

The logo for WIP (Water Institute of Paris) is displayed in large, bold, black letters on a blue background.

ProDes

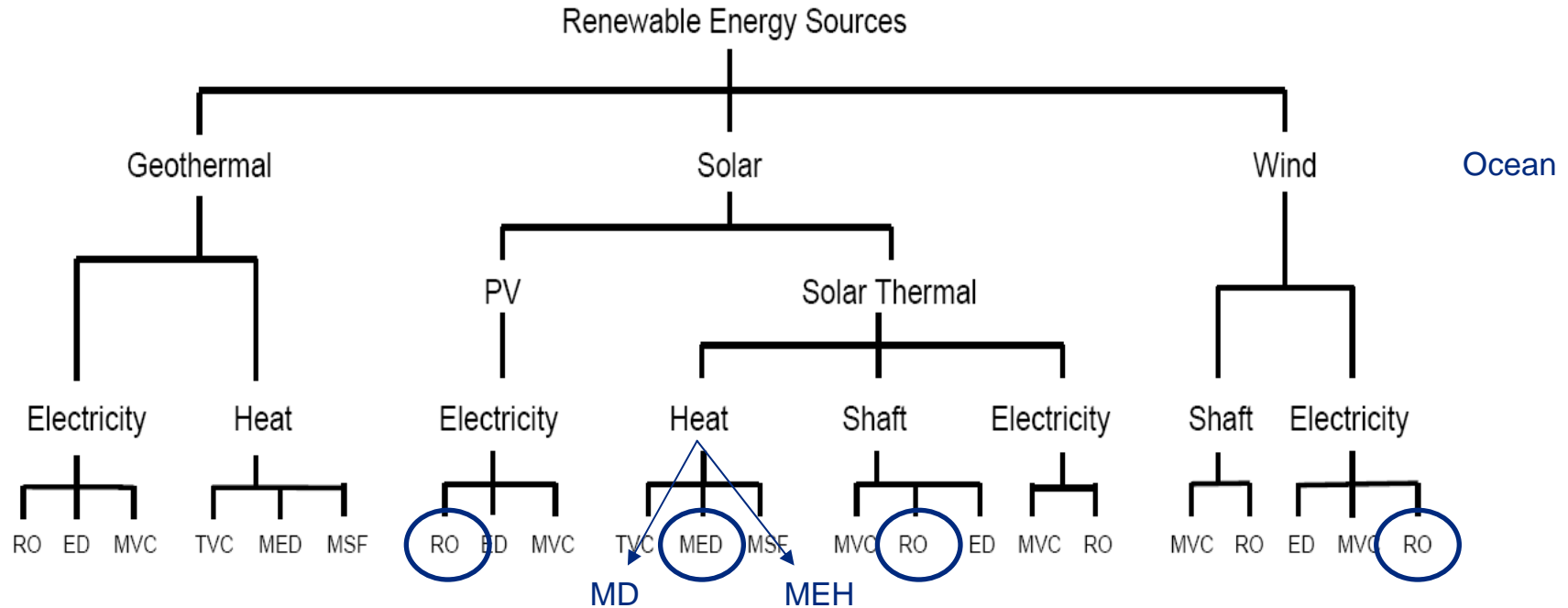
***Promotion of Renewable Energy for
Water Production through Desalination***

www.prodes-project.org

Michael Papapetrou



RE - desalination combinations (CRES, 1998)



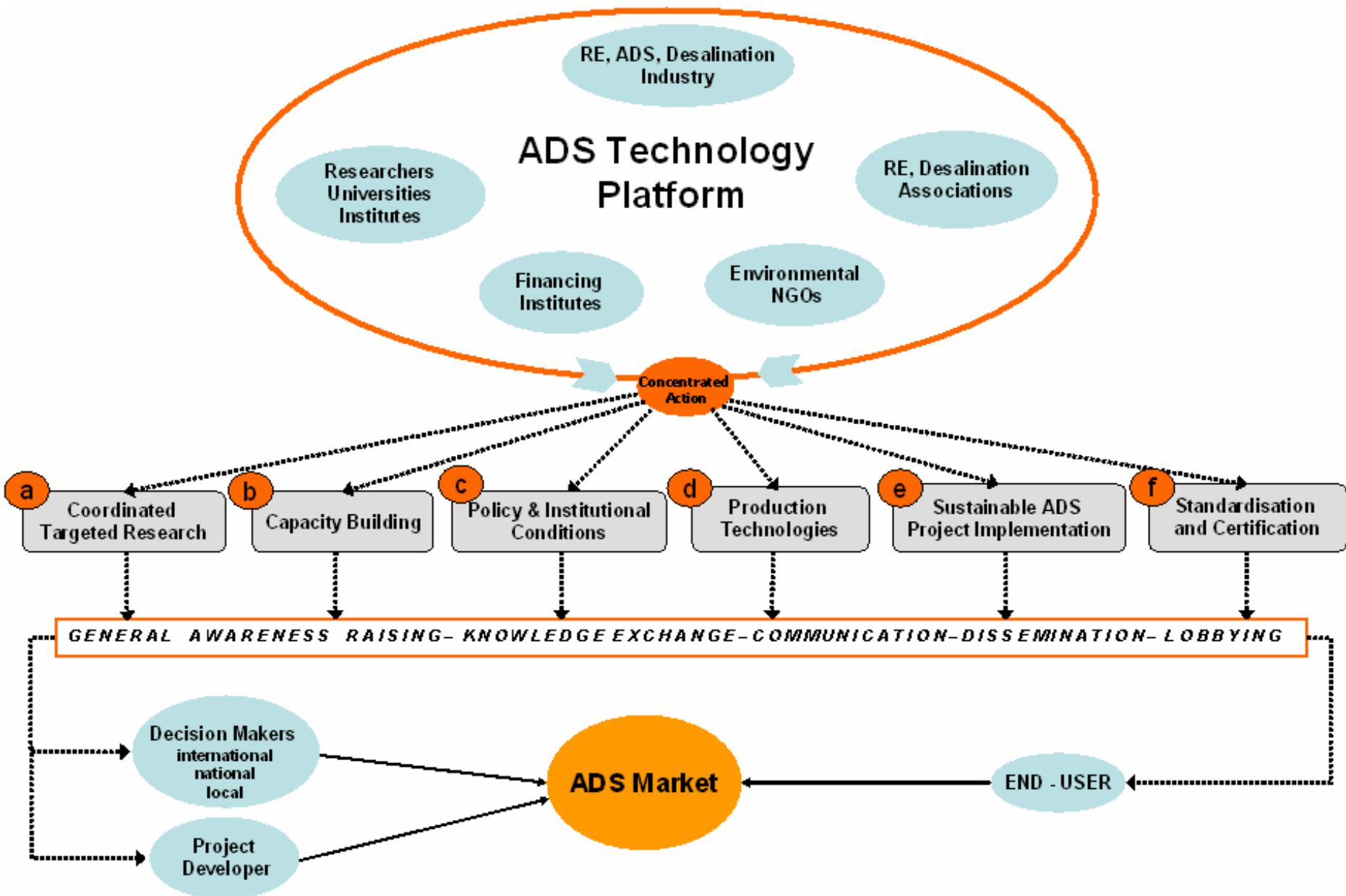
RO: Reverse Osmosis
 ED: Electro dialysis
 MVC: Mechanical Vapour Compression
 MEH: Multiple Effect Humidification-Dehumidification

MED: Multiple Effect Distillation
 MSF: Multiple-Stage Flash Distillation
 TVC: Thermal Vapour Compression
 MD: Membrane Distillation

Background

- The interest for RE-desalination is growing
- Within ADIRA 10 systems have been installed in MENA
- The ADU-RES network brought together the actors in the Mediterranean region
- The need for common action has created the idea for ProDes







ProDes: Main facts

- Co-financed through the “Intelligent Energy for Europe” programme



- Contract number: IEE/07/781/SI2.499059
- Starting date: 1 October 2008
- Closing date: 30 September 2010
- 14 partners with a focus on Southern Europe



Participant name	Country
WIP Renewable Energies	Germany
Centre for Renewable Energy Sources – CRES	Greece
University of Palermo	Italy
Instituto Nacional de Engenharia, Tecnologia e Inovação – INETI	Portugal
Ao Sol, Energias Renováveis	Portugal
Fraunhofer Gesellschaft – Institute for Solar Energy	Germany
Befesa Construcción y Tecnología Ambiental	Spain
AquaMarine Power	United Kingdom
Hellas Energy	Greece
European Desalination Society – EDS	Italy
Technology, Environment and Energy Research Centre – CIEMAT	Spain
Tinox	Germany
Instituto Tecnológico De Canarias – ITC	Spain
Capital Connect	Greece



The non-technical barriers

- (1) There is no European coordination of research efforts
- (2) There is no formal training resulting in a lack of experts
- (3) SMEs in remote areas are not up-to-date with the technological developments
- (4) Funding for product and project development is not easy
- (5) The regulatory framework is complicated without protecting the consumers and the environment
- (6) The general public and specific stakeholders are not aware of the RE-desalination option



Objectives and main steps

- ProDes aims to support the market development for RE-desalination, through the following strategy:
 - ✓ Bring together the European players and coordinating their activities
 - ✓ Develop training tools
 - ✓ Identify key players on the local level and connect them with technology providers
 - ✓ Liaising with investors to facilitate product and project development
 - ✓ Working with policy makers to outline a support mechanism
 - ✓ Making the general public aware of the technology





RE-Desalination Road Map

- The research needs of the industry will be identified
 - Common requirements will be highlighted for public funding
 - Link with the academic community will be established
 - A working groups within EDS will sustain these efforts after the end of the project
- **Your contribution to the road-map will be crucial**





RE-Desalination in Higher Education

- A course for students will be developed and implemented in ES, IT, PT and GR
 - Also a shorter course for professionals will be offered
 - An e-learning course will available on-line in the end of 2009
- The structure and material of the courses will be made publicly available
- The ProDes course can be offered in other countries not covered by the project





Networking Events and Financing

- A workshop will be organised in each involved country to connect project developers with local stakeholders
- A publication presenting RE-desalination products will be distributed in the events
- Tips for raising capital will be developed for the sector
 - You are encouraged to participate in the events
 - We will happily include your products to the publication
 - Talk to us about your financing needs





Regulatory and Institutional Issues

- The framework conditions in the target countries will be analysed and recommendations will be developed
- Guidelines will be outlined for legislation that will protect the consumer and the environment
- A support scheme for RE-desalination will be suggested
- Seminars for policy-makers will promote the results
- ➔ Your views of institutional issues and ideas for support schemes are very welcome





Expected results

- A working group will be established within EDS coordinating the RE-desalination community activities
- Training courses will be established enriching the pool of experts on a European level
- The companies will build a network for promoting their products to the niche markets of remote areas in Southern Europe
- The framework conditions in each country will be improved
- The general public will become familiar with the technology



MD by ITC in Canary Islands



WIP



Thank you for your attention!

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Michael Papapetrou
WIP-Renewable Energies
Sylvensteinstr. 2, 81369 Munich, Germany

Phone: +49 89 720 12 792
e-mail: pmp@wip-munich.de
website: www.wip-munich.de