







Project: Ecosystem approach to hydropower: facilitating the implementation of European requirements to development of hydropower sector in states of the Eastern Partnership

Final resolution, approved in Kyiv, 04.10.2019

The participants of Final project conference are taking into account the state of rivers in the Eastern Partnership's countries and aware of hydropower contribution to their degradation, consider it necessary to claim the following:

We state:

- 1. Hydropower in the Eastern Partnership countries is currently an important part of national energy systems and plays a leading role in ensuring the energy security of countries. Hydropower has certain advantages among which:
 - generation of electricity without fossil fuels, zero air pollution from combustion products and carbon emissions during the operation of hydropower plants;
 - the use of domestic renewable energy sources and no dependence on imports of fossil fuels;
 - flexibility of the power generation mode and the ability to cover peak loads in the power system.
- 2. The rivers on which the cascades of hydroelectric power plants were built back in the Soviet period (such as the Dnipro, Dniester, Kura, Hrazdan, Vorotan) underwent almost irreversible degradation of ecosystems, and their restoration is almost impossible without liquidation of dams.
- 3. The modern construction of hydroelectric and hydroelectric pumped storage power plants (HEPs and PSPPs) and hydropower development plans do not pass proper environmental impact assessments, and their implementation will lead to an increase in negative environmental impact and degradation of ecosystems. Existing practices of strategic environmental assessment (SEA) and environmental impact assessment (EIA) are mainly focused on the impacts on individual species of living organisms within small areas and do not provide an objective assessment of environmental impact in terms of impact on the ecosystem as a whole.



















In projects to mitigate the effects of climate change, hydropower is considered as an energy source that does not have greenhouse gas emissions, while the climate system is affected during not only the operation of hydroelectric power stations and reservoirs, but also in the production of equipment, construction of facilities, operation and putting out of service of hydroelectric power stations. This leads to the mistaken opinion that hydropower does not have a negative impact on the climate.

- 4. In the countries of the Eastern Partnership, there is no regulatory and legal basis as long as methodological basis for applying the ecosystem approach in assessing the environmental impact of hydropower plans, programs and projects. Ecosystem services of rivers remain out of focus, and their economic value is not evaluated and not taken into account, which leads to ignoring their loss in the implementation of hydropower projects, as well as to unreasonable ideas about the relative cheapness of electricity produced by hydropower plants.
- 5. The use of the ecosystem approach the identification and assessment of ecosystems and their services, the prevention of their changes and losses due to the impact of hydropower facilities is a tool for the proceeding to balanced hydropower.
- 6. The current state of development of alternative energy sources, new opportunities for accumulating excess energy produced by renewable energy sources, and the possibility of using it as shunting capacities to cover peak loads, indicate the existence of alternative energy supply solutions in addition to hydropower projects.

In view of the above, we call upon:

1. Governments of the Eastern Partnership countries:

- as Parties to the Convention on Biodiversity, develop regulatory frameworks for implementing the ecosystem approach into the SEA and EIA procedures, in particular for hydropower plans, programs and projects;
- implement a methodology for assessing the impact of the "full cycle" in the rules for assessing the impact of hydropower plants on the environment to assess the impact on the climate;
- accelerate the implementation of integrated water resources management taking into account the needs of all water users and the need for the maximum possible conservation of ecosystems and ecosystem services;



















- prohibit the construction of hydraulic structures, including dams, on the channels of freely flowing rivers (natural watercourses) as obstructing the free, natural flow, and create an open catalog of rivers on which the construction of any hydropower structures is prohibited;
- abandon economic incentives (green tariffs, special taxes, etc.) to stimulate the creation of hydropower facilities;
- ensure the application of the ecosystem approach at the water-basin level for the
 management of transboundary river basins with the mutual recognition of losses of ecosystem
 services and their compensation; the introduction of the "polluter pays" principle, targeted
 use of compensation tools, adaptation of existing industries to the requirements of the
 ecosystem approach, taking into account the interests of all ecosystem users services;
- promote the dissemination and application of the experience of cross-border cooperation between Ukraine and Moldova in the Dniester basin to other river basins of the Eastern Partnership countries.

2. The line ministries of the Eastern Partnership countries:

- ensure the development of a methodological framework, including the economic component, for introducing the ecosystem approach in the SEA and EIA procedures for hydropower plans, programs and projects and in river basin management plans taking into account European experience (https://biodiversity.europa.eu/maes);
- contribute to the systematic study of ecosystems for a more complete account of the ecosystem services provided and with the aim of their restoration and conservation, as well as to provide training for relevant specialists;
- facilitate research in the field of the ecosystem approach to hydropower and water resources management in general, as well as integration of such research with European ones, in particular, by applying modern research methods for the hydrological cycle of individual territories using lysimeters, which opens new opportunities for river basin management;
- monitor the state of river ecosystems both in the zones of influence of hydropower facilities and river basins;
- introduce best practices for ecosystem restoration;



















- legislatively introduce the rules for rationing water use by hydroelectric power stations according to the "left-over principle", that is, specifying only the regime of ecological release in the river channel, the observance of which will be automated;
- conduct a broad educational program among the population at the local, national and international levels regarding ecosystem values and the cost of ecosystem services of rivers, economic and social consequences of their losses.

3. European Union:

- contribute to the reform of the sphere of water resources management in the countries of the Eastern Partnership, the introduction of integrated management based on the water basin principle;
- to promote the implementation of the ecosystem approach in the hydropower sector, to support scientific and educational programs related to the ecosystem services of river and their ecosystems;
- promote public control over the development of hydropower in the countries of the Eastern Partnership and strengthen the influence of public on pro-European changes in this area;
- facilitate the search for reasonable compromises in the further development of hydropower to preserve existing and restore damaged ecosystems.



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