

# Behave 2018



The 5th European Conference on Behaviour and Energy Efficiency

5<sup>th</sup> – 7<sup>th</sup> September 2018  
Zurich, Switzerland

## Conference Schedule



Supported by

saguf 



Host

Zurich University  
of Applied Sciences

**zh  
aw**

## General information

Behave aims to bring together researchers, policy makers and practitioners to discuss problems and measures in the field of behaviours related to end-use energy efficiency and sufficiency and the adoption of low-carbon technologies. As such, it will focus on various fields of research, innovation and knowledge transfer.

Behave aims to facilitate the exchange of knowledge on sustainable energy behaviour in transport, buildings and consumption of goods as well as the individual and social acceptance of sustainable technologies (e.g. renewables). In particular, the conference will act as a platform to share multi-disciplinary research on new technological developments and best practices concerning understanding and influencing energy-related behaviours. Therefore, contributions to Behave 2018 will provide theoretical knowledge, evidence-based research and methods, as well as innovative practices related to fostering sustainable energy-behaviour. These may focus on either macro- (countries, regions, cities), meso- (organisations, districts, communities) or micro-levels (individuals, buildings).

Conference topics are:

- / Behaviour integration into smart grid, energy and transportation modelling
- / Demand-side information and management in smart energy and transport systems
- / Digitalisation, ICT, automation, and behaviour
- / Discourse by and among different actors, such as authorities, consumers, media, intermediaries and stakeholders, and related communication strategies
- / Acceptance and use of renewable energies, load shifting and low carbon technologies
- / Determinants of behaviour change, consumer segmentation and tailoring, user engagement
- / Inter- and transdisciplinary approaches to energy and mobility behaviours
- / Psychological and communicative prerequisites of policy change, social and technological innovations
- / Energy poverty and vulnerable consumers
- / Business models, norms, standards and strategies in determining decisions in the industries
- / Policies, innovation initiatives, living labs, interventions, social practices, case and real world studies and their evaluation
- / Methodological approaches for investigating energy-related behaviour

The conference features pre-conference workshops, panel discussions, special sessions and panel sessions.

- / Pre-conference workshops are special sessions for a specific audience on the day before the main conference.
- / Panel discussions are discussions among experts in a specific field who have accepted the invitation to participate.
- / Special sessions present series of papers and/or panel discussions with a specific focus with experts in a specific field who have accepted the invitation to participate.
- / Panel sessions consist of paper presentations followed by questions and discussions.

**The online registration deadline for day visitors to the conference is 31 August, 2018. Starting from 1 September, 2018, registration is only possible on-site.**

If you arrive on 7 September, please take the opportunity to register early to avoid unnecessary queues on the morning of the following day, when the actual conference starts.

Overview of pre-conference workshops .....	4
Short descriptions of pre-conference workshops .....	5
Session overview .....	8
Information on keynote speakers .....	10
Detailed session plan .....	11
Parallel sessions A .....	11
A1. EnR panel discussion "Energy agencies supporting households and communities through the energy transition with a particular focus on behaviour change and advice services" .....	11
A2. Building-related investment decisions I .....	11
A3. Household I .....	12
A4. Feedback I .....	12
A5. Demand response and load management I .....	13
A6. Triggering sustainable consumption behaviour .....	13
Parallel sessions B .....	14
B1. Innovative technologies .....	14
B2. Building-related investment decisions II .....	14
B3. Household II .....	14
B4. Feedback II .....	15
B5. Demand response and load management II .....	15
B6. Special session: Consumer judgement and decision making regarding energy-efficiency and sustainable behaviour .....	16
Parallel sessions C .....	16
C1. Digitalisation of energy use .....	16
C2. Building-related investment decisions III .....	17
C3. Household III .....	17
C4. Gamification and ICT .....	18
C5. Special session: Demand-side management (DSM) and information (DSI) to reduce energy consumption: Recent developments .....	18
C6. Use of technology .....	19
Parallel sessions D .....	19
D1. Special session: Behavioural economics .....	19
D2. Communication, acceptance and adoption .....	19
D3. Special session: Who are the most important stakeholders in a community striving for sustainable energy? .....	20
D4. Transportation .....	20
D5. Special session: Social science input on energy transitions: Making social science policy relevant – Insights from the ECHOES project .....	21
D6. Addressing energy poverty .....	21
Parallel sessions E .....	22
E1. Behaviour modelling .....	22
E2. Acceptance and adoption of technology I .....	22
E3. Household IV .....	23
E4. End-user behaviour in schools and offices .....	23
E5. Policy implementation and evaluation I .....	24
E6. Special session: Understanding and fostering citizens' energy-saving behaviour through collaboration between science and cities .....	24
Parallel sessions F .....	25
F1. Special session: Modelling behaviour – behavioural models: How to integrate human behaviour into energy models? ..	25
F2. Acceptance and adoption of Technology II .....	25
F4. Special session: Advancing the 'middle-out' perspective: Fostering the role of middle actors in energy system transformation .....	26
F5. Policy implementation and evaluation II .....	26
F6. Development of markets and innovation .....	27
Presentation guidelines .....	28
Session chairs .....	28

## Overview of pre-conference workshops

### Wednesday, 5<sup>th</sup> September 2018 Pre-conference workshops

**If you arrive on 7 September, please take the opportunity to register early, to avoid unnecessary queues on the morning of the following day. Registration hours and points:**

08:00 - 09:00 and 12:00 - 13:00: Floor 3 Entrance/Exit, in front of Pre-Conference Workshop 2  
09:00 - 12:00 and 13:00 - 18:00: Floor 6 Main Conference Area, Office

08:00 - 09:00	Registration (Floor 3: Entrance/Exit, in front of Pre-Conference Workshop 2)		
09:00 - 12:00			
10:00 - 10:30 Coffee break (see site plan)	<i>Room: Pre-conference workshop 1</i>	<i>Room: Pre-conference workshop 2</i>	
10:30 - 12:00	Delivering a more efficient energy system through energy communities – The REScoop <sup>1</sup> PLUS toolkit	MOBISTYLE <sup>2</sup> and H2020 <sup>3</sup> sister projects: Behavioural change toward energy efficiency through ICT	<i>Room: Pre-conference workshop 3</i> Will peer-to-peer energy trading deliver genuine social benefits in tomorrow's electricity systems? (PACE <sup>4</sup> )
12:00 - 13:00	Lunch break (more details in the conference folder) Registration (Floor 3: Entrance/Exit, in front of Pre-Conference Workshop 2)		
13:00 - 17:00			
15:00 - 15:30 Coffee break (see site plan)	<i>Room: Pre-conference workshop 1</i>	<i>Room: Pre-conference workshop 2</i>	<i>Room: Pre-conference workshop 3</i>
	Acceptance research for the energy transition (SAGUF <sup>5</sup> Annual Conference, conference language: German)	IEA DSM <sup>6</sup> Tasks 24 – What seven years of a global behaviour change research programme has taught us about evaluating impacts	The Horizon2020 project CHEETAH <sup>7</sup> . Household energy efficiency adoption behaviour: Integrating findings from choice experiments into energy models
17:00 - 20:00	Welcome Drinks sponsored by SAGUF, SAEE and ZHAW, Bar Mehrspur (All participants of the pre-conference workshops are invited to come)		

<sup>1</sup> Federation of Groups of Citizens for Renewable Energy in Europe

<sup>2</sup> MOBISTYLE Energy Health Indoor Environment

<sup>3</sup> Horizon 2020

<sup>4</sup> PACE Research Group: People, Adaptability, Comfort and smart Energy

<sup>5</sup> Swiss Academic Society for Environmental Research and Ecology

<sup>6</sup> International Energy Agency Demand Side Management

<sup>7</sup> Changing Energy Efficacy Technology Adoption in Households – A Horizon 2020 Research Project

## Short descriptions of pre-conference workshops

### Delivering a more efficient energy system through energy communities - The REScoop PLUS toolkit

**Wednesday, 5<sup>th</sup> September 2018, 9:00-12:00**

Members are reducing their energy consumption upon joining a REScoop. This conclusion was reached by several European REScoops (Renewable Energy Cooperatives), also known as 'energy communities'. The REScoop PLUS Project verified this assumption, and aimed to better understand why participating in a REScoop fosters this behavioural change.

The project identifies and measures best practices, improve activities to engage citizens in energy efficiency actions. We will present the scientific evidence to support the role of energy communities to encourage efficient behaviour change. Finally, we will bring together energy efficiency experts from the REScoops to explain the tools they put in place.

To know more: [www.rescoop-ee.eu](http://www.rescoop-ee.eu)



### MOBISTYLE and H2020 sister projects: Behavioural change toward energy efficiency through ICT

**Wednesday, 5<sup>th</sup> September 2018, 9:00-12:00**

Under the H2020 funding schemes, EU is supporting projects with the common objective of demonstrating that ICT-based solutions can contribute to saving energy by motivating and supporting behavioural change of energy end-users.

Through facilitating open discussions, the workshop will adopt a user-centric approach to exchange ideas, share the projects' lessons learned so far, brainstorm on current and future challenges in the area of ICT solutions encouraging behaviour change, and document actionable new ideas that could help improve the projects' progress and maximise the European replication impacts.

Interested in knowing more? Join this half-day session and check on our website: [www.mobistyle-project.eu](http://www.mobistyle-project.eu)

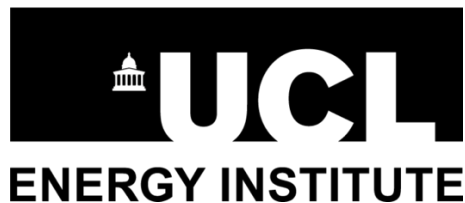


## Will peer-to-peer energy trading deliver genuine social benefits in tomorrow's electricity systems?

**Wednesday, 5<sup>th</sup> September 2018, 10:30-12:00**

Peer-to-peer electricity trading presents opportunities for positive social impacts. For example, community schemes could facilitate wider inclusion in community renewable energy projects, with potential for energy donation to support fuel-poor neighbours and greater retention of money in the community. However, such benefits will only be realised if factors such as market design and regulation, participation and ownership align to enable them. This panel discussion will highlight the potential social benefits that peer-to-peer trading could bring and identify the main challenges and trade-offs that will be faced in making them reality. It will also present an opportunity to point out risks of unintended consequences and how these could be mitigated. The panellists will be Sarah Darby (U. of Oxford, UK), Noam Bergman (U. of Sussex, UK), Angelo Facchini (IMT, Italy), Yael Parag (IDC, Israel) and Daphne Geelen (Enexis, Netherlands). There will be plenty of opportunity for audience discussion.

For more information on the organisers, UCL Energy Institute PACE Group, see [www.ucl.ac.uk/bartlett/energy/PACE](http://www.ucl.ac.uk/bartlett/energy/PACE)



## Acceptance Research for the Energy Transition (SAGUF Annual Conference 2018 in Zurich)

**Wednesday, 5<sup>th</sup> September 2018, 13:00-17:00 (conference language: German)**

The SAGUF Pre-Conference focuses on the interface between practice and science. The central research question is: Which findings of acceptance research support a transformation towards a sustainable energy future? Acceptance is an important focus of social science energy research. Since 2013, SAGUF's working group on the future of energy has focused on the topic of the social acceptance of renewable energies, their infrastructure and the associated energy systems. In this event, thematic input from international speakers will be followed by a World Café with discussions on the presented topics. A Networking-Aperitif will close the day.

More information on the SAGUF Annual Conference 2018: <https://naturalsciences.ch/organisations/saguf/101309-saguf-jahrestagung-2018-akzeptanzforschung-fur-die-energiewende>



## **IEA DSM Task 24 - What 7 years of a global behaviour change research programme taught us about evaluating impacts**

**Wednesday, 5<sup>th</sup> September 2018, 13:00-17:00**

IEA DSM Task 24, initiated in 2012, is the first global research collaboration focusing on behaviour change in DSM. It aims to provide an overview of the wider systemic issues and to develop hands-on solutions on how to solve them collaboratively. Sometimes the hardest part of a behaviour change programme is verifying savings and getting credit for them. Come and hear what we have learned from project researchers, practitioners, and international best practice and share your own insights and ideas as we tackle the last frontier of behaviour - proving that what we're doing makes a difference.

For more information see: [www.ieadsm.org/task/task-24-phase-2/](http://www.ieadsm.org/task/task-24-phase-2/)



## **The Horizon2020 project CHEETAH. Household Energy Efficiency Adoption Behaviour: Integrating Findings from Choice Experiments into Energy Models**

**Wednesday, 5<sup>th</sup> September 2018, 13:00-17:00**

This workshop will present findings from a series of representative choice experiments in eight EU countries regarding household energy efficiency investment decisions and discuss their integration in various energy demand models. Incorporating insights from social science theories of decision-making, behaviour and diffusion, and accounting for individual preferences for technology characteristics, responses to policies, individual attitudes and household characteristics in this way, is expected to improve the modelling of technology adoption (appliances, smart thermostats, heating systems, insulation) and of the policy effects (labels, rebates, bonus-malus incentives).

For more information see: [www.briskee-cheetah.eu/cheetah/](http://www.briskee-cheetah.eu/cheetah/)

# **CHEETAH**

## Session overview

### Thursday, 6<sup>th</sup> September 2018 Main Conference Day 1

Upon request, rooms for network meetings can be provided by the organisers of the conference.

07:30 - 08:30	Registration (Floor 7, in front of Keynote Speeches «Konzertsaal 3»)					
08:30 - 10:00	<p><i>Room: Konzertsaal 3</i></p> <p><b>Welcome address by</b>            Professor Jean-Marc Piveteau, President of the ZHAW            Suzana Atanasoski, Head of Euresearch Office Zurich UAS            Professor Markus Hackenfors, Chair of the Organising Committee of Behave 2018            Raphael Zürcher, Deputy Head of SwissEnergy Office on behalf of the European Energy Network</p> <p><b>Keynote speech by</b>            Professor Benjamin Sovacool, University of Sussex</p>					
10:00 - 10:30	Coffee break (see site plan)					
10:30 - 12:30	<i>Room: Session 1</i>  A1. European Energy Network panel discussion	<i>Room: Session 2</i>  A2. Building-related investment decisions I	<i>Room: Session 3</i>  A3. Household I	<i>Room: Session 4</i>  A4. Feedback I	<i>Room: Session 5</i>  A5. Demand response and load management I	<i>Room: Session 6</i>  A6. Triggering sustainable consumption behaviour
12:30 - 14:00	Lunch break @ Tanzwerk 101 (more details in the conference folder)					
14:00 - 16:00	<i>Room: Session 1</i>  B1. Innovative technologies	<i>Room: Session 2</i>  B2. Building-related investment decisions II	<i>Room: Session 3</i>  B3. Household II	<i>Room: Session 4</i>  B4. Feedback II	<i>Room: Session 5</i>  B5. Demand response and load management II	<i>Room: Session 6</i>  B6. Special session: Consumer judgment and decision making
16:00 - 16:30	Coffee break (see site plan)					
16:30 - 18:30	<i>Room: Session 1</i>  C1. Digitalisation of energy use	<i>Room: Session 2</i>  C2. Building-related investment decisions III	<i>Room: Session 3</i>  C3. Household III	<i>Room: Session 4</i>  C4. Gamification and ICT	<i>Room: Session 5</i>  C5. Special session: Demand-side management and information	<i>Room: Session 6</i>  C6. Use of technology
18:30 - 20:00						
20:00 - 23:00	Social event and dinner at Die Waid (more details in the conference folder)					



## Friday, 7<sup>th</sup> September 2018

### Main Conference Day 2

Upon request, rooms for network meetings can be provided by the organisers of the conference.

07:30 - 08:30	Registration (Floor 7, in front of Keynote Speeches «Konzertsaal 3»)					
08:30 - 10:00	<i>Room: Konzertsaal 3</i> <b>Keynote speech by</b> Marianne Zünd, Swiss Federal Office of Energy (SFOE) Marilyn Mehlmann, Co-founder of Legacy17					
10:00 - 10:30	Coffee break (see site plan)					
10:30 - 12:30	<i>Room: Session</i>  D1. Special session: Behavioural economics	<i>Room: Session 2</i>  D2. Communication, acceptance and adoption	<i>Room: Session 3</i>  D3. Special session: Who are the most important stakeholders?	<i>Room: Session 4</i>  D4. Transportation	<i>Room: Session 5</i>  D5. Special session: Social science input on energy transition	<i>Room: Session 6</i>  D6. Addressing energy poverty
12:30 - 14:00	Lunchtime break @ Tanzwerk 101 (more details in the conference folder)					
14:00 - 16:00	<i>Room: Session 1</i>  E1. Behaviour modelling	<i>Room: Session 2</i>  E2. Acceptance and adoption of technology I	<i>Room: Session 3</i>  E3. Household IV	<i>Room: Session 4</i>  E4. End-user behaviour in schools and offices	<i>Room: Session 5</i>  E5. Policy implementation and evaluation I	<i>Room: Session 6</i>  E6. Special session: Understanding and fostering citizens' energy-saving behaviour
16:00 - 16:30	Coffee break (see site plan)					
16:30 - 18:30	<i>Room: Session 1</i>  F1. Special session: Modelling behaviour	<i>Room: Session 2</i>  F2. Acceptance and adoption of technology II		<i>Room: Session 4</i>  F4. Special session: Advancing the 'middle-out' perspective	<i>Room: Session 5</i>  F5. Policy implementation and evaluation II	<i>Room: Session 6</i>  F6. Development of markets and innovation

## Information on keynote speakers

### Professor Benjamin K. Sovacool University of Sussex



Benjamin Sovacool is Professor of Energy Policy at the University of Sussex in the United Kingdom. Here, he serves as Director of the Sussex Energy Group and Director of the Center on Innovation and Energy Demand which involves the University of Oxford and University of Manchester. Professor Sovacool works as a researcher and consultant on issues pertaining to energy policy, energy security, climate change mitigation, and climate change adaptation. More specifically, his research focuses on renewable energy and energy efficiency, the politics of large-scale energy infrastructure, designing public policy to improve energy security and access to electricity, and building adaptive capacity to the consequences of climate change.

### Marianne Zünd Swiss Federal Office of Energy (SFOE)



Marianne Zünd is a member of the management board of the Swiss Federal Office of Energy SFOE. Here, she heads the media & politics division, and acts as chief communication officer. Prior to this assignment, she worked at the Swiss Nuclear Safety Inspectorate ENSI as a manager of Swiss bilateral technical cooperation projects in the field of nuclear safety and of ENSI's regulatory nuclear safety research programme. Before that, she was a senior consultant at Amstein + Walthert AG Consulting in Zurich where she established a corporate R&D program and was mandated as deputy managing director of Novatlantis at ETH Zurich. Marianne holds a MSc in Plant Physiology from the University of Bern, a Postgraduate Diploma in Research and Higher Education Policy from the Federal Institute of Technology in Lausanne (EPFL) and is fluent in German, English and French.

### Marilyn Mehlmann Co-founder of Legacy17



A founder member of Legacy17, an international not-for-profit cooperative of leading-edge consultants, practitioners and educators focused on supporting the realisation of the UN's 17 Sustainable Development Goals. The concept is to curate and make accessible the most effective and appropriate methods and tools for significantly improved impact and scale. Ms Mehlmann has worked in more than 20 countries over several decades. She combines a background in psychosynthesis, empowerment, education, and action research to co-create new methods and tools for community, personal, and professional development, with particular focus on behaviour and lifestyle. Awarded the *Rachel Carson Prize* 2011– 2012.

## Detailed session plan

### Parallel sessions A

**A1. EnR panel discussion “Energy agencies supporting households and communities through the energy transition with a particular focus on behaviour change and advice services”, Thursday 10:30-12:30, 6 September 2018, room: Session 1**

*Chair: ROD JANSSEN*

The session includes 5 interventions from EnR member agencies followed by a moderated panel discussion among panelists and the audience. The session will be chaired by Rod Janssen of Energy Advice Exchange.

ADEME experience of PRIS one stop energy advice services - How are advice services financed? Who pays with pressure on public budgets? – SOLANGE MARTIN (ADEME, France)

Lessons Learned from the Development and Implementation of an On- and Offline Energy-Saving Campaign for Young Adults and Teenagers in Austria – KERSTIN SCHILCHER (Austrian Energy Agency, Austria)

Consumers and communities active in energy experiments and pilots – change in the focus of advice format and delivery – IRMELI MIKKONEN (Motiva, Finland)

Accelerating energy efficiency in the residential sector: The new national campaign "Certificar é Valorizar" – Bringing value through certification – RUI FRAGOSO (ADENE, Portugal)

PrioritEE – changing behaviour for increased energy efficiency in public buildings: guidance and toolbox of good practices – ELENA TAXER (CRES, Greece)

**A2. Building-related investment decisions I, Thursday 10:30-12:30, 6 September 2018, room: Session 2**

*Chair: YEKATHERINA BOBROVA*

What Deters Small Private Landlords from making Energy Efficiency Investments? A Mixed Method Approach Applied to a Depressed Neighbourhood in Germany – STEVEN MÄRZ

Understanding Homeowners' Renovation Decisions Resulting in Low Carbon Retrofit – YEKATHERINA BOBROVA, LAI FONG CHIU, GEORGE PAPACHRISTOS

Energy Efficient Refurbishment within Homeowner Associations: A Guide for Procedural Fairness – THOMAS BÄUMER, STEPHANIE HUBER, ANTJE BRETZMANN, DANIELA WOLF

Energy Efficient Retrofits in Germany - Tenants' Heating Consumption and Resulting Cost Burden – INES WEBER, ANNA WOLFF, JULIA MITTERMÜLLER

Are Energy Decisions about Energy? – WENDY BROERS, RENÉ KEMP, VERONIQUE VASSEUR, NURHAN ABUJIDI, ZEGER VROON

**A3. Household I, Thursday 10:30-12:30, 6 September 2018, room: Session 3**

*Chair: ANN-KATHRIN HESS*

Enable Consumers to Learn about, Engage with and Adopt Renewable Energy Technologies: Learning from the Clear Project – SUZANNE DAUTZENBERG, G. CAROLI, S. GYSEN, M. LINARD, I. OLIVEIRA, S. CASIRAGHI, C. CRESPO, P. VAN DER WILT, A. KLAG

Public Energy Advising in the Internet Age - Challenges and Opportunities on the Road to More Energy Efficiency – ARE E. KJEANG, JENNY PALM, G. VENKATESH, M. STÄHL

The Effect of Personal Energy Advice on Households' Energy Use: a Randomized Controlled Field Experiment – ANN-KATHRIN HESS, ILJANA SCHUBERT

Empower the Consumer! Energy-Related Financial Literacy and its Role for the Decision-Making Process in Households – NINA BOOGEN, JULIA BLASCH, CLAUDIO DAMINATO, MASSIMO FILIPPINI

Sustainable Grassroots Innovations as Opportunities to Foster Sufficient Lifestyles – STEPHANIE MOSER, STEPHAN SCHMIDT, CHRISTOPH BADER, VERENA MACK, MATTHIAS HOLENSTEIN

**A4. Feedback I, Thursday 10:30-12:30, 6 September 2018, room: Session 4**

*Chair: DAN PODJED*

Changing Energy-Related End User Behaviour by Dynamic, Personalized Visualization of Consumption Data – MARK BLUMENKRANZ, BABETTE PEULICKE SLOTT

Impacts of Digital Feedback on the Precursors of Behaviour Change: Findings from a Large Experimental Field Study – MARTIN PULLINGER, LYNDIA WEBB, JANETTE WEBB

Stimulating Energy-Saving Behaviour Through Eco-Feedback, Adaptive Gamification and Personalized Recommendations – JASMINKO NOVAK, MARK MELENHORST, ISABEL MICHEEL, PIERO FRATERNALI, CHIARA PASINI, SERGIO HERRERA, BALAZS HIDASI

Interdisciplinary People-Centred Approaches to Understanding and Improving Energy Information Systems in Public Buildings – SARA ARKO, GREGOR CERINŠEK, DAN PODJED, AJDA PRETNAR, JURE VETRŠEK

One for All? - The Impact of Different Types of Energy Feedback and Goal Setting on Individuals' Motivation to Conserve Energy – JEROEN SEBASTIAAN BRANDSMA, JULIA BLASCH

Metaphorical Visualizations of Energy Saving Impact for Behavioural Change: A Goal-Framing Approach and Results from an Online Crowd Evaluation – MARK MELENHORST, KSENIA KOROLEVA, JASMINKO NOVAK, ISABEL MICHEEL

**A5. Demand response and load management I, Thursday 10:30-12:30, 6 September 2018, room:  
Session 5**

*Chair: MÁTÉ JÁNOS LÖRINCZ*

Residential Demand Response in the Long Run: Assessing the Effects of a Time-Of-Use Power Tariff 20 Years After Implementing It – CAJSA BARTUSCH, BRITT T. STIKVOORT

The Effect of Working Status in Structuring Peak Electricity Demand – MÁTÉ JÁNOS LÖRINCZ, JACOPO TORRITI, TIMUR YUNUSOV

Energy Actors' Views on Demand Response from Heat Pumps – MARIA HÅKANSSON

A Multidisciplinary Approach to Assess End-Users' Preferences and Quantify Electricity Demand Flexibility – MARTA LOPES, CAROLA HENGgeler ANTUNES, INES LIMA REIS, ANTÓNIO G. MARTINS

Lessons Learned about User Engagement for Demand Response – DAPHNE V. GEELEN

**A6. Triggering sustainable consumption behaviour, Thursday 10:30-12:30, 6 September 2018, room:  
Session 6**

*Chair: JANA PLANANSKA*

The Effect of Messages on the Intention to Buy Environmental Products: An Experimental Study – KAORI ANDO, JUNKICHI SUGIURA, SUSUMU OHNUMA, NAHOKO ADACHI

How to Motivate People to Eat More Environmental Friendly? An Intervention Study That Investigates Also on Unconscious Processes – MARIA HÖGGER, CATHÉRINE HARTMANN, MARKUS HACKENFORT

Reducing Single-Use Waste: Determinant Factors for the Use of Reusable Dishes on a University Campus – FLAVIA GOSTELI, CATHÉRINE HARTMANN, MARKUS HACKENFORT

Feeling Green: Decision Modes Promoting Environmentally-Friendly Consumer Utility Choices – KAROLINE GAMMA, CRYSTAL REECK, ELKE U. WEBER

Energy Efficiency of Refrigerators in Germany – The Role of Purchase Behaviour – LENA THOLEN, JOHANNES FEHR, CLAUS BARTHEL, THOMAS BOGNER, GUNNAR WILL, ANTON BARCKHAUSEN

Tailoring Climate Change Communication to Female Target Groups - An Experimental Analysis of Voting and Consumer Behaviour in Switzerland – JANA PLANANSKA

## Parallel sessions B

### **B1. Innovative technologies, Thursday 14:00-16:00, 6 September 2018, room: Session 1**

*Chair: SPYRDION KARYTSAS*

'The Third Success Factor': Understanding (Non)Constructive Behaviour and (Non)Helpful Organizational Processes of Renovation Projects in the Built Environment That Have Highly Ambitious Energy Goals (3SFO) – MARGRIET VAN LIDTH DE JEUDE

Actor-Related Factors of Influence on Planning and Implementation of Energy Efficient Cold Supply Systems – DOROTHEE KEPPLER

Consumers' Behaviour Towards Thermal Energy Systems Adoption: Findings from the TESSe2b European Project – SPYRIDON KARYTSAS, OLYMPIA POLYZOU, CONSTANTINE KARYTSAS

A Bottom-Up Approach for System Integration of Energy Infrastructures to Support Energy Flexibility – WIM ZEILER, TIMI LABEODAN, KENNEDY ADUDA

Potential of Internet of Things to Act as Enabler for Reducing Energy Consumption & CO2 Emissions in Switzerland – TOBIAS KUEHN, VICENTE CARABIAS-HÜTTER, CORINNA BAUMGARTNER, BATON SHALA, DAVID SUTER

### **B2. Building-related investment decisions II, Thursday 14:00-16:00, 6 September 2018, room: Session 2**

*Chair: SEBASTIAN BOBETH*

Decision-Making in Building Retrofitting: Lessons from Dynamic Modelling of Scenarios for Gothenburg City – ÉRIKA MATA, J. WANEMARK, M. ÖSTERBRING, H. WALLBAUM, L. THUVANDER

A Modelling Approach for the Adoption of Heating Systems by Private Households in Germany – ANNETTE STEINGRUBE

Predicators and Interventions Regarding Investments in Sustainable Energy Innovations – SEBASTIAN BOBETH, INGO KASTNER, ELLEN MATTHIES

Low Carbon Advisors and SMES: Changing Energy Behaviours Through Values-Based Engagements – SAM HAMPTON, TINA FAWCETT, RICHARD BLUNDEL, CHRIS SHAW

### **B3. Household II, Thursday 14:00-16:00, 6 September 2018, room: Session 3**

*Chair: RIHAB KHALID*

Coevolution of Household Practices and Spatial Layouts: A Case of Rising Middle-Class Electricity Consumption in the Global South – RIHAB KHALID, MINNA SUNIKKA-BLANK

Challenging Common Assumptions of Occupant Behaviour to Mitigate Overheating or Poor Indoor Air Quality – SEBASTIAN WILLIAM JUNEMANN, LAI FONG CHIU, CLIVE SHRUBSOLE

End-Use Electricity Consumption Profiles of Turkish Homes - MERIH AYDINALP KOKSAL, GULSAH AKGUL, BILAL DUZGUN, OGUZ K. KABAKCI

Involuntary Rebound in Low Energy Buildings – SIMON MÖLLER, AMELIE BAUER, BERNHARD GILL, FRANZ SCHRÖDER

**B4. Feedback II, Thursday 14:00-16:00, 6 September 2018, room: Session 4**

*Chair: BRONWYN LAZOWSKI*

Towards a 'Smart' Energy Culture? Evaluating the Influence of Smart Meter Feedback in a Canadian Case Study – BRONWYN LAZOWSKI, GORDON STEPHEN, PAUL PARKER

Behavioral Change Driven by Smart Meters, Does Feedback on Energy Use Result in Energy Savings? – MARIËLLE D. A. RIETKERK, LAURIE HERMANS, MARIJKE MENKVELD

A New Smart Meter Research Portal – SIMON ELAM

Capturing the Energy Efficiency Benefits of Smart Meters in the Non-Domestic Sector: Using Novel Research Methods to Inform Innovation in Energy Management Solutions – DAVID KENINGTON, STEPHANIE GALE, MICHAEL HARRISON

A Study of Behavioral and Socio-Economic Factors Influencing the Willingness to Monitor the Energy Usage by the Residential Consumers – ANNA KOWALSKA-PYZALSKA, KATARZYNA BYRKA

Gathering Learnings from a Behavioral Methodology Aimed at Rio De Janeiro Low Income Communities with High Incidence of Energy Commercial Losses – RODRIGO HOLTERMANN LAGRECA, ANA PAULA ZILLIG

**B5. Demand response and load management II, Thursday 14:00-16:00, 6 September 2018, room: Session 5**

*Chair: MARTA A. R. LOPES*

Smart Distributed Thermal Storage: Customer Experiences and Implications for Demand Response Business Models – SARAH J. DARBY, SARAH HIGGINSON, MARINA TOPOUZI, JULIE GOODHEW, STEFANIE REISS

Dynamic Tariffs: How Does Literacy, Decision Style, Loss Aversion and Information Representation Influence End-Users' Decision? – INÊS FILIPA GOMES DOS REIS, MARTA A. R. LOPES, CARLOS HENGGELE ANTUNES

Willingness to Adhere to Smart Grid with Dynamic Prices, Energy Literacy and Familiarity with People and Technology – MARIA SAO JOAO BREDÁ

The Electricity Footprint of Everyday Life - How Activities Shape Load Profiles – PHIL GRUNEWALD, MARINA DIAKONOVA, AVEN SATRE-MELOY, MIRIAM ZACHAU WALKER

Control Technique for Residential Essential Load Utilization – OLAWALE POPOOLA, BLESSING CHIPANGO

**B6. Special session: Consumer judgement and decision making regarding energy-efficiency and sustainable behaviour, Thursday 14:00-16:00, 6 September 2018, room: Session 6**

*Chair: GEA HOOGENDOORN*

Effects of Public Participation in Decision Making on Public Acceptability of Energy Projects: A Value Based Approach – GODA PERLAVICIUTE

Assessing Consumers' Perceptions of Electricity Use: Does Providing Reference Points Help? – WÄNDI BRUINE DE BRUIN, VEDRAN LESIC, INES LIMA AZEVEDO, MATTHEW DAVIS, TAMAR KRISHNAMURTI

Towards a More Environmentally Sustainable Society: Public Perceptions of Strategies to Realize Low Carbon Futures – KATHARINE STEENTJES, CATHERINE CHERRY, NICK PIDGEON

Fancy but Useless? The Impact of Provided Interactive Information Vs. Effect on Energy Portfolio Choices – MARILOU JOBIN, VIVIANNE HM VISSCHERS, OSCAR PR VAN VLIET, JOSEPH ARVAI, MICHAEL SIEGRIST

Value-Based Message Framing and Political Decision-Making in the Energy Domain – ULF J. J. HAHNEL, CHRISTIAN MUMENTHALER, TOBIAS BROSCHE

When Good Intentions Go Bad: The Biasing Effect of Intention on a Behavior's Perceived Environmental Impact – GEA HOOGENDOORN, BERNADETTE SÜTTERLIN, MICHAEL SIEGRIST

**Parallel sessions C**

**C1. Digitalisation of energy use, Thursday 16:30-18:30, 6 September 2018, room: Session 1**

*Chair: LINDA MIESLER*

Digital Sufficiency: An Interdisciplinary Approach to Promote Eco-Sufficient Use of Digital Media – LINDA MIESLER, VERENA BERGER, GREGOR WALLER, MATTHIAS STUCKI

Cumulative Energy Demand of Adolescents' Digital Media Behaviour – REGULA KELLER, MATTHIAS STUCKI, LILIAN SUTER

Analysis of User Behaviour of Commercial Dishwashers in Germany – SVENJA KERSCHGENS, RAINER STAMMINGER, BRITTA VON ESMARCH-RUMMLER

Effectiveness of a Green Default in Electricity Product Choice and the Drivers of Switching Behaviour – BERNADETTE SÜTTERLIN, MICHAEL SIEGRIST

Consumer Acceptance and Perceptions of Smart Appliances: A Global Survey – JASMIN GEPPERT, RAINER STAMMINGER



**C2. Building-related investment decisions III, Thursday 16:30-18:30, 6 September 2018, room: Session 2**

*Chair: ZAREEN SETHNA*

Understanding the Presence of Energy Efficiency Measures in the English Private Rented Sector – ZAREEN SETHNA, IAN G. HAMILTON, LAI FONG CHIU

Research-Based Communication Strategy to Boost Energy Efficiency Improvements in Multi-Apartment Buildings – VESNA BUKARICA, ANAMARIJA BRSTILO, LIDIJA TOŠIĆ

Explaining the Energy Performance Gap in Professionally Managed Buildings – MARCEL JANSER

How Do Investors Choose Intermediaries for Energy Efficiency Refurbishments? – BARBARA SOPHIE ZAUNBRECHER, KATRIN ARNING, MARTINA ZIEFLE

Target Group Segmentation for Retrofitting - An Action Research Approach – SIBYLLE STUDER, STEFAN RIEDER, ZILLA ROOSE

Towards Sustainable School Buildings: What Barriers are School Boards Encountering in Engagement with Energy Service Companies (ESCOS)? Evidence from the Netherlands – DUJUAN YANG, RITESH BRISPAT, QI HAN

**C3. Household III, Thursday 16:30-18:30, 6 September 2018, room: Session 3**

*Chair: MARCO A. ORTIZ*

Investigating the Influence of Physical and Occupant Factors on Energy and Environmental Performance of Four Identical Modern Flats in UK – RAJAT GUPTA, AGNESE SALVATI

Method for Measuring Occupant Behaviors Affecting Indoor Air Quality in Apartments – JONAS BORELL, H. CALTENCO, A. WIERZBICKA, Y. OMELEKHINA, E. PEDERSEN

Contextual Thermography: A New Socio-Technical Method for Understanding Energy and Comfort? – ADAM C. G. COOPER, TRUPTI B. PATEL, PILAR GARCIA SOUTO

Qualitative Classification of Energy Consuming Habits of Young Home Occupants – MARCO A. ORTIZ, PHILOMENA M. BLUYSSSEN

**C4. Gamification and ICT, Thursday 16:30-18:30, 6 September 2018, room: Session 4**

*Chair: PAU REY GARCIA*

Energaware: A Pilot Longitudinal Exploration of a New Serious Game to Reduce Energy Demand in Social Housing – REBECCA J. HAFNER, SABINE PAHL, CHRISTINE BOOMSMA, RORY JONES, ALBA FUERTES

Can new ICT Tools Trigger More Energy Efficient Behaviours? Challenges and Good Practice to Improve Pilot Design and Implementation – PAU REY GARCÍA, TALÍA BRUN MARCÉN

Exploring Effects of Entertaining Communication Strategies Promoting Pro-Environmental Behavior – SASCHA DEMARMELS, DOROTHEA SCHAFFNER, MATTHIAS ALBISSER, SONJA KOLBERG, ANJA JANOSCHKA

Enabling Change? A New Approach to ICT-Based Behaviour Change – ASHLEY MORTON, ANDREW REEVES, RICHARD BULL

Segmentation and Characterization of Customers Using Online Games in the Energy Sector – CHRISTINA M. MARCHAND, MARK HASELBÖCK

Exploring Factors Driving Social Comparison in Energy-Related ICT – VALERIYA AZAROVA, JED J. COHEN

**C5. Special session: Demand-side management (DSM) and information (DSI) to reduce energy consumption: Recent developments, Thursday 16:30-18:30, 6 September 2018, room: Session 5**

*Chairs: VICENTE CARABIAS-HÜTTER and UROS TOMIC*

Social Information and Energy Conservation: Environmental Identity and Social Norms – CRISTINA CATTANEO, JACOPO BEONAN, GIOVANNA D'ADDA, MASSIMO TAVONI

Energy Saving Kits - Educating and Empowering End Users? A Cross-Country Case Study Comparison – SEA ROTMANN, DANIEL CHAPMAN

Beyond Energy Reports - A Use Case Summary for Energy Tips – REBECCA FORD, BETH KARLIN, MICHELLE PURCELL, LISA ZAVAL, HALE FORSTER, DANIEL CHAPMAN

How to Improve Energy Billing Information to Induce Energy Savings? Insights from Switzerland – UROS TOMIC, VICENTE CARABIAS-HÜTTER, TOBIAS KUEHN, FRANCESCA CELLINA, ROBERTA CASTRI, NIKOLETT KOVACS, STÉPHANE CITHERLET, SARA ELCHER, PIERRYVES PADEY, BASTIAN BURGER, JÜRG BICHSEL

Dynamic Intervention Strategies to Change Energy Consumption Behaviour in Residential Buildings – VERA KÄMPFEN, ANNIKA SOHRE, PAUL BURGER

The Role of the User in Peer-To-Peer Energy Communities – LILIANE ABLEITNER, SANDRO SCHOPFER, VERENA TIEFENBECK

**C6. Use of technology, Thursday 16:30-19:30, 6 September 2018, room: Session 6**

*Chair: ANA TISOV*

New Operational Challenges in Electrical Distribution Network Management in Presence of Storage Systems – CLAUDIO CARLINI, GIACOMO VIGANÒ, DIANA MONETA

Using a Scenario-Based Methodology to Assess Users' Requirements for Future Thermal Energy Storage Systems – KONSTANTINA KYRIAKOPOULOU, V. HAINES, V. MITCHELL, C. LAWTON

User in Control: People-Centred Approach for Developing ICT Solutions and Supporting Energy Efficiency in Buildings – SIMONA D'OCA, DAN PODJED, ANA TISOV, JURE VETRŠEK

User-Centric Measures of Perceived Light Quality: Development of Tools to Promote Energy Efficient Lighting – MAGDALENA BOORK, JOHANNA ENGER, CAROLINA HILLER, KARIN WENDIN

**Parallel sessions D**

**D1. Special session: Behavioural economics, Friday 10:30-12:30, 7 September 2018, room: Session 1**

*Chair: LUIS MUNDACA*

Behavioral Economics: The Impact of Social Standards and Information in Portuguese Energy Consumption Decisions – RITA RAPOSO, MONICA MEIRELES, MARTA FERREIRA DIAS

A Climate Policy Gap: Swedes Are Willing to Pay More for Their Air Travel Emissions than They Have To – JONAS SONNENSCHIN, NORA SMEDBY

Visibility, Peer Effects and Monetary Incentive in Solar PV Adoption in Sweden – MARGARET SAMAHITA, LUIS MUNDACA

Behavioural Aspects Regarding Alternative Vehicle and Fuel Choices – LINDA ANDERSSON

How to Best Stimulate Electric Vehicles' Adoption? – NIVES DELLA VALLE, ALYONA ZUBARYEVA

**D2. Communication, acceptance and adoption, Friday 10:30-12:30, 7 September 2018, room: Session 2**

*Chair: LUKAS BRAUNREITER*

Public Debate on Carbon Capture and Storage: Statements and Visual Frames Used in Dutch Newspapers – CHRISTINE BOOMSMA, EMMA TER MORS

Analyzing Multilingual Energy Discourses in Switzerland – PHILIPP DREESEN

The Common Sense of Energy Transition – PETER STÜCHELI-HERLACH, MAUREEN EHRENSBERGER-DOW

Not Only Experts Matter: The Role of Lay People's Expectations About the Energy Future in Acceptability Evaluations – LUKAS BRAUNREITER, YANN BENEDICT BLUMER

Strategic Communication of Renewable Energies and Energy Efficiency in an Intercultural Context Analog to the Example of an Acceptance Campaign – THOMAS HELM, ANNIKA SCHACH

**D3. Special session: Who are the most important stakeholders in a community striving for sustainable energy?, Friday 10:30-12:30, 7 September 2018, room: Session 3**

*Chair: ANNETTE ROSER*

Exploring the Social Acceptance of Building Integrated Photovoltaics in Switzerland – EVELYN LOBSIGER-KÄGI, UROS TOMIC, HARRY SPIESS, TOBIAS KUEHN, VICENTE CARABIAS-HÜTTER

Using Digital Interventions for Behaviour Change Towards Energy Efficient Behaviour – EDITH CHASSEIN, ANNETTE ROSER, KARIN SCHAKIB-EKBATAN

Energy Efficient Solutions for Smart Cities – NATALIA VESELITSKAYA, VICENTE CARABIAS-HÜTTER, ONUR YILDIRIM

*This session will be organised as an interactive workshop that includes the three keynotes indicated in the programme as well as a imaginary journey to a future city and discussions in small groups.*

**D4. Transportation, Friday 10:30-12:30, 7 September 2018, room: Session 4**

*Chair: MARTA FARIA*

Assessing Aggressive Driving Effects on Pollutant Emissions and Energy Consumption: City Level Analysis – MARTA FARIA, GONÇALO DUARTE, ROBERTO VARELLA, TIAGO FARIAS, PATRICIA BAPTISTA

Social Factors Contributing to the Success of Cycling Uptake Interventions – TRUDY LEDSHAM, BETH I. SAVAN, EMMA HEFFERNAN, MICHELLE KEARNS

Families as Early Adopters of Car Sharing Systems? – UTA SCHNEIDER, ELISABETH DÜTSCHKE

How to Achieve the Switch from Private Car Use to Sustainable Transport Options – ILJANA SCHUBERT, ANNIKA SOHRE, ANNE SCHERTENLEIB, CORINNE MOSER, UROS TOMIC

Train, Plane or Skype? Testing Possible Interventions to Reduce Flight Emissions at Zurich University of Arts – ANNE LOHMANN, CATHÉRINE HARTMANN, MARKUS HACKENFORT

**D5. Special session: Social science input on energy transitions: Making social science policy relevant – Insights from the ECHOES project, Friday 10:30-12:30, 7 September 2018, room: Session 5**

*Chair: CHRISTIAN A. KLÖCKNER*

In How is Social Science Reflected in European Policies? An Analysis of Policy Documents – CHRISTIAN A. KLÖCKNER

Household Appliance Purchases as a Joint-Decision Process: Evidence from Upper-Austrian Solar Adoption – JED COHEN, ANDREA KOLLMANN

Determining the Similarities and Differences Towards Energy-Related Behaviour Between Different Types of Formal Social Units: A Set of Parameters – MEHMET EFE BIRESSelioğlu, MUHITTIN HAKAN DEMIR, MELIKE DEMIRBAG KAPLAN, BERFU SOLAK

Analysing the Country-Wise Perspectives on the Factors Driving Collective Energy Choices and Energy-Related Behaviour: Policy Recommendations - SIMEN ROSTAD SÆTHER, XINLU QIU

A Meta-Analytic Approach to Understand the Psychological Correlates of Energy-Related Behaviours – GUISEPPE CARRUS, IMMO FRITSCH, CHRISTIAN A. KLÖCKNER, TORSTEN MASSON, STEFANO MASTANDREA, ANGELO PANNO, LORENZA TIBERIO, STEPHAN VESELY

Energy Memories - A New Concept for Understanding the Impact of Historic Events on Energy Choices – GUDRUN LETTMAYER, STEPHAN SCHWARZINGER, TOMAS MOE SKJØLSVOLD, DANIELA VELTE

**D6. Addressing energy poverty, Friday 10:30-12:30, 7 September 2018, room: Session 6**

*Chair: AUDREY DOBBINS*

Analysis of Current Trends in the Rental Accommodation Market for Students and their Implications for Fuel Poverty – IOANNIS KOUSIS, MARINA LASKARI, VASILEIOS NTOUROS, VASILEIOS LONTORFOS, JOANNA ROMANOWICZ, NEIL JENNINGS, MARGARITA-NIKI ASSIMAKOPOULOS, RACHEL DRAYSON

The Significance of Energy Poverty and Low Income as Key Barriers to the Achievement of Household Energy and Emission Targets in Germany – AUDREY DOBBINS, ALI TASH, ISELA BAILEY, ULRICH FAHL

Behavioural Changes to Alleviate Energy Poverty in Europe – ANNA REALINI, SIMONE MAGGIORE, VALERIA CRESPI, GIORGIO BESAGNI

Energy Poverty and Vulnerable Groups: A Contribution on the Relationship Between Energy Poverty and Income Poverty, as Well as on the Social and Economic Consequences of Energy Retrofits – ANNA SUPPA, SONJA KUBAT

Energy Poverty in Rural Areas of Tajikistan – MURODBEK LALDJEBAEV

Reaching the Hardest to Reach in Energy Advice and Support: Key Lessons and Good Practice from the UK – AIMEE AMBROSE

## Parallel sessions E

### E1. Behaviour modelling, Friday 14:00-16:00, 7 September 2018, room: Session 1

*Chair: HUI BEN*

Assessing the Impacts of Household Archetypes on the Effectiveness of Energy Retrofit – BEN HUI, KOEN STEEMERS

Actors' Behaviour Analysis in a Decentralised Energy System: The Case of German Iron and Steel Industry – ISELA BAILEY, MOHAMMAD AHANCHIAN, AUDREY DOBBINS, ULRICH FAHL, ALI TASH

Learning with Students About Energy Consumption Behaviors – ALEXANDRE SILVA, CARLA OLIVEIRA, CARLOS HENGGELE ANTUNES, CATARINA SILVA, DULCE COSTA, DULCE COELHO, INES REIS, JOAO SOUSA, JOSÉ L. SOUSA, LICÍMO MOREIRA, LUÍS MARCELINO, LUÍS NEVE, MARTA LOPES, VÁLTER GONÇALVES

### E2. Acceptance and adoption of technology I, Friday 14:00-16:00, 7 September 2018, room: Session 2

*Chair: BABETTE NEVER*

Impacts of the Fossil Fuel Divestment Movement – NOAM BERGMAN, TIMOTHY J. FOXON

Investigating Demand-Side Solutions to Addressing Barriers in Energy Transitions: Study of Urban Societies in India – ANJALI RAMAKRISHNAN, FELIX CREUTZIG

Middle Class Carbon Consumption in Middle Income Countries: Conceptualising Consumer Behaviour – BABETTE NEVER

Social, Structural, Personal and Contextual Factors of Prosuming in Households – JANA KÖHLER, MORITZ SEMEN, JANINA LANGE, JOHANNA BECKER, FREDERIK BRAUER, VANESSA LOHMANN, LISA MÜLDNER, NADJA BAMBOWSKY, VALENTIN LEMIK, LEA-MARIA BUNDSCHUH, ELISABETH DÜTSCHKE, DANIEL HENSS

Energy Installations as Socio-Technical Systems - Barriers to Efficient Operation from a Social Scientist Perspective – UTA BÖHM, MARTINA SCHÄFER, M. ABRAHAMOWICZ

**E3. Household IV, Friday 14:00-16:00, 7 September 2018, room: Session 3**

*Chair: KIRAN MAINI GERHARDSSON*

Better Saved than Spent? The Carbon Footprint of Savings Across Socioeconomic Groups – MICHEL ZIMMERMANN, VICENTE MOREAU

An Empirical Analysis of Energy Saving Measures from a Household Perspective – VÉRONIQUE VASSEUR, ANNE FRANÇOISE MARIQUE

Small is Beautiful? Behavioural Challenges for Reducing Building Energy Consumption by Limiting Per Capita Living Space – IMMANUEL STIESS, CORINNA FISCHER, GEORG SUNDERER, KATHARINA REINDL

Moving from Energy-Saving to Mindful Lighting Behaviour in Homes – KIRAN MAINI GERHARDSSON

The How and Why of Shorter Showers: Long-Term Effects of Construal Level and Real-Time Feedback on Energy Conservation – ANOUK M. GRIFFIOEN, MICHEL J.J. HANDGRAAF, GERRIT ANTONIDES

Mapping Structure for Interviews on Energy-Related Behaviour and Underlying Motives of Residents in Large, Underused Flemish Dwellings – ANN BOSSEREZ, JASMIEN HERSENS, GRIET VERBEECK

**E4. End-user behaviour in schools and offices, Friday 14:00-16:00, 7 September 2018, room: Session 4**

*Chair: HERMANO BERNARDO*

Competing Priorities: Lessons in Engaging Students to Achieve Energy Savings in Universities – RICHARD BULL, NEIL JENNINGS, MARINA LASKARI, JOANNA ROMANOWICZ, DAVE EVERITT, GRAEME STUART

Hourly Utilisation and Energy Consumption of a Finnish Office Building – KEN DOOLEY

Changing Energy Consumption Behavior in Office Buildings Using Energy Meter Data – QI HAN, R. ITKELWAR, P. VAN DER WAERDEN

Behavioural Change Interventions to Reduce Energy Use for Lighting in Preschools: A Pilot Study – PIMKAMOL MATTSOON, THORBJÖRN LAIKE

Structuring Decision Support for Energy Performance Assessment of School Buildings Using a Soft Systems Methodology Approach – HERMANO BERNARDO, ADÉLIO GASPAS, CARLOS HENGGELE ANTUNES

Types of Energy Consumers in Offices Buildings – MINYOUNG KWON, HILDE REMOY

**E5. Policy implementation and evaluation I, Friday 14:00-16:00, 7 September 2018, room: Session 5**

*Chair: MATTHIAS NÄF*

Foster Urban Innovations Through Collaborative Dialogues - Malmö Innovation Arena as an Example – JENNY PALM, N. SMEDBY, DANIELA LAZOROSKA

Key Success Factors of Subsidizing Energy Efficiency Technologies. Findings from Swiss Competitive Tenders – KURT BISANG, SIMONE HEGNER

Coping with a Growing Number of E-Taxis: A Stated Adaptation Approach on Driving and Charging Patterns in Greater Stockholm – JENS HAGMAN, JORAM LANGBROEK

Assessing demand-side solutions for climate change mitigation – FELIX CREUTZIG

**E6. Special session: Understanding and fostering citizens' energy-saving behaviour through collaboration between science and cities, Friday 14:00-16:00, 7 September 2018, room: Session 6**

*Chairs: CORINNE MOSER and DOROTHEA SCHAFFNER*

Towards a Differentiated Understanding of Citizens' Energy-Saving Behaviour – DOROTHEA SCHAFFNER, KATHARINA KOSSMANN, TIMO OHNMACHT, CHRISTIAN WEIBEL

How Cities and Researchers Can Successfully Collaborate in Planning, Implementing and Evaluating Behavioural-Change Interventions in Energy – CORINNE MOSER, YANN BLUMER, MICHAEL STAUFFACHER, UROS TOMIC, ROMAN SEIDL, CARMEN KOBE, BETTINA FURRER

Dynamic & Participative Process Towards Sustainable Development on City Level with Focus on Sufficiency – STEPHAN PARLOW, ANNIKA SOHRE, ILJANA SCHUBERT

Co-Designing a Persuasive App Promoting a Less Car-Dependent Community: Introducing the Bellidea Living Lab – FRANCESCA CELLINA, JOSÉ VEIGA SIMÃO, PASQUALE GRANATO

Swiss Jean Challenge: Contesting Norms around Cleanliness Towards Reduced Energy Usage – MARLYNE SAHAKIAN, WLADYSLAW SENN, BÉATRICE BERTHO

*Discussion among all participants about key learning from such collaborative processes and their consequences for the energy transition in cities.*



## Parallel sessions F

### **F1. Special session: Modelling behaviour – behavioural models: How to integrate human behaviour into energy models?, Friday 16:30-18:30, 7 September 2018, room: Session 1**

*Chairs: ELISABETH DÜTSCHKE and JOACHIM GLOBISCH*

Agent-Based Model of Energy Efficiency Technology Adoption in Households - A First Version with Policies Targeted at Intermediaries – ÉMILE J. L. CHAPPIN, LAURENS HESSELINK

Concept on Modelling the Adoption of Energy-Related Technologies on the Basis of Investment Decisions of Private Households and Organizations in the Energy Industry – CHARLOTTE SENKPIEL, SANDRA WASSERMANN, JESSICA BERNEISER, CHRISTIAN HOFMAIER

An Empirical Study of the Factors Underlying the Implicit Discount Rate: Findings from Representative Surveys in Eight EU Countries – CORINNE FAURE, JOACHIM SCHLEICH, XAVIER GASSMANN, THOMAS MEISSNER

Understanding Energy Efficient Refurbishment Decisions: A Process Model from the House Owner's Perspective – KATRIN ARNING, BARBARA SOPHIE ZAUNBRECHER, MARTINA ZIEFLE

Identifying and Modelling Target Groups for Demand Side Management Via Flexible Heat Pumps – JOACHIM GLOBISCH, MATTHIAS KÜHNBACH, ELISABETH DÜTSCHKE, ANKE ESSER

Simulating Technological Innovation Micro Processes - Towards Experience-Based Robust Policy Recommendations – BERT DROSTE-FRANKE, GABRIELE FOHR

### **F2. Acceptance and adoption of Technology II, Friday 16:30-18:30, 7 September 2018, room: Session 2**

*Chair: BRITT T. STIKVOORT*

Evaluation of Interventions Implemented by Rescoops to Stimulate Household Energy Conservation; Results from a Survey in Six EU Countries – THOMAS HOPPE, FRANS COENEN

Shedding Light on Involuntary Prosumers: Implications of Shared Residential Solar Installations on Pro-Environmental Behaviours and Attitudes – BRITT T. STIKVOORT, ISAK ÖHRLUND, MÄRTEN SCHULTZBERG

A Social Values-Based Perspective on Peer-To-Peer Energy Sharing Systems – LURIAN PIRES KLEIN, GIOVANNI ALLEGRETTI, DOMINIQUE HES, LUISA MATOS

Developments of Charging Infrastructure Provision by Swedish Housing Cooperatives – JORAM H. M. LANGBROEK, JOEL P. FRANKLIN, YUSAK O. SUSILO

**F4. Special session: Advancing the 'middle-out' perspective: Fostering the role of middle actors in energy system transformation, Friday 16:30-18:30, 7 September 2018, room: Session 4**

*Chair: KATHRYN B. JANDA*

The Central Role of Middle Actors in Retrofitting Scotland's Built Environment: Focusing on Local Authorities and Their Delivery Partners – FAYE WADE, RUTH BUSH, JANETTE WEBB

Implementing Energy Measures in Renovations for Multi-Family Dwellings: Influence and Practice of Professionals – KATHARINA REINDL

Formal Social Groups as Promising Middle Actors for Municipal Interventions: Empirical Insights from Six Studies – YANN BLUMER, CORINNE MOSER, UROS TOMIC, MICHAEL STAUFFACHER, ROMAN SEIDL, VIVIAN FRICK

Macroergonomics: A Path to Understanding Net-Zero Energy Builder-Developers – PHILIP AGEE, PAIGE FREDERICK, ANDREW McCOY, BRIAN KLEINER

Kosher Electricity: (Re)Creating a Sustainable Shabbat from the Middle Out – Yael PARAG

Code Officials in India: Extending the Agency & Capacity of Building Regulators - KATHRYN B. JANDA, RADHIKA KHOSLA

**F5. Policy implementation and evaluation II, Friday 16:30-18:30, 7 September 2018, room: Session 5**

*Chair: SASCHA KUHN*

Developing an Agent-Based Model to Assess Behavioural Policies: Personal Carbon Trading – ROMAN SEIDL, JONAS SONNENSCHN, LUIS MUNDACA

Socio-Economic Effects of Instruments to Achieve Reductions in Energy Consumption Through Sufficiency: Financial Impacts and Distributional Considerations – JOHANNA CLUDIUS, CORINNA FISCHER, TANJA KENKMANN, KATJA SCHUMACHER, TILMAN FRIES, LARS BRISCHKE

Trends in Behavioral Energy Efficiency Programs from 2010-2018 in the United States and Canada – KIRA V. ASHBY

On the Effectiveness of Choice Architecture Tools Aimed at Energy Consumption – A Systematic Review – SASCHA KUHN, JOHANNES PRAGER, FLORIAN KUTZNER

Nudge: Complement or a Substitute of Traditional Energy Policy Instruments? – VALERIA FANGHELLA, MATTEO PLONER, MASSIMO TAVONI

The Impact of the Swiss Climate Policy Instruments on the Energy Consumption and Greenhouse Gas Emissions in the Industry and the Service Sector: Evidence from an Ex-Post Evaluation of microdata – THOMAS LEU

**F6. Development of markets and innovation, Friday 16:30-18:30, 7 September 2018, room: Session 6**

*Chair: LUISA GONÇALVES*

New Determinants of Behaviour Change: Triggering Energy Savings Through Profitability and Self-Sufficiency of Photovoltaic Battery Systems – KATHRIN GRAULICH, INGA HILBERT, ROMAN SEIDL, SEBASTIAN ALBERT-SEIFRIED, DIETER SEIFRIED

What are the Challenges to Include the Trade, Commerce and Service Sector in Contributing to the Energy Transition - Lessons Learned from Germany – KATHARINA LANGER, SEBASTIAN GÖLZ, TOM PILHOFER, KRISTIN GOLDBACH

Bringing the Service Perspective to Understand Customer Engagement and Value Co-Creation with Smart Energy Services – LUISA GONÇALVES, LIA PATRÍCIO

Towards a Sustainable Agro-Food INDUstry: Capacity Building Programs in Energy Efficiency (INDUCE) – SUZANNE BRUNSTING, KOEN STRAVER, KEVIN BROECKS, WOUTER WETZELS, RENEE KOOGER, LAURIE HERMANS

Development of a Digital Social Market to Promote Sustainable and Energy Efficient Behaviour: Lisbon Pilot – CATARINA C. ROLIM, MARIA J. CANEIRAS, CARLOS S. SILVA

Human-Centred Service Design with Big Data Applications for Smart Buildings – ELENA MALAKHATKA

## Presentation guidelines

All lecture rooms are equipped with data projectors and laptop computers running on Windows or iOS. To minimise delays between presentations, all presenters are kindly asked to use the laptop computer provided in the room. If a presentation cannot be delivered via the ZHAW laptop or in the event of other technical emergencies, an external laptop may be connected via an HDMI connection.

There will be a staff member in the lecture room 30 minutes prior to the start of each session to collect the presentations and assist the presenters with technical matters. **We kindly ask all presenters to deliver their presentations in PowerPoint or PDF format on a USB flash drive to their respective rooms at least 30 minutes prior to their session.**

Maximum length of oral presentations is **15 minutes** + an additional 5 minutes for discussions.

## Session chairs

The main responsibility of each session chair is to ensure that every presenter in the session has the same amount of time available for her or his presentation as well as questions from the audience.

A session chair should indicate approaching time limits to the presenter by holding up a sign or by making a gesture.

We also ask each session chair to provide a concise introduction of the presenters, mentioning their name, their affiliation, and the title of their presentation. The chair should also moderate the discussion by selecting questions from the audience and bringing the discussion to an end when the time is up.