# Solar minigrid for rural electrification in Nepal


**Project duration: 2 years**

In 2020, EKOenergy granted 35,000 euros to the Centre for Rural Technology, Nepal (CRT/N). The Siemenpuu Foundation matched our contribution with the same amount. The project focused on the electrification of Saure Bhangtar village through a solar minigrid and the promotion of renewable energy through Municipal Energy Plans.

Text: María Quero Fernández
Photo: GRID

This project for the solar electrification of Saure Bhangtar village consisted of 3 components, the first one being the installation of a 10 kWp solar minigrid in the village. This was complemented by the development of a Municipal Energy Plan (MEP) for the Khanikhola Rural Municipality and the promotion of the MEP at local, provincial and national levels.

The contribution from EKOenergy was used to finance the solar minigrid system. The village is not connected to the national electricity yet, so the inhabitants either relied on a standalone Solar Home System provided by development organizations following the massive 2015 earthquake in Nepal, or on kerosene lamps.
CRT/N's project started with an introductory workshop to inform the representatives of the municipality about the solar minigrid technology. To ensure transparency on the project, a Solar Electrification Program User Committee was formed. The installation of the solar panels and the grid itself was delayed because of Covid but it finally took place at the end of 2021.

Thanks to the minigrid, 96 households got electricity at home. Each household also got 4 LED bulbs along with 5 LED street lights (10 W). The minigrid also powers 2 poultry farms, able to raise 100 chickens, and a multi-purpose electric mill, used for hulling and grinding.
By connecting businesses to the grid, CRT/N wants to showcase how access to solar energy can lead to additional income generation and improve food security. This in its turn should make solar energy economically feasible, also in the rural areas of Nepal.

*"I cannot express in words the happiness of having a mill in my own community. The mill, merely two steps away from my home, has not only saved my time but also relieved the drudgery associated with milling responsibility. The electric mill is a blessing for us because we have never imagined having a mill in our village. These days, people from other villages are also coming to our village for milling purpose."- Ek* Bahadur Kingring.

The minigrid is designed in a way that it can be connected to the national electricity grid when it expands to that area.

CRT/N hopes that this project will inspire many others to switch to solar energy too. EKOenergy is able to support projects such as this one thanks to the users and sellers of EKOenergy-labelled renewables worldwide.

## 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 2020, the Fund granted 230,000 € for 13 new projects
- All EKOenergy users contribute 0.10 € / MWh to the Fund

# EKOenergy - the global ecolabel for renewable energy

EKOenergy is the international ecolabel for energy (electricity, gas, heat and cold). 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 50 countries worldwide. Many 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 energy | Grid mix |
|---|---|---|---|
| Recommended by environmental organisations | ✓ | ? | - |
| Extra criteria to minimise the impact of energy production on nature. For example, hydropower installations with fish passes and wind turbines outside important bird areas | ✓ | ? | - |
| Renewable energy tracked by EACs, such as GOs and I-RECs (In line with Greenhouse Gas Protocol Scope 2 Guidance) | ✓ | ✓ | - |
| Contributes to renewable energy projects in developing countries, advancing the realisation of multiple Sustainable development goals | ✓ | - | - |
| Available and recognised worldwide | ✓ | - | - |
| Supports the promotion of a transition to renewable energy worldwide | ✓ | - | - |

# 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."*

EKOenergy

info@ekoenergy.org | www.ekoenergy.org