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CASE STUDY 1

TITLE: The Solar Water Heating System Facility in Egypt for Hotels

Main Objective:

Build a sustainable long-term framework for the Solar Water Heater (SWH) market in Egypt by replacing conventional energy (electricity, natural gas) with SWH-produced solar energy into the Egyptian hotel sector.

Responsible Body:

The EGYSOL facility designed by UNEP (United Nation Environment Programme) performing this program as a cooperation framework between UNEP, Italian Ministry for Environment Land and Sea (IMELS), and Egyptian New and Renewable Authority (NREA).

Timeframe & Geographical Scope:

In force, ready and operational since 2012 & Hotels of Red Sea & South Sinai governorates.

Reason of interest in relation to ENEPLAN project:

- The amount of electricity required to heat water for residential and commercial/industrial uses can be considered as a saving (oil barrels or cubic meters of natural gas).
- A considerable amount of CO₂ is avoided which will be an added value for using SWHs.
- Energy planning phase

Implemented projects under this program are:

- Total integrated area of installed SWH is 1,130.93m²
- Annual energy saving is 1024,000 kWh
- Overall investment is \$ 350,464
- Public-Private Partnership based international cooperation programmes
- A capital cost subsidy of 25% to SWHs installations up to 250 m² for each hotel.



CASE STUDY 2

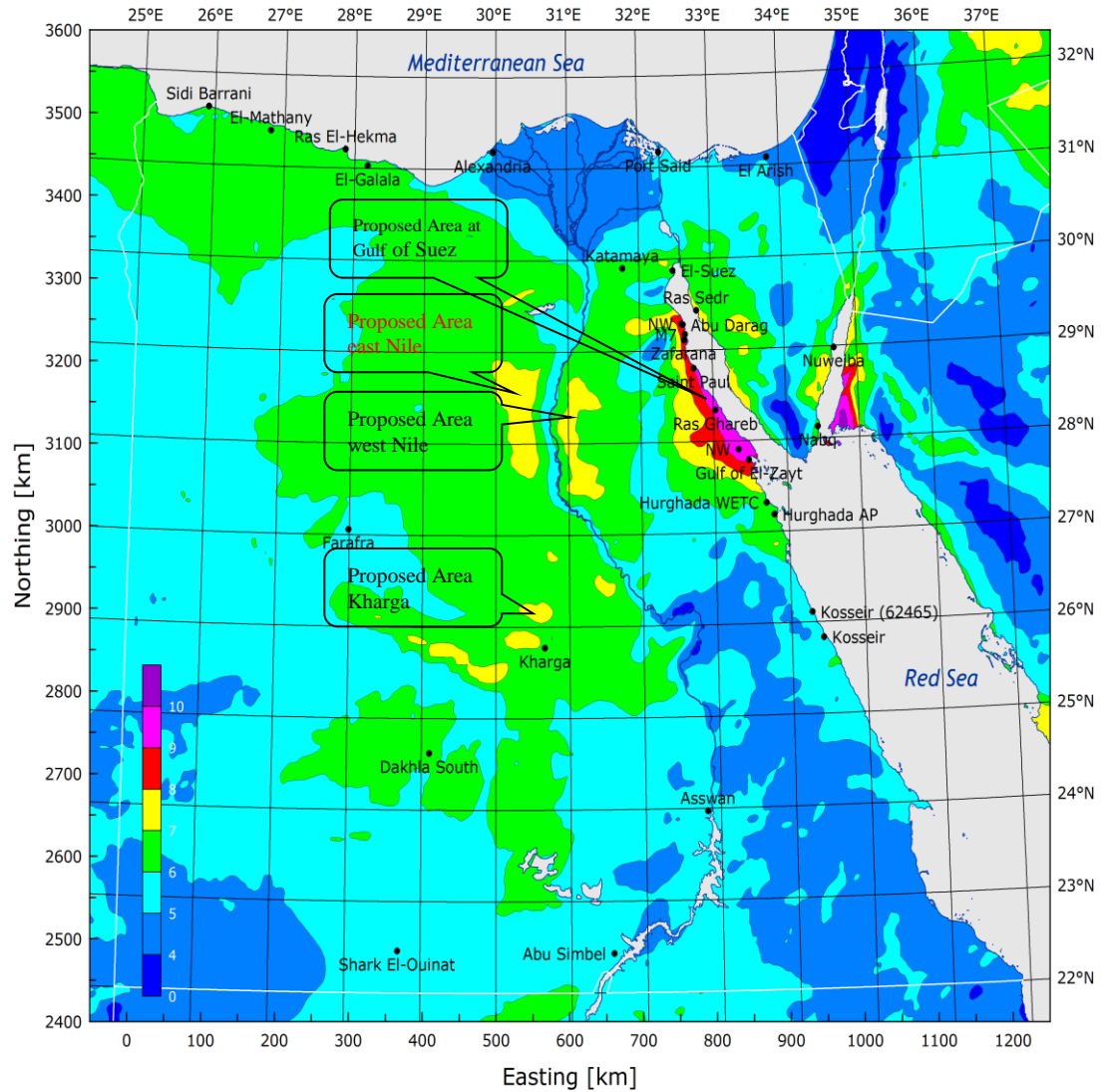
TITLE: The Renewable Energy (Photovoltaic and Wind) Feed-in Tariff (FiT) Projects in Egypt.

Main Objective:

- An incentive scheme for promoting RE investments in Egypt.
- Diversification of energy resources in order to maximize the benefits of using RE local resources that are rich in Egypt.

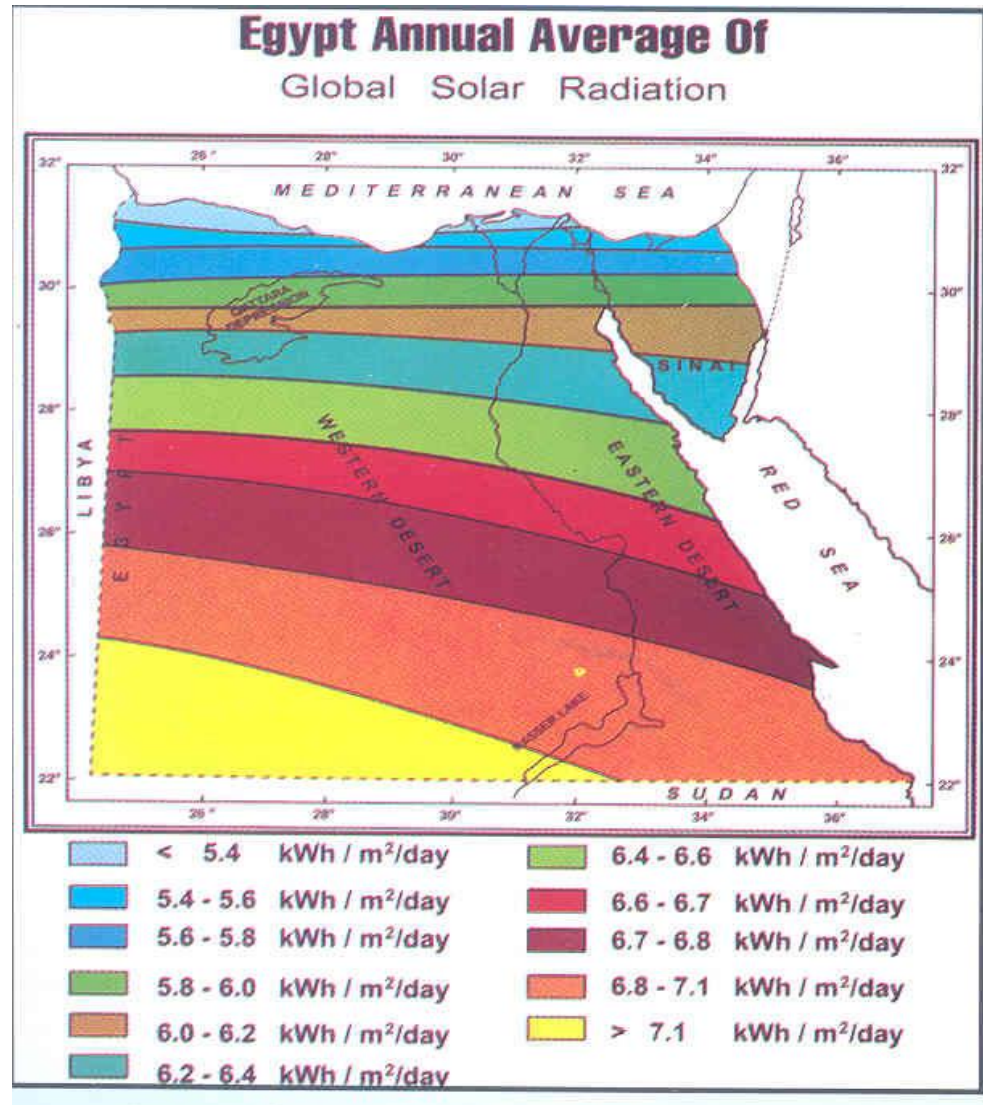
Wind Energy

The Egyptian wind atlas:



Solar Energy

The Egyptian solar radiation:



Responsible Body:

Egyptian Electric Utility and and Consumer Protection Regulatory Agency
(EgyptERA),

Egyptian New and Renewable Authority (NREA),

Egyptian Electricity Transmisson Company (EETC),

Egyptian Electricity Holding Company (EEHC), and

Egyptian Electricity Distribution Companies.

Timeframe & Geographical Scope:

FiT scheme is in force from 2014, and some projects are operational and others are under construction.

The Egyptian territories connected to the electric utility networks.

Reason of interest in relation to ENEPLAN project:

The targeted RE will be included in the Egyptian energy planning. This scheme aims to add more renewables into the grid and to narrow the gap between generation and demand.

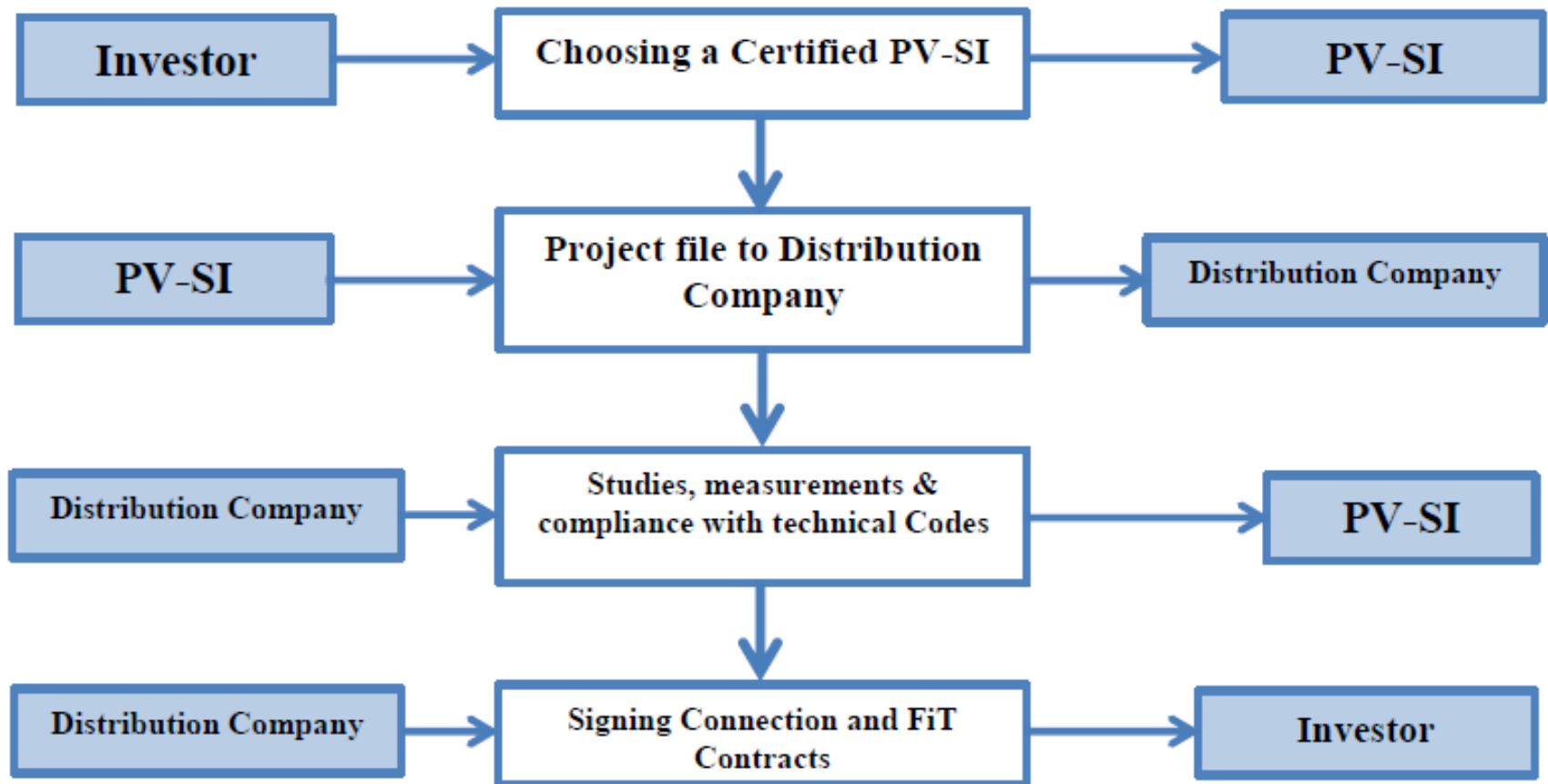
FiT is an incentive scheme for promoting RE implementation which is considered to be a major topic in energy planning.

The Egyptian FiT RE Strategy:

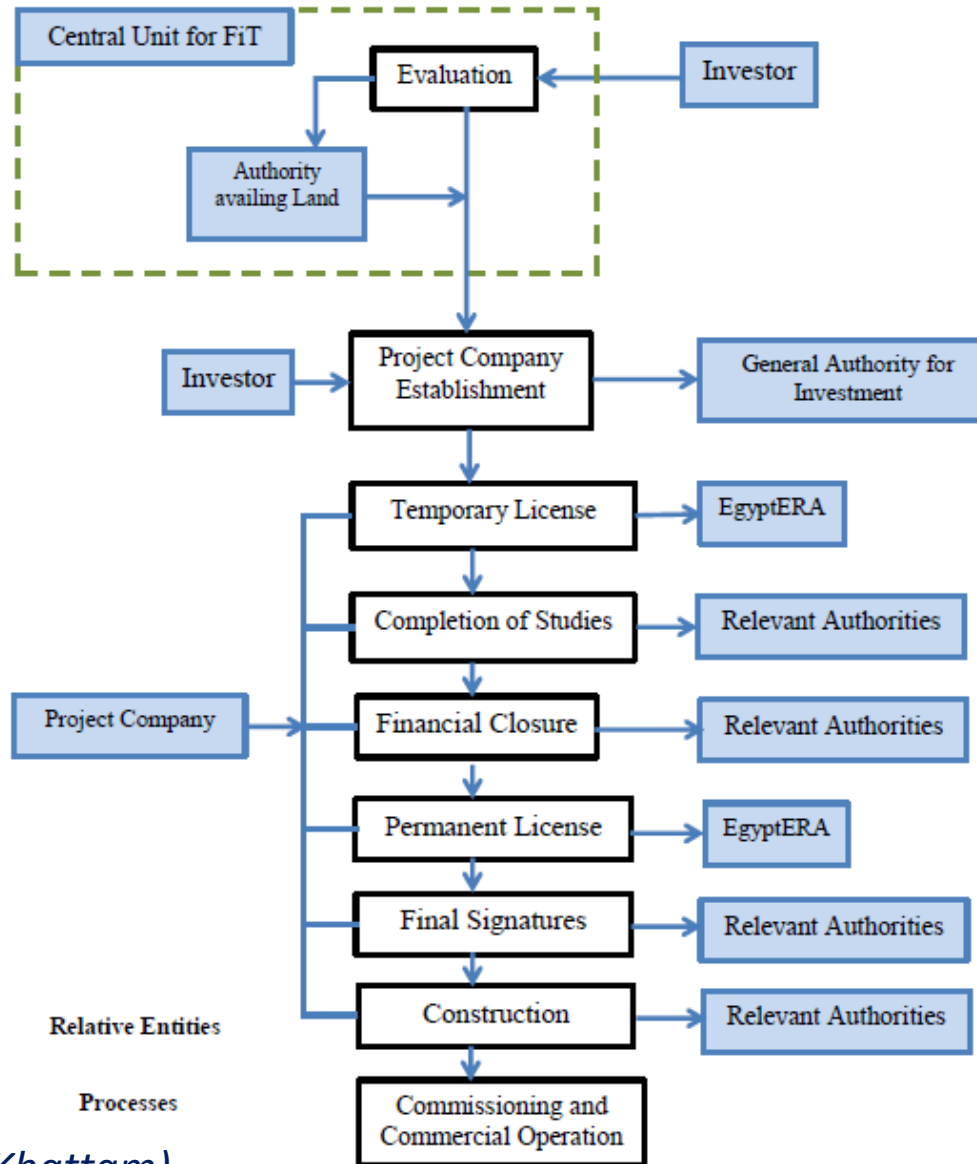
A total target is to authorize 4300 MW to be achieved over the first period of applyin:

- 300 MW for small PV installations below 500 kW,
- 2000 MW for large size PV installations (500 kW up to 50 MW)
- 2000 MW is from wind energy installations (20 MW up to 50 MW)

Procedures for Establishing PV project under the FiT Program for Installed Capacities less than 500 kW



Procedures for Establishing a RE project under the FiT Program for Installed Capacities more than 500 kW



Thank you.