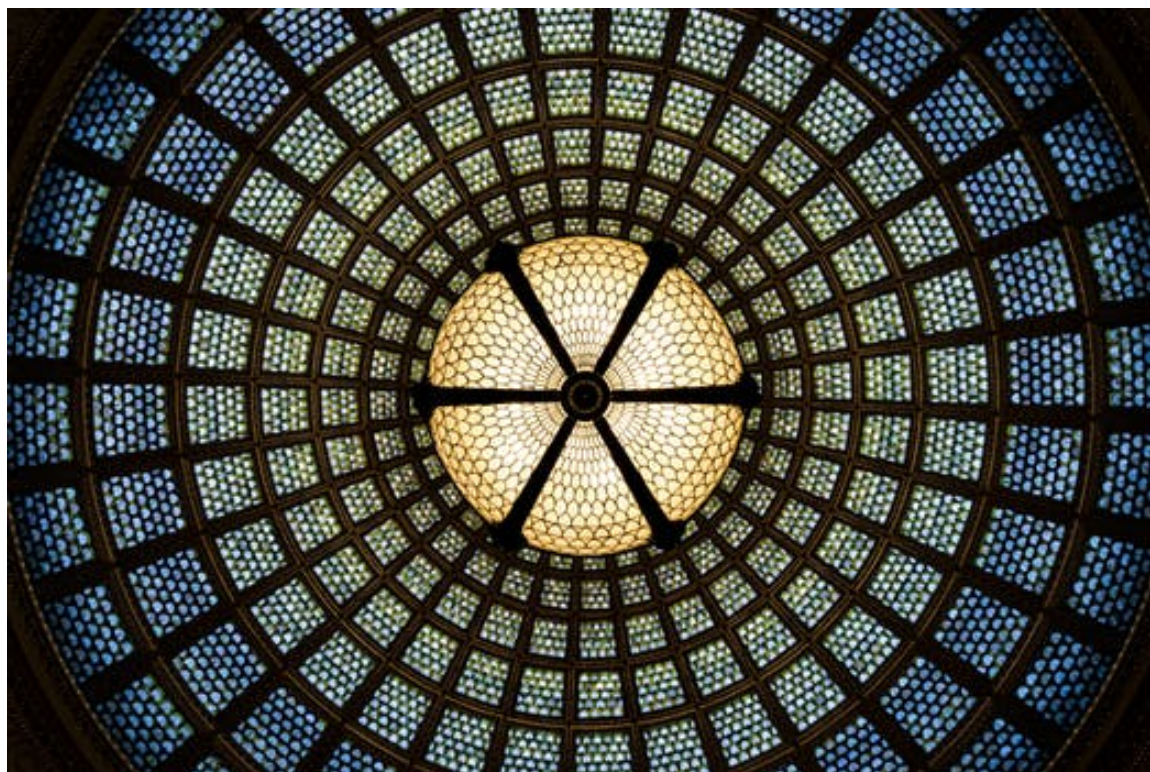


4TH ENERGY AND SOCIETY CONFERENCE

University of Exeter, September 2018

Programme



Conference Information

Venue

The conference will be held in the Peter Chalk Centre located on the University's Streatham Campus. The Peter Chalk Centre provides a modern, fully-equipped conference venue. The Streatham campus, the University's largest site in Exeter, is built around a country estate overlooking the city and is readily acknowledged as one of the most beautiful in the country. A Registered Botanic Garden, Streatham Campus is described by The Times as the 'best-gardened campus in Britain' and by The Independent as having a 'sublime' setting. The grounds feature many exotic trees and shrubs and with stunning views across the city to the sea at Exmouth. Its lakes, parkland, woodland and gardens make it a very special place.

For more information on the Peter Chalk Centre, see <https://www.exeter.ac.uk/eventexeter/venues/peter-chalk-centre/>

Address: *Peter Chalk Conference Centre, University of Exeter, Stocker Road, Exeter, EX4 4QD*

The Peter Chalk Centre is number 17 (5F) on the [Streatham Campus Map](#). Visit the University web pages for [directions](#) and [parking information](#).

Accommodation is in Holland Hall (62 4D)

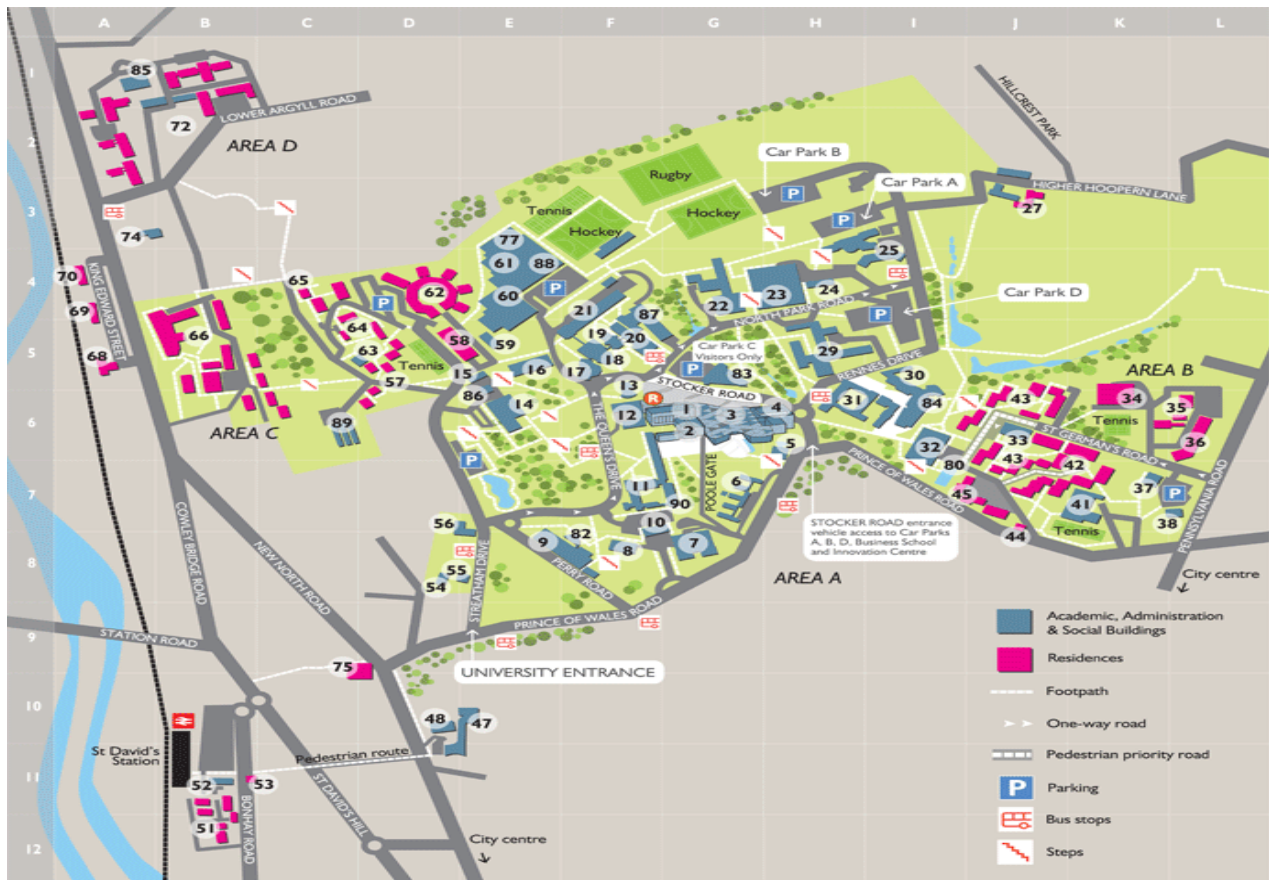
The gala dinner will be held in Holland Hall dining room.

Wifi

You can access wifi using the University of Exeter Guest wifi. You can find instructions here: <https://as.exeter.ac.uk/it/network/wifi/>

Printed versions of the instructions are available from the registration desk.

Campus Map



Peter Chalk - 17 (5F)

Holland Hall - 62 (4D)

Forum (for shop and food outlets) - 3 (6G)

Outline Programme

12.00 – 1.20	Arrival, registration and coffee	Peter Chalk Hall 1
1.20 – 1.30	Conference Welcome – Professor Stewart Barr	Newman Blue
1.30 – 2.30	Keynote – Professor Catherine Mitchell <i>Chair: Dr Karen Bickerstaff</i>	
2.40 – 4.10	Parallel Paper Sessions	PC 2.1/ 2.2/ 2.3/ 2.4/ 2.5/ 2.6
4.10 – 4.30	Break	Peter Chalk Hall 1
4.30 – 6.00	Parallel Workshops	PC 2.1/ 2.2/ 2.3/ 2.4
7.00 – 8.00	Welcome drinks reception & Poster session	Peter Chalk Hall 1

8.30 – 9.00	Coffee	Peter Chalk Hall 1
9.00 – 10.30	Parallel Paper Sessions	PC 2.1/ 2.2/ 2.3/ 2.4/ 2.5/ 2.6
10.30 11.00	Break	Peter Chalk Hall 1
11.00 12.30	Parallel Paper Sessions	PC 2.1/ 2.2/ 2.3/ 2.4/ 2.5/ 2.6
12.30 – 1.30	Lunch	Peter Chalk Hall 1
1.30 – 3.00	Parallel Paper Sessions	PC 2.1/ 2.2/ 2.3/ 2.4/ 2.5/ 2.6
3.00 – 3.30	Break	Peter Chalk Hall 1
3.30 – 5.00	Parallel Workshops	PC 2.1/ 2.2/ 2.3/ 2.4
5.10 – 6.20	Keynote – Professor Harald Rohrer <i>Chair: Professor Matthias Gross</i>	Newman Blue
7.00	Conference Dinner	Holland Hall Dining Room

9.00 – 9.30	Coffee	Peter Chalk Hall 1
9.30 – 11.00	Parallel Paper Sessions	PC 2.1/ 2.2/ 2.3/ 2.4/ 2.5/ 2.6
11.10 – 12.40	Parallel Workshops	PC 2.1/ 2.2/ 2.3/ 2.4
12.45 – 1.30	Closing Plenary	Newman Blue

'At a Glance' Programme: Parallel Sessions

Monday 3rd September

Session Theme	Public Engagement	Justice and Vulnerability	Theory, Concepts & Methods	Politics and Governance	Dynamics of Demand	Locality and community
2.40 – 4.10	Sarah Becker, Christina Demski, Darrick Evensen, Erin Roberts, Nick Pidgeon	Ana Horta, João Carlos Sousa, Luísa Schmidt	Chris Groves, Karen Henwood, Nick Pidgeon, Fiona Shirani, Erin Roberts	Margaret Tingey	Nicolette Fox	Fionnguala Sherry-Brennan, Patrick Devine-Wright
	Vilja Varho (Luke), Riikk Paloniemi, Annukk Vainio, Anna Pulkka, Petri Tapio	Ioanna Kyprianou, D. K. Serghides, S. Dimitriou	Paula Kivima, Wouter Boon, Sampsa Hyysalo, Laurens Klerkx, Mari Martiskainen, Johan Schot	François Joseph Daniel, Rémi Barbier, Victor Bailly	Tom Roberts	Michael Ornetzeder, Alicia Gutting, Tanja Sinozic
	Gareth Thomas, Christina Demski, Nicholas Pidgeon	Françoise Bartiaux, Anne Baudaux	Kaisa J Matschoss, Petteri Repo	Julian R Dobson	Georgina Wood, Rosie Day, Emily Creamer , Dan van der Horst, Atif Hussain, Shuli Liu, Ashish Shukla, Mark Gaterell, Panagiotis Petridis, Nicholas Adams, Victoria Brown	Alessandro Sciullo, Winston Gilcrease
	Elisabeth Franziska Ruef, Olivier Ejderyan	Sylvia Mandl	Claudia Foltyn, Matthias Sebastian Klaes, Reiner Keller			Michiel A. Heldeweg, Séverine Saintier

Tuesday 4th September

Session Theme	Public Engagement	Justice and Vulnerability	Theory, Concepts & Methods	Politics and Governance	Dynamics of Demand	Locality and community
9.00 -10.30	Christina Demski, S. Becker, G. Thomas, D. Evensen, N. Pidgeon	Adolfo Mejia Montero	Sophie Nemoz	Andreas Röhring	Joana Abreu, Nathalie Wingartz, Claire McIlvennie, Kurt Roth	Thomas Bauwens, Boris Gotchev, Lars Holstenkamp, Jörg Radtke, Daan F.J. Schraven, Özgür Yildiz
	Regine Sønderland	Lourdes Alonso Serna	Julia Backhaus,	Thomas Reverdy,	Marta Pappalardo,	Jessica Balest, Barbara Di

	Saga, Rachel Dunk, Paul O'Hare		Harro van Lente	Frederic Marty	Thomas Reverdy	Pietro, Giulia Garegnani
	Catherine Cherry, Nick Pidgeon	Anna Berka	Sanneke Kloppenburg, Marten Boekelo	Agatino Nicita	Gary Goggins, Frances Fahy , Charlotte Louise Jensen	Poppy Walter
	Fulvio Biddau, Mauro Sarrica, Barbara Di Pietro, Paol Cottone		Miroslav B. Milovanović Dragan S. Antić, Milena N. Rajić , Pedja M. Milosavljevi, Dragan LJ. Pavlović		Amélie Anciaux, Françoise Bartiaux	Diana Süsser, Anderas Kannen
			Clare Hanmer, David Shipworth, Michelle Shipworth		Marco Sonnberger, Antonia Graf	
	Public Engagement	Justice and Vulnerability	Theory, Concepts & Methods	Politics and Governance		Public Engagement
11.00-12.30	Catherine Queen	Xavier Lemaire	Lars Holstenkamp, Jörg Radtke	Çigdem Adem		Ilona Jędrasik
	Mel Rohse, Rosie Day , David Llewellyn	Lucie Middlemiss, Pepa Ambrosio Albala, Nick Emmel, Jan Gilbertson, Ross Gillard, Tom Hargreaves , Caroline Mullen, Tony Ryan, Carolyn Snell, Angela Tod	Natalia Magnani, Dario Minervini	Richard Lowes, Bridget Woodman		Alex Boso, Cristian B. Oltra Algado
	Etienne Bailey, Patrick Devine-Wright, Susana Batel	Robert Lindner, Andrew Cock	Rosie Robison, Chris Foulds	Arie Yanwar Kapriadi		Hawal Shamon, Diana Schumann, Jurgen-Friedrich Hake
	Susana Batel, Patrick Devine-Wright	Ute Dubois, Hicham Sebti	Osman Arrobbio, Giulia Sonetti	Örn D Jónsson		

Session Theme	Public Engagement	Justice and Vulnerability	Theory, Concepts & Methods	Politics and Governance	Politics and Governance	Special Double Session: Art and Energy
1.30 – 3.00	David Krantz	Neil Simcock	Laure Dobigny, Marlyne Sahakian	Laura Brinker	Marie Claire Brisbois	Chloe Uden
	Imogen Rattle	Noel Longhurst, Tom Hargreaves	Tineke van der Schoor	Kat Buchmann	Jon Phillips, Federico Caprotti	
	Maija Hujala, Anssi Tarkiainen, Sari Janhunen, Satu Pätäri	Karen Parkhill, Catherine Butler	Michael Kunkis	Dagmar Lorenz-Meyer	Martin Burgess	
	Midori Aoyagi	Lior Herman, Ashik Movshovitz	Mirko Suhari	Roberto Cantoni	Emi Ichianagi	

Wednesday 5th September

Session Theme	Public Engagement	Justice and Vulnerability	Theory, Concepts & Method	Politics and Governance	Politics and Governance	Public Engagement
9.30-11.00	Ruth Woods, Thomas Berker	Rachel Guyet	Gerardo A. Torres Contreras	Matthew Lockwood	Andrzej Strzałkowski	Iwińska Katarzyna
		Petteri Repo, Markku Anttonen, Minna Lammi, Juri Mykkänen	Franco Ruzzenenti	Sandra Wassermann, Marc Deissenroth, Ulrich Frey	Talia Contreras Tapia	Karel Deneckere
	Maria Busse, Rosemarie Siebert	Xaquín Pérez-Sindín López, Xoan Doldán, Aleksandra Wagner, Martin David	Ioanna Kyprianou, D. K. Serghides, S. Dimitriou	Paul Upham, Katinka Johanssen	Giorgio Osti, Giovanni Carrosio	Agne Budzyte
	Bastien Tavner, Laura Draetta	Iván López	Rebecca Pearce	Marek Józefiak	Paola Velasco Herrejo	Jason Harold, Valentin Bertsch

Parallel Workshops

Monday 3rd September

Workshops	Beyond the mainstream: diversity in Social Science & Humanities responses to city-level energy needs (rm 2.1)	Devolution and defection in energy networks (rm 2.2)	Justice, democracy and community energy (2.3)	Religion in Energy Transitions: A Hidden Player? (rm 2.4)
4.30 – 6.00	Organisers: Rosie Robison	Organisers: Michael Fell and UCL Energy Institute PACE Group	Organisers: Thomas Bauwens, Patrick Devine-Wright	Organisers: Jens Köhrsen, Alexandre Grandjean, Christophe Monnot
	Rosie Robison	Colin Nolden	Annalisa Savaresi	Jens Köhrsen
	Kat Buchman	Helen Poulter		Alexandre Grandjean
	Jessica Britton	Sonya Bedford	Loïc Cobut	Christophe Monnot
	Iain Souter,	Jon Phillips	Thomas Bauwens, Patrick Devine-Wright	Lior Herman
	Aleksandra Wagner			David Krantz
	Osman Arrobbio			
	Mel Rohse			

Tuesday 4th September

Workshops	Real-world laboratories as a tool for a participatory energy transition (rm 2.1)	The renewable energy-critical mineral-nexus in times of the global energy transition (rm 2.2)	Community energy: A UK perspective (rm 2.3)	Widening the lens: energy transitions and governance beyond 'energy' policy (rm 2.4)	Special Double Session: Art and Energy (rm 2.6)
3.30 – 5.00	Organisers: Annika Arnold, Anne H. Kraft, Johannes Venjakob	Organisers: Martin David, Alena Bleicher	Organisers: Thomas Bauwens, Patrick Devine-Wright	Organisers: Karen Bickerstaff, Catherine Butler	Organisers: Chloe Uden
	Richard Beecroft, Volker Stelzer	Keynote address: Kate Moore	Colin Nolden, J. Barnes, Jack Nicholls	Sarah Royston	
				Nicky Hodges	
	Kaisa Matschoss, Julia Backhaus		Carly McLachlan, Tim Braunscholtz-Speight	Caroline Snell	
				Catherine Butler	
	Jay Harrison, Luederitz, Elizabeth C. Kurucz, Elise Desjardins, Barry A. Colbert, Sean Geobey		Jack Nicholls, Patrick Devine-Wright	Rosie Robison	
				Naomi Creutzfeldt	
				Karen Bickerstaff	

Wednesday 5th September

Workshops	Workshop session Beyond Academia: translating energy transition research into policy (rm 2.1)	Environmental Conflicts in Energy Production as Promoter for a new Convergence between Anti-Ecology and Right Wing Populism (rm 2.2)	Community Energy: International Outlook and Research Perspectives (rm 2.3)
11.10 – 12.40	Organisers: Anne Schiffer and Mary Greene	Organisers: Conrad Kunze, Julia Zilles	Organisers: Patrick Devine-Wright, Thomas Bauwens, Boris Gotchev, Lars Holstenkamp
	Anne Schiffer	Julia Zilles	Anna Berka, Julie MacArthur, Claudia Gonnelli
	Mary Greene	Conrad Kunze	
	Sally A. Semple	Andrzej Strzałkowski	
	Katherine Ellsworth-Krebs	Bleta Arifi and Georg Winkel	Dominique De Wit

Key Note Speakers

Professor Catherine Mitchell

Catherine Mitchell is Professor of Energy Policy at Exeter University, having worked on energy issues since the early 1980s. She has worked previously as an academic in the Centre for Management Under Regulation at the Warwick Business School, University of Warwick (2000-2007); the Energy Group of the Science Policy Research Unit, University of Sussex (1990-2000); and the Energy and Resources Group, University of California, Berkeley (1999). Prior to that she was a journalist writing about oil and gas issues (1982-6). She was a Lead Author (LA) in the IPCC Working Group 3's Fifth Assessment report (AR5) and a coordinating Lead Author (CLA) of the Policy, Financing & Implementation Chapter of the IPCC (Inter-Governmental Panel on Climate Change) Special Report on Renewable Energy Sources and Climate Change Mitigation 2008-2011. She also was a Lead Analyst of sub-Chapter 13 (Policy) of Chapter 11 (Renewable Energy) of the Global Energy Assessment undertaken through the International Institute for Applied Systems Analysis (IIASA) 2008-2010; She is currently an EPSRC Established Career Fellow leading a 3 year project (2016-2019) Innovation and Governance for Future Energy Systems (IGov2). This is an extension of a 4 year project on Innovation, Governance and Affordability for a Sustainable and Secure Economy (IGov), which ended in September 2016. She is Chair of the Regulatory Assistance Project – a US based non-profit organisation that provides regulatory advice to Governments; and on the Advisory Board of the GB based Energy and Climate Intelligence Unit (ECIU). She has also advised numerous national and international companies, NGOs and institutions on various aspects of the transition to a sustainable energy system.



Professor Harald Rohrer

Harald Rohrer is Professor of Technology and Social Change at the Department of Thematic Studies, Linköping University, Sweden (since 2012). He holds degrees in Technical Physics (MSc), Sociology (MA, PhD), University of Graz, Science and Technology Policy (MSc), Sussex University, and a *venia legendi* (habilitation) in Science and Technology Studies from Klagenfurt University. He has been Head of Tema T - Technology and Social Change (2015-17), co-founder and director of the Inter-University Research Centre for Technology, Work and Culture (IFZ), Graz, Austria (1999-2007), Joseph A. Schumpeter Fellow at Harvard University (2009-10) and Simon Visiting Professor at Manchester University (spring 2013). He is Chair of the Research Network 24 (Sociology of Science and Technology) of the European Sociological Association, Associate Editor of 'Environmental Innovation and Societal Transitions' and editorial board member of 'Sustainability'. In his research he is interested in the governance of socio-technical change with a particular focus on the role of users and civil society in innovation processes, urban low-carbon transitions, as well as the role of ICT in the transformation of infrastructures. Current projects focus among others on Smart & Sustainable Cities, the role of demonstration projects and experiments in socio-technical change, and on the development of a Swedish knowledge platform for transformative innovation policy.



Poster Session (sponsored by Nature Energy)

7pm – 8pm Monday 3rd September, Peter Chalk Hall 1

Authors	Pia Laborgne, Jochen Wendel
Title	Creating Interfaces in the Urban Food-Water-Energy Nexus

Authors	Xinfang Wang
Title	Institutional landscape changes for energy storage deployment in UK's energy system transition

Authors	Christina Demski, Darrick Evensen, Nick Pidgeon
Title	The role of trust in delivering energy transitions

Authors	Sioned Hâf, Karen Parkhill*
Title	Social Benefits Of Community Owned Renewable Energy Schemes: A comparative study of community energy on the peripheries

nature
energy

Special Session: Art and Energy

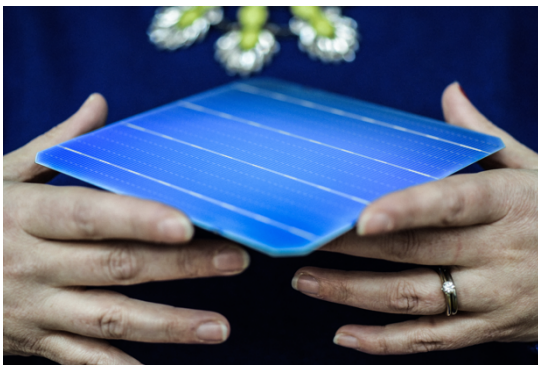
Tuesday 4th September 1.30 – 3.00 and 3.30 – 5.00 Room 2.6

The Art and Energy programme pioneers a range of creative engagement projects for the sustainable energy industry.

Their purpose is to protect against the danger that a shift to a new energy generation is changing our environment creating uninspiring clone spaces where people feel alienated. Art and Energy are experts transforming the look of solar panel energy generation through art in order to:

- Brighten up our communities
- Celebrate our diverse cultures
- Inspire others to consider renewable energy

Art and Energy will be running a double special session on the aesthetic potential for solar PV and what it might mean for communities approaches to new energy installation.



Full Programme: Parallel Sessions and Workshops

Monday 3rd September 2.40 – 4.10

Public engagement

Rm 2.1

Chair: Catherine Butler

Author(s):	Sarah Becker, C. Demski, D. Evensen, E. Roberts, N. Pidgeon
Title	Energy, Technology and Society: Socio-technical Imaginaries

Author(s):	Varho Vilja (Luke), Riikka Paloniemi, Annukka Vainio, Anna Pulkka, Petri Tapio
Title	Citizens' views on the future transition towards decentralized renewable energy

Author(s):	Gareth Thomas, Christina Demski, Nicholas Pidgeon
Title	Deliberating Technologies and Governance for Energy Storage

Author(s):	Elisabeth Franziska Ruef, Olivier Ejderyan
Title	Public engagement in a geothermal energy program: understanding the emergence of collectives of participation

Justice and Vulnerability

Rm 2.2

Chair: Karen Bickerstaff

Author(s):	Ana Horta, João Carlos Sousa, Luísa Schmidt
Title	Energy poverty in Portugal

Author(s):	Ioanna Kyprianou, D. K. Serghides and S. Dimitriou
Title	The Impact of Energy Policies and Measures on Energy Poverty in Mediterranean Countries

Author(s):	Bartiaux Françoise, Anne Baudaux
Title	Energy poverty in the Brussels' Region: Asymmetric social aid procedures, and (mis-)recognition

Author(s):	Sylvia Mandl
Title	Energy cultures in the context of fuel poverty: Exploring the energy consumption patterns of Austrians living with limited resources.

Theory, Concepts & Methods

Rm 2.3

Chair: Matthias Gross

Author(s):	Chris Groves, Karen Henwood, Nick Pidgeon, Fiona Shirani, Erin Roberts
Title	Islanded, connected, visible, intangible? Mapping expert imaginaries of whole energy system transition

Author(s):	Paula Kivimaa, Wouter Boon, Sampsa Hyysalo, Laurens Klerkx, Mari Martiskainen, Johan Schot
Title	How do intermediaries advance sustainability transitions? Conceptual insights on intermediary action in different transition phases

Author(s):	Kaisa J Matschoss, Petteri Repo
Title	Actor-network analysis of sustainable energy experiments

Author(s):	Claudia Foltyn, Matthias Sebastian Klaes, Reiner Keller
Title	Comparing Energy Discourses – The controversies on hydraulic fracturing and shale gas in Germany and Poland

Politics and Governance

Rm 2.4

Chair: Alena Bleicher

Author(s):	Margaret Tingey
Title	Business models and citizen activism in the German municipal energy sector: key insights for UK and Scottish energy contexts

Author(s):	François Joseph Daniel, Rémi Barbier, Victor Bailly
Title	The Moral Economies of Biogas in France

Author(s):	Julian R Dobson
Title	Are energy transitions societal transitions? The excluded imaginaries of environmental leaders

Dynamics of Demand

Rm 2.5

Chair: Pia Laborgne	
Author(s):	Nicolette Fox
Title	Here Comes the Sun: The evolution of a Prosuming Project within a social housing estate
Author(s):	Tom Roberts
Title	Let's talk about thermal comfort
Author(s):	Georgina Wood, Rosie Day, Emily Creamer* , Dan van der Horst, Atif Hussain, Shuli Liu, Ashish Shukla, Mark Gaterell, Panagiotis Petridis, Nicholas Adams, Victoria Brown
Title	Sensors, sense making and sensitivities: Householders' experience with a feedback display on energy consumption and indoor environmental conditions.

Locality, energy and community

Rm 2.6

Chair: Aleksandra Wagner	
Author(s):	Fionnguala Sherry-Brennan, Patrick Devine-Wright
Title	Putting shared ownership of renewable energy projects into practice: practical challenges and policy turbulence
Author(s):	Michael Ornetzeder, Alicia Gutting, Tanja Sinozic
Title	User and community involvement in the integration of renewables in a local energy distribution network
Author(s):	Alessandro Sciullo, Winston Gilcrease
Title	Communities Supporting the Energy Transition: conceptual and practical remarks
Author(s):	Michiel A. Heldeweg, Séverine Saintier
Title	Community Energy Initiatives as a 'Socio-Legal Institution': towards a social Right of Access to affordable, secure and sustainable energy?

Tuesday 4th September

Public engagement

Rm 2.1 (& 2.6)

9.00 – 10.30

Chair: Catherine Butler

Author(s):	Christina Demski, S. Becker, G. Thomas, D. Evensen, N. Pidgeon
Title	Public conceptualizations of energy as a need and basic right

Author(s):	Regine Sønderland Saga, Rachel Dunk, Paul O'Hare
Title	Understandings of the Smart City: The Perspective of University Students

Author(s):	Catherine Cherry, Nick Pidgeon
Title	Exploring public values for a low material future

Author(s):	Fulvio Biddau, Mauro Sarrica, Barbara Di Pietro, Paul Cotton
Title	Public participation and social acceptability of energy system change: Findings from a longitudinal and multi-scalar investigation of a regional case study

11.00 – 12.30

Rm 2.1

Chair: Catherine Butler

Author(s):	Catherine Queen
Title	Exploring public disengagement from proposed overhead powerline consultation processes through a Bourdieuan lens

Author(s):	Mel Rohse, Rosie Day , David Llewellyn
Title	Emotions in an energy system: the case of a South Wales former mining village

Author(s):	Etienne Bailey, Patrick Devine-Wright, Susana Batel
Title	Understanding public responses to power line siting: combining place and project-based research pathways

Author(s):	Susana Batel, Patrick Devine-Wright
Title	Populism, different-level identities and responses to energy infrastructures at different scales: A post-Brexit reflection

Chair: Giorgio Osti

Author(s):	Ilona Jędrasik
Title	Civil society's impact on the Polish energy transition

Author(s):	Alex Boso, Cristian B. Oltra Algado
Title	The adoption of wood pellet heating systems in households: the role of affects, perceptions and social practices

Author(s):	Hawal Shamon, Diana Schumann, Jurgen-Friedrich Hake
Title	Determinants of Local Acceptance – Insights from a Representative Experimental Survey in Germany

Chair: Sophie Nemoz

Author(s):	David Krantz
Title	Is fracking Kosher? The Jewish Response to a transforming energy system

Author(s):	Imogen Rattle
Title	Postpolitics and the online: the divisive case of shale gas in Lancashire, UK

Author(s):	Maija Hujala, Anssi Tarkiainen, Sari Janhunen, Satu Pätäri
Title	Acceptability and acceptance of wind power – a holistic view

Author(s):	Midori Aoyagi
Title	Economy versus environment revisited: from the analysis of the combination of public opinion survey and focus groups in Japan.

9.00 – 10.30

Chair: Andre Schaffrin

Author(s):	Adolfo Mejia Montero
Title	An interdisciplinary categorization of perceived injustices around wind energy projects in Oaxaca Mexico using the energy justice conceptual framework

Author(s):	Lourdes Alonso Serna
Title	Negotiation and conflict in the deployment of wind farms in the Isthmus of Tehuantepec, Oaxaca

Author(s):	Anna Berka
Title	Characterising inclusive governance in a post- Feed-in-Tariff World: an international review

11.00 – 12.30

Chair: Ana Horta

Author(s):	Xavier Lemaire
Title	Energy Transition and Energy Justice in the Global South

Author(s):	Lucie Middlemiss, Pepa Ambrosio Albala, Nick Emmel, Jan Gilbertson, Ross Gillard, Tom Hargreaves* , Caroline Mullen, Tony Ryan, Carolyn Snell, Angela Tod
Title	Energy poverty and social relations: using a capabilities approach to understand the social dimension of energy vulnerability

Author(s):	Robert Lindner, Andrew Cock
Title	Energy access and rural electrification in Myanmar

Author(s):	Ute Dubois, Hicham Sebti
Title	Energy poverty identification on the field: Analysing the variety of approaches

1.30 – 3.00

Chair: Francoise Bartiaux

Author(s):	Neil Simcock
Title	Recognising recognition: incorporating concepts of misrecognition into energy justice

Author(s):	Noel Longhurst, Tom Hargreaves*
Title	(Dis)assembling fuel poverty: Exploring relations of energy, knowledge, finance and affect among energy vulnerability social housing tenants

Author(s):	Karen Parkhill, Catherine Butler
Title	Exploring the impact of welfare and employment policy on energy vulnerabilities.

Author(s):	Lior Herman, Ashik Movshovitz
Title	Energy Justice from International and Transnational Perspectives

Theory, Concepts & Methods

Rm 2.3

9.00 – 10.30

Chair: Pia Laborgne

Author(s):	Sophie Nemoz
Title	When energy transitions confuse or how to rethink a divided world

Author(s):	Julia Backhaus, Harro van Lente
Title	Hegemonic and counter-hegemonic theories-in-use in sustainable energy initiatives

Author(s):	Sanneke Kloppenburg, Marten Boekelo
Title	Plug into your energy: energy platforms and the future of the decentralized grid

Author(s):	Miroslav B. Milovanović Dragan S. Antić, Milena N. Rajić* , Pedja M. Milosavljevi, Dragan LJ. Pavlović
Title	Energy consumption forecasting based on endocrine neural network application

Author(s):	Clare Hanmer, David Shipworth, Michelle Shipworth
Title	Methods for investigating householder response to transitions in home heating technologies

11.00 – 12.30

Chair: Matthias Gross

Author(s):	Lars Holstenkamp, Jörg Radtke
Title	Walker/Devine-Wright at Ten: Reflections on the Meaning of "Community Energy"

Author(s):	Natalia Magnani, Dario Minervini
Title	Investigating renewable energy commons as translation, morphological policentricity and intermediation

Author(s):	Rosie Robison, Chris Foulds
Title	Critiquing storytelling: local participation in low-carbon collaborations

Author(s):	Osman Arrobbio, Giulia Sonetti
Title	Barriers to the integration of Social Sciences and Humanities in the energy-related sectors outside academia

1.30 – 3.00

Chair: Alena Bleicher

Author(s):	Laure Dobigny, Marlyne Sahakian
Title	Comparing energy-using practice across European countries: methodological considerations

Author(s):	Tineke van der Schoor
Title	Community energy, it's coming up roses!

Author(s):	Michael Kunkis
Title	De-Carbonized Futures in Energy-Producing and Energy-intensive Companies

Author(s):	Mirko Suhari
Title	Knowledge Brokers, Change Agents, or Process Mediators? Actor roles and methodological reflexivity in transdisciplinary approaches of energy research

9.00 – 10.30

Chair: Ana Horta

Author(s):	Andreas Röhrling
Title	Energy transition between climate protection, profit orientation and regional interests

Author(s):	Thomas Reverdy, Frederic Marty
Title	Legitimacy constraints and strategic interdependencies between political authorities and independent authorities in the French electricity-market regulation

Author(s):	Agatino Nicita
Title	The consumer engagement in the energy market in Mediterranean area: review of barriers challenges and approaches

11.00 – 12.30

Chair: Celia Robbins

Author(s):	Çigdem Adem
Title	Renewable Energy Cooperatives in Turkey: Challenges and Opportunities for Energy Governance

Author(s):	Richard Lowes, Bridget Woodman
Title	The emerging hydrogen vision for the decarbonisation of heat in the UK: a ploy by incumbents to protect existing interests?

Author(s):	Arie Yanwar Kapriadi
Title	Political Ecology of Biofuel Policy Development in Indonesia

Author(s):	Örn D Jónsson
Title	Taming the elements: The varied utilization of geothermal energy in Iceland

1.30 – 3.00**Rm 2.4**

Chair: Celia Robbins

Author(s):	Laura Brinker
Title	Of markets and monopolies: competing discourses at play in the design of retail electricity markets

Author(s):	Kat Buchmann
Title	Corporate Sponsored Climate Denial

Author(s):	Dagmar Lorenz-Meyer
Title	On the technoecologies of solar energy

Author(s):	Roberto Cantoni
Title	Shale Tales: A Comparative Study of the Shale Gas Promise in France and Poland

1.30 – 3.00**Rm 2.5**

Chair: Andre Schaffrin

Author(s):	Marie Claire Brisbois
Title	The disruptive political potential of decentralized renewable energy production: empirical evidence from the Powershifts project

Author(s):	Jon Phillips, Federico Caprotti
Title	The political and technological decentralisation of energy in South African cities

Author(s):	Martin Burgess
Title	Achieving social change around fuel use with Personal Carbon Accounts

Author(s):	Emi Ichiyanagi
Title	Comparison of the decision making process of energy policy between Germany and Japan after Fukushima

Dynamics of Demand

Rm 2.5

9.00 – 10.30

Chair: Giorgio Osti

Author(s):	Joana Abreu, Nathalie Wingartz, Claire McIlvennie, Kurt Roth
Title	What would you do to keep the lights on in your community?

Author(s):	Marta Pappalardo, Thomas Reverdy
Title	Improving the energy performance in service building through collective learning and regulation: how socio-technical dependencies are convened in a deliberative space

Author(s):	Gary Goggins, Frances Fahy , Charlotte Louise Jensen
Title	Unpacking efforts to reduce domestic energy use across urban areas in Europe

Author(s):	Amélie Anciaux, Françoise Bartiaux
Title	The eclecticism of practices: when compartmentalisation becomes the norm

Author(s):	Marco Sonnberger, Antonia Graf
Title	Imagining sustainable and energy-efficient mobility futures – Concepts of needs in sociotechnical imaginaries of passenger mobility

Locality, energy and community

Rm 2.6

9.00 – 10.30

Chair: Aleksandra Wagner

Author(s):	Thomas Bauwens, Boris Gotchev, Lars Holstenkamp, Jörg Radtke, Daan F.J. Schraven, Özgür Yildiz
Title	Community Energy, Citizen Energy, and other concepts – same same but different?

Author(s):	Jessica Balest, Barbara Di Pietro, Giulia Garegnani
Title	Cooperative And Integrated Energy Plan: Recommendations from socio-energy viewpoint

Author(s):	Poppy Walter
Title	Public engagement with heat decarbonisation

Author(s):	Diana Süsser, Anderas Kannen
Title	Renewables? Yes Please!': Understanding the facets of community renewable energy

Wednesday 5th September 9.30 – 11.00

Public engagement

Rm 2.1 & 2.6

Rm 2.1

Chair: Sophie Nemoz

Author(s):	Ruth Woods, Thomas Berker
Title	Supporting sustainable ambitions: a zero emission neighbourhood living lab

Author(s):	Maria Busse, Rosemarie Siebert
Title	The acceptability of local biomass heating plants – Experiences from a real-life lab in the Spreewald region (Germany)

Author(s):	Bastien Tavner, Laura Draetta
Title	Diverging concerns and converging distrust: The public controversy over the smart metering initiative in France

Rm 2.6

Chair: Pia Laborgne

Author(s):	Iwińska Katarzyna
Title	Energy transition in Poland: social perception of the Nuclear Power Plant Programme

Author(s):	Karel Deneckere
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Title	The nature of nuclear power: Giving meaning to the environment in the Belgian nuclear power debate on the occasion of the Fukushima disaster
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Author(s):	Agne Budzyte
Title	How preventable actions on energy technologies distort the perception of environmental issues?

Author(s):	Jason Harold, Valentin Bertsch
Title	A multi-national examination of public acceptance of future electricity generation mixes

Justice and Vulnerability

Rm 2.2

Chair: Francoise Bartiaux

Author(s):	Rachel Guyet
Title	Energy innovations in the social housing sector in Europe

Author(s):	Petteri Repo, Markku Anttonen, Minna Lammi, Juri Mykkänen
Title	Green economy, circular economy, and visions of the future

Author(s):	Xaquín Pérez-Sindín López, Xoan Doldán, Aleksandra Wagner, Martin David
Title	Energy production and regional inequality: quantitative analysis of energy production and consumption across regions in Spain, Poland, Germany and UK

Author(s):	Iván López
Title	Socio-economic characterization of energy poverty in Spain: a survey data analysis of households

Theory, Concepts & Methods

Rm 2.3

Chair: Karen Bickerstaff

Author(s):	Gerardo A. Torres Contreras
Title	The Politics of Wind Energy in the Isthmus of Tehuantepec: Wind, Land and Livelihoods

Author(s):	Franco Ruzzenenti
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Title	The Governance of RES: The Role of the Network
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Author(s):	Ioanna Kyprianou, D. K. Serghides, S. Dimitriou
Title	The Bioclimatic Approach in Developing Smart Urban Isles for Sustainable Cities

Author(s):	Rebecca Pearce
Title	Life in the Slow Lane: applying a current sun philosophy to Passive House dwelling

Politics and Governance

Rm 2.4 & 2.5

Rm 2.4

Chair: Catherine Butler

Author(s):	Matthew Lockwood
Title	Energy transitions and direction-setting in comparative perspective: Do governance paradigms matter?

Author(s):	Sandra Wassermann, Marc Deissenroth, Ulrich Frey
Title	Fit and conform vs. stretch and transform storage strategies of incumbent and challenger actors

Author(s):	Paul Upham, Katinka Johanssen
Title	Environmental impact assessment in an era of scientific and political post-normality: the case of the Sejerø Bugt nearshore wind farm bid for tender

Author(s):	Marek Józefiak
Title	Air pollution in Poland: From 'myth' to one of nation's most disputed topics

Rm 2.5

Chair: Ana Horta

Author(s):	Andrzej Strzałkowski
Title	Implications of practice theory, multi-level perspective and behavioural insights for local scale energy transitions in Po(Coal)land

Author(s):	Talia Contreras Tapia
Title	A combined framework to analyse Mexico's energy transition

Author(s):	Giorgio Osti, Giovanni Carrosio
Title	Energy transition in between scales and games: two Italian regions compared

Author(s):	Paola Velasco Herrejo
Title	Sustainability, Capabilities, and Power: Building a Framework to Analyse Business-Community Relations in Mexico's Wind Energy Sector

Workshops

Monday 3rd September 4.30 – 6.00

Title	Beyond the mainstream: <i>diversity in Social Science & Humanities responses to city-level energy needs (rm 2.1)</i>
Organisers/Chair	<i>Rosie Robison</i>
Co-organisers/discussion facilitators:	Dr Kat Buchmann & Dr Mel Rohse (Global Sustainability Institute, Anglia Ruskin University, kat.buchmann@anglia.ac.uk , melanie.rohse@anglia.ac.uk), Dr Iain Soutar & Jessica Britton (Energy Policy group, University of Exeter, i.soutar@exeter.ac.uk , j.britton@exeter.ac.uk), Aleksandra Wagner (Jagiellonian University, Poland, aleksandra.wagner@uj.edu.pl), Dr Osman Arrobbio (Università degli Studi di Torino, Italy, osman.arrobbio@unito.it)
<p>Energy transitions at the city level do not only require technological shifts. Rather, as is recognised by many actors within the local energy system, consideration of a range of social, political, and behavioural problems is also needed. All too often however, these aspects are neglected in the planning of projects, or only considered in a narrow framing which fits most easily alongside the ‘technological-fix’ narrative. The SHAPE ENERGY project is a 2-year European H2020 platform, funded by the Commission to highlight the diversity of energy-related Social Science and Humanities (energy-SSH) research, and increase its impact at the policy level. As part of its work, from Nov 2017-Jun 2018 SHAPE ENERGY has been running 17 European city-level workshops with local policymakers, businesses, citizen groups, and academics, using storytelling methods to discern energy-SSH research needs at the local level. The final report from these workshops will be published in August 2018. This workshop, after a chance to try one of the storytelling exercises, headline findings from the workshops (Dr Rosie Robison, Dr Osman Arrobbio), and brief responses (Dr Iain Soutar, Jess Britton), will be an interactive opportunity for E&S attendees to discuss key questions raised in small groups, including: the academic as policy advisor; why certain social science framings dominate; workshop facilitation methods; the impact of SSH on local and national policy.</p>	

Title	Devolution and defection in energy networks (rm 2.2)
Organisers/Chair	<i>Michael Fell and UCL Energy Institute PACE Group</i>
<p>There is a trend towards decentralization in energy networks in OECD countries, as demonstrated by growth in small-scale distributed solar photovoltaic systems. Falling prices for generation/storage technology, combined with the emergence of new market structures such as peer-to-peer energy trading, suggest this trend will continue. Decentralization has many benefits, including the potential to reduce distribution losses or support community cohesion. However, it also presents challenges. Currently costs and risks associated with</p>	

supplying energy are largely socialized across millions of network participants. As communities or individuals are able to become increasingly independent – or even defect from grids altogether – the costs of running the existing infrastructure will be borne on fewer shoulders. Those left behind may not be able to afford the technology that would allow them to defect or participate in new markets. The workshop will provide a forum for discussion of the challenges presented by devolution and defection in energy networks, with the aim of informing future research directions. The format will be a scene-setting presentation by the workshop organizers, followed by brief comments from invited experts. The remainder of the session will be for moderated audience debate and discussion.

Panel: Colin Nolden (University of Bristol), Helen Poulter (University of Exeter), Sophia (Exeter Community Energy, and Creating Synergies), Jon Phillips (King's College London)

Title	<i>Justice, democracy and community energy (2.3)</i>
Organisers/Chair	<i>Thomas Bauwens, Patrick Devine-Wright</i>
<p>This is the first in a series of three workshops that will be running throughout the conference on the topic of community energy.</p> <p>Speakers: Annalisa Savaresi, Justice, Equity and Community Energy: Lessons for the Energy Transition Loïc Cobut, Citizen Participation in the Energy Transition: What role for the European Union? Thomas Bauwens, Patrick Devine-Wright, Does community energy facilitate energy democracy? An international comparative analysis</p>	

Title	Religion in Energy Transitions: A Hidden Player? (rm 2.4)
Organisers/Chair	<i>Jens Köhrsen, Alexandre Grandjean, Christophe Monnot</i>
<p>Religion is barely addressed in research about sustainability transitions and more specifically, energy transitions. However, with the COP21 summit in Paris and Pope Francis' "Laudato Si", the engagement of religious actors in sustainability transitions and their struggle against global warming have received much media attention. Against the backdrop of a growing concern about environmental degradation and ongoing efforts to transform energy systems, world religions and spiritual movements are increasingly involved in environmental issues. Yet, in academic research on sustainability, religion and spirituality have somehow remained hidden players in these transformation processes. Through empirical insights and theoretical reflections, this panel explores how religion gets involved in energy transitions.</p> <p>Presentations</p> <p>Köhrsen, Jens (University of Basel): Religion in Urban Energy Transitions: Preliminary Insights</p>	

Abstract: As the majority of the world population lives today in urban spaces, cities have increasingly undertaken efforts to reduce carbon emissions. These efforts are accompanied by rising academic research which highlights the role of actors from a variety of social spheres in promoting low carbon transitions. However, studies have thus far ignored religion as a potentially important factor. This presentation addresses this research gap by theorizing the potentials of religion in urban low carbon transitions and providing some first empirical insights on its role. First, the presentation systematizes different forms of religious participation in urban low carbon transitions by reviewing literature from religious studies and sociology of religion. Second, based on this systematization, the presentation will present first empirical insights from the research project “Urban Green Religions”. This research project studies the role of religion in the energy transitions of two benchmark cities in Germany and Switzerland.

Grandjean, Alexandre (University of Lausanne): Energy transition as technical and cosmological modalities: A case study from the “greening” of Swiss vineyards

Abstract: Agriculture has recently received attention in Swiss environmental debates throughout a polling initiative on “alimentary security”. While organic approaches are developing in food-producing cultures, in vitiviniculture (*i.e. the raising and turning of grapes into wine*), more esoteric and cosmological approaches known as “biodynamic” are trending. Based on ethnographic fieldwork about the symbolic and pragmatic resources mobilized in the “greening” of Swiss vineyards, this presentation shows different modalities of conceiving the energy transition as: (a) technical (e.g. installation of solar panels and heat pumps) and (b) cosmological. Cosmological modalities can be « deeply » ecological, such as the seeking to reconnect one’s plants with the “energy of the cosmos” and hence finding back to the “genuine” expression of one’s terroir (*i.e. land*). However, these modalities are not necessarily conflicting but can be complementary, as will be discussed in the presentation.

Monnot, Christophe (University of Strasbourg): Greening of the Church or Visibility of Green Actors within the Church?

Abstract: The background of this presentation is the current observation in Switzerland about, firstly, a progressive « spiritualization » of discourses on ecology and the emergence of new actors, events and cultural productions mixing up spiritual and environmental arguments. Secondly, religious and spiritual actions are increasingly turned towards « ecological » arguments and give rise to new forms of collaborations within civil society. In this paper, we will present research insights about the members, local activities, and NGOs of Christian churches who are involved in ecological actions. We will describe how actors, NGOs, and Church hierarchy interact to diffuse or refrain an eco-friendly policy and theology.

Lior Herman (Hebrew University of Jerusalem): Kosher Electricity and Energy Transformation

Abstract

Energy and its socio-technical dimensions and energy transformations are two important and broad themes that have been in the last couple of years at the forefront of academic research and public awareness. Religion in these contexts have seemed to play a marginal role in terms of offering a unique cultural-technical perspective on the issue of energy transformations. Yet, religion as a system of faith, worship and morality have a critical and powerful role in designating and directing the actions of individuals, organizations and states. In this paper, I explore the concept of Kosher electricity, being the relation between the generation and use of energy and the Jewish prohibition on work during the Sabbath. As religion and politics in Israel are often intertwined, Kosher electricity is becoming an increasingly contested issue. Thus, on the one hand, Kosher electricity has significant local and domestic implications, in terms of various issues, such as energy poverty equity, and citizens energy consumption behaviour. On the other hand, Kosher electricity and its local implications have much broader consequences at the national level for energy transformation and the transition to solar and wind energy.

David Krantz (Arizona State University): Is Fracking Kosher? The Jewish Response to a Transforming Energy System

Abstract: Around the world, coal is declining in usage as a source of fuel, and despite the thoughts of the American president, the reason is not environmental regulation but rather the rise over the last decade of hydraulic fracturing, AKA fracking, that is leading to abundant (and thereby cheap) supplies of natural gas. In industrialized nations, religious communities have taken notice, particularly in the way that energy sourcing affects the freshwater supply. How has the Jewish community responded to this transformation in the energy system? This paper/presentation will compare the response to fracking among Jewish organizations in the United States and Israel. To what extent have Jewish groups in both countries worked together? What are the similarities and the differences to the approaches taken by Jewish activists in both countries? In both places, the internal debate on fracking within the Jewish community seems reflective of a secular debate: energy security and independence vs. caring for the environment and a safe and clean water supply. What do Jewish groups see as their religious obligations in ensuring energy independence and/or protecting water supplies? And what inspired their leaders to fight for or against fracking?

Tuesday 4th September 3.30 – 5.00

Title	Real-world laboratories as a tool for a participatory energy transition (rm 2.1)										
Organisers/Chair	Annika Arnold, Anne H. Kraft, Johannes Venjakob										
<p>The goal of the workshop is to advance international research efforts surrounding real-world laboratories (real-world labs) by systematizing and comparing results and methodological approaches from different case studies. The global energy transition needs innovative bottom-up approaches to involve citizens and change agents, researchers and policy actors alike and to foster cooperative transition designs; real-world labs offer a new approach to do so. The workshop is put forward and framed by research conducted within the project <i>ENavi – Navigational System for the Energy Transition</i>, funded by the <i>German Federal Ministry of Education and Research (BMBF)</i>. This project is the largest research consortium for energy research in the social sciences in Germany. It explicitly aims at involving stakeholders, change agents and citizens in the research activities. The workshop thus presents an opportunity to discuss and further develop the real-world lab-approach in this large consortium. Three individual presentations offer insights into real-world labs (case studies), representing different thematic scopes and geographical regions. These inputs shall be discussed among all participants, focusing on the specific topic of each real-world lab, the constellation of involved actors and the labs’ strategies for dissemination and continuation (a framework adapted from the Business Model Canvas). Participants are encouraged to identify challenges and advantages, key actors and necessary resources that constitute a real-world lab approach in their respective fields. This workshop provides a place for bringing together international perspectives on transformative research in the form of real-world labs. Moreover, it offers the possibility to discuss research settings and findings in an international perspective, thus acknowledging the global scale of those topics that are tackled in real-world labs, often in a specifically local perspective.</p>											
<p>Program</p> <p>1. Introduction: Goals and concept of the workshop; the project “ENavi – Navigational System for the Energy Transition” as workshop-frame; adapting the Business Model Canvas for evaluating real-world labs</p> <p>2. Input presentations</p> <p>3. Group discussions of specific questions, adapted from the Business Model Canvas</p> <p>4. Synthesis</p>											
<table><tr><td>Input presentations</td><td>Authors</td><td>Title</td><td>Institution</td></tr><tr><td></td><td>Richard Beecroft, Volker Stelzer, Colette Waitz</td><td>Energy Dialogue. Bridging Science-Communication and Co-Design in a Real world Lab I Germany</td><td>Karlsruhe Institute for Technology (KIT) – Institute for Technology Assessment and Systems Analysis (ITAS), Germany</td></tr></table>				Input presentations	Authors	Title	Institution		Richard Beecroft, Volker Stelzer, Colette Waitz	Energy Dialogue. Bridging Science-Communication and Co-Design in a Real world Lab I Germany	Karlsruhe Institute for Technology (KIT) – Institute for Technology Assessment and Systems Analysis (ITAS), Germany
Input presentations	Authors	Title	Institution								
	Richard Beecroft, Volker Stelzer, Colette Waitz	Energy Dialogue. Bridging Science-Communication and Co-Design in a Real world Lab I Germany	Karlsruhe Institute for Technology (KIT) – Institute for Technology Assessment and Systems Analysis (ITAS), Germany								

Eva Heiskanen ¹ , Senja Laakso ¹ , Kaisa Matschoss ¹ , Julia Backhaus ² , Gary Goggins ³ , Edina Vadovics ⁴	Designing real-world laboratories for the reduction of residential energy use: articulating Theories of Change:	¹ Consumer Society Research Center, University of Helsinki, Finland ² Maastrich University, Netherlands ³ National University of Ireland, Ireland ⁴ Green Dependent Institute, Hungary
<i>Jay Harrison⁴, Christopher Luederitz², Elizabeth C. Kurucz³, Elise Desjardins⁴, Barry A. Colbert¹, Sean Geobey²</i>	Leveraging university-based sustainability labs for social-ecological resilience: Practical design principles to catalyze social learning I Canada & Europe	<i>¹ Lazaridis School of Business and Economics, Wilfrid Laurier University, Canada ² Faculty of Environment, University of Waterloo, Canada ³ College of Business and Economics, University of Guelph, Canada ⁴ Office of Community Engagement, McMaster University, Canada</i>

Title	The renewable energy-critical mineral-nexus in times of the global energy transition (rm 2.2)
Organisers/Chair	<i>Martin David, Alena Bleicher</i>
<p>A strong body of literature evolved in the last couple of years on what we call “renewable energy-critical mineral nexus”. It seems, however, that the current discussion is lopsidedly centered towards interests of industries, whereas questions on the impact of emerging energy technologies and the increasing need for critical minerals on societies are more or less kept open. Literature argues therefore that nexus-constituting relations should be put in focus from a broader governance perspective which recognizes societal impacts of those developments. This is where the workshop takes up upon. It aims on identifying research topics related to the renewable energy-critical minerals nexus and encourages discussing the advantages and shortcomings of existing approaches for managing and governing the nexus from different perspectives. Some guiding questions of the workshop are: what implies the renewable energy-critical mineral nexus for the scenario of the global energy transition and what implies the global energy transition for the renewable energy-rare earth nexus? Under this umbrella, the discussion aims to shed on constitutive elements of the nexus - policies focused on</p>	

substitution or recycling, practices, actors, asymmetries, knowledge, concepts such as criticality, or technological trends.

Invited keynote speaker:

Kate R. Moore (Lecturer in Critical and Green Technology Metals, Camborne School of Mines, University of Exeter)

Abstract:

Raw materials production: escalating fuel consumption or the solution to sustainable energy?

Large, high-grade ore deposits are becoming depleted. Economies of scale and the need to prolong mining for investment security have advantaged mining of very large, low-grade deposits, with substantially increased energy consumption and vast global transport networks. The increasing costs of energy for rock-crushing and environmentally-regulated shipping will drive up the price of metals from a dominant global supplier. Additionally, the ore deposits for a wide diversity of metals and metalloids that are used in small quantities in modern technological devices that create or use electrical energy are unattractive to large mining companies with high overheads. There is an emerging niche for geographically dispersed, small-scale mining operations that are more responsive to market forces and designed to operate ethically and sustainably in collaboration with communities. Technological innovations that reduce throughput of rock in small-scale mining operations reduce energy requirements and increase the potential contribution of renewable energy to mining activities.

Biography: Kate Moore gained degree qualifications in geology (BSc), experimental petrology (PhD) and archaeology (Dip) from the University of Edinburgh, University of Bristol and National University of Ireland, Galway. She moved to the Camborne School of Mines in 2012, becoming lecturer in Critical and Green Technology Metals (linking to the British Geological Survey). She is Project Lead for IMP@CT (Integrated Modular Plant and Containerised Tools for selective, low-impact mining of small, high-grade deposits). The IMP@CT project includes tasks relating to the energy requirements of mining and processing, designs for increasing the contribution of renewable energy to mine sites, social sustainability and ethics in small scale mining.

Title	<i>Community energy: A UK perspective (rm 2.3)</i>
Organisers/Chair	<i>Thomas Bauwens, Patrick Devine-Wright</i>
Speakers: Colin Nolden, J. Barnes, Jack Nicholls , The changing economics of community energy – A review of community solar PV development in the UK Carly McLachlan, Tim Braunscholtz-Speight , Future visions of ‘community energy’ for the city region – conceptualising and delivering a flourishing sector Jack Nicholls, Patrick Devine-Wright , Owning the sun: solar farm development and ownership - local narratives and micro politics in the case of three solar farms	

Title	Widening the lens: energy transitions and governance beyond 'energy' policy (rm 2.4)
Organisers/Chair	<i>Karen Bickerstaff, Catherine Butler</i>
<p>Our concerns in this workshop are to address the ways in which government and governance objectives, policies, priorities, investments and ways of providing and working - that fall within and outside the ambit of energy policy - are re-constituting the need for energy and the nature of energy related issues, in particular energy poverty. There is a now growing body of evidence that has revealed how policy outside of formal energy policy has direct and indirect implications for achieving decarbonisation aims and addressing problems of energy vulnerability. In this context, there is a growing interest in widening the analytical lens and tracing the implications of non-energy policy and an array of institutional practices for achieving transitional and decarbonisation goals. This workshop responds to an urgent need to widen debate around energy transitions, governance and how energy issues, such as patterns of vulnerability (social, spatial, institutional), are produced and often interact. It has a specific interest in bringing together perspectives, case studies, examples, and knowledges that bring to light aspects of governance and inequality important for energy but that tend to remain unnoticed and under-examined.</p> <p>Workshop Format: The workshop will involve short presentations on relevant aspects of governance and policy that each raise key areas for group discussion.</p> <p>Speakers: Sarah Royston; Rosie Robison; Caroline Snell; Nicky Hodges; Naomi Creutzfeldt Discussants: Karen Bickerstaff; Catherine Butler</p>	

Title	Special Double Session: Art and Energy (rm 2.6)
Organisers/Chair	<i>Chloe Uden</i>
<p>The aesthetics of Solar PV and the potential cultural value of energy art installations</p> <p>A talk about the aesthetic versatility of solar PV, how we're working to turn it into an art material followed by a discussion about what that might mean for solar PV installations in the future with a short 'make'.</p>	

Wednesday 5th September 11.10 – 12.40

Title	Workshop session Beyond Academia: translating energy transition research into policy (rm 2.1)
Organisers/Chair	<i>Anne Schiffer and Mary Greene</i>
<p>Research on energy transitions is under increasing pressure to create impact beyond traditional dissemination routes, for example policy recommendations (Raw et al 2017). At the same time decision makers are criticised for being removed from the experiential and lived experience of policy impacts at grassroots level. These can arguably become more effective if recommendations are grounded in knowledge of everyday experiences. Here, situated ethnographic and immersive research holds a particular promise in shedding light on how lived experiences including embodied practices, dispositions and practical know how play out in domestic and community settings. As such, this workshop session explores how ethnographic energy transition research can inform policy at local, national and international level. In response to dominant technocratic approaches, social-scientific and human-centred energy research increasingly explores complex dimensions of everyday life. The workshop session will combine short presentations with a participatory discussion format on dissemination to policy makers and civil society.</p> <p>Speakers</p> <p>Anne Schiffer, School of Art, Architecture and Design, Leeds Beckett University, UK (co-organiser – lead)</p> <p>Mary Greene, School of Geography and Archaeology, NUI Galway, Ireland (co-organiser)</p> <p>Katherine Ellsworth-Krebs, School of Geography and Sustainable Development, University of St Andrews, UK</p> <p>Sally A. Semple, Herriot Watt University</p>	

Title	Environmental Conflicts in Energy Production as Promoter for a new Convergence between Anti-Ecology and Right Wing Populism (rm 2.2)
Organisers/Chair	Julia Zilles
<p>Presenters:</p> <p>Local Protests against wind turbines and connections to populist reasoning Julia Zilles, Göttingen Institute für Democracy Research</p> <p>Anti Ecology and its connetions to national and local energy politics in EU nations? Dr. Conrad Kunze, conrad.kunze2@fu-berlin.de FU Berlin, Centre for Environmental Research FFU (via Skype)</p> <p>Environmental Conflicts in Energy Production as Promoter for a new Convergence between Anti-Ecology and Right Wing Populism Renewable energy sources under rule of law crisis in Poland Andrzej Strzałkowski, Institute of Sociology, (as well as Faculty of Law and Administration), University of Warsaw, andrzej44@gmail.com.</p> <p>With the takeover of power in 2015 elections, right wing, Law and Justice party started implementation of its manifesto of sweeping changes in Poland. Taken actions, besides many positive, included numerous violations of Polish Constitution and rule of law, including drastic limitations of judiciary legal independence. Changes also included enactment of legal acts disturbed development of renewable energy sources in Poland, especially wind plants. Simultaneously, there were pro-coal governmental actions. Moreover, increase lodging in Białowieża Forest (on UNESCO World Heritage Site) was started. There were a couple of formal reactions to changes in RES sector, included preliminary question to Court of Justice of the European Union and start of international arbitration procedures. In the end, increase lodging in Białowieża was stopped after CJEU judgement, as well as there are signs of possible positive changes in RES sector. However, destruction of rule of law Poland is in progress what pose further risks for sustainabilitytransition in this country.</p>	

Title	Community Energy: International Outlook and Research Perspectives (rm 2.3)
Organisers/Chair	<i>Patrick Devine-Wright, Thomas Bauwens, Boris Gotchev, Lars Holstenkamp</i>
<p>Community Energy (CE) has become a widespread phenomenon on multiple levels and scales in transitions to a low carbon energy system that is taking place around the world. We notice an increasing amount of scholarship on the role of citizens, individual actors and local public authorities in the ownership and governance of sustainable energy and infrastructure.</p>	

However, concepts, empirical forms and available datasets vary widely across disciplines, geographies and institutional contexts. The workshop intends to present state of the art international research and a forum for discussion, reflection and networking of international CE scholars with different backgrounds, foci and disciplines. Therefore, the workshop will first present two papers followed by an interactive and collaborative format (World Café). This workshop is intended to complement formats presenting current research results on the topic, particularly by reflecting research perspectives on Community Energy in practice and policy.

5 min.	Introduction to the Workshop			<i>Organizers</i>
40 min.	i. Anna Berka, Julie MacArthur & Claudia Gonelli (15 min.) ii. Dominique de Wit			<i>Chairs:</i> <i>Patrick Devine-Wright, Thomas Bauwens</i>
40 min.	(1): Concepts, definitions, typologies of Community Energy	(2): Data on Community Energy	(3): The role of research for Community Energy practice and exchange between research and practice	<i>Facilitation:</i> <i>Lars Holstenkamp, Boris Gotchev, Thomas Bauwens, Patrick Devine-Wright</i>
5 min.	Wrap-up			<i>Organizers</i>

