

A Hybrid System for Upper Mustang Area, Nepal



Project Duration: 14 months

In 2018, EKOenergy and the Siemenpui Foundation paid 37,000 € to the Nepalese Energy, Environment Research and Development Centre (EERDC) to install a minigrid powered by a hybrid system composed of a 1kW wind turbine and solar panels.

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Picture: EERDC

Located in a remote corner of Nepal, the Mustang area is, on a whole, facing a series of challenges derived from energy poverty. Local residents' daily life largely relies on the use of traditional fuel, such as wood and oil, which are normally accompanied by problems such as unreliable supply and inefficient usage. Burning this kind of fuel can also lead to several health problems.

In 2018, after careful selection, a total of 37000 € (22,000 € from EKOenergy's Climate Fund and 15000 € from Siemenpui Foundation) was granted to the Energy, Environment Research and Development Centre (EERDC) based in Nepal. Jointly implemented by EERDC and People, Energy and Environment Development Association (PEEDA), the grant was used for a project targeting the last mile community of Chumjung in the Upper Mustang area.

A hybrid system consisting of 3 kW solar and a 1 kW wind turbine system was installed. The system also includes eight 100 Ah batteries, located in a weatherproof container nearby the panels. The inverter and charge controller panels are placed inside the com-

munity hall. The beneficiaries of the project include around 40 households and a primary school that suffered from a lack of lighting.

A key component of the project was the active involvement of the local community in every stage of the implementation. Firstly, a pre-implementation survey was conducted to help understand local people's needs. Later, during the construction phase, the villagers also contributed by, for example, digging trenches for the cables. Also, one of the project's targets was to help local people not only *know what* but more importantly *know how*; with some of the villagers receiving full training on operation and maintenance of the facilities.

A major positive of the project is its ability to function as a pilot program for the promotion of clean energy in the area. As stated by EERDC, "this project will serve as a demonstration site for feasibility of this technology in similar geographical locations of Nepal." We're delighted to see that the project has received nationwide media attention and was broadcast on the television, which has made our work more visible in the area.

Climate Fund Projects



Focus on energy poverty and multiple Sustainable Development Goals



New projects annually in developing countries



Run and monitored by trusted NGOs



Selected by an independent jury



In 2019, the Fund granted 245,000 € for nine new projects



All EKOenergy users contribute 0.10 € / MWh to the Fund

EKOenergy - the international ecolabel for renewable energy

EKOenergy is [the international ecolabel](#) for energy. We are a non-profit organisation working to fight climate change, protect biodiversity and realise the Sustainable Development Goals.

Energy sold with the EKOenergy-ecolabel fulfils strict [sustainability criteria](#). Through our ecolabel we also raise money for our Climate Fund, which is used to finance new renewable energy projects in developing countries.

EKOenergy-labelled energy is sold by licensed energy companies and is [available in over 40 countries worldwide](#). Many of the consumers of EKOenergy-labelled energy choose to use our ecolabel on their website or products to demonstrate their commitment to a 100% renewable and sustainable world.

EKOenergy users include large international businesses such as SAP, Tetra Pak, VMware, Workday and Genelec, as well as cities, public organisations and individual households.



Sustainability criteria: additional value for our planet

	EKOenergy	Other renewable	Grid mix
New renewable energy production via our Climate Fund	✓	?	-
Only the most climate-friendly bioenergy	✓	?	-
Wind power outside bird and nature areas	✓	?	-
Hydropower takes into account migratory fish. River restoration projects via our Environmental Fund .	✓	?	-
Renewable energy tracked by EACs, such as GOs and I-RECs. (in line with Greenhouse Gas Protocol Scope 2 Guidance)	✓	✓	-
Wind, solar, hydro, geothermal, bioenergy	✓	✓	?
Fossil fuels, nuclear, possibly renewables	-	-	✓

Endorsed by other standards

EKOenergy is recommended by many international environmental standards such as CDP, the Greenhouse Gas Protocol, Greenkey for hotels and LEED-certification for buildings.

"A growing number of hotels in Europe have already switched to EKOenergy and include the EKOenergy logo in their communication with their guests. Follow their lead and [go the extra mile](#)."

"Ecolabels are a way for companies to do more with their purchases. EKOenergy, mentioned by the GHG protocol Scope 2 guidance, is such an option: it is [a mark of quality](#) which comes on top of tracking certificates."

"EKOenergy represents the [best available option](#) for the sustainable and additional consumption of renewable electricity within Europe."

