

# Sheet N° 71- 1/2- Wiring for solar and wind panels

## Description



Manufacturing unit for high and low voltage electrical cables for solar panels and wind turbines

**Main customers :** Energy companies, PV and wind operators

**Sector and sub-sector:** Renewable energy industries

**Complexity of the product<sup>1</sup>** -3,33 2,56  
- 0,342

**HS Code:** 8544

## Key facts

- Strategic sector for the Region to develop and deepen the local integration of the industry around renewable energy
- Very significant potential for national production to meet energy mix and green hydrogen production targets with an estimated potential of: ~15 GW of wind energy in the medium term and ~10GW of solar energy
- Project to support national and local ambitions for an energy mix and green hydrogen
- National market for electrical wiring largely focused on the needs of the automotive and aerospace industries

## Prerequisites <sup>(2)</sup>

- Opportunity dependent on the attraction of production locomotives for wind turbines (including gearbox and others) or photovoltaic modules

## Market indicators

**Target market(s) :**

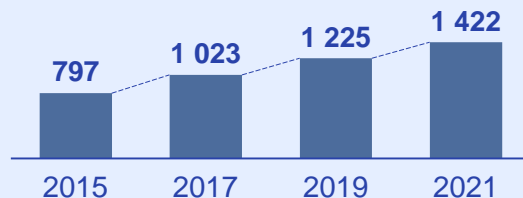
**Target market(s), (from highest to lowest priority) to be addressed :**

**+** Local: To serve the region's energy mix and green hydrogen ambitions

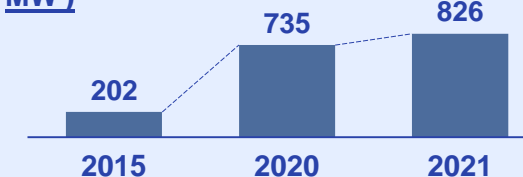
**-** National: In order to meet the Kingdom's objectives in terms of energy mix and green hydrogen by 2025 and 2030 and in terms of H2 ambition

**Market size and development <sup>(3)</sup>**

**National installed wind power capacity ( MW )**

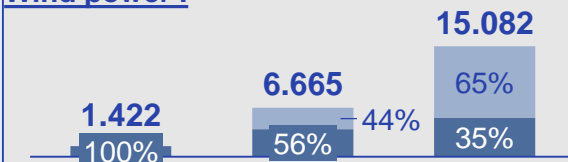


**National installed solar energy capacity ( MW )**

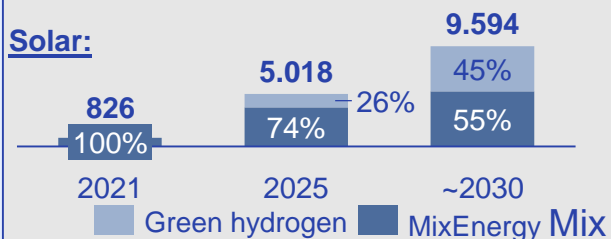


**Projections of national wind and solar energy requirements, by need, in MW**

**Wind power :**



**Solar:**



(1) Product Complexity Index: Diversity and sophistication of the know-how required to produce a product. The PCI is calculated according to the number of countries that produce the product and the economic complexity of these countries. The most complex products, those that only a few countries can produce, have the highest PCI (e.g. electronics, chemicals) vs. the least complex products (e.g. raw materials, agricultural products) - Source: TradeMap, Harvard economic complexity

(2) Sources: MEN, Press articles, Objectives Morocco NDC



# Sheet N°71- 2/2- Wiring for solar and wind panels

## Financial indicators \* (indicative) :

<b>Potential investment</b>	40 - 150 Mn MAD
<b>Turnover</b>	100 - 200 Mn MAD
<b>Estimated selling price</b>	40-45 K MAD/tonne
<b>ROI</b>	1 - 3 years
<b>EBITDA (as % of sales)</b>	30 - 35 %
<b>Jobs</b>	100 - 150

## Human resources

### HR skills needed

- Industry 4.0 technologies, IoT, robotics and automation, electrical engineering, electrical technicians

### Training offers

- OFPPT (Laâyoune, Boujdour and Es-Smara branches) : Electrical engineering
- EST (Laâyoune branch) : Professional degree in renewable energies and water desalination

## Raw materials and suppliers

### Main inputs

- Copper, aluminium
- Rubber and plastic

### Main suppliers

- Morocco: aluminium, plastic
- China: Rubber, copper

## Investment elements

### Potential land

#### Target provinces

- ✓ Laayoune
- ✓ Tarfaya

#### Type of land

Private domain of the State (e.g. National Road EL marsa -Lamssid)

#### Area

2.5 ha

#### Average land price

Unified Regional Investment Commission (CRUI)

#### Mode of mobilisation

Unified Regional Investment Commission (CRUI)

### Main investment benefits

#### Grant

Investment Charter

#### Support for training

Solar Cluster, AMEE (Moroccan Agency for Energy Efficiency) TAEHIL" programme, "IDMAJ" programme

#### Other

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