Morocco Solar Home Systems

Morocco

The Morocco Solar Home Systems (SHS) project is a Masdar-led initiative in partnership with Morocco's Office National de l'Electricité et de l'Eau Potable (ONEE). It provides 19,438 solar home systems in over 1,000 rural villages in the Kingdom of Morocco.

The solar home systems, along with broader electrification initiatives, provides 99 percent of rural Morocco with access to energy, enhancing the lives of more than 95,000 people that did not previously have access to electricity.

Each of the installed systems consists of two solar panels with a total capacity of 290 watts and two batteries with sufficient storage capacity for up to three days, thus ensuring uninterrupted power supply. In addition, the system includes eight LED light bulbs and light switches, three electric sockets and a 165-liter refrigerator.

Due to the different housing construction methods, several mounting structures were developed to suit each type of housing unit, including roof-mounted, ground-mounted, pole-mounted, tower-mounted and wall-mounted.

Masdar, through its EPC contractors, will provide maintenance support for the first two years after installation. ONEE will take over this role for the subsequent eight year period with Masdar contributing to the cost of operation & maintenance.

QUICK FACTS

- Provided 19,438 solar systems in over 1,000 rural Moroccan villages

- Extends energy access to 99% of rural Morocco, or 116,000 people

- Each house received:
  1. Two solar panels of 290-watt total capacity
  2. Two batteries with a total capacity of 300 Ah (up to 3 days supply of energy)
  3. One charge controller
  4. 8 LED light bulbs and light switches
  5. One 165-liter capacity refrigerator
  6. 3 electric sockets

The home owners will also make a monthly payment contribution to the cost of the maintenance support.

The project was funded through a grant by the Abu Dhabi government, reflecting the United Arab Emirates' strong bond and historic relationship with the Kingdom of Morocco.

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