

**Government of Montenegro**

**Ministry of Economy**

## **Questionnaire**

Information requested by the European Commission to the Government of Montenegro for the preparation of the Opinion on the application of Montenegro for membership of the European Union

– ADDITIONAL QUESTIONS –

### **15 Energy**

Minister:

**Branko Vujovic**



**TABLE OF CONTENTS**

CHAPTERS OF THE ACQUIS – ABILITY TO ASSUME THE OBLIGATIONS OF MEMBERSHIP..	5
15: Energy .....	6
I. GENERAL .....	7
Development of a regulatory framework for upstream petroleum activities in Montenegro.....	14
II. SECURITY OF SUPPLY .....	20
III. INTERNAL ENERGY MARKET .....	22
IV. STATE AID .....	30
V. RENEWABLE ENERGY.....	31
VI. ENERGY EFFICIENCY.....	38
VII. NUCLEAR ENERGY .....	45
VIII. OTHER NUCLEAR ISSUES (INCLUDING RADIATION PROTECTION).....	46



**CHAPTERS OF THE ACQUIS – ABILITY TO ASSUME THE OBLIGATIONS OF MEMBERSHIP**

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**15: Energy**

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## **I. GENERAL**

### **1. (Ref to Q. 1): Please specify the methodology used for collecting statistical data.**

Energy statistics given in response to Q. 1 was produced in accordance with EUROSTAT compatible methodology and structure, which is given in the publication on European Energy and Transport – Trends to 2030. Since Montenegro does not produce energy statistics, which are compliant with EUROSTAT methodology, the data were collected from various sources:

- Data for 2000 and 2004 were obtained in the study on the professional basis for the Energy Development Strategy of Montenegro by 2025 (Book A: Historic Energy Balances, July 2006);
- Data for 2006 and 2008 were obtained from the Statistical Office of Montenegro (pilot project for the preparation of energy balances, which are in accordance with the EUROSTAT methodology) and Montenegrin Ministry of Economy (Energy Balance of Montenegro);
- Data for 2009 were obtained in the Ministry of Economy from 2010 Energy Balance of Montenegro and they represent an achievement assessment for 2009.

Forecasts for the period 2010 – 2025 are based on the data in the Energy Development Strategy of Montenegro by 2025 and Professional Basis of the said Strategy (Book E: Long-term Plan of Energy Supply of Montenegro – Energy Balances to 2025 (July 2006)).

### **2. (Ref. Q. 2)**

**- Please explain the methodology of calculation of the coal prices. How are costs of production reflected in the coal prices?**

In line with the Energy Law, the coal price for electricity generation is set according to the Rules on the method for setting the coal price for electricity generation passed by the Energy Regulatory Agency in October 2005. The rules expired on 8 July 2008, also in accordance with the said law. At the moment, buying and selling of coal for electricity generation are carried out at the last price set by the Agency (for the period 1 January – 8 July 2008), although this is not compulsory since the Agency has no jurisdiction over this price.

Draft new Energy Law, due for adoption in April 2010, will determine the coal price for electricity generation for one-year period valid after the entry into force of the law, in line with the rules defined by the Agency within 30 days after the entry into force of the law.

We assume that the future rules will be similar to the Rules from 2005. It is certain that for now the values of elements for calculation of return on investment will be elaborated in detail. Breakdown of the said document, with the coal price calculation methodology and the way in which the production costs affect the coal price, is given in the text below.

Rules on the method for setting the coal price for electricity generation, which were adopted by the Energy Regulatory Agency in October 2005, defined the methodology for setting the regulatory allowed income of Rudnik uglja AD Pljevlja based on the approved justifiable business expenses, cost of depreciation, and approved return on investment, as well as procedure for setting the coal price for electricity generation.

Allowed income should cover the total justifiable business expenses, cost of depreciation, and approved return on investment. Allowed income of the coal producer is approved by the Agency upon concluded audit of the total justifiable business expenses, cost of depreciation and return on investment.

Justifiable business expenses include techno-economic justifiable and acceptable business expenses shown in accordance with the business records of the coal producer for the fiscal year preceding the year in which the coal price is set, and planned data based on the business efficiency enhancement program for the current year and period for which the price is set. The costs are shown based on the appropriate accounting documentation which is kept by the coal producer in line with the valid accounting regulation in Montenegro.

### Calculation of justifiable business expenses

Justifiable business expenses (Ej) are calculated as follows:

$$E_j = C_s + C_f + C_{lr} + C_{exp} + C_{env} + C_e + C_{ex} + C_{con} + C_{tps} + C_b + C_{tax} + C_o$$

Where:

C<sub>s</sub> – annual costs of salaries and other personal income of employees in the period pertaining to the request and equals to:

$$C_s = C_s(t-1) + C_s(t-1) \times (X_i - X) / 100$$

Where:

C<sub>s</sub> (t-1) – cost of salaries and other personal income of employees in the year directly preceding the year of request for price approval,

X<sub>i</sub> – inflation index in the year preceding the year directly before submitting the request for price approval, published by the Statistical Office of Montenegro,

X – index of efficiency enhancement approved by the Agency following a thorough analysis of all circumstances relative to the performance of the coal producer, taking into account margin for cost reduction and efficiency factor suggested by the producer in his request;

C<sub>f</sub> – cost of fuel and lubricants

C<sub>lr</sub> – cost of land recultivation

C<sub>exp</sub> – cost of expropriation

C<sub>env</sub> – cost of environmental protection

C<sub>e</sub> – cost of electricity

C<sub>ex</sub> – cost of explosive and explosive devices

C<sub>sp</sub> – cost of spare parts and material

C<sub>con</sub> – cost of concession remuneration

C<sub>tps</sub> – cost of third party services

C<sub>b</sub> – cost of current banking, telecommunication, postal and insurance services

C<sub>tax</sub> – cost of property tax and mandatory contributions

C<sub>o</sub> – other costs.

### Calculation of depreciation

In the approved period of regulatory allowed income, depreciation cost is calculated based on the real estimate of the property's value which is in the function of core activity, useful lifespan, selection of the preferred depreciation model and real depreciation rate.

When setting the coal price for electricity generation, the Agency also takes into account investment plan proposed by the coal producer. Plan for each separate investment comprises technical description, techno-economic feasibility analysis, financial plan, and depreciation plan.

Value of property, which is in the function of core activity, means the property which was taken into account in the previous approval of coal price, and property earned in accordance with the investment plan for the previous period approved by the Agency. Value of property may also include property earned outside of the approved investment plan, with the prior consent of the Agency.

Depreciation is not changed within the approved period of the valid coal price.

Depreciation cost is approved by the Agency.

### Calculation of return on investment

Annual return on net investment is proposed by the coal producer based on the value of property which in the function of core activity, taking into account the rate of weighted average cost of capital.

The Agency appropriately takes into account the achieved business efficiency of the coal producer when approving return on investment.

### Setting unit price of coal

Unit price of coal for electricity generation for the guaranteed lower calorific value of 9.211 kJ/kg (Cu) is expressed in Euro per tonne (€/t) and Euro per Giga Joule (€/GJ), and calculated by dividing total allowed income, reduced by income from the sale of coal to other consumers, by total planned delivery of coal for electricity generation for the period for which the price is established, according to the following formula:

$$C_u = (E_j + D + R_{inv} - P_{inc}) : Q_{del}$$

Where:

E<sub>j</sub> – justifiable business expenses

D – cost of depreciation

R<sub>inv</sub> – return on investment

P<sub>inc</sub> – planned income from the sale of coal to other consumers

Q<sub>del</sub> – total planned delivery of coal for electricity generation

The price of coal of calorific value greater or lower than the guaranteed lower calorific value are set depending on the achieved calorific value, which is defined in the coal delivery contract concluded between electricity generator and coal producer.

### - Please provide further information on the perspectives per sub-sector for privatisation. Please elaborate on the privatisation of AD Prenos/Transmission.

With the aim of creating the conditions for successful business operations and increasing competitiveness of energy undertakings, as well as investing in the revitalisation of existing and construction of new power facilities and reducing their negative impact on the environment, a series of activities for privatisation of Montenegrin energy undertakings has been completed in the previous period. As a result of these activities, the present situation in the energy sector of Montenegro in terms of the privatisation is as follows:

- **Jugopetrol AD Kotor** (JSC for exploration, exploitation, and trade of oil and petroleum products) was privatised in 2002 making Hellenic Petroleum International AG the owner of 54.53% of the company's shares.
- **Rudnik uglja AD Pljevlja (Coal Mine)** (JSC for lignite exploitation) has approximately 31.1% of state-owned shares and about 68.9% of shares in private ownership i.e. shares owned by private, legal and natural national and foreign persons.
- **Brown Coal Mine "Ivangrad" AD Berane** (JSC for exploitation of brown coal) was privatised/sold to a foreign investor in mid-September 2007. The concession agreement with the foreign investor has been concluded for 20 years.
- **Electric Power Holding Company of Montenegro AD Nikšić** (holding company for electricity generation, distribution and supply), following the project of partial privatisation and capital increase which was implemented in 2009, now has 43.7073% of the shares owned by the Italian company A2A S.p.A. and 55% of state-owned shares.

**Prenos AD Podgorica** is a company that was separated from the Electric Power Holding Company of Montenegro Nikšić in late March 2009. This joint stock company has begun to operate as an independent legal person in April 2009. Prenos AD deals with transmission of electricity over transmission network, management of power transmission system, and maintenance and development of transmission network in Montenegro. The role of market operator is temporarily being carried out within Prenos AD. About 70% of the shares of Transmission AD Podgorica is now

owned by the state. It is planned to carry out capital increase of Prenos AD so that the company continues to be in the majority ownership of the state with at least 55% of the shares. Capital increase will be carried out by a company willing to invest in the development of the power transmission system of Montenegro and its connection with the neighbouring power systems.

**Montenegro Bonus DOO Cetinje** is a company dealing with the wholesale of petroleum products. Montenegro Bonus DOO Cetinje is 100% state-owned company. Privatisation of the company is envisaged by the Decision on the 2010 Privatisation Plan adopted by the Government on 17 December 2009.

**3. (Ref to Q. 3): Please specify when the Energy Law and the Energy Efficiency Law will be adopted, and send to the Commission a version of the law as adopted (since the date suggested, December 2009, is clearly out of date).**

The Government of Montenegro adopted draft Energy Law at its sessions held on 24 and 29 December 2009, and draft Energy Efficiency Law at its session held on 11 February 2010. The procedure for adopting the draft laws by the Montenegrin Parliament is underway. Adoption of both laws is expected to take place during April 2010. Following the adoption, the laws will be promptly sent to the European Commission.

**4. (Ref to Q. 6):**

**- Please provide up to date figures of staffing levels at both the Energy Sector of the Ministry of Economy and the Energy Efficiency Unit of the Ministry of Economy. Both of these are severely understaffed in comparison with the number of positions envisaged, what is the timetable to increase staffing levels?**

Staffing levels at the Energy Sector and Energy Efficiency Unit of the Ministry of Economy have not changed compared to November 2009. The Ministry of Economy has taken the necessary steps to hire new professional staff in the Energy Sector and Energy Efficiency Unit. The ongoing procedure envisages, inter alia, advertising vacancies for employment of required staff to fill the positions foreseen by the Rulebook on Internal Organisation and Systematisation of the Ministry of Economy, which was adopted by the Government of Montenegro in October 2009.

**- Please provide similar figures for the Energy Regulatory Agency: what is the breakdown of positions envisaged and persons filling these positions?**

The valid systematisation of work positions in the Energy Regulatory Agency envisages 17 different positions with a total of 22 staff members. At the moment, the Agency hires 19 employees and one trainee. Vacancies are as follows:

- Engineer-analysts, one position;
- Economist-analysts, one position;
- Lawyer-analyst, one position.

5. (Ref to Q. 7):

- Please provide more detailed information on other source of financing for energy sub-sectors. (e.g. no mention of IPA 2007 project, WB loan for EE in schools and hospitals, future KfW loan, submarine cable line to Italy, 400 kV line Pljevlja Tivat.)

The tables below provide details on the sources of financing of the energy sector projects, specifically, projects that were completed in 2009, ongoing and planned projects.

Table 1: Completed (in 2009-2010) and ongoing donor supported projects

DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
EBRD	Western Balkans Sustainable Energy Direct Financing Facility - Institutional Capacity Building	ME	TA Ongoing	September 2009 - March 2010	<p>Building on existing knowledge, and in close co-operation and co-ordination with the country government and other relevant organisations, the objectives of this assignment are to:</p> <ul style="list-style-type: none"> <li>Collect information and provide up-to date recommendations in liaison with other ongoing supporting activities in the area of renewable energy in Montenegro (e.g. Energy Community Secretariat, UNDP, GTZ, USAID);</li> <li>Identify new and/or refine existing mechanisms, procedures and standards in the area of renewable energy in Montenegro</li> </ul> <p>Consultant: ECA</p>
EU projects funded	Development and private sector participation in Pljevlja thermal power complex	Ministry of Economy (ME) / Sector of Mining and Geological Explorations (SMGE)	EUR 0.5m (grant) Completed	January–September 2009	<p>The overall objective is to assist the Government of Montenegro to achieve a key objective of it's energy strategy by attracting the necessary investment in additional coal fired power generating capacity at Pljevlja (and associated coal mine fields, including Maoce); and to assist the Government to make key decisions concerning the structure of the transaction to attract this investment.</p> <p>Task 1: Assessment of exploitable coal reserves for the Pljevlja and Maoce Basins</p> <ul style="list-style-type: none"> <li>Assessment of exploitable coal reserves for the Pljevlja basin</li> <li>Assessment of exploitable reserves and estimated development/ production costs for the Maoce Basin</li> </ul> <p>Task 2: Coal Demand and Analysis of the Existing Plant</p> <ul style="list-style-type: none"> <li>Block 1 of the TPP Pljevlja</li> <li>Coal demand</li> </ul> <p>Task 3: Cement production/other minerals</p> <p>Task 4: Transmission Analysis</p> <ul style="list-style-type: none"> <li>Transmission system assessment</li> <li>Unit Maximum Size Assessment</li> </ul> <p>Task 5 Economic and Financial feasibility of Pljevlja Block 1 and 2 and Maoce Mine</p> <ul style="list-style-type: none"> <li>Development of economic/ financial model</li> <li>Economic/ financial viability of Pljevlja Units 1 and 2 and/or Maoce</li> </ul> <p>Task 6: Structuring the Transaction</p>
EU projects Funded	Assistance in mplementation of electricity market opening and development of	Energy Regulatory Agency (ERA)	EUR 0.2m TA Completed	March 2008 – October 2009	<p>Assistance to Energy Regulatory Agency in implementation of regulations necessary for establishment of electricity market in Montenegro in compliance with provisions of Energy Community Treaty (Consultant: Exergia).</p>

## - Additional Questions -

DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
	privatisation strategy				
EU funded projects	IPA 2007: "Supporting the implementation of the Energy Community Treaty"	ME / Sector of Energy Efficiency (SEE), ERA, Prensos AD (TSO and MO)	EUR 1.5m TA Ongoing	February 2010 – July 2011	<p>Project aim is to develop energy sector policies that will ensure the implementation of commitments under the Energy Community Treaty, including the Regional Energy Market:</p> <ul style="list-style-type: none"> <li>• Support to the ME for policy and strategy development, and the monitoring of progress on implementing of the Energy Community Treaty (including Energy Efficiency Unit responsible for promoting energy efficiency and renewable energy).</li> <li>• Capacity building and support to the Energy Regulatory Agency in overseeing the establishment of the regional electricity market.</li> <li>• Specialised technical assistance to the EPCG, in particular to the unbundled transmission and market system operators.</li> </ul> <p>The tendering process has been finished and EXERGIA SA-Greece in consortium with KANTOR-Greece and Mercados-Spain have been selected as winner.</p>
GTZ (Germany)	GTZ ASE Project (Advisory Services to Energy Efficiency in Montenegro)	MfED/ME	EUR 1.5m (+ extra 2m) TA Ongoing	April 2008 – December 2012	<p>GTZ is providing technical assistance to the MfED/ME for improvement of energy efficiency in Montenegro. Project support includes assistance to the MfED/MEEU in implementation of the future NEEAP (National Energy Efficiency Action Plan) 2009-2011 One of the main activities are: development of relevant legal norms and regulations in the field of energy efficiency and use of renewable energy sources, strengthening of the Montenegrin Energy Efficiency Unit , development of Statistical and Information System for energy efficiency, promotion of energy audits in Montenegro, promotion of energy efficiency in the public and residential sector, education and training of national professional staff, delivery of goods and contributions for the implementation of pilot projects etc.</p>
IMELS (Italy)	Technical assistance aimed at implementation of the Kyoto Protocol	MfED/ME (MoTEP/MfSPE)	TA Ongoing	November 2004 – not defined	<ul style="list-style-type: none"> <li>• GHG National Inventories for 1990 and 2003 are completed.</li> <li>• National Communication in response of UNFCCC completed</li> <li>• Portfolio of CDM projects/opportunities in Montenegro related to GHG emissions reduction. It represents an assessment of the projects' potential in the fields of renewable energy sources, energy efficiency, fuel switch, waste management and forestry management.</li> <li>• Study on establishment of institutional framework to support the development of market for solar thermal water heating systems in households in Montenegro. On this base, UNEP would start to implement a project worth EUR 1 million in 2010 (also see under UNEP)</li> </ul>
IMELS (Italy)	CDM pilot projects Feasibility Studies	MfED/ME (MoTEP/MfSPE)	TA Ongoing	September 2006 – not defined	<p>Four Feasibility Studies for CDM pilot projects are developed, for the realization of:</p> <ul style="list-style-type: none"> <li>• two Small Hydro Power Plants (Krupac and Slano), near the city of Niksic;</li> <li>• power plant in Berane fed with wood biomass/residues;</li> <li>• landfill gas recovery for energy production (Podgorica);</li> </ul> <p>These studies are aimed at providing the Italian and Montenegrin Ministries, the relevant international financial institutions and the potential investors with a preliminary evaluation of the technical-economical feasibility of the four projects.</p>
KfW (Germany)	Advisory Services for the Implementation of the Energy Strategy	MfED	TA Completed	March 2008 – May 2009	<p>This technical assistance is aimed at providing in-house support to the Minister (MfED) and his cabinet in (i) implementation of energy sector reforms in Montenegro, (ii) ad-hoc advice in priority areas identified, and (iii) support to Energy Strategy Project by provision of QA/QC in preparation of the Action Plan (2008-2012). The Project has also a capacity building component to the Sector of Energy, Mining and Geology of MfED.</p>

## - Additional Questions -

DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
KfW (Germany)	Update/ Upgrade of the Energy Industries Act of Montenegro	MfED	TA Completed	November 2008 – March 2009	This technical assistance is aimed at drafting new Law on Energy for Montenegro including transposition of major EU directives for electricity (2003/54/EC), gas (2003/55/EC), renewable energy sources (2001/77/EC), security of supply for electricity and gas (2005/89/EC and 2004/67/EC), cogeneration (2004/8/EC) and 90 days strategic oil reserves (98/93/EC).
KfW (Germany)	Renewable Energies and Energy Efficiency Facility Montenegro	SMEDA – Small and Medium Enterprise Development Agency	EUR 19m credit line and EUR 0.5m TA Ongoing	Oct. 2006 (ongoing, revolving fund)	Objective of the facility is to contribute to the improvement of the economic and social development as well as the protection of the environment and the resources. Credit line to local commercial banks for the extension of loans to SME and other investors to finance energy efficiency and renewable energy projects. Thirteen projects were realized by the end of 2008, with total amount of EUR 3 mill. In 2008 credit line has been increased with additional EUR 19 mil. The credit line is given through the local banks for SME energy efficiency projects.
KfW (Germany)	Rehabilitation of HPP Perucica (Phase I)	EPCG	Grant: EUR 4.46m for investments + EUR 0.54m for accompanying measures Loan: EUR 3.58m Total : EUR 8.58m Completed	Dec. 2003 – 2009	The purpose of the Project is to contribute to a reliable, cost-efficient and ecologically compatible energy supply in Montenegro. Rehabilitation and installation of (among other things) excitation and electrical braking system, auxiliary power supply, auxiliary power supply control system, process information system and technical information system of four units: Engineering and project supervision by a consultant company. The accompanying measures will focus on the current capacity limitations of the plant and will also serve for the preparation of the second phase of the rehabilitation. The first four units of the HPP Perucica (45 MVA each) will be rehabilitated in Phase I. There is a financing agreement between KfW and the Government of CG, with additional "onlading" agreement between the Government and EPCG.
KfW (Germany)	Construction and Operation of 400 kV Transmission Line Tirana-Podgorica	EPCG (Prenos AD) and KESH (Albanian Power Company)	Loan (Total for Albania and Montenegro): EUR 43.9m. Ongoing	2004 – 2010	The objective is to contribute to the further economic development of the Republic of Albania as well as of the Republic of Montenegro. Measures: Construction of a 400 kV transmission line and substations in Podgorica and Elbasan. KfW is providing loan to KESH, which further extends part of the loan (EUR 11 mill. to EPCG under internal KESH-EPCG agreement.
KfW (Germany)	Extension/construction of the substations Ribarevine and Podgorica 5	EPCG (Prenos AD)	Grant: EUR 3.1m Loan: EUR 5.4m + EUR 5.0m = EUR 10.4m Ongoing	2007-2010	Enforcement of the electrical network in Montenegro and improvement of connections with regional energy system. Measures: Construction of new substation Podgorica 5 in very important industrial part of Podgorica, which will unburden the existing substations and improve the supply of the city. Extension of existing substation Ribarevine, which is very important for supplying the northern part of country. The first part (grant + loan) is under "mixed financing" scheme, while the last loan of EUR 5.0 mill. is under "interest-reduced" terms due to changed investment rating of Montenegro.
KfW (Germany)	Rehabilitation and modernisation of HPP Piva, Phase I	EPCG	Loan: EUR 16m Grant: EUR 1m for accompanying measures Ongoing	2007-2012	Improvement of the safety and reliability standard of HPP Piva in order to improve the overall stability of the energy system of Montenegro. Measures: Rehabilitation of the electrical, mechanical and civil equipment at the plant. "Interest reduced" loan conditions.
KfW (Germany)	Precipitators for TPP Pljevlja	EPCG	Loan: EUR 10m.	December 2008 - October 2009	The project is aimed at equipping the TPP Pljevlja with new electrostatic precipitators, by installation of which the emissions of particulates in flue gases will drop within the permitted

## - Additional Questions -

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			Completed		levels in line with EU Directives for such type and age of plants. The loan conditions will be the "interest reduced" terms with 5 years grace period and 15 years of maturity.
KfW (Germany)	Program for the Promotion of Renewable Energies (Hydropower)	ME	Financial contribution up to EUR 0.4m Ongoing	May 2009 – To be defined	Preparation of the proposed "Program for the Promotion of Renewable Energies (Hydropower)"; Selected studies and supervisory activities, such as - Establishing of the data base for needs of the Strategic Environmental Impact Assessment preparation; - Supervision activities and professional monitoring of the preparation of the Strategic Environmental Impact Assessment; - Preparation of the Report: Analysis of distribution of the meteorological parameters in the catchment area of the River Morača and the change of climate elements after construction of the Morača hydropower plants; - Co-financing of the Preparation of the Detailed Spatial Plan for the area of multi-purpose water reservoirs on the Morača River; If necessary, other Expert Services still to be agreed between the Recipient and KfW.
KfW (Germany)	Advisory Services in Support of Implementation of Energy Sector Reforms	ME	EUR 0.3m (grant)	February 2010 – February 2012	Advisory Services shall comprise the following: - Assistance in implementation of Energy Development Strategy and of the Action Plan; - Assistance in promotion and implementation of energy sector reforms and in institutional strengthening of ME; - Assistance to ME in preparation of a tender dossier for concession in the Maoce Basin; - Support in Coordinated Auction Office related issues; - Ad-hoc advice to the Minister based on the current needs and demand.
Norway: Ministry of Foreign Affairs Implementing Agency: ENSI (in close cooperation with GTZ and Mechanical and Architecture Faculties in Montenegro)	Energy Efficiency in Montenegro	Ministry for Economic Development (MfED) / Ministry of Economy (ME)	TA Ongoing	Oct 2009 - May 2010	Capacity building programme on "Energy Auditing of Buildings", including: • Adjustment of the ENSI methods, tools and software for Energy Auditing of Buildings to meet Montenegrin conditions; • Training of specialists in applying the ENSI methods and tools through Energy Auditing of real building projects; • Preparation for further training of local specialists and education of university students.
Norway: Ministry of Foreign Affairs	Development of a regulatory framework for upstream petroleum activities in Montenegro	MfED/ME	EUR 0.3m TA Ongoing	January 2009 – To be defined	Project objective is to assist MfED/ME in its endeavours to achieve the level of primary, secondary legislation and model contracts in the upstream petroleum sector comparable with international / EU standards and best practice, ensuring capacity building amongst officials participating in such development process. Project includes two main tasks as follows: Task A: Completion of draft legislation with resource related fiscal elements (including royalties) for the upstream petroleum sector; Task B: Preparation of documentation required for inviting interested companies to conduct exploration or production activities, these may be concession based or a hybrid with the PSA/PSC concept.
Norway: Ministry of Foreign Affairs	SEA Study on the HPP Moraca project	Ministry for Spatial Planning and	EUR 0.15m Ongoing	January 2009 – April 2010	Standard SEA Study in connection with the HPP Moraca project, associated with development of a detailed spatial plan at the local level.

## - Additional Questions -

DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
		Environment (MfSPE)			
Spain	Feasibility Study and Technical Design for Energy Efficiency Measures for the Clinical Center Podgorica	ME, Ministry of Health	TA (donation) Ongoing	March 2009 -March 2011	Montenegro has applied for a grant from the Spanish Government to prepare feasibility study and technical design for energy efficiency measures for the Clinical Center in Podgorica, which is a large hospital complex with about 10 buildings. Elaboration of application is underway. Results of this project will be used as an input documentation for World Bank MEEP Project. Spanish firm was selected to perform Energy Audit and prepare Technical Design for the Clinical Center. Furthermore, the tender has been published for consultants to perform technical monitoring and evaluation of the Clinical Center.
UNDP / GEF	Power Sector Policy Reform to Promote Small Hydropower Plants Development in the Republic of Montenegro	MfED/ME, EPCG, Energy Regulatory Agency	Total Fund: US\$ 4.45m TA = US\$ 0.98m GEF + US\$ 0.04m UNDP (grant) + US\$ 1.59m Government (in-kind) + US\$ 1.19m EAR (grant) + US\$ 0.65m Norway (grant) Ongoing	June 2008 - May 2012	The project will support the Government in realizing its goal of 15 to 20 MW of new small generating capacity by the close of the project, instead of 2015 as declared by the Energy Strategy. <ul style="list-style-type: none"> <li>Hired consultants helped with the procedures related to the II tender for sHPP construction on 10 water streams, as well as with simplification of procedures regarding the civil permit issuance. UNDP also procured necessary equipment for HMZCG for the purpose of measuring and analyzing hydropotential on 8 chosen water streams</li> </ul>
UNDP	Climate Change-Initial National Communication (INC) under UNFCCC	Ministry of Tourism and Environmental Protection (MoTEP)/Ministryfor Spatial Planning and Environment (MfSPE)	US\$ 0.435m. Ongoing	May 2008 - May 2011	The project enables Montenegro to prepare the Initial National Communication to the UNFCCC. It includes measures such as planning and capacity building, institutional strengthening, training, public participation and targeted research in support to implementation of the UNFCCC principles and objectives.
UNEP	The Balkan Renewable Energy Programme (BALREP)	ME, MfSPE	TA and a credit line (most likely to the banking sector)	To be defined	The objective of the BALREP in Montenegro is to accelerate and sustain the renewable energy market through the adoption of residential and/or collective solar water heating systems. Support for the BALREP finance component comes from IMELS. BALREP shall focus and seek to replicate the combinations of measures tested and implemented by the Mediterranean Renewable Energy Programme (MEDREP) to promote the deployment of solar energy in Morocco, Tunisia and Egypt. In December 2008 UNEP has announced request for proposals within the framework of BALREP. Proposals are sought for the evaluation of concepts for the implementation of financial mechanisms for the development of the residential and/or collective solar water heating systems market in Montenegro. The study will prepare the ground for the implementation of one or more financial schemes in partnership with identified Montenegrin partners. During 2009, consultants conducted market research and prepared the draft of the Feasibility

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DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
					study on financial mechanism for support to the development of the solar water heating installations in Montenegro. This study served as a green light to UNEP to start preparations for the practical implementation of the recommendations from the study during the year of 2010.
World Bank (hired consultants CEPA)	Different options for public-private partnership regarding future production of electrical energy in Montenegro	ME	TA Ongoing	December 2008 - March 2010	Different options for public-private partnership regarding future production of electrical energy in Montenegro, co-sponsored by World Bank and CEPA, through technical assistance and grant for the year 2009, regarding the field of renewable energy sources and energy. Expected results are the establishment of private partnerships regarding the production of electrical energy, overview of LIR frame, and options and directive for PPP in Montenegro. CEPA prepared the report, in February 2010, which will be used as the main document for concrete actions to be taken in the field of power generation PPP in Montenegro.
World Bank	Montenegro Energy Efficiency Project	ME, Ministry of Education and Science, Ministry of Health	EUR 6.5 mill. Loan Ongoing	January 2009 - December 2012	The objective of the Project is to improve energy efficiency performance in targeted public sector buildings with a view to developing a sustainable energy efficiency improvement program in the Borrower's public sector. The Project consists of the following parts: From the effectiveness date of the project (24.02.2009.), Project Coordinator was hired, tenders for 2 objects were published for reconstruction works, and corresponding companies selected, and tenders for works supervision, social monitoring and evaluation, and reconstruction works for 3rd object were published. For the year 2010, reconstruction of 11 objects is planned, as well as hiring of consultants for their supervision. Furthermore, GTZ conducted audits for the given objects, as well as hired consultants to perform their technical monitoring and evaluation
World Bank	ECSEE APL3 - Montenegro	EPCG	Loan: EUR 9m Ongoing	October 2007 – March 2012	Support to telecommunications in the power sector, transmission connections / substations.
International Financing Corporation (IFC) –secured financing	Two components (Italian and Austrian)	ME	Italian gov. (US\$ 0.35m) + Austrian gov. (US\$ 0.6m) Ongoing	15 July 2009 – 30 June 2010 (Italian component) 1 March – 31 December 2010 (Austrian component)	Italian component: for supporting PR activities (Consultants: Business Press Spa, MAGMA, McCann Erikson) Austrian component: Geological investigation of potential land slide-zone of Djurdjevina (Consultants: Energoprojekt-Hidroinzenjering Co)

Table 2: Planned donor supported projects

DONOR / IFI (COUNTY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
European Bank for Reconstruction and Development	Power Network Analysis for Wind Power Integration	Prenos AD (TSO)	EUR ? (grant) (financing and TOR to be confirmed)	Mid 2010 onwards (6 months – to be confirmed)	The specific objectives of the project are (a) to enable Prenos to determine the appropriate levels of wind power capacity which may be connected to the national grid and appropriate operational and technical parameters for management of such connected capacity, and (b) to identify whether investment is needed to strengthen the national grid in order to increase the capacity of wind power which could be connected, and if so, what investment is required.
EU funded projects	IPF: "Energy Electricity Network Development Project"	EPCG AD, Prenos AD	TA (drafting of TOR ongoing, financing ensured)	To be defined	<p>This network development project is within the framework of the European Union funded Infrastructure Projects Facility (IPF). Under the projects defined by the Action plan for realization of the Energy Development Strategy between 2008 and 2012, two sub-projects have been finished for support from the IPF project:</p> <ol style="list-style-type: none"> <li>1. The preparation of the transmission network expansion and refurbishment project plans for inclusion into the next Action Plan (between 2012 and 2017); and</li> <li>2. The preparation of the distribution network expansion and refurbishment project plans for inclusion into the next Action Plan (between 2012 and 2017). The most valuable project plans out of analyzed ones have been selected, so the procedure of implementing them is ongoing, which means that Feasibility studies for following 5 main projects will be finished during the next period: <ol style="list-style-type: none"> <li>1. Feasibility study for new 400 kV line Tivat – Pljevlja</li> <li>2. New 110 kv line from SS Virpazar to SS Ulcinj and upgrade of 110 kv lines Virpazar-Bar and Virpazar-Podgorica 1</li> <li>3. Grounding of neutral points and compensation of reactive power in distribution network of Montenegro</li> <li>4. Development of distribution network in Podgorica</li> <li>5. Upgrading of transmission system protection</li> </ol> </li> </ol>
EU funded projects	IPA 2010: "Harmonization of national legislation with EU Acquis in the area of construction, including energy efficiency and renewable energy sources on demand side"	ME	TA (scope of work under development)	To be defined	<p>With implementation of this project, ME aims to analyze the current state of compliance of Montenegrin legislation in the field of construction with the EU Acquis, identifies regulation in this area that must be harmonized and start process of complete harmonization. Based on recommendation from the EC Delegation in Montenegro, ME is preparing ToR for the preparation of project program that will precisely define activities, deadlines for implementation and the necessary human and material resources necessary for the project implementation. After the preparation of ToR, ME will try to provide short - expert assistance for the preparation of project program, as the basis for the implementation of the project, which will be proposed for the IPA 2010.</p>
IPA CBC Adriatic Programme	SELF ENERGY IN TOURISM project for energy saving and renewable energy sources	ME	EUR 0.2m	2010 – to be defined	SELF ENERGY IN TOURISM project for energy saving and renewable energy sources, applied via the IPA CPC programme, initiated by province Ravenna and Pescara, during the years 2010-2013. The purpose of this project is promotion of production of energy from renewable energy sources, decrease of emissions caused from usage of fossil gases, and development of regional cooperation and integration of energy politics.
KfW (Germany)	Energy Efficiency in Public Buildings	GoM	Loan: EUR 10m	2010 – to be defined	Energy efficiency measures in public buildings. The aim is reducing of the energy consumption in public sector, especially in education and

## - Additional Questions -

DONOR / IFI (COUNTRY)	PROJECT TITLE	BENEFICIARY	AMOUNT / TYPE / STATUS	IMPLEMENTATION PERIOD (From-To)	BRIEF DESCRIPTION / COMMENT
					health sectors.
KfW (Germany)	Rehabilitation of HPP Perucica, Phase II	EPCG AD	Earmarked up to EURm (loan)	Under preparation, envisaged for 2010	Measures still need to be defined. Rehabilitation of remaining units (3) and other measures that will be identified by the accompanying measures of Phase I. Feasibility study will include final design and studying of a possibility for a new (8 <sup>th</sup> ) unit of HPP Perucica as envisaged in adopted Energy Development Strategy of Montenegro until 2025. "Interest reduced" loan envisaged.
KfW (Germany)	Rehabilitation and modernisation of HPP Piva, Phase II	EPCG	Earmarked up to EUR 30m (loan)	2010 – to be defined	Further improvements in HPP Piva will be done based on results of the prior feasibility study (included in the amount). "Interest reduced" loan envisaged.
Slovenia (Ministry of Foreign Affairs)	To be defined	Prenos AD (MO)	Earmarked up to EUR 0.2m (grant) (TOR under development, funding to be confirmed)	Autumn 2010 onwards	Support to Market Operator in procurement and tailor-made development of software for control and market operations based on specifications and tender documents prepared by IPA-07 project of delegation of the EU to Montenegro. Training and other TA services are envisaged, too.
Slovenia (Ministry of Foreign Affairs)	To be defined	ME	Earmarked up to EUR 0.5m (grant) (TOR under development, funding to be confirmed)	Autumn 2010 onwards	Support to ME in implementation of Programme of establishing a database in the energy sector of Montenegro, adopted by Government of MNE in June 2008. Envisaged services include: <ul style="list-style-type: none"> <li>• Concept development, which shall include (a) collection of typical statistical data on energy and energy economy, prices etc., development of applications for drawing-up of energy balances in standard international formats, production of reports etc. – development and establishment of a data base on national energy statistics, and (b) establishment of an IT platform for further development of a data base on energy efficiency in ME/ SEE (in close cooperation with IPA-07 project)</li> <li>• Procurement of hardware and development of most urgent applications</li> <li>• Training of staff of ME/SE (energy balances) and ME/SEE (EE statistics) in DB system maintenance and further development of their own applications</li> </ul>
UNDP	To be defined	ME / Sector of Energy Efficiency (SEE)	US\$ 0.15m (grant)	Mid 2010 onwards (6 months)	The objective of the study is to analyse technical possibilities to connect small hydro power plants envisaged in the first two tenders launched by ME (8+10 waterstreams included or approx. 100 MW of installed capacity) into the existing distribution and transmission system of Montenegro, to propose shallow or deep connections as well as to propose reinforcement of the distribution system in order to allow such connection to the network in the vicinity of promising areas with prospective small hydro power plants by 2025 (new tenders).

**- Please provide update information on exploitation of coal reserves in Maoče, on possible construction of 2x250 MW TPP in Maoče and on new TPP Pljevlja 2(Pg 47).**

Maoče is a coal basin located in the north-east of Montenegro at about 15 km of aerial distance from the town of Pljevlja.

There is still no exploitation of coal in the Maoče basin, while the proved coal reserves are:

- Geologic reserves 123 000 000 t
- Exploitation reserves 109 900 000 t.

Net calorific value of coal is 12.342 KJ/kg.

The study Development and Private Sector Participation in Pljevlja Energy Complex, elaborated by the German consultant Fichtner, recommends building 500MW TPP in Maoče as a more cost – effective solution compared to building Block 2 of TPP Pljevlja.

The Government of Montenegro has committed to award the concession for exploitation of coal in the Maoče deposit, conditioned by the construction of a thermal power plant with the estimated capacity of 500MW (2x250MW), which has been determined based on the current coal reserves and the lifespan of TPP.

Concession award procedure is carried out through an international transparent and competitive two-stage bidding procedure. The investor is expected to finance, open, develop, exploit and maintain the coal mine Maoče and build and maintain TPP Maoče as a single business entity. The foreseen term of the concession is 45 years, with the possibility of extension in line with the Law on Concessions (Official Gazette of Montenegro 08/09). The investor's obligation will be to build TPP by using state-of-the-art technologies abiding by the environmental laws and standards.

Public notice of prequalification competition for award of the concession for exploitation of coal from the Maoče basin, conditioned by the construction of a thermal power plant of estimated capacity of 500 MW, was published on 6 November 2009, with the closing date scheduled for 6 February 2010. In late January 2010, the deadline for submission of Prequalification Applications was extended to 10 May 2010. Following the evaluation of the received bids, the qualified bidders will receive Tender documentation and they will be invited to submit binding bids for the concession award.

## **II. SECURITY OF SUPPLY**

### **6. (Ref to Q. 9-11):**

**- Please provide a timetable for reaching EU oil stock requirements, taking into account the 2009/119/EC of 14 September 2009 on the maintenance of stocks of crude oil and/or petroleum products. This should include a good estimate of the current level of oil stocks in Montenegro, calculated according to the Directive's methodology.**

Decree promulgating the Law on Emergency Procurement (Official Gazette of the Republic of Montenegro 69/03) replaced the Law on Commodity Reserves (Official Gazette of the Republic of Montenegro 56/92); consequently Montenegro has no obligation of keeping stocks of petroleum products.

The Law on Emergency Procurement regulates the procedure for providing the continuance of supply of the Montenegrin market with the products which are necessary for satisfying the basic needs of the population in conditions of serious market disturbances. Serious market disturbances include circumstance caused by natural disasters, direct war threat, blockade of Montenegro's borders and other similar reasons that cannot be predicted.

The Government of Montenegro adopts the plan for emergency procurement in conditions of serious market disturbances. The plan includes: directives, measures, actions, type, quantity and value of merchandise, as well as the supply agent per municipality. Financial means for implementation of the plan are provided by the Ministry of Finance from the budgetary reserves upon prior consent of the Government.

Draft Energy Law includes a chapter with provisions regarding the operating and strategic stocks of oil and petroleum products. The provisions are in accordance with the Directive 2006/67/EC imposing formation of oil and petroleum products stocks which allow supplying of the market for another 90 days in case of market disturbances.

2010 Agenda of the Government of Montenegro envisages drafting of Decree on mandatory operating and strategic stocks of oil and petroleum products. The Decree will provide for required operating stocks of oil and petroleum products, and regulate the manner of providing the storage space, manner and conditions of their use and renewal and manner of operating reserves management. The decree will regulate the manner of formation, maintenance and management of strategic stocks of oil and petroleum products. The decree will be drafted in accordance with the Directive 2009/119/EC. The intention is that the Ministry of Economy would prepare and submit this decree to the Government for adoption in fourth quarter this year.

### **7. (Ref to Q. 12): Please specify by which date membership to IEA is planned to be requested.**

Montenegro is in the process of implementation of significant energy sector reforms through harmonisation with *Acquis*, in compliance with the provisions of the Treaty establishing the Energy Community and the decisions of the Energy Community's Ministerial Council. This process is also expected to prepare Montenegro to meet the IEA membership criteria. However, at the moment, the Government of Montenegro has not yet defined a timescale for submitting the IEA membership application. By the end of 2010, Montenegro will establish cooperation with the IEA aimed at defining future steps for the IEA membership.

**8. (Ref to Q. 13): Please specify more precisely what would be your preferred mechanism for coordination positions with the EU in case of membership in IEA.**

As indicated in the response to Q.7, specific plans for preparation of Montenegro for the IEA membership and timescale for submitting the membership application have not yet been defined by the Government. Consequently, there is no decision on preferred mechanism for coordinating positions with the EU in case of the IEA membership. Nevertheless, the competent Montenegrin ministry will appoint a contact person in charge of the IEA cooperation once the contact with the Agency has been established.

### **III. INTERNAL ENERGY MARKET**

**9. (Ref to Q. 17): Please specify your policy on electricity and gas exchanges and network interconnections with neighbouring countries and/or regions. Who provides the funding Policy, funding for Adriatic-Ionian Gas Pipeline?**

As a member of the Energy Community, Montenegro committed to intensive cooperation with the neighbouring countries and region in all energy-related areas, especially in the area of electricity and gas exchange and new interconnections with neighbouring energy systems.

Transmission of electricity over transmission network, transmission system management, and maintenance and development of transmission network in Montenegro are carried out by the company Prenos AD Podgorica. Role of market operator is also temporarily performed by Prenos AD. The company has three licences for – network owner, transmission operator, and market operator.

The Government of Montenegro owns about 70% of the shares of Prenos AD. As the company's majority owner, the Government adopts strategic decisions on the funding policy for projects related to the development of transmission network in Montenegro and connection with neighbouring energy systems.

As a signatory to the Energy Community Treaty, Montenegro strives to fully contribute to creating single energy market, and providing security of electricity supply in the region and further integration into the Europe's energy market.

In accordance with the Energy Community Treaty and the interstate agreement, signed between the governments of Montenegro and Italy on 6 February 2010 concerning the cooperation in the field of energy, Montenegro and its transmission company will implement all relevant EU directives and regulations into its transmission system.

As a licence holder for transmission network operator, Prenos AD Podgorica adheres to the following rules for the concession of available transmission capacities on interconnecting links:

- Maintenance of secure and stable operation of the power system or reliable and quality supply of electricity to Montenegrin consumers;
- Public and non-discriminatory concession of available transmission capacities;
- Transit of electricity for consumption outside Montenegro within available transmission capacities and in accordance with the valid interconnection regulation.

It is envisaged to separate market operator from Prenos AD this year, and make it state property.

As an expression of its commitment to build its own gas network and interconnect with the gas systems of the neighbouring countries and region, the Montenegrin Government together with the governments of the Republic of Croatia and the Republic of Albania signed the Declaration on Construction of the Ionian-Adriatic gas pipeline on 25 September 2007 in Zagreb, which should be connected to the Trans-Adriatic gas pipeline. In December 2008 the Declaration on the Construction of Ionian - Adriatic gas pipeline was also signed by the representatives of Bosnia and Herzegovina. Total length of the Ionian - Adriatic gas pipeline is about 400 km, of which a section of approximate length of 100 km should be built in Montenegro. The total project value is estimated at EUR 230 million, and the envisaged contribution of Montenegro in the project is EUR 60 million.

There are several possibilities for funding the construction of Montenegrin part of the Ionian-Adriatic gas pipeline, which primarily depend on organisational and ownership structure of the project implementation.

If the entire project for the construction of the Ionian-Adriatic gas pipeline is structured and organised as a joint venture and implemented by a single joint company, the funding would be ensured by the founders and owners of such company proportionally to their stakes. Each of the founders or investors could fund their share from own sources or a loan borrowed from some

financial institution. The key to getting such loan are the guarantees which may be given by the investor to the financial institution. In case of private investor, a guarantee is his potential i.e. potential of the project confirmed by the signed gas transport contract via funded gas pipeline, and in case when a state is investor it is the state guarantee. In thus structured, organised, and funded project, all investors bear every risk, including financial risk, proportionally to their stakes. Joint partnership before the financial institutions might be advantageous. In case when implementation of the Ionian-Adriatic gas pipeline project is structured and organised so that a separate company is established for each of its parts, in every concerned country, each of such companies will ensure separate funding for their stake and provide separate guarantees.

In both the above mentioned scenarios, ensuring funding through a loan is more straightforward if investor-borrower has a long-term contract for gas transport over the said gas pipeline or part thereof. The contract is a security or best guarantee for the lender. However, in case when the investor is a state or a state-owned company, state guarantee is acceptable for lender without insistence on long-term transport contract.

The Montenegrin Government will make a decision on funding method for the construction of the Montenegrin part of the Ionian-Adriatic gas pipeline after having considered all feasible options.

**10. (Ref to Q. 18) Please provide as much information as possible on the legal state of market opening, as well as the actual state of market opening (in terms of numbers of entrants to the market and percentage of the market that has switched suppliers.**

The Energy Regulatory Agency has adopted and issued the following regulations and decisions regarding electricity market:

- Decision on market model (19 July 2007),
- Rules on third party access (11 December 2007),
- Policy on future involvement of the Agency in legal unbundling of EPCG (6 February 2008),
- Rules on electricity market establishment and functioning (26 December 2008),
- Decision on qualified electricity customers (26 December 2008),
- Decision on adoption of market rules (30 December 2008),
- Decision on electricity market opening (30 December 2008),
- Decision on appointment of public supplier (30 December 2008),
- Rules on amendments and changes to the Rules on licences in energy sector (30 July 2009),
- Rules on electricity supply (30 July 2009) (new rules with clearly defined functions, rights and obligations of supplier of qualified customers, public supplier, supplier of final choice and qualified customer),
- Decisions on establishing tariffs for the use of distributive and transmission network and network losses, and decisions on setting prices for the use of distributive and transmission network and costs of network losses (30 July 2009),
- Issued licence for electricity trade and licence for electricity supply to DOO EFT Herceg Novi (15 December 2009). This is the first independent supplier that appeared since the market opening. Other three companies from the countries in the region (Serbia, Slovenia and Austria) have shown the interest.

Formal openness of the Montenegro's electricity market in 2009 was 67.5%. The actual openness has not yet occurred. Judging by the business plan of the first independent supplier, it is expected that a certain number of customers will change their supplier in 2010.

**11. (Ref to Q. 19): Please provide summary of all necessary steps and corresponding timescale to complete procedures. Do you have plans to improve the timescale and address the difficulties in procedures governing authorisation for the construction of power and gas installations/networks; if so, when and how?**

The following laws regulate construction and reconstruction of energy facilities in Montenegro:

- 1) Energy Law (Official Gazette of the Republic of Montenegro 39/03),
- 2) Law on Spatial Development and Construction of Structures (Official Gazette of Montenegro 51/08)
- 3) Law on Concessions (Official Gazette of Montenegro 08/09),
- 4) Law on General Administrative Procedure (Official Gazette of the Republic of Montenegro 60/03).

### **Issuing authorisations for construction of power facilities**

Article 12, paragraph 2, item 3 of the Energy Law (Official Gazette of the Republic of Montenegro 39/03) stipulates that the Energy Regulatory Agency issues authorisations for the construction of new or reconstruction of existing generation capacities. Authorisation means a permit issued by the Agency for the construction of new or reconstruction of existing generation capacities and new connections with other systems. In accordance with the Energy Law and its competencies, the Energy Regulatory Agency adopted the Rulebook concerning procedure and criteria for issuing authorisations in energy sector of Montenegro (Official Gazette of the Republic of Montenegro 46/07). The said document prescribes detailed criteria for issuing authorisations for the construction of new generation capacities, reconstruction of existing generation facilities to significantly improve them, new connection with other systems and the construction of a direct line.

The Agency issues authorisation to the applicant provided that legal, technical, and economic requirements set by the Agency are met. Authorisation is issued for a period no longer than two years, in which period the authorisation holder is required to obtain a permit for the construction of facility by the competent authority, whereby the Agency may extend this period up to one (1) year, at the request of the authorisation holder.

The overall procedure for issuing authorisation by the Agency takes up to 25 days from the receipt of a valid application.

Draft new Energy Law, due for adoption, does not envisage the Agency to issue this authorisation.

Since gas market is not developed and there are no gas networks and installations in Montenegro, the existing Energy Law does not regulate gas sector activities, such as exploration, production, transport, and distribution of gas. Owing to the same reasons, there is no secondary legislation in this area. However, draft new Energy Law includes provisions concerning performance of gas-related activities, as follows: acquisition, storage, transmission, distribution, and supply of gas.

### **Issuing energy permit**

Draft Energy Law envisages energy facilities to be built pursuant to the law regulating spatial planning and construction of structures, technical and other regulations, upon a previously obtained energy permit. Draft Energy Law (article 61, 62, 63, and 64) defines energy facilities for which energy permit is issued and provides for issuing criteria and procedure for issuing energy permit. Article 61, paragraph 3 states that the ministry competent for energy business issues energy permit, and Article 63, paragraph 5 states that the ministry adopts regulation establishing, inter alia, detailed criteria for issuing energy permits. The regulation will define timescale for issuing of energy permit. In line with Article 209, paragraph 1 the regulation is to be adopted within six months from the entry into force of the Energy Law.

Article 61, paragraph 9 of draft Energy Law defines the cases when energy permit is not required.

**Decision on concession award**

Construction of energy facilities which ensure safe and regular supply of energy may be approved on the basis of a public tender procedure conducted beforehand, to which the provisions of the law regulating concessions are applied.

Article 6, paragraph 1, item 8 of the Law on Concessions (Official Gazette of Montenegro 08/09) defines that the subject matter of a concession, inter alia, may be: design, construction, maintenance, and exploitation of energy and other facilities serving for the generation, transmission and distribution of electricity, heat and gas, or their reconstruction, modernisation, maintenance and exploitation. For the purposes of this law, concessions are granted on the basis of an annual plan adopted by the Government, or municipality, and are published on the website of the Government, or municipalities. Plan for granting concessions designates regions - sites or areas in which concessions will be granted, subject matter of concession, deadlines for publication of public announcement for concession granting.

The Law on Concessions provides legislative framework and defines the concession-granting procedure, as one of the ways to obtain approval for the construction of electrical and gas installation/network, if this is foreseen by the Concession Granting Plan.

### **Issuance of building and use permits**

Provisions of the Law on Spatial Development and Construction of Structures (Official Gazette of Montenegro 51/08) apply when issuing building and use permits for power and gas installation/networks.

#### **ISSUANCE OF BUILDING PERMIT**

**(Article 94 of the Law) A building permit is issued within 15 days from the day of submission of the application, if the requirements referred to in Article 93 of the Law are met**

#### **APPLICATION SUBMISSION**

**(Application is submitted by the investor, Article 92)**

**Evidence of the ownership right or other right over the buildable land or evidence of the right to construct or other right related to the structure, in case of the reconstruction of the structure (Article 93);**

**Conceptual design or main design with detailed implementation procedure (Article 93)**

**Report on the conducted review of the conceptual or main design (Article 93)**

Chart of the required steps for issuance of building permits for the construction of power and gas installation/networks in accordance with the Law on Spatial Development and Construction of Structures

#### **ISSUANCE OF USE PERMIT**

(Article 121) ADMINISTRATION AUTHORITY IN CHARGE OF ISSUANCE OF BUILDING PERMIT ISSUES USE PERMIT WITHIN SEVEN DAYS FROM THE DAY OF RECEIPT OF TECHNICAL INSPECTION REPORT IF THE STRUCTURE IS SUITABLE FOR USE; INSTRUCTS THE INVESTOR TO ELIMINATE IDENTIFIED DEFICIENCIES WITHIN THE DETERMINED TIMEFRAME OR PROHIBITS THE USE OF STRUCTURE

#### **TECHNICAL INSPECTION**

WITHIN SEVEN DAYS FROM THE DAY OF RECEIPT OF APPLICATION FOR ISSUANCE, ADMINISTRATION AUTHORITY SETS UP TECHNICAL INSPECTION COMMISSION (ARTICLE 122). THE COMMISSION PERFORMS TECHNICAL INSPECTION OF A STRUCTURE AND WITHIN SEVEN DAYS UPON THE COMPLETION OF THE TECHNICAL INSPECTION DRAFTS A REPORT SPECIFICALLY ORDERING:

- ISSUANCE OF USE PERMIT
- ELIMINATION OF IDENTIFIED DEFICIENCIES WITHIN THE DETERMINED TIMEFRAME
- PROHIBITION OF USE OF THE STRUCTURE.

#### **SUBMISSION OF APPLICATION FOR ISSUANCE OF USE PERMIT**

(SUBMITTED BY THE INVESTOR ACCORDING TO ARTICLE 120)

- STATEMENT OF THE GENERAL CONTRACTOR THAT THE STRUCTURE HAS BEEN CONSTRUCTED ACCORDING TO THE BUILDING PERMIT AND REVIEWED MAIN DESIGN
- STATEMENT OF THE SUPERVISING ENGINEER THAT THE STRUCTURE HAS BEEN CONSTRUCTED ACCORDING TO THE BUILDING PERMIT AND THE REVIEWED MAIN DESIGN
- STATEMENT OF THE LEAD PROJECT ENGINEER THAT THE STRUCTURE HAS BEEN BUILT ACCORDING TO THE BUILDING PERMIT AND THE REVIEWED MAIN DESIGN
- EVIDENCE OF FULFILLED OBLIGATIONS, IN ACCORDANCE WITH SPECIAL REGULATIONS
- EVIDENCE OF REGULATION OF RELATIONS IN RESPECT TO PAYMENT OF THE FEE FOR UTILITY EQUIPPING
- REVIEWED MAIN DESIGN, IF THE BUILDING PERMIT HAS BEEN ISSUED BASED ON THE CONCEPTUAL DESIGN

Chart of the required steps for issuance of use permits for the construction of power and gas installation/networks in accordance with the Law on Spatial Development and Construction of Structures

- There are no gas networks constructed in the territory of Montenegro.
- Timescale for performing certain steps in the procedure for issuance of building permit (obtaining evidence of ownership right or other right over buildable land, drafting conceptual or main design with details for the construction, review of conceptual or main design) cannot be affected during the construction of power network, since there is no deadline for these activities defined by the law. Timescale for implementation of the above activities depends on the responsibility and seriousness of the investor, contractual relationship between the investor and designer, and person in charge of technical review of the project documents. The law has established deadlines for issuance of urban development and technical requirements, consents by competent authorities, building permits, and use permits. For the above reasons, it is not possible to accurately determine the timeframe for completion of the procedures for issuance of building permit for the construction of power network.
- Based on the previous experience in the procedure for issuance of building permits for the construction of power transmission and distribution network, the table below shows **the average time spent** for certain activities - steps in the procedure for issuance of building permits.

Activity – step in the procedure for issuance of building permit	The average time spent for certain activities - steps in the procedure for issuance of building permit
Furnishing evidence of ownership right or other right (drafting of study on expropriation, adoption of a decision on declaring the public interest for the route for power network, publishing of the decision in the Official Gazette of Montenegro, conducting expropriation proceedings for the route and registration of property in the cadastre)	90-365 days
Issuance of urban development and technical requirements	up to 15 days
Drafting of main design	90 – 120 days
Obtaining energy consent	up to 30 days
Obtaining fire protection consent	up to 30 days
Obtaining environmental compliance	90 - 180 days
Obtaining agricultural consent, if the energy facility is located within the area of the Spatial plan of Montenegro	up to 30 days
Obtaining water economy consent	up to 30 days
Obtaining sanitary consent	up to 30 days
Obtaining geological consent	up to 30 days
Review of the main design	30-60 days
Issuance of building permit	up to 15 days (if the conditions specified in Article 93 of the Law on Spatial Development and Construction of Structures (Official Gazette of Montenegro 51/08) are met)

The average time needed to complete the procedure for issuance of building permits for power networks is **240 - 365** days.

- Based on the previous experience in the procedure for issuance of building permits for the construction of power transmission and distribution networks, the table below shows the

average time spent for certain activities - steps in the procedure for issuance of use permits.

Activity – step in the procedure for issuance of use permit	The average time spent for certain activities - steps in the procedure for issuance of use permit
Appointment of the person in charge of technical inspection of the structure	up to 7 days
Technical inspection of the structure	30-90 days
Issuance of use permit	up to 7 days

The average time needed to complete the procedure for issuance of use permit for power networks is **44 -108** days.

## 12. (Ref to Q. 20):

**- Please provide the list of companies authorised to import petroleum products not provided.**

The Energy Regulatory Agency issues licences for conducting oil and gas-related activities for:

- Sale and supply of petroleum products and gas (57 licences),
- Storage and distribution of petroleum products and gas (47 licences),
- Commercial transport of petroleum products and gas (34 licences).

Import of petroleum products is fully liberalised.

Import licence for petroleum products is not required in Montenegro. Namely, Law on Excise Taxes (Official Gazette of the Republic of Montenegro 65/01, 12/02, 76/05, Official Gazette of Montenegro 76/08, 50/09) has defined that import requires a certificate by a foreign tax or customs authority, producer or foreign authority in charge of marking, that petroleum products have been marked outside of Montenegro and that, with respect to the type and quantity, they contain at least the marking matters prescribed by the law.

**- Please provide further details on the legislative situation regarding independent power producers not thoroughly explained.**

Currently there are three major power plants in Montenegro of total capacity of 859 MW and seven small HPPs of total capacity of 9 MW, all of which operate within the integrated power utility Electric Power Holding Company of Montenegro AD Nikšić. Although the existing Energy Law does not specifically treat independent producers, that does not mean it prevents their existence. Indeed, several public invitations for concession award for the construction of small HPPs were published, and private investor i.e. future independent producers mostly participated in those tenders. The situation is quite similar when it comes to the construction of wind power plants. International prequalification tender for the construction of four large HPPs on the River Morača has been published and a number of private investors have already shown strong interest. Electricity generated from all these future plants will be offered at the free electricity market.

**13. (Ref to Q. 21): Please indicate how many additional persons are planned to be employed at the ERA after adoption of the new energy Law which brings expansion of Agency's competences.**

In accordance with the existing organisation and business operations of the ERA, the plan is to hire another three persons:

- Engineer-analyst, one position,
- Economist-analyst, one position,
- Lawyer-analyst, one position,

together with two trainees, bachelor of economics and graduate engineer.

Given that the adoption of the new Energy Law, which will significantly expand competences, role and tasks of the Agency, is shortly expected, and in the attempt to respond to new responsibilities as readily as possible, the Agency has requested that one of the tasks of the (new) EU Technical Assistance Project for ERA Institutional Strengthening, includes identifying optimal organisational structure and adequate staffing and professional competences in accordance with the role and tasks prescribed by the new law.

#### **IV. STATE AID**

**14. (Ref to Q. 23, 24, 26b):**

**- Please provide further clarification on deferred payment liability which benefit to lignite production.**

Aid of the Government of Montenegro is reflected in providing the Coal Mine Pljevlja (hereinafter referred to as the "Rudnik uglja AD Pljevlja") with deferred payment of liabilities to the Government of Montenegro (concessions, VAT, contributions) in the periods when Rudnik uglja AD Pljevlja had impeded opportunities for settlement of these liabilities, as well as in writing off tax liabilities (tax, contributions on salaries, value added taxes) and concessions for exploitation of mineral resources according to Decision No 02-2636/1 of 03 April 2009 of the Ministry of Economy.

## **V. RENEWABLE ENERGY**

### **15. (Ref to Q. 27):**

**- Taking into consideration the methodology for calculating the obligatory targets for individual countries (which may be much higher than the overall EU target of 20%), please indicate to what extent Montenegro's current energy development strategy would need to be revised to meet the objectives of the Directive 2009/28. Please specify whether studies to assess the impact of the European acquis in the field of renewable energy have been undertaken.**

Directive 2009/28/EC on the promotion of the use of energy from renewable sources (with the exception of the part that relates to the field of transport) is transposed into the proposal for Energy Law, which stipulates that the development and use of renewable energy sources shall be regulated by the Programme for development and use of renewable energy sources that shall be issued by the Government of Montenegro for a period of 10 years. Program for development and use of renewable energy sources contains national target of using renewable energy sources, which is defined as the share of energy generated from renewable energy sources in total final energy consumption. Within the national target of using renewable energy sources, targets related to the share of renewable energy sources in generation of electricity, energy for heating and / or cooling and energy for transport are specially emphasised.

Ministry of Economy intends to develop the Programme for development and use of renewable energy sources in accordance with defined, new national target concerning renewable energy sources, which is different from the proclaimed targets in the Energy Development Strategy of Montenegro by 2025. Ministry of Economy also plans to carry out audit process of the Energy Development Strategy of Montenegro soon. In order to meet requirements of Directive 2009/28, a significant modification of existing Energy Development Strategy of Montenegro will be necessary, especially in the field of hydro and wind potential utilisation.

Methodology for calculating the national target that needs to be adopted on the basis of the Energy Law will be completely harmonised with the methodology of Directive 2009/28/EC. Within the Energy Community Secretariat, a study on the possibility to implement this directive in Energy Community contracting parties has been drawn up - "Study on the implementation of the New EU Renewables Directive in the Energy Community". Department of renewable energy sources, within the Ministry of Economy, has had intensive communication and has exchanged information and data with consultants who were involved in drawing up of the study. The study provides preliminary assessment of the impact of implementation of the aforementioned Directive in Energy Community contracting parties. In addition, the Ministry of Economy, under the technical assistance of the European Bank for Reconstruction and Development, is working on the assessment of electricity price increase for final customers due to the implementation of new national target of renewable sources and guaranteed prices of electricity from renewable sources. Many scenarios were made where preliminary assessments indicate that the increase in electric energy prices due to realisation of new national target concerning renewable sources on the basis of new Directive will be from 5% to over 20%. Increase in electricity prices is highly dependent on the fate of large consumers of electricity in Montenegro and on the construction of large hydropower plants. As a result, national target concerning use of renewable energy sources in Montenegro by the year 2020 has been defined. Calculated in accordance with methodology defined in Directive 2009/28, increase in the share of renewable energy sources in total final energy consumption by 2020 will be 6.5% (5.5% fixed and 1.0% variable). The share of renewable energy sources in base year 2005 is currently being double checked. The share of renewable energy sources in base year 2005 has not yet been precisely calculated due to the lack of reliable statistics on the consumption of biomass. However, we can say with great confidence that the national target concerning use of renewable energy sources by 2020 for Montenegro shall be from 29% to 30% of total final energy consumption.

**- By when is it foreseen to develop a strategy to meet the requirement of the Directive 2009/28?**

As stated in the answer to the previous question, pursuant to new Energy Law, the Ministry of Economy will prepare the Programme for development and use of renewable energy sources that will comply with the new national target calculated on the basis of the methodology set out in Directive 2009/28. The Programme will provide manners Montenegro plans to use in order to achieve national target, in accordance with adopted methodology. The Programme will particularly highlight the potential of specific renewable energy sources that are intended for utilization, plants that will use these sources, incentives, dynamics of projects' realization and rough estimation of financial assets necessary for realization of the Programme. National target for share of energy from renewable sources in total final energy consumption shall be determined within a period of one year from the date of entry into force of the new Energy Law. Programme for development and use of renewable energy sources shall also be adopted within one year from the day of entry into force of new Energy Law.

**- Please specify which piece of legislation corresponds with which acquis and to what extent it aims to be aligned to the acquis?**

Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources is transposed into the Proposal Energy Law, specifically concerning electricity and heating and cooling. In addition to this Directive, Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market is also transposed into the Proposal Energy Law. Aforementioned Directives are fully transposed into the Proposal Energy Law, concerning renewable energy sources for promotion of generation of electricity, heating and cooling, as well as cogeneration.

Part of Directive 2009/28/EC related to the promotion of the use of energy from renewable sources in transport will be transposed into another law.

**- Please clarify if Montenegro has a general strategy to promote RES (not just HPPs).**

Montenegro has large hydropower potential, and therefore the greatest attention was devoted to the implementation of hydropower plants' projects so far. Accordingly, in the Action Plan for Realization of Energy Development Strategy of Montenegro by 2025 for the period from 2008 to 2012, the construction of hydropower plants on rivers Morača and Komarnica is planned. Moreover, Small Hydropower Plants Development Strategy in Montenegro has been done. However, in accordance with the new Directive on the promotion of energy production from renewable sources, other renewable energy sources such as wind, solar energy, biomass, municipal waste, are gaining on importance in Montenegro. The use of these renewable energy sources is foreseen in Energy Development Strategy of Montenegro by 2025. Study on Assessment of Renewables Potential in Montenegro regarding wind, solar energy and biomass was done and adopted in 2007. The Study on Biomass Energy Potential is also completed. Moreover, drawing up of the study on possibilities to integrate electricity from wind power plants into electric power system of Montenegro is ongoing.

**16. (Ref to Q. 29): Please specify if the standard EN-589 (LPG automotive fuel) is used.**

Rulebook on technical and other requirements for petroleum-derived liquid fuels (Official Gazette of Serbia and Montenegro 51/2004, 54/2005 and 18/2006), as well as Decree on the method of setting maximum retail prices of petroleum products (Official Gazette of the Republic of Montenegro 52/02, 55/02, 23/03, 32/05 and 35/05 and Official Gazette of Montenegro 73/08) do not define the quality of LPG, and therefore they do not define quality standards for LPG.

LPG automotive fuel is imported in Montenegro with accompanying certificate that proves fuel quality. Those are mainly state (national) certificates. Some importers ask for the evidence of compliance with requirements of standard EN -589 as a proof of the quality.

**17. (Ref to Q. 31): Please provide information on the level of compliance with EU standards in other energy sub-sectors.**

Since the beginning of 2008, Institute for Standardization of Montenegro is working intensively on the adoption process of European standards, where it gives priority to "harmonized European standards" that accompany and enable the implementation of "New Approach" directives.

Of total 3305 European standards relating to energy sub-sectors, the Institute has so far adopted 386 standards at the national level, which, expressed in percents, is around 12%.

According to Work Plan and Programme for 2010 of the Institute for Standardization of Montenegro, it is planned to adopt 507 European standards more, during this year. Moreover, the Institute plans to adopt all European standards for energy sub-sectors by 2012.

The following table provides the number of existing European standards for various energy sub-sectors, as well as the number of standards for these sub-sectors that have been adopted in Montenegro.

Standardization subject	Number of European standards	Number of Montenegrin standards
Rotating machinery	58	8
Wind turbines	21	-
System aspects of electrical energy supply	40	6
Electromechanical material on board rolling stock	25	-
Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)	14	-
Electrical equipment and systems for railways	47	-
Overhead electrical lines exceeding 1 kV A.C. (1,5 kV D.C.)	12	-
Aluminum conductors steel supported (ACSS type) for overhead electrical lines	1	-
Thermal resistant aluminum alloy wire for overhead line conductor	1	-
Power transformers	61	9
High-voltage switchgear and control gear	54	2
Electric cables	79	38

# 15 Energy

## - Additional Questions -

Secondary cells and batteries	20	7
Power electronics	20	8
D.C. plugs and socket-outlets and switches for household and similar fixed electrical installations	30	14
Circuit breakers and similar devices for household and similar applications	44	10
Cable management systems	33	15
Plugs, socket-outlets and couplers for industrial purposes	5	-
Electrical apparatus for potentially explosive atmospheres	33	13
Installation rules	9	5
Intrinsically safe apparatus and systems "i"	2	1
Intrinsically safe apparatus and systems "ii"	7	1
Increased safety "e"	3	2
Apparatus type of protection "n"	3	-
Pressurization and other techniques	3	2
Electrostatic painting and finishing equipment	3	1
Electrical apparatus for the detection and measurement of combustible gases to be used in industrial and commercial potentially explosive atmospheres	22	8
Gas detectors	13	1
Luminaries and associated equipment	101	1
Insulated bushings	12	1
Low voltage surge protective devices	12	2
Relays	56	1
Safety of machinery: electro-technical aspects	29	7
Winding wires	82	-
Performance of household and similar electrical appliances	20	18
Safety of household and similar electrical appliances	81	11
Safety of hand-held motor-operated electric tools	83	-
Power frequency over-voltage protective device for household and similar applications	1	-
Electrical installations and protection against electric shock	74	1
Operation of electrical installations	3	-
Equipment and tools for live working	64	4
Lightning protection	27	6
Low-voltage switchgear and control gear including dimensional standardization	60	27
Low-voltage switchgear and control gear assemblies	18	6

Power installations exceeding 1 kV A.C. (1,5 kV D.C.)	4	-
Electrical installations for lighting and beaconing of aerodromes	14	3
Safety of electrostatic painting and finishing equipment	4	-
Liquefied petroleum gas equipment and accessories	63	6
Gaseous and liquid fuels, lubricants and related products	195	7
Materials, equipment and offshore structures for petroleum	202	-
Solid biofuels	61	-
Solid fuels	1	-
Solid Recovered Fuels	68	-
Sustainable production of biomass for energy applications	4	-
Gas infrastructure	32	-
Gas pressure regulators and associated safety devices for use in gas transmission and distribution	4	-
Non industrial manually operated shut-off valves for gas and particular combinations valves-other products	5	-
Gas meters	14	-
Test gases, test pressures and categories of appliances	2	-
Installation and equipment for LNG	11	-
Gas supply for Natural Gas Vehicles (NGV)	1	-
Gaseous fuels and combustible gas	59	-
Domestic gas-fired water heaters	10	-
Safety and control devices for gas-burners and gas-burning appliances	28	-
Independent gas-fired space heaters	10	-
Sealing materials and lubricants for gas appliances and gas equipment	9	-
Central heating boilers using gaseous fuels	27	6
Gas burners using fans	2	-
Non-domestic gas-fired overhead radiant heaters	16	5
Transportable gas cylinders	115	2
Unfired pressure vessels	44	9
Industrial valves	108	21
Cryogenic vessels	41	16
Shell and water-tube boilers	42	23
Pressure vessels	2	-

# 15 Energy

## - Additional Questions -

Industrial fans	-	-
Prefabricated district heating pipe systems	14	1
Heat exchangers	22	-
Heat pumps and air conditioning units	22	-
Space heating appliances without integral heat sources	20	4
Ventilation for buildings	77	-
Heat cost allocation	3	-
Industrial thermo-processing - Safety	7	3
Air filters for general air cleaning	14	-
Heating systems in buildings	25	-
Cleanroom technology	15	-
Thermal solar systems and components	17	-
Space heating	2	-
Household refrigerating appliances and commercial refrigeration equipment	8	1
Refrigerating systems, safety and environmental requirements	20	7
Atomizing oil burners and their components - Function - Safety -Testing	15	-
Central heating boilers	21	3
Heat meters	9	4
Cast iron pipes, fittings and their joints	18	2
Pumps	42	3
Compressors - Safety	5	3
Fluid power	-	-
Valves and fittings to equip radiators	-	-
Industrial piping and pipelines	18	7
Electrometric seals for joints in pipework and pipelines	16	5
Plastics piping systems and ducting systems	259	8
Joint Task Force Power Engineering	37	-
Metal hoses, hose assemblies, bellows and expansion joints	10	1
Power Engineering	2	-
Energy audits	-	-
Energy Management and related services - General requirements and qualification procedures	2	-
Energy efficiency and saving calculation	1	-



## **VI. ENERGY EFFICIENCY**

### **18. (Ref to Q. 35):**

**a) Please provide clarifications on the current status and the outcome (as far as Energy Labelling and Eco-design measures are concerned) of the Audit of the Energy Efficiency Strategy of Montenegro.**

Regulation concerning energy labelling of household appliances and eco design has not been implemented yet in Montenegro.

Proposal for the Law on Energy Efficiency contains provisions relating to ecodesign of products, labelling of household appliances, as well as obligations of suppliers and distributors of energy-using appliances.

Within secondary legislation in this field it is planned to draw up two rulebooks:

- Rulebook on energy labelling of household appliances and
- Rulebook on ecodesign of energy-using products.

During draw up of these rulebooks, the attention will be devoted to their compliance with the requirements of said directives. Adoption of foregoing rulebooks is planned in the first quarter of 2011.

During the upcoming audit and updating of the Energy Efficiency Strategy of Montenegro, measures and activities relating to energy labelling and ecodesign will be envisaged.

**b) Please provide clarification on technical regulations issued on eco-design, even if only provisional/transitional.**

Regulation concerning ecodesign has not been implemented yet in Montenegro. Answer to the question 18 a) contains more information.

**c) Please provide information on the plans to align national legislation with the Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters.**

Member States of the European Union shall adopt the Regulation 1222/2009 until November 2012, since it shall enter into force then. Whereas this obligation has not yet been envisaged for members of the Energy Community, neither in Proposal for the Law on Energy Efficiency, Montenegro currently does not envisage concrete actions to implement new Regulation 1222/2009 on the labelling of tyres.

**d) Please provide further clarification on the way the draft new Energy Law and the draft Energy Efficiency Law foresee to implement the following pieces of EU legislation:**

In accordance with Decision No 2009/02/MC-EnC of 18 December 2009, all states signatories of the Treaty establishing the Energy Community, including Montenegro, have taken certain obligations to implement EU directives with regard to energy efficiency, adjusted to institutional

framework of the Treaty, and within a time limit set out in the aforementioned Decision. These directives include:

- Directive 2006/32/EC of the European Parliament and of the Council on energy end-use efficiency and energy services that, among other, considers the formation of special national bodies for energy efficiency;
- Directive 2002/91/EC of the European Parliament and of the Council on the energy performance of buildings;
- Council Directive 92/75/EEC on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances.

In accordance with the aforementioned Decision, the Proposal for the Law on Energy Efficiency transposes the basic concepts of these directives and stipulates a series of secondary acts to ensure its application. The basic concept of Directive 2005/32/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-using products is also defined in the Proposal for the Law on Energy Efficiency.

Proposal for the Law on Energy Efficiency envisages drawing up of the following secondary legislation:

- 1) Methodology for calculating the indicative target for energy efficiency improvement in Montenegro - (Article 12)
- 2) Indicative target for energy efficiency improvement in Montenegro - (Article 12)
- 3) Rulebook on Energy Efficiency of Buildings - (Article 21)
- 4) Rulebook on Energy Performance of Buildings - (Article 21)
- 5) Rulebook on Energy Certification of Buildings - (Article 26)
- 6) Rulebook on carrying out energy audits of buildings (manner of carrying out the audit, methodology and content of the report) - (Article 22)
- 7) Rulebook on terms for acquiring the authorisation to carry out energy audits of buildings, energy certification of buildings and method of keeping the register of authorised persons - (Article 31)
- 8) The list of energy efficiency measures for the public sector and guidelines for their implementation - (Article 17)
- 9) The methodology for determining the energy efficiency level in procedure of public procurement of goods and services - (Article 18)
- 10) Rulebook on ecodesign of energy-using products - (Article 36)
- 11) Rulebook on energy labelling of household appliances - (Article 38)
- 12) Rulebook on determining the annual energy consumption limit for large energy consumer - (Article 20)
- 13) Rulebook on more detailed contents and manner of providing data on energy consumption and energy-generating products by the public sector and large consumers - (Article 42)
- 14) Rulebook on more detailed contents and manner of providing data on energy consumption and energy-generating products by distribution system operators, energy suppliers and distributors of energy-generating products - (Article 15)
- 15) Rulebook on more detailed contents of the report on implementation of the plan for improvement of energy efficiency in the public sector and at large consumers (Article 11 for the local self-government and Article 20 for large consumer)
- 16) Rulebook on more detailed contents and functional features of information system of energy consumption monitoring in public sector and at large consumers (Article 41)
- 17) Rulebook on energy auditing of boiler heating systems with effective nominal power over 20 kW - (Article 24)
- 18) Rulebook on regular energy auditing of air-conditioning systems with effective nominal power over 12 kW - (Article 25)

Directive 2004/8/EC of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market is transposed into the Proposal for Energy Law. Proposal for the Energy Law envisages incentives for electricity production from cogeneration, privileged cogeneration producer, and guarantee of origin of

electricity produced from highly efficient cogeneration, similar as for energy production from renewable energy sources. Highly efficient cogeneration development and use in accordance with Energy Development Strategy shall be determined by the programme for development and use of highly efficient cogeneration, which the Government issues for a period of 10 years.

**i. Efficiency of end-use energy consumption and energy services - Directive 2006/32/EC on energy end-use efficiency and energy services;**

**ii. Energy efficiency of buildings - Directive 2002/91/EC on the energy performance of buildings;**

**iii. Eco-design of products - Directive 2005/32/EC (Recently replaced by 2009/125) establishing a framework for the setting of eco-design requirements for energy-using products (including implementing legislation);**

**- Commission Regulation (EC) No 641/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for glandless standalone circulators and glandless circulators integrated in products**

**- Commission Regulation (EC) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for electric motors**

**- Commission Regulation (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for household refrigerating appliances (Text with EEA relevance)**

**- Commission Regulation (EC) No 642/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for televisions**

**- Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for no-load condition electric power consumption and average active efficiency of external power supplies**

**- Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for non-directional household lamps and Commission Regulation (EC) No 859/2009 of 18 September 2009 amending Regulation (EC) No 244/2009 as regards the eco-design requirements on ultraviolet radiation of non-directional household lamps**

**- Commission Regulation (EC) No 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council**

**- Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment**

**iv. Energy labelling of household devices - Directive 92/75/EEC on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances (including implementing legislation:**

**- Commission Directive 2003/66/EC of 3 July 2003 amending Directive 94/2/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations);**

**- Commission Directive 2002/40/EC of 8 May 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric ovens**

**- Commission Directive 2002/31/EC of 22 March 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household air-conditioners**

**- Commission Directive 1999/9/EC of 26 February 1999 amending Directive 97/17/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers**

**- Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps**

**- Commission Directive 97/17/EC of 16 April 1997 implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers**

**- Commission Directive 96/89/EC of 17 December 1996 amending Directive 95/12/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines**

**- Commission Directive 96/60/EC of 19 September 1996 implementing Council Directive 92/75/EEC with regard to energy labelling of household combined washer-driers**

**- Commission Directive 95/13/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric tumble driers**

**- Commission Directive 95/12/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines**

**- Commission Directive 94/2/EC of 21 January 1994 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations**

**v. Cogeneration - Directive 2004/8/EC on the promotion of cogeneration.**

**e) Should the adoption of these laws been delayed, please provide a clear timeline for implementation of the above mentioned legislation.**

Proposal for the Energy Law and Proposal for the Law on Energy Efficiency have been confirmed by the Government of Montenegro and their adoption procedure by the Parliament of Montenegro is ongoing. Their final adoption is expected during April 2010.

Law on Energy Efficiency shall officially start applying from 01 May 2011 by when the adoption of relevant secondary legislation is foreseen. Ministry of Economy is currently drawing up secondary legislation of the first priority for building sector. A project funded by the EU and coordinated by the EC Delegation in Montenegro, "Technical assistance for implementation of the Treaty establishing the Energy Community", also includes assistance to the Ministry of Economy in drawing up of specific secondary legislation. However, the dynamics of obligations fulfilment concerning the adoption and implementation of all envisaged secondary legislation depends on allocated resources, and decision-making speed of various institutions

**i. When will the Audit of the Energy Efficiency Strategy of Montenegro, foreseen for the end of 2009 be completed?**

Montenegro, as well as other states signatories of the Treaty establishing the Energy Community, has an obligation to deliver the National Energy Efficiency Action Plan (NEEAP), with calculated indicative target until June 2010. The first draft of the NEEAP was sent to the Energy Community in December 2009. Drawing up of NEEAP is the first step in auditing and updating process of Energy Efficiency Strategy of Montenegro. Following the adoption of NEEAP, updating of the Energy Efficiency Strategy may begin, assuming that necessary financial assets are provided.

**ii. Please indicate if Montenegro foresees concrete action to implement the new Regulation 1222/2009 on the labelling of tyres.**

Member States of the European Union have obligation to adopt the Regulation 1222/2009 until November 2012, since this Regulation shall enter into force then. Whereas this obligation has not yet been foreseen for members of the Energy Community, neither in Proposal for the Law on Energy Efficiency, Montenegro currently does not foresee concrete actions to implement the new Regulation 1222/2009 on the labelling of tyres.

**(Ref to Q. 41): Please elaborate the statement: "Existing Action Plan defines the measures for improvement of energy efficiency, responsibility and time schedule, but does not fully meet the requirements of Directive 2006/32/EC, in particular due to lack of national indicative targets for energy efficiency improvement."**

The Government of Montenegro adopted the Energy Efficiency Strategy of the Republic of Montenegro in October 2005. The Strategy is being implemented with National Energy Efficiency Action Plans, which are being prepared and implemented by the Energy Efficiency Unit within the Ministry of Economy. In the previous period, action plans for 2006 and 2007 were adopted, and currently in force is the Action Plan for Implementation of Energy Efficiency Strategy 2008 - 2012, which was adopted by the Government of Montenegro on 29 May 2008. The Action Plan is based on the guidelines from the Energy Efficiency Strategy of the Republic of Montenegro and Energy Development Strategy of Montenegro by 2025, on the need of approximation to EU legislation in the field of energy efficiency, as well as on progress and experience from the implementation of action plans in 2006 and 2007. Existing Action Plan defines the measures for improvement of energy efficiency, responsibility and time schedule, but does not fully meet the requirements of Directive 2006/32/EC, in particular due to lack of national indicative targets for energy efficiency improvement. Hence, existing Action Plan does not define the dynamics of achieving indicative inter-targets and targets to which Montenegro is bound as a member of the Energy Community (9% until 2018).

The Proposal for the Law on Energy Efficiency foresees creation of three-year, instead of the current four-year, National Energy Efficiency Action Plan (NEEAP), which is also the obligation under the Energy Community. Draft NEEAP was prepared in December 2009, according to model prepared by the Energy Community that fully complies with the requirements of Directive 2006/32/EC. The deadline for its completion and adoption is in June 2010.

**19. (Ref to Q. 44): Please elaborate activities related to establishment of Energy Efficiency Fund.**

Draft Law on Energy Efficiency stipulated the establishment of the Energy Efficiency Agency and Energy Efficiency Fund. Answers to questions from the EC questionnaire have been prepared in accordance with the provisions of the Draft. However, due to global crisis, the Government of Montenegro has given up the establishment of new institutions, among others, the energy efficiency institutions. The Government of Montenegro adopted the Proposal for the Law on Energy Efficiency that does not stipulate the establishment of the Energy Efficiency Fund and, accordingly, there are currently no activities concerning the establishment of the Fund.

**VII. NUCLEAR ENERGY**

**20. (Ref to Q. 52): Please specify whether Montenegro has only acceded to the Vienna Convention or if it has already ratified it. What is the timeframe for the ratification of the Joint Convention, the Convention on Nuclear Safety and the Convention on Supplemental Compensation for Nuclear Damage? Does Montenegro envisage the construction of any other civil nuclear facility such as a research facility?**

In answers to questions 52 and 53 of the questionnaire, which were submitted, we have responded, among other things, that by the Law on Ratification of Vienna Convention on Civil Liability for Nuclear Damage, published in Official Gazette of Federal Republic of Yugoslavia 5/77) and based on succession procedure, Montenegro acceded to this convention on 21 March 2007 that presents its ratification.

Law on Ratification of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was passed by the Parliament of Montenegro on 2 March 2010 and published in the Official Gazette of Montenegro (Official Gazette of Montenegro – International treaties 02/10 from 16 March 2010).

Scope of application of the Convention on nuclear safety regulated in Article 3, refers to the safety of nuclear installations. As Montenegro, according to the definition of "nuclear installation", has no such installation, ratification of this Convention is not foreseen for now.

Agenda of the Government for 2010 foresees drawing up the Law on Ratification of the Convention on Supplemental Compensation for Nuclear Damage (fourth quarter) after which the Proposal shall be sent to the Parliament for adoption. It is expected that the Parliament of Montenegro will adopt the Law on Ratification of the Convention on Supplemental Compensation for Nuclear Damage during 2011.

Montenegro does not foresee the construction of other civil nuclear facility, such as a research facility.

**VIII. OTHER NUCLEAR ISSUES (INCLUDING RADIATION PROTECTION)****21. (Ref to Q. 56):**

**- Please specify who the Environmental Protection Agency Director reports to, the Government as a whole or to the Minister for spatial planning and environmental protection.**

Director of the Environmental Protection Agency reports to the Minister of Spatial Planning and Environmental Protection.

Pursuant to Article 63 of the Decree on Organisation and the Manner of Work of the State Administration (Official Gazette of Montenegro 59/09), the Environmental Protection Agency submits its Agenda to the Ministry that supervises its work (Ministry of Spatial Planning and Environmental Protection). To the submitted Agenda, the Ministry gives approval. Pursuant to Decree on Organisation and the Manner of Work of the State Administration (Official Gazette of Montenegro 59/09) (Articles 64, 65 and 66) the Environmental Protection Agency, at least once a year, shall submit a Report on the work and situation in fields it was established for to the Ministry that supervises its work, i.e. the Ministry of Spatial Planning and Environmental Protection.

The Report shall contain review of enforcement of legislation, implementation of the programme and conclusions of the Government, taken measures and their results.

Notwithstanding, the Environmental Protection Agency shall submit a special Report on the work upon the request of the Government or the Ministry. Environmental Protection Agency shall submit the report, made upon the request of the Government, to the Government through the Ministry that supervises its work. The opinion of the Ministry, i.e. the Ministry of Spatial Planning and Environmental Protection shall be submitted along with the report.

The Ministry of Spatial Planning and Environmental Protection, at least once a year, shall submit a report on the work and situation in fields, for which it was established, to the Government. Report on work of the Ministry includes, in particular: the assessment of the situation in administrative area, review of legislation enforcement, implementation of programme activities and conclusions of the Government with their primary contents and effects achieved in exercising authorities' functions (review shall be given individually by functions) and assessment of administration authority performance which work is under its supervision. Report on the work of the Ministry also includes a report on the work of administration authorities which work is under its supervision.

**- Please elaborate more precisely method of appointment and reporting relationship of the officers of the National Regulatory Authority.**

Issues concerning positions of civil servants or state employees relating to employment, titles, rights and obligations, responsibilities, re-assignments, performance appraisal, advancement and identification of skills, professional development, termination of employment, protection of rights, human resources management, as well as supervision of law enforcement, are regulated by the Law on Civil Servants and State Employees (Official Gazette of Montenegro 50/2008 from 19 August 2008). Selection of civil servants is done through open competition/advertisement through the Human Resources Administration. Candidate who meets all the requirements is selected and appointed by the Director, i.e. Director of the Environmental Protection Agency. Rulebooks on internal organisation and job descriptions of the Ministry of Spatial Planning and Environmental Protection systematise positions on ionising radiation protection affairs that are performed by state employees.

Reporting method in the National Regulatory Authority is described in more details in the answer to the question 56 c) and 56 d) that we provided in December 2009.

**22. (Ref to Q. 58): What is the timeframe and procedure of the adoption of the Waste Management Strategy? When will Montenegro present the Strategy including the Action Plan?**

With a view to providing the conditions for implementation of the policy in the field of ionising radiation protection, radiation safety and waste management, the Government of Montenegro shall adopt the Strategy for Protection against Ionising Radiation, Radiation Safety and Radioactive Waste Management, with the Action Plan for its implementation, on a proposal from the Ministry competent for environmental protection affairs, which is prescribed in the Article 6 of the Law on ionising radiation protection and radiation safety (Official Gazette of Montenegro 56/09 and 58/09). The Strategy defines plans and objectives regarding ionising radiation protection, radiation safety and radioactive waste management in accordance with standards and principles of international organisations in this field, i.e. taken international obligations.

Pursuant to National Programme for Integration of Montenegro into the EU (NPI) 2008 – 2012, the Strategy for Protection against Ionising Radiation, Radiation Safety and Radioactive Waste Management with the Action Plan shall be done until the end of the 2012.

**23. (Ref to Q. 69): Please specify whether the "National Control List of Dual-purpose Goods and Technologies" issued during 2009 based upon the EU Dual-use control list (Regulation (EC) 428/2009).**

Decision on determining national control list of dual-purpose goods (Official Gazette of Montenegro 42/09 of 29 June 2009) is not harmonised with the Regulation (EC) No 428/2009 of 5 May 2009.

In accordance with provisions of the Article 6 of the Law on Foreign Trade in Arms, Military Equipment and Dual-purpose Goods (Official Gazette of Montenegro 80/08), amendments to the existing Decision on determining national control list of dual-purpose goods shall be initiated, which will ensure compliance with new EU Regulation. Full answers to these issues are provided in answers in Chapter 30 that were submitted during December 2009.

**24. (Ref to Q. 79): Please provide further information, in particular on the new nuclear sites.**

In the answer to the question 79 regarding environmental assessment and review of the licensing of new sites and nuclear, we stated that present national legislation provides for environmental assessment requirements and public participation/review during the licensing process.

However, Montenegro has no nuclear installations, and therefore no new nuclear sites. Article 17 of the Law on ionising radiation protection and radiation safety (Official Gazette of Montenegro 56/09) prohibits the construction of nuclear power plants, installations for production of nuclear fuel and installations for spent nuclear fuel processing. In addition, the same Law in Article 19 prohibits all research and business activity with an aim to develop, produce and use nuclear weapon, as well as to use radioactive and nuclear materials for production of weapon of mass destruction. Strategic document of the Government of Montenegro, Energy Development Strategy of Montenegro by 2025 (adopted in December 2007), does not foresee construction of nuclear power plants.

**25. (Ref to Q. 80):**

**- What is the legal nature of the "Rulebooks", which have been established on the basis of the radiation protection act: binding, non-binding, etc.?**

Provisions of the Article 38 of the Law on State Administration (Official Gazette of the Republic of Montenegro 38/03 and the Official Gazette of Montenegro 22/08) stipulate that ministries shall adopt rulebooks, orders and instructions for enforcement of legislation. It is further stipulated that rulebook shall elaborate certain provisions of laws and other regulations (Article 39 paragraph 1).

Law on Ionising Radiation Protection and Radiation Safety (Official Gazette of Montenegro 56/09 and 58/09) provides legal basis for comprehensive elaboration of certain provisions of legislation for all aspects of radiation protection, and they are therefore binding. This Law stipulates the adoption of 26 rulebooks and Strategy for Protection against Ionising Radiation, Radiation Safety and Radioactive Waste Management.

**- What is the timeframe for the Radiation Protection Strategy with the Action Plan?**

The answer is given in the answer to the question no 22 of this set of questions.

**- What is the current status of the monitoring programme for environmental radioactivity required by Art. 35 of the Euratom Treaty?**

Monitoring programme for environmental radioactivity in Montenegro that is required by Article 35 of the Euratom Treaty does not fully comply with it. Only the absorbed gamma radiation dose rate in the air is continuously being measured, while it is not measured in water or soil. The problem is lack of equipment necessary for the implementation of continuous monitoring.

**- Is the one dose rate monitoring station mentioned by Montenegro a continuously measuring station?**

Online network of radioactivity dose rate measuring stations does not exist in Montenegro. One site for online measuring of the absorbed dose rate is located in Podgorica, within the Public Institution "Centre for Ecotoxicological Research of Montenegro", and measuring results are presented in "Report on examination of contents of radionuclide in the environment of Montenegro".

**- Could Montenegro please include information about a (routine) monitoring programme for air, water, (soil) or foodstuff (research in this area is mentioned, in connection with monitoring by their EPA) in order to assess Montenegro's structure for the monitoring of environmental radioactivity.**

The Programme of systematic examination of contents of radionuclide in the environment is prepared by the Environmental Protection Agency, on a proposal from the Ministry of Spatial Planning and Environmental Protection, and it is adopted by the Government. Program The programme of systematic examination of contents of radionuclide in the environment is being

implemented in Montenegro since 1998. It is done in accordance with the Law on Ionising Radiation Protection and Radiation Safety (Official Gazette of Montenegro 56/09 and 58/09), Decision on systematic examination of contents of radionuclide in the environment (Official Gazette of the Federal Republic of Yugoslavia 45/97) (formerly Annex 91 given in December 2009)**Error! Bookmark not defined.**, Rulebook on limits of radioactive contamination of environment and on manner for conduction of decontamination (Official Gazette of the Federal Republic of Yugoslavia 9/99) and EU requirements concerning nuclear safety and radiation protection EURATOM (89/618, 96/29, 87/3954, 90/737, etc).

Pursuant to Decision on systematic examination of contents of radionuclide in the environment (Official Gazette of FRY 45/97), routine Programme of systematic examination of contents of radionuclide in the environment includes following analyses:

- 1) Examination of external radiation dose rate
- 2) Examination of contents of radionuclide in air
- 3) Examination of contents of radionuclide in solid and liquid precipitation
- 4) Examination of contents of radionuclide in rivers, lakes and sea
- 5) Examination of contents of radionuclide in soil
- 6) Examination of contents of radionuclide in drinking water
- 7) Examination of contents of radionuclide in foodstuff and general use items
- 8) Examination of contents of radionuclide in cattle feed
- 9) Examination of ionising radiation exposure level in residences and working places
- 10) Examination of contents of radionuclide in building stocks

Legal person that is selected by Environmental Protection Agency through a public tender in accordance with the Law on Public Procurement (Official Gazette of Montenegro 46/06-1), shall implement the Programme of systematic examination of contents of radionuclide in the environment and has duty to submit a Report on examination of contents of radionuclide in the environment to the Agency by 1 March of the current year for the previous year. In the case of radiation accident, legal person has duty to inform the Agency immediately.

Report on monitoring of environmental radioactivity is an integral part of the Environmental condition monitoring programme in Montenegro, based on which, the Environmental Protection Agency produces a Report on environmental condition each year that is adopted by the Government.

In addition to monitoring in regular conditions (routine monitoring), the Decision on systematic examination of contents of radionuclide in the environment (Official Gazette of the Federal Republic of Yugoslavia 45/97) prescribes monitoring in emergency conditions. When measured value of absorbed dose rate of gamma radiation in the air at certain location is 20% higher than the maximum measured value in the past period of one year at that same location, the transfer from regular to emergency preparedness state shall be done.

Below is given the spreadsheet display of the Programme of systematic examination of contents of radionuclide in the environment (radioactivity monitoring) in Montenegro for 2010, which is adopted by the Government in the fourth quarter of 2009.

**Table 1. Examination of absorbed gamma radiation dose rate and contents of radionuclide in air and atmospheric waters**

LOCATION	SAMPLE	METHOD	RADIONUCLIDES	ABSORBED $\gamma$ -RAYS DOSE RATE	MEASUREMENT FREQUENCY
Podgorica	Air	PCRM		Expressed in $\mu\text{Gy/h}$	24 hours daily sampling
		TL dosimeters		Expressed in $\mu\text{Gy/h}$	Semi-annual replacement and reading
		Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90		Daily samples are gathered into collective monthly
	Atmospheric precipitations	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235		24 hours daily sampling
Pljevlja	Air	TL dosimeters		Expressed in $\mu\text{Gy/h}$	Semi-annual replacement and reading
		Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90		Daily samples are gathered into collective monthly
Bar Žabljak Herceg Novi		TL dosimeters		Expressed in $\mu\text{Gy/h}$	Semi-annual replacement and reading

**Table 2. Examination of contents of radionuclide in surface, underground and drinking water**

LOCATION	METHOD	RADIONUCLIDES	MEASUREMENT FREQUENCY
River Vezišnica	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Collective semi-annual sampling
River Čehotina			
River Brezanica			
River Gračanica			
Drainage water stream from Majjevac landfill basin			
Underground waters from piezo-boreholes on the territory of Aluminium Plant Podgorica			
Underground waters from Zeta Plain (1 sample)			
Underground waters from Steelworks Nikšić (1 sample)			
Underground waters from TPP Pljevlja surrounding (1 sample)	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Collective quarterly sampling
Bar Herceg Novi	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Collective quarterly sampling
Drinking water from Water supply system Podgorica	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Collective quarterly sampling
Drinking water from the well close to Steelworks Nikšić landfill			
Drinking water from the well in surrounding of red mud basin (Aluminium Plant)			
Drinking water from the well in surrounding of the Mine Šuplja Stijena			
Drinking water from the well in surrounding of TPP Pljevlja			
Lake Skadar towards the state border	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Annual
Crno Lake			

**Table 3. Examination of contents of radionuclide in soil**

LOCATION	METHOD	RADIONUCLIDES	MEASUREMENT FREQUENCY
North region of Montenegro (two locations)	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Semi-annual (April and October)
Central region of Montenegro (two locations)			
South region of Montenegro (two locations)			
Immediate surrounding of Maljevac Landfill (agricultural goods), coal and ashes from the pit	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90, U-238, U-235	Semi-annual
Immediate surrounding of the Mine Šuplja stijena – two locations (agricultural goods)			
Composite sample from the Mine Šuplja stijena			
Immediate surrounding of red mud basin at Aluminium Plant Podgorica – two locations (agricultural goods)			
Composite sample of red mud at Aluminium Plant Podgorica			
Immediate surrounding of Steelworks Nikšić landfill – two locations (agricultural goods)			
Composite sample of red mud at Aluminium Plant Podgorica			

**Table 4. Examination of contents of radionuclide in foodstuff**

LOCATION	SAMPLE	METHOD	RADIONUCLIDES	FREQUENCY
Podgorica (kindergardens, canteens for pupils and stuent; primary producers)	Meat: beef, lamb, pork and chicken; milk and cheese; wheat and corn bread; eggs; white and red wine; salt and sugar; nuts; mineral waters; grapes; oil	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual, except for kindergardens, canteens for pupils and students that are done quarterly
Nikšić	Meat: beef, lamb, pork and chicken; milk and cheese; wheat and corn bread; eggs; beans; beer	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Herceg Novi	Beans; milk and cheese; wheat and corn bread; cuttlefish and mussels	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Berane	Wheat and corn bread; apples; potato; mushrooms; blueberries; raspberries	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Pljevlja	Wheat and corn bread; eggs; mushrooms; blueberries; raspberries	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Bar	Meat: beef, lamb, pork and chicken; milk and cheese; wheat and corn bread; eggs; grapes; cuttlefish and mussels	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Bijelo Polje	Meat: beef, lamb, pork and chicken; milk and cheese; wheat and corn bread; eggs	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Ulcinj	Milk and cheese; wheat and corn bread; eggs; cabbage; oil; salt	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual

**Table 5. Examination of contents of radionuclide in cattle feed**

LOCATION	SAMPLE	METHOD	RADIONUCLIDES	FREQUENCY
Podgorica – Zeta	Meadow grass, hay, animal compound feed, chicken feed, corn meal, pigs and piglets feed	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual
Pljevlja	Meadow grass, hay, animal compound feed, chicken feed, corn meal, pigs and piglets feed	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232, Be-7, Sr-90	Semi-annual

**Table 6. Examination of contents of radionuclide in building stocks**

LOCATION	SAMPLE	METHOD	RADIONUCLIDES	FREQUENCY
Directly from producer	Pebbles, concrete block	Y-spectrometry	K-40, Cs-137, Ra-226, Th-232	Annual

**Table 7. Examination of radon exposure level in residences**

LOCATION	SAMPLE	METHOD	Absorbed Y-rays dose rate	FREQUENCY
Residences locations – 20	Air			Quarterly

All tests, measurements, control and all other professional activities in the field of above mentioned monitoring programme, in compliance with the Law on Ionising Radiation Protection and Radiation safety (Article 32), can be performed only by institutions or legal persons who have license to perform ionising radiation protection tasks issued by the Environmental Protection Agency. Article 32 of the Law on ionising radiation protection and radiation safety sets out the requirements that an institution shall meet in order to obtain the license:

- 1) to have a certain number and type of instruments, devices and equipment necessary to perform those tasks;
- 2) that facilities and premises meet technical, safety and health requirements for protection of people and environment from ionising radiation;
- 3) to have adequate number of persons employed for an indefinite period of time, who have required professional qualifications and who are able to implement measures of protection against ionising radiation and who have appropriate work experience;
- 4) to have accreditation certificate for analytical techniques and methods required to carry out those kinds of tasks.

Public Institution Center for Ecotoxicological Research of Montenegro (CETI) is an institution that implements the Programme of systematic examination of contents of radionuclide in the environment of Montenegro since 1998. In accordance with the above mentioned requirements, CETI has all necessary equipment for implementation of the monitoring programme and it is presented in Table 8.

**Table 8: The list of existing equipment in Division for radiation protection and monitoring in Public Institution Ecotoxicological Examination Centre**

Public Institution Ecotoxicological Examination Centre of Montenegro	Review (list) of equipment and devices Organisational part: Division for radiation protection and monitoring Spectrometry and Dosimetry Units		
	Device / Equipment	Type	Manufacturer
HP Ge coaxial detector, efficiency 40%	GEM40190	ORTEC	1998.
HP Ge coaxial detector, efficiency 35%	GEM30185S	ORTEC	2001.
HP Ge coaxial detector, efficiency 25%	GEM 25	ORTEC	2005.
Liquid scintillation counter	LS 6500	Backman Coulter	2007
Alpha spectrometry	920 E	ORTEC	2007
Radon monitor ALPHA GUARD	PQ 2000 PRO	GENITRON	1998.
GENITRON Alpha Guard AQUAKIT	AQUAKIT	GENITRON	1998.
GENITRON Alpha Guard + SOIL GAS Probe	SOIL GAS Probe	GENITRON	
RADON WL METER (TN-WL-02)	TN-WL-02	THOMSON&NIELSEN	1998.
MULTI SENSOR UNIT D/T	MULTI SENSOR UNIT D/T	GENITRON	1998.
CALIBRATION AND MEASURING CONTAINER V-100I		GENITRON	1998.

## - Additional Questions -

Radon monitor	RAD 7	DURRIDGE Co	2000.
$\alpha$ - $\beta$ Flow-type proportional counter	FHT 770	EBERLINE	1998.
Dosimetry system TOL/F	TOL/F	EBERLINE	1998.
PC –RM Radiation monitor	PC RM	INN VINCA-Laboratory for Electronics	1998.
VICTOREEN	190SI	Victoreen	
BICRON ANALYST	ANALYST	BICRON	
DOSIMETRY SYSTEM	KOMO-TL	INN VINCA-Laboratory for Electronics	
PERSONAL DOSIMETER	MINI 6100	MINI	
InSpector 1000	IN 1K	Canberra	2006
RadEye	PRD	Thermo	2006
Dosimetry system	X5Cplus	Graetz	
TLD Harshow Reader	4500	Thermo	2006
Irradiator	2210	Bicron	2006
Barracuda		RTI Electronics	2007
Hand Foot Clothing Contamination Monitor	HFCM	MED Nuklear-Medizintechnik	2008.
375 - 2RT Wall Mount Area Monitor	375 – 2RT	CNMC Company	2008.
Identifinder Ultra NG Nal(Tl) + GM detector	Identifinder	Target	2008.
MCB2/cps Alfa/Beta/Gama mini dosimetry system	MCB2/cps	Canbera	2008.
Gr 135 Identifier	Gr 135	SAIC Exploranium	2008.
Electronic pocket dosimeters	AT 2503	Atomtex	2008.
Remote pliers for handling radiation sources		Von Gahlen	2008.
Hydraulic platform		SFSI	2008.
Barrels transporter		SFSI	2008.
2235 Noise analyser	2235	Bruel & Kjer	2008.
2236 Noise analyser	2236	Bruel & Kjer	1999.
2237 Noise analyser	2237	Bruel & Kjer	1999.
VICTOREEN 451 P		Victoreen	2008.
VICTOREEN ASM990		Victoreen	2008.

For all analytical methods that are subjects of examination in accordance with monitoring programme, Public Institution Center for Ecotoxicological Research of Montenegro has accreditation decision. Except from the list of accredited methods in above mentioned business activity is given in the following text that is available on the Web site of Accreditation Body of Montenegro: <http://www.atcg.co.me/cg/>

Table 9: List of accredited methods

Item No	Subject of testing material / product	Field of testing	Type of testing or feature being measured (measurement scope; U)		Testing method (rulebook, standard, validated method)
8.	WATER	Radioactivity testing	93.	Gamma spectrometry testing – examination of radionuclides in water L.D: $1 \times 10^{-3}$ Bq/l U: 3.5 %	“Measurement of Radionuclides in Food and the Environment, A Guidebook” IAEA Technical Reports Series No. 295. 1989.
9.	AIR	Radioactivity testing	94.	Gamma spectrometry testing – examination of radionuclides in the air L.D: $9 \times 10^{-6}$ Bq/m <sup>3</sup> U: 3.5 %	“Measurement of Radionuclides in Food and the Environment, A Guidebook” IAEA Technical Reports Series No. 295. 1989.
			95.	Examination of <sup>222</sup> Rn and <sup>220</sup> Rn in the air L.D.: 4 Bq/m <sup>3</sup> U: 4.37%	
		Radioactivity testing	96.	Examination of <sup>222</sup> Rn and <sup>220</sup> Rn decay products in the air (EER) Thompson & Nielsen Radon WL Meter – CWLM – Users Manual Radon Decay Measurement Protocol L.D: 10 Bq/m <sup>3</sup> U: 11 %	US Environmental Protection Agency Office of Air and Radiation(6604J): “Indoor Radon and Radon Decay Product Measurement Device Protocols” EPA 402-R-92-004, July 1992 (revised)
10.	SOIL	Radioactivity testing	97.	Gamma spectrometry testing – examination of radionuclides in soil L.D: 0.1 Bq/kg U: 3.5 %	“Measurement of Radionuclides in Food and the Environment, A Guidebook” IAEA Technical Reports Series No. 295. 1989. EML Procedures Manual HASL 300, 28 Edition – U.S. Department of Energy, Environmental

## - Additional Questions -

					Measurements Laboratory
11.	FOODSTUFF	Radioactivity testing	98.	Gamma spectrometry testing – examination of radionuclides in foodstuff L.D: 0.1 Bq/kg U: 3.5 %	“Measurement of Radionuclides in Food and the Environment, A Guidebook” IAEA Technical Reports Series No. 295. 1989.
12.	BUILDING STOCK	Radioactivity testing	99.	Gamma spectrometry testing – examination of radionuclides in building stock L.D: 0.1 Bq/kg U: 3.5 %	“Measurement of Radionuclides in Food and the Environment, A Guidebook” IAEA Technical Reports Series No. 295. 1989.
13.	Examination of external radiation level	Radioactivity testing	100	Dosimetry measurements L.D: $0.01 \times 10^{-6}$ Gy/h U: 6 %	EML Procedures Manual HASL 300, 28 Edition - U.S. Department of Energy, Environmental Measurements Laboratory
14.	Examination of ionising radiation sources	Radioactivity testing	101	Dosimetry measurements U: (1.02 – 2.40)%	Rulebook on conditions for trafficking and use of radioactive materials, X-ray generators and other devices that produce ionising radiation (Official Gazette of FRY 32/98) Barracuda & QABrowser-Reference manual – Version 3.2A
15.	Examination of contamination level of residences and occupational places and environment and their decontamination	Radioactivity testing	102	Dosimetry measurements Gamma spectrometry testing – examination of radionuclides in L.D: 1 Bq/m <sup>2</sup> U: 3.5 %	New Methods and Tehniques for decontamination in maintenance or decommissioning operations IAEA TECDDOC 1022 1998 Rulebook on limits of radioactive contamination of environment and on manner of decontamination (Official Gazette of FRY 9/99)
			103	Thermo-luminescent dosimetry L.D.: 10 µSv U: 21 %	IAEA Safety standards series Assessment of occupational exposure due to external sources of radiation N0 RS G 1.3

Annual Report on the implementation of monitoring programme shall be submitted to the

Environmental Protection Agency in print and electronically on 1 March for the previous year. The report shall present all data in accordance with the structure of the programme and shall also provide statistical data processing in form of maximum, minimum and medium values of results and medians range. It shall also present graphics of changes of value at annual level and as well as trends of middle value changes during monitoring period since 1998.

**- Could Montenegro please provide a working timetable for the adoption of the secondary legal acts based on the Law on ionizing Radiation Protection and Radiation Safety? Will the adoption of the secondary acts fully transpose Euratom legislation on radiation protection?**

Pursuant to Article 50 of the Law on ionising radiation protection and radiation safety (Official Gazette of Montenegro 56/09 and 58/09), it is set out that secondary legislation for implementation of this Law shall be adopted within one year from the day of entry into force of this Law and that secondary legislation adopted on the basis of the Law on Ionising Radiation Protection (Official Gazette of FRY 46/96) shall apply until the secondary legislation provided for hereby is adopted.

In this respect, it is necessary to draw up 26 acts and the Strategy for Protection against Ionising Radiation, Radiation Safety and Radioactive Waste Management. Ministry of Spatial Planning and Environmental Protection has begun with secondary legislation drawing up. Due to adoption of the new directives by the European Commission and the accession of Montenegro to the conventions in this field, it is certain that it will be necessary to make amendments to the Law on Ionising Radiation Protection and Radiation Safety.

Bearing the above mentioned in mind, working timetable for secondary legislation adoption cannot be given more precisely.

Adoption of the secondary acts will fully transpose Euratom legislation on radiation protection.

**26. (Ref to Q. 81): Please provide annex with List of planned secondary legislation.**

Annex with List of planned secondary legislation is presented below. We remind that the Annex is submitted as part of answers to questions from the questionnaire in December 2009 as Annex 87 – Secondary legislation on the basis of the Law on Ionising Radiation Protection and Radiation Safety.

**Note:** In the coming period we will start amending the Law on Ionising Radiation Protection and Radiation Safety that will require adjustment (decrease) of the number of secondary acts with a view to more effective implementation of the Law.

**SECONDARY LEGISLATION ON THE BASIS OF THE LAW ON IONISING RADIATION PROTECTION AND RADIATION SAFETY**

The Government adopts the following:

- 1) Strategy for protection against ionising radiation, radiation safety and radioactive waste management, with the Action Plan for its implementation (Article 6 of the Law)
- 2) The programme of systematic examination of contents of radionuclide in the environment (Article 9 of the Law)

The Ministry adopts the following:

- 1) Rulebook on the permissible contents of radionuclides in the environment (Article 9 of the Law)
- 2) Rulebook on types, methods and time intervals of measuring with a view to assessing the exposure level to ionising radiation of professionally exposed persons, persons engaged in training and scientific research, patients and citizens (Article 11 of the Law)
- 3) Rulebook on exposure limits for professionally exposed persons, persons engaged in training and scientific research and population, on method and time intervals of exposure levels measuring, on method and implementation of direct control over the ionising radiation sources (Article 12 Of the Law)
- 4) Rulebook on types, exposure limits and measurement method with a view to assessing the level of medical exposure to ionising radiation (Article 13 of the Law)
- 5) Rulebook on the contents of the Report on measurements, manner of keeping and time limits of keeping the records, as well as on the process of informing the competent (Article 14 of the Law)
- 6) Rulebook on required qualification level, health conditions that have to be meet by professionally exposed persons and on time intervals of examinations, contents, method and time limits of storing data on these examinations (Article 15 of the Law)
- 7) Programme of additional education and training of professionally exposed persons and persons responsible for implementation of ionising radiation protection measures (Article 16 of the Law)
- 8) Rulebook on manner of keeping records of users and ionising radiation sources, criteria for determining types of ionising radiation sources and their categorisation (Article 20 of the Law)
- 9) Rulebook on the content of the application and required documentation for obtaining the permit to conduct radiation activities (Article 21 of the Law)
- 10) Rulebook on detailed conditions for conduction of radiation activity (Article 22 of the Law)
- 11) Rulebook on the content of the application and required documentation for obtaining the permit for temporary conduction of radiation activity (Article 23 of the Law)
- 12) Rulebook on requirements for professional qualifications of the person responsible for protection against ionising radiation (Article 24 of the Law)
- 13) Rulebook on the form and content of the records on ionising radiation sources, on professionally exposed persons, as well as on radioactive waste and records of ionising radiation exposure of patients (Article 26 of the Law)
- 14) Rulebook on the manner, types and time intervals in which measurements are done for quality control of ionising radiation protection measures (Article 27 of the Law)

- 15) Rulebook on the manner for conduction of decontamination and conditions that shall be met by legal persons who perform decontamination (Article 28 of the Law)
- 16) Rulebook on conditions for medical application of ionising radiation sources and on manner of protection of patients during medical exposure due to implementation of diagnostic or therapeutic procedure (Article 29 of the Law)
- 17) Rulebook on the contents and time limits of delivery of records on increase in concentration of natural radionuclides over the prescribed limits in technical and technological production process (Article 31 of the Law)
- 18) Rulebook on detailed conditions to be met by a legal person to carry out the prescribed examinations, measurements or other professional activities, as well as on the contents of the application and required documentation (Article 32 of the Law)
- 19) National Action Plan for action in the event of radiation accident that may cause a state of emergency (Article 35 of the Law)
- 20) Early notice programme (Article 36 of the Law)
- 21) Rulebook on detailed conditions and manner under which the radioactive waste is collected, kept, processed, recorded and disposed off (Article 37 of the Law)
- 22) Rulebook on detailed conditions and manner under which the radioactive waste is collected, kept, processed, recorded and disposed off, on contents of the application and required documentation for managing the radioactive waste warehouse (Article 39 of the Law)
- 23) Rulebook on detailed conditions for trafficking of ionising radiation sources and radioactive materials and on contents of the application and required documentation that must be fulfilled by legal persons (Article 42 of the Law)
- 24) Rulebook on permissible limits of contents of radionuclides, methods and manner of radioactive products control (Article 44 of the Law)
- 25) In order to uncover and prevent illicit trafficking of radioactive and nuclear materials across Montenegrin borders, ionising radiation monitors are being installed at border crossings, in accordance with the Act of the body competent for home affairs and public administration.