

# Desertec: A Malthusian Mirage in the Sahara

by Claudio Celani

Aug. 27—The Malthusian plan to cover North Africa with solar concentrating plants, windmills, and biomass plants, to produce electricity to be shipped to Europe, gained new momentum at the end of July, when the organizers reached an agreement with the King of Morocco to start the first pilot plant.

The project, called Desertec, is a creation of the Club of Rome, the ultra-malthusian organization that launched the famous “limits to growth” campaign in 1972, predicting that mankind would soon exhaust fossil-fuel resources through continued technological development. The plan is so bizarre that it will probably never be built, but it is being used to lure European and North African nations into abandoning plans for nuclear development and desert greening. In fact, Desertec aims at covering part of the Sahara Desert with solar mirrors, and building thousands of kilometers of high-capacity electroducts to ship 100 GW to Europe, an odd enterprise in itself.

Desertec is so insane that it has drawn critics even from environmentalist and solar industry circles. The website EurActiv.de says that “the initiative looks like the world-domination strategy of a James Bond villain.” Hermann Scheer, chairman of Eurosolar, appropriately calls it a “mirage” and warns against the costs and the difficulties in managing the international power grid.

Nevertheless, a group of German firms and financial institutions came together under the initiative of the insurance giant Munich Re, and founded the Trans-Mediterranean Renewable Energy Corp. (TREC), to build Desertec. Siemens, RWE, E.ON, Deutsche Bank, HSH Nordbank, MAN Solar, Schott Solar, are among the founders, as well as the Algerian firm Cevital, and the Spanish Albengoa Solar. And to avoid antagonizing France, whose nuclear industry has plans for Africa, French firms were involved as well.

Another industrial consortium has emerged in the meantime, of French inspiration, which will build infrastructure to transport the electricity from Africa to Europe. That project, proposed by the Transgreen com-



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*The Mediterranean Initiative plan to blanket the Sahara with solar collectors to provide electricity for Europe, was never intended to work; it's a scheme to secure huge subsidies, and reduce population worldwide.*

pany, was recently adopted by the 43 members of the Mediterranean Union meeting in Cairo, which integrated it into its “Mediterranean Solar Plan” to provide 20 GW between now and 2020.

Since the project is economically inefficient, it could work only if it is heavily subsidized. In the preliminary phase, subsidies are coming from energy concerns, such as RWE, which are hoping to reap huge profits once the real subsidies kick in, presumably from the European Union and the German government.

Benita Ferrero-Waldner, a former EU Commissioner, who is now on the supervisory board of Munich Re, is lobbying for EU money. EU subsidies would possibly come through the Mediterranean Initiative. Recently, the Foreign Trade and International Affairs Committee of the European Parliament gave the green light to Desertec, in the context of the Mediterranean Initiative policy.

EU Energy Commissioner Günter Öttinger is a big supporter of Desertec, as is former German Environment Minister Klaus Töpfer, who lobbies as an advisor to Desertec. In an interview with the *Frankfurter Rundschau* on March 15, Töpfer said that without subsidies, the project cannot work: “Companies investing in Desertec will do that only if investments are profitable. Electricity from the desert is one of the large projects in the Action Plan of the EU for the Mediterranean. It is evident that subsidy rules must be drafted at European level.”

Paul Van Son, CEO of the Dii, a joint venture of De-

sertec Foundation and various industries, also admitted in a July 9 interview with *Die Zeit* that, without subsidies, Desertec cannot work.

### ‘Nobody Knows’ What It Will Cost

The Desertec gang is now aiming at having the first (subsidized) project running in Morocco, to show that the thing “works,” and to get the big money to go ahead with the rest. Of course, conditions in their chosen location in Morocco are much better than in the Sahara itself, where 20-30 meter high sand dunes move about. They convinced King Mohammed VI of Morocco to start a 10,000-hectare plant, which is supposed to deliver 2GW in 2020. The Desertec people do not say how much desert they need to produce their target of 100GW by the year 2020. They babble about studies showing that 20 square meters per capita are enough. Desertec also does not

reveal the amount of subsidies it will require, nor what the final costs will be. They babble about EU400 billion investments for the total Sahara project, but concede that this is an indicative figure, and “nobody knows” how much it will cost.

In fact, Desertec is based on the fatally flawed assumption that “renewables,” like solar and wind, could replace baseline sources of electrical power, like fossil fuel and nuclear, a fraud that would lead to the deaths of billions of people worldwide. To illustrate the point, the solar concentrating plants that the plan uses are intermittent, and have a capacity factor of around 25%—and that is being generous. That means, that the solar power plant will only produce electricity about 25% of the time, as opposed to a nuclear power plant, which produces electricity 95% of the time.

Moreover, solar concentrating plants use four times the water of a natural gas power plant—an insane idea for the North African desert. The other limiting feature of the solar concentrating plant is that it does not produce much in the way of high-temperature process heat. With a solar concentrating plant, you have to choose to use the steam either to produce electricity or to desalinate seawater—you cannot do both. On the other hand, with a fourth-generation high-temperature nuclear reactor, which produces high-temperature process heat, you could both desalinate seawater and produce electricity. This will allow us to green the desert, instead of covering it with mirrors.