

DESERTEC will allocate 80% of the production of solar energy for development in the countries of the region

Arab minds and institutions are involved in the great project for the production of solar energy in the countries of North Africa and the Middle East, and the transfer of part of it to Europe known as the "DESERTEC" project which has generated broad media interest as soon as announced in Munich on 13 July 2009.



In an exclusive interview with swissinfo.ch, Dr.-Eng. Hani El Nokrashy, Vice-Chairman of the Supervisory Board of the DESERTEC foundation, said that about 80% of the energy produced will be consumed locally for the development of the Arab region, and clarifies the role of the Arab side in the project and respond to some critics who see it as a "neo-colonial" attempt.

After the launch of "DESERTEC" the largest project for the production of solar energy in the world, based on the exploitation of solar energy available in the countries of North Africa and the Middle East and transmit part of it to Europe, began to raise several questions about the sense of the implementation of this project, which will cost until its completion in 2050 more than 400 billion Euros (about 600 billion Swiss francs).

On the other hand, some questioned the extent to which countries of the South will benefit from a project of this kind, and others went to the extent to call the project "neo-colonial", while others questioned the ability of the countries of the South to ensure the security and stability and secure the facilities of high complexity which will be held on their territories.

These questions are answered in the next dialog from one of the main participants in the project from Arab origin, Dr.-Eng. Hani El Nokrashy, who is vice chairman of the Supervisory Board of the DESERTEC Foundation, and lifts the veil on the details of Arab participation in the various stages of the project, confirms that the region would benefit by about 80% of the Total energy produced by the project if it is realised one day.

swissinfo.ch: Much has been said about the project "DESERTEC" for the production of solar energy in the countries of North Africa and the Middle East and the transfer of part of the energy to countries of Europe. In your position as a top-Arab institution of this huge project, how do you judge it?

Dr.-Eng. Hani Nokrashy: This project is intended to serve all countries that participate in it, whether the countries of the Mediterranean basin and the Arabian

peninsula or the Middle East region, a project that allows these countries to use the solar energy, which is at their disposal, in addition to other renewable energies such as wind energy and hydropower and other renewable energies, for the production of clean electrical energy rather than relying on oil and gas or coal, and that these countries can reserve the fossil material to future generations or for export or for the chemical industry, which have no alternative to it.

swissinfo.ch: What are the Arab parties participating in the project so far?

Dr.-Eng. Hani Nokrashy: the only Arab party that has announced so far to formally participating is the Algerian company "Cevital". Some Egyptian companies has shown wish to participate, but will join in the next phase. The participation during the first three years will be to fund research, that will be engaged at the beginning to study and identify areas that will be suitable for these projects.

swissinfo.ch: a fantastic amount was announced for the project, about 400 billion Euros. What did you achieve in terms of assurances in the Munich conference, do you think that the collection of this amount is possible in the light of current economic conditions?

Dr.-Eng. Hani Nokrashy: The sum of 400 billion Euros, is an estimated amount for the completion of the project from now till 2050, of which are 350 billion to build plants for the production of solar energy in the countries of North Africa and the Middle East, and 50 billion for the establishment of networks for the transfer, but the project will know other stages of investment later, and any project depends on the willingness of the countries and companies to participate in the investment. This project will put us on the way to avoid a lot of natural disasters caused by climate change. A Minister of State of the German Foreign Ministry participated in the Munich meeting, he will establish channels for connection to the States of the south.

swissinfo.ch: In addition to what was said on the allocation of part of the energy extracted for domestic use in the South, what are the benefits for the countries of the South? Will there be a transfer of technology, for example?

Dr.-Eng. Hani Nokrashy: This project is based on cooperation and partnership. Cooperation and partnership have a meaning only if each partner has advantage of the project, therefore there are Arab partners in the project, and I am one of them. And have already convinced our German partners, that the issue of water in the Arab countries is more crucial than the issue of electricity. The sense for the extreme importance of water to the Arabs is not always available at the Europeans, due to the availability of rain and large quantities of water in their countries; we also explained to them that the electricity transfer must be linked local manufacture and to reasonable amount of desalted water. This is the kind of cooperation that is intended, a cooperation of partners on the same level to benefit all participants.

swissinfo.ch: On the Arab side, did you convince the States and the private sector to have greater participation in the project?

Dr.-Eng. Hani Nokrashy: We are on our way to that ..., and we hope this meeting (13 July 2009) will be the facilitator in this context. I know from my contacts that the Egyptian government has taken a very positive attitude on this issue, and we also have extensive correspondence with our partners in the Palestinian Authority, who

have the same orientation. We also have correspondence with our partners from Jordan, as you know Jordan has no resources from oil or gas, but its resources from the sun and wind are very large.

The Arab participation in the project "DESERTEC" for the production of solar energy in the countries of North Africa and the Middle East and transfer it to Europe was given from the very beginning. As we began in 2000 to establish the "Trans-Mediterranean Renewable Energy Co-operation" (TREC). We set up a network of scientists to maintain contacts and research. This network was joined by engineer Malek Kabariti, president of the National Energy Research Center (NERC) in Jordan. The German Ministry of Environment funded Studies that were conducted by the German AeroSpace Center DLR, which contains a section specialized Technical Thermodynamics and has accessibility to satellite based measurements of solar irradiance in each spot of the world.

And first study mapped the available potential of all renewable energies in the countries around the Mediterranean basin. It was found that the potential of solar energy is by far the largest in this region, it exceeds the sum of all other renewable energies several times. So that its harvesting will result in benefit to all peoples in the region, beside covering the demand for development for the peoples of the south, there will be enough surplus to export to the countries of Europe.

The idea is not to export all the energy produced, but that the South would use between 80 and 85% of the energy produced for own development, and about 15 to 20% are exported to Europe. This will cover about 15% of the electricity demand in Europe; the remaining portion of 85% has to be produced from renewable energies harvested on European territories.

swissinfo.ch: But Doctor, this figure provided (between 80 and 85% of the energy consumed locally, i.e. in the Arab countries participating at the project) this number was not communicated in the media clearly, so that some people went to describe the project as "a new colonial project"?

Dr.-Eng. Hani Nokrashy: The project aims to consume between 80 and 85% of the energy produced for local development, because the region will need in 2050 an amount of electricity that is nearly equal to European consumption now. It will also need large quantities of water - around 3 times the size of the River Nile - and this amount can be obtained only by seawater desalination. If fossil fuel is used to produce such amount from desalination, the environmental conditions will deteriorate significantly, for this reason we are suggesting to substitute consumption of fossil fuels through clean energy, such as solar energy.

swissinfo.ch: After it became clear that the peoples of the Arab region did participate actively in the project since its beginning and have the desire to continue, either as researchers or as partners for participating in this huge project. How do you respond to the question that the project is "neo-colonialist" and aims to continue to drain the energies of the region?

Dr.-Eng. Hani Nokrashy: To precise the answer to your question, there are researchers from the region involved in the studies on which the project was based. These studies were carried out by the German AeroSpace Center DLR with Arab participation in the study teams. From Egypt, in addition to myself; the New and Renewable Energy Authority NREA, from Iraq Dr. Nasir El-Bassam, Director of an

Institute of Agriculture in Germany, from Morocco Prof. Dr. Abdel Aziz Bennouna, from Algeria Eng. Tewfik Hassni, and from Jordan Eng. Malek Kabariti.

swissinfo.ch: If the environmental conditions are suitable to start the project. Some people mention the problem of instability in the region and the potential impact on the completion of the project. As one of the interested people in realising the project, how do you respond to that?

Dr.-Eng. Hani Nokrashy: I respond to this by saying that the political stability in the countries southern the Mediterranean are clear, and all existing political systems there are stable. If there is some concern that democracy in the region is not at same the level of democracy in Europe that's for sure, because there is a difference between the two regions. However, this project (i.e. DESERTEC) will give power to democracy through promotion of cooperation.

When we look at the subject objectively, we find that this project is going to create massively new jobs in the Arab countries; as a result it will help to raise the level of education and raise the level of schooling for the children and thus raise the awareness and acceptance for democracy. The project will allow the extraction of enough water for drinking and for agriculture, enhance the level of development and the level of social progress. This will increase the level of stability in these countries. The bottom line is that this project will have a positive impact on the future of the region.

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