





The REAPower pilot plant:

First installation in the world to generate electricity from brine

30th September 2014 Saline Ettore e Infersa, Marsala (TP)

WORKSHOP

Reverse Electrodialysis is a novel technology for producing electricity from two solutions with different salt concentration. In the REAPower project we apply this technology with concentrated brines and brackish water. We have a team of 11 partners across Europe, ranging from companies to universities and research institutions that have been working over the past 4 years on mathematical modelling, membranes development, stack design and experimental activities in order to turn the technology from an idea into a demonstration plant.



We have succeeded in constructing a prototype, able to produce up to 1kW using just a small amount of brackish water and brine, that has been operating since March 2014 in the Marsala saltworks, in Trapani. This is the first Reverse Electrodialysis pilot plant in the world to be producing electricity from brine in a real environment.

The aim of this workshop present the results achieved and is to demonstrate the successful operation of the prototype installed, as well as potential discuss the high of the developed technology future for applications at the industrial scale.









WORKSHOP PROGRAM

9:30 **Opening** Prof. Giacomo D'Alì Staiti - SOSALT SpA Prof. Giorgio Micale - UNIPA Mr. Michael Papapetrou - WIP (DE)

- 10:00 *The Salt Ponds in Trapani and Marsala: past, present and future* Prof. Giacomo D'Alì Staiti - SOSALT SpA
- 10:30 *The REAPower Project* Mr. Michael Papapetrou - REAPower Project Coordinator - WIP (DE)
- 11:00 The REAPower prototype: concept, design and operation
 Prof. Giorgio Micale UNIPA
 Dr. Andrea Cipollina UNIPA
- 11:30 The REAPower prototype: Technological innovations
 Dr. Kristan Goeting REDstack B.V. (NL)
 Mr. Willem van Baak Fujifilm Manufacturing Europe B.V. (NL)
- 12:00 *REAPower prototype demonstration* UNIPA Research Team
- 12:30 *Future perspectives and Closure* All Speakers

ATTENDANCE FREE OF CHARGE - REGISTRATION REQUIRED To register, please e-mail your name and affiliation to: reapower@unipa.it For more information please contact: Prof. Giorgio Micale email: giorgiod.maria.micale@unipa.it phone: +39 320 432 8589

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