



# The Role of Hydropower in a Clean Energy Economy

The Hydropower Reform Coalition is committed to fighting climate change, and to doing so in a way that prioritizes and increases the resilience of ecosystems and local communities. Hydropower has a place in a 100% clean energy economy, but that place must be carefully determined to both ensure that hydropower assets accelerate climate change mitigation and to minimize the worst impacts from this energy source.

## IMPACTS OF HYDROPOWER

All power generation – including hydropower – impacts ecosystems and communities. While some descriptions of hydropower focus strictly on its relatively low emissions, assessing hydropower's sustainability, and its position within policies, requires a broader assessment of environmental and social impacts.

Dams have devastated river health nationwide, including blocking the migration of economically, culturally, and ecologically important fish such as salmon; turning rivers into warm, still reservoirs that grow algae affecting drinking water; significantly changing the timing, volume, and duration of flows in a river through hydropower generation, disrupting biological cues for wildlife and the surrounding ecosystem; and imposing serious public safety and economic risks for nearby communities with aging dam infrastructure.

**We believe the following principles will avoid the worst impacts of hydropower and help to ensure that hydropower's inclusion in a future clean energy economy is truly clean and sustainable.**



### **ANY HYDROPOWER INCLUDED IN A CLEAN ENERGY STANDARD MUST MEET OR EXCEED REGULATORY REQUIREMENTS.**

To be included in a 100% clean energy standard, hydropower facilities must have a valid Clean Water Act Section 401 water quality certification. Hydropower can have many serious impacts on rivers and other bodies of water. State and tribal 401 water quality certifications ensure that those impacts are addressed or minimized. Likewise, hydropower included in a clean energy standard must also maintain compliance with all applicable regulatory requirements (i.e. the Federal Power Act, Endangered Species Act, etc.). Hydropower projects that cannot meet these minimum standards of environmental protection should not be considered "clean" energy.



### **ASSESS THE EXISTING HYDROPOWER FLEET TO DETERMINE WHICH PROJECTS MAKE SENSE FOR THE 21ST CENTURY.**

America's existing hydropower fleet is aging and not all hydropower is created equal. Some projects are better able to serve multiple needs within a watershed or electrical grid, while others have negative impacts that far outweigh the values they provide. As we transition to cleaner forms of energy, an assessment of the benefits and impacts of the existing fleet would

allow for strategic decision making about which projects should be compensated for their ability to integrate other renewables, and which projects are candidates for removal and restoration. Policies should incentivize and support decommissioning and removal of facilities where the social and ecological harm they cause outweighs their benefits. Where hydropower is taken off-line, replacement of lost energy production should be through other sources of renewable energy or through energy conservation and efficiency measures.



### **APPOINT COMMISSIONERS TO THE FEDERAL ENERGY REGULATORY COMMISSION THAT BALANCE ALL PERSPECTIVES.**

FERC has a long history of being non-partisan and Commissioners have a vitally important role in ensuring a smooth and just transition to a clean energy supply. The greatest strength of the Commission's hydroelectric licensing process is its collaborative nature. Working with states, tribes, federal resource management agencies, and stakeholder groups, the Commission must balance the benefits and impacts of a hydroelectric project before ultimately licensing the projects. Nominees for the Commission should have a demonstrated history of support for cooperative federalism, tribal treaty and trust rights, and environmental and scientific integrity.



### **ENCOURAGE RETROFITS AND REHABILITATION OF DAMS THAT INCREASE HYDROPOWER CAPACITY AND PROTECT RIVER HEALTH.**

There are more than 88,000 dams in the United States. Efficient and thoughtful use of the infrastructure already in place makes economic sense, and allows for the growth of hydropower capacity while also protecting or improving river health. New hydropower dams, and changes to existing dams that adversely affect an ecosystem's services or its resilience to climate change, should not be considered. Any policies that promote expanded hydropower capacity should focus on existing infrastructure by encouraging retrofits, capacity additions, or efficiency improvements at existing facilities where new capacity can be gained without adding new impacts to the surrounding ecosystem. Such policies should also promote investment in continued rehabilitation of existing facilities to fully protect river health and mitigate environmental justice impacts. These policies should promote dam and reservoir operations that improve grid integration with wind and solar; this will make it easier to incorporate greater percentages of renewable energy into a clean energy grid. If done with appropriate protections, these upgrades could also reduce environmental impacts and restore rivers.



### **AVOID EXPORTING IMPACTS.**

Federal energy policy should protect resources and Indigenous communities regardless of the country they are in. Fulfillment of climate change responsibilities must not export impacts to other countries. In particular, the clean energy economy should not incentivize new dams or other hydropower impacts to neighboring countries.



The Hydropower Reform Coalition is a diverse consortium of more than 160 national, regional, and local conservation and recreation organizations with a mission of protecting, enhancing, and restoring America's rivers, watersheds, and communities affected by hydropower operations. Our combined membership and supporters represent more than 1.5 million people across the country.