

Small-scale hydropower projects are soaring in number across the Balkans — but they're also destroying the region's wild rivers and threatening one of Europe's most biodiverse areas, according to environmental groups. By diverting water, the hydropower plants often leave the rivers dry and interrupt fish migration patterns. Despite the environmental damages that these plants produce, governments and companies are continuing to fund their construction. European public banks, particularly the European Bank for Reconstruction and Development and the European Investment Bank, are financing many of them.

The Balkan region represents a biodiversity hotspot and many of its rivers are still in outstanding conditions, according to Pippa Gallop, an expert from BankWatch, a global network focused on monitoring activities of several international financial institutions. A 2012 study found that there are 69 species of freshwater fish and lampreys endemic to the Balkans. Dozens of globally threatened fish can be found there and many of them are native to the region.

Green energy at what environmental cost?

Environmentalists warn that small-scale dams are detrimental for rivers and local communities, and extremely inefficient. The Western Balkans Investment Framework reported that the 390 small hydropower plants operating in the Western Balkans' represent almost 90% of all hydropower plants across the region but only produce 3% of the total hydropower, with a capacity of up to 7%. Most hydropower energy was in fact delivered by a small number of large hydropower plants.

However, a spokesperson for EBRD told Euronews that small-scale hydropower is considered one of the "important, renewable, low-carbon and effective sources of energy," which is why the bank financially supports it. Proponents of small-scale dams also suggest that they provide a low-cost and reliable source of "green electricity" and that, if installed correctly, they have limited environmental impact.

But not everyone agrees. Ulrich Schwarz, a leader of Fluvius, an international consultancy focused on river basin management, stressed that these dams cannot contribute to the change toward renewable energy sources, since climate change scenarios predict decreasing river water flows.

Ulrich Eichelmann of RiverWatch, an organisation focused on protecting the Balkan rivers from dam construction, said local communities need rivers' freshwater in order "to irrigate their fields and gardens, sometimes use it as drinking supply, to catch fish and — most importantly — for their sheep, goats and cattle." He added: "There are villages in Albania with hundreds or even thousands of sheep that rely on natural sources to water their

flocks.”

These types of plants also damage areas surrounding rivers and streams. Eichelmann stressed that “to build these schemes, you need to build roads, bridges, tunnels, transmission lines and for that you have to cut down forests, destroy farmland.” This is problematic, since numerous hydropower plants are constructed in protected areas.

Financing

Schwarz added that the projects are mostly carried out by international consortia from Austria, Slovenia and Italy, given their proximity to the Balkans, though many more come from Turkey and China. Contacts for smaller dams can go to local companies, including some politically-connected ones. According to Gallop, in Montenegro, some of the concessions have gone to businesses close to the ruling party and even the ex-Prime Minister’s son.

The larger projects are financed by major financial institution such as EIB, EBRD, and the World Bank, among others. Although promising to raise environmental and social standards in the projects they support, European banks have funded dams that are alleged to have been disastrous. A 2017 BankWatch study found that eight hydropower projects in Albania, Croatia and FYR Macedonia financed by EIB and EBRD have damaged biodiversity and required increased monitoring and restoration measures. According to Gallop, the dams have “affected endemic and endangered species such as the Prespa trout, and in some cases they have also hampered local communities’ water use. In most cases, flagrant violations of national laws and international financial institutions’ standards are visible and include blocking fish passes, releasing insufficient or no water at all downstream, and creating significant erosion with access roads.”

Flouting local environmental laws?

An EBRD spokesperson refuted this, however, saying that all of their projects: “Must fulfil strict local and international laws and regulations and under these conditions we are committed to sustainable hydropower solutions. All our projects are subject to comprehensive technical and environmental and social due diligence prior to making an investment decision. On hydropower projects, this includes, among others, in-depth analysis of hydrological patterns, water resources and climate resilience considerations.’

On the accusations that the Prespa trout was eliminated in FYR Macedonia as a result of the construction of the “Brajcinska reka 1” plant, the EBRD said it was “currently verifying this claim”. He stated, however, that, so far, “fish monitoring undertaken by the operator confirms the continued viable presence of the Prespa trout and the functioning of the aquatic ecosystem with the SHPPs operating normally thereby discounting the allegation

and demonstrating that sustainable hydropower can co-exist with key biodiversity features.” Marco Santarelli, an EIB spokesperson, also said the institution follows strict guidelines on lending in line with EU policy objectives on energy. He added that EIB does not “usually finance directly small-scale hydropower projects”, as these are normally financed with credit lines via local banks as intermediaries.

“In the Balkans like anywhere else, the EIB applies strict energy lending criteria established on the basis of a comprehensive review to ensure that our lending in the energy sector reflects EU energy and climate policy, as well as current investment trends,” he said.

Valbona National Park

Some planned dams have been blocked, such as the Boškov Most and Lukovo Pole in FYR Macedonia's Mavrovo National Park, others have started being built. In Valbona National Park in Albania, three plants are under construction, leaving locals without water supply. As of December 2017, a delegation of eight local inhabitants of the Valbona Valley village Dragobia went to the US Embassy to ask for diplomatic intervention, saying, “for as long as four months, many houses have been without drinking water or irrigation water for fields.” They said that although Valbona was a designated National Park since the mid-90s, the developments were turning it into an industrial zone, killing off vegetation and destroying its potential as a tourist spot.

Numerous other constructions are planned across the region, including a dam series on the Drina river, the most important Danube salmon habitat.

According to Schwarz, there is no restoration concept for dam-affected rivers and says there should be a “moratorium for new hydropower plants construction for specific rivers in the countries that wish to access the EU.”

For Eichelmann, financial institutions like EBRD and EIB must stop funding Balkan projects, and instead push these countries to more balanced renewable energy production, focused on solar and wind power.

Calls to balance renewables

Santarelli explained that EIB has a policy of “technological neutrality” when financing energy projects and “does not support any particular type of renewable energy over another. The bank finances the full range of renewable energy activities both inside and outside the EU. Wind has accounted for over a third of bank financing, followed by solar, and hydro (primarily outside the EU). The EIB finances projects that are economically viable, technically sound and in line with EU policy objectives.”

However, BankWatch stressed that laws must be enforced, ensuring that environmental assessments are correctly conducted, that plant operators release enough water

downstream to preserve ecosystems and shut down the dams in times of low water. In addition, it called for laws to be improved, with special no-go zones for hydropower and mandatory environmental assessments for all dams.

"In Europe, there needs to be a clear declaration that energy future in Europe and worldwide will focus on solar exploitation," said Schwarz. "Hydropower is not the solution for the future."

As it stands there is still no perfect solution. Solar energy also has substantial problems, including its high costs, making its electricity sometimes five to 11 times more expensive than coal, hydro or nuclear sources. At the same time, its efficiency ranges from 20-40 percent, with the rest of the sunlight hitting the panel wasted as heat.