ESCWA Workshop


3 and 4 May 2016, Rabat Hotel, Morocco
Financing renewable energy projects challenges & potential solutions

Moroccan financing Schemes and mechanisms for financing RE projects. The SIE experience
# THE ENERGY SECTOR AND ITS STRATEGY

**FOUR STRATEGIC ORIENTATIONS**

1. A diversified mix, optimized by reliable and competitive technology
2. The mobilization of national resources, especially renewable resources
3. The energy efficiency has become a national priority
4. The regional energy integration

**SOLAR, HYDRO & WIND NATIONAL PROGRAMS**

- **Wind potential** 25,000 MW
- **Solar potential** 6.5 kWh/m²/day
- **Energy Efficiency program**

Initially, 42% of the total power capacity will be from renewable energies by 2020.

Since COP21 in Paris, the National target is 52% by 2030.
INVESTING IN THE ENERGY SECTOR INDUSTRY IN RNE & EE

"Morocco, an attractive RnE business environment"

NEW LAW FOR RENEWABLE ENERGY

NEW LAW FOR ENERGY EFFICIENCY

NEW AGENCY FOR THE DEVELOPMENT OF RENEWABLE ENERGY AND ENERGY EFFICIENCY

MOROCCAN AGENCY FOR SOLAR ENERGY

DEVELOPMENT ENERGY FUND

ENERGY INVESTMENT COMPANY

NEW DEDICATED APPLIED RESEARCH INSTITUTE

- Clear vision of Morocco to build a new economic and social system based on principles of sustainable development.

- Morocco has already implemented an attractive regulatory framework to develop Renewable Energy and Energy Efficiency.

- Morocco is determined to catch the opportunities offered by green economy.

- Morocco is offering clear business opportunities in Renewable energies and Energy Efficiency.

- International companies are most welcome to invest in these projects with their experience, know-how and technologies.
The SIE is today the reference tool of the State to invest in the energy sector and more specifically in renewable energies and energy efficiency. The SIE is an important element of the national scheme aiming at reaching the objectives of the national strategy issued by the Ministry of Energy, Mines, Water and Environment.

At the heart of the national energy strategy, the SIE’s missions are the following:

- **Support large scale national programs**
- **Cover the medium voltage sector mainly with photo voltaic mini-plants**
- **Drive the investment in energy efficiency (public buildings and public lighting)**
- **Support the relevant industry upstream**
Positioning:

- Co-developer in Renewable Energy and Energy Efficiency
- State investor in Energy with a priority given to the RnE & EE
- Fund leverage

Current missions:

- National programs support
- Mid Tension sector coverage, mainly through photovoltaic
- Boost investment in Energy Efficiency in the Country
- Industry support in SIE Domain (scope of SIE action)
**Collaboration as trusted partner**

In order to fully play its role as an investor, catalyst, escrow and financial partner, SIE concluded several cooperation and financing agreements with major players in the financial system: national and international banks, private funds, ...

**Facilitate financial solution access to RnE & EE projects supported by SIE**

The mobilization of the Moroccan financial system will establish an incentive framework for the development and structuring of renewable energy and energy efficiency projects to the benefit of private sector.

**Accompaniment**

These partnerships target both the accompaniment of the national energy strategy and the opening of a new bank financing as well to the RnE and EE sectors, and new financial products.

**Attractive financial conditions**

These agreements are designed to benefit projects, where SIE is investor, advantageous conditions in terms of interest rates, maturity of the loan and case processing time.

**Access to all financial services**

It is also to benefit the RnE and EE projects all services from financial partners: insurance, consulting, mobilizing third party financing (debt, equity, ...), identification by the project banks forming part of SIE strategy ....
" Development of dedicated financial vehicles "

1 Participation of major institutional investors
   • Creating a financial vehicle structure to mobilize institutional and private capital, national and international ones

2 Two tools of committed investments
   • Renewable Energy Fund
   • Financial Vehicle dedicated to Energy Efficiency

3 Energy Fund with Global Nexus SA
   • This fund aims to leverage and accelerate the investment program in renewable energy and energy efficiency projects through a partnership with private financial actor with references in structuring and managing investment funds

4 Energy Efficiency Fund with Attijari Invest
   • This fund aims to launch private investment in Energy Efficiency sector through financing tools with the support of National Commercial Banks. It will address all energy consuming economic sectors.
SIE’s OPERATION MODE

Medium Voltage
- Photovoltaic
- Waste to Energy
- Hydro

Energy Efficiency
- Public lighting
- Public buildings
- Industry
- Activity zones, new cities

Upstream Industry
- Equipments required by all new RnE & EE sectors

Projects
- National Banks
- International Banks
- Private Funds

Financial Framework

A new approach in Morocco
WEIGHT OF RENEWABLE ENERGIES IN THE STRATEGY

Social Return systematically considered, each time it is feasible

- Training programs developed upstream
- Development of the economic and social sector
- Job creation
- Working for a sustainable environment
- Regional integration

Social Return systematically considered, each time it is feasible
ENERGY EFFICIENCY EXAMPLE

Buildings: sustainable approach

SIE / Facilitator

Customer

Auditors, Consulting

Installers, …

Companies…

Operating ESCO

Scheduling

Contract for goods and services

SIE projects’ portfolio (Extract)

First ESCO dedicated to energy efficiency

Program for Green Mosques

Program for Hospital Buildings, universities, schools

New Cities (Case study on going)
ENERGY EFFICIENCY EXAMPLE

Mosques Program

The Team

15000 mosques directly managed by the Ministry of Habous and Islamic Affairs

- A total energy savings of 60% equivalent to 45 million dirhams economy
- A reduction in CO2 emissions by 20,700 tCO2

Socio-economic return of the project

- The creation of a new growth market
- A social dynamic and a collective awareness of the importance of green energy

Energy Efficiency Measures

- Led lighting
- Solar water heaters
- Auto Production
- Solar cooling

Viability of SMEs and micro-companies in the EE sector
Public Lighting

PPP Model

Banks

FEC

SDL

Municipality

SDL

Local Development Companies

i.d

Mixed Companies

Municipality / SIE / Private*

(*) Expert selected in a call of interest

Debts

Management contract

Company’s equity
Accomplishment: The first success story

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<thead>
<tr>
<th>SALÉ</th>
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<tbody>
<tr>
<td>Size</td>
<td>34,000 lighting points</td>
</tr>
<tr>
<td>Investment</td>
<td>90 M Dhs</td>
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<tr>
<td>Payback Period</td>
<td>7 Years</td>
</tr>
<tr>
<td>Contract’s duration</td>
<td>15 years</td>
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<td>Energy savings potential</td>
<td>40%</td>
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<td>Achievements</td>
<td>34% of energy savings in the first 6 months</td>
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**Goals**
- Optimization of energy consumption min. 40%
- Ensure a good public lighting service
- Extension of public lighting network
- Etc.

**Achievement**
- Use of new technologies in the management of public lighting
- A Claims center available
- Qualified staff
- …
THANK YOU!

Investing in a sustainable future...