Arabian Desert Solar Energy Proposal

The Strategy

of

The Arabian Energy Solution

Arabian Desert Solar Energy Proposal
Arabian Consortium

The fight for oil

The war on fossil energy resources is triggered by the great consumers destabilising the Near East, wrangling about the territorial allocation of the Arctic and the Antarctic resources.

Poor countries are struggling to survive in urgent need of food and energy to prepare their meals, to pump water for people, cattle as well as irrigation. This situation destabilizes large regions of Africa and Asia.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Solar Energy Wealth of the Muslim States

The Sahara cover an enormous part of North Africa. Together with extensive desert areas of the Middle East it is the part of the world with optimal conditions for the installation of photovoltaic arrays and solar thermal parabolic trough power plants.

Electricity in Europe is mainly produced by nuclear power plants and burning brown coal. Both are seen as extremely unfriendly to nature.

Solar electricity is being supported by the European governments but will never produce the bulk amounts demanded by the growing European market. Solar incidence is to low and there is not sufficient area available.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Solar Energy Wealth of the Arab States

The Arabian deserts have both important qualities needed for the project:

- Sufficient area which does not compete with agriculture or other uses.

- High solar incidence during all seasons.

Solar energy is the greatest wealth of the Islamic world which has not been exploited yet.
It is renewable clean energy which is free of pollution and will last forever.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Solar Energy hits a market niche

With the production of electricity the Arabian Countries open a new energy market segment. This may secure their dominance in the future energy economy.

Solar energy does not compete with oil economy because electricity in western countries is mainly won from nuclear power or from brown coal, or wind turbines which are generating about 18 per cent of electricity of the grid in Denmark and are planed to be increased up to 50 per cent.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Solar Energy hits a market niche

Exploration of electricity from the deserts has been neglected by industrial countries because of political difficulties related to the of access of land user rights, together with a strong lobby work of energy corporations fearing to loose market shares.

The addition of low priced hydrogen on the fuel market widens the portfolio alleviating the burden of emission in heavy traffic regions. Increasing traffic call for clean fuel.

Arabian Desert Solar Energy Proposal
Arabian Consortium

Inability of Industrial States to develop Solar Energy

The government of industrial countries like Germany , England and the European Commission have not signalised interest on solar energy and hydrogen technology.

There is a disagreement on strategies which is nourished by electricity providers such as EdF, E.ON, EWE, ENEL, Vattenfall Elactrabel, EnBW, Endesa, Iderbola, British Energy.

These Companies rely mainly on nuclear power 32%, coal 30% to produce electricity. They defend their market share with all their might, persuading everybody that other energy sources (which are out of their hands) are to expensive and not feasible.

Arabian Desert Solar Energy Proposal
Arabian Consortium

Peace and welfare for the region

The development of a strategy to supply electricity and hydrogen for Arabian countries and the Muslim Asia will contribute to peace and welfare,

and last but not least, will contribute to protect the climate and avoid further desertification such as it is happening in the Sahel zone.

It becomes thus to be an humanitarian aid.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Spirit of Desert Energy Project

All available facilities are welcome and are pieces of a great puzzle.

Commercial organizations suit best in the global project, as the main target is to make profit with a sound good product and to open the future energy economy.

Equity, brotherhood and mutual cooperation marks the stable business world of tomorrow.

Arabian Desert Solar Energy Proposal
Arabian Consortium

Development of the Arabian Solar Technology Consortium

Depending on the political agreements between the different states two proposals were highlighted:

1- The Algerian start

Due to the similarity of the Algeria/Europe pipeline, a relative short distance to the European Mediterranean electrical grid, and early studies regarding the import of electricity from Africa, the trade negotiations with Europe might be helpful .

2-The Saudi Arabia start

The Start in Saudi Arabia bear the advantage to have the PV/heat convection power plants near the development/control centre . This is very helpful in the initial phase of the project to respond rapidly during the development phase. Another advantage is that the superconducting grid connected to the European Grid has short distances of water to bridgeover. Using the Bosphorus Bridge no deep water cable is necessary.

Arabian Desert Solar Energy Proposal
Arabian Consortium

Time Schedule of the Arabian Solar Technology Project

FEASIBILITY AN PLANNING
Planning, invitation and contractural phase
Duration: 6 Month
Completion: December 2008

PHASE 1
Realisation of the first PV/ solar thermal power plants in Algeria , or in Saudi Arabia
Duration: 5 Years
Completion: 2013

PHASE 2
Completion of the African and Middleeast grid
Duration: 10 Years
Completion: 2023

PHASE 3
Expanding the Arabian Solar Technology Corporation to India, China, Australia and Mexico completing the Global Grid.
Begin:2024
Duration:Unlimited

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Algerian Start

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Algerian Start

Western
Sahara

Export to
Europe

First Phase: The project may begin in Africa with the installation of a photovoltaic array and an electrical grid from Algeria to Europe. Production of hydrogen in Africa and in different places of Europe which are connected to the grid.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Algerian Start

Western Sahara, North Sahara
Region of Red Sea
Horn of Africa

Exporting to Europe
and supplying Africa

Second Phase: Installation of photovoltaic arrays and electric grid on Northern Africa, the Red Sea area and Horn of Africa. Production of hydrogen near the array and in different places of Europe which are connected to the grid, supplying hydrogen cars of both continents.

Arabian Desert Solar Energy Proposal
Arabian Consortium

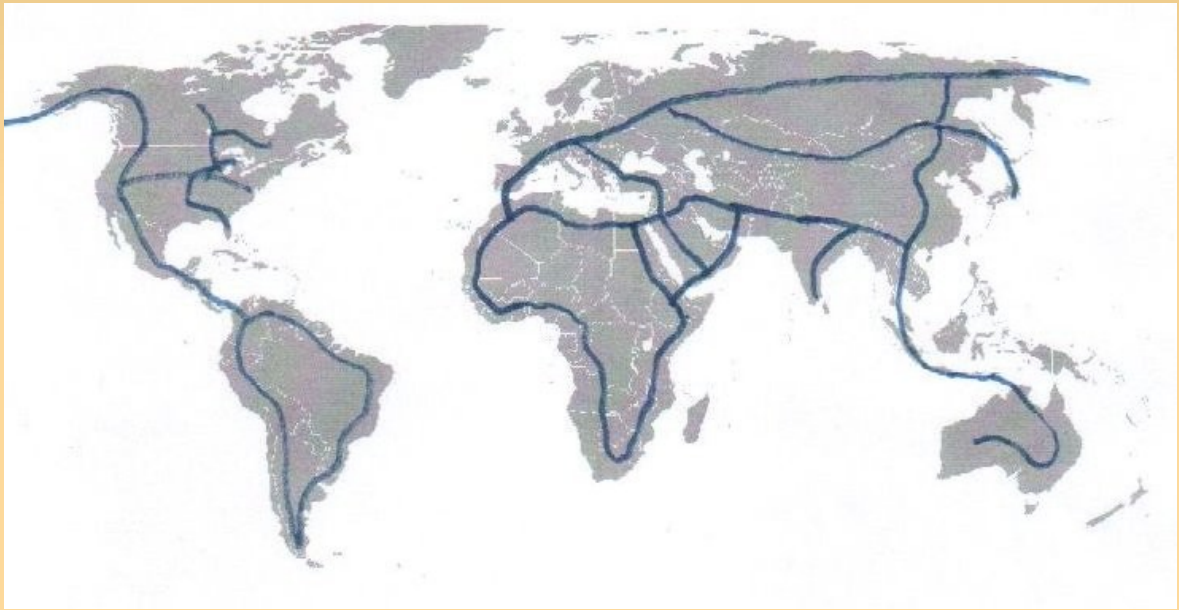
The Algerian Start

African Desert
For Europe,Africa Middle East.

Australia Deserts for the
pacific archipelago
and South Asia.

Gobi Desert for Japan,
China and Siberia.

US deserts, Mexican
desert and Chile Desert
For North- Middle- and
South America.



Source:: Science 1 Nov. 2002: Vol. 298. no. 5595, pp. 981 - 987
DOI: 10.1126/science.1072357

Third Phase: Completion of the global electrical grid and installation of photovoltaic arrays in the different deserts. Production of hydrogen near the array in different places of the world.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Middle East Start

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Middle East Start

Saudi Arabia Desert
Export of electricity and hydrogen for Turkey and Europe.

The grid, on its way to Europe could serve Jordan, Syria and Turkey

First Phase: The project may begin in Saudi Arabia with the installation of a photovoltaic array and an electrical grid to Europe. Production of hydrogen in Africa and in different places of Europe which are connected to the grid may start.

Arabian Desert Solar Energy Proposal
Arabian Consortium

The Middle East Start

North Sahara
Region of Red Sea

Exporting to Europe
and supplying Africa

Second Phase: Installation of photovoltaic arrays and electric grid on Northern Africa, the Red Sea area and Horn of Africa. Production of hydrogen near the array and in different places of Europe which are connected to the grid, supplying hydrogen cars of both continents.

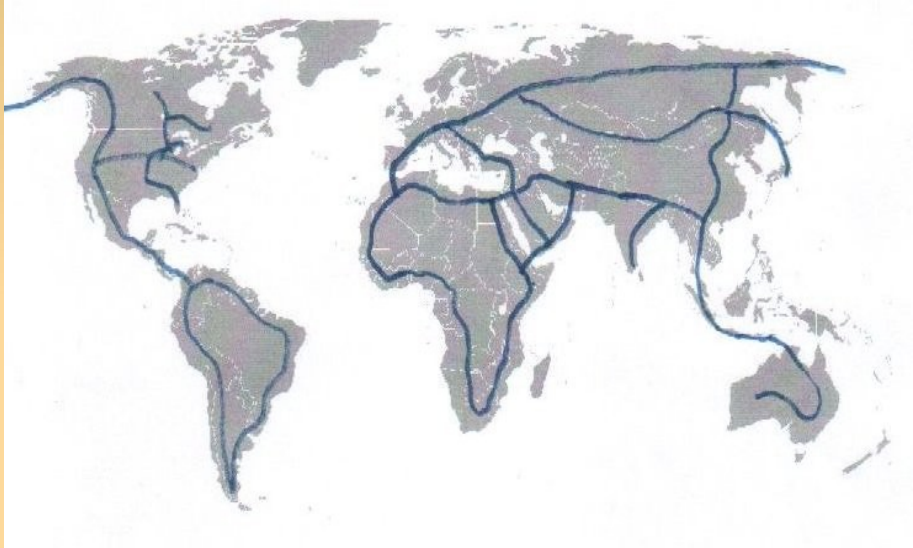
Arabian Desert Solar Energy Proposal
Arabian Consortium

The Middle East Start

African Desert
For Europe,Africa Middle East
.
Australia Deserts for the
pacific archipelago
and South Asia.

Gobi Desert for Japan,
China and Siberia.

US deserts, Mexican
desert and Chile Desert
For North- Middle- and
South America. Source: Wikipedia World Map



Third Phase: Completion of the global electrical grid and installation of photovoltaic arrays in the different deserts. Production of hydrogen near the array in different places of the world.

Arabian Desert Solar Energy Proposal
Arabian Consortium

1- Humanitarian background

The foregoing 5 items should be adopted by the Arab and Moslem countries as a commitment to peace and development of poor regions to overcome energy shortage, water scarcity and desalinating water.

2 – Global Energy Export

The solar energy wealth of the desert countries can supply many times the current global energy demand. The important deserts are chiefly Arabian and Muslim territories. These countries should use their energy wealth to use it peacefully and to export it to the western world. From the revenues of the initial Sahara installations the global expansion of the Arabian Consortium may take place.

Arabian Desert Solar Energy Proposal
Arabian Consortium

Summary

The Arabian Solar Technology Proposal reduces Emission of greenhouse gases, uses advanced technology and boosts the economy of involved nations.

It promotes peace sustainable development of poor regions and reduces desertification.

The Arab states can fill the market niche of solar energy which has been neglected so far. The energy wealth of the desert countries will dominate the future global economy with the start of this project. Using clean solar energy for centuries to come, the climate will be protected.