



in collaboration with



## Advanced Training Course 2016

**“Integration of renewable energy solutions in the Mediterranean electricity markets”**  
Milan, 14 November – 25 November

### Mon 14 Nov

9:00 – 17:30  
Building 25 – Politecnico di Milano  
Campus Bovisa

#### Morning

#### Welcome and International energy market insights

(Res4med, Politecnico di Milano, Enel Foundation, Madreg, IEA, OME)

9.00-9.45

##### Welcome

**C.Papa** Director Enel Foundation

**F.Inzoli** Head of Dept. Of energy, Politecnico di Milano

9.45-10.45

##### Introductory Session

**R.Vigotti** Secretary General, RES4MED

**A.Badr** Director RCREEE

**D.Otieno** AEEP Secretariat

**S.Mercuri** Ministero Affari Esteri e Cooperazione Internazionale – DGMO

10.45-11.15

##### Participant presentation

11.15-11.45

**L.Boldrini-F.Zaccheo** EU Policy for Africa RES deployments

11.45-12.15

**M.Baroni** IEA - Africa Outlook

12.15-12.45

**S.Vinci** IRENA - The Role of RE in transition to more sustainable energy system

12.45-14.30

*Lunch*

#### Afternoon

#### Solar

14.30-15.15

**M.Delfanti** PoliMi

15.15-16.00

**E.Colombo** PoliMi

16.00-16.30

*Coffee break*

16.30-17.30

**PoliMi Project work**

### Tue 15 Nov

8:00 – 19:00  
Private transfer departure from  
Hotel Radisson, via Villapizzone 24,  
Milan (07:30 am) to JRC Ispra

#### Morning

#### JRC Ispra -PV

08.00-10.00

**Transfer to JRC Ispra**

10.00-10.30

**S.Leva** PoliMi - PV technology: state of the art and future developments

**11.30-13.00** **JRC Photovoltaic Geographical Information System**  
**13.00-14.30** *Lunch*

**Afternoon** **JRC Ispra PV & CSP**

**14.30-15.00** **JRC European Solar Test Installation**  
**15.30-17.30** **P.Silva** PoliMi - CSP state of the art and future development  
**17.30-19.00** **Transfer to Milano**

**Wed 16 Nov**

*9:00 – 17:15*  
*Building 25 – Politecnico di Milano*  
*Campus Bovisa*

**Morning** **Wind** (PoliMi, M&A)

**09.00-11.00** **A.Zasso** PoliMi - Wind Energy state of art and future developments  
**11.00-11.30** *Coffee Break*  
**11.30-13.00** **Visit to PoliMi Wind Tunnel and Solar-Tech**  
**13.00-14.30** *Lunch*

**Afternoon** **Wind** (PoliMi, Siemens – E2i)

**14.30-15.30** **Presentation of leading Wind Turbine Manufacturer** –Siemens  
**15.30-16.30** **M. Scandellari** Enarray - Utility scale PV projects in emergency economist: challenge and benefit  
  
**17.00** Bus to Edison  
**18.00** **Welcome by E2i-Edison**  
**19.00** **Social Dinner in Edison**

**Thu 17 Nov**

*8.30 – 18:00*  
*At Aula Fire – PWC Training Center*  
*Via Guglielmo Silva 36, Milan*

**Morning** **Renewable energy investments and financing**  
(PwC, Bocconi University, Enel Green Power)

**08.30-9.00** **Participants registration**  
**09.00-10.00** **PWC** - Project financing of renewable energy plants  
**10.00-11.00** **Bocconi** - Utilities strategies in the Renewable Energy Sector  
**11.00-11.30** *Coffee break*  
**11.30-13.00** **EGP** - Competitive development of PV and Wind the importance of multi-year and pluri-technological programs  
**13.00-14.30** *Lunch*

**Afternoon** **Renewable energy investments and financing**  
(Terni Energia, Unicredit Leasing, D'Appolonia)

**14.30-15.15** **Terni Energia** - The role of EPC contractor in utility scale projects  
**15.15-16.00** **UniCredit Leasing** - Renewable energy asset: bank's view  
**16.00-16.30** *Coffee break*  
**16.30-18.00** **D'Appolonia** - The role of technical advisory in project finance structure

**Fri 18 Nov**

*9:00 – 18:00*  
*Building 25 – Politecnico di Milano*  
*Campus Bovisa*

**Morning** **Storage solutions**

**09.00-10.45** **M.Merlo** PoliMi - Energy Storage state of the art and future developments

**10.45-11.15** Market overview and presentation of a leading manufacturer  
**11.15 -11.45** **Terna Plus** – Role of storage in the network operation  
**11.45-13.00** **EGP** – Minigrad technical solution and business models  
**13.00-14.30** *Lunch*

**Afternoon** **Storage solutions**

**14.30-16.00** **G.Moschi** PoliMi & DIT - Tanzania Smart Grid control for RES penetration into on-grid and Off-grid solution  
**16.00-16.30** *Coffee break*  
**16.30-18.00** **Visit to Fuel Cell Labs and Project work**

**Mon 21 Nov**

*9:00 – 17:30  
 Building 25 – Politecnico di Milano  
 Campus Bovisa*

**Morning** **Grid Operation & Regulatory framework**

**09.00-11.00** **A.Berizzi** PoliMi - Grid Operation technology: state of the art and future developments  
**11.00-11.30** *Coffee break*  
**11.30-12.30** Enel Distribuzione-Renewables challenges for DSO  
**13.00-14.30** *Lunch*

**Afternoon** **Grid Operation & Regulatory framework**

**14.30-16.00** Terna - The challenges of TSO to Manage the Renewable variability generation  
**16.00-16.30** *Coffee break*  
**16.30- 17.15** POYRY - Electrical market designer for optimal integration  
**17.15-18.00** **Project Work**

**Tue 22 Nov**

*9:00 – 18:00  
 Building 25 – Politecnico di Milano  
 Campus Bovisa*

**Morning** **Regulatory framework**

**09.00-11.00** **M.Delfanti** PoliMi - Regulatory framework for RES: the Italian experience in European context  
**11.00-11.30** *Coffee break*  
**11.30-13.00** Autorità dell'energia Elettrica Italiana  
**13.00-14.30** *Lunch*

**Afternoon** **Regulatory framework**

**14.30-16.00** **G.de Beni** Italgen...  
**F.Belfiore** ERM - ESG-environmental social and governance  
**16.00-16.30** *Coffee break*  
**16.30-18.00** **Project work**

**Wed 23 Nov**

*Private transfer departure from  
 Hotel Radisson, via Villapizzone 24,  
 Milan (07:30 am) to ASJA  
 headquarter (Rivoli-TO)*

**Morning** **Biogas (ASJA)**

Transfer to ASJA headquarter

Rivoli (TO)

**9:15-9.45**

**9.45-10.00**

**10.00-11.00**

**11.00-12.00**

**12.00-13.15**

**13.15**

*Welcome coffee*

**Welcome speech (Company presentation)**

**Biogas basic principles, landfill gas, waste gas and state of art**

**Biogas from agricultural wastes**

**TOTEM Energy production plant visit**

*Lunch*

**Afternoon**

**Biogas (ASJA)**

**14.30- 15.00**

**Transfer to Pianezza landfill biogas plant and guided tour**

Transfer to Milano

## **Thu 24 Nov**

*Private transfer departure from  
Politecnico di Milano –  
Campus Bovisa*

**Morning**

**CESI Haedquarter**

Transfer to Cesi

**Welcome and company presentation**

**MED-Infrastructure N/S and S/S interconnection**

**Power pools in MENA and Africa**

*Lunch*

**Afternoon**

**CESI Haedquarter**

**Smart grid and its enabling components, digital meters**

**Visit to main Cesi laboratories**

Transfer to hotel

## **Fri 25 Nov**

*9:30 – 13.00  
Building 25 – Politecnico di Milano  
Campus Bovisa*

**Morning**

**Final Round Table**

**09.30-10.30**

**Report from project work**

**10.30-11.00**

**C. Biello** Met Newen

**11.00-11.30**

**Final considerations by selected participants**

**11.30-12.30**

**Closing ceremony**

**\_Rector of PoliMi**

**\_President RES4MED**