



The Union for the Mediterranean and the Mediterranean Solar Plan

Carsten Hoyer-Klick*
Institute of Technical Thermodynamics –
Department of Systems Analysis and Technology Assessment

*some material taken from various presentations of Philippe Lorec



**Deutsches Zentrum
für Luft- und Raumfahrt e.V.**
in der Helmholtz-Gemeinschaft



Outline

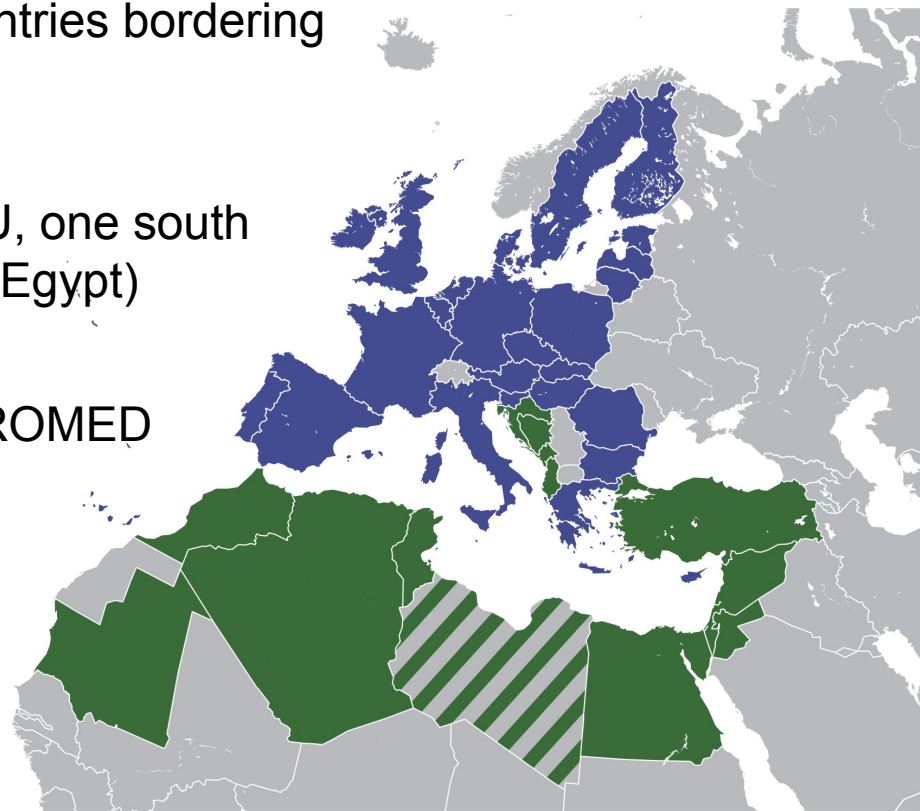
- A quick history of the Union for the Mediterranean
- Mediterranean Solar Plan
- Master Plan Study

A Quick History of the Union for the Mediterranean

- The idea of the Mediterranean Union was originally launched by Nicolas Sarkozy in his election campaign in 2007.
- The idea was welcomed by the Mediterranean Countries but objected by northern EU states and the European Commission
- The idea was reframed to the “Union for the Mediterranean” based on the Barcelona Process.
- The Union was formally founded by a decision of the European Council in March 2008.
- The first summit of the heads of states was held in Paris on July 13th.
- The UfM idea has triggered a lot of new cooperation and (peace) talks with the Mediterranean.

Institutions of the UfM

- Member states: EU + EC + Countries bordering the Mediterranean
- Observers: Arab League
- Rotating Co-Presidency (one EU, one south Mediterranean, first France and Egypt)
- Biennial summits
- Institutions replace existing EUROMED institutions
- Senior officials meetings
- Joint Permanent Committee in Brussels
- Secretariat based in Barcelona (to be operational in May 2009)





Key Initiatives of the UfM

- De-pollution of the Mediterranean
- Maritime and Land Highways
- Civil Protection
- **Alternative Energies: Mediterranean Solar Plan:** The recent activity on energy markets in the terms of both supply and demand, confirms the need to focus on alternative energy sources. Market development as well as research and development of all alternative sources of energy are therefore a major priority in efforts towards assuring sustainable development. The Secretariat is tasked to explore the feasibility, development and creation of a Mediterranean Solar Plan.

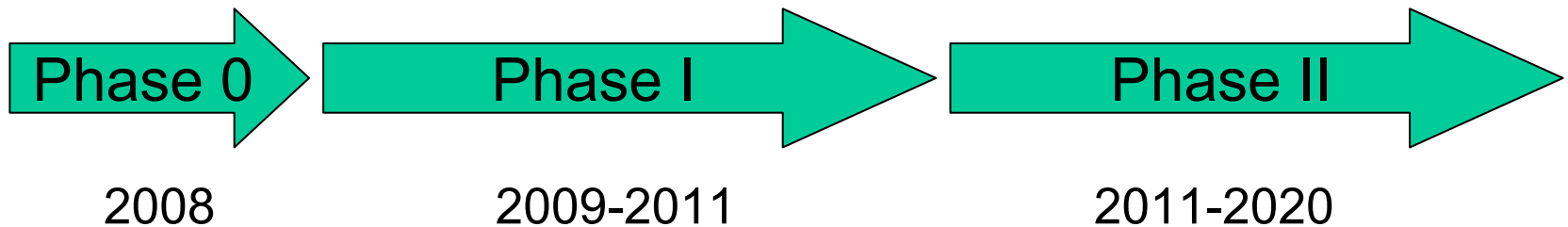
Development of the Mediterranean Solar Plan

- The French Embassy was triggered on the development of RE in the Mediterranean during a workshop of the Club of Rome, German Parliament and French Embassy in Nov. 2007
- Development of draft proposal of the MSP within the French Government in the first semester 2008.
- Participation of BMU as a Franco-German Proposal in June 2008.
- The proposal calls for 20 GW of new installed Capacity with a focus on CSP
- Announcement of a German Conference for the MSP at the summit in Paris.
- Expert Workshop on Technologies and Cost at BMU 28th / 29th of October.
- Paris round table by e-parliament on infrastructure and interconnection on Nov. 21st in Paris
- Financing Conference (France/Germany/Spain/Egypt) on Nov. 22nd in Paris

MSP – Priority Areas of Action

- **Setting up of an adequate legal, regulatory, institutional and organisational framework** to enable the development and massive deployment of solar energy and other renewable energy technologies
- **Limiting the growth of energy demand and improve energy efficiency and energy savings**
- **Promote the development of electricity interconnections** to establish a viable grid system for “Euro-Mediterranean green electricity” trade.
- **Facilitate co-operation on technology aspects.** The MSP will co-operate with existing and new initiatives as “Solar Europe” as defined in the EU Strategic Energy Technologies (SET) Plan.

Phases of the MSP



Preparations:
Definitions of the objectives and organisation of the MSP process

Pilots:

- Development of economic and technological pilots
- Elaborate mainstream procedures for the MSP

Large Scale development:
MSP large scale development based on the experience of Phase I

MSP – Phase I

- During the next two years, concrete projects will be implemented in several countries to initiate the technical, economical and organisational process which should lead to the large-scaled development of solar power plants in the Mediterranean.
- From 2009, it will be possible to develop small photovoltaic, CSP and wind power plants. Small-scale projects require less investments and generate less risks than larger ones, which is particularly interesting to convince private investors.
- First, four clusters of pilot projects have to be established, these clusters being composed of three or four projects distributed in different countries. The clusters will be presented to private investors and to financial institutions to get subsidies and loans with attractive interest rates.

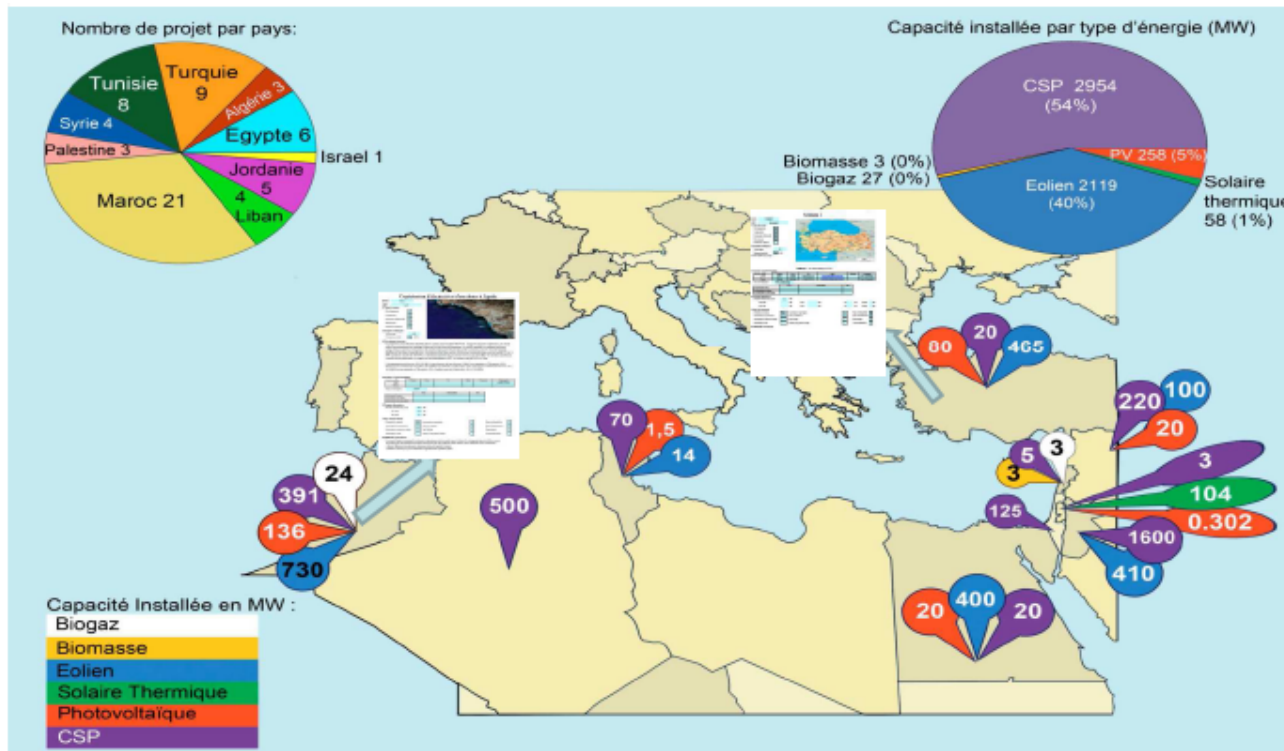
MSP – Phase I

- The Franco- Egyptian co-presidency wants to develop concrete projects.
- The objectives of the “pilots” are :
 - Validation of the approach and selected projects by the concerned countries;
 - Create the conditions necessary to a good profitability for each project;
 - Organise the structure and the processes necessary for MSP’s governance.
- Through the development of the first projects, the participants to the MSP will be able to define and test financial mechanisms, legal frameworks (licences, authorisation, tariffs etc.) and to establish a viable import-export framework for green electricity.

MSP – Phase I – Tasks

- Studies: identification of solar potentials, regulation and normalization, incentive mechanisms (financial and fiscal instruments), monitoring and evaluation methodologies, etc.
- Propose concrete and profitable projects for southern and northern countries but also for private and public investors.
- Promote the establishment of public/private and private/private partnerships with the aim to enhance the development of industrial projects.
- Contribute to the search for appropriate financing and sponsors necessary to implement projects.
- Harmonization of practices and energy market integration.
- Support behavioural changes thanks to awareness-raising among public and private stakeholders and the general public.

IAP – Immediate Action Plan



- Collection of proposed Projects for the Pilot Phase
- Project are collected by national government and Philippe Lorec at Ministry of Industry of the French Governments

Master Plan Study – Outline

- To begin in the first semester 2009
- The study shall outline concrete steps for the development of:
 - Solar thermal power plants
 - Solar photovoltaic
 - Other renewable energy installations
 - Export of electricity to the EU along with local energy needs, e.g. for water desalination
- The Study shall be a coordinated effort involving
 - relevant administrations from member countries
 - European Commission
 - industry, utilities, transport system operators
 - potential investors and financing institutions



Master Plan Study – Content I

Targeted Result:

A Road map detailing the phases, activities and precise timeline for the implementation of the Mediterranean Solar Plan

- Assess available renewable energy resources, site selection issues and local industrial capabilities and renewable energy market development
- Evaluate current initiatives in the field of solar and other renewable energies
- Make recommendations in terms of legislative and regulatory frameworks, institutional and administrative conditions as well as other issues for a phased development of solar and other renewable technologies



Master Plan Study – Content II

- Study suitable options and mechanisms for financing along with the most cost-effective solutions to ensure active private sector involvement
- Study relevant conditions for the improvement of energy efficiency
- Address the specific issue of transport infrastructures to EU countries
- Identify needs for technical assistance and capacity building

The Master Plan Study may be build upon previous work of DLR (e.g. MED-CSP, TRANS-CSP), OME (e.g. MED2010, REMAP, MED-CSD) and EUROMED

Upcoming Events



- REMAP Final Conference in Paris Dec. 16th
- EC-funded CA 2007-2008
“Action Plan for the development of Renewable Energy in South and East Mediterranean countries”
- Target: Identifying demonstration sites in FP7 for CSP and Wind
 - Resource Assessment for Solar and Wind
 - Site Assessments
 - Financing Schemes
 - Action Plan
- Information and registration at <http://www.ome.org> or <http://www.remap-ec.eu>