
Response to the consultation on the draft revised Climate, Energy and Environmental Aid Guidelines (CEEAG) - by the European Anglers Alliance (EAA)

State aid to hydropower - Europe needs less, not more hydropower

More hydropower plants would deliver very little to the zero net emissions of greenhouse gases in 2050 but do much environmental damage and work against EU Biodiversity Strategy 2030.

Hydropower is a mature industry. Public funding to this industry is causing unfair competition, hampering the development and pace of more environmentally friendly renewables, including wind-, wave- and solar power. It conflicts with CEEAGS point 9, which explains why some state interventions are acceptable that *“The intervention thereby, contributes to smart, sustainable and inclusive growth.”*

Renewables are *not* ‘sustainable’ or ‘green’ per se. This would be abundantly clear if all externalities were accounted for, which they rarely are.

Hydropower plants hamper fish migration and breeding, disturb ecological flow, damage habitats, and alter sediment transport. Measures to mitigate the negative impacts of hydropower plants on biodiversity only have limited efficiency. Investing in this type of measures can only marginally reduce adverse impacts on ecosystems. For example, many existing fish ladders and fish passages are dysfunctional.

New hydropower plants’ contribution to the energy transition in Europe is negligible.

The most profitable places for hydropower plants are already occupied. 91% of existing and planned hydropower plants in Europe are small (capacity <10 MW). The negative impact per power unit produced is much bigger for small hydropower plants than the bigger ones. In other words, many small hydropower plants do much more damage than a few bigger ones for the same power output.

Building new hydropower plants runs counter to commitments expressed in the EU Biodiversity Strategy 2030 like the proposal to restore at least 25,000 km of free-flowing rivers. It is also incompatible with the achievement of a good status of water bodies by 2027 as required under the Water Framework Directive (WFD).

We urge that environmental legislation – water legislation not the least - and nature protection are given more weight in the CEEAG.

We suggest that the externalities of hydropower should be internalized/monetized to make it possible to do genuine cost-benefit analysis of new and old hydropower plants, as well as providing a better basis for comparison - economically and environmentally - between various renewable energy alternatives. This would help address the market failures mentioned in CEEAG point 10.

We suggest that new hydropower facilities should not be eligible to state aid; and aid to existing plants should be phased out. The potential power contribution from additional hydropower plants in Europe is miniscule but the negative impacts on the environment are vast and devastating. For example, feed-in tariffs for existing micro-hydropower plants have facilitated the continuous development of many facilities below 0.5 MW, with negligible electricity production but disastrous environmental impacts.

Methane emissions from impounded rivers

Methane (CH₄) is the 2nd most important atmospheric greenhouse gas, with a global warming potential of 28 to 35-fold that of CO₂.

The more than one million barriers in Europe's rivers are not all there for reason of hydropower production. However, it is worth mentioning that recent science shows that the methane production and escape of it from impounded rivers in Europe is more profound than previously thought.¹

Further information:

- More than 150 NGOs have signed [a manifesto](#) calling on the EU institutions to phase out all public finance for new hydropower development projects.
- [EAA Hydropower Position Paper](#) (Oct 2020) - with an emphasis on small scale hydropower

Contacts:

Mark Owen, Head of Freshwater Affairs at EAA

Jan Kappel, Secretary General

Tel: 0032 (0)2 725 11 15

¹ "Methane production in large and small reservoirs in Bavaria and Rhineland-Palatinate";
- by Andreas Lorke, Institute for Environmental Sciences, University of Koblenz-Landau Landau, Germany
https://registrierung-veranstaltung.de/download.php?f=3-4_andreaslorke.pdf