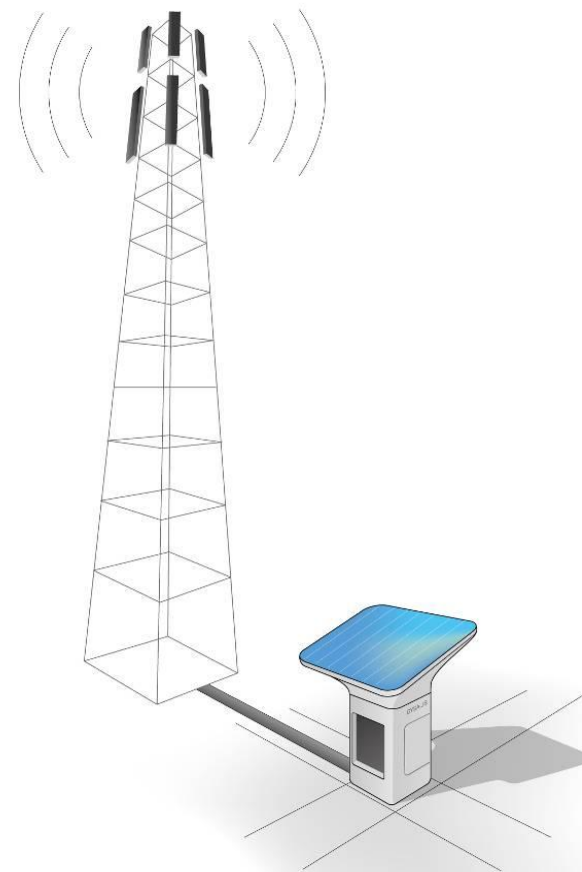


# The SMART HYBRID POWER UNIT :

*The new effective solution to power off-grid telecom sites.*



Sarkis Armoudian – Guillaume Jullien de Pommerol  
22-23 October 2015, TBB Berlin



# A specific power context in emerging countries

✓ **73%** diesel generator

✓ **75%** failures due to power.

✓ **1<sup>st</sup> Operational Expense** = Power

→ NEEDS :

- **DECREASE OPERATIONAL COSTS**
- **and SECURE POWER SOURCE**



# Evolution of telecom equipment

1995 - GSM

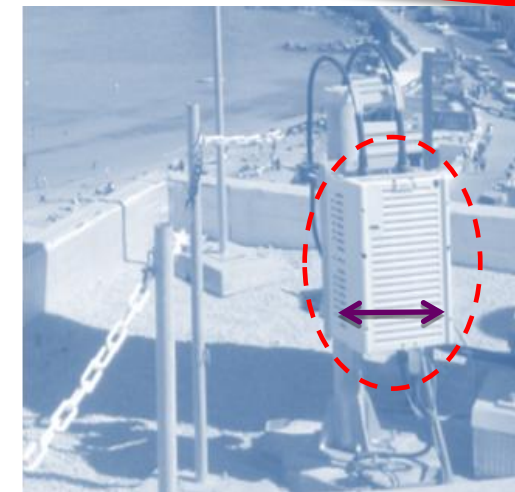
5 500 Watts



.....

2015 - 4G

800 Watts



→ **Power consumption divided by 7.**



## Existing solutions :

Diesel generators



100% solar solution

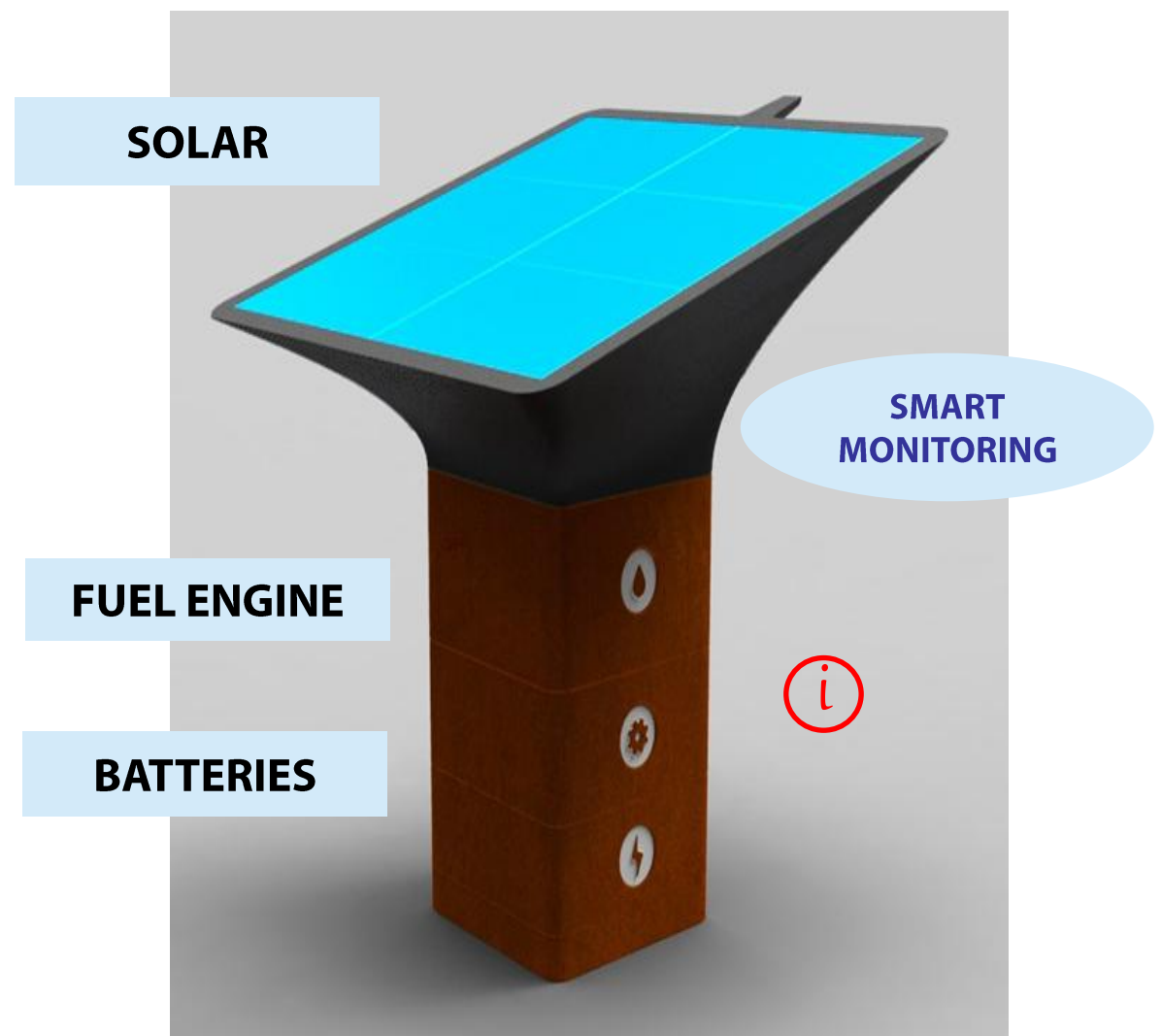


Hybrid integrated solution



CYSALYS has developed the  
**SMART HYBRID POWER UNIT**

*New equipment generation  
consumption < 1500 Watts*



... not really adapted any more

# The targeted market

## AFRICA + MIDDLE EAST

Existing telecom sites

sites < 1500 Watts  
Diesel generator life time



40 000 /year

New sites to be equipped



8 000 /year

**Total : 48 000 units/year**  
**1 billion €uros potential market**

**AFRICA :**  
53 countries  
146 **mobile operators**



*Tower  
companies*  
IHS, ELIOS, Eaton, ...

# Next steps

2015

2016

2017-2018-2019

- POC OK + lab prototype
- 1<sup>st</sup> patent filled
- 1<sup>st</sup> funding round finalized

- Real scale prototype
- **1<sup>st</sup> field pilot installed**  
(3 real customers)

→ **Business development**  
**commercial acceleration**  
(new customers)

→ **Commercial growth**  
- Product **industrialization**

TTM version

- **2<sup>nd</sup> funding**  
**round (1 M€)**



Number of SHP Units sold

# An experimented team with complementary skills

## **Sarkis Armoudian**

expert in mobile network deployment

Founder,  
CEO of CYSALYS Technologies.



## **Guillaume Jullien De Pommerol**

expert in broadcast network deployment and operations

Co-founder,  
CTO of CYSALYS Technologies.



## **Qowisio team**

Participation in the capital of Cysalys Technologies,  
represented by Cyrille Le Floch,  
Co-founder

29 customers in 14 countries

Hiring :

R&D engineer

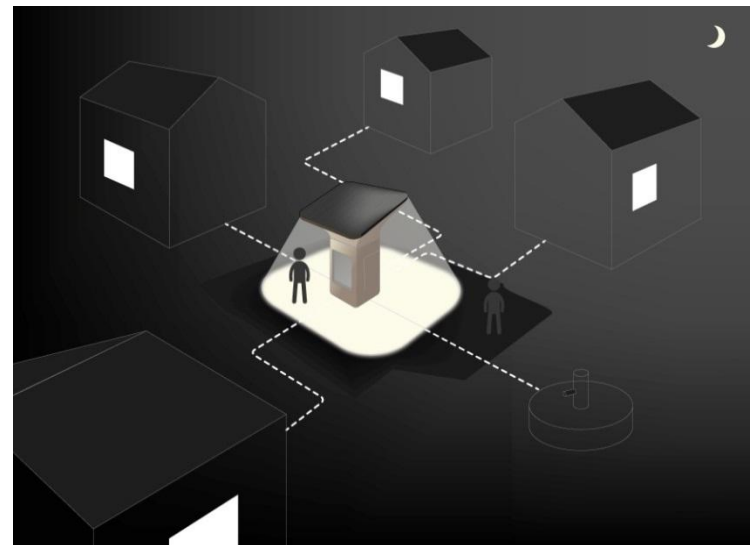
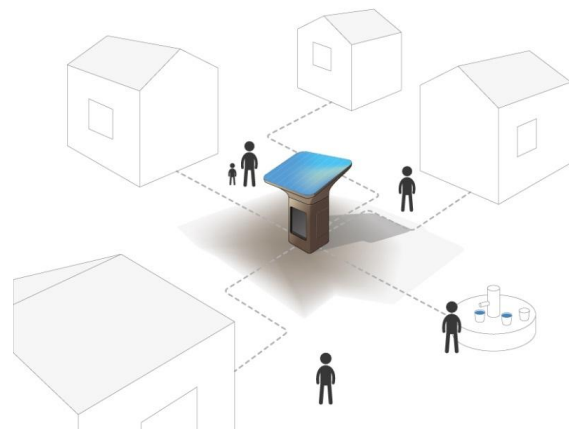






Business development



# Thank you

## Any questions?



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