



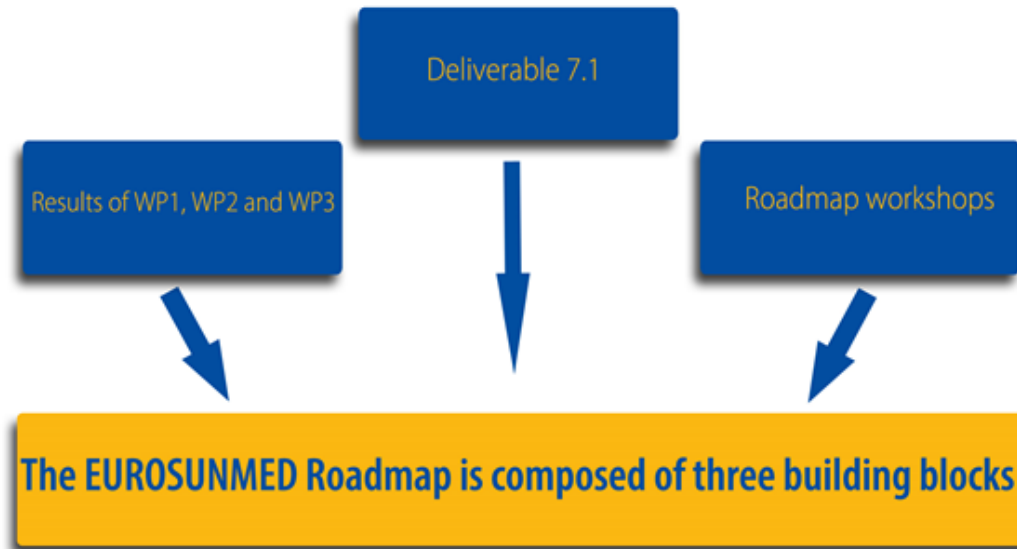
EUROSUNMED ROADMAP
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Industrial workshop in Cairo

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Objective

Actions to create long-standing cooperation between EU and MPCs related to solar energy



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Targets for long-standing cooperation

- Challenges to be tackled:
 - *Energy security*
 - *Reduction of CO2 emissions*
 - *Competitiveness*, both in terms of reduction of energy cost, and of creation of a local industry
- Mutually beneficial:
 - MPCs:
 - Possibility to satisfy an electricity demand, which grows by 5-9% per year
 - Reduction of energy costs
 - Development of a green economy with opportunities to create a local industry and job opportunities
 - Control and reduction of pollution
 - EU:
 - Reduction of oil and gas imports
 - Boosting the EU energy industry along the whole value chain
 - Reduction of electricity costs, by optimizing exchanges
 - Reduction of CO2 emissions

Needs for long-standing cooperation

- ***Technology innovation***
 - PV
 - Solar Thermal Electricity
 - Grid integration
 - Technology areas to be further developed
- ***Access to capital***
- ***Supportive policy framework***
- ***Skilled workforce***

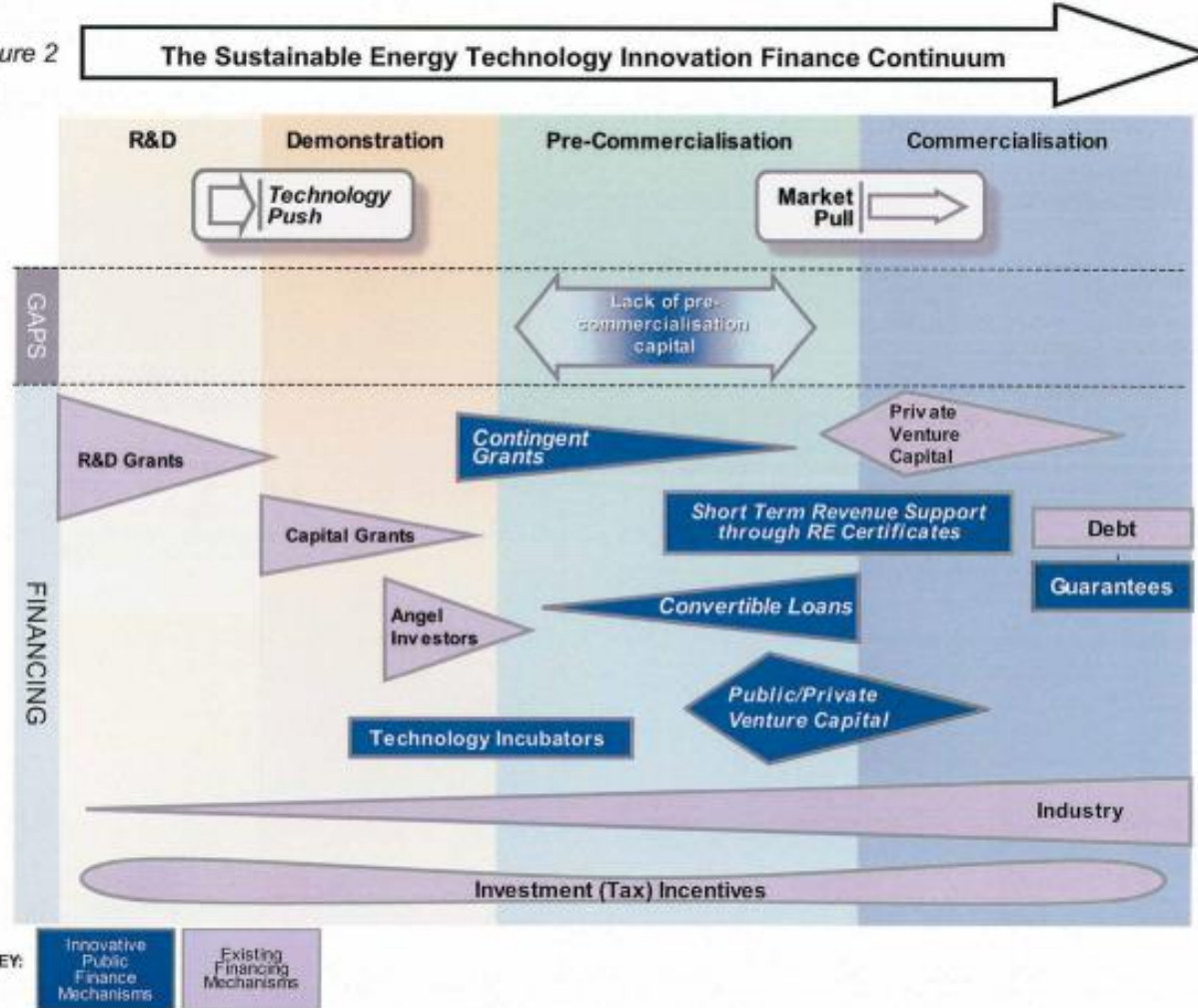
Technology areas to be further developed

- **Local manufacturing of components** is important in order to ensure the development of a local industry (Thin Film PV cells, CSP heliostats, transformers, PV modules, Biomass technologies).
- **Energy storage technologies**
- **Power electronics for grid integration**
- Smart grids and demand side management
- **Energy efficiency** and integration in buildings
- **Material science** research on RE (polymers)
- **Water desalination**
- **Advanced hybridisation between PV and CSP**
- Components' **durability**
- **Innovation management**
- **Process heat**

Access to capital

- Development of **public-private partnerships**
- **Different financial needs** according to project scale
- Invol
- **New**

Figure 2



Supportive policy framework

- Create **government bodies, agencies and institutions**
- Increase **public awareness**
- Create a regulatory body for the **monitoring of the energy market**
- **Economic incentives** and financial infrastructure for RE and EE (local private sector)
- **Advantages** to facilitate investments from the private sector
- **Government guarantees** for local banks
- **Incentives** to attract foreign investments
- Develop **standards**

Skilled workforce

- Development of **local industry**
- Scientific/engineering profiles
- Project managers
- Training and education courses along whole value chain

Available funding instruments (1)

Name of funding mechanism	Focus	Weblink
<i>International Renewable Energy Agency (IRENA) and the Abu Dhabi Fund for Development (ADFD)</i>	Loans to finance transformative and replicable renewable energy projects in developing countries	http://adfd.irena.org/
<i>Sustainable Energy Fund for Africa</i>	Support to small- and medium-scale Renewable Energy (RE) and Energy Efficiency (EE) projects in Africa	https://www.africa-eu-renewables.org/funds/sefa/
<i>Clean Technology Fund</i>	Concessional funding to: <ul style="list-style-type: none"> o Drive down technology costs o Support first-movers o Bridge financing gaps o Create markets o Innovate private sector finance 	https://www-cif.climateinvestmentfunds.org/fund/clean-technology-fund
<i>HORIZON2020</i>	<ul style="list-style-type: none"> o Policy and international cooperation measures for research infrastructures o Research and Innovation Staff Exchange (RISE scheme) o Secure, clean, and 	https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html

Available funding instruments (2)

Name of funding mechanism	Focus	Weblink
<i>Facility for Euro-Mediterranean Investment and Partnership</i>	To improve infrastructure in several sectors, including energy (power generation, transmission and distribution, renewable energies).	http://www.eib.org/projects/regions/med/
<i>ERANETMED</i>	To enhance Euro-Mediterranean co-ownership through innovation and competitive research in the societal challenges of the region.	http://www.eranetmed.eu/
<i>European Bank for Reconstruction and Development</i>	The EBRD funds up to 35% of the total project cost for a greenfield project or 35% of the long-term capitalisation of an established company	http://www.ebrd.com/home
<i>ERASMUS+</i>	It aims at enhancing the international dimension of education and training.	http://ec.europa.eu/programmes/erasmus-plus/resources_en#tab-1-0

Available funding instruments (3)

Additional financial instruments can be found here: <http://www.martinot.info/finance.htm>

Roadmap activities- ongoing

- **Technology transfer**

Quintuple Helix Approach to Targeted Open Innovation in Energy, Water, Agriculture in The South Mediterranean Neighborhood (2016- 2019)



- **Research infrastructures**

EU-SOLARIS (European SOLAR Research Infrastructure for Concentrated Solar Power)

Joint lab between CNRS (FR) and UMV (Mo)



- **Education and Training**

MEDSOL (Euro-Mediterranean cooperation on Education, research and business in solar energy)

- **Other collaboration initiatives**

CAPTure (Competitive Solar Power Towers)

Prospective for using the Helwan/NVE demo site



- Identifying areas where research cooperation on renewable energy is further needed (***wind, solar, biomass, hydro***)
- Identifying ***barriers and best practices*** for the introduction of renewable energies in MPCs (case studies on MPCs)
- Developing ***professional courses*** on renewable energy
- Defining general principles for ***public awareness campaigns***
- Organising an ***annual conference and several experts' meetings***

Thank you for your attention

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