Energy Situation in Egypt

Egypt has traditionally been a net exporter of energy. Until the late 1990s, it exported oil, but oil production has declined from its peak in the early 1990s, and now roughly matches local consumption.

The discovery and exploitation of large reserves of natural gas mean that Egypt is now a significant exporter of gas, both by pipeline and as liquefied natural gas.

Natural gas also represents three-quarters of the power generated. The remainder comes from the

Energy Situation in Egypt

Natural gas also represents three-quarters of the power generated. The remainder comes from the Aswan Dam hydro-electricity complex and from heavy fuel oil (□ mazut□). Due to major increases in power demand, the role of hydropower on meeting electricity demand has fallen to less than 15%. Egypt has dammed its only major river and has limited opportunities to add to its hydro capacity.

Energy Situation in Egypt

At the same time, Egypt's greenhouse gas emissions have been among the fastest growing in the world. To reverse that trend, Egypt - already considered a leader in the region on renewable energy and energy efficiency - hopes to realise a 7200 MW wind power capacity by 2020, cut vehicle emissions in heavily populated regions through improved public transportation systems, and to make industry more energy-efficient.

Energy Situation in Egypt

- There is a high fluctuation in energy market due to the booming consumption\intensive demand and limited traditional energy resources.

- In 2010 Egypt becomes a net oil importer and natural gas exporter.

Energy Situation in Egypt

- Investigation have shown that the electric losses in the electric distribution networks were as high as 15%.
- The energy efficiency activities are encouraged by the supreme energy council where the fuel subsidy was reduced by 50% for the high intensive consumption industries(cement, iron, fertilizers, etc..).

Energy Situation in Egypt

- On the supply side, EE includes improving efficiency in the levels of generation, transmission and distribution.
- On the domestic demand side , projects of high efficiency lighting, building codes, standards and labels for residential appliances, power factor improvement, enhancement of system insulation, process control and cogeneration applications.

How is Egypt positioned to meet the increasing demands for energy from Egypt's growing economy and population?

- Diversifying the energy supply resources by increasing the renewable energy sources such as solar, wind and biomass.
- Maximizing the share of (RE) in the energy mix.
- Gradual reduction of subsidizing energy end-use prices.
- Raising awareness of end-users on the benefits of renewable energy.

Planned future mix of renewable and fossil fuels

Satisfy 20% of the generated electricity by renewable energies by 2020, including 12% from wind energy, i.e., reaching more than 7200 MW grid-connected wind farms (about 600 MW wind farms annually).

Cooperation between Egypt and Horn Africa Countries

- Sustainable development is a strategic goal that we are all looking forward to realize and in view of this, it should be an important factor in promoting better regional and international cooperation.
- Nile basin initiative is a model of regional cooperation on the continental level aiming to benefit from the hydro power projects to provide a sustainable supply of clean energy that could serve the Horn African Countries needs with the access to be transmitted to Europe.

Cooperation Situation in Egypt Horn Africa Countries

- Electrical interconnection between horn African Countries will provide a milestone in our cooperation targeting the increase in the green electricity exports and to benefit from the tradable clean energy systems.
- However these projects require a massive investment to be realized

Cooperation betweenEgypt and Horn Africa Countries

- Egypt is willing to share the accumulative experience and expertise, through cooperation with developed and developing partners, for the benefit of all .
- Moreover, technology transfer is a key element to enhance the local industrial capabilities that would positively affect nthe economics of renewable energies and energy efficiency; thus attract the private investments.

Shaping A G20 action plan to our local needs

We believe that the role of G20 governments and International Institution regarding sustainable water and energy sources should focus in the following:

- Promote an environmentally sustainable economic development, based on the contribution of securing water and energy supplies, improving living conditions and conserving the natural environment.

Shaping A G20 action plan to our local needs

- explore the possibility of the export of excess environmentally clean energy to neighboring countries.
- providing guidance in national energy and water planning, RD, education and training.
- supporting African countries to build up knowledge for the conversion and use of RE sources and environmental protection.

Shaping A G20 action plan to our local needs

- proposing recommendations to assist developing countries to reach its targets outlined in their local water and energy plans.

- working with African countries to provide capacity building assistance, develop policy frameworks, undertake research and development.

Recommendations

We propose therefore initiating a dialogue with G20 on sustainable development, clean energy and water, climate change and invite all interested countries with significant water and energy needs to join us.

The dialogue may focus on the following:

- address the strategic challenge of transforming our energy and water systems to create a more secure and sustainable future.

Recommendations

- sharing best practice between participating countries.
- Creating the formula of ppp that could be one of the driving forces in the cost gaps and building the national capacity regard.
- Bilateral and multilateral cooperation that could play a pivotal role in terms of bridging