

EREF Press release

Modern small hydropower is fully compliant with environmental goals

Brussels, 26 October 2020

The Manifesto *Stop new hydropower in Europe*, signed by environmental NGOs, opposes the construction of new hydropower plants in Europe and suggests there is a specific damaging impact of small hydropower plants on the environment.

The Small Hydropower Chapter of the European Renewable Energies Federation (EREF SHP Chapter) and its members, national (small) hydropower associations from EU Member States, defend themselves vehemently against this one-sided paper that takes an unnecessary and extreme position, based on an outdated view of that of the signatory associations of this Manifesto.

The small hydro sector is not willing to be used as a scapegoat, shielding major polluting sources in our economy that are degrading the quality of our water and related flora and fauna much more than the small hydro sector could or would ever be. Small hydropower has done its homework to a large extent, as modern hydropower is fully compliant to the strict regime of the European Water Framework Directive.

The small hydro sector seeks and maintains constant exchange with the environmental NGO sector since it sees itself as a reliable part of this sector. The so-called Manifesto discredits longstanding joint work and effort, of the sustainable, locally integrated small hydropower companies, often co-owned by cooperatives, villages or family companies. The Manifesto unfortunately springs from an outdated NGO policy that is often criticised as being lenient to big industry and accepting contributions from big players without careful monitoring.

EREF and its small hydro members hope to reconnect with these NGOs through constructive dialogue for the sake of our climate and to promote a holistic and decentralised energy system, based on all sustainable renewable energies including ecological solutions that are already in use.



Hydropower and environmental requirements

Latest hydropower technology, as well as related environmental mitigation measures, are already implemented by small hydropower plants in Europe to a large extent and have significantly reduced the footprint on water species and habitat during the last 20 years.

Today, modern hydropower has practically no impact on the fish populations of our rivers and is fully compliant with the strict requirements of the EU Water Framework Directive. New kinetic turbines for example have a fish mortality of less than 0.1%. Fish ladders and related solutions allow up and downstream movement of migratory fish species. Small hydropower plants create new habitats for rare and precious water plants and waterfowls. With its ditches and dammed water areas small hydropower plants even form diverse and structurally rich additional fish habitats.

Most importantly, the hydropower sector is as interested in good water quality as environmental NGOs and has repeatedly called for measures against the pollution of Europe's water bodies e.g. from agricultural and industry emissions. Small hydropower plants enrich water bodies with oxygen and clear rivers from all sorts of waste floating in the water. A small hydropower plant in Austria for example collects between 7-10 kg of plastic waste on a monthly basis.

European stakeholders have invested billions of Euros in upgrading hydropower plants, showing their commitment to the ecological requirements of the Water Framework Directive and demonstrating that hydropower and environment go hand in hand. More investment is feasible if the economic conditions are right.

The EREF Small Hydropower Chapter shares the Manifesto's critique about certain hydropower plants in the Balkans as they do not seem to respect and apply the available state-of-the-art hydropower technology and expertise. EREF stresses however that you cannot draw general conclusions about Member States of the European Union from difficult occurrences and failures in the Balkans. Generalisation is not useful as each plant is site-specific and unique.

Hydropower as an enabler for a renewable energy system

Hydropower and its system services play a major role in allowing a true European energy system based on renewable energy and energy efficiency. It is a reliable, local, storable and domestic energy source that favours a decentralised energy system, the integration of volatile renewable energy such as solar and wind, and greatly reduces the necessity to build new grids.

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Special importance is given to regional electricity generation from hydropower. It secures medium-sized commercial enterprises and creates added value locally. The current corona crisis clearly shows how important a stable domestic energy supply is for the economy, e.g. on the very local level.

In 2018, hydropower still accounted for 13 % of electricity generation in Europe, making it the largest renewable energy source, ahead of wind and solar energy. However, in the future, the significance of hydropower for the energy industry will be based less on the quantity than on the quality of the electricity. Electricity from hydroelectric power is CO₂ neutral and constantly available and base loadable. Thus, small-scale hydropower in particular will take on system-stabilising tasks at the low and medium-voltage level in a decentralised European energy supply system, besides simple electricity production.¹

Social contribution of hydropower

In addition to the generation of domestic, climate-friendly and resource-saving energy, traditionally anchored hydropower also provides other additional services, such as flood protection, waste collection and disposal of water waste, watercourse maintenance, etc. These additional services are in the public interest and are provided for free in the region and for the region.

Furthermore, many energy cooperatives and communities use small hydropower in their portfolio to provide a secure energy supply to their members. It allows them to build energy clusters that are balanced and can be self-sufficient.

Need for a constructive dialogue for practical nature and climate protection

A healthy river which provides drinking water, cools the towns or cities on its banks, enables crops to be grown, supports industrial processes and enables people to fish and swim in its waters and to walk along its banks: hydropower is not an obstacle to it. Hydropower can make it possible. The use of especially small hydropower for centuries has not harmed healthy rivers.

EREF and the European hydropower associations are ready to continue its dialogue with the environmental associations in order to push ahead with the ecological modernisation of

¹ Prof. Dr.-Ing. Markus Zdrallek, Grid-related contribution of small hydropower plants to a secure and cost-effective electricity supply in Germany, available in German at: https://www.wasserkraft-deutschland.de/fileadmin/PDF/Gutachten Netztechnischer Beitrag Kleinwasserkraftwerke.pdf



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hydropower plants while at the same time maintaining economic, climate-friendly electricity generation.

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