

## Solar irrigation for agriculture resilience for Santhal tribe people in India



**Project duration: 19 months**

Photo: CSRA

In 2024, EKOenergy granted €27,120 to Surul Centre for Services in Rural Area (CSRA) to support the installation of solar-powered irrigation systems, replacing diesel pumps to deliver sustainable access to water, support climate-resilient agriculture, and increase food security for communities across seven remote villages in West Bengal, India.

In the drought-prone Birbhum district, West Bengal, India, many rural communities depend on agriculture for their livelihoods. However, climate change, water scarcity and environmental degradation have severely impacted crop yields and food security. These challenges, combined with existing social vulnerabilities, have made it increasingly difficult for families to sustain themselves through traditional farming practices.

The main issue in the seven villages where the project took place was the lack of reliable access to water for agriculture. The region has limited water resources, making it difficult for families to grow more than one crop per year. This led to food insecurity, low income levels, and increased vulnerability to the impacts of climate change.

In response to these challenges, CSRA first organised orientation meetings across all seven villages. In larger communities, meetings were held at the neighborhood level to ensure broad participation. Using resource and transect maps, villagers took part in selecting optimal solar pump locations based on the ridge-to-valley water flow principle. To strengthen local ownership and long-term sustainability, 14 Farmer Interest Groups were formed to support planning, coordination and community-led management.

Based on the outcomes of these consultations, the project partners installed 2.2 kWp solar arrays and water pumps with a power level of 3 HP in each village. With an average daily solar power generation of 61.6 kWh, these systems will pump about 300,000 litres of water daily for irrigation and drinking and enable irrigation of about 300 hectares of farmland. This will allow 850 small and marginal farmers to shift from single- to multi-crop cycle.

Apart from improving food security and resilience to climate change, the project is expected to reduce seasonal migration, increase household income, facilitate farmers' work, and reignite interest in farming. Additionally, the position of women has been strengthened, as they have been given an important role in the management of irrigation infrastructure.

These outcomes contribute directly to many UN Sustainable Development Goals, including SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), and others.

Thank you to all those involved in implementing this impactful project, and thanks to EKOenergy sellers and users. Together we contribute to a more sustainable and fair future for all!

### EKOenergy's Climate Fund



Focus on energy poverty and multiple Sustainable Development Goals



New projects annually in low- and middle-income countries



Projects run and monitored by trusted NGOs



Selected through a transparent process



In 2024, EKOenergy approved grants for 23 new projects



All EKOenergy users contribute 0.10 € / MWh to the Climate Fund

# EKOenergy - the global ecolabel for renewable energy

EKOenergy is [the global ecolabel](#) for energy (electricity, gas, heat and cold). We are a non-profit initiative working to fight climate change, protect biodiversity and realise the Sustainable Development Goals.

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

EKOenergy's network of authorised sellers makes EKOenergy-labelled energy easily [available in over 80 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 Microsoft, SAP, Pampers, Mercedes-Benz, SCHOTT and the Iliad Group, 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 global 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."*

