

## **Solution to Increase the Produced Power in Micro-Hydro Power Plant**

**Authors :** Radu Pop, Adrian Bot, Vasile Rednic, Emil Bruj, Oana Raita, Liviu Vaida

**Abstract :** Our research presents a study concerning optimization of water flow capture for micro-hydro power plants in order to increase the energy production. It is known that the fish ladder whole, were the water is capture is fix, and the water flow may vary with the river flow, this means that on the fish ladder we will have different servitude flows, sometimes more than needed. We propose to demonstrate that the 'winter intake' from micro-hydro power plant, could be automated with an intelligent system which is capable to read some imposed data and adjust the flow in to the needed value. With this automation concept, we demonstrate that the performance of the micro-hydro power plant could increase, in some flow operating regimes, with approx. 10%.

**Keywords :** energy, micro-hydro, water intake, fish ladder

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