



RE-Charge Tacloban:

Renewable Energy in Action

The crisis spawned by supertyphoon Yolanda has offered Leyte a chance to build back better. How? With renewable energy and sustainable transport to help communities become more resilient to climate change impacts.

RE-Charge Tacloban is a community center for information training and for practical initiatives that show how renewable energy can power better development and help in disaster response and reconstruction.

The center is powered by a 9.75 kilowatt solar power system that provides most of the facility's electricity needs, and which is integrated with a sustainable transport initiative in the form of electric jeepneys or eJeepneys. The facility is iCSC's modest contribution to helping Tacloban build back better, particularly through public transport and climate resilience programs.

Tacloban, 1 year after


Supertyphoon Yolanda (International name: Haiyan) smashed communities, towns and cities in the Philippines to such an extent that countless Filipino survivors are now forced to start anew from scratch. The crisis has presented an opening to reboot development, particularly in energy and transport systems. New approaches can be made to rebuild safer, more resilient and more sustainable communities through practical initiatives that show how renewable energy can power better development and help in disaster response and reconstruction.

A community hub for renewable energy

The facility is located downtown in Burgos Street near the city's port. Up to 90 percent of the facility's power will come from a hybrid 9.75-kW solar array and energy storage system. When the battery bank begins to run low, the system taps into grid-based geothermal power to provide electricity while the solar array recharges. The system ensures uninterrupted power supply, particularly during power outages.

The facility's multi-purpose meeting hall is meant to serve as a venue for community conferences, exhibits and events. Aside from being home to iCSC's Solar Scholars training program which aims to enhance the response capacity of humanitarian workers in local governments and communities, RE-Charge Tacloban will also serve as an incubation center for sustainable livelihoods and renewable energy-powered social enterprise.

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Renewable energy and sustainable transport

The center is also home to a fleet of electric jeepneys, or eJeepneys, which will be powered by the hybrid solar power system working with the geothermal grid. Combined with training programs for local drivers, dispatchers, operators, administrators and technicians in the maintenance and servicing of both eJeepney fleet operations and solar facilities, RE-Charge Tacloban will help generate green jobs and draw more investments towards local sustainable enterprise while attending to immediate reconstruction needs of supertyphoon-hit areas.

Project Components and Beneficiaries

1. A sustainable transport fleet composed of electric vehicles that alleviates the need for public transport, supports trade and provides jobs in transport services such as driving, conversion, maintenance, and vehicle dispatching.

A portion of the fleet will be comprised of multicabs from Tacloban whose engines were damaged by the typhoon, but which will be re-fitted with electric motors.

Together with the facility's battery-swapping program, these electric jeepneys and multicabs can ferry commuters over a longer time period and drivers can operate non-polluting vehicles for longer hours with reduced battery wear and tear, translating to increased potential income.

2. A 9.75-kW solar photovoltaic facility that would charge the battery-swapping system and which would provide energy for small enterprises such as cafeterias, retail activities and internet services. The facility will also function as a community charging center.

3. A mobile power solutions service for communities, especially in areas near coastlines that are still without power. Fully-charged specially retrofitted electric vehicles will visit designated communities based on predictable schedules to offer internet facilities and charging services for cell phones, laptops and other equipment.

The RE-Charge Tacloban project aims to demonstrate a working model of integrated renewable energy and sustainable transportation services for cities and communities, which address long-term needs.

Data on energy usage and operations from the pilot operations shall serve as input for the private sector—small and medium businesses, social entrepreneurs, transport sector cooperatives, and community associations—to increase the potential to scale-up or replicate the initiative. This is key to reaching interested stakeholders, investors and financiers who have the capacity to put up similar installations and operations.

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