

Standard Summary Project Fiche – IPA centralized programmes

Project Fiche: 6

1. Basic information

1.1 CRIS Number: 2011/023-173

1.2 Title: Developing sustainable energy use

1.3 ELARG Statistical Code: 02.15

1.4 Location: Montenegro

Implementing arrangements:

1.5 Contracting Authority: Delegation of the European Union to Montenegro

1.6 Implementing Agency: Delegation of the European Union to Montenegro

1.7 Beneficiary (including details of project manager):

Ministry of Economy

Project managers:

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Financing:

1.8 Overall cost: € 900,000

1.9 EU contribution: € 800,000

1.10 Final date for contracting:

Three years following the signature of the Financial Agreement

1.11 Final date for execution of contract:

Two years from the final date for contracting

1.12 Final date for disbursements:

One year from the final date of the execution of the contract

2. Overall Objective and Project Purpose

2.1. Overall Objective:

Contribute to the further energy reforms in Montenegro in order to comply with obligations from the energy acquis

2.2 Project Purpose:

Develop and enforce relevant regulatory framework in order to increase sustainable energy use, especially in transport sector

2.3 Link with AP/NPAA / EP/ SAA

Council Decision of 22 January 2007 on the principles, priorities and conditions contained in the **European Partnership with Montenegro (2007/49/EC)** indicates that the **short-term priorities** in the energy sector include i.e. continuation of implementation of the commitments undertaken in the framework of the signed Energy Community Treaty; implementation of the Energy Development Strategy, and the Energy Efficiency Strategy; strengthening the administrative capacity of the Ministry of Economy, etc. The project addresses the above priorities from implementation point of view and updating of legislation in line with the new requirements of the Energy Community Treaty. The **medium term priority** in the energy sector that is addressed by the project, is adoption and implementation of a long term strategy for an environmentally sustainable energy policy.

The Stabilization and Association Agreement with Montenegro, [Council and Commission Decision of 29 March 2010 / OJ L 108, 29.4.2010] Article 109 on Energy, states that cooperation shall focus on priority areas related to the Community acquis in the field of energy and that it shall be based on the Energy Community Treaty and developed with a view to the gradual integration of Montenegro into Europe's energy markets, especially through the formulation and planning of energy policy, including, improvement and diversification of supply as well as through the promotion of energy saving, energy efficiency, renewable energy and studying the environmental impact of energy production and consumption. This project addresses these goals, especially in transport sector.

The **Commission Opinion on Montenegro's application for membership of the European Union (COM(2010) 670 final) 09.11.2011)** outlines that despite recent legislative developments, Montenegro will have to undertake additional efforts to align with the energy *acquis* and to implement it effectively in the medium term, with special reference to meeting targets for improving energy efficiency and use of renewables and ensuring security of oil stocks. Further adjustments of the legal and

institutional framework and in particular strengthening of administrative and implementation capacities are also needed.

2.4 Link with MIPD:

Multi-annual Indicative Planning Document (MIPD) 2011-2013 for Montenegro recommends that Montenegro should develop "additional efforts" in the fields of transport policy and energy. Furthermore, the MIPD 2011-2013 specifies that related to energy, as a member of the Energy Treaty Community, Montenegro is obliged to implement substantial parts of the *acquis* in energy, environment and competition and that there are important shortcomings which will need to be addressed with financial support. The MIPD enlists the **Public administration reform** as one of the 7 main sectors for IPA 2011-2013, with objective to further support the country's efforts (centrally and locally) in its reform and alignment with relevant *acquis*. Namely, in collaboration with other donors, IPA will provide institution building support including to the existing strategies, and in particular for the preparation of the required legislation, for the improvement of managing skills throughout the public administration. One of the specific objectives in the field of **environment and climate change** is developing actions to mitigate and adapt to climate change, where sustainable energy use in transport and use of biofuels represents one of direct measures towards this objective. In the sector of **transport**, which represents another key assistance sector, the efforts must be driven towards the strengthening administrative and implementation capacities, as it is also recommended in the **Commission Opinion on Montenegro's application for membership of the European Union**.

2.5 Link with National Development Plan (where applicable)

N/A¹.

2.6 Link with national/ sectoral investment plans(where applicable)

Montenegro adopted updated Energy Policy for Montenegro through 2030² (EPM) in 2011. EPM defines as one of the three main priorities sustainable development of energy sector in accordance with principles for environmental protection and though efficient energy use and use of renewable energy sources. Moreover, strategic goals clearly state that energy efficiency and renewable energy sources are priorities and their focus on transport sector is stressed. Aside from the EPM the development of the energy sector in Montenegro is also guided by the Energy Development Strategy (EDS) through to 2025³, adopted in December 2007 and programmes and projects are presented in Action Plan for Implementation of EDS (2008 – 2012)⁴, adopted in October 2008. EDS gives plans for

¹ National Development Strategy and Plan are being developed under IPA 2009 project that is ongoing.

² Energy Policy for Montenegro through 2011 (<http://www.gov.me/rubrike/ekonomski-programi/103843/Energetska-politika-Crne-Gore-do-2030-godine.html>)

³ Energy Development Strategy through to 2025 (<http://www.oie-cg.me/doc/The%20startegy%20for%20energy%20development%20until%202025.pdf>)

⁴ Action plan for implementation of EDS (2008-2012) (<http://www.oie-cg.me/doc/The%20startegy%20for%20energy%20development%20until%202025.pdf>)

Montenegro energy sector in accordance to existing estimations of potential, needs and obligations in accordance to Energy Community Treaty signed in 2005. Therefore in the sector of transport the accent is mostly put on fulfilling the need of introduction of biofuels, while Strategy for Energy Efficiency (SEE) adopted in 2005⁵ focuses more on decrease of energy consumption in this sector. The SEE calls for necessary assessment of needed and applicable measures in this sector while pointing out the lack of appropriate energy statistics in all sectors, and especially transport and calls for systematic approach to energy management. However, Action plan for Energy Efficiency for period 2010-2012⁶ outlines the needs of this sector in more detail and gives specific energy efficiency measures needed for transport sector, specifically road transport. Legislation plan for 2011 for Montenegro Government envisages the development of Law on using renewable energy sources in transport, specially biofuels, as well as mandatory secondary legislation in the area of energy efficiency.

Furthermore, EDS plans for development of small cogeneration plants industrial cogeneration plant and for local use, even though Energy Law adopted in 2010 calls for adoption of Programme for use and development of cogeneration, as well as regulatory framework specifically for high-efficiency cogeneration in harmonization with Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market. Aside from this framework, Montenegro is currently developing regulatory framework for crude-oil stocks for which 90-day reserves are planned in EDS, taking into account maintenance of existing 45-day reserves.

However, due to recent developments in the energy sector, including legislative and structural changes, and additional obligations in accordance with Energy Community Treaty, Government of Montenegro decided to update the EDS and SEE during the year of 2011. These changes will impose a more demanding and dynamic development of the sector, taking a closer look at sustainable energy growth.

Consequently this project is fully in line with not only national strategies and action plans but also with the EU sectoral approach plans, especially if considering the Energy 2020⁷ plan, which puts an accent on energy security, energy efficiency, sustainable energy development, tapping into potential of transport sector and supporting renewable energy use.

3. Description of project

3.1 Background and justification:

Montenegro is a country with a fast-changing energy sector. Currently Montenegro's energy system consists of three large producers of electrical energy and seven small HPPs. Three large producers include Thermal Power Plant Pljevlja on coal, that has been rehabilitated in 2010, with installed power of 210 MW and two HPPs, HPP Piva with installed power of 307 MW and HPP Perucica with installed power of 342 MW. The total installed capacity is 868 MW. Along with large producers, Montenegro energy sector is

⁵ Energy Efficiency Strategy for Montenegro (<http://www.questionnaire.gov.me/Annexes/Annex072.pdf>)

⁶ Action plan for Energy Efficiency for period 2010-2012 (<http://www.energetska-efikasnost.me/download/Energy%20Efficiency%20Action%20Plan%20for%20Period%202010-2012.pdf>)

⁷ Energy 2020 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0639:FIN:EN:PDF>)

characterized by two large industrial consumers, the Aluminum Plant Podgorica (KAP) and the Steel Works Plant in Niksic that consume about 45 % of the final energy consumption or 91 % of the final energy consumption in industry.

Montenegro has primary energy sources that include brown coal and lignite, but more importantly has a high unused energy potential of hydropower, biomass, solar radiation and wind. There is no oil or gas exploration. With continuous growing consumption and lack of new energy producers over the last three decades, Montenegro has become a significant importer of electricity, with average import of 30 % of electricity consumed and all petroleum products consumed. In order to lower import and improve energy independence, Montenegro has started processes and is working on improving the environment for investment in energy sector, so domestic resources could be used for generation of electricity as well as heating from renewable energy sources.

In electricity sector, Montenegro is currently ongoing a tendering procedure for construction of HPPs on river Moraca. Also, Montenegro has given out 13 concessions for construction of 33 sHPPs with total capacity of 100 MW, as well as signed two contracts for construction of two wind farms with total capacity of 96 MW that are currently in the process of receiving permits for construction.

Montenegro power system has been developed in the past with focus on consumers and both transmission and distribution system operators are switching to a more producer and consumer oriented policy. Aside from planning development of the network for potential new producers, transmission system for conventional HPPs and wind farms and distribution system for small producers such as sHPPs located in less developed areas of Montenegro, and analyzing the influence on the system, transmission system is planning expansion through interconnections, specifically with undersea cable with Italy.

In heating sector, considering significant biomass and solar potential, Montenegro is starting with valorization of biomass through district heating systems in Pljevlja and Kolasin, and through fuel switch in reconstruction of public buildings, as well as valorization of solar radiation for heating for southern and central regions of Montenegro.

Petroleum products, as previously mentioned are all imported, and managed by a number of oil companies awarded with the licenses for the sale and supply of petroleum products. In addition, certain quantities of petroleum products are directly purchased by large consumers through international tenders. Imported petroleum represents 98 % of consumption in transport sector, which represents 20 % of final energy consumption in Montenegro. Road transport is 88 % of the whole transport consumption, where individual consumers represent 60 – 80 % of consumption. Energy use in this sector is based on imported fuel, while energy use is very inefficient and motor gasoline consumption grows at a 7.4 % rate during the past few years.

In order to further help the transformation of energy sector and its harmonization with EU energy policy, Montenegro made significant legislative changes by adopting Energy Law and Energy Efficiency Law in 2010. The main strategic objectives deal with completing the regulatory framework and improving significantly the institutional framework, statistical system and also demonstrate tangible and concrete results from implemented measures of sustainable energy use. These two laws assign responsibilities and obligations to different bodies from the Government and the Ministry of Economy responsible for energy, to the local self governments, energy supplies and large energy consumers and

implement latest directives on market rules, competitiveness, energy security, gas, cogeneration, crude-oil stocks, renewable energy sources and energy efficiency, excluding in most parts energy use in transport sector. Moreover, in order to develop statistical system in line with EU policies, which can be used for monitoring and quality reporting of changes in the energy sector, Montenegro is currently receiving assistance from Slovenian Government through a project that will be completed by mid 2012.

Based on the obvious reforms taking place in energy sector the EU's Progress Report on Montenegro accompanying Enlargement Strategy and Main Challenges 2009-2010 (COM 2009) 533 final) clearly states that steps have been taken towards meeting the requirements of the Energy Community Treaty, but that further efforts are required and that promoting energy efficiency and renewable energy sources is crucial. Furthermore, the new EU Energy strategy 2020 calls for the rebalance of energy actions in favor of a demand-driven policy, empowering consumers and decoupling economic growth from energy use. In particular, the transport and construction industries must pursue an active energy savings policy and diversify towards non-polluting energy sources. This Strategy lists as its first priority "an efficient use of energy that translates into energy savings of 20 % by 2020" and demands that special attention should be given to the sectors with the largest potential to make energy efficiency gains, namely the existing building stock and transport sector.

Therefore, in line with EU energy policy, Montenegro's obligation towards fulfilling the *acquis* as well as in line with the most urgent issues in the energy sector in Montenegro, this project proposes to analyze in detail Montenegro's possibilities and potential for increase of sustainability in transport sector and developing adequate regulatory framework, as well as to analyze possibilities for use of high-efficiency cogeneration for which regulatory framework will be adopted. Moreover, project aims to analyze economical and strategic ways in fulfilling necessary 90-day crude oil storage aligned with national strategies. Finally, aside from informing the public of the sustainable use of energy in transport sector, which is important considering their input in consumption of energy in this sector, project plans to train existing capacity in administration to be more aware of Montenegro's obligations and potential solutions and their implementation.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

The development and overall activity of energy sector is repeatedly and indivisibly connected with the social position of the citizens of Montenegro. Besides direct impact through smarter energy use, the social position is influenced by the possibility of employment, entrepreneurship, additional education, the modernization of technological level of labor structure in Montenegro, as well as overall quality of life through the achievement of policy of secure energy supply and enabling the choice of energy sources and their suppliers.

Investing in the development of the energy sector contains another very important component which materially impacts the social position of the citizens and it reflects in the fact that the space for "black capital" and so called "grey economy" is narrowed through these investments since the majority of funds are directed through regular capital flows, thereby eliminating appearances that has harmful impact on the social position of the citizens.

Project impacts would include:

- Convergence toward EU energy 2020 targets from the level at the beginning of the project by end-project date and by an average 1% per annum over the following 3 years from the end-project level;
- Rise in the sustainability of energy supply by end-project and a further overall rise during the following 5 years;
- Reduction of emission of greenhouse gases and local air pollutants, especially related to pollution generated from road transport;
- Promotion of sustainable use of energy in transport by offering various environmentally friendly modes of transport and options of biofuels utilization that would, both directly and indirectly lead to stimulation of a market demand for EE and RES transport products, services and new technologies (new more fuel efficient vehicles, hybrid and electric vehicles, better public transportation, intelligent traffic management, energy efficiency standards for vehicles, quality check of fuels used and the like);
- Improvement of functional and healthy environment, better access to road infrastructure, increased safety, comfort and overall living standards;
- Energy security through managing the needed reserves of crude-oil;
- Introduction of variable sources of energy production and various possibilities for replacement of otherwise imported energy.

Since projects aims to not only introduce changes at the regulatory level, but also introduce new measures for more sustainable energy use through coordination of various governmental bodies, after the project those bodies should be able to continue the implementation of the outlined measures to further improve transport sector. Studies done through the project will involve local governments and energy managers and MONSTAT, who will be responsible for further collection of information and data for quality statistics on energy use in various sectors and quality of fuel used. Therefore it is assumed that they will be thought to collect adequate statistics correctly even after the project is finished.

3.3 Results and measurable indicators:

Sustainable energy use in transport sector

Result 1. Renewable energy sources (RES) and energy efficiency (EE) potential is assessed and Action plan with top priority measures for sustainable use of energy in transport sector prepared;

- 3 studies completed by the end of second quarter from project start and an Action plan developed by the end of the fifth quarter from project start and adopted by the end of the sixth quarter from the start of the project;

- Guidelines and top priority measures known to key stakeholders by the end of the seventh quarter from the start of the project;
- Result 2. Regulatory framework for EE and RES in transport sector is developed and prepared for adoption, as well as legislation for energy use in transport
- Number of relevant legal acts developed and ready for adoption by the end of the project;
- Result 3. Statistical monitoring and reporting system for energy consumption in transport sector reviewed and operating including update of necessary software so that level of compliance of statistical and monitoring system with EUROSTAT is checked and suggestions given;
- Level of compliance of statistical and monitoring system with EUROSTAT checked and suggestions given by the seventh quarter from the start of the project;
- Result 4. Energy management monitoring schemes for transport sector developed and implementation started.
- 25 people capable of overseeing and reporting energy use by the end of the project.

Sustainable energy use in other areas of energy sector

- Result 5. Study on possible economic and strategic solutions for crude oil and oil products stocks undertaken;
- Study completed and delivered by the end of the fourth quarter from the start of the project;
- Result 6. Undertake a study for potential of use of high efficiency cogeneration and give guidelines for development;
- High efficiency cogeneration nationwide study report delivered by the end of the third quarter from the beginning of the project and action plan developed by the end of the sixth quarter from the project start and adopted and guidelines known to key stakeholders by the end of the project;
- Result 7. Policy advise on ongoing and future changes needed for sustainable use of energy given continuously throughout the period of the project.
- Continuous policy advise and additional needed guidelines given continuously throughout the period of the project;

Capacity development and awareness raising on sustainable energy use

- Result 8. National administration (relevant ministries, national agencies, offices and administrative workers from local governments) trained for further implementation and compliance with EU energy policy;

- 50 people trained and familiar with EU energy policy and obligations for Montenegro by the end of the Project;

Result 9. Awareness raising surveys conducted, data analyzed and interpreted.

- 1 baseline general public awareness raising survey conducted at the beginning of the project and one final general public awareness raising survey conducted at the end of project.

3.4 Activities:

The project will be implemented through two Service Contracts due to the national co-financing requirement with the following activities:

Sustainable energy use in transport sector

Activity 1. Develop studies to assess RES and EE potential and develop Action plan with top priority measures for sustainable use of energy in transport sector

- Undertake studies to assess potential RES and EE for sustainable use of energy in transport sector
 - Undertake a study on bio fuels potential and secondary bio fuels production potential in Montenegro
 - Undertake a study on possibility of introduction of electricity from renewable energy sources in transport sector
 - Undertake a study on energy efficiency potentials in transport sector
- Develop Action plan for RES and EE in transport
 - Develop Action plan for introducing the renewable energy sources and energy efficiency measures into a transport
 - Dissemination of information about the new energy efficiency technology in vehicles and the transport sector as well as about use of existing and used vehicles that can take advantage of renewable energy sources

Activity 2. Develop EE and RES regulatory framework and review legislation of energy use in transport sector

- Finalize and give for adoption law on renewable energy sources in transport sector.
- Develop regulatory framework regarding renewable energy sources and energy efficiency in transport sector that would identify the top priority measures that need to be implemented

Activity 3. Review existing and make operational statistical monitoring and reporting system for energy consumption in transport sector

- Use software to monitor quality, use and the production of biofuels so that it complies with the regulatory framework
- Use national energy database to monitor energy consumption with special focus on transport sector according to the EUROSTAT

Activity 4. Further improvement of the existing information system to accommodate energy management and monitoring of energy use with special focus on transport

Sustainable energy use in other areas of energy sector

Activity 5. Develop a study on possible economic and strategic solutions for crude oil and oil products stock

Activity 6. Develop a study on the potential of high efficiency use in Montenegro and develop action plan for development and use of high-efficiency cogeneration

Activity 7. Give advise to Ministry of Economy for further improvement in energy regulation and requirements

Capacity building and awareness rising on sustainable energy use

Activity 8. Deliver trainings and information to national administration including administrative workers from relevant ministries, governmental bodies and local governments

Activity 9. Prepare, develop and implement baseline and final awareness surveys, including the comparison of baseline and final data, with focus on positive trends from the analysis of final data

A Steering Committee shall be established to guide the Consultant in achieving its tasks, to monitor progress of the project activities and to ensure timely achievement of results. The structure and representatives to the Steering Committee shall be determined during the Inception Phase upon consultation with the beneficiaries. The Steering Committee will meet at the end of the Inception Phase, on six month's basis as well as whenever any of its members deems it necessary.

3.5 Conditionality and sequencing:

- Draft law on energy use in transport prepared according to relevant EU directives by mid- 2012
- Coordination and cooperation agreement among Ministry of Economy, Ministry of Transport and Maritime Affairs, Ministry of Sustainable Development and Tourism, Ministry of Agriculture and Rural Development, other relevant institutions and municipalities
- National co-financing of € 100,000 must be secured by state budgets for 2013 and 2014.
- Sufficient number of employees and adequate office space
- Statistical system for monitoring of energy consumption and adequate IT infrastructure in place by mid-2012
- Financial agreement signed.

3.6 Linked activities

TA to Montenegrin Energy Efficiency Unit-an EU funded projects (via European Agency for Reconstruction-EAR) benefiting Montenegrin Energy Efficiency Unit (EEU) within the Ministry for Economic Development (MED), implemented between March 2006 and June 2007. The results of the project concentrated on institutional base formation for energy efficiency, outlining the responsibilities, organizational structure and operational methodology

Advisory support for energy sector reform-an EU/EAR funded project benefiting EPCG and MfED, implemented between April 2006 and March 2008.

Energy Efficiency in Montenegro-GIZ (Germany) funded project benefiting the MED, implemented between April 2008 and December 2010, which concentrated on building the awareness on necessity of energy efficiency and renewable energy sources, creating initial legislative framework and following implementation of specific pilot measures related to overall energy efficiency.

Advisory Services for the Implementation of the Energy Strategy-KfW (Germany) funded project benefiting the MED, implemented between March 2008 and February 2012.

Energy Development Strategy of Montenegro by 2025 and the Action Plan-an UNIDO funded project benefiting the MED, implemented between September 2006 and November 2007 (Strategy) and between January and May 2008 (Action Plan).

Energy Efficiency in Montenegro-Ministry of Foreign Affairs (Norway) funded project benefiting the MED, and EE private Sector, implemented between October 2007 and July 2008. The project created pool of experts specialized in energy auditing and certification and gave EE measure recommendations in public sector that were used later on in reconstruction projects (financed via KfW and World Bank loans)

Technical assistance to the Ministry of Economy Renewable energy unit for development of RES field in Montenegro – GIZ/CIM Government of Germany October 2009 – October 2011.

Different options for public-private partnership regarding future production of electrical energy in Montenegro - World Bank implemented December 2008- March 2010. The project outlines recommendations on different energy production options in Montenegro, including the option for cogeneration.

Western Balkans Sustainable Energy Direct Financing Facility - Institutional Capacity Building – EBRD implemented September 2009- March 2010. The project outlined the milestones on how to optimize the supervision process of legislation implementation

Climate Change - Initial National Communication (INC) under UNFCCC -UNDP implemented May 2008 - May 2011. ME was included in the project in relation to GHG emissions from energy sector and creation of recommendation areas for climate change mitigation, including the specific references to energy and transport sectors

Montenegro Energy Efficiency Project (MEEP) - World Bank – loan for EE reconstruction in public sector, implemented January 2009 - December 2012. The project is ongoing and concentrates on reconstruction of buildings in education and health

Technical assistance for implementation of the Energy Community Treaty Montenegro IPA 2007 (JEE, REGAGEN, EPCG), granted by European Union and European Commission (1.5 million €). February 2010 – September 2011. The project is currently ongoing and Project and aims to develop energy sector policies that will ensure the implementation of commitments under the Energy Community Treaty, including the Regional Energy Market

Technical assistance to the Ministry of Economy on developing regulatory framework for renewable energy sources and high-efficiency cogeneration based on Energy Law and Programme for use and development of renewable energy sources – EBRD June 2010 – September 2011.

Development of IT-infrastructure system for Montenegrin energy sector - Official Development Aid of Slovenian Government, January 2011-May 2012. The goal of the project is to develop statistics system needed for energy balances according to the EU standards.

Energy Efficiency in Public Buildings - KfW loan to be implemented December 2010-2012. The project builds on successful experiences from the World Bank project (MEEP) and improves the EE reconstruction process to include the “turnkey” procedure.

3.7 Lessons learned

Most of the lessons learned are derived from current and completed projects, either financed from donor’s assistance, or from loans disbursed by international financing institutions:

- necessity to better target project proposals and correspondingly project objective and purpose, with focus on the evaluation of maturity and feasibility of projects;
- include all relevant stakeholders in the process of preparation and development of project design so as to ensure good cooperation during the realization of the project;
- previous experience showed that having a technical assistance project on specific issue provides additional push to introduce changes in that area;
- avoid potential overlapping of the project by ensuring better donors' and stakeholders' coordination;
- make sure all the necessary data and surveys are conveyed at the beginning of the project in order to be able to statistically monitor the influence of project activities;
- make sure capacity building has a specific and measurable purpose;
- ensure political will and preparation and information of relevant institutions whose cooperation will be necessary in order to ensure acceptable dynamic of processing of documents developed by the project;
- ensure sufficient administrative capacity and expertise in the development and implementation of sustainable, results-oriented projects in order to optimize the absorption of available pre-accession funds;
- wherever possible, explore opportunities for ownership of the project by the beneficiary, as it is the case with World Bank MEEP project, IPA 2007 EnCT-TA project and the like.

4. Indicative Budget (amounts in €)

The project is financed through one service contract from EU and one contract for National

		<u>SOURCES OF FUNDING</u>											
	<u>TOTAL COST</u>	<u>EU CONTRIBUTION</u>				<u>NATIONAL PUBLIC CONTRIBUTION</u>					<u>PRIVATE</u>		
<u>Activities</u>		<u>Total</u>	<u>% *</u>	<u>IB</u>	<u>I N V</u>	<u>Total</u>	<u>% *</u>	<u>Central</u>	<u>Regional</u>	<u>IFIs</u>	<u>Total</u>	<u>% *</u>	
<u>EU service contract</u>	<u>800,000</u>	<u>800,000</u>	<u>100</u>	<u>X</u>									
<u>National service contract</u>						<u>100,000</u>	<u>100</u>	<u>100,000</u>					
<u>TOTAL</u>	<u>900,000</u>	<u>800,000</u>	<u>89</u>	<u>X</u>		<u>100,000</u>	<u>11</u>	<u>100,000</u>					

* expressed in % of the Total cost funds.

5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
EU Contract	Q1 2012	Q3 2012	Q3 2014
National Contract	Q2 2013	Q3 2013	Q3 2014

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

The project will take into account gender equal opportunities when implementing the project and developing sustainable energy use. The project managers will ensure that there is no discrimination and equal opportunities are provided irrespectively of gender. The same applies for capacity building, awareness raising and monitoring actions foreseen in the project.

Equal opportunity principles and practices in ensuring equitable gender participation in the project will be guaranteed, particularly as regards to selection of trainers and trainees for the training programme, where a balanced distribution of positions/places will be sought.

6.2 Environment

This project does not have activities which directly affect the environment, but is indirectly influencing it positively through changes in energy use and behavior of citizens towards more sustainable and environmentally friendly development of energy sector.

However, in a more general sense, the initial national communication on climate change of Montenegro to the UNFCCC⁸ it is clearly stated that highest emission of CO₂, 52.8 % of total emissions in 1990 were from transformation of energy sub-sector of energy sector and 15.2 % of total emissions from transport sector, which mainly consists of road transport. Through mitigating climate change by empowering sustainable energy use in transport, through energy efficiency measures and uses of renewable energy sources and creating an ambient for development of high efficient cogeneration, this project is directly influencing the most critical sectors from emissions point of view in Montenegro. Moreover improvement of the regulatory and institutional framework will also provide opportunities for promotion of carbon policies and implementation of CDM projects.

6.3 Minorities

Through implementation of the project, in various activities such as involvement of public during surveys, nationwide studies and capacity building of administrative workers the project managers will make sure that equal opportunities are available for all involved regardless of their ethnic or other background.

⁸ The initial national communication on climate change of Montenegro to the UNFCCC (<http://www.unfccc.me/doc/INC-ENG.pdf>)

ANNEXES

- 1- Log frame in Standard Format
 - 2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
 - 3 - Reference to laws, regulations and strategic documents:
 - Reference list of relevant laws and regulations
 - Reference to AP /NPAA / EP / SAA
 - Reference to MIPD
 - Reference to National Development Plan
 - Reference to national / sector investment plans
 - 4- Details per EU funded contract (*) where applicable:
 - For *TA contracts*: account of tasks expected from the contractor
 - For *twinning covenants*: account of tasks expected from the team leader, resident twinning advisor and short term experts
 - For *grants schemes*: account of components of the schemes
 - For *investment contracts*: reference list of feasibility study as well as technical specifications and cost price schedule + section to be filled in on investment criteria (**)
 - For *works contracts*: reference list of feasibility study for the *constructing works* part of the contract as well as a section on investment criteria (**); account of services to be carried out for the *service part* of the contract
- (*) non standard aspects (in case of derogation to PRAG) also to be specified
- (**) section on investment criteria (applicable to all infrastructure contracts and constructing works):
- Rate of return
 - Co financing
 - compliance with state aids provisions
 - Ownership of assets (current and after project completion)

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR Project Fiche	Programme name and number:	
Developing sustainable energy use	Contracting period expires: Three years after conclusion of the Financial Agreement	Disbursement period expires: One year after the final date for the execution of contracts
	Total budget : 900.000	IPA budget: 800.000

Overall objective:	Objectively verifiable indicators:	Sources of Verification:	Assumptions:
Contribute to the further energy reforms in Montenegro in order to comply with obligations from the energy acquis	<ul style="list-style-type: none"> Increase in convergence toward EU energy 2020 targets of 2% from the level at the beginning of the project by end-project date and by an average 1% per annum over the following 3 years from the end-project level 	<ul style="list-style-type: none"> National energy statistics from MONSTAT and Annual energy balances Project Progress Reports (Biannual and Final), Monitoring and Evaluation Reports 	
Project purpose:	Objectively verifiable indicators:	Sources of Verification:	Assumptions:

<p>Develop and enforce relevant regulatory framework in order to increase sustainable energy use, especially in transport sector</p>	<ul style="list-style-type: none"> • 20 % increase of general public aware of obligations regarding energy use in transport sector by the end of the project • 10% increase of general public ready to implement measures of sustainable energy use by 2015 • Renewable energy consumption in transport increased at least 1 % by 2015⁹ 	<ul style="list-style-type: none"> • Final awareness raising survey on general public • Final awareness raising survey on general public and project report and records • National statistics on energy consumption and specifically in transport sector (MONSTAT) 	<ul style="list-style-type: none"> • No major changes in EU energy policy • Parliament adopting the developed legislation in due time • Government commitment and readiness to implement legislation • Consumers ready and interested to implement legislation • Implementing structures equipped to enforce legislation
<p>Results:</p>	<p>Objectively verifiable indicators:</p>	<p>Sources of Verification:</p>	<p>Assumptions:</p>
<p><u>Sustainable energy use in transport sector</u></p> <p>1. RES and EE potential assessed and Action plan with top priority measures for sustainable use of energy in transport sector prepared</p>	<p>Sustainable energy use in transport sector</p> <ul style="list-style-type: none"> • 3 studies completed by the end of second quarter from project start and an Action plan developed by the end of the fifth quarter from project start and adopted by the end of the sixth quarter from the start of the project • Guidelines and top priority measures 	<p>Sustainable energy use in transport sector</p> <ul style="list-style-type: none"> • Project records and reports 	<ul style="list-style-type: none"> • Stability of administrative structures • Cooperation with other beneficiaries • Parliamentary programme includes the legislation on energy efficiency and

⁹ Specific % increase should be revised based on the initial studies of potential at the Inception phase of the project

<p>2. Developed EE and RES regulatory framework and reviewed legislation for energy use in transport sector</p> <p>3. Statistical monitoring and reporting system for energy consumption in transport sector reviewed and operating including update of necessary software</p> <p>4. Energy management monitoring schemes for transport sector developed and implementation started</p> <p><u>Sustainable energy use in other areas of energy sector</u></p>	<p>known to key stakeholders by the end of the seventh quarter from the start of the project</p> <ul style="list-style-type: none"> • Relevant legal acts developed and ready for adoption by the end of the project • Level of compliance of statistical and monitoring system with EUROSTAT checked and suggestions given by the seventh quarter from the start of the project • 25 people capable of overseeing and reporting energy use by the end of the project <p><u>Sustainable energy use in other areas of energy sector</u></p>	<ul style="list-style-type: none"> • Project records (minutes from dissemination meetings) • Project reports and parliamentary database • Statistics on energy use and Project reports • Check of format of database and methodology used for data collection 	<p>renewable energy sources</p> <ul style="list-style-type: none"> • Administration motivated to participate in trainings
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<p>5. Undertake a study on possible economic and strategic solutions for crude oil and oil products stocks</p> <p>6. Undertake a study for potential of use of high efficiency cogeneration and give guidelines for development</p> <p>7. Policy advise on ongoing and future changes needed for sustainable use of energy</p> <p><u>Capacity building and awareness raising on sustainable energy use</u></p> <p>8. National administration (relevant</p>	<ul style="list-style-type: none"> • Study completed and delivered by the end of the forth quarter from the start of the project • High efficiency cogeneration nationwide study report delivered by the end of the third quarter from the beginning of the project and action plan developed by the end of the sixth quarter from the project start and adopted and guidelines known to key stakeholders by the end of the project • Continuous policy advise and additional needed guidelines given continuously throughout the period of the project <p><u>Capacity building and awareness raising on sustainable energy use</u></p> <ul style="list-style-type: none"> • 50 people trained and familiar with 		
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<p>ministries, national agencies, offices and administrative workers from local governments) trained for further implementation and compliance with EU energy policy</p> <p>9. Awareness raising surveys conducted, data analyzed and interpreted</p>	<p>EU energy policy and obligations for Montenegro by the end of the Project</p> <ul style="list-style-type: none"> • 1 baseline general public awareness raising survey conducted at the beginning of the project and one final general public awareness raising survey conducted at the end of project 		
<p>Activities:</p>	<p>Means:</p>	<p>Costs:</p>	<p>Assumptions:</p>
<p><u>Sustainable energy use in transport sector</u></p> <p>1. Develop studies to assess RES and EE potential and develop Action plan with top priority measures for sustainable use if energy in transport sector</p> <ul style="list-style-type: none"> • Undertake studies to assess potential RES and EE for sustainable use if energy in transport sector <ul style="list-style-type: none"> - Undertake a study on biofuels potential and secondary biofuels production potential in Montenegro - Undertake a study on 	<ul style="list-style-type: none"> • TA contract – EU Financing • Parallel national co-financing of Result 1 with 11 % of total budget 	<ul style="list-style-type: none"> • 89 % of total costs – 800.000 € • 11 % of total costs - 100.000 € 	<ul style="list-style-type: none"> • Availability of energy statistics on fuel consumption in transport sector • Administrative capacity stay stable

<p>possibility of introduction of electricity from renewable energy sources in transport sector</p> <ul style="list-style-type: none">- Undertake a study on energy efficiency potentials in transport sector <ul style="list-style-type: none">• Develop Action plan for RES and EE in transport<ul style="list-style-type: none">- Develop Action plan for introducing the renewable energy sources and energy efficiency measures into a transport- Dissemination of information about the new energy efficiency technology in vehicles and the transport sector as well as about use of existing and used vehicles that can take advantage of renewable energy sources <p>2. Develop EE and RES regulatory framework and review legislation of energy use in transport sector</p> <ul style="list-style-type: none">• Finalize and give for adoption law on renewable energy sources in transport sector.			
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<ul style="list-style-type: none">• Develop regulatory framework regarding renewable energy sources and energy efficiency in transport sector that would identify the top priority measures that need to be implemented <p>3. Review existing and make operational statistical monitoring and reporting system for energy consumption in transport sector</p> <ul style="list-style-type: none">• Use software to monitor quality, use and the production of biofuels so that it complies with the regulatory framework• Use national energy database to monitor energy consumption with special focus on transport sector according to the EUROSTAT <p>4. Further improvement of the existing information system to accommodate energy management and monitoring of energy use with special focus on transport</p> <p><u>Sustainable energy use in other areas of energy sector</u></p> <p>5. Develop a study on possible economic and strategic solutions for crude oil and oil products stock</p>			
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<p>6. Develop a study on the potential of high efficiency use in Montenegro and develop action plan for development and use of high-efficiency cogeneration</p> <p>7. Give advise to Ministry of Economy for further improvement in energy regulation and requirements</p> <p><u>Capacity building and awareness raising on sustainable energy use</u></p> <p>8. Deliver trainings and information to national administration including administrative workers from relevant ministries, governmental bodies and local governments</p> <p>9. Prepare, develop and implement baseline and final awareness surveys, including the comparison of baseline and final data, with focus on positive trends from the analysis of final data</p>			
			<p>Preconditions:</p> <ul style="list-style-type: none"> • Draft Law on energy use in transport prepared • National funds available for co-financing of the project • Letter of agreement of

			cooperation among ministries responsible for energy, transport and environment
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ANNEX II: amounts (in million €) Contracted and disbursed by quarter for the project

Contracted	2012		2013				2014				
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Service contract (IPA)	0.8										
Cumulated	0.8										
Disbursed											
Service contract (IPA)		0.32		0.13		0.13		0.14		0.08	
Cumulated		0.32		0.45		0.58		0.72		0.8	

ANNEX III - Reference to laws, regulations and strategic documents:

III. 1 Reference list of relevant laws and regulations

Laws:

Law on Energy (OG M NO. 28/2010)

Law on Energy Efficiency OG M No. 29/2010)

Law on Environment (OG RM No.48/2008)

Law on Nature protection (OG RM No.51/2008)

Law on Environmental Impact Assessment (OG RM No. 80/2005)

Law on Strategic Environmental Assessment (OG RM No. 80/2005)

Law on Integrated Pollution Prevention Control (OG RM No. 80/2005)

Law on air quality (OG RM No. 48/2007)

Law on Environmental Noise (OG RM No. 45/2006)

Law on Public Procurement (OG RM No. 46/2006)

Law on Inspection Control (OG RM No. 39/2003)

Law on Local Self-Government (OG RM No. 42/2003)

Law on Spatial Planning and Development (OG M No. 28/2005)

Law on Free Access to Information (OG RM No. 68/2005)

Law on Roads (OG RM NO. 42/2004)

III. 2 Reference to AP /NPAA / EP / SAA

Council Decision of 22 January 2007 on the principles, priorities and conditions contained in the **European Partnership** with Montenegro (2007/49/EC)

3.1. Short-Term Priorities / Sectoral policies / Energy

- Ratify and continue implementing the commitments undertaken in the framework of the signed Energy Community Treaty.
- Complete and implement the energy development strategy, and the energy efficiency strategy; strengthen the administrative capacity of the Ministry of Economy in the field of energy.

- Put in place a regulatory body and adopt appropriate legislation in the field of nuclear safety and radiation protection.
- Ensure law enforcement and transparency in the energy market.

3.2. Medium-Term Priorities / Sectoral policies / Energy

- Adopt and implement a long term strategy for an environmentally sustainable energy policy.
- Continue to implement regional and international commitments in this area in view of establishing a competitive regional energy market.
- Become party to international nuclear safety conventions to which Euratom is already a Contracting Party.

Stabilization and Association Agreement between the European Communities and their Member States, of the one part, and the Republic of Montenegro, of the other part. [Council and Commission Decision of 29 March 2010 / OJ L 108, 29.4.2010]

Article 109

Energy

Cooperation shall focus on priority areas related to the Community acquis in the field of energy. It shall be based on the Energy Community Treaty, and it shall be developed with a view to the gradual integration of Montenegro into Europe's energy markets. Cooperation may include in particular:

- (a) the formulation and planning of energy policy, including modernization of infrastructure, improvement and diversification of supply and improvement of access to the energy market, including facilitation of transit, transmission and distribution and restoration of electricity interconnections of regional importance with neighboring countries;
- (b) the promotion of energy saving, energy efficiency, renewable energy and studying the environmental impact of energy production and consumption;
- (c) the formulation of framework conditions for restructuring of energy companies and cooperation between undertakings in this sector.

III. 3 Reference to MIPD 2011-2013

The following priorities for IPA support over the period covered by this MIPD have been grouped in three areas: (1) support to the key priorities of the Opinion; (2) the opening of three new components; (3) support to the *acquis*.

(3) A priority for IPA is to support Montenegro's efforts through significant strengthening of administrative and implementation capacities in the areas of the *acquis*. Indeed, IPA will concentrate on the outcomes of the Opinion highlighting that Montenegro should, (i) in the medium term, have the capacity to "comply with the requirements of the *acquis* in the following fields": taxation; enterprise and industrial policy; science and research; education and culture; customs union; financial and budgetary provisions; (ii) develop "additional efforts" in the following fields: freedom of movement for workers; right of establishment and freedom to provide services; free movement of capital; public procurement; company law; competition policy; financial services; information society and media (incl. electronic communications); intellectual property rights; transport policy; energy; economic and monetary policy; trans-European networks; consumer and health protection (incl. actions in public health¹⁰); (iii) carry out "considerable and sustained efforts" in: free movement of goods; intellectual property law; agriculture and rural development; food safety, veterinary and phyto-sanitary policy; fisheries; statistics; social policy and employment; regional policy and coordination of structural instruments; judiciary and fundamental rights; justice, freedom and security; financial control. Related to energy, as a member of the Energy Treaty Community, Montenegro is obliged to implement substantial parts of the *acquis* in energy, environment and competition. There are important shortcomings which will need to be addressed with financial support.

In the programming period 2011-2013, the Commission will thus focus its assistance on the following broad sectors:

1. Justice and home affairs
2. Public administration
3. Environment and Climate Change
4. Transport
5. Social development
6. Agriculture and rural development

Sector 2. Public Administration Objectives for EU support over next three years

In collaboration with other donors, IPA will provide institution building support including to the existing strategies, and in particular for the preparation of the required legislation, for the improvement of managing skills throughout the public administration

Sector 3. Environment and Climate Change for EU support over next three years

¹⁰ such as human substances, communicable diseases, tobacco control, cancer screening, mental health.

- ~ To protect Montenegro's water resources by improving water supply and integrated waste water management systems, and
- ~ To develop the waste management infrastructure in order to reduce the impact on the environment
- ~ To manage natural disasters' risks (floods prevention, fire fighting, emergency equipments)
- ~ To develop actions to mitigate and adapt to climate change.

Sector 4. Transport Objectives for EU support over next three years

The overall strategic objective is to promote environmentally friendly transport modes contributing to better accessibility and mobility within Montenegrin territory and ensuring good safety and efficiency standards.

ANNEX IV -Details per EU funded contract (*) where applicable:

This project will be realized through one EU Service contract for technical assistance, as well as one national service contract for technical assistance. National contract will be awarded via national procurement procedures. National co-financing will be used to complement the activities needed for Result 3 and 4 for sustainable energy use in transport sector:

- Assistance in the implementation of the identified top priority measures, and
- Review and update of the statistical monitoring and reporting system.

Part of the project using the EU funds will be implemented by a Consultant, selected through a restricted international procurement procedure. The project will comprise of 5 key experts:

- Team leader - expert for sustainable energy use
- 1 expert for transport
- 1 expert for statistics
- 1 expert for high efficiency cogeneration
- 1 expert for crude oil

For successful implementation of the project, Ministry of Economy will additionally, during implementation:

- Name key persons who will directly work with experts
- Ensure the participation of all relevant stake holders and end beneficiaries in all activities
- Provide all necessary information and materials to experts so as to ensure timely implementation of the project
- Provide administrative, technical and organizational support for the implementation of activities of the project.

The project implementation will be overseen by a Steering committee (SC) to be established during the inception phase. It will include representatives from the European Commission Delegation to Montenegro, Ministry of Economy (Sector for Energy and Sector for Energy Efficiency), Ministry of Transport and Maritime Affairs, Ministry of Sustainable Development and Tourism, and MONSTAT.