

# Hydropower and its future role (environmental aspect)

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- 1991 Montenegro adopted the Declaration on Montenegro as an ecological state;
- All activities undertaken by the Government of MNE are based on the protection of human health and life, the improvement of living and business environment, preserving the ***ecological balance and stability of nature, rational and adequate use of natural resources, investment in clean energy sources,*** improving system of environmental protection and pollution reduction;
- Considerable attention has been devoted to renewable energy sources.

# Strategic framework

A number of strategic documents in which Montenegro has demonstrated its commitment to environmental protection and use of renewable energy sources, has been adopted:

- National Strategy of Sustainable Development with an Action plan for period 2015-2030 (prepared, not yet adopted);
- National Climate Change Strategy 2030 (September 2015);
- Energy Development Strategy (2014);
- Development Directions of Montenegro 2015-2018 (June 2015);
- National Strategy for Air Quality 2013-2016 (2013);
- National Action Plan for the use of energy from renewable sources by 2020 (December 2014)...

# Legislative framework

A great job was done in order to improve the quality of legislation, in particular in the context of the European integration process. The most important legal acts in the field of energy and environment are:

- **Law on Energy, with sublaws;**
- Law on Environment;
- Law on Water;
- Law on Air Protection;
- Law on Nature Protection;
- **Law on Strategic Environmental Impact Assessment;**
- **Law on Environmental Impact Assessment;**
- *Regulation on projects for which the environmental impact assessment is needed;*
- *Rulebook on the content of documentation to be submitted with the application for deciding on the need for environmental impact assessment;*
- *Rulebook on the content of documentation to be submitted with the application for the determination of the scope and content of the study on environmental impact assessment;*
- *Rulebook on the content of an environmental impact assessment study.*



Important international agreements ratified in accordance with the Constitution of Montenegro, which are part of the internal legal framework are:

- Law on Ratification of the Agreement between the European Community and the Republic of Montenegro on establishing the Energy Community,
- Law on Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

## Main institutions involved in creating and implementing policy for the use of renewable energy sources

- Ministry of Economy
- Ministry of Sustainable Development and Tourism
- Ministry of Agriculture and Rural Development
- Environmental Protection Agency
- Institut for Hydrometeorology and Seismology
- Energy Regulatory Agency
- responsible for creating and implementing energy policy
- strategic spatial planning, issuing urban-technical conditions, environmental protection policy and climate change, environmental impact assessment...
- use of water resources
- approval of the strategic environmental impact assessments and studies on environmental impact
- survey of water resources, energy potential of the sun and wind...
- annual analysis of the share of RES in overall production and consumption of electricity...

# What are the main priorities?

Development priorities of Montenegro:

- tourism,
- **energy**,
- industry and
- agriculture



Energy is recognized as one of the priority development sectors in Montenegro.;

In order to develop this sector in accordance with the principles of sustainability, effective use of resources, clean production and consumption, it is necessary to continue to support renewable energy sources;

It is necessary to plan measures to reduce emissions of greenhouse gases and to reduce air pollution by switching to renewable energy sources;



One of the main priorities of the energy policy of Montenegro until 2030:

„Sustainable energy development -energy development based on accelerated, but the rational use of energy resources while respecting the principles of **environmental protection**, improving energy efficiency (EE) and greater use of renewable energy sources (RES), and the need for socio-economic development of Montenegro.“




# Moving to RES? (I)

- In accordance with the Intended National Defined Contribution to the global reduction in emissions of greenhouse gases, the strategic goal of Montenegro in the field of climate change is to reduce the level of emissions of greenhouse gases by 2030 by 30% compared to 1990;
- increase the use of renewable energy sources (RES), which will reflect positively both on the economy and for the environment. *Promotion of rational use of energy and greater use of renewable energy must be accompanied by further improvement of the legislative framework and financial instruments in this field;*
- The hydropower potential and its use are defined as priority issues of economic development of Montenegro.

# Moving to RES? (II)



- Integrated planning of hydroenergy and environmental protection is the only way for sustainable development;
- Switching to renewable energy would reduce emissions, economic dependence on energy import, security of supply would be enhanced and technological innovation would be given more importance;
- On the other hand, *environmental impact* can be significant and must be taken into account when deciding on projects *through the implementation of environmental impact assessment*.

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- Regulations in the field of environment and climate change, information access, public participation in environmental issues are mechanisms which provides advancement of the process of decision-making, development and implementation of policies and regulations in the different sectoral areas

# Implementation procedures for hydropower plants

- Planning (strategic planning in environment and energy field)
- Project approval (concession –Law on Concession, construction permit-Law on Spatial Planning and Construction)
- Construction
- Exploitation

# Main challenges?

- Integraton of environmental issues into development plans and sectoral policies and balancing development needs with environmental protection, and implementation of instruments for environmental management (strategic and environmental impact assessment, ecosystem protection);
- Diversity and uniqueness of natural resources of Montenegro require taking decisive action to preserve this exceptional potential in accordance with commitment of Montenegro as an ecological state, vision, principles, strategic goals and measures for sustainable development;
- Make a balance: increasing energy efficiency and the share of renewable energy sources, reduction of GHG emissions/protection of natural resources?

- Montenegro has one Thermo-power plant (development of II Block of Thermo-power plant is foreseen), 2 large hydro-power plants („Piva“ and „Perućica“) and some number of small hydro-power plants;
- Plans for development of new plants are foreseen by Energy Development Strategy.



- On the other hand, efforts to increase the share of renewables in the energy mix can enhance pressures on water resources in Montenegro and biodiversity and ecosystem services that depend on water;
- It is, therefore, very important in making development decisions to take into account and consistently apply policies on the conservation of habitats, species and achieving / maintain good status of water;



Thank you for your attention!