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Behold, the Latest Wind Megaproject, In Morocco

Think energy megaprojects are passé? Check out www.Saharawind.com, a private development group based in Morocco. They want to build 5 GW of wind in the Sahara Desert and ship the juice to Europe via monster undersea D.C. transmission lines.

Managing Director **Khalid Benhamou** claims, «According to our conservative estimations, the steady trade winds blowing in this area shall enable us to deliver the equivalent yearly production of five GW capacity of wind power to the European Union at costs as low as Euro 3.7 cents/KWh. This price takes into account all infrastructure costs, HVDC lines with sea cables, converting station, and transmission losses.»

Benhamou argues that the project is timely, saying, «In the run-up to the **World Summit for Sustainable Development** in Johannesburg, South Africa in September, it looks more and more like there will be problems with defining concrete further steps—and the European Union should have some concrete projects it can support. The Saharawind project represents a unique example of power integration opportunity between both continents.»

According to Benhamou, «The development of wind power has been a success story in Europe. However, land-based electricity production in Europe is limited by a relatively high population density, and its corresponding intensive use of land. This leads to a significant reduction of usable land, on which the wind energy potential can be exploited. In the case of Germany (number one in wind power worldwide), the wind energy potential is limited to a maximum of 17 percent of today's electricity consumption. The West Saharan coastal plateaus represent the largest, least populated and windiest sites available worldwide that are within the reach of Europe's electricity grid. The size of the wind catchment area is huge.»

Transmission is not a problem, insists Benhamou. HVDC technology, he says, could limit losses at full load to less than 15 percent per 4000 km for a capacity exceeding 5 GW. «That distance is enough to deliver electricity from the West Saharan plateaus to the center of Germany,» he claims. [DW]