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Desertec or the Mediterranean Solar Plan – whose sun is shining brighter?

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Desertec or the Mediterranean Solar Plan – whose sun is shining brighter?

Bonn, 2 August 2010. The anniversaries of two events that could be extremely important for future energy supplies in Europe and the Middle East and North Africa (MENA) region fell on 13 July 2010: The establishment of the Union for the Mediterranean (UfM) and its Mediterranean Solar Plan in 2008, and the founding of the commercial Desertec Industry Initiative (Dii) in 2009. Most people will have heard of Desertec, the initiative to construct large scale solar and wind power plants in northern Africa. Not so the Mediterranean Solar Plan, which at the moment is known only to insiders. Why is that, given that both initiatives are so ambitious and pursuing similar objectives? The Mediterranean Solar Plan aims to install 20 gigawatts (GW) of new renewable energy capacities by 2020 – roughly the capacity of 15 large coal-fired power plants. The Desertec initiative, in contrast, has set itself the long-term goal of supplying 15 per cent of Europe's electricity by 2050 from power generated in the desert.

In December 2008 efforts to set up UfM stalled due to the outbreak of the Gaza War, as a result of which no high-level ministerial meetings of member states have taken place for a long time. Important decisions on the UfM's institutional structure have thus been put on hold. After long delays the Union is now taking the first steps to set up a secretariat in Barcelona comprising a small staff and experts from member states who are to make headway on shaping and implementing the Mediterranean Solar Plan, among other things.

The Desertec Industry Initiative – as of now using only the abbreviation Dii as its name so as to dissociate itself from the non-profit Desertec Foundation – is developing at a much faster pace. Initially founded with 13 mainly German partners, the consortium now has 17 partners from seven countries. Negotiations with companies from Tunisia and Italy to join the consortium are well advanced; up to six further partners are set to be incorporated after that. There are also another 22 firms that support Dii in their capacity as Associated Partners. The members of the consortium not only deal with technical and economic aspects needed to achieve its ambitious targets. By expanding its company structure to include companies from the MENA region, Dii is also fulfilling the development policy's demand that those countries in which power plants are to be built be involved from the outset.

One thing, however, must apply to both initiatives: Given that access to energy is a cornerstone of the United Nations' Millennium Development Goals, development of the MENA region must take priority. Also, on account of their enormous population growth and increasing industrialisation, countries in Africa have a great deal of catching up to do when it comes to energy projects. Industrialised nations are facing the challenges posed by climate change, which is rapidly gaining pace, and are thus having to give top priority to investing in renewable and efficient energy technologies – and the same must go for developing countries and emerging economies.

Against this backdrop, the question arises of why fossil power plants are still being built in both industrialised as well as developing countries and emerging economies. There are technical reasons for that: Renewable energy sources, like wind power and photovoltaics, will not be able to serve as base-load energies until 'intelligent' electricity grids and storage capacities become available. Further, the investment costs in renewables are still higher than in fossil fuel-fired power plants. However, one should bear in mind that costs for the latter's primary energy carrier, i.e. coal or natural gas, arise throughout the plant's entire operating time.

What renewables and thus large-scale projects like the Desertec Initiative need are a clear legal, administrative and above all economic framework. Only then will the high investment costs pay off later. The conditions must apply in those countries in which the power plants are to be constructed as well as to legislation in the European Union (EU) and its Member States that plan to import electricity from Africa. Article 9 of the 2009 "EU Directive on the promotion of the use of energy from renewable sources" already set the framework for energy projects with non-EU countries as well as for the import of the electricity generated. Whether, in Germany's case, this means that the Renewable Energy Sources Act (*Erneuerbare-Energien-Gesetz* - EEG) will be extended to include a feed-in tariff for 'desert electricity' must be regarded critically. Of all the countries in the MENA region, Morocco appears to be making the most progress when it comes to creating the conditions conducive to using renewables. The country currently has to import 95 per cent of its energy needs but wants to cover 40 per cent of its energy requirements from renewables by 2020. That is another reason why Dii regards Morocco as an ideal partner country and is planning to begin work on installing a first power plant park there that will then be able to prove that the vision of generating electricity in the desert can be realised.

So, where do the two initiatives – the Mediterranean Solar Plan and Desertec – now stand one and two years respectively after they were founded and what priorities should they set for the future? The Mediterranean Solar Plan is a political process and should be regarded as such. It is not the task of an intergovernmental process to take on entrepreneurial tasks and install power plant capacities. Especially when it takes two years to set up a secretariat. The focus should, therefore, not be on installing 20 GW power plant capacities, but its goal should be to speed up the process of creating the regulatory enabling framework conditions for private-sector initiatives and investments in the UfM's member countries. The countries in the MENA region still do not have enough financial clout to independently shoulder such cost-intensive cross-border infrastructure projects. But the launch of the Desertec Initiative has already led some MENA countries to re-shape their regulatory framework and set new goals in regard to expanding their renewables capacities. That will not only make them more attractive to investors from industrialised countries but also for financial institutions such as, for example, the African Development Bank, the World Bank and the European Investment Bank. In that respect Desertec and the Mediterranean Solar Plan are parallel processes that should complement and cross-fertilise each other.

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