



# Schneider Electric solution enables Indogreen to cut diesel consumption of Telecom Tower sites by ~50%

## Customer Overview

PT Indogreen Technology and Management is committed to the adoption of solar power and green solutions in Indonesia. With a rich history in minerals, bio-energy, research and global business consulting, Indogreen aims to add to its extensive portfolio and become a leading green energy provider. Their mission is to continuously develop high quality products and solutions that meet customer needs, with cost effectiveness in mind.

## Challenge

Several telecom tower sites in Indonesia are operated in rural areas with very little to no access to electricity. This demanded multiple challenges from both the customer and the environment:

1. These towers were powered by diesel generators (DGs), which acted as the primary power source and ran continuously for 12 hours a day. Long running hours generated a substantial diesel consumption of 28 litres per day, per site, and a staggering weekly consumption of 200 litres per site.
2. On top of the environmental impairment, the rural location of these sites quadrupled the total fuel value and delivery costs.
3. The maintenance of these generators called for manual service labour every three to four months, and acquired additional overhead resources.

Committed to delivering world-class service, Indogreen sought out a cost effective and robust solution for their customer. The solution needed to integrate solar power into the existing energy infrastructure and significantly reduce diesel and generator costs.

## SUMMARY

### Customer Profile

PT Indogreen Technology and Management  
<http://www.teknologihijau.co.id>

- Renewable energy system provider in Indonesia
- Location: Bogor, Indonesia

### Challenge

- High diesel and generator maintenance costs
- High carbon footprint

### Solution

- Conext XW 4548 Inverter/Charger
- MPPT 60 150 Solar Charge Controller
- Automatic Generator Start (AGS)
- Conext ComBox



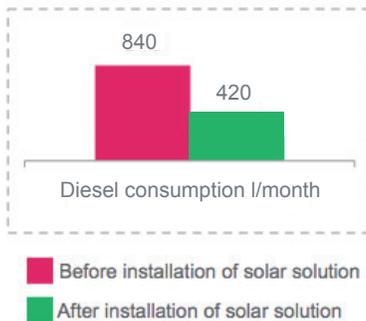
## Solution

These challenges required an integrated solution with the following key features:

1. High amps capacity charger that operates without derating, even up to 40°C
2. Modular and stackable design to support wide system sizes: both 1-phase & 3-phase systems
3. Easy and seamless integration with solar to reduce diesel costs
4. Best-in-class MPPT (Maximum Power Point Tracking) algorithm to harvest maximum possible solar energy
5. Optimum battery charging algorithm with PFC (Power Factor Correction) to help extend battery life
6. Compact footprint for ease of installation
7. Essential accessories for DG control, remote monitoring with Conext ComBox and electrical BOS (Balance of System)
8. All the components and accessories from the same bankable partner offering highly reliable products and technical support

The **Conext XW 4548 inverter charger and MPPT 60 150 solar charge controller from Schneider Electric** proved to be the perfect installation for Indogreen and their customer. Our Conext ComBox provided the added functionality for remote monitoring and easy configuration, while the AGS (Automatic Generator Start) module allowed for a seamless integration with the existing DG on site.

Furthermore, the MPPT 60 150 solar charge controller allowed harvest of maximum possible solar energy at the site. This helped to substantially reduce dependence on the diesel generator for the energy needs at the site. It is no surprise that the installation has reduced the DG runtime by up to 75% a day (dependent on the intensity of the sun at the site and local weather conditions) and fuel delivery to the site is minimized.



**“The highly efficient, reliable and robust equipment from Schneider Electric accompanied with excellent technical support makes Schneider Electric our preferred partner for Telecom Tower solutions.”**

*– Ayi Rahmat,  
President Director, Indogreen*



**The Telecom Tower sites were able to reduce DG runtimes by up to 75% per day**

### About Schneider Electric

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, and efficient, the company's 150,000 plus employees achieved sales of 24 billion euros in 2013, through an active commitment to help individuals and organizations “Make the most of their energy”.

Contact us at <http://solar.schneider-electric.com/where-to-buy/> to discuss your solar energy needs.