

The DESERTEC Concept

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**Possible Policy Developments that
Could Lead to the First Power Plants
and Transmission Lines in North Africa**

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A Path to Sustainable Energy by 2030



'Wind, water and solar technologies can provide 100 percent of the world's energy, eliminating all fossil fuels.'

(Mark Z. Jacobson & Mark A. Delucchi)

Costs of Renewable Energy vs. Cost of Continued Use of Fossil Fuels

Estimated costs fossil, nuclear energies (US \$)	
Petroleum	3350-4475 Bil.
Natural Gas	550-830 Bil.
Coal	150-300 Bil.
Electricity	1490-2150 Bil.
Sum per year (without external costs!)	5000-7750 Bil.
Sum 2010-2030 (+ 20% rise)	200 000 Bil.
Sum to replace world's energy with 100 % renewable energies by 2030	100 000 Bil.

Goal Prospects for Green Electricity in North Africa are Articulated at the EU Level

- Renewable Energy Directive
- The EU Commission's Energy Security Strategy
- Union for the Mediterranean: Cooperation with Renewable Energy

Renewable Energy Directive

- Physical import of green electricity from North Africa will be made possible (Art. 9)
- Member countries can implement Art. 9
- Third countries (countries outside of the EU) can contribute to the goal of 20% renewable energy by 2020
- Third countries can help to achieve the goals of EU Member States.

Feed-in Tariff Amendments for the Acquisition of Green Electricity from Outside of the EU

Example: German Feed-in Tariff Law (EEG)

- New § allows for the physical acquisition of green electricity from North Africa
- New § allows for the usual compensation rates to be used for, wind, solar from both thermal and photovoltaic sources, marine and geothermal power

Many Thanks
for your Attention!

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