

Solar-powered flour mills for empowering women in rural north India



Project duration: 10 months

Photo: Aga Khan

In 2023, EKOenergy's Climate Fund granted €31,284 to the Indian nonprofit organisation Aga Khan. This enabled them to implement a women-led project focusing on the installation of solar-powered flour mills in off-grid communities.

In Bahraich, a district located in India close to the border with Nepal, rural communities grow and use wheat for personal consumption and income. Prior to selling or consuming the wheat, it needs to be grinded into flour. The latter comes with its challenges. Local women often have to travel long distances to access grain processing mills, which depend on polluting and expensive electricity sources like diesel. This not only harms the environment but places a physical burden on women, through long, unsafe journeys to the mills, and limits their economic opportunities.

Together with the local women's groups, Aga Khan identified 10 villages where solar energy operated flour mills would be installed, 5 of them already had community-based solar irrigation systems that powered a mill. During this phase it was clear that many communities faced economic, environmental and physical challenges due to the absence of easily accessible flour grinding facilities.

Before installing the solar-powered flour mills, Aga Khan worked closely with the communities, ensuring participation and local ownership. This collaborative approach laid the foundation for the efficient management and long-term sustainability of the project.

Each selected village took into account the specific needs of the site and the people. The 5 sites where solar irrigation already existed got enhanced and made more energy efficient in the process. Whereas the 5 other villages infrastructures were equipped with a 5 kW solar system to power the flour mills. Four out of five standalone sites also received spice mills which allows for an additional potential income through grinded spices like chili or turmeric.

To ensure a sustainable and successful handover of the mills to the local community, the project included training sessions regarding the maintenance, reparations and finances of the mills.

Today, the local communities benefit from high quality products as a result of sustainable infrastructure powered by renewable energy. This project has directly contributed to SDG 5 (Gender Equality), SDG 7 (Affordable and Clean Energy), and SDG 13 (Climate Action), by enhancing women's skills and leadership, while also minimizing the environmental impact of flour mills.

We thank EKOenergy users and sellers for making these impactful projects possible.

Our Climate Fund



Focus on energy poverty and multiple Sustainable Development Goals



New projects annually in lower-income countries



Projects run and monitored by trusted NGOs



Selected through a transparent process



In 2023, EKOenergy approved grants for 20 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."

