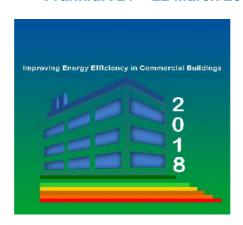
#### Frankfurt 21 - 22 March 2018



### Wednesday, 21 March

#### 09:00-11:00 Session 1.a Cities I

Chair:

Breakthrough Community Energy and Climate Planning in Canada – City of Windsor, Ontario (7)

**Peter Garforth,** Karina Richters, Gerd Fleischhammer, Oliver Baumann

Garforth International IIc, Toledo, Ohio (USA)

Implementation of Energy Strategies in Communities (28)

**Helmut Strasser** 

SIR – Salzburger Institut für Raumordnung und Wohnen (Austria)

Energy optimization on district level (49)

Oliver Ottinger, Jürgen Schnieders,

Harald Malzer, Laszlo Lepp

Passive House Institute (Germany)

Assessment of the Covenant of Mayors and Aggregate GHG Emission Reduction at 2050 (61)

Paolo Bertoldi

European Commission Joint Research Centre

#### Session 1.b Lighting 1

Chair:

Electric lighting predictions in the energy calculation methods (42)

**Francesco De Luca,** Raimo Simson and Jarek Kurnitski

Department of Civil Engineering and Architecture

Tallinn University of Technology (Estonia)

Minimizing energy consumption for artificial lighting in classroom aiming for a nZEB using LED luminaires and daylight harvesting: The potential of Greek classrooms (18)

**L.T. Doulos,** A. Kontadakis, A. Tsanarassoulis

University of Thessaly, Dept. of Architecture, Volos (Greece)

The impact of lighting systems on healthy, energy efficient and smart buildings (23)

Ourania Georgoutsakou

Annette Steinbusch, Axel Baschnagel

LightingEurope (Belgium)

EU Financed Life-Diademe Project: additional Energy Savings in street lighting by means of IoT Sensors (39)

**Di Lecce P.,** Mancinelli A., Trentini M., Rossi G., Frascarolo

Reverberi Enetec (Italy)

### Frankfurt 21 – 22 March 2018

11:00-11:30	Coffee Break			
11:30-13:00	Session 2.a Policies I	Session 2.b Building Technologies		
	Chair:	Chair:		
	National Energy Efficiency and Renewable Energy Action for Lebanon (14) Rami Fakhoury, Rani Al Achkar Lebanese Center for Energy Conservation (LCEC) (Lebanon)  The German Sustainable Building Council (DGNB) (26) Anna Braune Deutsche Gesellschaft für Nachhaltiges Bauen – DGNB e.V. (Germany)  A Database of Energy Use and potential Savings in European SMES (37) Neil Brown, Paul Fleming, Nicoletta Favaretto, Ahad Arshad Institute of Energy and Sustainable Development, De Montfort University (UK)	Technological quality in process innovation for energy-renewable buildings (36)  Consiglia Mocerino Faculty of Architecture, Sapienza University of Rome-Miur (Italy)  Building Integrated Photovoltaic Systems as a sustainable option for retrofitting of office buildings in South East Europe (40)  Anna Serasidou, Georgios Martinopoulos School of Science and Technology, International Hellenic University (Greece)		
13:00-14:00 Lunch Break				

#### Frankfurt 21 - 22 March 2018

14:00-15:30	Session 3.a Building Example	s I
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Chair:

Technical and Business Models for Deep Energy Retrofit of Public Buildings-Findings of EBC Annex 61 (21) Rüdiger Lohse, Alexander Zhivov KEA Climate Protection and Energy Agency Baden-Württemberg GmbH (Germany)

Energy Management and Performance of a Renewable Energy System in a Rural Hotel (25) Teodor Pulido, Joan Carles Bruno

Universitat de Girona, Mechanical Engineering & Industrial Construction Department (Spain)

2D Numerical Investigation of Flow Controlling Plates on Gable Roof Geometry Cross-sections for Fresh Breeze to Violent Storm Wind Speed Classifications (58)

Kasra Amini, Seyed Mehdi Mortazavi Institute of Combustion Engines (Germany) Session 3.b Behaviour, Audits & Commissioning

Chair:

COPILOT supervised commissioning of commercial buildings – from pre-design to post-delivery (8)

Cormac Ryan

COPILOT Building Commissioning Solutions (France)

GREPCon: an independent and standardized assessment of energy efficiency building renovations in the tertiary sector (41)

Paolo M. Sonvilla, Pedro L. Espejo,
Javier Lemus, Theocharis Tsousos

Creara Consultores (Spain)

Challenges and opportunities for widening participation in order to improve energy efficiency in commercial buildings (3)

Richard Bull, Kathryn B. Janda

Institute of Energy and Sustainable Development (IESD) (UK)

### 15:30-16:00 Coffee Break

#### Frankfurt 21 - 22 March 2018

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#### Session 4a ESCO I

Chair:

Approach and decision process for sustainable retrofitting of public and commercial buildings (59)

Enrique Grosser, Kinga Horváth
EnergoSys Inc (Hungary)

Asset Class Energy Efficiency (20) **Rüdiger Lohse,** Diana Wang, Kai Schinck

KEA (Germany)

The Role of Cloud Based Services in Energy Performance Contracts (22) Joan Vidal

European Energy Solutions Development Leader

Honeywell Building Solutions (Spain)

Development of quality assessment schemes for energy efficiency services (27) **Daniela Bachner, Geert Goorden** e7 Energie Markt Analyse GmbH (Austria) Session 4.b Building Automation, ICT, Control

Chair:

Buildings which can speak to us and thinks and shares their data (10) Soner Hacıhaliloglu BEAD – Building Energy Analysis Device (Turkey)

Well Being & Sustainability: Focusing on Buildings beyond Energy Efficiency (56) Gayathri Unnikrishnan International WELL Building Institute (USA)

Barriers to implementing an ICT-based behaviour change programme in commercial buildings (2)

Ashley Morton, Andrew Reeves, Richard Bull Institute of Energy and Sustainable Development (IESD) (UK)

Smart Services in Buildings: An early insight into business models based on IoT, sensors and actuators (51)

Detlef Olschewski, Gary Fragidis
Cleopa GmbH (Germany)

#### Frankfurt 21 - 22 March 2018

Thursd	lay, 22	March
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#### 09:00-11:00 Session 5.a HVAC & Windows

#### Chair:

Simulation and Evaluation of HVAC and Renewable based Scenarios for Building and District Renovations (6)

Luciano De Tommasi, Diana Manjarres Martinez, Nekane Hermoso Matrinez, Xabat Oregi Isasa, Hassan Ridouane, Lara Mabe Gomez

United Technologies Research Centre (Ireland)

Control and monitoring solutions for HVAC systems with implementation of machine learning techniques for energy saving: a real case (15)

Fabio Ferrari, Simone Stancari, **Andrea Pagan** 

Energy Way SRL (Italy)

Imaf Project: Natural ventilation using intelligent window systems with innovative acoustic optimisations (35)

**Erhart T.,** Lust D., Offtermatt D., Reinhold S., Zeitler B., Eicker U., Cremers J

Centre for Sustainable Energy Technology Research (zafh.net) (Germany)

Window films (54) **Stéphanie Priou** EWFA (European Window Film

EWFA (European Window Fili Association) (Belgium)

#### Session 5.b Monitoring

#### Chair:

Bridging the Gap between System Operation Data and Actual Energy Performance (17) Johannes Bracke, Ben Burgoyne, Lutz Miersch

BAUMANN Consulting (Germany)

The surprising results of three years monitoring of a Community Centre in London refurbished to the full Passive House standard (47)

Bere Justin

Bere: architects (UK)

Addressing the gap between calculated and actual energy performance in deep renovations (48)

Robert Cohen, Greg Waring Verco Advisory Services (UK)

Energy consumption monitoring and building performances in a commercial building – Case study (11)

Elena Camelia Tamas

Technical University of Civil Engineering Faculty of Building Services (Romania)

#### 11:00-11:30 Coffee break

### Frankfurt 21 - 22 March 2018

11:30-13:00	Session 6.a Policies II	Session 6.b Lighting II
	Chair:	Chair:
	Energy Efficiency Indicator Study (34)  Renee Clair  Global Energy & Sustainability  Johnson Controls (USA)	Daylight-linked control systems: a new method to assess their performances (1)  Laura Bellia, Francesca Fragliasso  DII - Università di Napoli Federico II (Italy)
	BACS in the new Energy Performance of Buildings Directive: paving the way for efficient, smart and healthy buildings (45) Peter Hug, Simone Alessandri European Building Automation and Controls Association (eu.bac) (Belgium)	PremiumLight_Pro – Next level energy efficient lighting systems in the service sector (52) Christof Horvath, Bernd Schäppi Austrian Energy Agency (Austria)  Financing models for energy-efficient urban street lighting (53)  Aleksandra Novikova , Matthias Hessling, Kateryna Stelmakh Ernst-Moritz-Arndt-Universität Greifswald / Institute for Climate Protection, Energy and Mobility (IKEM) (Germany)
13:00-14:00	Lunch break	

#### Frankfurt 21 - 22 March 2018

Chair:

4:00-15:30 Session 7.a Building Examples II	Session 7.b Demand Response
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Chair:

Koksijde: environmental Flagship (24) Camille Chapalain, Jan Geeraerts CARREFOUR BELGIUM (Belgium)

Energy saving in large-scale commercial activities through a plant supervised management (33)

Guido Francesco Fratea, **Lorenzo Ferrari**, Umberto Desideria, Nicola Bosib, Francesco Sorbib, Pietro Saloi

Department of Energy, Systems, Territory and Construction Engineering (DESTEC) University of Pisa (Italy)

Retroffiting supermarkets towards CO2 emission reduction (46) Javier Llorente Yoldi, Sergio Díaz Garayo CENER, National Renewable Energies Centre (Spain) Demand side management potentials in the services sector – empirical study on 4

European countries (4)

**Ulrich Reiter,** Robin Peter, Katharina Wohlfarth, Martin Jakob

TEP Energy GmbH (Switzerland)

Day-ahead multi-objective energy optimization of a smart building in a dynamic pricing scenario (55)

M.Botticelli, G.Comodi, A.Monteriù, A. Pallante, **S.Pizzuti** 

Energy, New Technologies and Sustainable Economic Development Agency (ENEA) (Italy)

Cost-curves for heating and cooling demand reduction in services sector buildings (16)

Ulrich Reiter, Andrea Palacios,
Giacomo Catenazzi, Martin Jakob

TEP Energy GmbH (Switzerland)

15:30-16:00 Coffee break

### Frankfurt 21 - 22 March 2018

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16:00-18:00	Chair:  The new Eurostat Guidance Note on the recording of EPC in Government Accounts: a real game changer (44) Christian Spengler, Simone Alessandri European Building Automation and Controls Association (eu.bac) (Belgium)  RenoWatt, a one-stop-shop for public authorities (5) Erika Honnay GRE-Liege (Belgium)  From ESCO to RESCO: How to transform an Energy Servicing Company (ESCO) into a Resource Efficiency Servicing Company (RESCO). Chances and challenges for new business models (50) Martina Occelli	Chair:  Buildings efficiency models and the optimization of the district heating network for low-carbon transitions cities (60)  Elisa Guelpaa, Guglielmina Mutania, Valeria Todeschia, Vittorio Verdaa  Politecnico di Torino, Department of Energy (Italy)  The Cassandra Project_First smart city from scratch in Spain (43)  Marciano Sánchez Cabanillas, Alfredo L.  Peña, Sergey Tsakunov  THE CASSANDRA PROJECT (Spain)  Living in a smart building (31)  Ines Clarissa Weigl, Andreas Schuster  Aspern Smart City Research (Austria)  Automated energy concept derivation from 3D urban district modelling (32)	
	new business models (50)	Automated energy concept derivation from 3D urban district modelling (32)  Sally Kohler, Jonas Stave, Verena Weiler, Maximilian Haag, Ursula Eicker  Zentrum für Nachhaltige Energietechnologie - zafh.net (Germany)	
18:00	End of conference		