

Intelligent Concepts
for the use of regenerative energy resources

Competence Center
for the use of
Renewable Energies

from:

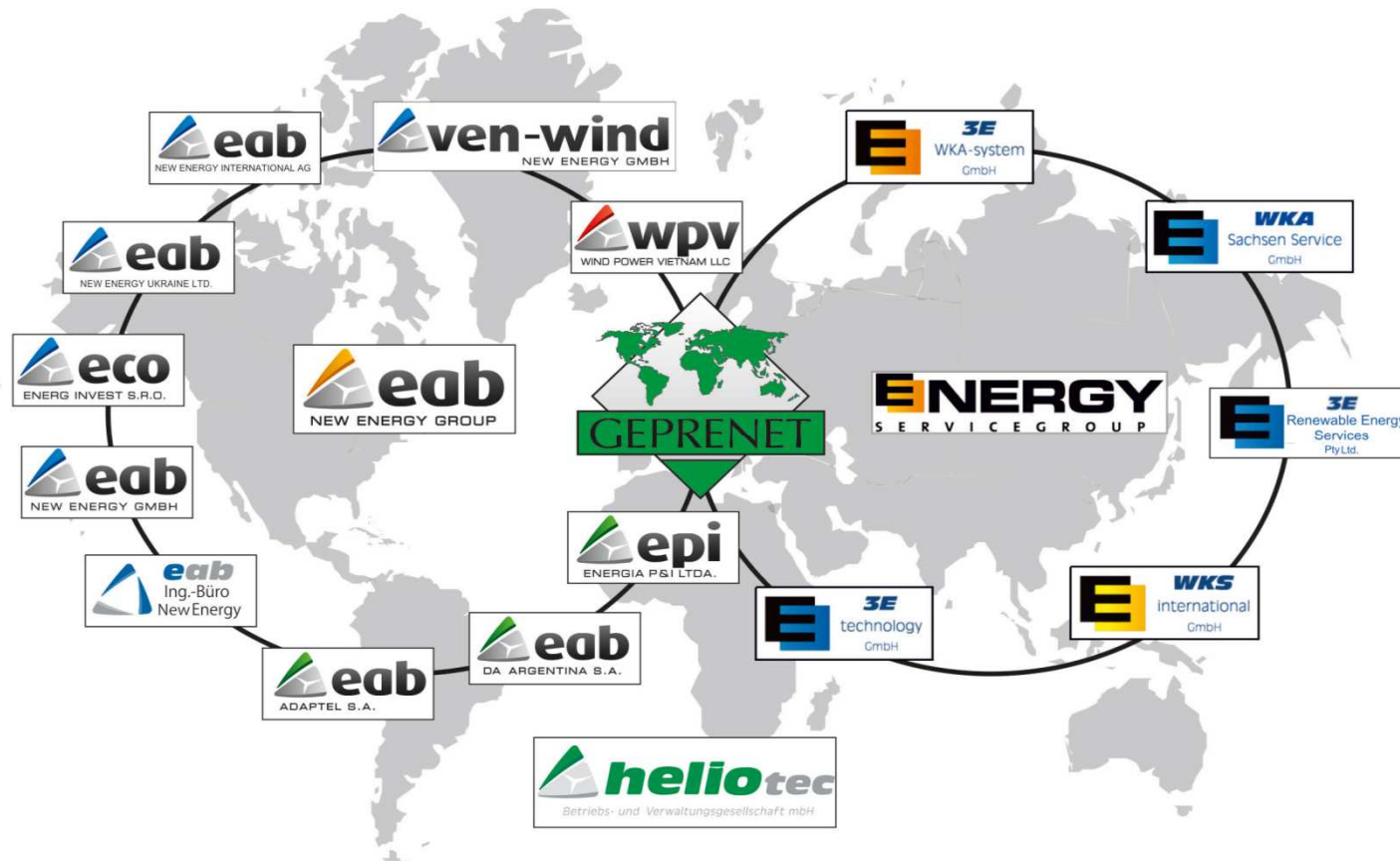
Alexander Kaiser– eab New Energy GmbH

Date:

28 of August 2013



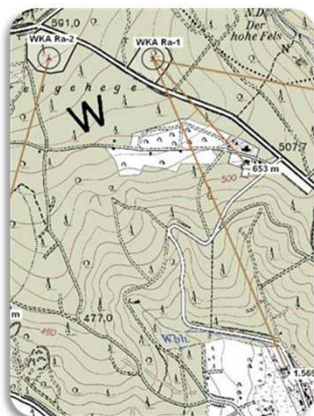
Company Structure



- Geprenet:** Engineering and Administrative Coordination of the Competence Centre
- eab New Energy Group:** Developing and Realization of International Renewable Energy Projects
- Energy Service Group:** Service for Construction, Repowering, Maintenance of Wind and PV Plants
- Heliotec:** Technical and Commercial administration of Renewable Power Plants



Our Range of Services



**Planning/
Projecting**



**Construction
WTG**



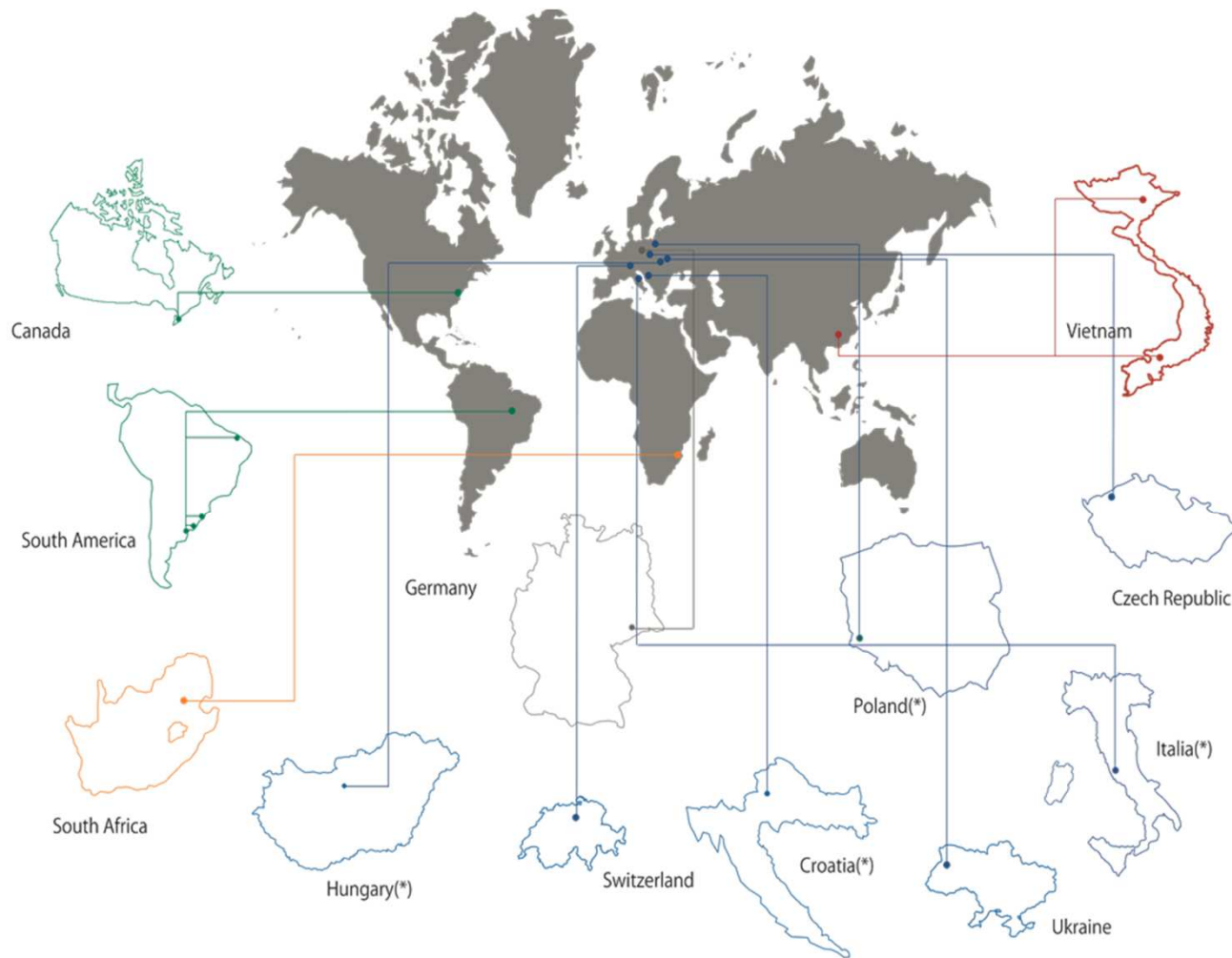
**Operation of
Wind Turbine Generators**



Repowering

2 – 10 years

20 years



* Share Holdings



Intelligent Concepts

for the use of regenerative energy resources

Self sustaining supply
systems for stand-alone and
Off-Grid applications to
provide:

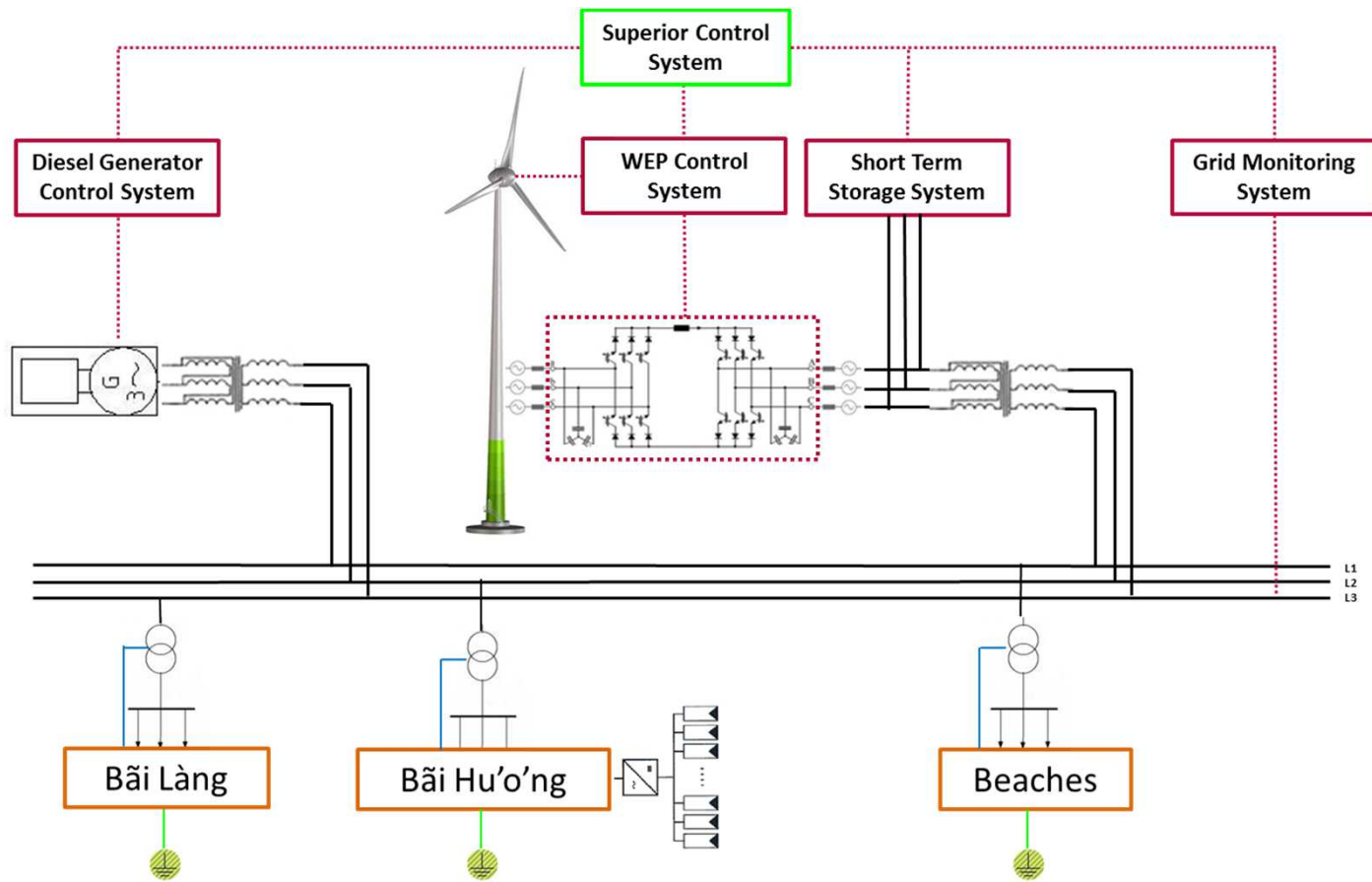
- electricity
- heat
- drinking water

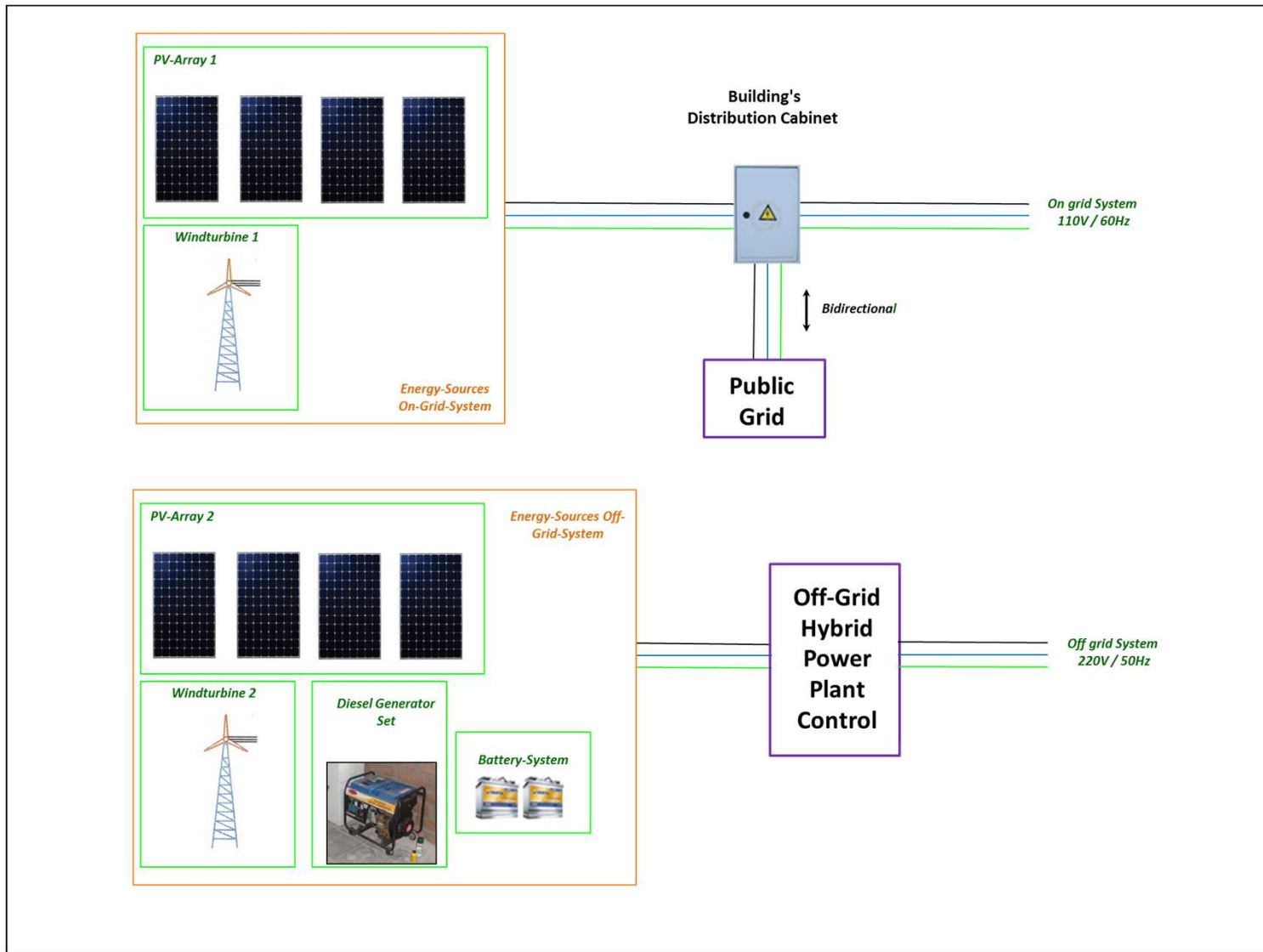
Application fields for Off-Grid Systems

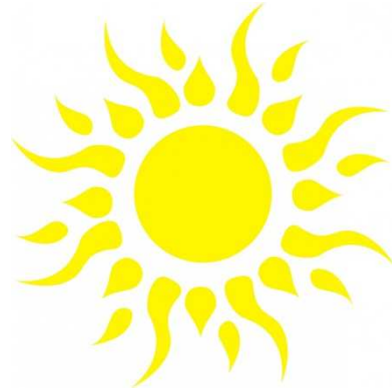
- **Remote Areas and Islands without access to an superior supply grid like a public grid**
 - **New installations**
 - **Enhancement of diesel based system in order to save fuel costs**
- **Areas with an unreliable grid, to supply safety related applications like telecommunication, medical-care, administrative or military facilities**

Challenges:

- **PV-Systems as well as Wind turbines are made for grid parallel operating, means they are not capable to establish a grid themselves**
- **The sun as well as the wind are unsteady energy sources**
- > **These creates the need of installing grid forming equipment and to combine different energy sources to establish a reliable and stable energy supply**

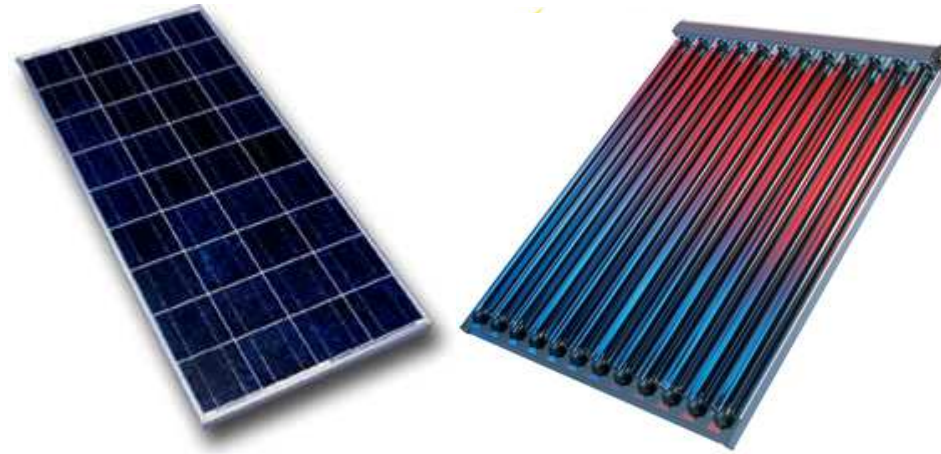






Demand

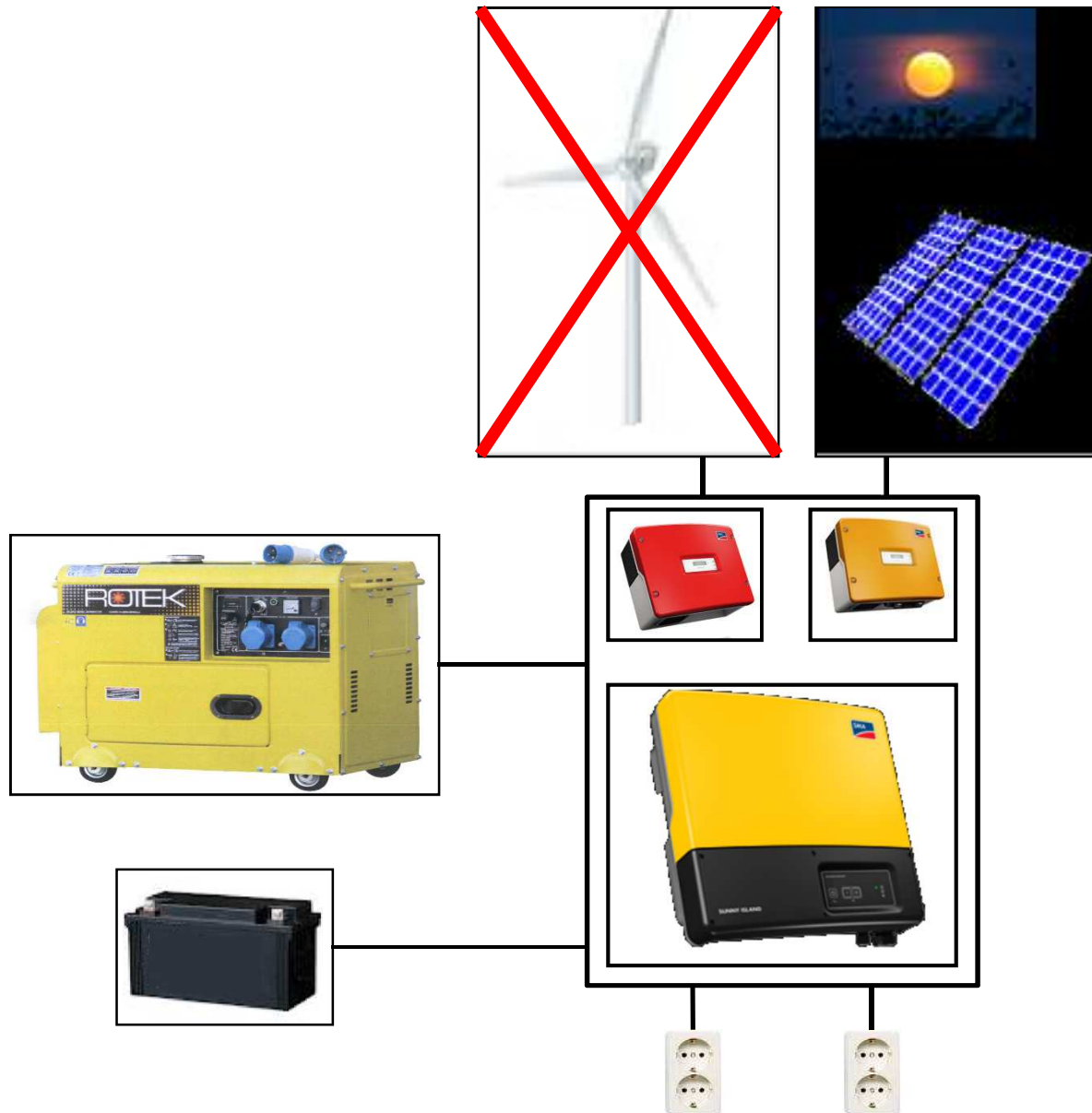


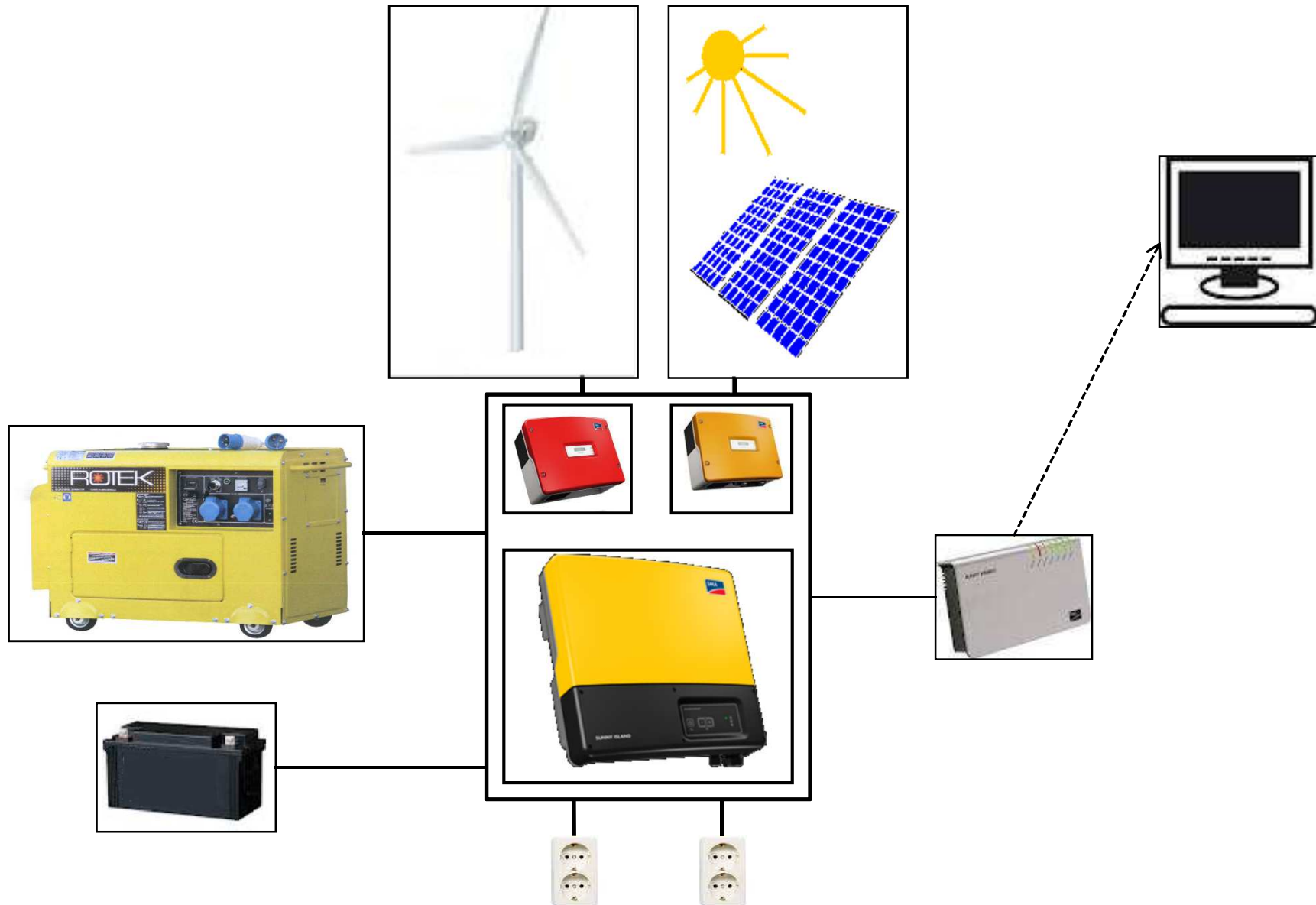


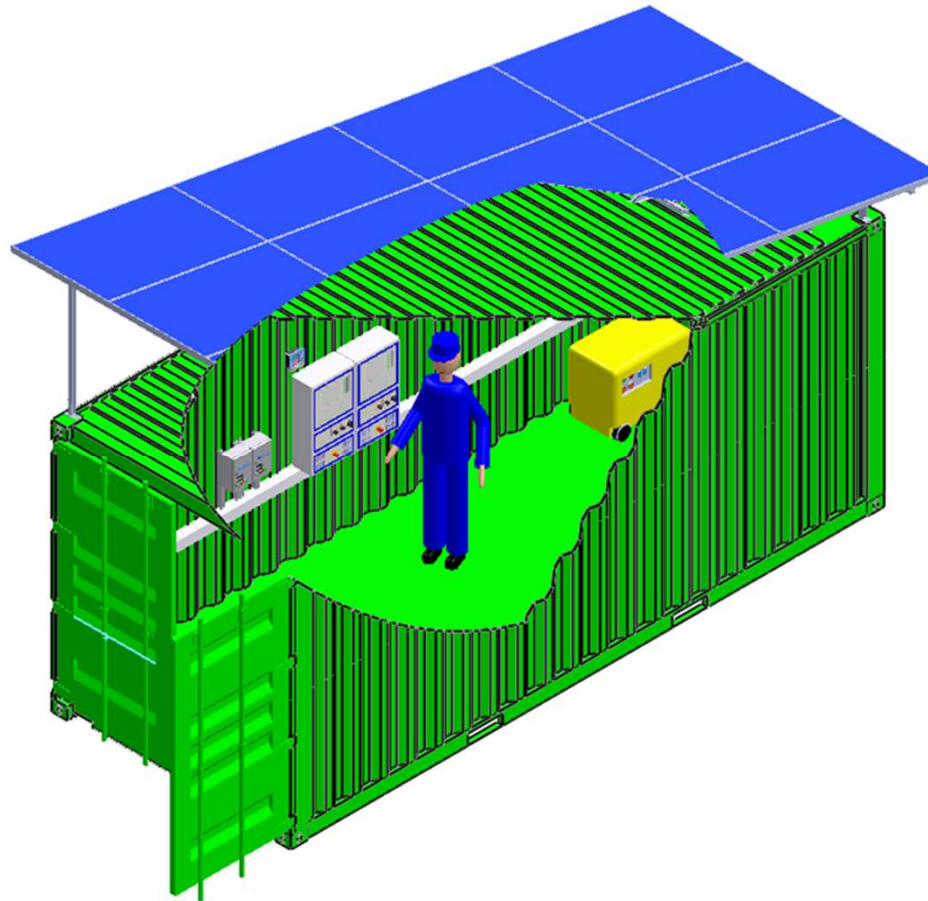
Demand





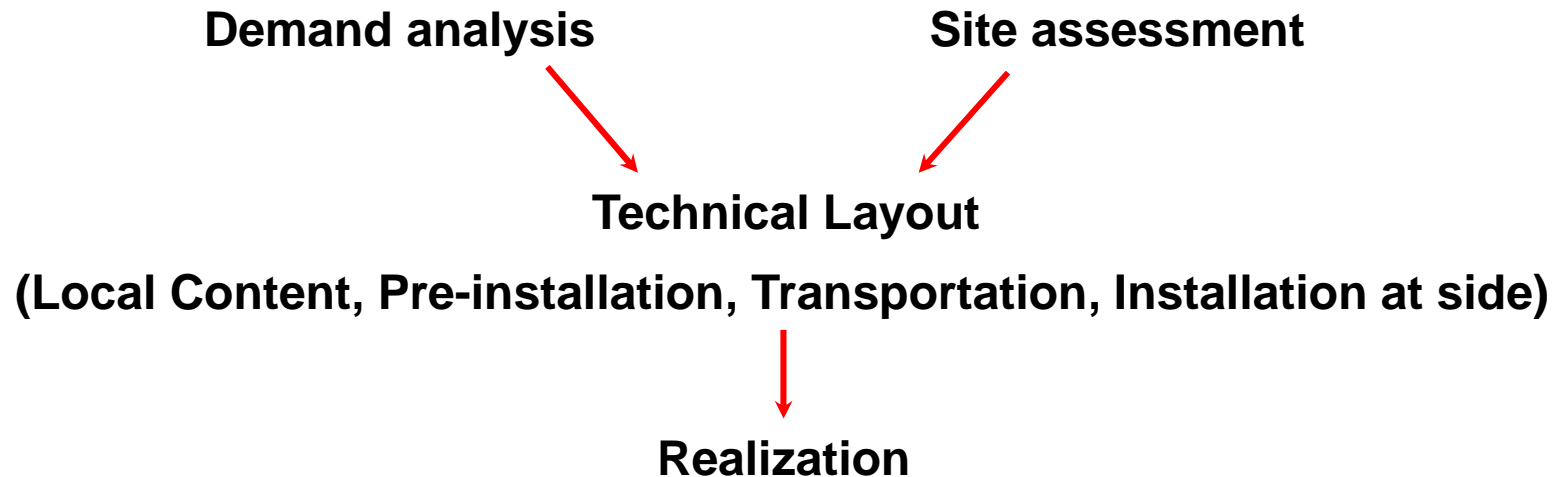






- **Stand alone applications are custom made items**
- **Aim is to cover the need while avoiding expensive over-capacities**

Systematic approach:

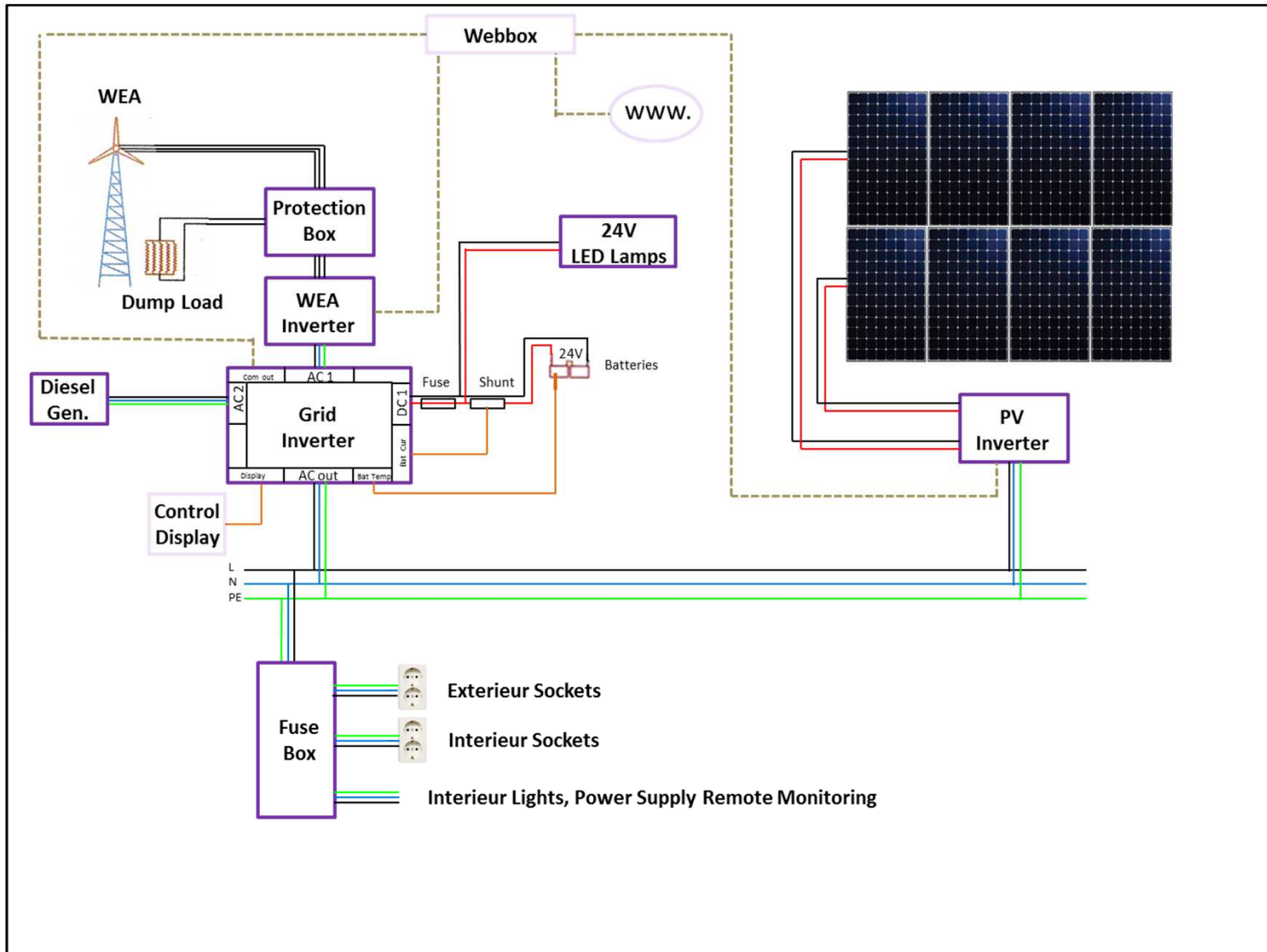


Including Education/Training of maintenance staff, continuous Remote Control



Cham Island - Vietnam



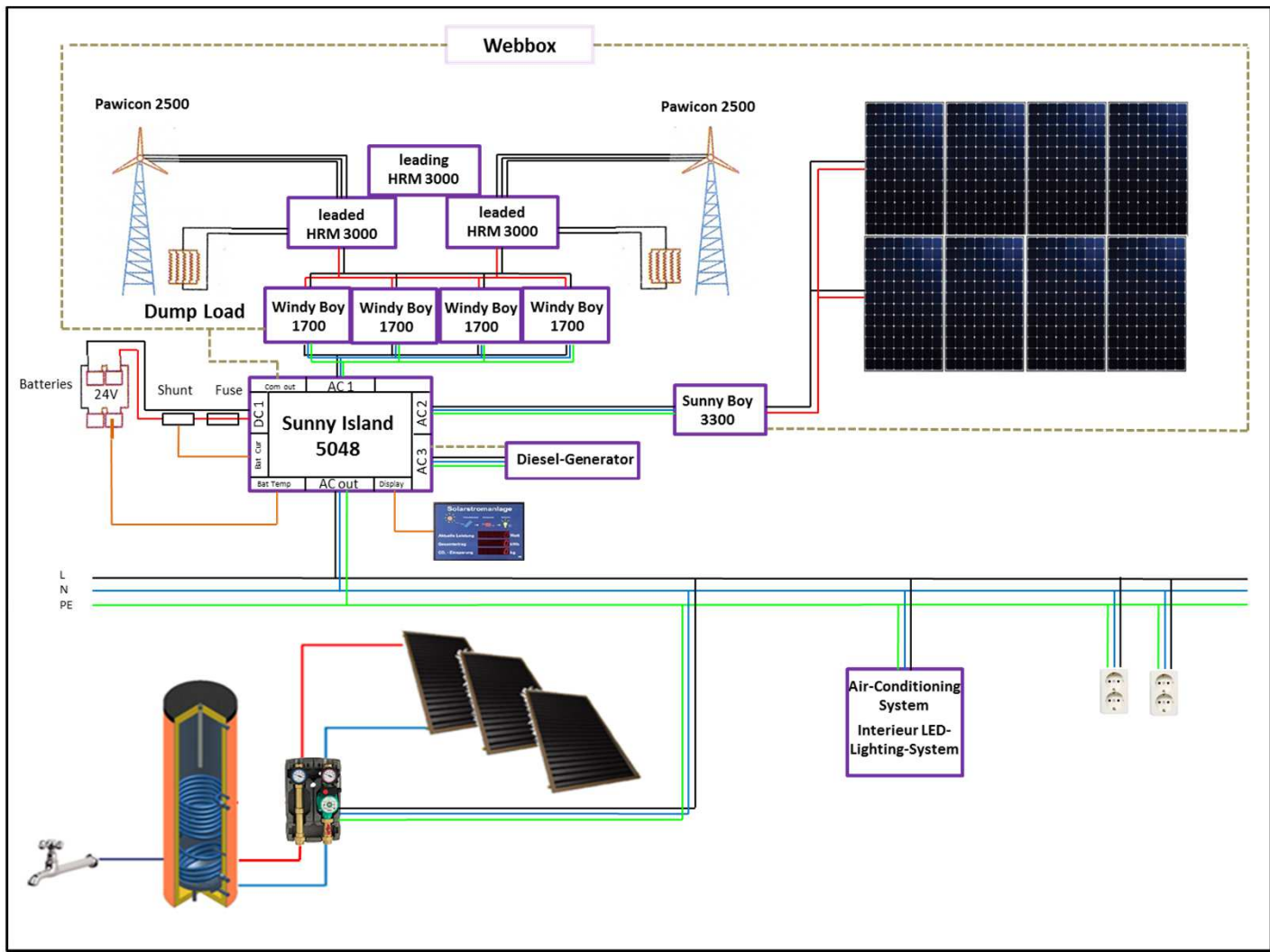




Rio Grande - Brasilien







**Many thanks for your
attention**

