



Sustainability action · Project Renewable Energy and Energy Efficiency

Small run-of-river hydro, Bulgaria

Hydropower is a form of energy that is generated by the conversion of free-falling water into electricity. It generates no emissions or waste. In addition to producing clean energy, hydropower is often used in connection with irrigation and water distribution purposes.

Project

This low impact run of river hydro plant utilises water from the existing Spanchevo irrigation channel, so no major infrastructure needed to be set up for the project specifically. Clean power is generated from a natural height difference of about 100m, with the water driving a 3.4MW turbine.

By providing this rural region with reliable and sustainable energy, the project activity displaces diesel generators and wood-fired heating and lighting, which leads to better indoor/outdoor air quality, and reduces respiratory and eye diseases. In addition, by the reduction of wood consumption and associated deforestation and soil erosion, the regional environment is benefitting significantly.

A special feature of the project is the Bulgarian government's commitment to cancel the same amount of AAUs corresponding to the volume of VERs verified by the project. Thanks to this, the project's emission reduction certificates are not double counted

Checklist	Additionality and permanence	3 rd party verified	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 301 290	According to the rules of the VCS	By RINA	Provided by NYSE Blue VCS Registry	12,000 tCO ₂ e	As documented in our database	Pictures available



Location

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Project achievements

Socio-economic impact

- The project generated jobs for locals in this unemployment struck region during the construction phase, and generated six permanent jobs in the maintenance of the plant.
- The construction and the operation of the hydro plant does not harm the nearby agricultural lands.
- The project owners contribute to sustainable development in the region by construction and repair, respectively, of bridges and roads.

Environmental impact

- By using the existing Spanchevo irrigation channel infrastructure, negative environmental impact through construction and operation of the hydro plant could be restricted to a minimal level.
- The Bulgarian Ministry of Environment and Waters confirmed that "the impacts upon the soil, flora, fauna and surface water during the construction phase will be minimal .
- Thanks to sound planning, the project does not affect any protected territories, habitats, wetlands or monuments of culture.

