the administrative capacity for implementing similar activities.

The intended project will ensure adoption of best practices and fulfilment of commitments under the Energy Community Treaty and EU *acquis* and the best European practices in the field

of energy efficiency. It will contribute to a more rational use of energy in the Republic of Serbia. Based on the EU *acquis* and existing Serbian legislation, NEEAPs will be prepared every 3 years. Methodologies developed under this project will allow its successful replication whilst preparing and monitoring the implementation of future NEEAPs.

2.7 ASSUMPTIONS AND PRE-CONDITIONS[2]

There are no pre-conditions for the project implementation.

The Serbian Government will be oriented towards continuation of the EU accession process, improving the power system of Serbia, further implementation of EU standards and continued energy sector reform.

An assumption for the successful adoption of the Energy Efficiency Action Plan is the full support of decision-makers and agreement of key stakeholders. Also, both good cooperation between administrative officials and experts and good inter-sector communication are required. Result 2 should be based on the analysis of energy consumption from the Result 1 of the Service contract.

The main risk is to undertake survey on time and to collect sufficient information on energy consumption to prepare the NEEAP and establish realistic objectives.

3 IMPLEMENTATION ISSUES

The project will be implemented under Centralised Management mode.

The project will be implemented through one **service contract**: EUR 2,000,000 (International restricted procedure).

Partners in project implementation will be the MEDEP and the Serbian Energy Efficiency Agency.

3.1 INDICATIVE BUDGET

[2] 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.

Indicative Project budget (amounts in EUR) *(for centralised management)*

Preparation of Second Energy Efficiency Action Plan and Development of Energy Indicators				**SOURCES OF FUNDING**								
			TOTAL EXPENDITURE	IPA CONTRIBUTION		NATIONAL CONTRIBUTION					PRIVATE CONTRIBUTION	
	IB (1)	INV (1)	EUR (a)=(b)+(c)+(d)	EUR (b)	% (2)	Total EUR (c)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Activities 1,2												
Service contract 1	X	–	2,000,000	2,000,000	*100*							–
TOTAL IB			2,000,000	2,000,000	*100*							
TOTAL INV												
TOTAL PROJECT			2,000,000	2,000,000	*100*							

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

Amounts net of VAT

(1) In the Activity row, use "X" to identify whether IB or INV

(2) Expressed in % of the **Total** Expenditure (column (a)

3.2 INDICATIVE IMPLEMENTATION SCHEDULE (PERIODS BROKEN DOWN BY QUARTER)

Contracts	Start of Tendering/ Call for proposals	Signature of contract	Project Completion
Service contract 1	T + 1Q	T + 3Q	T + 9Q

3.3 CROSS CUTTING ISSUES

3.3.1 *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.

Reaching increased energy efficiency goals would contribute to a higher competitiveness of Serbian business on local and international markets, which should have a positive impact on the employment rate for both genders. No gender discrimination exists in Serbia. There are no differences between gender beneficiaries regarding the implementation and the results of this project. Equal opportunities will be ensured in the management and individual activities of the project. The team of experts involved in the project must possess relevant skills to ensure effective mainstreaming of gender equality and inclusion of and participation by minorities. Whilst implementing the project activities and the Beneficiary will try to assure where applicable that gender disaggregated data will be made available to carry out an analysis of the social and economic impact of the actions undertaken.

3.3.2 *Environment and climate change*

This project directly relates to environmental issues and the objective of this project is to help Serbia to achieve compliance with the environmental *acquis*, as required by the Energy Community Treaty. With regard to environment, this is one of the sectors which will benefit from the proposed project, particularly in terms of reduction of CO_2 emissions. Namely, increasing energy efficiency will directly lead to the reduction of CO_2 emissions. Energy efficiency is one of the most cost effective ways of enhancing the security of energy supplies, and reducing emissions of greenhouse gases and other pollutants. This will support the preparation and implementation of investment projects contributing to improving the environmental performance of the beneficiaries.

3.3.3 *Minorities and vulnerable groups*

In all activities during this project steps will be taken to ensure that the rights of minorities are taken into account. The general tendency is to work simultaneously on minimising the consequences of energy poverty and promoting activities aimed at its prevention with an ultimate goal of ensuring energy sustainability in the long run.

3.3.4 *Civil Society/Stakeholders involvement*

In the programming phase of international assistance (IPA and bilateral aid simultaneously) wide consultations are carried out, in accordance with the instructions and procedure defined in the Action Plan for Programming and Reporting on EU Funds and International Development Assistance and in accordance with the Programming Calendar in an organised and structured way led by the NIPAC Technical Secretariat. In order to identify projects to be financed from IPA 2012, consultations within and between Governmental Sector working

groups was carried out. In the case of the proposed project consultations were carried out within the Sector Working Group for Environment and Energy consisting of representatives of the the MEDEP of ministries in charge of mining, natural resources and spatial planning, ministries in charge of economy and regional ministries in charge of agriculture, trade, forestry and water management and the Republic Geodetic Authority. Regular consultations between NIPAC TS and EUD and between Sector Working Groups and donors as well as representatives of civil society organisations had been conducted.

During the implementation phase, a significant number of households and public and private companies as representatives of the sectors of final energy consumption will be included through the activities related to Result 1. Energy efficiency is a subject where the support and assistance of stakeholders and civil society could be of great help, in the organisation of campaigns, actions on the collection and dissemination of information, and implementation of energy efficiency activities. Representatives of non-governmental organisations and civil society will be consulted through participation in public events organised in the process of NEEAP preparation. The lead national institution in both phases (programming and implementation) is the MEDEP.

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR Project Fiche		Project title and number		**Preparation of Second Energy Efficiency Action Plan and development of Energy Indicators**
		Contracting period expires: 3 years after the signing of the FA		Execution period expires: 5 years after the signing of the FA
		Total budget	EUR 2.0 m	
		IPA budget:	EUR 2.0 m	
Overall objective	**Objectively verifiable indicators (OVI)**	**Sources of Verification**		
Energy savings and reduced CO_2 emissions, through a higher level of energy efficiency and reduced energy consumption	Achieved final energy savings as foreseen in second NEEAP	▪ Annual Reports of MEDEP ▪ The Decision of the Ministerial Council of the Energy Community 2009/05/MC-EnC		
Specific objective	**Objectively verifiable indicators (OVI)**	**Sources of Verification**		**Assumptions**
Effective implementation of the energy saving and energy efficiency measures by the Serbian authorities; reduced energy consumption and CO_2 emissions	• Final report on Survey on energy consumption adopted by MIE • Draft Energy Efficiency Action Plan with clear targets indicated adopted by MIE	• Reports of Energy Community Secretariat • Annual report of MEDEP • Published report on Survey on energy consumption		• Political stability and EU accession process continued; • Serbian Government oriented towards implementation of EU *acquis* and Energy Community Treaty
Results	**Objectively verifiable indicators (OVI)**	**Sources of Verification**		**Assumptions**
Result 1. Comprehensive survey on energy consumption in residential, agricultural, commercial and public services, transport and industry sectors in Serbia is published	**Indicators for the Result 1:** ▪ Methodology concept for survey adopted by MIE; ▪ Energy consumption structured by energy services and energy sources for each sector; ▪ Energy database as a module of IMIS with energy indicators, implemented and fully functional; ▪ Final report on Survey on energy consumption adopted by MEDEP; ▪ Proposals for improvement of the existing system of reporting and collecting data.	▪ Annual Reports of MEDEP ▪ Questionnaires fulfilled in households, industry, transport and service sector ▪ IMIS web service ▪ Web site of MEDEP		▪ Continuation of energy sector reform
Result 2. Second Energy Efficiency Action Plan developed	**Indicators for the Result 2:** ▪ Developed methodology for evaluation of energy efficiency measures; ▪ Identified measures in the Energy Efficiency Action Plan with main priorities in line with Energy Community Treaty and the EU acquis and EU policies on energy efficiency; ▪ Institutional responsibilities and financing plan for the Action Plan developed; ▪ Identified list of undertakings to be involved in categories of activities in Serbia in accordance			

	with Annex I to Directive 2009/29/EC amending Directive 2003/87/EC on Emission Trading Scheme; ▪ Identified indicators and methodology for monitoring, verification and evaluation of Action Plan progress; ▪ Draft Energy Efficiency Action Plan with clear targets indicated adopted by MEDEP; ▪ Proposals for possible priority assistance in the field of energy efficiency.		
Activities to achieve results	**Means / contracts**	**Costs**	**Assumptions**
Activities related to Result 1: 1.1. Preparation of methodological concept of conducting the survey on energy consumption; 1.2. Organisation and conducting of the survey (questionnaires, field trips); 1.3. Creating an energy data base as a module of IMIS, entering data into IMIS, data processing, calculating energy indicators and publishing through web interface; 1.4. Preparation of Final report on survey; 1.5 Preparation of proposals for the improvement of existing system of reporting and collecting data. **Activities related to Result 2:** 2.1. Analysis of potentials for energy savings in the various energy consumption sectors; 2.2. Mapping and analysis of measures for improving energy efficiency in energy consumption sectors and development of the methodology for their evaluation taking into account energy saving potentials, CO_2 reduction and financial implications of each measure; 2.3. Identification of the undertakings to be involved in categories of activities listed in Annex I to Directive 2009/29/EC amending Directive 2003/87/EC on Emission Trading Scheme; 2.4. Analysis of the results of the first NEEAP and lessons learned; 2.5 Identification of indicative target of efficient use of energy of the Republic of Serbia for the period of three years, taking in the account results achieved by the first NEEAP; 2.6.Identification of technical, financial, legal and other measures and instruments needed in order to achieve the indicative energy saving target for each sector; 2.7. Analysis on financial implication of NEEAP and its implications for CO_2 emission reduction; 2.8. Preparation of methodology for monitoring, verification and evaluation of the Action Plan progress and evaluation and identification of relevant indicators; 2.9. Development of comprehensive Second NEEAP. 2.10. Preparation of the proposal for possible priority assistance in the field of energy efficiency.	Service contract 1	EUR 2.0 m	▪ Sufficient number of staff in the relevant institutions ▪ Effective participation of households, industry, transport and service sector in the survey

ANNEX 2: Description of institutional framework

The Ministry of Energy, Development and Environmental Protection (hereinafter: MEDEP) is responsible for setting the energy policy objectives and methods of their implementation, to create a framework for increased energy efficiency in all energy consumption sectors, to monitor and stimulate activities of SEEA, the legal framework and energy balance of the Republic of Serbia; approving the tariff systems, issuing energy permits, assuring security of energy supplies and energy sources.

The Serbian Energy Efficiency Agency (hereinafter: SEEA) is responsible for preparing the programme and measures for encouraging rational and efficient energy use and monitoring its implementation, setting the criteria for evaluation of the energy efficiency of equipment and the method of labelling it in line with corresponding international regulations and standards, recommending financial and technical support to the preparation and implementation of priority energy efficiency projects and consultancy for the purpose of improving energy efficiency.

Steering Committee

A Steering Committee will be set up to oversee the implementation of the project. It will consist of approximately 6 members including representatives of MEDEP, Serbian Energy Efficiency Agency, EU Delegation and other stakeholders. The function of this Committee will be to monitor progress of the project tasks, to mobilise whenever needed the inputs and contributions of government departments, and to ensure timely achievement of the expected results. The MEDEP is responsible for providing the secretariat function for this Steering Committee (organising meetings, taking and preparing minutes).

ANNEX 3: Reference list of relevant laws and regulations

Reference list of relevant laws and regulations:

- Law on Energy (Official Gazette RS, No. 57/2011);
- Law on Building and Construction (Official Gazette RS, No. 72/2009, 81/2009, 24/2011);
- Draft Law on Rational Use of Energy.

Reference list of relevant national strategies:

- Needs of the Republic of Serbia for International Assistance 2011-2013;
- National Programme for Integration of the Republic of Serbia into the European Union from December 2009;
- National Sustainable Development Strategy of the Republic of Serbia (Official Gazette RS, No. 57/08);
- 2015 Serbian Energy Development Strategy;
- Implementation Programme for the Serbian Energy Sector Development Strategy for the period 2007 – 2012 (Amendments and supplements – December 2009 - Official Gazette RS, No. 99/09; April 2010 - Official Gazette RS, No. 27/2010);
- National Environmental Protection Programme (Official Gazette RS, No. 12/10);
- First Energy Efficiency Action Plan for 2010-2012.

List of relevant EU Directives:

- Proposal for a Directive on energy efficiency repealing Directives 2004/8/EC and 2006/32/EC [COM(2011)370, 22/06/2011];
- Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market;
- Directive 2006/32/EC on energy end-use efficiency and energy services;
- Directive 2010/31/EU on the energy performance of buildings;
- Directive 2010/30/EU on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products;
- Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community;
- Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

ANNEX 4: Details per EU funded contract (*):

Results	Type of Contract
Result 1. Comprehensive survey on energy consumption in residential, agricultural, commercial and public services, transport and industry sectors in Serbia prepared and published	The project will be implemented through one **service contract**: EUR 2,000,000 (International restricted procedure)
Result 2. Second Energy Efficiency Action Plan developed	

ANNEX 5: Project visibility activities

The project visibility activities will be organised to promote the exchange of experiences, constraints and best practices achieved on the project.

The main aims of the publicity / visibility requirements are to increase the public awareness and transparency over the project activities and to inform potential beneficiaries about the project results. Publicity must be ensured in accordance with the applicable rules on the visibility of external actions laid down and published in the "EU guidelines on visibility" available on: http://ec.europa.eu/europeaid/work/visibility/index_en.htm.

The standard formats will be used in briefings, newsletters, press conferences, presentations, invitations, and signs, to highlight EU participation. The key tools of information and communication are:

- Media – press releases, press events, interviews, background papers, project visits
- Events – forums, information days, workshops, professional debates, seminars, conferences, project presentations, other regional events

Publications – news letters, brochures, leaflets, project information sheets, reports, studies, programme presentation summaries

- Publications Internet pages
- Others: billboards, plagues, stickers, flags, maps, posters and tableaux.