

Future Energy...Today

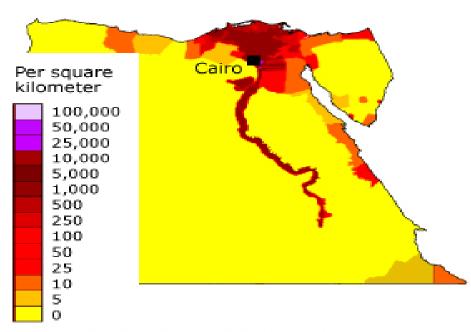


Decentralized Renewable Energy Solutions in the MENA Region:
A Driver of Local Value and Job Creation

### Locations & Applications

#### Do we need Grid in these Areas?

#### Population density in Egypt

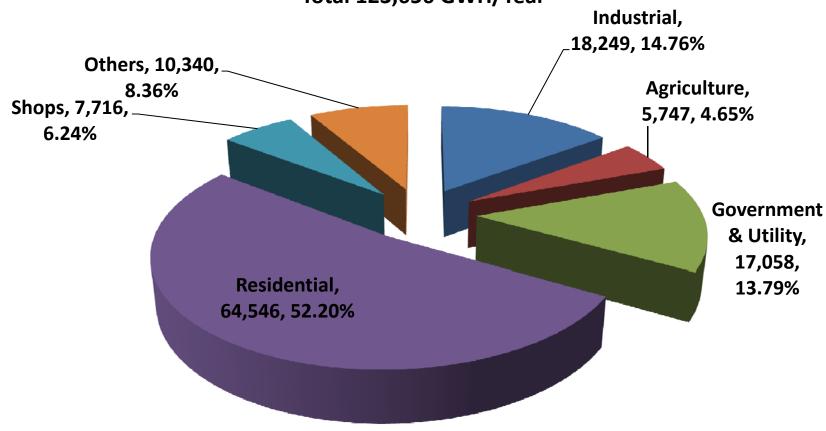


Source: Sedac/Ciesin, Columbia Univ.



### Locations & Applications



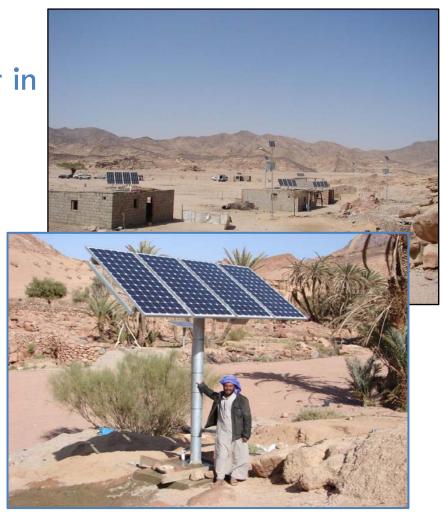




### **Bedouins Settlement**

Bedouins Settlement Project in 2007

- EU Financed
- Homes & Water Pumping
- Completely changed their lives
- Energy Saving is a priority





### **Health Care Units**

Western Desert

Health Care Improvement





### **Solar Traffic Lights**

Alex & Ismailia Highways

Reducing Accidents Rates









## **High Way Ambulance Centers**

High Ways

Health Care Improvement







### **GSM Solar Sites**

• 600 Sites

Improving Communications







### On Grid Systems (GUPCO & EGPC)

• Power: 320 KWp

• Energy: 580 MWH/Year

• NG Saved: 4.5 Million Cu FT/Year

• CO2 Saved: 300 Tons/Year

• Execution Time: 4 Weeks





#### **Decentralized Renewable Energy Solutions**

#### Off Grid Applications

- ✓ Much More Economical in terms of CAPEX & OPEX
- √ Faster Deployment

#### On Grid Applications

- √ Home Consumer Can be part of the solution
- √ Faster Deployment
- ✓ Energy used where it is needed
- √ Transmission Development will not be required







# Thank you