

SOLAR FARMS

SCHOOL ELECTRIFICATION IN THE MALDIVES



DESIGN, SUPPLY, INSTALLATION AND MAINTENANCE OF 11 SOLAR FARMS IN THE MALDIVES



THE CONTEXT

The **School electrification Project in the Maldives**, supervised and funded by UNDP, is part of a Maldivian program called LECReD (Low Emission and Climate Resilient Development). This program aims at reducing greenhouse gases emissions as well as improving access to electricity for the population.

Hadhdhunmathi Atoll, located in South Maldives, consists of 82 islands, 12 of which are inhabited, and is home to about 15,000 people.

This atoll, not a main tourist destination, lags behind in terms of development. Logistical constraints are important. In all of the atoll, there is only one maritime freight harbor. Sea links with the rest of the country are very limited and rare; connections between the islands of the atoll are also rare and precarious.

OUR MISSION

Enviroearth mission consisted in **designing, supplying, installing and maintaining 11 grid-tie solar farms of a nominal capacity of 6kWp**. These farms are providing power to 11 schools and educational centers located on 10 islands of the Hadhdhunmathi atoll in the Maldives.

Each system consists of:

- 24 solar modules, 250 Wp each
- 1 6 kW inverter (single-phase or three-phase depending on local grid)
- 1 DC protection panel
- 1 AC protection panel
- A roof-mounting structure
- A weather monitoring station
- A remote power production monitoring system for the solar farm
- Training for the end users

Having worked closely with our local partner, the beneficiaries and our client, as well as taking the responsibility for the overall project in order to ensure a perfect integration of each solar farm and a maximization of the production, our involvement comprised in:

- Design of the installation meeting IEC standards
- Selection and procurement of the material
- International and national logistics
- Installation
- Coordination with the local electricity company regarding the connection to the grid

We also monitor the production of the solar farms and ensure after-sales service for several years.

A FEW FIGURES ABOUT THE PROJECT:

- **11 schools** electrified
- **66 kWp** of power installed
- Over **1,200** beneficiaries, **150** of whom were trained
- **22** ferries taken

OUR ADDED VALUE

Enviroearth, over the years, has acquired a rich experience in **installing solar farms and environmental monitoring stations** around the world.

We organize and coordinate civil works, train the local operators and beneficiaries, for small and medium-sized **solar farms or hybrid power plants**, grid-tie or off-grid.

Our projects take us to many **remote and heavily constrained areas**, (Tristan Da Cunha, Easter Island, Cape Verde, Madagascar, Kenya, Papua New Guinea, Antarctica...), enhancing our know-how related to these very specific areas and conditions.

Several times a year, our engineers travel to the remotest islands on Earth, expanding our knowledge and experience in this field.

Over 10 years, our collaboration with UN Agencies such as **UNESCO, CTBTO, or UNDP** has enhanced our recognition in the field.