

Can desert solar power power Europe?

A plan to power Europe from solar power plants in Sahara desert, popularly known as Desertec, seems to have stalled, but several large North African solar projects are still going ahead despite local concerns. Where did the Desertec project go wrong, and can desert solar power yet play a role in a democratic and sustainable future?

What is the Desertec project?

The DESERTEC project describes an enhanced concept, in which the electric power of concentrating solar thermal power plants in the MENA states is transferred to Europe via UHVDC transmissions lines with rated voltage of 177,800 kV and transmission power of 5 GW of each line.

What is DESERTEC & how does it work?

It was formed as a largely German-led private-sector initiative with the aim of translating the Desertec concept into a profitable business project, by providing around 20 per cent of Europe's electricity by 2050 through a vast network of solar- and windfarms stretching right across the Middle East and North Africa (MENA) region.

How can a desert power system be sustainable?

This means that sufficient clean power can be generated from the world's deserts to supply mankind with enough electricity on a sustainable basis. The DESERTEC Concept promotes the large-scale production of solar and wind power in the desert regions of the world, combined with a smart mix of photovoltaics, hydropower, biomass and geothermal energy.

How can solar energy be used in the desert?

The key concepts, Solarthermal-Plants, Photovoltaics and Direct Current Transmission, have been in application for decades. The desert offers several options to supply energy. These options include traditional PV-Systems and Wind-Power, either to supply the local market or to export it as peak demand energy to Europe.

What is the DESERTEC Foundation?

The non-profit Desertec Foundation was founded in January 2009 by a network of scientists, politicians and economists from around the Mediterranean. Its aim is to supply as many people and businesses as possible with renewable energy from the world's deserts. This should, they hope, provide opportunities for prosperity and help protect the climate.

The DESERTEC concept promotes a massive expansion of solar and wind energy in the deserts of the world in order to integrate them into an intelligent mix of hydropower, biomass, ...

While Shuman was thwarted by a world war, Knies spent two decades working to develop desert solar power as a viable energy source, and his efforts resulted in the project ...

The aim of the plan is to generate 2,000 megawatts of solar power by 2020 by building mega-scale solar power projects at five locations across the country. ... Plan, will be commissioned in 2014, and the entire project is ...

The Desertec project, which aims to power Europe with solar energy from the deserts of North Africa and the Middle East, is to go truly international next month as five new ...

Many people are excited. If built, it would be the largest concentrated solar power project (CSP) ever. It is an estimated EUR400 (\$555) billion project which would be implemented ...

At the Desert Energy Leadership Summit in Dubai in November 2015, Dii's CEO Paul van Son even went so far as to claim that the Desertec dream was about to be revived. ...

Desertec's ambitions of meeting regional demand and providing 15% of Europe's electricity needs by 2050 through a super grid were dashed only five years into the project. Here's why. A meeting in Rome last October ...

Dimming prospects for solar energy have caught up with a massive renewable-energy project planned for the Sahara Desert. By 2050, according to its backers, DESERTEC, a network of solar plants and ...

The ambitious, multibillion dollar solar power project Desertec has been abandoned by all but three of its shareholders and will now continue in an "adapted format" as a consultancy. The...

In 2009 the Desertec Industrial Initiative (DII) was founded by several, predominant German enterprises. The objective of DII was to organise the conditions for the realisation of ...

A: Desertec was a project to harness solar energy from the Sahara Desert and distribute it across Europe, North Africa, and the Middle East. Q: Why did the Desertec ...

The DESERTEC project, launched in 2007, aims to enable the countries of Europe, North Africa and the Middle East to cover a large part of their energy needs through the use of renewable ...

O. Steinmetz - DESERTEC - ITER Cadarache - 14 November 2012 . An initiative of . Summation for numerous individual units with concentrated solar power Collector areas for ...

Les membres fondateurs et principaux actionnaires de la société Desertec sont : La TREC (Transmediterranean Renewable Energy Cooperation) ; la Fondation Desertec Industrial Initiative ; 12 sociétés : ABB, ALBENGOA ...

Project Desertec. Histoire; ... (Moroccan Agency for Solar Energy) [8] portant sur la mise en oeuvre d'un

projet solaire à grande échelle au Maroc. Ce projet vise principalement à ...

In 2009, the Desertec project, an ambitious initiative to power Europe from Saharan solar plants was launched by a coalition of European industrial firms and financial institutions with the idea ...

The Desertec Foundation is an international non-profit collaboration of scientists, concerned individuals, and alternative-energy companies that believe that a combination of solar power from the world's ...

A plan to power Europe from Saharan solar plants seems to have stalled, but several large North African solar projects are still going ahead despite local concerns. Hamza Hamouchene asks: where did the Desertec project go ...

Concentrating solar power (CSP) plants use mirrors to convert the thermal energy from the sun into electrical energy. ... First and foremost, many African nations are skeptical about the benefits they would reap from this ...

In February 2016, the solar power station of Ouarzazate was inaugurated in Morocco, on the north-western edges of the Sahara. ... Ouarzazate's impressive installation was celebrated by the media as the first ...

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