



Solar and Hybrid Solutions for Mini-Grids

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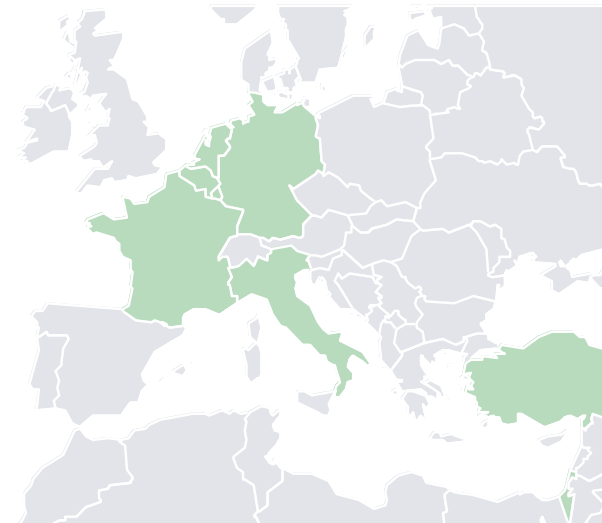
The Company



Energiebau overview

- Established in 1983
- Approx. 350 employees worldwide
- Turnover 2010: 360 Mio.€

- Subsidiaries:
 - **2006** Energiebau solar power benelux bv
 - **2006** Energiebau Sunergy Ghana Ltd.
 - **2007** Energiebau Italia Srl.
 - **2009** Energiebau France S.A.S.
 - **2011** Energiebau North America Inc.(New Jersey)

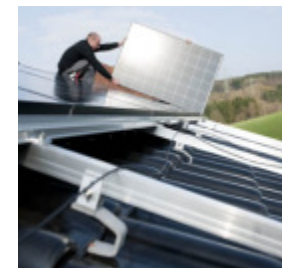
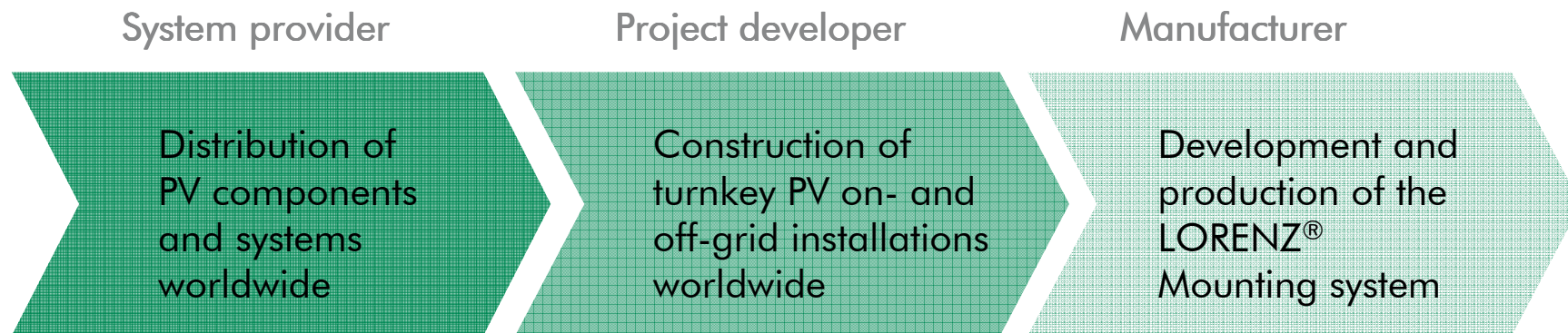


The Company



3 Business sectors

With almost **30 years of experience**, Energiebau today is a professional partner in any aspect of solar power generation.



LORENZ®



References on-grid



Cologne Bonn Airport
Germany

- 03/2009
- 295 kW_{peak}
- SCHOTT Solar
- Energiebau LORENZ®



Henygarov
Czech Republic

- 11/2010
- 1.1 MW_{peak}
- Kyocera
- Ground mounted



Siebenlehn
Germany

- 06/2010
- 722 kW_{peak}
- SCHOTT Solar
- Energiebau LORENZ®

References off-grid



Germany

Type: Water quality measurement station, Genke dam, Bergisch Land

Construction: 2009

Capacity: 0,5 kWp

Projectpartner: Aggerverband



Bangladesh

Type: Off-grid power supply for a charity building

Construction: 2011

Capacity: 5,0 kWp

Projectpartner: Proknit Ltd.



Poland

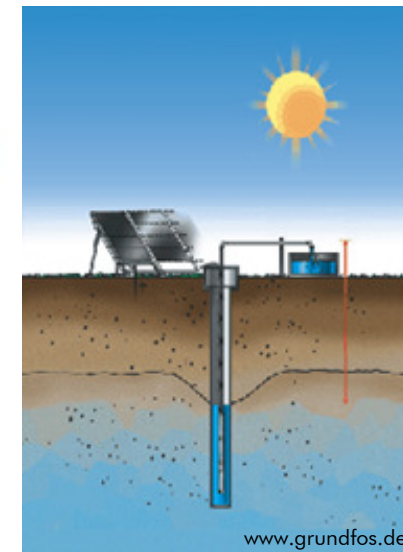
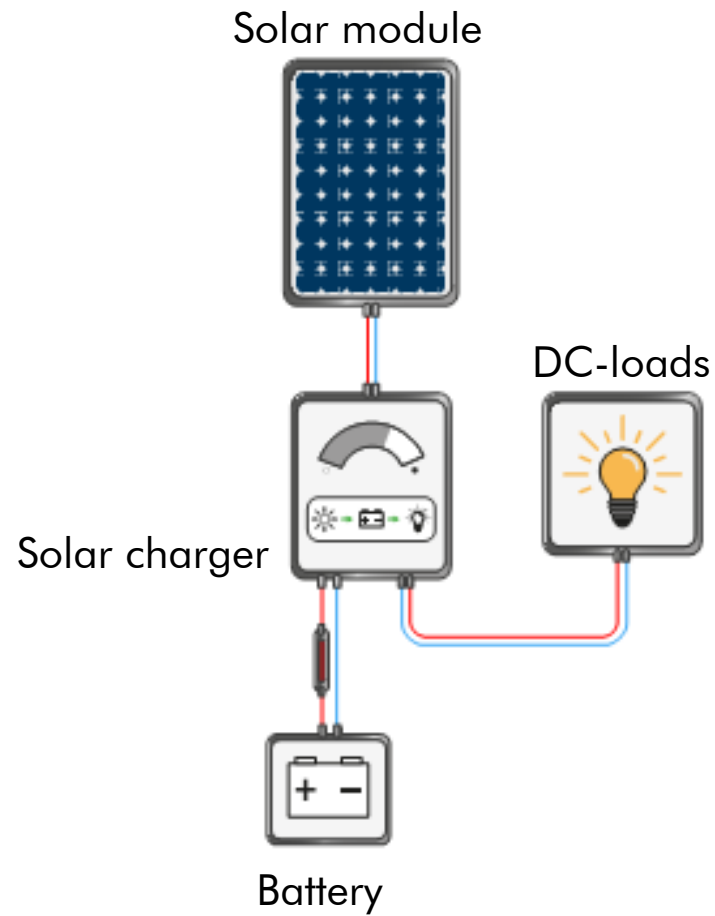
Type: Off-grid system for an agricultural business

Construction: 2006

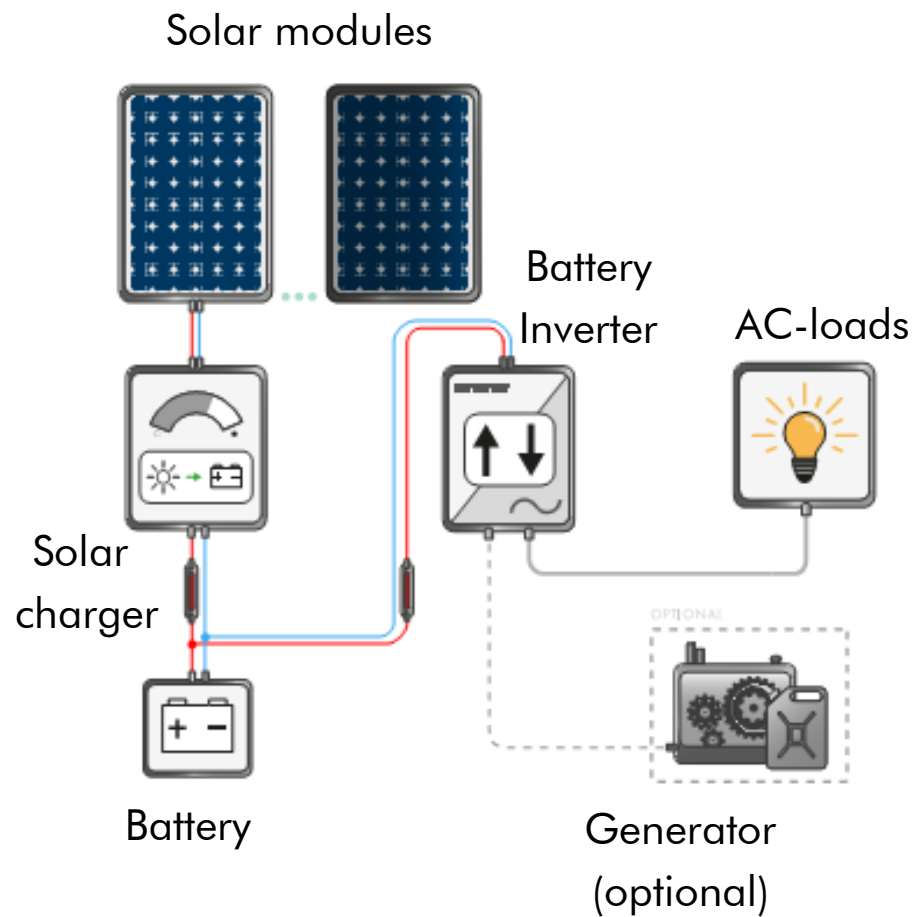
Capacity: 12 kWp

Projectpartner: Tele I Radiomechanika

Stand-alone system for DC-loads



Off-grid system for AC-loads (DC-coupling)

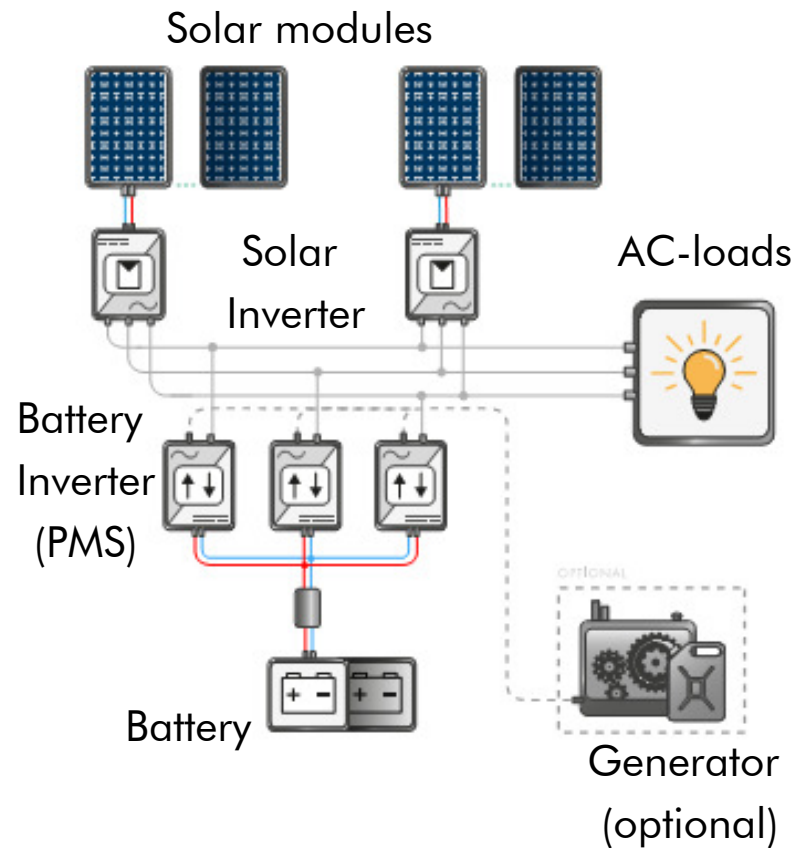


Off-grid power supply for a
radio station in Benin

Construction: 2009

Capacity: 4 systems each 16,6 kWp

Off-grid system for AC-loads (AC-coupling)

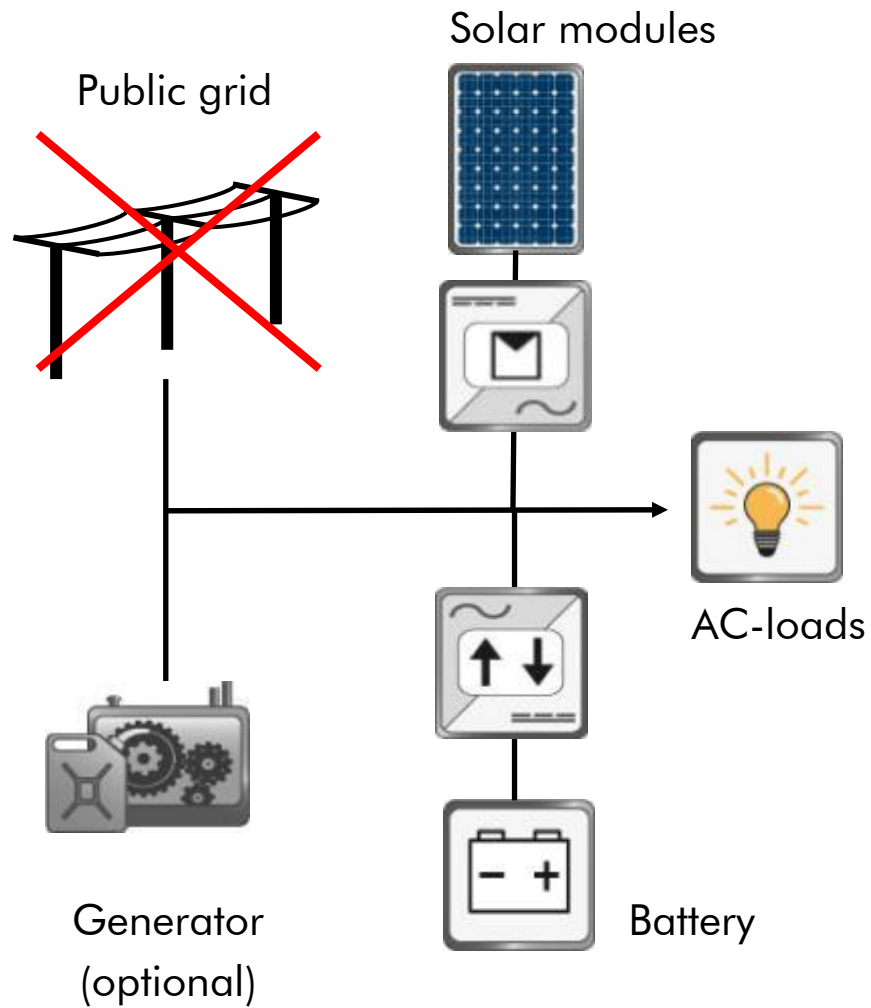


Off-grid systems for a
SOS childrens village in Peru

Construction: 2007

Capacity: 10,2 kWp

Backup-Systems (in combination with PV)



Back-up system for grid failures
at an hotel in Slovakia

Construction: 2009

Capacity: 10,8 kWp

Village power supply system for Busunu, Ghana



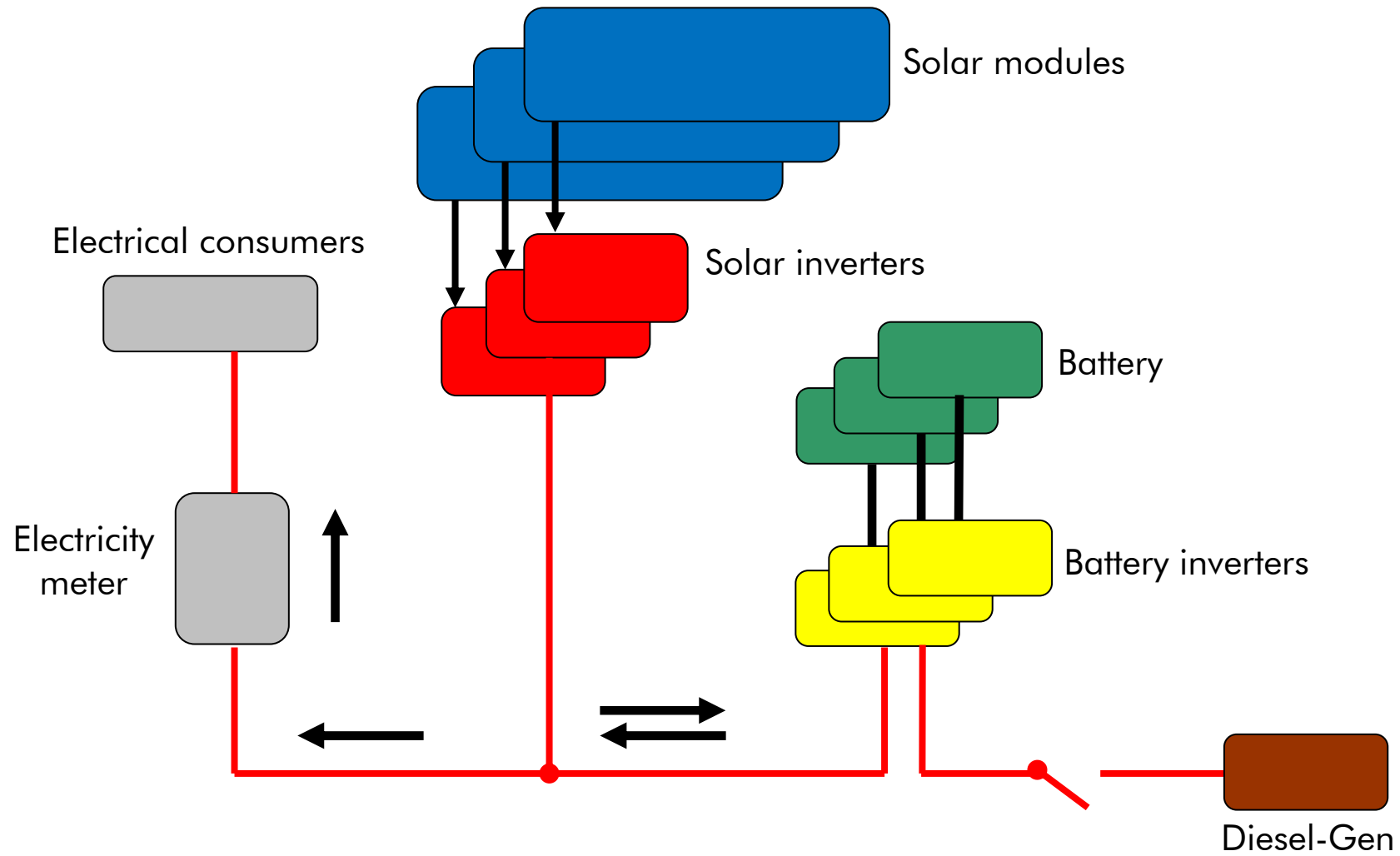
Village Power Supply in Ghana

Construction: 2009

Capacity: 10,8 kWp



Village power supply system for Busuna, Ghana



Solar power system for the NOF office block of UN Nairobi

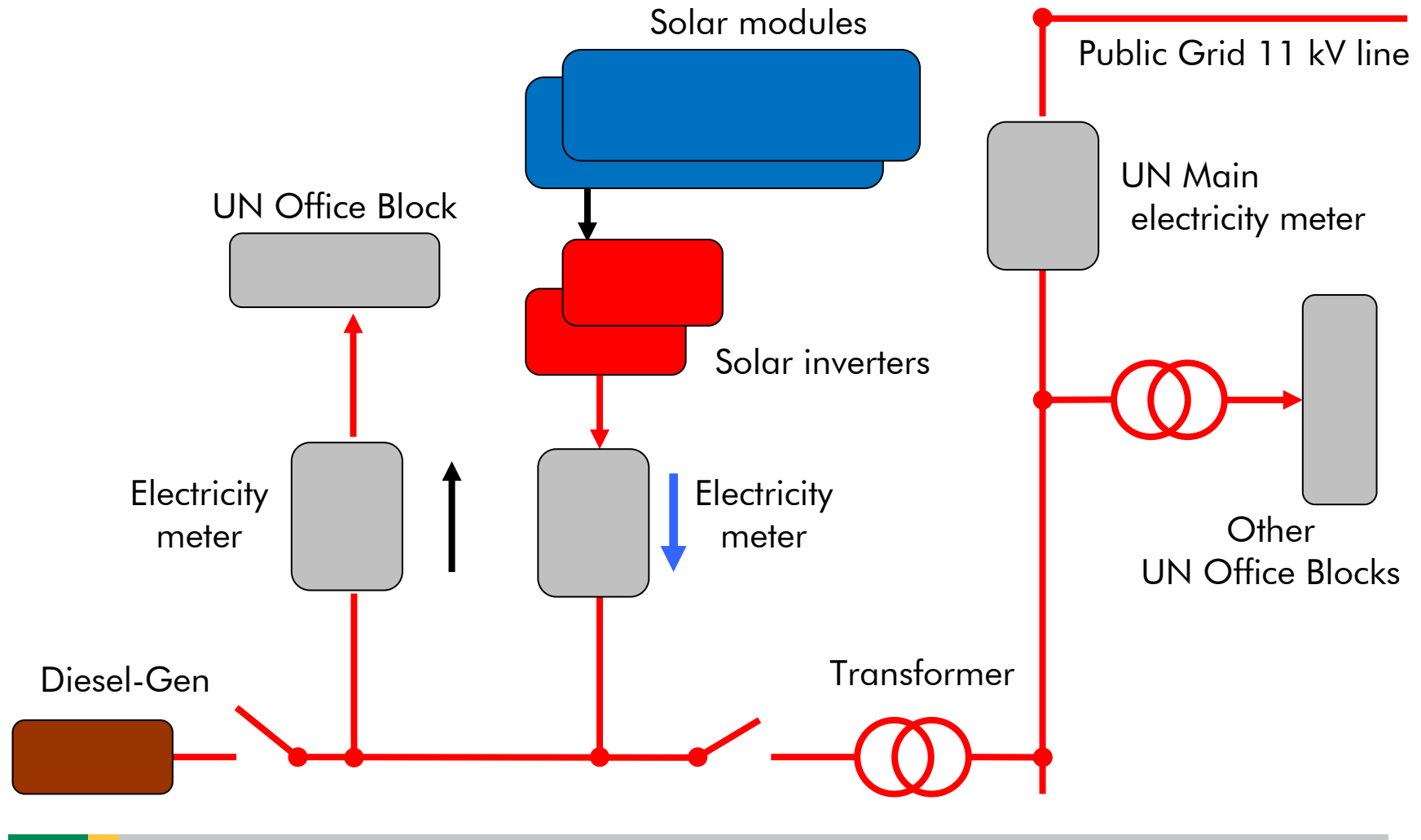


Power supply for office block of the UN Nairobi, Kenya

Construction: 2011
Capacity: 515 kWp



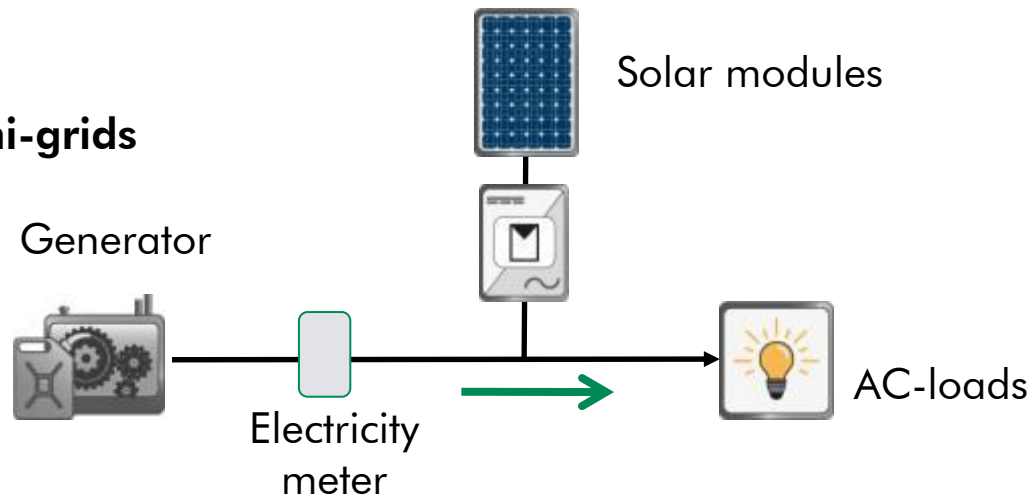
Solar power system for the NOF office block of UN Nairobi



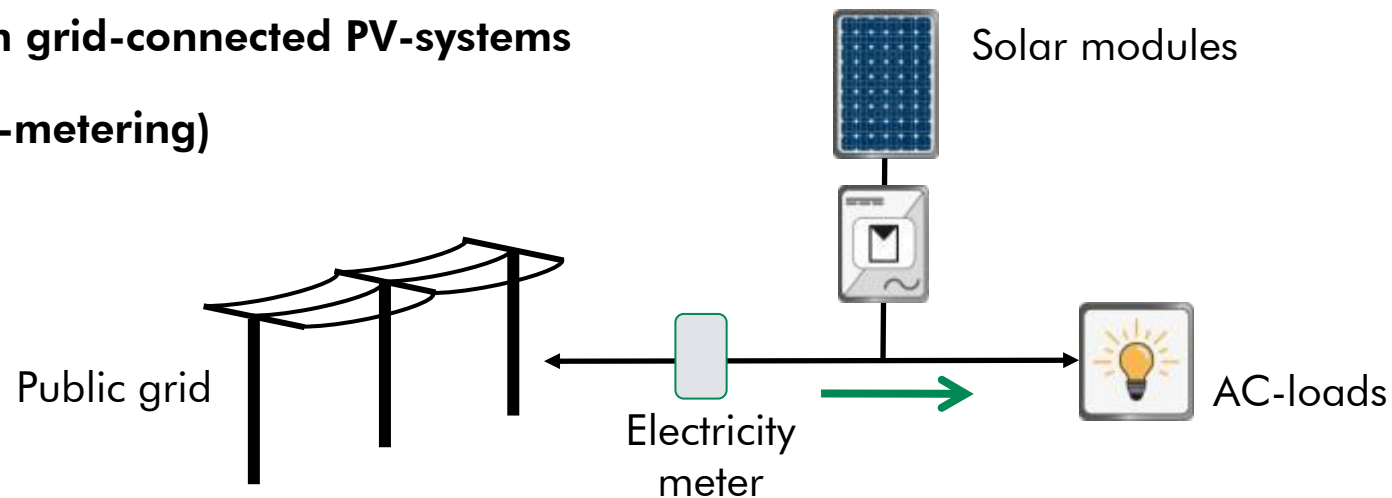
Cost reduction in mini-grids through PV



- In diesel-powered mini-grids



- With grid-connected PV-systems (net-metering)



Hybrid Mini-Grid



Several technologies can be used in mini-grids:

Hydro power:

cheapest technology
most site dependent

Solar photovoltaic (PV):

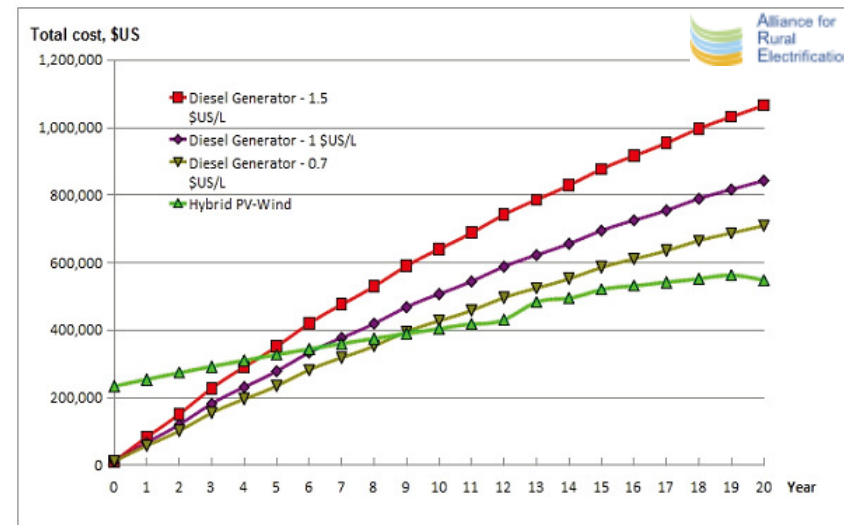
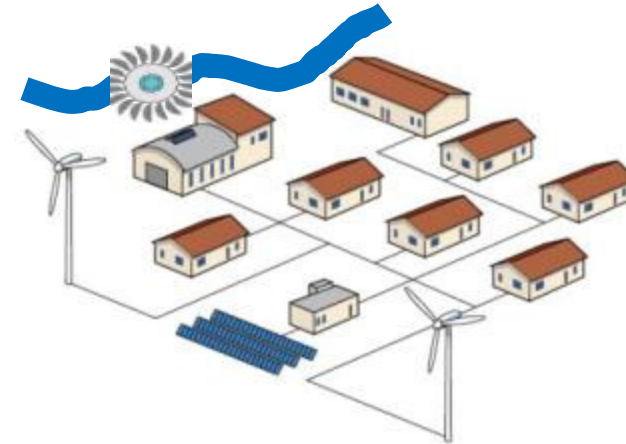
suitable for almost any location
comparatively easy to install and maintain
high initial investment costs

Wind power :

very site specific

Diesel Generator :

ensuring quality of service
fuel is costly



Energiebau Partners



DESIGNING THE FUTURE

German Solar Award 2011



Energiebau.
The solar power experts.

Thank you for your attention!

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