A solar-powered mini-grid for Pitas Laut

Photo: Green Empowerment

Project duration: 17 months

In 2024, EKOenergy granted €60,000 from its Climate Fund to Green Empowerment and its Malaysian partners TONIBUNG, Forever Sabah, and the Community Association of Pitas Laut. With this support, a 30 kWp solar PV mini-grid was installed to provide 24-hour electricity to 117 residents across 20 households and community facilities in Kampung Pitas Laut, Sabah, Malaysia.

Kampung Pitas Laut is a traditional fishing village located within the Lower Kinabatangan–Segama Wetlands, a Ramsar site of international ecological significance. It is home to the Indigenous seafaring Suluk community, whose livelihoods depend on fishing, clam harvesting, and turtle conservation. Before the project, families relied on costly petrol generators that provided only a few hours of electricity each day, limiting income opportunities and quality of life. For example, without cold storage, fishers must sell their catch quickly, leaving them vulnerable to debt cycles with middlemen.

With EKOenergy's support, the project partners built a 39.2 kWp solar PV array along with a solar house, where the inverters (2 x 15 kW), batteries (7 x 10 kWh), and the control panel are located. The space also serves as a community center and a hub for income-generating activities, particularly the women's group ice business. A network of transmission and distribution lines runs from the solar house to all 20 households and the village surau (Islamic assembly building), ensuring reliable electricity access throughout the village.

The project strengthened livelihoods and community resilience in multiple ways. Reliable electricity now supports cold storage and small-scale businesses, such as cold-drink production.

The development of the solar project in Pitas Laut went hand in hand with a nature conservation project supported by an additional grant from the NGO Seacology. As a result, the community signed a conservation agreement to protect a 45-acre marine turtle nesting habitat, and a bridge was constructed to improve access to the shore and turtle nesting sites. The community also engaged in additional mangrove planting.

Throughout the project, community members participated in installation, technical training, and capacity-building workshops in financial management and digital skills. The community also elected a Renewable Energy Committee to oversee tariff management and ensure that revenues are reinvested into maintaining the system. Last but not least, the project also serves as a pilot model for scaling renewable energy access to 60,000 people across Sabah through 203 mini-grids.

This impactful partnership shows how a well-planned deployment of renewable energy can contribute to the realisation of many Sustainable Development Goals, including SDG 1 (No poverty), SDG 5 (Gender equality) and SDG 10 (Reduced inequalities). A heartfelt thank you to the organisations involved in the activities. Thank you also to all users and sellers of EKOenergy-labelled energy. Initiatives like this wouldn't be possible without you!

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."

Green Key

"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."

CDP

"EKOenergy represents the best available option for the sustainable and additional consumption of renewable electricity within Europe."

U.S. Green Building Council LEED USGBC

EKOenergy

info@ekoenergy.org | www.ekoenergy.org