### Ex-post Evaluation of the Access to Sustainable Energy Programme (ASEP) in the Philippines



# Powering the Philippines' sustainable energy transition



ASEP was a programme funded by the European Union and implemented mainly by the German development cooperation agency GIZ, the World Bank, the National Electrification Administration (NEA), International Organisations and local and international NGOs and civil society organisations, in close cooperation with the Department of Energy (DOE) and other main energy agencies.

ASEP ran from December 2015 until October 2023, whereas the independent ex-post evaluation was conducted by NIRAS from September 2024 to March 2025 to assess the programme's performance and draw learnings. This brief presents some of the key achievements and three impact stories that resulted from ASEP.





## ASEP was divided into three components:



#### **Component 1**

Technical assistance to the Department of Energy, including policy and capacity development



#### Component 2

Investments in cooperative-owned solar power plants, Solar Home Systems and technical assistance



#### Component 3

Grants to civil society organisations and international organisations to implement renewable energy projects in remote and poor households



### ASEP was set to produce the following results



Strengthened capacity of energy sector actors to develop sustainable energy projects, policies and reforms







Increased access to renewable energy in rural, remote and poor areas, especially in Mindanao





Promoted disaster-resilient and innovative energy solutions that support income generation



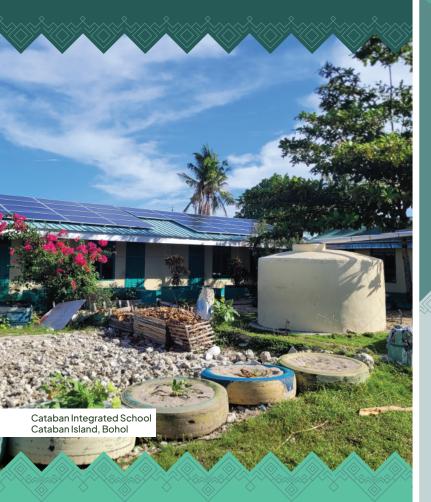


# ASEP main achievements were:

Around **250,000** 

people gained access to renewable energy thanks to ASEP

with considerable improvements in the income and quality of life of women, youth and Indigenous Peoples living the remote areas of the Philippines, mostly in Mindanao.



### **Policy and Regulatory**



About

policies and regulations

in renewable energy and energy efficiency developed



### Renewable Energy Capacity

An improved second generation of **Solar Home Systems developed and distributed** 

A sustainable business model established, where local Electric Cooperatives provide and maintain Solar Home Systems by collecting small service fees

**Replications of Solar Power Plants** owned by Electric Cooperatives and **further expansion** of **Solar Home Systems** are underway



# **Capacity Building**

Over **20 graduate and undergraduate courses** on renewable energy developed and **delivered to more than** 

**3,000** students

Solar power system installation and maintenance courses implemented in 5 Senior High Schools, benefitting at least

150 students

Several capacity development initiatives of five bureaus at the Department of Energy, the National Electrification Authority, Energy Regulatory Commission, Electric Cooperatives and barangays in Mindanao



### Transforming lives through renewable energy access

ASEP has brought about transformative changes in the off-grid remote community of Sitio San Malbino, home to B'laan Indigenous People in Don Marcelino, Davao Occidental. Ms. Jeanette Jane Albano Singkala, a dedicated teacher who also serves as the head of Maltusan Elementary School, describes the profound impact that reliable access to energy has had on both her professional life and the performance of her students.

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with a **community-owned micro hydropower system**, the school environment underwent a significant transformation. Jeanette observed that having access to electricity allowed the school to utilise modern teaching tools such as televisions and projectors. These tools enabled the teachers to present instructional materials in a more engaging and interactive manner. Students were also able to study at home after dark, significantly impacting pupils' academic performance. Jeanette noted significant improvements in the students' grades and their ability to complete homework assignments.

In addition, Jeanette observed a boost in the students' confidence and engagement. With access to the internet, students could now research and explore new topics, broadening their horizons and fostering a culture of curiosity and continuous learning. The ability to connect with the outside world also helped them stay informed about current events and trends, further enriching their educational experience.





Maricel P. Gubal, a health worker at Barangay Bacong, North Cotabato, gained access to reliable solar energy through a Solar Home System, allowing her to perform additional economic activities in her free time.

Before the Solar Home System was installed, Maricel's evenings were shrouded in darkness. The nights were long and unproductive, limiting her ability to contribute to her family's income. However, when the Solar Home System was installed, the light allowed her to perform tasks even after dark. She began making barbecue sticks in the evenings, a task that was previously only possible on weekends. The barbecue sticks are handcrafted from locally sourced bamboo, and it's a livelihood performed by many people in Sitio Colondatal. This additional income was a significant boost for her family, allowing them to improve their living conditions and save for the future.

The Solar Home System also enabled her to open a small grocery store, which she operates with her husband. The store stays open until 7 p.m., thanks to the reliable lighting, attracting more customers and increasing their daily earnings. The light not only made the store more inviting but also allowed them to keep it open longer, maximizing their sales.

As a former student of the Electrical Installation and Maintenance (EIM) course, Rodhel T. Valentos was among the first batch of students to benefit from the support given to San José National High School, in Talibon, Bohol. Thanks to ASEP, San José National High School integrated solar photovoltaic (PV) training into their existing EIM curriculum and creating a specialised EIM-PV course.

Rodhel's journey began with hands-on training in solar PV installation, which was crucial for his development as a skilled technician. The practical experience gained during his studies allowed him to become proficient in installing and maintaining solar systems, a skill that proved invaluable in the context of the Philippines' numerous island barangays.

Upon graduating in 2020, Rodhel leveraged his new expertise to establish himself as an independent solar contractor. The 24-year-old now runs his own business, providing solar installation services and contributing to the local economy. His journey from a high school student to a successful entrepreneur exemplifies the transformative power of education in promoting renewable energy and sustainable development in the Visayas region.



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