



# 6° Training Module

## Energy Storage & PolyGeneration

at Polytechnic University of Turin

TURIN, Italy

13<sup>th</sup> – 21<sup>st</sup> October 2016

# AGENDA

<b>Project Coordinator:</b>	Dr. Ursula Eicker HFT University of Applied Sciences - Stuttgart
<b>Training Module Responsible Parties:</b>	Prof. Dr. Marco Perino POLITO
<b>Partners (full and associated):</b>	HFT Stuttgart (GER), EDF/EIFER (GER), EPFL (CH), IES (UK), NOTT (UK), Canton of Geneva (CH), SIEMENS (GER), POLITO (IT), UCD (IRE), AIT (AUS), TUW (AUS), City of Vienna (AUS)

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Contract no: 606851



# Thursday, 13<sup>th</sup> October 2016

Location: Sala Riunioni (meeting room) "Cafaro"

Research Skills: Smart Cities & Cinergy Group Meeting

Leaders: **POLITO**

Time	Responsible	Topic
09:00 – 09:30	<b>POLITO</b>	<ul style="list-style-type: none"><li>Welcome and agenda review Marco Perino and Enrico Fabrizio</li></ul>
09:30 – 11:30	<b>POLITO</b>	Lecture Prof. Andrea Acquaviva, IoT for Smart Cities
11:30 – 12:00	<b>POLITO</b>	Discussion
12:00 – 13:30		Lunch
13:30 – 15:30	<b>All ESRs/ERs</b>	ER + ESR team work
15:30 – 15:45		Break
15:45 – 17:15	<b>All ESRs/ERs</b>	ER + ESR team work
17:15 – 17:30	<b>POLITO</b>	Summary, Close of Day I

## Friday, 14<sup>th</sup> October 2016

Location: Sala Riunioni (meeting room) "Cafaro"

Research skills: Cinery Group Meeting + Technical Visit (TBC)

Leaders: ERs + ESRs

Time	Responsible	Topic
09:00 – 09:30	<b>POLITO</b>	
09:30 – 11:00	<b>POLITO</b>	<i>Technical Visit (TBC)</i>
11:30 – 13:00	<b>POLITO</b>	<i>Technical Visit (TBC)</i>
13:00 – 14:30		<i>Lunch</i>
14:30 – 15:45	<b>All ESRs/ERs</b>	<i>ER + ESR team work</i>
15:45 – 16:00		<i>Coffee Break</i>
16:00 – 17:15	<b>All ESRs/ERs</b>	<b>ER 1 : Web service help (ESR 01 &amp; ESR 04)</b>
17:15 – 17:30	<b>POLITO</b>	<i>Summary, Close of Day 2</i>

## **Saturday & Sunday, 15-16<sup>th</sup> October 2016**

**Sunday 16<sup>th</sup> October, 15:00-18:30**

**Proposal: Walking tour of the city (TBC)**

Meeting point:

When: 15:00

Where: Piazza Statuto corner via A. Manzoni, Torino

Contact: Enrico Fabrizio ([enrico.fabrizio@polito.it](mailto:enrico.fabrizio@polito.it))

The tour will guide you to discover the city and its architecture.

Approximate length: 3 km

# Monday, 17th October 2016

Location: Sala Riunioni (meeting room) “Cafaro”

Research Skills: Methodologies and Results

Leader: HFT

Time	Responsible	Topic
09:00 – 09:30	HFT	<ul style="list-style-type: none"> <li>Management Briefing</li> <li>CINERGY Book review and Organization</li> </ul>
09:30-11:00	EPFL	<ul style="list-style-type: none"> <li>Lecture Guest Speaker: Prof Paolone: about smart grids and integration of Blds in Smart Grids</li> </ul>
11:00 – 11:15		Coffee Break (meeting room II floor)
11:15-12:30	EPFL	<ul style="list-style-type: none"> <li>Lecture Guest Speaker: Prof Paolone: about smart grids and integration of Blds in Smart Grids</li> </ul>
12:30-13:30		LUNCH (meeting room II floor)
13:30-14:15	Solène Goy	<b>ESR 10 (UCD) Estimating Demand Response Potential in Building Clusters (20 minutes)</b> Question/ Answer session (25 minutes)
14:15-14:30	Giorgio Agugiaro	<b>ER 3 (AIT) Vienna Case Study: Status Report (10 minutes)</b> Discussion about upcoming Vienna Module (AIT + TUW + new City of Vienna Contacts) Book Section update/ Question/ Answer session (5 minutes)
14:30-14:45	Alejandro Lago Gomez	<b>Town and Country Planning, Housing and Energy Department</b> <b>Canton of Geneva: New reperiashnentaive of Geneva in the project</b> Self-Introduction and status quo description of the Geneva
14:45-15:15		Coffee Break (meeting room II floor)
15:15-16:00	Nina Solomakhina	<b>ESR 08 (SIEMENS) Modeling and Analysis of Multimodal utility networks (20 minutes)</b> Question/ Answer session (25 minutes)
16:00-16:45	Sebastien Cajot	<b>ESR 01 (EDF/EIFER) Urban energy system planning: a decision support methodology (20 minutes):</b> Question/ Answer session (25 minutes)
16:45 – 17:00		Coffee Break (meeting room II floor)
17:00–17:45	Nils Schüler	<b>ESR 04 (EPFL) Optimization of Urban Energy Systems bridging spatial scales (20 minutes):</b> Question/ Answer session (25 minutes)
17:45 – 18:30	Kunpeng Wang	<b>ESR 02 (AIT) Integration Platform For Urban Energy (20 minutes)</b> Question/ Answer session (25 minutes)
18:30	HFT	Management Meeting closing remarks (as necessary) Summary, Close of Day 3
20:30		DINNER (Resturant Arcadia, Piazza Castello   Galleria Subalpina, Torino TBC )

# Tuesday, 18<sup>th</sup> October 2016

Location: Sala Riunioni (meeting room) “Cafaro”

Research Skills: Methodologies and Results

Leaders: HFT

Time	Responsible	Topic
09:00 – 10:00	TUW, AIT, HFT	<b>Management Meeting</b> <ul style="list-style-type: none"> <li>• <b>Training Module 7: VIENNA</b>, Dates: Feb 16-24, 2017</li> </ul>
10:00 – 10:45		<b>Remembrance: Georgios Kazas</b>
10:45 – 11:15		Coffee Break (meeting room II floor)
11:15 – 12:00	<b>Jean-Loup Robineau</b>	<b>ER 2 (EPFL) Geneva Case Study Database and Urban Optimisation (20 minutes)</b> Question/ Answer session (20 minutes)
12:00 – 12:45	<b>Giovanni Tardioli</b>	<b>ESR 05 (IES) Prediction of building energy use in urban case studies using data driven approaches (20 minutes):</b> Question/ Answer session (25 minutes)
12:45 – 14:00		Lunch (meeting room II floor)
14:00 – 14:45	<b>Pilar Monsalvete Álvarez-Uribarri</b>	<b>ESR 07 (HFT) Physical modelling of energy systems at urban scale (20 minutes):</b> Question/ Answer session (25 minutes)
14:45 – 15:30	<b>Ana Sancho Tomás</b>	<b>ESR 11 (UNOTT) On the electrical autonomy of urban districts: DSM of electrical devices (20 minutes):</b> Question/ Answer session (25 minutes)
15:30 – 16:00		Coffee Break (meeting room II floor)
16:00 – 16:45	<b>Parag Wate</b>	<b>ESR 03 (HFT) 3D GIS for Urban Energy Demand Modelling (20 minutes):</b> Question/ Answer session (25 minutes)
16:45 – 17:30	<b>Mario Potente Prieto</b>	<b>ESR 06 (TUW) Simulation of district heating networks in combination with heat pump technology (20 minutes)</b> Question/ Answer session (25 minutes)
17:30 – 17:45	<b>Preston Rodrigues</b>	<b>ER 1 (HFT) Dynamic Building Simulation: A Webservice Approach (20 minutes)</b> Question/ Answer session (20 minutes)
17:45-		Summary, Close of Day 4

## Wednesday, 19th October 2016

Location: Sala Riunioni (meeting room) “Cafaro” and room “Sala Agorà”, I3P

Research Skills: Entrepreneurship and start-ups

Leaders: I3P

Time	Responsible	Topic
09:00 – 09:30	<b>POLITO</b>	<ul style="list-style-type: none"><li>• Welcome and agenda review</li></ul>
09:30 – 11:00	I3P	Lecture Prof. Paolo Cantamessa, Entrepreneurship and start-ups I
11:00 – 11:30		Coffee Break
11:30 – 13:00	I3P	Lecture Enrico Ghia, Entrepreneurship and start-ups II
13:00 – 14:30		Lunch
14:30 – 18:00	I3P	Visit to I3P – Incubator of Politecnico di Torino Room: Sala Agorà, I3P  14:30 -15:00 Wellcome  15:00 – 18:00 Visit to some innovative start up

# Thursday, 20<sup>th</sup> October 2016

Location: Sala Riunioni (meeting room) "Cafaro"

Research Skills: Ethics and management of energy sources + Cinergy Group Meeting

Leader: **POLITO**

Time	Responsible	Topic
09:00 – 09:30	<b>POLITO</b>	<ul style="list-style-type: none"><li>Welcome and agenda review</li></ul>
09:30 – 11:30	<b>POLITO</b>	Lecture Prof. Pierluigi Leone, The multi-dimensional challenge of the energy transition - leapfrogging the technical, political and ethical barriers
11:30 – 12:00	<b>POLITO</b>	Discussion
12:00 – 13:30		Lunch
13:30-14:00	Jean-Loup Robineau and Preston Rodrigues	EPIGEUM Wrap up (last Modules) RES 009: Career planning in the sciences; RES XX: Enhancing Research Impact
14:00 – 15:30	<b>All ESRs/ERs</b>	ER + ESR team work
15:30 – 15:45		Break
15:45 – 17:15	<b>All ESRs/ERs</b>	ER + ESR team work
17:15 – 17:30	<b>POLITO</b>	Summary, Close of Day 6



# Friday, 21<sup>st</sup> October 2016

Location: Sala Riunioni (meeting room) “Cafaro”

Research Skills: District heating Networks + Cinergy Group Meeting

Leader: **POLITO**

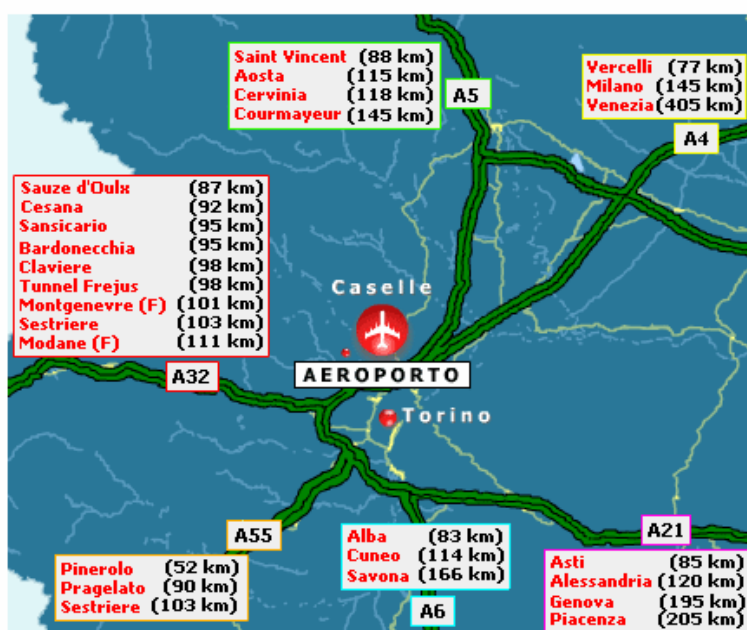
Time	Responsible	Topic
09:00 – 09:30	<b>POLITO</b>	<ul style="list-style-type: none"><li>Welcome and agenda review</li></ul>
09:30 – 11:00	<b>All ESRs/ERs</b>	<i>ER + ESR team work</i>
11:00 – 11:30		<i>Coffee Break</i>
11:30 – 13:00	<b>All ESRs/ERs</b>	<b>ER I : Redmine (Web Service : How to Guide)</b>
13:00 – 14:30		<i>Lunch</i>
14:30 – 16:30	<b>POLITO</b>	<i>Lecture</i> <i>Prof. Vittorio Verda, Design and operational optimization of district heating networks</i>
16:30 – 17:00	<b>POLITO</b>	<i>Discussion</i>
17:00 – 17:30	<b>POLITO</b>	<i>Summary, Close of Day 6</i>

## Training Location: Turin, Italy

Date	Time	Location (Building/Room)
Thursday 13. October 2016	09h00 - 17h30	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor
Friday 14. October 2016	09h00 - 16h30	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor
Monday 17. October 2016	09h30 - 17h:30	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor
Tuesday 18. October 2016	08h30 - 17h00	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor
Wednesday 19. October 2016	08h30 - 17h30	09h00 - 13h00 Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor 14h30 - 17h30 Room "Sala Agorà", I3P
Thursday 20. October 2016	09h00 - 16h45	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor
Friday 21. October 2016	09h00 - 11h00	Room "Cafaro", DENERG (Department of Energy), Door 5, III Floor

Coffee breaks and lunches on Monday 17 and Tuesday 18 October will be served in the room of DENERG (Department of Energy), Door 5, II Floor.

## Travel Information



Some websites where to collect information:

Turin airport : [http://www.aeroportoditorino.it/en/hp\\_en.html](http://www.aeroportoditorino.it/en/hp_en.html) (there are also transport information)

Turin public transportation: <http://www.gtt.to.it/cms/en/>

## Arrival at "Caselle" Turin Airport:

- It is possible to arrive at the city centre either by train or bus (see Turin airport website)
- The train stops at Stazione DORA railroad station. From there a taxi or a bus is needed to reach the hotel (the suggested ones are located near the Porta Susa railroad station).

- Using the bus from the airport, the stop nearest to the hotel is “Porta Susa railway station”.
- Taxi: taxis are on the left with respect to the exit at the “arrivals” level. On the average, the travel takes 30 – 40 min outside rush hours (with a cost of about 40- 50 €). During rush hours (7.30 – 9 in the morning, 17.30 – 19 in the afternoon) the travel can last 1 hour or more.

### **Arrival at “Malpensa” Milan airport (<http://www.sea-aeroportoimilano.it/>)**

- It is possible to reach Turin directly from “Malpensa” airport by bus (see airport web-site) or to go to Milan “Stazione Centrale” railroad station and then take a train to Turin.
- Trains from Milan to Turin are available about every hour (or less) from 6.00 in the morning to 21.00 in the evening (during nighttime the frequency is lower).
- It is possible to check train time table at: <http://www.trenitalia.com/tcom-en>
- During rush hours train from/to Turin-Milan are very crowded and it is advisable to take 1st class tickets.
- When arriving in Turin (from Milan by train) it is better to stop at “Porta Susa” railroad station.
- Downtown Milan is about 50 km from the Malpensa airport. It is possible to go to the city either by train (MALPENSA EXPRESS - Ferrovie Nord Milano <http://www.malpensaexpress.it/en/> or by bus.
- A taxi to the city cost about 70 €.
- The MALPENSA EXPRESS stops at “Milano Stazione Cadorna”. From there to go to Turin by train it is needed to move to “Milan Central Station” (by underground or bus).

### **Possible accommodations**

#### **ART HOTEL BOSTON**

Via Massena, 70

Torino

Tel. 011.500359

[commerciale@hotelbosotntorino.it](mailto:commerciale@hotelbosotntorino.it)

#### **City Hotel – Best Western**

Via Filippo Juvarra, 25

101222 Torino Italy.

Tel. +39 – 011 540546

Fax. +39 – 011 548188

[city.to@bestwestern.it](mailto:city.to@bestwestern.it)

[www.bwhotelcity-to.it](http://www.bwhotelcity-to.it)

#### **NH AMBASCIATORI**

C.so V.Emanuele II, 104

Torino

Tel. 011.57521

[nhambasciatori@nh-hotels.com](mailto:nhambasciatori@nh-hotels.com)

#### **BEST WESTERN Hotel LUXOR**

Corso Stati Uniti, 7

10128 Torino

Tel: +39-011-5620777

Fax: +39-011-5628324

[info@hoteluxor.it](mailto:info@hoteluxor.it)

Best Quality Hotel Politecnico Hotel

Corso Peschiera, 117Bis

10141 - TORINO

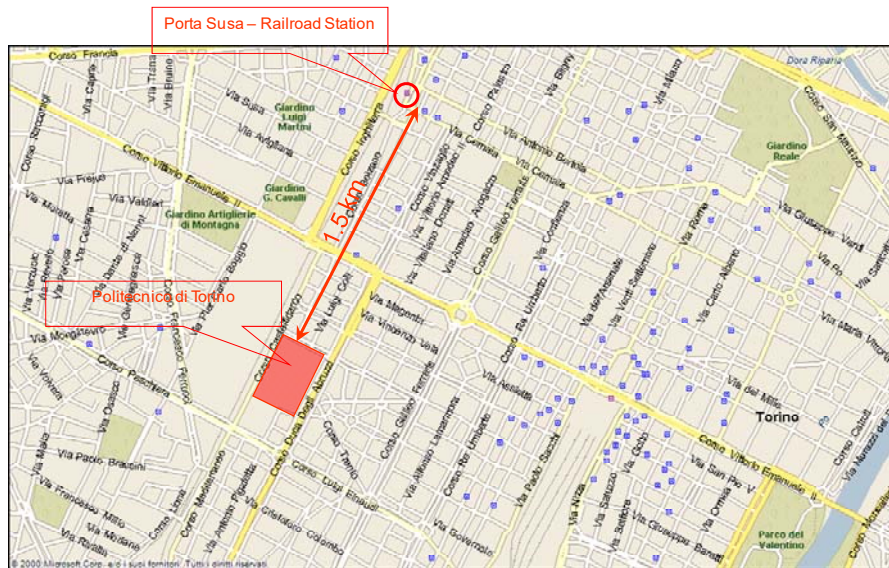
Tel. +39 011 3853953  
Fax. +39 011 3352880  
politecnico@bqhotel.it

**PLEASE BOOK DIRECTLY AT THE HOTEL** – Some of these hotels have a special agreement with Politecnico di Torino. Should you book directly, mention it, you are supposed to receive a special room rate. Note, however, that frequently the same hotels can be booked through web sites (like booking.com and similar) and frequently the room rate is better than the one secured by the Politecnico di Torino.

## MEETING ROOM

The meeting will take place at the Politecnico di Torino, in the meeting room “Cafaro” of the Department of Energy – Door 5 – III Floor (should you be lost: mobile phone Marco Perino: +39 331 6795993, Enrico Fabrizio: +39 338 6501401)

To get to the Politecnico di Torino from Porta Susa the bus/Tram Line 10 is suitable.



To get to the “Cafaro” meeting room you have to go to the DENERG (Department of Energy), Door 5, III Floor (see map below for the location of Door 5 of DENERG)

