









## 2nd UNI-SET Energy Clustering Event

# Universities in the Energy Transition: Focus on Energy Efficient Systems and Nuclear Safety

Hosted by Politecnico di Torino (POLITO) Torino, Italy

> 26-28 September 2016 #UNISET2016IT

## Programme

### Monday 26 September - Valentino Castle (Viale Mattioli, 39)

18.30-19.00	Registration
19.00-21.00	Welcome Reception
	—Ms Paola Pisano, Assessor for Innovation, City of Turin
	—Prof. Marco Gilli, Rector, Politecnico di Torino
	—Prof. Torbjørn Digernes, Chair of the UNI-SET Steering Committee; former Rector, Norwegian University of Science and Technology

### Tuesday 27 September – Politecnico di Torino: Corso Duca (Corso Duca degli Abruzzi, 24)

8.30-9.00	Registration	
9.00-9.45	Welcome Addressees and Keynote	
	—Prof. Enrico Macii, Vice-Rector for Research and Innovation, Politecnico di Torino	
	—Prof. Rolf Tarrach, President, European University Association	
	Keynote Speech	
	—Ms Andreea Strachinescu, Head of Unit for New energy technologies, innovation and clean coal, DG Energy, European Commission	

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9.45-11.00	Plenary Session
	Presentation of the UNI-SET Project and the Conference Objectives
	—Prof. Johan Driesen, KU Leuven; Education Director, KIC InnoEnergy; UNI-SET Project Leader
	—Dr Lidia Borrell-Damian, Director for Research & Innovation, EUA; UNI-SET Project Coordinator
	Towards a Roadmap for Universities in Energy
	—Prof. Torbjørn Digernes, Chair of the UNI-SET Steering Committee; NTNU
	Politecnico di Torino's Strategic Approach to the Energy Challenge
	—Prof. Enrico Macii, Vice-Rector for Research and Innovation, Politecnico di Torino
	Chair: Prof. Torbjørn Digernes, Chair of the UNI-SET Steering Committee; former Rector, Norwegian University of Science and Technology
11.00-11.30	Coffee break
11.30-13.00	Plenary Session
	Research, Innovation and Education in Energy Efficiency and Nuclear Safety
	During the second plenary session, three keynote speakers will present main research and education challenges for universities in the fields of energy efficiency in buildings, energy efficiency in industry and nuclear safety.
	"Energy Efficiency in Buildings: perspectives, trends and challenges"
	—Prof. Marco Perino, Professor, Politecnico di Torino; Chair of the International Association of Building Physics (IABP)
	"Research, Innovation and Education for Energy Efficiency in Industry: Beyond Energy Bean Counting"
	—Prof. Michael Narodoslawsky, Deputy Head, Institute of Process and Particle Engineering, TU Graz; European Sustainable Energy Innovation Alliance (eseia); UNI- SET Steering Committee
	"Research and Education in the field of Nuclear Safety"
	— Dr Michael Bluck, Director, Centre for Nuclear Engineering, Imperial College London
	Chair: Dr Lidia Borrell-Damian, Director for Research & Innovation, EUA; UNI-SET Project Coordinator
13.00	Change of location (Move to 'Cittadella Politecnica')
13.00-14.00	Lunch

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14.00-15.30	Parallel sessions: Good practices in resear	rch, innovation and education
	1) Setting Energy Efficiency Benchmarks Universities	and Targets – the Contribution of
	Passive House POLITEHNICA	Prof. Vladimir Tanasiev, University Politehnica of Bucharest
	Energy efficiency indices for large building stocks	Mr Dario Cottafava, University of Turin
	Good practices in research, innovation and education - Setting Energy Efficiency Benchmarks and Target	Prof. Armin Hafner, Norwegian University of Science and Technology (NTNU)
	Chair: Prof. Paulien Herder, TU Delft, UNI- Rapporteur: Prof. Josep Bordonau, UPC Ba	-
	2) Living Labs and Smart Metering for In	creasing Energy Efficiency
	Social networking between the campus and the city	Dr Giacomo Pettenati, University of Turin
	Results achieved from work done in Technical University – Gabrovo in energy efficient systems	Prof. Svilen Rachev, Technical University of Gabrovo
	Decoupling human comfort from energy consumption	Prof. Dario Padovan, University of Turin
	Chair: Prof. Johan Driesen, KU Leuven; Edu Project Leader Rapporteur: Dr Justin Chiu, KTH Royal Inst	
	3) Sustainable and Energy Efficient Cam and Employees	puses – Involving students, Researchers
	Sustainable and energy efficient campus management – integration of education, research and participation	Ms Berit Edlich, Technical University of Dresden
	SoLaRS – Social sciences Laboratory for Research on Sustainable Energy	Mr Osman Arrobbio, University of Turin
	An interactive approach inside the university: how to feed sustainability on social networks and users' proposals	Mr Federico Dattila, University of Turin
	Chair: Prof. Mihaela Albu, MicroDERLab Ch UNI-SET Steering Committee Rapporteur: Dr Lidia Borrell-Damian, Direc	

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#### 4) Cooperation for Energy Efficiency – Universities, Public Bodies and Others

Lifelong learning in energy efficiency Prof. Eduard Minciuc, University field – cooperation between University Politehnica of Bucharest Politehnica of Bucharest and Romanian Regulatory Authority for Energy Integrated spatial and energy planning Mr Georg Neugebauer, University of - new approaches for energy strategy Natural Resources and Life Sciences, development Vienna **Cooperation of Georgian State** Dr Nino Chubinidze, Ivane Javakhishvili University and San Diego State **Tbilisi State University** University: New Opportunities for Academic Development and Internationalisation in STEM Chair: Dr John Smith, European University Association, UNI-SET Steering Committee Rapporteur: Dr Andrzej Adamski, Jagiellonian University 5) Multidisciplinary Research & Education for Energy Efficiency Prof. Michael Narodoslawsky, , TU Graz BioEnergyTrain Curricula BOKU Energy Cluster – Networking Prof. Gernot Stoeglehner, University of Energy Research capacities within Natural Resources and Life Sciences, **BOKU University** Vienna Chair: Prof. Marco Masoero, DENERG, Politecnico di Torino Rapporteur: Ms Borana Taraj, EUA 6) Multidisciplinary Research & Education for Nuclear Safety & Energy Securing the human component of Prof. Ionut Purica, Senior Researcher, nuclear safety Institute for Economic Forecasting, Romanian Academy; Executive Director, Advisory Centre for Energy and Environment Developing Synergies in Nuclear Safety Prof. Daniel Dupleac, University Politehnica of Bucharest Culture Chair: Prof. Massimo Zucchetti, Politecnico di Torino

Rapporteur: Mr Lennart Stoy, EUA

15.30-16.00 **Coffee break** 

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1 <b>6.00-17.30</b>	Clustering Sessions	
	1) Energy Efficiency in Buildings & Communities	
	ICT for Energy Efficient Buildings: an IoT perspective	Prof. Andrea Acquaviva, Politecnico di Torino
	Energy Efficiency in Buildings and Communities: Interaction between different energy sectors for active demand control	Prof. Birgitte Bak-Jensen, Aalborg University
	Energy Efficiency in Buildings and Communities: Interactions between users and buildings for comfort and energy savings	Prof. Stefano Corgnati, Politecnico di Torino; President, REHVA
	The culture of energy efficiency and the gaps in engineering knowledge	Prof. Knut Holtan Sørensen, Norwegian University of Science and Technology (NTNU)
	Chair: Prof. Giovanni Fracastoro, Professor Department, Politecnico di Torino; UNI-SE Rapporteur: Dr John Smith, EUA	
	2) Energy Efficiency in Industry	
	Energy Efficiency in Industry of Georgia: Energy Policy and Compliance with EU Directives in the Field of EE	Prof. Otar Zumburidze, Georgian Technical University
	Asja Group's approach to a green, energy-efficient future	Dr Stefano Re Fiorentin, Research and Innovation Officer, Asja Group
	Electrical Engineering @ POLITO	Prof. Maurizio Repetto, Politecnico di Torino
	Chair: Prof. Fabrice Lemoine, University of Rapporteur: Ms Borana Taraj, EUA	Lorraine, UNI-SET Steering Committee
	3) Nuclear Safety	
	Overview of EERA JPNM Generation IV - Materials and links to Universities	Dr Karl-Fredrik Nilsson, DG JRC "Nuclear Safety & Security"; Joint Programme Sub-Coordinator, European Energy Research Alliance (EERA)
	Improvement of PWR safety by means of improved controlling the fuel cladding fracture due to damage accumulation	Prof. Sergii Pelykh, Odessa National Polytechnic University
	Chair: Prof. Andreas Class, Institute for Nuc Institute of Technology Rapporteur: Mr Lennart Stoy, EUA	clear and Energy Technologies, Karlsruhe

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20.00-22.00	Dinner
	Palazzo Madama Piazza Castello 10122 Torino

Wednesday 28 September – Politecnico di Torino: Cittadella Politecnica (Via Pier Carlo Boggio, 71/A)

9.00-9.30	Short summary on the outcomes of first day parallel sessions
9.30-10.30	Outlook sessions "Topics of the future"
	a) Balancing Energy Efficient Systems and Renewable Energy Sources: Collaboration or Competition?
	—Mr Petter E. Røkke, Research Director, SINTEF Energy Research; Joint Programme Coordinator, European Energy Research Alliance (EERA)
	—Prof. Giovanni Fracastoro, Professor and Energy Manager, Energy Department, Politecnico di Torino; UNI-SET Steering Committee
	Chair: Prof. Torsten Fransson, Education Director, KIC InnoEnergy; UNI-SET Steering Committee Rapporteur: Ms Borana Taraj, EUA
	b) University Strategies for Research and Education in the Field of Energy – Green Campuses and Institutional Research Programmes
	— Prof. Patrizia Lombardi, Head of the Interuniversity Department of Urban and Regional Studies and Planning, Politecnico di Torino
	—Dr Eeva-Leena Rautama, Manager, Energy Efficiency Programme, Aalto University
	Chair: Prof. Mihaela Albu, MicroDERLab Chair, University Politehnica of Bucharest; UNI-SET Steering Committee
	<ul> <li>Rapporteur: Prof. Fabrice Lemoine, University of Lorraine</li> <li><i>Nuclear Safety Research and Education in Europe – What Role for European</i></li> </ul>
	Universities?
	—Prof. Walter Ambrosini, Educational Head at CIRTEN; University of Pisa
	—Prof. Andreas Class, Institute for Nuclear and Energy Technologies, Karlsruhe Institute of Technology
	Chair: Prof. Andrea Carpignano, Politecnico di Torino Rapporteur: Mr Lennart Stoy, EUA
10.30-11.00	Coffee break



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11.00-11.45	Plenary Session
	Short summary on the outcomes of the Parallel-Plenaries
	Chairs/Rapporteurs
	Discussion and validation of the Roadmap for Universities in Energy
	Prof. Torbjørn Digernes, Dr Lidia Borrell-Damian
11.45-13.00	Roundtable discussion
	"The future of Energy Research & Innovation in the Context of the Energy Union and SET-Plan"
	Opening presentation
	—Dr Philippe Tulkens, Deputy Head of Unit: 1. Strategy, Dir G — Energy, DG Research and Innovation, European Commission
	Panellists
	—Dr Michael Bluck, Director, Centre for Nuclear Engineering, Imperial College London
	—Dr Giovanni De Santi, Director for Competences, Joint Research Centre, European Commission
	—Prof. Torsten Fransson, Education Director, KIC InnoEnergy; UNI-SET Steering Committee
	—Dr Nicolas Katcharov, CEO, EDF Fenice
	—Mr Carlo Papa, Director, Enel Foundation & Strategic Studies Center
	—Dr Philippe Tulkens, Deputy Head of Unit: 1. Strategy, Dir G — Energy, DG Research and Innovation, European Commission
	Chair: Dr Lidia Borrell-Damian, Director for Research & Innovation, EUA; UNI-SET Project Coordinator
	Rapporteur: Ms Borana Taraj, EUA
13.00-13.15	Closing ceremony
	—Prof. Marco Gilli, Rector, Politecnico di Torino
	Announcement of the 3rd UNI-SET Energy Clustering Event in University Politehnica of Bucharest, Romania
	—Mihnea Costoiu, Rector, University Politehnica of Bucharest
13.15-13.45	Farewell lunch

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