



KINGDOM OF MOROCCO



Morocco's Annual
Investment
Conference 2009

Opportunities for Growth and Progress

DOES MOROCCO PROVIDE A NEW MODEL FOR BRIDGING OLD AND NEW ENERGY SYSTEMS ?

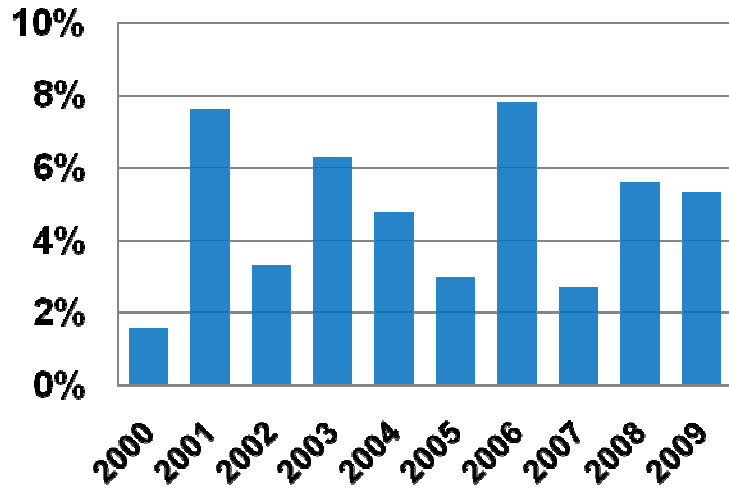
**KEYNOTE SPEECH OF DR. AMINA BENKHADRA
MINISTER OF ENERGY, MINES, WATER AND ENVIRONMENT**

OUTLINE

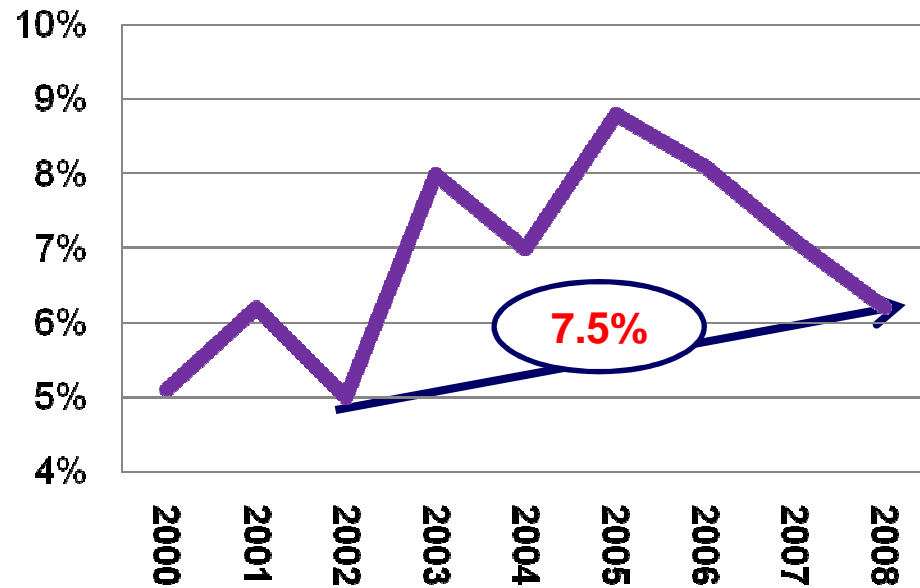
- I MOROCCO'S ECONOMIC AND ENERGY CONTEXT**
- II MOROCCO'S NEW DEAL FOR A SUSTAINABLE DEVELOPMENT**
- III NEW ENERGY STRATEGY**
- IV INVESTMENT OPPORTUNITIES**

AN ACCELERATED DEVELOPMENT

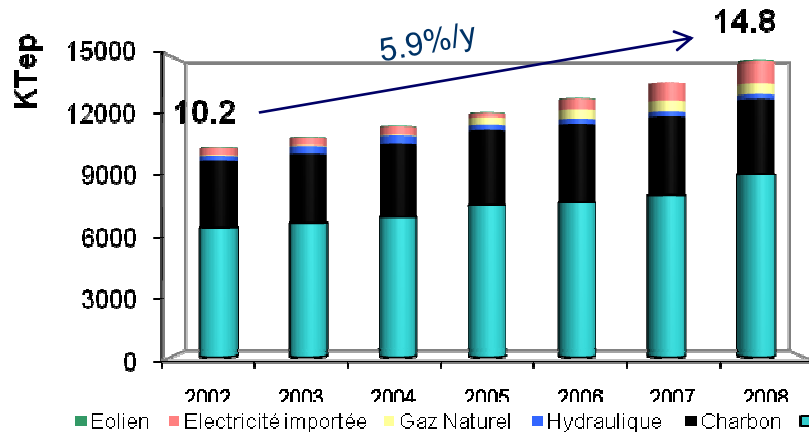
GDP growth



Electricity demand growth



Primary energy demand growth



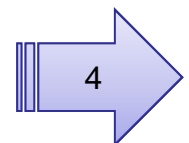
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A MOROCCAN NEW DEAL FOR A SUSTAINABLE DEVELOPMENT

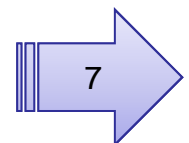


ENVIRONMENT : A NATIONAL COMMITMENT

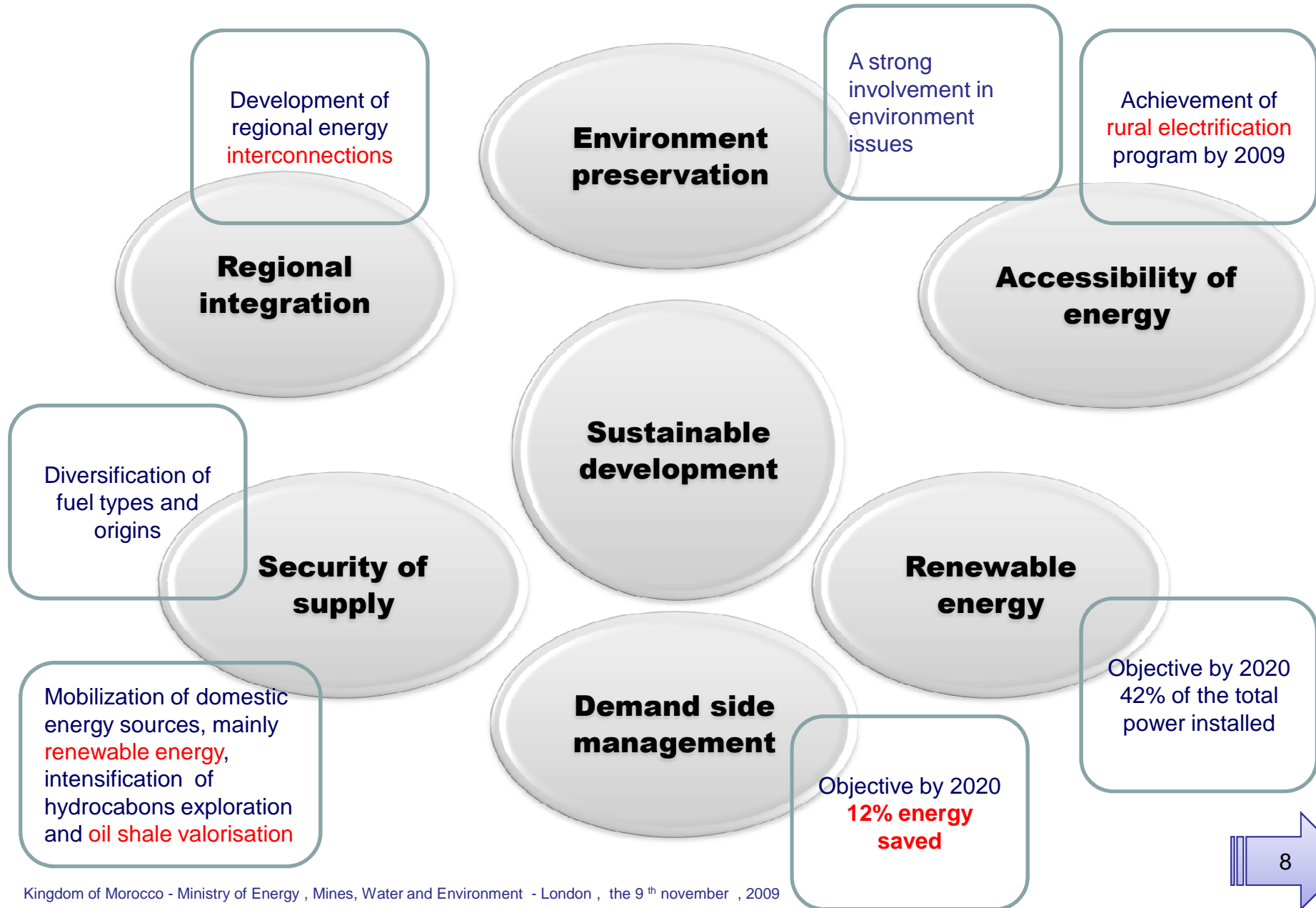
- A strong involvement in environment issues
- Morocco has signed:
 - the United Nations Framework Convention on Climate Change in 1995
 - the Kyoto Protocol (2002)
- Morocco hosted the COP 7 in Marrakech
- Morocco is the 2nd African country for the number of CDM projects with RE projects
- Commitment at the highest level for the setting up of a environmental strategy in the framework of a sustainable development.
- Generalization of diesel 50 ppm sulfur marketing on april first 2009.
- Today only 2 clean fuels are marketed in moroccan market: unleaded gasoline and diesel 50 ppm sulfur
- Five laws are adopted: water, environment ands wastes

OUTLINE

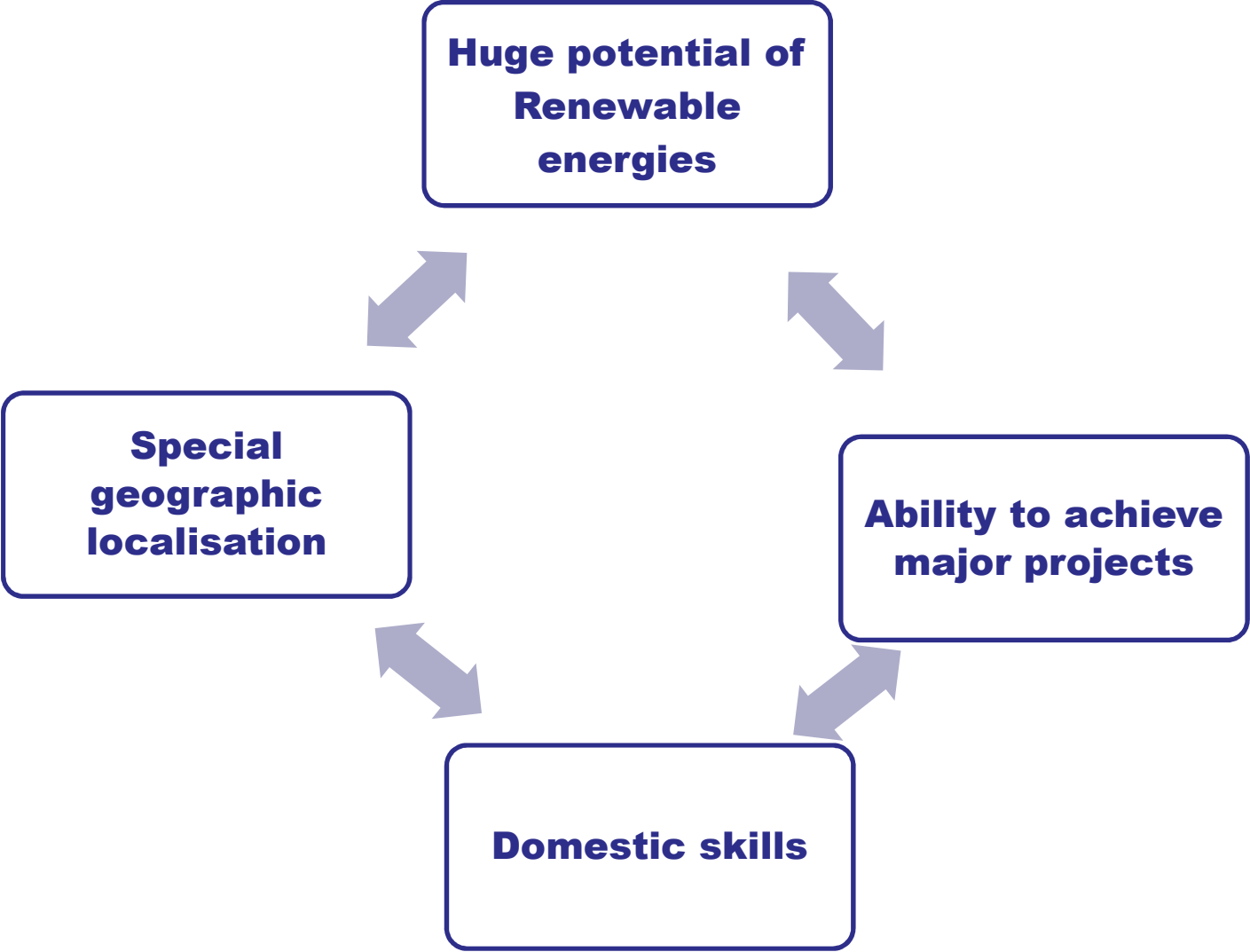
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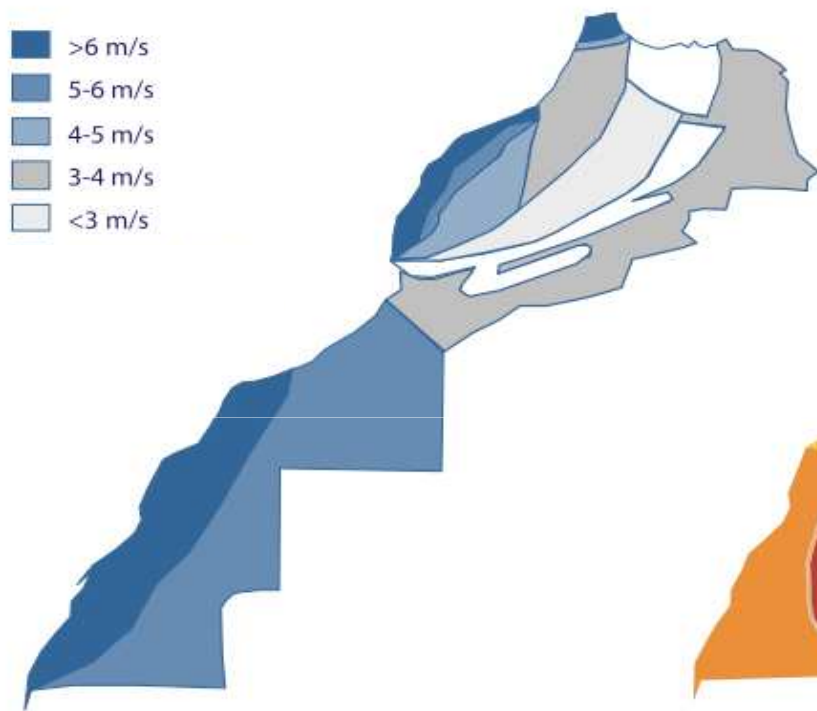
AN AMBITIOUS ENERGY STRATEGY



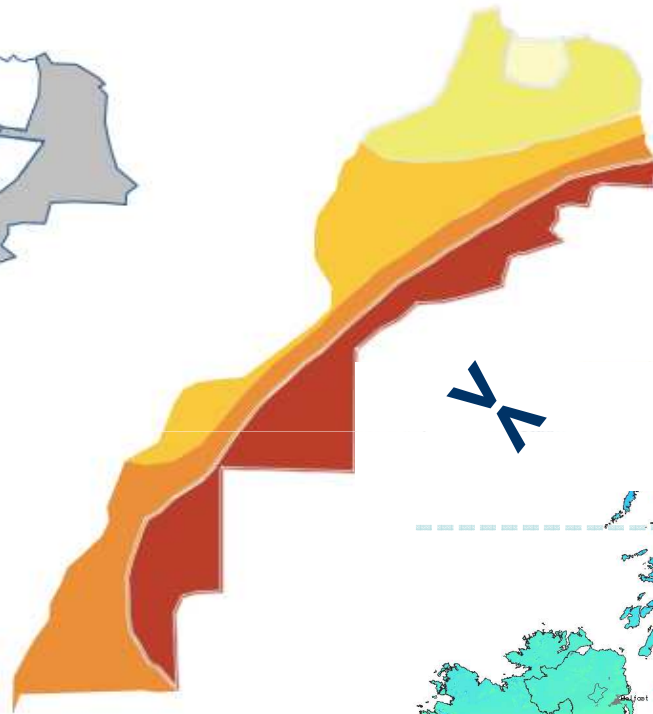
MOROCCO'S ASSETS



WORLD CLASS RENEWABLE RESOURCES

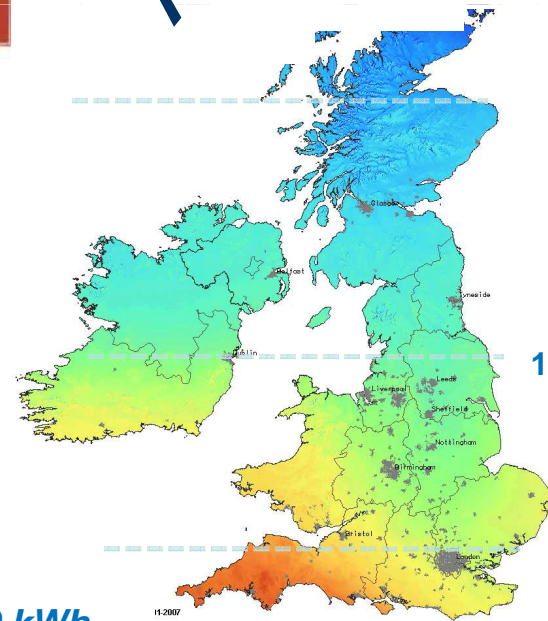


Wind Technical Potential :25,000 MW



Solar Potential :
More than 5kWh/m²/day

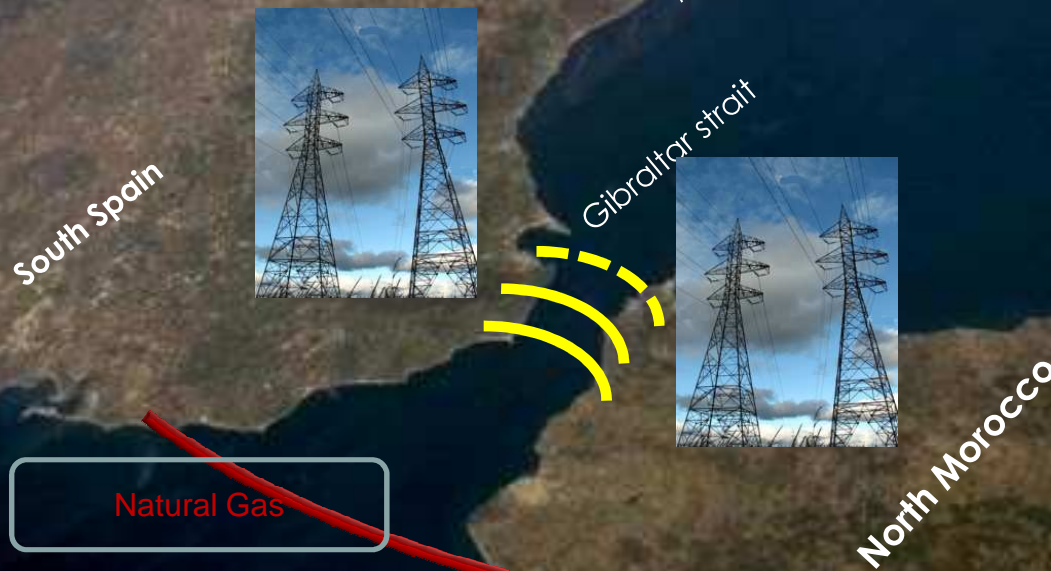
For information : One liter of oil = 10 kWh



Morocco – Europe: Mature Energy Transit Infrastructure



Strong regional interconnections: huge potential to export green energy to Europe



- Founding member of the COMELEC
- Fourth player on the OMEL Market since 1999
- The sole southern Mediterranean interface to the UCTE (Union for the Co-ordination of Transmission of Electricity)

DEMONSTRATED ABILITY TO ACHIEVE MAJOR PROJECTS



Tangiers Med



Rabat Tramway

**Current growth
rate of the
highways network :
160 km per year**



**Jorf Lasfar thermal
plant**

AVAILABLE DOMESTIC SKILLS

A national priority :

- National Plan for training, targeting the industries' needs
- Plan to train 10,000 new engineers per year
- Dedicated training institutes, established within international partnerships

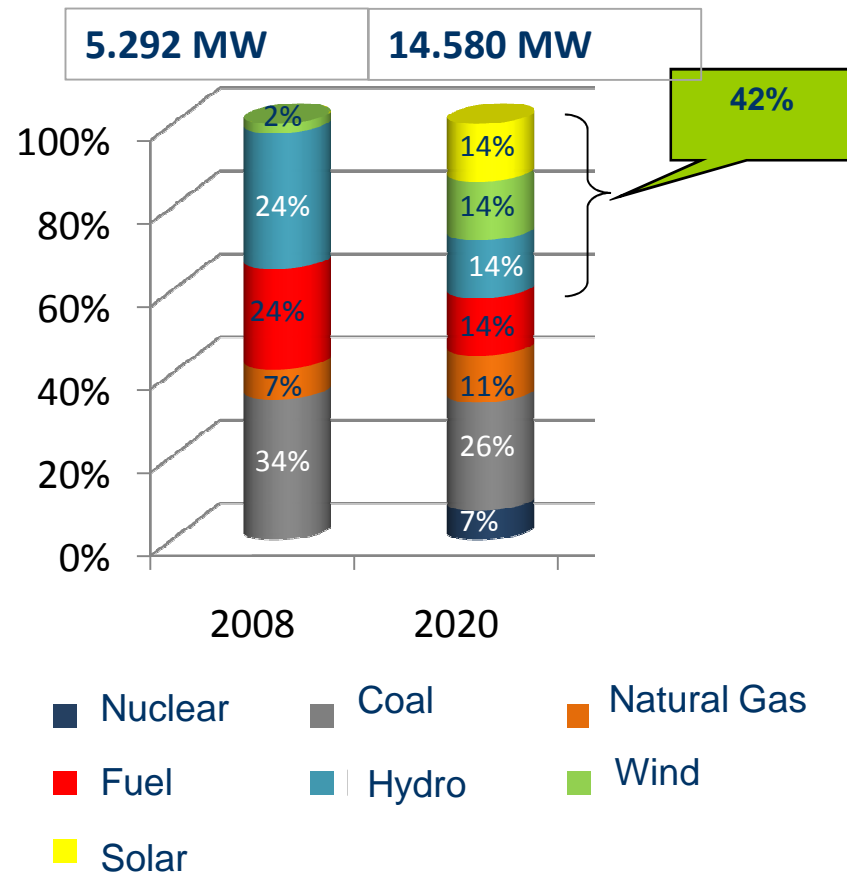
Energy oriented trainings:

- Trainings and high level diplomas dedicated to the implementation of renewable energies and energy efficiency

GREEN ENERGY : THE MOROCCAN FUTURE ENERGY

The part of installed capacity of renewable energy will represent 42% of total electric installed capacity by the year 2020

Evolution of installed capacity



OTHER ENERGY DEVELOPMENT

- The petroleum downstream sector is also in a process of important mutation: new topping at the oil refinery and reinforcement of LPG storage capacities are planned
- Natural gas supply : a LNG (liquefied natural gas) terminal will be built with an initial capacity of 5 BCM by 2015
- 2 new ports are planned : the first one at Safi, with a coal terminal and the second at Nador with petroleum storage terminal.

DEMAND SIDE MANAGEMENT

Energy efficiency
in industry

Energy efficiency
in transportation

Municipal light
saving

Energy efficiency
in housing

2020: 12% energy saved
2030: 15% energy saved

GMT + 1

Incentive
electricity pricing
for household

Incentive
electricity pricing
for industry

Residential light
saving

OUTLINE

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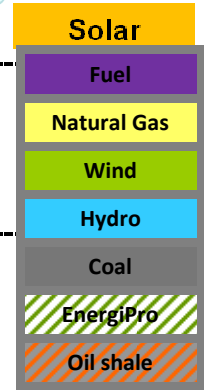
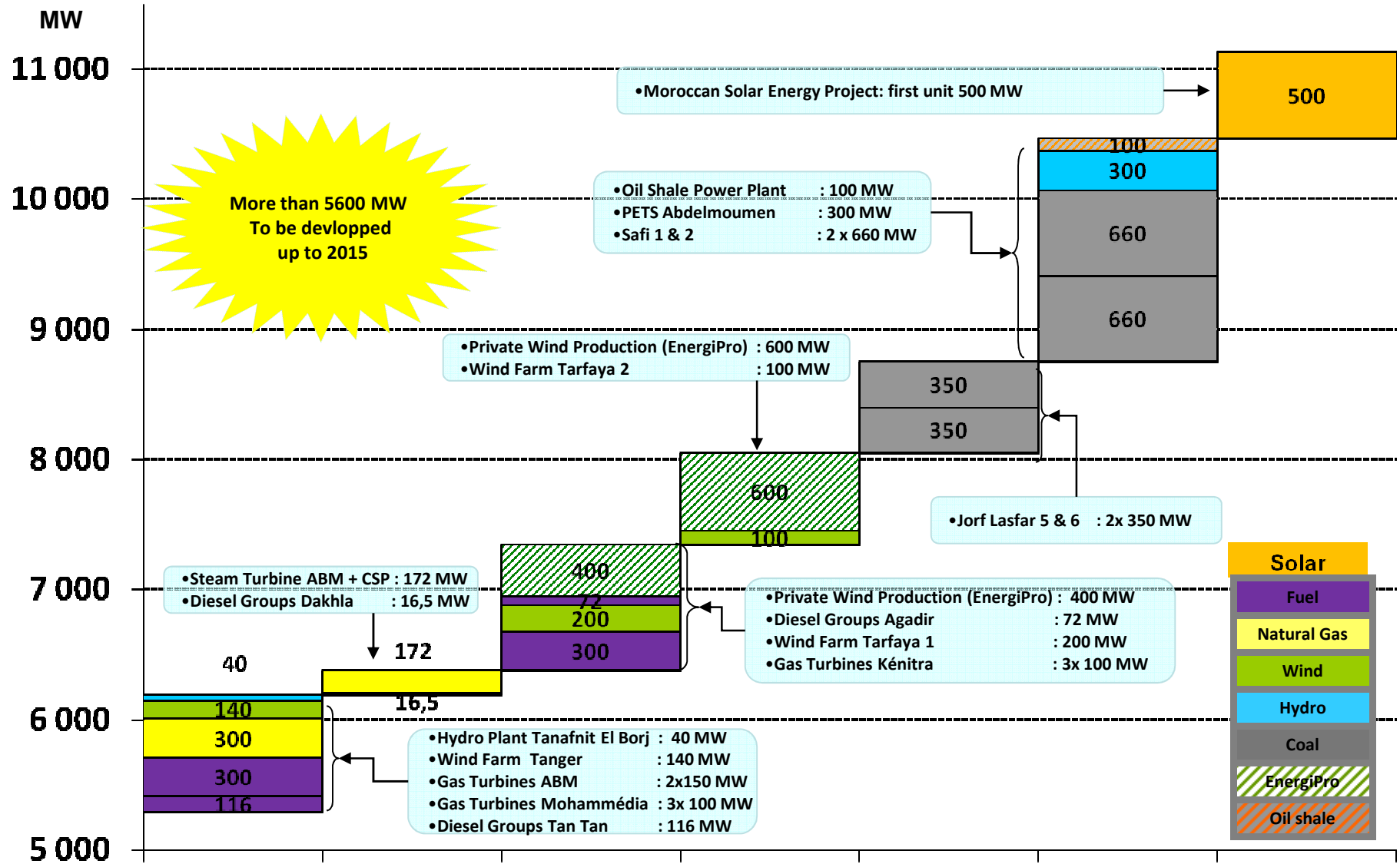
INVESTMENT OPPORTUNITIES

ENERGY PROJECTS INVESTMENT BY 2015

Billion USD



ELECTRICITY INFRASTRUCTURE PLAN 2009-2015



	2009	2010	2011	2012	2013	2014	2015
Cumulated Power MW	6 188	6 377	7349	8 049	8 749	10 469	10 969

PETROLEUM PRODUCTS SECTOR AND INFRASTRUCTURES

•Oil-LPG

- Refining
- LPG storage-filling

•LNG

Option to be realised if supply is secured

- LNG Terminal at Jorf Lasfar (Atlantic coast) or Nador (Mediterranean sea)
- 5 BCM in 2015
- 10 BCM in 2018
- Estimated cost: 1.5 Billion US\$

MOROCCAN SOLAR PROJECT : A MAJOR LOW CARBON PROGRAM

An investment of 9 billion USD by 2019

- **Installed Capacity : 2000 MW**
- **4500 GWh per year**
- **9 billion USD**
- **10 000 hectares dedicated**
- **First plant : Ouarzazate - 2015**



AN ATTRACTIVE BUSINESS ENVIRONMENT

NEW LAW FOR RENEWABLE ENERGY

Objectives

- Increase the share of Renewable Energies
- Promoting Investment for Export
- Assistance in site selections, permits and authorization
- Access to National Grid and Interconnections
- Access to Regional Markets (OMEL, MIBEL, POWERNEXT,...)
- Possible Equity partnership
- Promoting Investment in the field of Renewable Energies to meet local demand

MOROCCAN AGENCY FOR SOLAR ENERGY

- Conduct overall project (design, choice of operators, implementation, management)
- Coordinate and supervise others activities related to this program

NEW AGENCY FOR THE DEVELOPMENT OF RENEWABLE ENERGY AND ENERGY EFFICIENCY

- Law to be enacted soon
- Objective: development of renewable energies and Promotion of energy efficiency.

ENERGY EFFICIENCY

- Law under promulgation
- Improve energy efficiency

DEVELOPMENT ENERGY FUND

2 ways actions :

- Financial incentives for RE and EE programs
- Equity investments through the Energy Investment Company

CONCLUSION

- Clear vision of Morocco to build a new economic and social system based on principles of sustainable development.
- Morocco is preparing a National Charter for Environment and Sustainable Development For this purpose, Morocco has already implemented a National Plan for mitigation and adaptation to climate change.
- Morocco is offering business opportunities in energy, water, environment and other sectors.
- British enterprises will participate massively in these projects with their experience, know-how and technologies.



Thank you for your attention
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