



Press Release:

Energy from the desert:

Tremendous Opportunities for Egypt, Challenges need to be tackled

On the occasion of the World Environment Day 2012 Cairo Climate Talks (CCT) hosted its 7th monthly panel discussion to review and assess Egypt's potential for using renewable energies on the 5th of June 2012 at Sawy Culturewheel.

The desert brings tremendous potential for Egypt, experts agreed. Given the excellent conditions for Renewable Energies in Egypt, there are real chances for its economy and development. Regardless of the current lack of a suitable regulatory framework in Egypt, renewable energies are already competitive in the some areas.

Within the framework of a changing energy policy in the MENA region towards Renewable Energies and Energy Efficiency the demand of skilled professionals in the field is constantly rising.

As the desert countries shall soon play a major role in the production of renewable energies, future leaders need to be qualified in order to secure the development process and maximize those countries' share in the creation of value.

Under the DESERTEC proposal, concentrating solar power systems, photovoltaic systems and wind parks would be spread over the desert regions in Northern Africa. Produced electricity would be both used locally and transmitted to European and African countries.

So, Cairo Climate Talks brought scientists, policy makers and representatives from industry and society together to discuss the opportunities and challenges of the DESERTEC project in Egypt.

Dr. Hani Nokrashy, DESERTEC Foundation, explained that the DESERTEC concept offers energy security and climate protection for a world with 10 billion people. "We need to use the remaining resources responsibly and wisely. "If we change only 20% to the RE we would have won a big part of the battle against the rise of sea level," he concluded. All people of the earth shall have a realistic chance for development. According to the DESERTEC concept renewable energy is used not only for export to Europe, but also for regional development like water desalination. Energy from the sun is abundant and unused.

Dr. Nokrashy offered concrete steps: MENA countries shall shift subsidies from Oil/Gas for electricity production to subsidising delivered electricity, thereby removing barriers for renewable energies. EU should also do something: Suggestions included founding an EU-MENA company that builds HVDC lines between EU and MENA, founding an EU Company that buys clean electricity from MENA and sells it to the EU grid and expanding its domestic renewable energies. EU and MENA should enhance a win-win situation by agreement that the delivery of electricity is coupled with a reasonable amount of desalted seawater.



Since the Mediterranean basin is rich in wind and solar energy as **Dr. Hafez Salmawy**, Managing Director of the Egyptian Electric Utility and Consumer Protection Regulatory Agency, said, there are numerous initiatives for Renewable Energy. Three regional Initiatives are presently available which are; the Mediterranean Solar Plan (MSP), DESERTEC and Art. 9 of the 3rd EU Energy Package. The general theme of the two initiatives as well as the European directive is building renewable energy plants, mainly solar, in the south Mediterranean countries and export part of their produced energy to Europe.

There are several reasons justifying the Desertec initiative, like fighting Climate Change and political conversation on both Mediterranean shores. Promoting Renewable Energy also ensures energy security. Socio- economic impacts, not just energy but produce energy with employment. Yet, there are challenges and the infrastructure is to be established.

Eng. Emad Ghaly, Siemens President of Renewable Energy, Egypt, and Head of Wind Power Middle East, focused on the future potential that can reach 1000 times of what we have today.

He offered concrete suggestions on what needs to be done to advance Renewable Energy. The industry needs incentive mechanisms like feed-in tariffs and new management of the subsidized system. Renewable Energy will create an export market, which will support and develop infrastructure in Egypt and the region.

“We need applied mechanisms, we need specialized training. We also need clear mechanisms on establishing and connecting it to the electricity grid.”

The job potential is not to be underestimated. “In Germany more than 300 thousand people work in the field of Renewable Energy as direct employment only, without calculating the indirect employment.” In that sense, representing the industry, “we are here to do business” Mr. Ghaly concluded.

Dr. Albrecht Kaupp, GIZ Senior Advisor on behalf of the German Federal Ministry for the Environment - Support Mediterranean Solar Plan (MSP) summarized the opportunities for Egypt as follows: “There are good news and bad news for Egypt regarding renewable energy”, Dr. Kaupp said. The bad news is that electricity export by submarine cable into the EU is only realistic for Morocco, Algeria, Tunisia, Libya. This is due to sea depth and steep coastlines.

The good news for Egypt is that it has great potential in electricity production. So, Egypt has good resources but cannot connect directly transfer its energy to Europe. But it can use it locally, as Dr. Kaupp stated. Whether the legal framework gives incentives or not, fact is that photovoltaic systems and wind power are cheaper for some uses in Upper Egypt, e.g. water



pumps that are currently running on diesel. Dr. Kaupp maintained that promoters of renewable energy in Egypt did not analyze the budget allocation of adding RE power capacity. This might be a convincing factor, though.

Dr. Kaupp foresees that Solar and Wind based electricity generation is already financially competitive if promoters would avoid the practice of selecting the wrong technology, or putting it into the wrong places, or operating it in the wrong application setting.

Dr. Salmawy agreed. "Egypt is highly competitive". He would see the difficulties as challenges to be solved, not obstacles. Dr. Nokrashy, stressed that when working with renewable energy, energy efficiency is necessary, too. "It does not make sense to produce renewable energy and then waste it by non-rational consumption patterns. Thus, we need to promote awareness."

Dr. Mouldi Miled, Secretary General DESERTEC University Network (DUN), introduced the establishment of the academic network. Within the framework of a changing energy policy in the MENA region towards Renewable Energy and Energy Efficiency the demand of skilled professionals in the field is constantly rising. As the desert countries will soon play a major role in the production of renewable energies, future leaders need to be qualified in order to secure the development process and maximize those countries' share in the creation of value. There are also technical issues like dealing with sandstorms that only can be solved by academic cooperation.

DUN was founded 18 months ago to enhance education and capacity building and foster relationships between MENA and Europe. "We need to bring the academic institutions together, because they will realize the future together." The members from Egypt include Cairo University, Giza, Egypt, German University in Cairo, and Alexandria University. The Desertec University Network includes more than 20 members and the majority come from North Africa.

Prof. Maged ElSherbiny, President of the Academy of Scientific Research and Technology, and Assistant Minister for Scientific Research, acknowledged in the closed workshop that preceded the evening event, that there are legal obstacles that need to be solved, but he expects more progress on the political level within this year, not least because all presidential candidates have mentioned renewables as a priority.

A vivid discussion round followed the panel's opening statements. Dr. Kurt Wiesengart, Team Leader in the MED-ENEC EU project on energy efficiency in the Construction sector in the Mediterranean, expressed his concerns on the magnitude of job creation in Egypt, since most equipment would be imported. Stressing that RE had many other advantages, he doubted that job creation was one of them. But Dr. Salmawy countered by referring to some studies that estimate that 70% of the components of wind farms can be manufactured locally, like the wind



blades. Emad Ghaly from Siemens mentioned that job creation would not only be in manufacture, but that site construction, service, operation, transportation and maintenance would create almost 50% of the jobs in the wind energy sector and even 60% in the field of solar energy.

Finally, ecological concerns were raised. "Deserts are not empty. There is life, archeology, and other competing land usages for the desert", a professor in Ecology stated and asked if the calculations include costs on future land uses and disruption of ecosystems. Prof. Mouldi Miled linked these fears to issues of public awareness and public acceptance. "We need to reach out to the stakeholders and civil society to promote awareness." Thus, a taskforce in social sciences is established in TU Dresden to promote awareness. Dr. Salmawy assured that environmental impact assessment is already done on DESERTEC.

Next Cairo Climate Talks will discuss "Climate Culture - Paving the way to a sustainable society" on 10th of July at 7 pm at Sawy Culturewheel. The Cairo Climate Talks are held on a monthly basis; they provide a forum for Egyptian and German experts as well as the interested public to discuss climate related issues. It provides a platform to exchange experience, raise awareness and foster cooperation between policymakers, the business community, the scientific community as well as civil society.

Cairo Climate Talks is held in cooperation between the German Embassy in Cairo, in cooperation with the Egyptian Ministry of State for Environmental Affairs, the Egyptian Environmental Affairs Agency (EEAA), the German Academic Exchange service (DAAD), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Egyptian German High Level Joint Committee for Renewable Energy, Energy Efficiency and Environmental Protection (JCEE).

For further information please contact:

Hanan Badr

press@cairoclimatetalks.net

01273102143

You can also visit our website:

www.cairoclimatetalks.net

Cairo, 6th June 2012