Villaya Emergency

Clean and cost effective power for emergency response

Presented by: Access to Energy

Confidential Property of Schneider Electric

Life Is On Schneider Electric

HOW DO YOU PROVIDE ENERGY ACCESS TO PEOPLE DEPRIVED OF IT?

According to the International Energy Agency, nearly 993 Million people still lack access to electricity in 2017.

992 Million

people don't have access to energy in the world

3 Billion

with an unsafe, expensive and fossil-based access

Up to 30%

of their revenue spent on inefficient , dangerous, and polluting energy

Life Is On Schneider Electric

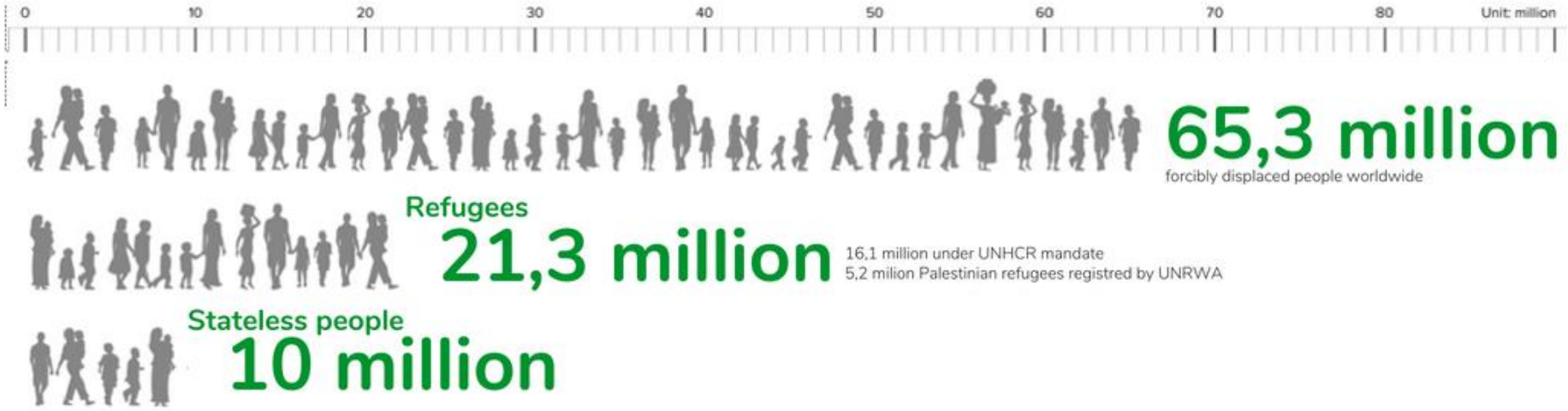
Access to energy at the center of global priorities

UN Sustainable Development Goals

Goal 7:

Ensure access to affordable, reliable, sustainable and modern energy for all.

Life Is On Schneider Electric



In 2016, refugees represented 0,8% of mankind, it has doubled in the last 10 years….

Life Is On Schneider Electric

Villaya Emergency

A game changer; containerized technology, including pre-mounted and rectractable solar modules

Schneider Electric Villaya Emergency Applications

VILLAYA EMERGENCY

Access to Energy

- Refugee camps
- Disaster relief

Energy

Mobile & fixed PV panels

- Mining industry and telecoms
- Oil & Gas
- Islands
- Defense

Villaya Emergency: the most efficient, clean solution to provide energy when and where its needed most

Robust

- Designed by Schneider Electric
- 20 year life span
- Fully tested in house
- Up to 5 years warranty

Cost Effective

- 3 year ROI compared to genset
- No maintenance
- Fast installation

Clean

- Solar energy
- Environmentally friendly batteries specifically designed for high temperature environments

Mobile

- Fast installation: 30min with no expert required
- Transportable by lorry, helicopter or boat
- Plug & Play

Remote monitoring

- Ecostruxure for energy access
  - Monitoring
  - Control
  - Efficiency

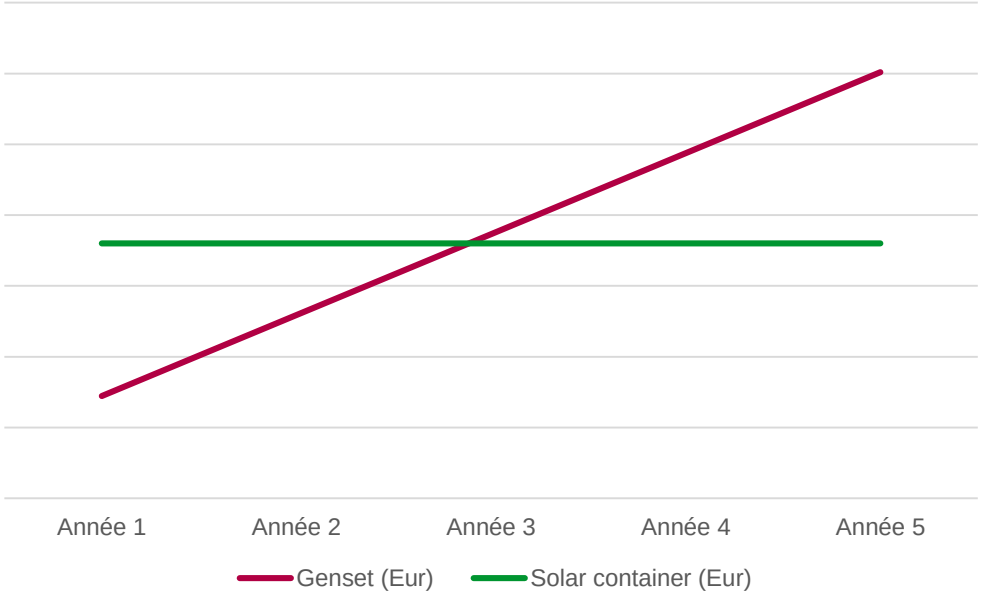
Scalable

- Modular solution
- 10ft or 20ft containers
- Additional containers of PV arrays available
- Hybrid with grid or genset if required

Life Is On Schneider Electric

Cost effective

3 years ROI
compared to genset



Life Is On Schneider Electric

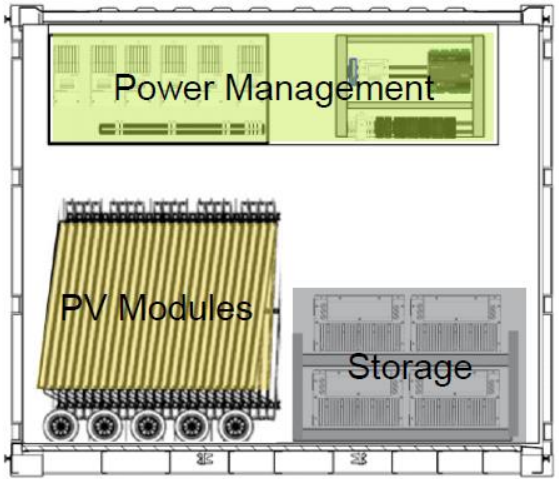
Villaya Emergency

The most efficient, clean solution to provide energy when and where its needed most

- 5 standardized power ranges: 7, 14, 21, 42 and 63kVA
- Flexible usage –off-grid or connectable to grid and/or genset
- Embedded «Ecostruxure for Energy Access»
- Plug and play, and maintenance free
- 2 years warranty extendable to 5 years

→ can ideally complement or replace genset base for all A2E types of customers

→ crushed lead time vs project mode (ie UEMOA, HCL)



Villaya Emergency’s advantages

Robust

- Designed by Schneider Electric
- 20 year life span
- Fully tested in house
- Up to 5 years warranty

Cost Effective

- 3 year ROI compared to genset
- No maintenance
- Fast installation

Clean

- Solar energy
- Environmentally friendly batteries specifically designed for high temperature environments

Mobile

- Fast installation: 30min with no expert required
- Transportable by lorry, helicopter (10 feet only) or boat
- Plug & Play

Remote monitoring

- Ecostruxure for energy access
  - Monitoring
  - Control
  - Efficiency

Scalable

- Modular solution
- 10ft or 20ft containers
- Additional containers of PV arrays available
- Hybrid with grid or genset if required

Life Is On Schneider Electric

Villaya Emergency

Technological innovations:

1. Sodium batteries, adapted to high temperatures and extreme environments, no need of air cooling systems
   100% recyclable

Villaya Emergency

Technological innovations:

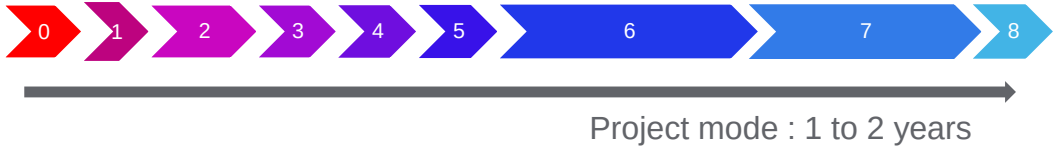
2. Retractable PV structures, mounted on EXOrac solar racking technology.

- PV installation up to 16-times faster than any existing racking system available today
- Bring solar energy generation where traditional fixed PV installations are not an option
- Eliminate high upfront capital investment, leasing options
- Relocate Assets as needed

Faster project delivery

Traditional PV Cycle

0. Customer need
1. Energy assessment
2. Engineering/Study and Offer/PO
3. Procurement
4. Component delivery
5. Delivery / Transport to site
6. On site assembly
7. Commissioning
8. Production of kWh



Project mode : 1 to 2 years

Villaya Emergency Cycle

-3 Procurement
-2 Factory assembly
-1 Stock of finish products
0 Customer need
1 PO
2 Delivery / Transport
3 Commissioning
4 Production of kWh

Villaya Emergency not in stock: 5 months

Villaya emergency in stock : 1 month

Life Is On Schneider Electric

Technical Specifications

Container	10 feet or 20 feet
PV power	From 7kWp to 65 kWp (24 to 240 modules) as a standard
Power Conversion system	From 7kVA to 63 kVA
Battery storage	From 10 kWh to 120 kWh (48V)

Life Is On Schneider Electric

Questions?

Life Is On Schneider Electric

Want to join us?

Schneider Electric: Access to Energy

@SchneiderA2E

At Schneider Electric, we believe Access to Energy is a basic human right

Subscribe to the Access to Energy newsletter

a2e@schneider-electric.com

Life Is On | Schneider Electric