# TAIEX Workshop on Reconciling Hydropower Production and Flood Protection with Sustainable Water Management and Nature Protection

**Brussels, 10-11 October 2016**

# Conclusions and Stakeholder recommendations

## Conclusions

After two days of intense and very productive discussions, the conclusions set out below summarise the key issues which arose from the workshop and are presented for consideration by national authorities, European Commission services and stakeholders. They are intended to be used as a reference in assessing the potential for hydropower development and as a basis for developing a strategic and integrated approach.

The Workshop was organised by the European Commission. It involved experts on environment, energy and water from national authorities in the Enlargement and Eastern Neighbourhood countries, the European Commission (DG ENER, DG NEAR and DG ENV), financial institutions (EIB and EBRD), NGOs and the private sector. The participation of representatives from both environment and energy sector was essential for the success of this meeting.

The objective of this two days conference was to showcase the importance of integrated water management and strategic planning in meeting rising energy needs and addressing flood risks while ensuring nature protection. The meeting was well attended by the full range of interested stakeholders and the discussion, debate and presentations were of high quality. It was a successful meeting in achieving the objective of an open and well informed debate on this issue.

The outcome of presentations and discussions may be summarised as follows:

- The promotion of renewable energy is a key policy of the European Union in order to ensure its climate and energy policies inside the EU but also in partner countries, which need to meet these obligations (Paris Agreement, Energy Union etc.)
- Renewable energy contributes to fight against climate change and can reduce air pollution. It must be accepted that the generation of renewable energy can also have significant negative impacts on the environment. Hydropower, which still represents an important share of electricity generation from renewables, requires a strategic approach, to ensure that the benefits in terms of climate change, energy security and economy have to be balanced with environmental impacts. It therefore has to be carefully considered in the light of other important requirements in EU environmental legislation (SEA, EIA, Birds and Habitat Directives, Water Framework Directive and Floods Directive).
- The perspective of flood management in the context of integrated water resources management has to be considered. Western Balkans, Turkey and Eastern Neighbourhoods countries are already and will continue to be very affected by climate change.

- The framework conditions and legal obligations for hydropower development stemming from the EU acquis must be clearly communicated and implementation supported through the Energy Community Treaty, International River Basin Organisations and Partnership Agreements with the EU.
- A coherent and thorough application of all relevant assessments (e.g. SEA/EIA/Appropriate Assessment under Article 6(3) of the Habitats Directive for Natura 2000 areas or equivalent e.g. areas under the Emerald network/Article 4.7 of the Water Framework Directive) as well as the assessment of transboundary aspects must be seen as a prerequisite for sound strategic planning as well as individual project design in hydropower.
- There is also the need to look at the cumulative impacts on landscape, water resources, fauna and flora and on local communities and livelihoods at early stage of each investment and project. This will ensure that assessment covers the full range of social, environment and economic issues necessary for balanced decision making.
- In the Balkans area, the majority of river systems are transboundary which highlights the need for a regional strategic approach, which is followed by the current hydro study for Western Balkans 6 (WB6).
- The Western Balkans has an important hydropower potential. The present HPP capacity of the region was mainly built before the 1990s within former Yugoslavia and had received limited further investments in the last decades, while the region still hosts significant unspoilt river ecosystems. Opportunities to upgrade and refurbish existing plants should be exploited where possible, before considering the construction of new facilities. Any proposal of HPP in the Western Balkans should also take into account the guidelines of the International Commission for the Protection of the Danube River (ICPDR) and the potential of alternative renewable energy sources developments (solar PV and wind).
- Coordination between relevant Ministries and European Commission services needs to be ensured, i.e. for the elaboration of the envisaged hydro master plan in Western Balkans. In this context the involvement of other partners such as, Energy Community, the International Commission for the Protection of the Danube River (ICPDR), International Sava River Basin Commission (ISRBC) and stakeholders such as civil society organisations etc. is crucial.
- Funding opportunities (investments and projects) from the EU (e.g. EIB, EBRD) have to fulfil EU legislation requirements and encompass environmental, social and economic impacts.

# Stakeholder recommendations

The recommendations set out below represent the different inputs received by stakeholders after the workshop and are not intended to represent the views of the European Commission.

They can be the basis for further discussions in the future about the need for a strategic approach in hydropower development.

Key Messages from countries' delegations:

- The Workshop represented interesting presentations and discussions on hydropower.
- It was very useful to understand the basic principles and requirement outlined in EU legislations such as: Environmental Impact Assessment and Strategic Environmental Assessment, Flood Risk Management Protection, River Basin approach, Key tools for Integrated Water Resource Management etc.;
- Guiding principles on sustainable hydropower development with examples from the EU were also very useful. Especially, presentations from Balkan countries representatives and other environmental NGO were extremely interesting as they revealed the other side of hydropower generation (describing vividly all the risks and consequences)
- It is good to know that financial institutions, like EBRD and EIB, have developed environmental policies/guidance for Hydropower Projects. All projects financed by IFI should be structured to meet the requirements of those policies. There is still a long way to go to a full alignment with all EU legislation requirements, but it is a good thing to start with.
- Some countries, as Azerbaijan, indicated their interest in giving a presentation about their situation regarding hydropower in any future workshop.

Key Messages from EIB:

- There is strong potential in WB6 to generate electricity from hydrological resources. In that context, sustainability should be ensured by engaging experts, taking into account environmental and social impacts and by rehabilitating existing HPPs.
- The development of the hydro master plan in Western Balkans is under way and will pencil down the priorities in hydro power plant development. The rehabilitation is the key priority of the plan and is expected to provide a priority project list. The master plan approach at regional/national level is supported by all stakeholders, provided that it encompasses environmental and social impact in sufficient detail.
- Environmental risks in HPP development must be assessed well in advance, managed and mitigated.
- Hydrology data should be reviewed and a regional hydrology database needs to be established. Currently the quality of data in WB6 is poor.
- There is strong need for transparent and informed engagement of the affected people. Timely public consultation to address all stakeholders is imperative.
- Most of the existing HPPs have been designed early 20th century with limited environmental and social considerations. Their rehabilitation will bring positive impact in the area. Recent trend shows that large HPPs might be considered as a better option than the small ones.
- The Water Framework Directive and the Floods Directive are tools for an integrated water management. River basin and flood risk management plans are to be updated in the years to come. Applicable EU directives to be considered in the context of hydropower projects include also SEA, EIA, Birds and Habitat directives (Natura 2000).
- An integrated and simplified presentation of provisions of the applicable EU Directives may contribute to a higher awareness in the hydro sector and a more effective application of the principles at national and regional level.
- Concerns have been expressed for the adequacy of livelihood impact, land compensation, action plan monitoring measures as well as measures to address civil society environmental and social expectations. It is important to define the no-go areas.

- IFIs have been asked to endorse the results of the hydro masterplan for WB6, subject to the bankability of the projects. There is appetite to finance projects that conform to their high standards. The early engagement of the IFIs has also been highlighted.

Key Messages from Energy Community Secretariat:

- The representative of the Energy Community Secretariat pointed out that the development and implementation of smart support measures for renewable energy sources is one of the key elements of the Western Balkans 6 Sustainability Charter (signed in Paris in July 2016) to pursue a transition towards a low-carbon and sustainable energy sector.
- It was pointed out that while there is indeed large potential for hydro in the WB Contracting Parties, sustainability should be ensured by engaging a wide range of experts and taking into account all possible environmental and social impacts, including the consequences of climate change. It was suggested that the rehabilitation of old HPPs shall be prioritised and focus shall shift from concentrating on new capacities only.
- The need to carry out environmental impact assessments and strategic environmental assessments (the latter from 1 April 2018) according to the relevant directives incorporated in the Energy Community Treaty was emphasised.
- It was underlined that the use of current, updated data, adequate baseline surveys and analysis as well as full engagement with local communities and civil society are indispensable for any additional hydro deployment.

Key Messages from NGOs:

**Proposals from "EcoLur" NGO:**

- To determine zones where HPPs and SHPPs are prohibited, which include specially protected areas, forest areas, landslide zones and vulnerable hydrological areas.
- To set a clear procedure, which will enable taking into consideration the opinion of the project affected community in the HPP or SHPP construction.
- International financial institutions together with other stakeholders - Nature Protection Ministry, Energy and Natural Resources Ministry shall bear responsibility for the adversary environmental and social consequences arising from the SHPP operation and violations of the domestic and international legislation.

*To assign companies operating HPPs or SHPPs:*

- To ensure automated management of environmental flow in SHPP head sections and to equip them with online control water measuring systems.
- When drawing up projects on the construction of fish passways already existing or planned to make use of the consultation of a relevantly certified ichthyologist to ensure the migration of the fish species inherent to the river.
- To equip the entrance of the pressure pipelines with fish-protecting structure.
- To equip transformers with oil-collecting system to decrease the risk of environmental pollution with persistent organic pollutants.
- To review the methodology for calculating environmental flow and to introduce determination methods of flow based on ecological approaches for each river basin individually on monthly and not yearly basis, which will enable making additions in the set environmental flow in case of special conditions (for example, fish spawning season, matters with biodiversity preservation)
- To ban the construction of new SHPPs on the rivers overloaded 30% and more with derivation.

*The following reforms are proposed to development banks:*

- To grant loans for HPPs and SHPP construction in line with European Water Directive requirements and to monitor the performance of these requirements.

**Proposals from WWF, EEB, CEE Bankwatch Network, RiverWatch, EuroNatur Foundation, Center for Environment, Croatian Society for the Bird and Nature Protection, EcoAlbania, EcoLur, Eko-svest, Environmental Citizens` Association Front 21/42, Green Home, SEE Change Net**:

- Cannot support the process of development of the Regional Hydropower Master Plan as currently envisaged and implemented by the European Commission, due to severe and considerable deficiencies in the planned approach that could lead to significant pressure on the most valuable river ecosystems in Europe and ecosystem services they provide.
- In particular, we are concerned that the approach and content, as currently planned, will not lead to a balanced and comprehensive Master Plan for the following reasons: 1) habitats and biodiversity are marginalised; 2) the scope of the Master Plan is too narrow; 3) transparency and public participation are lacking; 4) the timeline is insufficient to even establish proper baseline information; and 5) the legal status of the Master Plan is unclear.
- The European Commission services and countries in the Region need to address these concerns by: 1) focusing on renewable energy sector-wide identification of solutions resulting in development of general conditions for sustainable hydropower development; 2) designating areas to be kept free from any hydropower development and facilitating and supporting the needed biodiversity research in WB6 region; 3) considering small hydropower impacts and including other renewable energy sources (solar PV and wind) in the scope of the Master Plan; 4) ensuring transparency and public participation through preparation of a stakeholder engagement plan considering EU's legal obligations under the Aarhus Convention; 5) reviewing the timeline for the preparation of the Master Plan to ensure the establishment of an adequate baseline for its preparation; 6) clarifying the legal nature of the Master Plan to ensure its ownership and implementation by the EU institutions (including IFIs) and government authorities of the WB6 countries. Until such a proper Master Plan is developed, no hydropower project should be supported in the WB6 region.

**Proposals from EEB, DEF, BUND Germany, ÖKF, Riverwatch, Pro Natura Switzerland and Grünes Herz Europas - Nationalparkregion Donau-Moldau:**

- Call on the organizers of the workshop to come back to the objectives of EU water and biodiversity protecting legal instruments WFD and Natura 2000 as well as to the biodiversity, NWRM[1], Green Infrastructure and sustainable development strategies.
- Precautionary principle should result in a moratorium on all pending applications for dams for the next few years allowing time for the required analyses of river ecology and biodiversity and impacts from hydropower in combination with other pressures on rivers and floodplains.
- A Master Plan is needed for green and blue infrastructure for the river network in all the countries. Concepts and strategies for climate protection and sustainable energy use are needed without new dams, to protect the heritage of rivers for future.
- Stand ready to contribute and discuss the issues with you in the coming years. We expect to be supported in our work to protect rivers at least as much as hydropower is supported by European institutions.

[1] Natural water retention measures