

Potential Dimensions for Enhancing Local Renewable Energy Industrial Capabilities in cooperation with the Private Sector

Mohamed Farid Khamis

Head of Industry, Transportation & Power Committee,
Egypt's Senate

President of German-Arab Chamber of Industry and
Commerce

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Introduction

- **Increased demand** for Energy worldwide
- World is highly **dependent on Non-Renewable**, Fossil Fuels to meet the record high demands. Consumption upwards of 84 million barrels per day
- **Energy prices** are also on record highs
- The **Private Sector** can take the lead in meeting the challenges of rising fuel prices in both **using renewable energy** sources, and in helping make the renewable energy sources **equipment commercially viable**

Threats to Non-Renewable Energy Sources

- Fossil Fuel Sources are finite and newer resources are hard to come by. **The world consumes two barrels of oil for every barrel discovered (So, we should be worried)**
- The **damage to our Environment** from Fossil Fuels, both in extracting and in usage are a critical concern
- **Oil prices** are rising to \$70+ (\$100?!)

Renewable Energy Sources

- Wind Power
- Solar Energy
- Hydropower
- Bio-Energy
- Geo Thermal Energy
- Hydrogen and Fuel Cells

What Do We Need To Do?

- Governments need to create **Energy Policies** that promote economically and environmentally sound policies.
- **Encourage Research** and Development in New and Renewable Energy Sources
- **Encourage use of Renewable Energy** sources not only for industries but also to consumers and households.
- **Raise awareness** of Renewable Energy sources as a clean, environmentally friendly alternative source of energy
- **Make it cost effective** for manufacturers or households using New or Renewable Energy Sources by **providing preferential investment rates.**

What Do We Need To Do?

- **Conduct Research** into new Sources of Renewable and Alternate energy which are not workable now but **have high potential, such as Hydrogen**.
- In the future, **Hydrogen fuel** could mean the **end of carbon emissions** from vehicles. The only thing coming out of our car exhausts will be clean, harmless water vapour. Shell has opened the world's first integrated hydrogen filling station in Washington DC, and are building in the US, Europe, China and Japan. Hydrogen will be fuelling up to **700 million vehicles by 2050**

What Do We Need To Do?

- **Develop Commercially Viable Power Plants** from Renewable Energy sources
- **Increase Energy Efficiencies:** eg. **Automobile** industries need to make their engines more efficient in fuel usage, at a cleaner level, as well as take the development of hybrid engines to completion.

What Do We Need To Do?

Encourage use of Renewable Energy Power sources such as:

- **Solar Energy** to generate Energy for **Office and Household Usage**
- **Solar Thermal Energy Plants** which offer the possibility of **Desalination of sea water** which are a good option for regions facing water shortages such as the Middle East
- **Wind Energy** utilization in suitable areas
- **Bio-Energy in manufacturing sectors** as a supplement or alternative to Gas Turbines, and Steam Cycles, as well as energy and heating needs in Households

How can the Egyptian Private Sector Participate?

Utilize Egypt's Competitive Advantages to manufacture equipment jointly with Germany and Develop Renewable Energy

- **Access to Large Markets (Egypt's market, EU, Arab League Countries, and COMESA)**
- **Investment Incentives including tax free.**
- **Industrial Modernization Programs in Partnership with the EU**
- **Partnerships with German Businesses and Research Institutes that have already reached advanced results**
- **Unutilised capacity to manufacture equipments are available**
- **Location within the Mediterranean Area. Sun and Wind all Year Round**

Ideal Partner

- Egypt is an ideal partner for a commercial level manufacture of the equipment required for generation of New and Renewed Energy sources.

THANK YOU

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MOHAMED FARID KHAMIS