

Solar-assisted irrigation systems in Sofala Province, Mozambique



Project duration: 15 months

Photo: Azada Verde

In September 2024, EKOenergy granted €38,588.30 from its Climate Fund to the non-profit organisation Azada Verde. The funding supported the installation of solar-powered irrigation systems in the remote communities of Toronga and Mangunde in Sofala Province, Mozambique, strengthening food security and household incomes for more than 60 smallholder farming families.

Mozambique is one of the world's most climate-vulnerable and food-insecure countries. Rural families in Sofala Province, in the center of the country, face erratic rainfall, prolonged droughts, and increasing climate impacts. Most households rely on subsistence farming on small plots and previously depended on old diesel-powered pumps that were unreliable, costly, and highly polluting. Frequent breakdowns prevented continuous irrigation, resulting in crop losses and making dry-season farming almost impossible.

With EKOenergy's support, Azada Verde, in close partnership with the local organisation ESMABAMA, introduced clean and reliable solar irrigation systems for farming families in Chibabava District, along the Buzi River. The project was implemented between September 2024 and November 2025 and directly benefited 60 agricultural households (420 people), the majority of them women.

Two solar-powered irrigation systems were installed, each with a capacity of 2.2 kW, 20,000 litres of water storage, and a water flow of 4,000 litres per hour, together irrigating 7 hectares of farming land. By replacing diesel pumps, the systems eliminate fuel costs, reduce emissions, and ensure reliable year-round access to water for irrigation practices.

In both Toronga and Mangunde, 30 farming families per community now grow crops year-round. The families sell about 70% of the vegetables they produce in the local market, and use the remaining part for self-consumption. The income helps families support their children's education, cover health costs, and buy additional food. As such, the project contributes to strengthening resilience and improving nutrition in the involved communities.

Additionally, the project included training in climate-resilient and regenerative agriculture, including composting, biofertiliser and biopesticide production, soil management, and crop planning. In addition, agroforestry systems were introduced to diversify incomes, restore native vegetation, and reduce pressure on surrounding woodlands.

This project shows how solar energy can address hunger, poverty, and climate vulnerability at the same time. It contributes directly to the UN Sustainable Development Goals, including No Poverty (SDG 1), Zero Hunger (SDG 2), Gender Equality (SDG 5), Affordable and Clean Energy (SDG 7), and Decent Work and Economic Growth (SDG 8).

Thank you to all partners, communities, and EKOenergy sellers and users who made this project possible.

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."

