

The construction of a growing number of hydropower plants in Southeast Europe could cause invaluable damage to globally important biodiversity points, experts in an international scientific journal warn.

The analysis published in the journal *Renewable and Sustainable Energy Reviews* focused on rivers in the Danube basin in Slovenia, Bosnia and Herzegovina, Serbia and Montenegro, which also cover about two thirds of the Croatian mainland.

As many as 636 hydroelectric plants are operating along these rivers, with plans to build twice as many, while biodiversity monitoring stations are rare, making it difficult to assess the impact of hydroelectric plants on river flow, fish and invertebrates, warns three authors, one of whom, Kresimir Zganer from Croatia, and two by Helena Hudzek and Martin T. Pusch from Germany.

Out of the total number of hydropower plants, 42 of them, or only 6 percent, are large, ie larger than 10 MW, which have 94 percent of the total installed capacity, while 72 medium capacity are from 1 to 10 MW, and 522 are small.

Small hydropower plants account for 82 percent of the total, providing only 2 percent of electricity, and their numbers have increased sharply since 2000.

As many as 1015 km of river flow have been converted into reservoirs, which completely changes the habitat conditions of the living world, and pollution has been identified at 59 hydroelectric plants, it is said.

Most of the hydropower plants are located in the Sava River Basin, 438 of them and Drava 110, so the main flows of the two rivers are heavily used for electricity production.

New 1315 hydropower plants are planned to be built on the Danube River rivers, mostly in Serbia and Bosnia and Herzegovina, it is said.

The authors note for their text that it provides the first regional overview of hydropower use and available sources of environmental impact data for the area outside the Alps and strongly warns that current hydrological and biological monitoring in these rivers is not sufficient to assess environmental impacts.

In the article "Overview of Dams for Hydroelectric Power Plants in South East Europe - Distribution, Trends and Availability of Monitoring Data on the Case of a Multinational Danube Basin", the authors conclude that hydroelectric power projects can only produce environmentally friendly electricity if they are built in the right places and with appropriate mitigation measures.

Source: rs.seebiz.eu