

SERBIA AND MONTENEGRO



MONTENEGRO



SERBIA

Current situation in energy sector in Serbia and EPS is strongly influenced by fifteen years of crises that country went through since beginning of 1990s. During the winter of 2000-2001 donor grants were required in order to meet 25GWh/day import requirements, because electricity generation could not meet domestic needs especially during winter peaks (AEA 2004). Electric Power Industry of Serbia made some efforts both to ensure reliable energy supply to a customer (which was difficult task during winter because of electricity used for heating) and to reduce dependence on import. EPS also tried to influence energy demand by adjusting price of electricity. This price was raised several times according to decision of Ministry of Mining and Energy during past fifteen years but it was always perceived as quite unpopular act. During this period governments changed several times, but none of them made radical change in respect to electricity prices mostly due to the fact that that would give disadvantage in next elections. Main reason for this is low standard in general and high percent of people living on the edge of existence where even small changes in bills severely affect their home budget. EPS also made efforts to recover infrastructure that was heavily damaged during bombing in 1999 and neglected during many years of crises and lack of maintenance and investments. Some success was made in reducing losses and increasing collections (at present, the cash

collection rate for current bills is 88% overall, and around 92% for households). EPS' losses are currently around 15%: 5% (non-technical losses) and 10.5% (technical losses) and company has a plan to reduce them to 9% until 2010 (EPS 2004).

SECTION 1: ENERGY PROVISION

- ***Main fuel sources for direct use and power generation***

Primary Energy Supply:

Serbia and Montenegro SCG has large deposits of coal (50.8% of all energy resources) and a substantial amount of hydropower potential (Figure 1). SCG has proven 16 billion tons of lignite reserves, 78 billion barrels crude oil reserves (25% of whole reserves in South East Europe), 48 trillion cubic meters of natural gas reserves (60% of whole reserves in South East Europe) (AEA 2004).

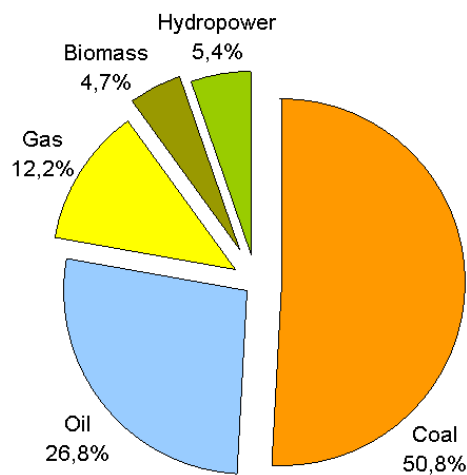


Figure 1: Shares of different energy sources in total energy supply in SCG in 2003
Source: Austrian Energy Agency (AEA 2004)

Other energy potentials derive from biomass (2.58 million toe), water (400 000 toe) and geothermal (185 000 toe) (AEA 2004).

Electricity generation:

Electricity generation: 30% of electricity is being generated using hydro power and 70% is generated in thermal power plants using fossil fuels, mostly coal, and gas and oil represent 3% of electricity sources (MSEP 2005) as in Figure 2.

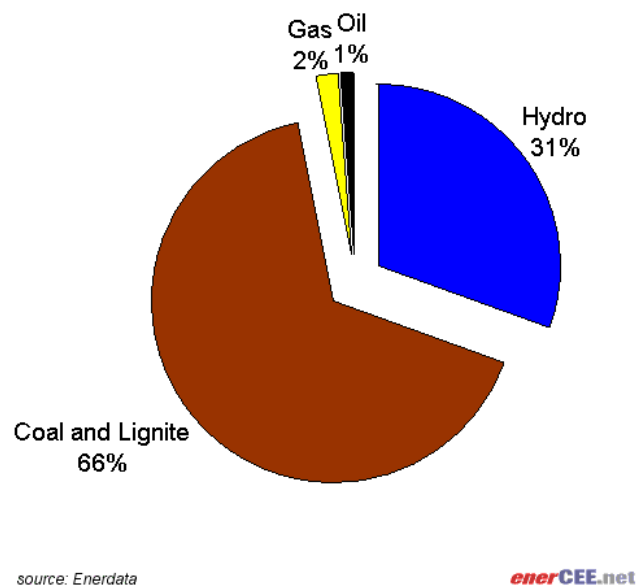


Figure 2: Electricity production in Serbia and Montenegro according to energy sources in 2003 Source: Austrian Energy Agency (AEA 2004)

Installed generation capacity in SCG in 2003 was 8.355 MW, while electricity generation was 31.81 TWh and electricity consumption 26.17 TWh (AEA 2004). At the same time energy losses in transition and distribution are estimated to be 19% due to poor maintenance and obsolete technology (MSEP 2005).

Serbia

Electricity generation:

According to Energy Agency of the Republic of Serbia, AERS data, electricity generation from various sources has been as in Table 1 in year 2004.

Table 1: Amount of electricity produced in Serbia, from different sources (data from: ERRA, 2004)

SOURCE	ELECTRICITY GENERATION (GWH)
Fossil fuel	38489
TPP (coal fired)	26184
CHP	381
Hydro	11924

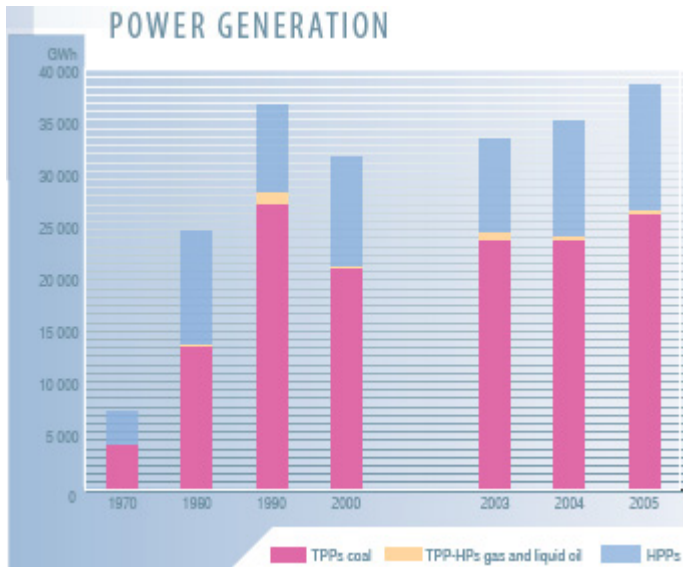


Figure 3: Power generation profile between years 1970-2005, by source in Serbia. (TPP: Thermal Power Plant; HPP: Hydro Power Plant) (Source: EPS, 2005)

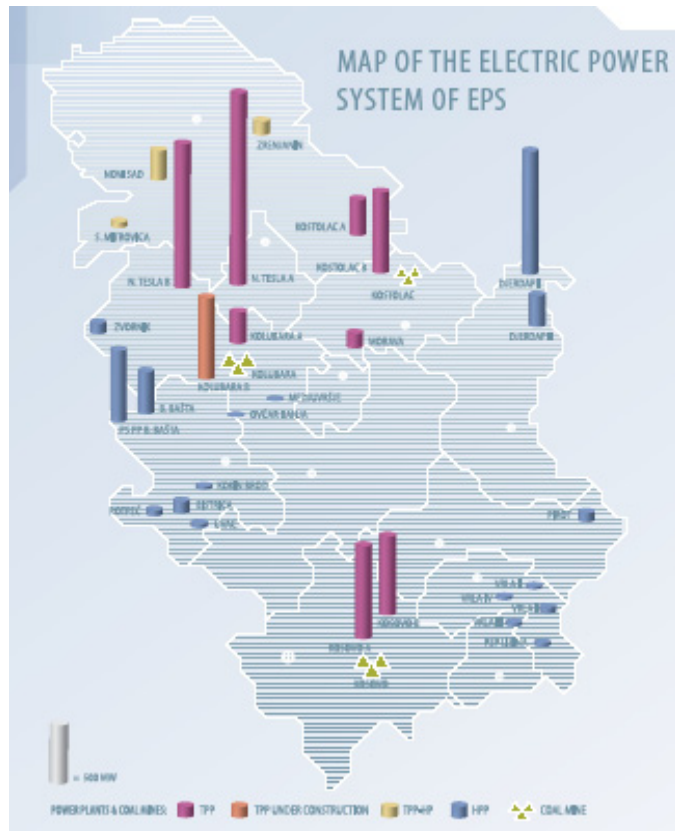


Figure 4: Electric power system of Electric Power Industry of Serbia with power plants, coal mines and transmission network Source: Electric Power Industry of Serbia (EPS, 2004)

Consumption:

AEA Report reveals that 14% of households in Serbia are using heating network as primary energy source, 33% is using electricity for heating, 39% coal, 7% waste wood and 7% natural gas (Table 2). Heating plants usually have problem with fuel supply of heating plants and temperatures in the households are often lower from the one that is

required. Because of this most of these households use electricity for heating in addition to the one provided by heating network.

Table 2: Energy sources used by households for heating in Serbia in 2003 (in percents)
Data from: Austrian Energy Agency (AEA 2004)

Energy source used for heating	percentage of households
electricity	33%
coal	39%
biomass	7%
natural gas	7%
heating network	14%

Also,

consumption zones were determined according to the amount of kWh of electricity spent and divided in three categories (Table 3).

Table 3: Consumption zones division and percent of household in each zone in Serbia in 2003 Source: Electric Power Industry of Serbia (EPS 2004)

ZONE	CONSUMPTION ZONES (PER MONTH)	% OF HOUSEHOLDS (2003)
Green Zone	< 600 kWh	70%
Blue Zone	601 kWh -1600 kWh	22%
Red Zone	>1601 kWh	4%

Montenegro

Electricity generation:

According to data from ERRA, in year 2005, Montenegro was producing 2994 GWh/year electricity, with the following distribution of sources as in Table 4.

Table 4: Electricity generation from different sources in Montenegro in year 2005 (data from ERRA, 2006)

SOURCE	ELECTRICITY GENERATION (GWH/YEAR)
HPP	2039
TPP	955
Total	2994

In Montenegro there is one big hydro-power station (“Piva”) and several small hydro-power stations. “Piva” was developed to take advantage of the hydro-electricity potential in the Montenegrin Mountains and the large thermal power stations in Serbia. According to agreement between Montenegro and Serbia, Montenegrin peaking power from Piva

hydro-power station is exchanged for base load thermal power from Serbia (the exchange terms are 1.415 units of base load power for peaking power) (AEA 2004). There is also small thermal power plant “Pljevlja” that has uncertain future because the cost of lignite from the adjacent mine hardly allows the station to recover its operating costs through tariffs, and it is expected that the cost of coal production will increase as deeper reserves are mined (AEA 2004).

Natural Gas:

In Montenegro there is neither production nor facilities of natural gas.

Consumption:

Montenegro most homes are using wood or electricity for heating and there is no district heating system (Table 5). This can be explained by the fact that Montenegro has mild winters. There are also significant regional variations in fuel use for heating that are related either to climate differences (warm South) or abundance of wood (that is more available on the North).

Table 5: Energy sources used by households for heating in Montenegro in 2003 (in percents) data from: Austrian Energy Agency (AEA 2004)

ENERGY SOURCE USED FOR HEATING	PERCENTAGE OF HOUSEHOLDS
Electricity	48,1%
Gas	0%
Stone coal	5,3%
Brown coal	1,3%
Wood	42,4%

- ***Degree of reliance on imported energy***

In spite of the abovementioned resources, SCG still depends on imports of oil and gas. Around 40% of its energy carriers are being imported (AEA, 2004).

Serbia

Oil market:

Oil market is organized through several oil producing and distributing companies. 30% of total supply with crude oil comes from Serbia's own sources. Oil derivatives are produced in Serbian oil refineries. Most of the country's oil production is undertaken in the autonomous province of Vojvodina where 18,000 barrels per day (bpd) of crude oil are produced, covering only 33 per cent of domestic oil consumption. The two refineries at Novi Sad in Vojvodina and Pancevo in central Serbia were badly damaged by NATO bombing during 1999, although these have been partly rebuilt. 70% of total refinery capacities are operating again. The rest is imported from Russia.

- **Extent of connection to electricity network (households and businesses; rural and urban)**

Serbia

According to AEA report all households in Serbia are electrified and metered, and average monthly electricity consumption is approximately 400kWh per household. There are some differences dependent on the region observed and regional average household consumption varies between approximately 350kWh (Western Serbia) to 490kWh (Belgrade-capital).



Figure 5: Electricity network of Serbia (planned and existing) (EPS, 2005)

Montenegro

According to AEA report nearly all Montenegrin households are electrified and metered, and average monthly electricity consumption in Montenegro in 2001 was 367 kWh per household. There is significant difference between average consumption in capital city (407 kWh, which is the main driver of high average consumption in Montenegro) and average consumption in smaller towns (231 kWh) in the republic.

- **Any capacity concerns (power generation an/or transmission/distribution)**

Serbia

Due to ten years of isolation and war, electricity sector experienced problems like: depressed electricity prices, rising consumption, ageing and damaged assets, limited access to imported equipment and financial constraints. The low tariffs (below €1/kWh) were and are still big problem for this sector, because they distort demand and encourage electricity use for heating (AEA 2004).

After more than a decade of underinvestment and lack of maintenance there is a need for investment in repairing of existing system. Power plants have been deteriorating over the last decade and transmission and distribution losses are high, and improvements in these aspects are priority. Second, household consumption has been increasing and therefore, there is a need for new power plants and maintenance of existing production and transmission facilities.

Montenegro

Situation in Montenegro is similar to that in Serbia: low electricity prices, high consumption, and growth in demand for electricity from domestic consumers. problems in energy system of Montenegro, like in case of Serbia, originate from inadequate maintenance and lack of investments. At the moment projects for recovery of energy system are being conducted due to investments from European Investment Bank (AEA 2004).

- ***Potential for renewable energy, energy efficiency and co-generation (i.e. any authoritative assessments)***

Serbia and Montenegro

Solar Energy

Solar irradiation levels in Serbia and Montenegro are qualified as high, and in some parts duration of sunshine ranges from about 2.000-2.500 hours per year and the yearly ratio of actual irradiation to the total possible irradiation reaches approximately 50%. There is no available data on the existing capacity currently operating, but it is known that for example in 1998 around 28,000 solar thermal units were in use, replacing the equivalent of 0.14 TWh of fossil fuel derived energy (used mainly for water and space heating) (AEA 2004).

The total potential for solar active technologies has been estimated to be approximately 50-60 % of heating demand in the cloudier central regions. On the other hand, photovoltaic conversion of solar energy is used on much smaller scale and is at its earlier stage in comparison to solar thermal technology. Considering the capacity for the use of solar energy it is to be expected that this energy source could be used on larger scale in the future.

Geothermal Energy

Serbia and Montenegro has geothermal potential but there is still no official data on how big this potential is and to which extents this renewable energy resource is being exploited. Assessment of geothermal resources and detailed investigations in twenty localities are in progress. SCG territory is considered to have favorable geothermal characteristics.

According to the European Bank of Reconstruction and Development report there are four geothermal provinces with more than eighty low enthalpy hydro geothermal systems. The reservoirs of these systems are in karstified lime stones more than 500m thick. Exploration has shown that geothermal energy use in SCG for power generation can provide a significant component of the national energy balance (400×10^6 tones of thermal-equivalent oil). The prospects for use of heat pumps on pumped ground water from alluvial deposits along major rivers are very good (EBRD 2003).

Biomass

The only biomass currently used on larger scale as source of energy in SCG is wood. SCG has also been exporting wood (in 2000 export was US\$ 1.7 million of firewood and non-processed wood) (AEA 2004). According to the AEA report it is estimated that 200 ktoe of conventional transport fuel could be saved each year through methanol production from crops grown only on 3% of the total arable land, and another 260 ktoe/yr is considered available from agricultural wastes. There were some attempts to produce biodiesel using soybean oil in Agricultural Faculty in Novi Sad, but without success.

Hydro-electric energy

Hydropower is being used in SCG for generating electricity without significant changes during last decade because most of the capacity has already been employed. 5.4% of total energy supply in SCG comes from hydropower and 30% of electricity is being generated in hydro power plants. There are nine hydro-power plans currently operating with total electrical capacity of around 2.8 MW (MSEP 2005).

Wind

There are no operational wind turbines in Serbia and Montenegro. The locations with the highest velocities in 1999 and 2000 were: Crni Vrh (256–223 days), Ban. Karlovac (128-155 days), Vranje (133-156 days), Kopaonik (134-144 days), Nis (81-105 days), Belgrade (130-114 days). According to the investigations made by experts from Agricultural Faculty and Faculty of electronics from city of Beograd in 2003, potentials to produce electricity from wind in Serbia and Montenegro are as follows (AEA 2004):

Average speed of wind: 4 – 6 m/s,

Potential (onshore) wind capacity: 11 000 MW,

Potential (onshore + offshore) wind capacity: 15 000 MW,

Electricity produced from (onshore + offshore) wind: 26,3 TWh/yr.

Section 2: ENERGY MARKET

- ***Ownership (state/municipality/private/mixture) of electricity and gas utilities and other sources of energy***

Serbia and Montenegro

Oil and Natural Gas:

NIS Jugopetrol is the only oil industry company responsible for supply with oil, fluid gas and natural gas in Serbia and Montenegro. This company was established in 1947. “NIS Jugopetrol” can be divided in a few main company daughters (ERRA, 2006, year 2005):

- “NIS Naftagas Novi Sad” (crude oil and natural gas production),
- “NIS Rafinerija Pancevo” and “NIS Rafinerija Novi Sad” (oil derivate production – energetic part),
- “NIS Rafinerija Beograd”, “NIS Rafinerija Novi Sad”, “NIS Fam Krusevac” (oil derivate production),
- “NIS Gas Novi Sad” and “NIS Energogas Beograd” (fluid and natural gas supplying),
- “NIS Jugopetrol Beograd” and “NIS NAP Novi Sad” (oil derivates supplying through 350 oil stations in area of Serbia).

Beopetrol: The biggest oil derivates distributor and trader is “Beopetrol” which emerged from the Croatian oil industry INA from Zagreb, Croatia. In 1990 it has started with independent business activities. It supplies oil derivates through 206 petrol stations in area of Serbia and covers 20% of total selling of oil derivates in Serbia. 33% of total oil derivates consumption is diesel and petrol, while 15% is (light) heating oil (ERRA, 2006, year 2005).

Serbia

Electricity market:

Electricity Market size: 26.773 GWh/year (ERRA, 2006). Electricity is currently being produced, transported and delivered to end-users by public enterprise Electric Power Industry of Serbia (EPS).

Elektroprivreda Srbije (Electric Power Industry of Serbia, EPS): Electricity utility “Elektroprivreda Srbije” is the largest electricity utility in Union State of Serbia and Montenegro. It is a state owned company with main business activities in electricity production, transmission and distribution, managing of electricity

system, export-import of electricity. Elektroprivreda Srbije runs its business in accordance with Serbian Law on Electric Power Industry.

EMS: Public enterprise EMS started its operation in July 2005, based on Government's Act on foundation issued in January 2005, as the independent Transmission System and Market Operator in Serbia.

Gas market:

30% of total supply with natural gas comes from Serbia's own sources. During the bombing in 1999 natural gas sector was not damaged but currently it is in a bad condition because of lacking operation and maintenance. It therefore needs large investments for reconstruction. Russia covers over 60 % of Serbia and Montenegro's gas demand. A small amount of natural gas is produced domestically in Vojvodina. [<http://www.worldinformation.com/>]

Srbijagas: Public enterprise "Srbijagas" started its operation in October 2005, performing transport, distribution, system operation and trade of natural gas. Srbijagas is also the sole wholesale supplier for tariff customers in Serbia.

Also, there are 28 privately owned distribution companies responsible for distribution and supply of natural gas in northern part of Serbia.

Montenegro

Electricity market:

The state owns 67,66% of the Elektroprivreda Crne Gore, EPCG shares. Private entities own about 12% and the rest own 5 privatization funds (ERRA, 2006). Generation consists of two HPP, one TPP and seven small HPP. The TPP and five SPP are planned for privatization within this year.

EPCG, Elektroprivreda Crne Gore: Electricity utility "Elektroprivreda Crne Gore" is a state owned company with main business activities in electricity production, transmission and distribution, managing of electricity system, export-import of electricity. "Elektroprivreda Crne Gore" runs its business in accordance with Montenegrin Energy Law.

- ***Extent of competition in power generation and energy retail***

Serbia

Electricity:

Initial eligibility threshold set by the Energy Law is 25 GWh/year (16% market opening) (ERRA, 2006, year 2005).

Gas:

Initial eligibility threshold set by the Energy Law is 50 million bcm/year (50% market opening) (ERRA, 2006, year 2005).

Montenegro

The threshold is set at 25 GWh in electricity, 50 million m³ of natural gas, and 5000 GJ of heat (ERRA, 2006, year 2005).

- ***Structure – extent of vertical integration of generation/transmission/distribution/retail***

Electricity market:

The Union State of Serbia and Montenegro has two electric utilities: Serbian “Elektroprivreda Srbije” and Montenegrin “Elektroprivreda Crne Gore”. Before the war (till 1990) Serbia and Montenegro had a modern electricity system and they imported electricity to neighbor countries. The electricity system lost capacity because of the Balkan conflicts and because of a lack of operation and maintenance of the system. This resulted in higher electricity demand than production. Today both utilities in Serbia and Montenegro are preparing themselves with a reconstructed electricity system for the reconstruction and privatization.

Serbia

Public enterprise EPS comprises of 11 legally independent subsidiaries- 4 generation companies, 1 generation/coal mining company, 5 distribution/ supply companies and one coal- mining company (ERRA, 2006).

Public enterprise EMS issued in January 2005, as the independent Transmission System and Market Operator in Serbia.

Montenegro

There is one vertically integrated electricity subject (EPCG). By the end of 2005 it was financially and functionally unbundled into four subjects: generation, transmission, distribution and supply. The Energy Law left to the Agency decision on the terms for legal unbundling.

There is no market yet. Still, there are some signs: direct consumers (110kV) purchase one third of their electricity abroad by themselves. The EPCG purchases for tariff consumers one third of their consumption from abroad too. Until the Agency determines that competitive market for electricity exists, generators are obliged to supply tariff customers only.

SECTION 3: ENERGY POLICY FRAMEWORK

- ***Existence of an explicit energy policy framework (e.g a recent White Paper) and key policies (e.g privatisation, liberalisation, rural electrification plan etc) or not – what role is envisaged for sustainable energy?***

Serbia

The basis of the energy policy is included in the proposed Serbian and Montenegrin Energy Laws. Strategy of development in sector of energy up to 2015 exists as a draft document. After it's finishing it will be submitted to the Serbian Government/Parliament according to the Serbian Law on Energy.

Energy Law of July 2004 contains Energy Sector Development Strategy of the Republic of Serbia that predicts policy measures for giving incentives for financial investments in energy facilities using renewable energy sources, incentives for increasing energy efficiency, conditions and methods for ensuring environmental protection, etc. The generation of electrical power is planned to include production in hydroelectric power plants, thermal power plants, combined heat and power (CHP) plants and renewable energy or waste electric power plants (MSEP 2005). According to new law privileged electrical power producers shall be producers who in their electrical power generation process use renewable energy sources or waste, as well as those who simultaneously generate electrical power and heat, provided they meet energy efficiency criteria (MSEP 2005)

Law on Mining ("Official Gazette", nr. 44/95)

Law on Gas Transporting, Distribution and Using ("Official Gazette", nr. 66/91, 12/96)

Law on Electric Power Industry ("Official Gazette", nr. 45/91)

Montenegro:

The New Energy Law: It was adopted by Parliament on 25th June 2003 and comprises the following activities:

- Electricity production, transmission, distribution and supply on market,
- Organization and function of electricity market,

- Oil derivatives and gas transportation, distribution, storage and trading.

Environment Law: It was adopted in 1996. Among its objectives of the environmental protection, it also aims to foster rational energy consumption by the implementation of energy -efficient technologies and by means of gradual transition to renewable sources of energy.

- ***Any current energy policy debates/developing legislation – e.g. on security of supply; energy market reform; incentives for renewable energy etc***

Serbia

Electricity pricing: EPS introduced some changes in pricing of electricity in Serbia in April 2001. A three-tier block tariff system for household consumers was introduced in order to provide an incentive for more efficient use of energy (especially to discourage the use of electricity for heating). Second objective of this new tariff system was to make electricity affordable for the poorest consumers.

Since April 2001 Serbia has raised tariffs extensively several times: in April 2001 (60%), June 2001 (40%), October 2001 (15%), June 2002 (50%) and June 2003 (15%). The aim is to reach full cost recovery levels and then the block tariff structure (introduced as a transitional measure) will be reformed and flattened by time. According to plans of EPS it is expected that this way further liberalization and independent regulation of electricity prices can be achieved (EPS 2004).

Montenegro

Electricity pricing: In Montenegro, 23% increase of electricity prices took place in April (to satisfy the conditions of IMF standby arrangements). An exception was made in case of electricity supply to local aluminum factory as a subsidy (which is a politically sensitive issue) (AEA 2004).

- ***Any specific policies or programmes to promote sustainable energy***

Fund for Environmental Protection: The Law on Energy of the Republic of Serbia provides for the establishment of a Fund for Environmental Protection. The fund's finances are to be used to finance, among others, incentives for use of renewable energy sources and increased energy efficiency.

European Agency for Reconstruction, EAR, Fund Program: In order to make some progress in improving energy efficiency Serbian Energy Efficiency Agency started a program Special EAR (European Agency for Reconstruction) Fund Program that has following goals (AEA 2004):

A number of programmes is prepared by the Serbian Energy Efficiency Agency and will be financed by Special EAR Fund Programme and approved by the Ministry of Mining and Energy. The programmes are as follows:

Energy Efficiency in the Building Stock: Serbian Energy Efficiency Agency has developed the Strategy Programme - Energy Efficiency in the Building Stock , which should contribute to the increase of energy efficiency and reduction of energy consumption in the residential and tertiary buildings.

Strategy Programme 'Energy Efficiency in Industry: Serbian Energy Efficiency Agency, in agreement with the Republic Ministry of Mining and Energy of the Serbian Government, has prepared the Strategy Programme 'Energy Efficiency in Industry', which is expected to contribute to the improvement of energy efficiency in the Serbian industry.

'Energy Efficiency in the Municipal Sector: Serbian Energy Efficiency Agency has developed the Strategy Programme 'Energy Efficiency in the Municipal Sector' which should contribute to the increase of energy efficiency in the buildings and systems which are within the responsibility of the local (municipal) administration.

Energy efficiency in transport: The Program 'Energy Efficiency in the Transport Sector' is going to start after the strategy of transport sector development is laid down.

Renewable energy sources: SEEA will promote wider use of RES through its Program "Renewable energy sources". The Program will be implemented through various activities: analysis of energy potential of RES, improvement of statistics and data base about the potential and the use of RES, improvement of energy management, alignment of legislation to the European practice, awareness campaigns and co-financing of demonstration projects aimed at introduction of new technologies for efficient use of RES.

- ***Any major energy network or sustainable energy studies available***

Structure and Trends of Energy Consumption in the Serbian Industry from 1990 to 200: Serbian Energy Efficiency Agency (SEEA) has analyzed energy efficiency in sectors and branches of the Serbian industry, within its activities of developing the National Strategy Programme "Energy Efficiency in Industry".

Project 'Training in energy audits in industry: The first project started in the Serbian Energy Efficiency Agency was aimed at: a. creating a group of experts trained in industrial energy audits; b. execution of preliminary energy audits in 10 selected companies; c. performance of one detailed energy audit; d. increase of awareness on the need of energy management in industry and elaboration of energy audits as

the key element for decisions on various possibilities and steps in rationalization of the energy consumption.

- ***Role of government in energy policy – which departments are involved?***

Serbia

Ministry of Mining and Energy: The Ministry is in charge of the governmental energy policy making, preparation and adoption of energy legislation, secondary legislation and regulation.

Montenegro

The Ministry of Economics – section for energy: The section for energy is monitoring the states, production trends and business results of Montenegro's energy sector. This section is making investigations and preparing plans for creating strategy of energy development in Montenegro. Ministry of Economy has prepared Strategy for the development of small hydro power plants in Montenegro.

The Ministry of Environmental Protection and Physical Planning: The section of the Ministry for providing general environmental politics is responsible for suggestion and creation of the basis of environmental politics and the monitoring of its realization; monitoring and eco-management systems; coordination of international cooperation, international contracts and convections; cooperation with domestic environmental non-governmental organizations and civil society in purpose to implement the environmental politics of Montenegro.

- ***Any government (or government funded) agencies with a specific role in sustainable energy and/or environmental protection (with an energy role)***

REC Country Office Yugoslavia: The Regional Environmental Center for Central and Eastern Europe (REC) operates in Serbia and Montenegro as an international organization, following the Memorandum of Understanding signed by REC and the Ministry of Foreign Affairs of FR Yugoslavia, in June 2001.

Serbia

Regional Energy Efficiency Centers of Serbia: In 1996, the Serbian government decided to establish energy efficiency centers at some of the universities, but because of the wars, the plans were not realized. Now, these canters are revitalized. The universities in the four larges cities (Belgrade, Novi Sad, Kragujevac and Nis) are now co-operating with the Ministry of Mining and Energy, with Serbian Energy

Efficiency Agency and with Norwegian experts to establish 4 centers as independent units.

A decision was taken 24 May 2003 to establish the centers as independent units. The four centers for energy efficiency origin from the mechanical faculties and the universities in the largest cities, including Novi Sad (as Regional Energy Efficiency Centre), Beograd (as Regional Centre for Energy Conservation), Kragujevac (as Regional Euro-Energy Centre on ept.kg.co.yu) and Nis (as Energy Efficiency Centre).

Alliance to Save Energy Regional Office – Serbia: The Alliance's Serbia Program was launched in April 2001 with funding from the United States Agency for International Development (USAID). The primary goal of the Alliance Serbia Program is to assist Serbia with the severe energy situation facing the country.

Energy Agency of the Republic of Serbia (AERS): The Agency was founded in consequence to the Energy Law, entered in force on 1st August 2004. The main tasks of this body are enhancing and directing the energy market development, monitoring the implementation of regulations and energy systems operation codes, harmonization activities of energy entities on providing regular supply of energy and services to customer as well as their protection.

Serbian Energy Efficiency Agency, SEEA: A Serbian Energy Efficiency Agency was originally founded by Governmental Decree in 2002. SEEA drafts proposals for incentive measures and programmes to increase energy efficiency and the use of Renewable Energy Sources, monitors their implementation, drafts and proposes technical and other regulations for increasing energy efficiency and criteria for equipment efficiency evaluation in use of energy and method of marking them in line with adequate international regulations and standards. It also provides financial and technical support in the preparation and implementation of priority energy efficiency projects and consultative, advisory and educational services in promoting energy efficiency.

Serbian Chamber of Commerce: The Energy and Mining Association works under the industry sector of Serbian Chamber of Commerce. The scopes of its work are: development of energy and mining sector, initiator and sub creator of laws, under-laws, decisions and regulations regarding energy sector, monitors financial flows of international energy companies, foreign investments and overlooks the process of electricity, gas and oil derivatives market liberalization.

Montenegro

Montenegrin Chamber of Commerce: Energy and Metallurgy Association works under Montenegrin Chamber of Commerce. The scopes of its work are the same as at Energy society of Serbian Chamber of Commerce.

- ***Any energy planning procedure in place***

Reconstruction of electricity infrastructure: The immediate and medium-term priority for Serbia and Montenegro is the reconstruction of the country's electricity infrastructure, which was heavily bombed during the recent war.

SECTION 4: ENERGY REGULATION

- ***Is there an energy or utility regulator? When was it established?***

Serbia

Energy Agency of the Republic of Serbia AERS: was founded by the Energy Law as a regulatory body responsible for enhancing and directing the energy market development. It harmonizes activities of energy entities on providing regular supply of energy and services to customers, ensuring customer protection and equal position as well as other activities stipulated by the Energy Law. After legal establishment in June 2005, AERS became fully operational in January 2006.

Montenegro

Energy Regulatory Agency of Montenegro, ERA: ERA was established in January 2004. ERA regulates electricity and liquid fuels. It supervises energy undertakings and establishes rules and regulations.

- ***Degree of independence of the regulator from government (legal structure, who appoints the regulator and board)***

Serbia

As per the Energy Law, the Council (managing body of AERS) consists of President and four members, with staggered terms of office (5, 4 and 3 years), elected by the National Assembly.

Montenegro

ERA consists of 17 staff members. The presiding of the board is appointed each year among the three members of the board. Their mandate is 4 + (4) years. Montenegrin parliament appoints the members of the board. Director and deputy director are appointed by the board and their mandate lasts 4 + (4) years.

- ***Regulatory framework – legislation, duties, powers (any references to environment, sustainable energy)***

Serbia:

AERS: The regulator has jurisdiction in electricity, gas, oil and district heating sub-sectors. It operates on the principles of non-discrimination and effective competition, monitoring the implementation of regulations and energy systems operation codes.

Ministry of Mining and Energy: The Ministry of Mining and Energy is responsible for the electricity power sector, geology and mining sector, oil and gas sector, general energy sector (communal utilities), energy balance of the Republic of Serbia, provision of conditions for the operation of public enterprises under its jurisdiction. The Ministry is in charge of the governmental energy policy making, preparation and adoption of energy legislation, secondary legislation and regulation.

Ministry of Science and Environment Protection: It is necessary for Serbia and this Ministry to apply obligations of environmental protection on global level, to decrease the greenhouse-gas emissions, according to international regulations. In Serbia as a part of international community it needs to ensure the application of international agreements in this field, which the state accepted. Ministry of Science and Environment Protection has already prepared two propositions of Laws:

- Law on Environmental Protection System (started in 2002, updated in 2004),
- Law on Reduction of Emission.

Montenegro

Energy Regulatory Agency of Montenegro, ERA's responsibilities include electricity tariff setting, price setting of coal for production of electricity, licensing, protection of consumer and investor interests and regulation of access to the transmission and distribution grids.

- ***Regulator's roles – key tasks (e.g. price controls, promoting competition etc) , actions to date, any action/role in the sustainable energy field)***

Serbia

Among other tasks, the Serbian regulator is primarily responsible for:

- Issuing licences,
- Price regulation,
- Approval of network codes and market rules,
- Dispute settlement (TPA),
- Determining eligibility criteria
- Setting the eligibility threshold and
- Market monitoring.

Montenegro

ERA regulates electricity and liquid fuels. It supervises energy undertakings and establishes rules and regulations. Its responsibilities include electricity tariff setting, price setting of coal for production of electricity, licensing, protection of consumer and investor interests and regulation of access to the transmission and distribution grids.

- ***Role of government departments in energy regulation (both where a regulator***
Please find the relevant information under the point: “Regulatory framework” above.

- ***Have any regulatory barriers to sustainable energy been identified and if so what are they?***

The changing in the institutional framework is going on, since the separation of Serbia and Montenegro is very recent. Potential insufficiency in the institutional capacity may cause delays in making new regulations, as well as in applying them.

REFERENCES:

Austrian Energy Agency (AEA) 2004. Energy profile – Serbia and Montenegro. URL: [consulted September 2006]

Cassedy, E. S. 2000. *Prospects for Sustainable Energy. A critical assessment*. Cambridge: Cambridge University Press.

Electric Power Industry of Serbia (EPS) 2004. *Annual report*. URL: http://www.eps.co.yu/publikacije/godisnji_izvestaji/ANNUAL%20REPORT%202004.pdf [consulted September 2006]

European Bank of Reconstruction and Development (EBRD) 2003. Serbia – country profile. URL: <http://www.ebrdrenewables.com/sites/renew/Shared%20Documents/Country%20Profiles/Serbia.pdf> [consulted September 2006]

Geller, H. 2003. *Energy revolution. Policies for a sustainable future*. Washington: Island Press.

Hinrichs R. A. 1996. *Energy. Its use and the environment*. New York: Saunders College Publishing.

Ministry for Science and Environmental Protection (MSEP), Directorate for environmental protection, 2005. *National Environmental Strategy of the Republic of Serbia*. Draft submitted for interministerial consultations. URL: http://www.ekoserb.sr.gov.yu/dokumenti/razno/National_Strategy.pdf [consulted September 2006]

Serbian Energy Efficiency Agency, “activities”, URL: <http://www.seea.sr.gov.yu/English/Prezentacija1.htm>, (consulted, September, 2006)

EPS, *Elektroprivreda Srbije (Electric Power Industry of Serbia, EPS)*. 2005. *Electric Power Industry of Serbia-2005 Report*, online report, URL: http://www.eps.co.yu/publikacije/godisnji_izvestaji/TechAR06e.pdf, consulted in September 2006

ERRA, Energy Regulators Association.