

Desertec Asia - A Pan-Asian Energy Infrastructure Proposal

Posted by <u>Big Gav</u> on December 6, 2009 - 9:18pm in <u>The Oil Drum: Australia/New</u> Zealand Topic: <u>Alternative energy</u> Tags: <u>asia</u>, <u>australia</u>, <u>concentrating solar power</u>, <u>desertec</u>, <u>deserts of gold</u>, <u>solar</u> thermal power, stewart taggart [list all tags]

Cross-posted from <u>Peak Energy</u>.

Stewart Taggart of <u>Desertec Australia</u> and the <u>solar thermal desalination</u> company <u>Acquasol</u>, has recently started a new branch of Desertec for <u>Asia</u>.



The Desertec Asia plan (linking Australian solar thermal power, geothermal power and wind / wave energy, along with natural gas and coal seam gas into an expanded east Asian energy grid featured local solar, wind, geothermal and hydro-power resources as well) is summarised below - more detail can be found at "A Pan-Asian Energy Infrastructure".

Imagine an interconnected, pan-Asian electricity and natural gas Infrastructure.

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The system would distribute electricity from solar, geothermal, wind and wave energy from Australia to China. Natural gas and hydro would fill the gaps. The vision is big. So is climate change.

In Europe, the DESERTEC Industrial Initiative proposes that a series of concentrating solar power plants in North Africa could power the region and export surplus electricity to Europe.

A similar network built in Asia would generate energy market efficiencies, spur innovation and increase energy security.

Following this path, Asia could end up with networked electricity and natural gas backbone that would serve the region into the 22nd Century.

The plan involves connecting Asia through a 6,000-8,000 kilometer electricity and natural gas transmission system stretching from southern Australia to Japan and South Korea.

Australian surplus concentrating solar power, geothermal, wind and wave energy, along with natural gas, would flow northward to Indonesia. There, it would be joined by Indonesia's surplus natural gas, geothermal and hydro power.

The combined energy supplies, joined by Malaysian hydro, southeast Asian biomass and Mekong wind, would then be transmitted to China, Japan and South Korea through a 'non-discriminatory, common-carrier' infrastructure operated like a toll road.

Further north, China's Inner Mongolia and Xinjiang provinces could contribute solar and wind energy. In the East Asian Sea, networked offshore wind farms and wave and tide machines would contribute more energy. Regional natural gas and hydro energy supplies would 'load balance' the entire system in a hemispheric network managed as an highly-efficient whole.

Competitively accessible, non-discriminatory, low-emission energy generated and delivered through a regionally-interconnected, Pan-Asian energy infrastructure represents a market-based solution to climate change.

Stewart made the closing address at the Clean Energy Expo Asia Conference 2009, describing the Desertec Asia plan. Part 1 is embedded below - click on the links for Part 2, Part 3 and Part 4.

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