

**OFF-GRID HYBRID SYSTEMS IN THAILAND**  
**February 2015**



**Project: Water Treatment Solution**

Product scope:  
System design, supply of equipment , commissioning of 5 systems  
by  
Fortis Wind Energy & Independent Energy  
The Netherlands

## Project: Off-Grid Hybrid Systems in Thailand

In February 2015 “Fortis Wind Energy” & “Independent Energy” from The Netherlands together with our hardware distributor and automation partner in Thailand we completed 5 (five) Hybrid Systems of 32 kWp each in the province Ayutthaya, Thailand. The Hybrid Systems are used for water treatment.



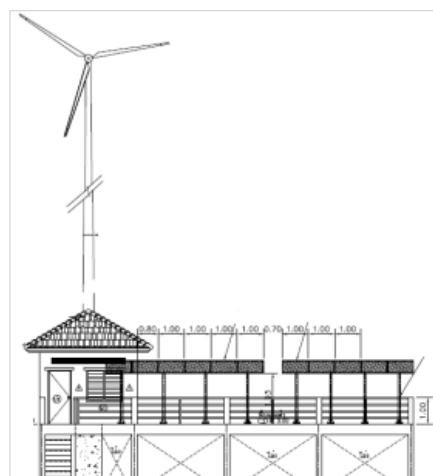
Site view: of the application in Taling Chan

## System configuration:

Each system is set up by:

- 120 x solar modules monocrystalline of 255 Wp
- 1 x Fortis Passaat (1,4 kW) wind turbine on 18 m monopole tower
- 3 x SMA STP inverter of 10 kW
- 3 x SMA Sunny Island type 6.0H
- 1x Battery Bank of 24 cells of 2 Volt type PVS4940
- 1x AC & DC distribution cabinet

Other equipment like motors, controllers timers are delivered and installed by our partner. Including all civil works, design of frames for solar modules, wind turbine foundation & tube tower plus cabling connection for all driving motors.



The 5 Hybrid Systems are divided over 2 sites near the city Ayutthaya:



2 systems located in the place Taling Chan & 3 systems in the place Han Tra

The systems are used to power water treatment:



Battery Bank: 24 cells of 2 Volt type PVS4940  
3x SMA STP inverter of 10 kW  
3x SMA Sunny Island type 6.0H



AC/DC distribution cabinet & Timer control

Total consumption per site is 60 kWh per day



Data monitoring via Webbox



Training & Instruction for end users

## Supervision on location:



Super vision by Fortis Wind Energy & Independent Energy engineers upon commissioning by our local partner



Traditional ritual at Project Completion

## Contact us now for more information:

### **Fortis Wind BV & Independent Energy BV**

Sales & Marketing  
Hendrik Figeeweg 5c  
2031 BJ Haarlem  
The Netherlands

[www.independent-energy.com](http://www.independent-energy.com)

[www.fortiswindenergy.com](http://www.fortiswindenergy.com)

Phone: +31 23 7114389

Phone: +31 50 55 15 666

E-mail: [info@independent-energy.nl](mailto:info@independent-energy.nl)

E-mail: [info@fortiswindenergy.com](mailto:info@fortiswindenergy.com)