

SUCCESS STORIES

ELECTRIC TRICYCLES DEMONSTRATE THE FUTURE OF TRANSPORTATION IN THE PHILIPPINES



- One hundred E-Trikes worth USD 910,000 were granted to the municipalities of San Vicente and Brooke's Point in Palawan Province in 2019 as part of the Department of Energy's 'Market Transformation through the Introduction of Energy Efficient Vehicles Project', or simply the 'E-Trike Project'. The funding was provided by the Asian Development Bank (ADB).

The project aims to promote an agenda of "green city development" among urbanizing municipalities by transitioning away from the traditional fossil-fuel-based tricycles as the ubiquitous mode of transportation in the province. Officials see the project as a means of making transport more environmentally friendly as well as a way to create jobs and set a wider example for green growth.

"The e-trike units will benefit us by generating employment and improving the mobility of its residents, without the pollution and noise. It is a symbol for green growth," says James Paul S. Inawasan, the former Municipal Administrator of San Vicente, Palawan.

Transforming the transport sector

Over the last decade, the Government of the Philippines has begun transforming its transport sector and promoting the use of electric vehicles over fossil fuel-powered transport to curb GHG emissions and lower the country's carbon footprint.

Studies have shown that fossil fuel-powered tricycles account for more than two-thirds of the pollution generated by the country's entire transport sector. The Philippines' Department of Energy has said replacing these tricycles with

electric-powered ones would minimize annual carbon dioxide emissions by up to 260,000 tons.

Adopting e-trikes also has benefits for the local economy by reducing the annual demand and consumption of petroleum imports, reducing fuel costs for e-trike drivers and increasing job creation through the establishment of manufacturing companies and associated after-sales services.

An initial pilot study in 2015 with 20 locally assembled e-trikes operating in Mandaluyong, Metro Manila, also showed that drivers were able to carry more passengers and increase daily income when using e-trikes.

The E-Trike Project was made possible through a grant deal between the Department of Energy and the Asian Development Bank. This part of the deal was facilitated by GGGI, which helps the Province of Palawan realize the Palawan Climate Resilient and Green Growth policy aimed at reducing the region's dependence on fossil fuels.

To structure the deal, GGGI developed an institutional relationship with both the grant applicants, San Vicente and Brooke's Point municipalities, and the grant donors, the Department of Energy and the ADB.

Each municipality was given 50 e-trikes as a seed investment that will further drive the transport transformation envisioned by the Provincial Government of Palawan.

Juherm Kim, GGGI's Country Representative in the Philippines, says that while the introduction of a relatively small number of trikes will have a limited environmental impact, it has a much greater long-term significance.

"GGGI views that the transition to sustainable transportation requires a phased approach since transforming the sector needs a processing time while also developing enabling policy conditions, coordinating technology transfers, and dealing with stakeholders that could be adversely affected such as operators and drivers of fossil-fuel-powered tricycles. (...) Albeit small in number, introducing the trikes serves as a 'demonstration case' to test out this new technology, as one of the low-carbon options. In other words, a first step is taken," explained Kim.

"The e-trikes project could be a catalyst for other similar changes elsewhere, particularly in popular tourist spots where the transportation demand is obvious. The scheme is one which helps local trike drivers at an income level and creates more green jobs in the future, and is built on a sustainable financing model," says Kim.

He is also keen to point out how it will help locals and the municipalities' economies.

Creating green jobs

The municipalities have provided an in-kind contribution, including charging stations, which are rented to users based on a fee arrangement, which will enable local governments to provide maintenance service of the electric trikes and buy more of them, creating a revolving grant arrangement.

Meanwhile, to encourage and scale-up electric

transportation, the San Vicente Municipality now implements an ordinance granting public transportation franchises only to electric tricycles.

Aside from creating green jobs for the e-tricycle drivers, this initiative has also provided a more sustainable livelihood for drivers as, under a special financing arrangement, they can pay a daily fee over a period of four or five years and eventually own the vehicles.

"The drivers were selected according to their financial status – the poorest were given priority. The scheme will also give the municipal authorities an income, and they can reinvest that into charging points and related infrastructure. This helps create a revolving grant system and a sustainable financing model," Kim says.

With the trikes already on the streets of both municipalities, local authorities and GGGI representatives have praised the initiative.

"This achievement, made possible through our partnership with GGGI, is a key milestone as we pursue the implementation of the Provincial-level Climate Resilient Green Growth Framework in Palawan. I think it is just a start," says Ninfa B. Rubio, Provincial Planning and Development Coordinator of Palawan.

Kim says all stakeholders should be congratulated on playing their part in making the plans a reality.

"GGGI would like to support action. There are many studies on bookshelves and several talking festivals on green growth, but we all know that what's more important is to walk the talk," he says.

He adds that GGGI's previous work in the Philippines, such as the Palawan Climate Resilient and Green Growth Development Program (CRGGDP), had been responsible for the project getting off the ground.

Kim says: *"The project is just one small part of the work we're doing in the Philippines, since we are looking at other green growth sectors, such as renewable energy (i.e. solar PV) potentials seriously. We helped to get funding for it because as embedded intermediaries we were able to structure the deal between financiers and government stakeholders in this area."*