

**Excellencies**

**Ladies and Gentlemen,**

First, I would like to take this opportunity to express my deep thanks to Heads of agencies, organizations and communities from all over the World, and Welcoming your participation in 2<sup>nd</sup> DII Desert Energy Conference in Egypt with my sincere wishes to enjoy your stay in Cairo.

Also allow me to extend my personal thanks to the DESERTEC Industrial Initiative, on choosing Egypt for hosting this conference. It is also my pleasure to participate with distinguished delegates in such important event.

Holding the 2<sup>nd</sup> DII Desert Energy Conference in Cairo could influence the region to get a better benefit of the Desertec Industrial Initiative by tapping the desert energy potential in MENA region. I hope that this conference will be an added value to deliver DII framework for large scale utilization of the energy that can produced from the desert, sun and wind for the benefit of EU-MENA region.

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The world is facing energy challenges dominated by growing concerns with more access to modern and competitive energy services, which require global cooperation. **Green energies** are anticipated to play a significant role in the global portfolio to secure energy supplies. Renewable energy has the capability of meeting the World energy demands if utilized properly. Utilizing renewable resources for energy production can expand the life of fossil fuels for future generations, decreasing carbon emissions and encourage socio-economic development for sustainability. The costs of fossil fuel plants with carbon capture will likely be sufficiently high that the renewable energy will be competitive economically.

**Wind energy** can compete with conventional resources particularly it is undepleted resources and some technologies are relatively matured and are able to compete with hydrocarbons. **The solar energy** is also an undepleted promising option for energy production. Although the capital cost of implementing solar technologies require significant investments, on the long run, its technologies are becoming economically.

There is a large potential of desert energy in the **Middle East and North Africa region (MENA)**. Dedicated efforts within **EU-MENA** countries on the technical, economical and legal levels are required. International and regional policies are needed to provide broad and attractive prospects for local and foreign direct investments. **Desertec Industrial Initiative** is the most recent launched initiative willing to work for wide spreading the utilization of desert energy. It will play a role in the **EU-MENA region** success to achieve energy security and sustained economic growth.

The Arabian Electricity Ministers Council has adopted a decision to prepare a Strategy up to 2020 for Arabian Countries for utilization of Renewable Energy.

Also the League of Arab States (LAS) introduced a complete vision for all Arab countries towards the Mediterranean Solar Plan (MSP) including maximizing the utilization of solar energy in the Arab region, identifying Arabian projects, forecasting the energy needs until 2030, developing the Arabian manufacturing capabilities and setting up a suitable environment for attracting investments.

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Energy plays a sustainable role in the socio-economic growth of Egypt. More than 99 % of Egypt's population have access to electricity. Currently, Egypt's Electricity Sector has 89.9% conventional energy production and 10.1% of renewable energy mostly from hydro and 550 MW wind energy and 140 MW solar thermal power plant out of it 20 MW solar.

**Egypt's Wind Atlas** indicates that Egypt is endowed of suitable wind speeds. Egypt's Solar Atlas indicates that Egypt is considered as one of the Sun Belt countries where it is endowed with high intensity of direct solar radiation ranging between 2000 – 3200 kWh/m<sup>2</sup>/year from North to South. The sun shine duration ranges between 9-11 h/day from North to South, with very few cloudy days.

Egypt's Electricity Sector has a plan to have 20% of renewable energy by the year 2020 with private investment share in wind energy of 67% and enhancement of the relevant local industrial capabilities. We have under construction 120 MW wind farm private sector contribution to be in operation in 2013. The invitation of the Pre-Qualification for the private wind farm of 250

MW has been completed based on (BOO) scheme to be in operation in 2014. 1000 MW wind farm through Competitive Bids scheme is planned to be achieved including four phases to be in operation between the years 2015-2016.

There are several new wind farm projects with total capacity of 1320 MW in various phases of preparation by New and Renewable Energy Authority (NREA).

About 7600 square kilometers of Egypt desert lands are anticipated for future Wind projects. They have the advantage that the National grid is extended all over Egypt.

For solar energy technologies, the first CSP project in Egypt of 140 MW – Integrated Solar Combined Cycle Power Plant including 20 MW solar portion has been in operation since July 2011. A solar energy long-term plan will begin with a CSP project of 100 MW and another 40 MW PV projects that will be developed during the next 5 years plan 2012-2017.

Currently, 30% of wind farms components are manufactured locally, and it's planned to reach to 70% by 2020. About 50% of the current CSP Power Plant Components are manufactured locally such as towers,

mirrors, and receivers are also manufactured locally, in addition to the solar field steel structures, cables, civil, mechanical and electrical works.

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For the renewable energy research and training work, Egypt's Electricity Sector has the Center of Testing & Certification and the Wind Technology Center, which has an integrated set of laboratories for testing and certification to serve the renewable energy industry and its relevant research. With cooperation of German and Danish governments and the European Union, Egypt is currently hosting the **Regional Center for Renewable Energy and Energy Efficiency (RCREEE)** to serve 13 Arab countries focusing on three core interrelated activities:

- (1) Renewable Energy & Energy Efficiency policies and strategies.
- (2) Policies of research & development and technology transfer.
- (3) Public – Private Partnership.

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The **Regulatory Agency** has been established since 10 years. **The New Electricity** law is in the process to be issued covering many aspects of Transparency, establishing Transmission System Operator, Third party access, the power generation from renewable sources through Competitive Bids and Feed in Tariff schemes.

A governmental support is offered to the investors particularly at the introductory stage to minimize financial risks on Renewable Energy projects through a number of actions and incentives namely,

- Allocation of “permitted” areas will be given to investors almost free against a certain percent of generated energy.
- Guarantee of financial obligations under the signed long term Power Purchase Agreement, PPA.
- Exemption all Renewable Energy Equipment and spare parts from customs duties.
- Opportunity for selling Certified Emission Reductions, Resulted from the implemented project.
- Establishment of a Renewable Energy Fund to cover the financial gap between the cost of energy produced by renewable energy and the conventional plants.

It is worthy to mention that the interconnection between the North and South of the Mediterranean could be activated to accommodate significant quantities of green energy. Egypt has a significant role for grid interconnection of **Arab Mashreq** with **North African** countries to have in the future the **Mediterranean Power Pool** through Turkey in the east and Spain in the west. And in this context, Egypt is now studying the direct interconnection with European Countries.

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Egypt's Electricity Sector is keen to be a member in the initiatives, which contribute to develop the market of renewable energy. Egypt is one of the founding members of the **International Renewable Energy Agency (IRENA)**. The Sector Works in cooperation with the **Mediterranean Solar Plan** which is a concrete project of the Union of the Mediterranean. MSP will upgrade the Mediterranean south-South cooperation on one hand and the Mediterranean North-South cooperation on the other hand. Also The Egyptian Electricity sector is closely working with the **DESERTEC Initiative** team and following up the activities of the Initiative and investigate the future plans to make use of it in implementing solar energy projects.

Egypt has started recently cooperation with the **World Bank Clean Technology Fund** in the “MENA region CSP scale up program” to finance 100 MW CSP project. Also, in cooperation with the **European Union and KFW** a Master Plan is developed, priority is for Wind, CSP & PV.

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Many efforts have been expanded in recent years to reach agreements on the regional and international levels to move towards more emission reduction, energy security and sustainability. DII could coordinate with the other regional initiatives particularly the Mediterranean Solar Plan to develop and support renewable projects in MENA region. Cooperation with governments and development partners are also important to rely for more **technology transfer, financing schemes and capacity building activities**.

We expect that our conference could be a forward step to the founding conference held in Munich in October 2009 and the 1<sup>st</sup> conference held last year in Spain to reach by the end of 2012 the major political, legal, regulatory, economic and technical framework to get in place the DII vision of supplying the World with sustainable energy.

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Through exerting joint efforts on various levels, we can manage common vision to cover the issues of:

- Solar resources assessment.
- Solar Projects selection criteria.
- Technical assistance and capacity building in the fields of planning, generation operation and maintenance.
- Enhancing local industrial capabilities through technology transfer and implementing joint projects in the field of renewable energy.
- Setting up mechanisms for covering the financial gap for the renewable energies especially solar energy.
- Introducing a framework for an active private sector involvement including the legislations, regulations and financial incentives.

**Finally**, The South Mediterranean region is endowed with renewable energy resources, particularly solar and wind. So we have to work together through a common vision to utilize such resources to meet the increasing demand for energy in South and North Mediterranean countries.

Looking for more cooperation.

**Thank you**

**H.E. Dr. Hassan Younes**  
**Minister of Electricity and Energy**  
**Egypt**

**The 2<sup>nd</sup> Desertec Industrial Initiative**  
**Desert Conference**

**Cairo**

**2<sup>nd</sup> of November 2011**