

MEDA WATER

adira

PROGRAMME



Autonomous Desalination system concepts for seawater and brackish water In Rural Areas with renewable energies: Potential, Technologies, Field Experience, Socio-Technical and Socio-Economic impacts.
ADIRA (Contract number: ME8/AIDCO/2001/0515/59610)



The ADIRA programme has installed 10 desalination units powered by solar energy, around the Mediterranean.

Place	JORDAN, Hartha Charitable Society
Installer	JUST
Commissioned	July 07
Capacity	½ m ³ /day
Technology	Photovoltaics-Reverse Osmosis

Place	MOROCCO, Msaim (Province Essaouira)
Installer	FM21
Commissioned	March 08
Capacity	5 m ³ /day
Technology	Photovoltaics-Reverse Osmosis

Place	TURKEY Oludeniz primary school
Installer	ITU
Commissioned	May 07
Capacity	4 m ³ /day
Technology	Photovoltaics-Nanofiltration

Place	MOROCCO, Douars in Amellou (Tiznit)
Installer	ITC
Commissioned	Pending
Capacity	1 m ³ /hour
Technology	Photovoltaics-Reverse Osmosis

Place	TURKEY HBC complex
Installer	ITU
Commissioned	May 07
Capacity	2 m ³ /day
Technology	Photovoltaics-Reverse Osmosis

Place	MOROCCO, Douar in Tangarfa (Tiznit)
Installer	ITC
Commissioned	Pending
Capacity	½ m ³ /hour
Technology	Photovoltaics-Reverse Osmosis

Place	CYPRUS, Geroskipou-Paphos Municipality
Installer	NCSR
Commissioned	Pending
Capacity	1 m ³ /day
Technology	Solar thermal humidification-dehumidification

Place	MOROCCO, Douar Azla (Essaouira)
Installer	ITC
Commissioned	Pending
Capacity	1 m ³ /hour
Technology	Photovoltaics-Reverse Osmosis

Place	MOROCCO, Alhaouz-Marrakech
Installer	FM21
Commissioned	March 08
Capacity	5 m ³ /day
Technology	Photovoltaics-Reverse Osmosis

Place	MOROCCO, Douar Tazekra (Essaouira)
Installer	ITC
Commissioned	Pending
Capacity	1 m ³ /hour
Technology	Photovoltaics-Reverse Osmosis

The ADIRA project aims to develop suitable concepts and to install a number of desalination units around the Mediterranean, for fresh water supply in rural areas. In the focus of this project are environment friendly, autonomous desalination units powered by renewable energy sources with fresh water output in the range of half to ten cubic metres per day. In the framework of the ADIRA project ten new desalination units were installed in Morocco, Jordan, Cyprus and Turkey. The experience and knowledge gained from planning, installing and monitoring the implemented technologies and from the evaluation of the potential of such systems, gives more light in the performance and cost issues of a clean but expensive technology.

Collaborating institutions

Agricultural University of Athens (Coordinator), WIP Renewable Energies - Munich, Fraunhofer-Institut für Solare Energiesysteme (ISE), Fondation Marrakech 21 (FM21), Istanbul Technical University (ITU), Canary Islands Institute of Technology (ITC), National Centre of Scientific Research Demokritos (NCSR), Jordan University of Science and Technology, Egyptian association for Water and Energy (EWE), Middle East Desalination Research Centre (MEDRC)