

## 1) Workshops with call for presentation (special sessions)

### **Dominated, ignored and belittled? Gender, justice and women in the energy**

**transition Convenors:** **Dr. Mary Greene**, mary.greene@wur.nl , Assistant Professor, Environmental Policy Group, Wageningen University, The Netherlands, **Dr. Anne Schiffer**, a.schiffer@leedbeckett.ac.uk Senior Lecturer, Leeds School of Arts, Leeds-Beckett University, The United Kingdom

This session seeks to explore questions of justice in consumption and energy transitions research through a gender lens. It invites contributions that engage with the question of gender at different scales of energy systems analysis, from everyday energy and resource consumption practices to governance at community, national and international contexts. In considering everyday energy practices, the question of gendered patterns, modes and meanings associated with performances have only recently begun to be explored ( Kumar, 2018; Wait, 2017), to which questions remain regarding the intersectionality of gender with other categories of social difference shaping energy practice dynamics. Scaling analysis up, gender inequalities in terms of access to and participation within energy and sustainability governance spheres, at community, national and international contexts emerges as an under explored yet important consideration in discussions of justice and governance for sustainability (Baruah, 2017; Gaffney and Dunphy, 2017; Pearl-Martinez and Stephens, 2016). Recent analysis of industrialised, emerging and developing energy economies shows that women are underrepresented in technical and decision-making roles in both community energy and conventional energy sectors (Allen et al, 2019; Baruah, 2017; Van Veelen, 2018;). Furthermore, emerging research indicates that women are playing a central role in energy focused social movements and resistance against extractivism (Willow and Keefer, 2015). This session seeks to respond to emerging calls for greater attention to gender analysis and means of achieving enhanced gender diversity in energy systems governance.

This interactive workshop welcomes researchers and practitioners to share perspectives and experiences of gender specific challenges and opportunities in past, current and future energy consumption and transitions research. Presentations may include but are not limited to the following themes:

- Gendered energy practices
- Gender and social practice theories
- Gendered approaches to energy citizenship
- Gendered approaches to environmental justice
- Gendered analysis of participation in energy-based social movements, resistance and governance
- Intersectionality of gender with other categories of social difference (e.g. socio- economic status, race, ethnicity) in energy transitions analysis
- Power and positionality of female energy researchers
- Regional/international comparisons

of gendered perspectives on energy practices and transitions research

The session will kick off with a series of short and visual Pecha-Kucha style presentations. These will be followed by discussion tables encouraging audience participation and feedback.

References: Allen, E., Lyons, H., & Stephens, J. C. (2019). Women's leadership in renewable transformation, energy justice and energy democracy: Redistributing power. *Energy Research & Social Science*, 57, 101233. doi:<https://doi.org/10.1016/j.erss.2019.101233> Baruah, B. (2017) Renewable inequity? Women's employment in clean energy in industrialized, emerging and developing economies. *Natural Resources Forum*, <https://doi.org/10.1111/1477-8947.12105> Gaffney, C. and Dunphy, N. (2017) The Gender of Energy Citizenship <http://conference.rgs.org/AC2017/270>. Kumar, A. (2018). Justice and politics in energy access for education, livelihoods and health: How socio-cultural processes mediate the winners and losers. *Energy Research & Social Science*, 40, 3-13. doi:<https://doi.org/10.1016/j.erss.2017.11.029> Pearl-Martinez, R. and Stephens, J.C. (2016) Toward a gender diverse workforce in the renewable energy transition. *Sustainability: Science, Practice and Policy*, 12(1), pp. 8-15. <https://doi.org/10.1080/15487733.2016.11908149> Van Veelen, B. (2018) Negotiating energy democracy in practice: governance processes in community energy projects, *Environmental Politics*, 27(4), pp. 644-665, DOI:10.1080/09644016.2018.1427824 Wait, G. (2018) Energy, households, gender and science: A feminist retrofit framework for transdisciplinary research, *Area*, 50, 3, 314-321. Willow, A. J., & Keefer, S. (2015). Gendering extraction: Expectations and identities in women's motives for shale energy opposition. *Journal of Research in Gender Studies*, 5(2), 93-120.

### **Tailored participation of different target groups in inter- and transdisciplinary research projects: what for, when and how to design participation processes**

#### **Convenors:**

**Rainer Kuhn**, ZIRIUS Center for Interdisciplinary Risk and Innovation Studies, Stuttgart, **Sigrid Prehofer**, ZIRIUS Center for Interdisciplinary Risk and Innovation Studies, Stuttgart, **Ricarda Schmidt-Scheele**, ZIRIUS Center for Interdisciplinary Risk and Innovation Studies, Stuttgart, **Sarah-Kristina Wist**, ZIRIUS Center for Interdisciplinary Risk and Innovation Studies, Stuttgart

#### Topic and background

For a long time, the contributions of the social sciences to energy research have been thought to be raising societal acceptance for energy technologies or efficiency measures. Yet, increasingly social sciences are moving beyond providing accompanying research for the more “natural” energy-related disciplines such as economics. One reason for this is that social scientists analyze, contrast and integrate the preferences, knowledges and values of various societal voices such as politicians, organizations, social groups or individual citizens (see Spreng 2014; Mallaband et al. 2017). In view of

the risk of climate change, the research focus is shifting towards sustainable energy systems transformations and its success factors. For this purpose, the perspectives of a wide range of stakeholders must be involved. From experts, stakeholders and citizens, local residents to the younger generation, all have to bear the consequences of climate change. Depending on the topic,

question and objective of the research, social scientists face the challenge of deciding which stakeholders to include (and which to exclude), at what stages of the research process and how to design participation processes. Their responsibility is to enable “balanced forms of interdisciplinarity and transdisciplinary” (Mallaband et al. 2017: 109), in which neither certain disciplinary perspectives nor science as a whole dominates over societal perspectives.

The aim of our workshop is to provide insights into these critical requirements for social scientists and to discuss how tailor-made processes for the integration of relevant stakeholders can be designed. The workshop will seek answers on how this can be achieved and how common success factors can be identified from the multitude of options at hand.

Three short presentations will give first insights into the integration of different target groups, e.g. experts, citizens and adolescents. In a participative design, the workshop participants will then jointly identify challenges and develop solutions.

The concept for the workshop is based on the experiences from a multitude of participatory energy projects at ZIRIUS and Dialogik (non-profit research institute, Stuttgart).

### **Input presentations**

We are planning on offering three to four short input presentations from external participants on expert, stakeholder, citizen and adolescent participation. An open call for contributions offers the possibility to include additional innovative and novel projects and insights in this workshop.

#### References:

Mallaband, B.; Staddon, S.; Wood, D. (2017) ‘Crossing transdisciplinary boundaries within energy research: An ‘on the ground’ perspective from early career researchers’, *Energy Research and Social Sciences*, 26: 107-111.

Spreng, D. (2014) ‘Transdisciplinary energy research – Reflecting the context’, *Energy Research and Social Sciences*, 1:65-73.

### **Collective Action as driver of Social Innovation for the Energy Transition**

Workshop to be hosted by the COMETS project

**Convenors:** Lead organiser: University of Torino (UNITO), **Alessandro Sciullo**, COMETS leading partner (alessandro.sciullo@unito.it)

Co-organisers/discussion facilitators: **Osman Arrobbio**, **Winston Gilcrease**, **Dario Padovan**, **Alessandro Sciullo** (UNITO), **Valeria Jana Schwanitz** (HVL – Western Norway University of Applied Sciences)

### **Motivation:**

The workshop aims at supporting the discussion among scientists, policy makers and practitioners about the role that Collective Action Initiatives (CAIs), such as communities, cooperatives, purchasing groups, may play in supporting the energy transition.

Collective action, a foundation for social life and a topic that pervaded the development of sociology from its infancy, has been gaining attention in the past years both in the scientific as well as in the policy field, with the European Commission having established new regulatory devices aimed at pushing the community perspective as a tool to shift the contemporary energy systems to more sustainable and inclusive models. CAIs, a social innovation in itself, are a prime way for the governance of the energy system transition in a smooth and participative way, ensuring that citizens and the social actors, other than the incumbents, are at the centre of the required fundamental transformation, thus enabling the development of their creative potential. However, both social innovation and CAIs lack proper scientific and field-tested understanding of their development and factors for success. As of today, the role and contribution of citizen-driven CAIs to the energy transition has neither been estimated nor understood in sufficient depth.

COMETS is a 3-years Horizon 2020 project that aims to fill these knowledge gaps by quantifying the European-wide aggregate contribution of CAIs to the energy transition and by investigating their evolution and scaling up at an in-depth level in six selected EU countries.

The workshop is intended as an opportunity to collect, in a participatory and interactive way, inputs to integrate, validate and enrich the results of the project as well as to figure out eventual social dynamics (under estimated or overlooked in COMETS) that may affect or that can be affected by CAIs development.

### **Description**

The duration of the workshop is 2 hours. The workshop will consist of two phases (1 hour each):

a. presentations aimed at identifying the main keywords and topics to feed the discussion;

b. moderated discussion aimed at providing insights around the topics identified.

Candidates for presentation will be asked: a. To choose one among the topics of the workshop; b. To choose if presenting, taking part to the discussion or just express interest and provide inputs (see c); c. To provide (at least 2 weeks before the workshop) some basic info about their profile (background and current activity) and a short paragraph with some insights on the chosen topic (100-200 words).

Then, for those who will be able to take part to the workshop, we foresee 2 levels of participation:

- . • presenting and taking part to the discussion (around 10 people);
- . • taking part to the discussion (around 10-20 people). Of course, all the participants to the conference will be invited to take part to the workshop even if they will have not registered in advance through the website. Below is a brief description of the activities and an estimation of the expected duration: Duration Activity

10 mins	Introduction: COMETS and workshop's activities and objectives.
45 mins	Presentations: speed-talks lasting 3-4 minutes following a template that will be provided in a
10 mins	On the basis of the results of the presentations and also considering the inputs collected in a original topics will be refined and the most relevant will be chosen to inform the discussion (f techniques).
50 mins	Moderated discussion.
5 mins	Conclusions and wrap-up.
Follow- up (October)	The discussion will be adequately tracked in order to draft a final report that will be then sen registered through the website) to collect comments. Finally, it will be published on the COM

**The Changing Landscape: Energy Power, Dependence, and the Grand Energy Transition in post-Soviet Eurasia**

**Convenors:** Morena Skalamera, University of Leiden

The energy landscape is rapidly changing with wide-reaching implications for global energy industries

and actors, including oil companies and oil-exporting countries, such as Russia and Kazakhstan. Just a decade ago, Russia's position as the world's leading producer and exporter of energy prompted the notion of Russia as an 'energy superpower.' Yet the way "energy power" and the prestige derived from it have been defined in the sociological sense have changed dramatically in the last decade, from a hydrocarbon-centric definition to one relying more on responsible leadership and renewable resources. This has dramatically reshuffled the cards for a handful of oil-rich producers in Eurasia – including Russia, Kazakhstan, Turkmenistan, Uzbekistan and Azerbaijan.

In contrast to the extensive body of scholarly research focusing on the nexus between oil rents and the disruptive effects of the Energy Transition in the Gulf countries (where, arguably the connection between geopolitical turmoil and the economics of oil is most closely correlated), the literature on the intersection between resource rent inducements and the effects of the Energy Transition in post-Soviet Eurasia is surprisingly scant.

From a conceptual standpoint, the notion that climate change needs to be addressed worldwide by embracing a new age of renewables has been internalized and this norm has, thus, nearly transcended any preexistent processes of contestation. This process has shown how national identities influence economic (energy) policies by endowing them with purpose and meaning. Yet the existing energy-related scholarship has proven to be ill-equipped to handle these changing meanings, embodied in agents' shifting dispositions and understandings of dominant norms and prevailing narratives. The Green Energy Transition is just that, and this workshop seeks to remedy the gap.

The lack of conceptual depth on the transformative effects of ongoing Energy Transitions across time and space, particularly in the under-studied region of Eurasia, opens the door for a new, sociological analysis of:

- o the sources of this multidimensional, complex, non-linear, and highly uncertain change;
- o the changing meaning and purpose that agents assign to concepts such as "energy security," "energy dependence," and "energy power;" and
- o a new account of how this affects the Eurasian region and international politics.

Submissions on any relevant empirical topic that builds on this analytical foundation are encouraged, including contributions on:

- o the nexus between domestic identity politics, the Energy Transition, and implications for international politics;

- o the intersection between the purposive content of national identities and the changing patterns of energy trade amidst the Energy Transition;
- o the importance of historically contextualizing such critical junctures - or points in time when existing economic policies are in flux;
- o works delving further into how history is a process of change that leaves an imprint on state identity, and how the domain of “energy issues” is, thus, also variable.

#### Submission Guidelines:

This workshop will accept submissions for two categories of work: early-stage and late-stage. Please clearly indicate to which category you are applying.

1. Early-stage work: Presenters should have a clearly-defined research question, a mostly or fully complete literature review, and be seeking guidance on data sources, theoretical framing, or modes of analysis. Please submit an extended abstract (250- 500 words, not including works cited) outlining the goals of the project, progress so far, tentative data collection and analysis plans, expected outcomes, and what you are seeking input on. This is a great opportunity for graduate students working on their dissertation prospectus or post-doc projects, but other types of projects are also welcome. If accepted, presenters will be need to submit a 5000+ word paper with a thorough literature review and detailed research plan.

2. Late-stage work: Presenters should be seeking feedback prior to journal submission or during R&R. Please submit an extended abstract (250-500 words) outlining the argument, theoretical framing, methods, results, broader implications. A full version of the paper should be sent to the session commentator by (date to be defined).

#### **Implementing energy communities in European countries**

Workshop at the 5th Energy and Society Conference - call for contributions

**Convenors: Nathalie Ortar:** Nathalie.ORTAR@entpe.fr, **Grégoire Wallenborn:** gregoire.wallenborn@ulb.ac.be

The European Directive 2018/2001 promotes and defines "energy community" as a legal entity that is “based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity”. Many arguments support the development of energy communities: utilisation of local energy sources, increasing environmental awareness through user

proximity to sources, greater citizen participation in the energy transition, social cohesion and community empowerment, income sources through local investment, shorter transport distances and reduced energy transmission losses. Cooperative associations and some energy activists argue also that energy communities are the first step towards considering energy as a common good and could foster 'energy democracy'.

In this call for contribution, we aim at organising discussions around the idea of 'energy community' as defined by the Directive and how energy communities could develop in European countries. Here are some questions we would like to raise:

- How was adopted the definition energy community in the Directive? What were the important discussions and lobbies in the shaping of the definition? What does the

definition presupposes and what are the likely implications? It seems that associations representing cooperatives and consumers are happy with the Directive, but they may not have realised that the private sector is a step ahead in the possibility to provide management services of these communities.

- How is the Directive implemented or will it be implemented in the various EU countries and to what extent are existing schemes adapted to the national contexts? What is the latitude of interpretation of the Directive? How are the national contexts and the balance of power between the concerned actors influential in the translation of the Directive? In particular, how are collective self-consumption defined? Indeed collective self-consumption depends on many parameters (e.g. perimeter of the collective, time slot during which self-consumption is measured) that will foster or impede actions.

- How are social inequalities taken into account in the development of energy communities? What are existing or potential schemes to ensure that energy communities do not worsen social inequalities? It can indeed be expected that people with financial capital (to invest in equipment), cultural capital and sensitive to the energy-climate issue as well as social capital (able to mobilize their neighbourhood) will be more able to build a community of energy.

**Proposal: When technological fix is not enough: industry, professionals and citizens in the energy transition.**

**Convenors: Dario Minervini** (University of Naples), **Ivano Scotti** (University of Pisa)

The energy transition is one of the biggest challenges that the EU officially consider a priority in the coming years<sup>1</sup>. Despite in the last 10-years the EU has supported a massive effort toward the sustainable transition, some reports highlight the risk that the achievements for the 2020 policy

package will not wholly accomplish<sup>2</sup>. For this reason, the strategy towards a low carbon society by 2050 should need a more significant effort.

According to the literature (i.e., Geels 2011; Hargreaves et al. 2013; Smith and Stirling 2010; Shove 2010), the socio-technical reconfiguration of the transition implies a process of uncertain co-evolution of complex systems, and the emergence of new functionalities enhanced by institutions, organizations and social practices. The entire process involving development, design, installation, use, maintenance and working of energy technologies is featured by diversification of strategies to both

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For example, in 2009 some directives define the targets for the EU by 2020. Recently, the European Union sets new targets for 2030 and a roadmap for a low-carbon economy by 2050. On this: the *Fourth Report on the State of the Energy Union* (2019) reports the risk to not reach the energy efficiency targets by 2020.

reduce the risk of failure and improve performances in terms of sustainability. For this, a comprehensive approach is needed to scrutinize and understand the multiply analytical dimensions and interests involved in the paths of (and resistance to) the energy transition, not strictly depend on technological intrinsic efficiency options (Geels 2014) but imbricated in social practices (Shove and Spurling 2013; Strengers et al. 2014).

Far from being a roughly homogeneous process, 'green' innovation appears as a fragmented, diversified and uncertain dynamic. Due to the heterogeneity of the field actors, their interests and outlooks (i.e., the industry, the professional groups, the training institutions and citizens), seems useful to intensify a multidisciplinary approach to establish a closer relationship between them increasing societal prefiguration of a low carbon scenario and appropriate policies. In fact, new energy artefacts and infrastructures are designed and built by particular professions (architects, engineers, also carpenters, bricklayers, etc.) who embody a vision of the transitions; however, they should deal with the other social actors in the energy field with they specificities (practices, interests, needs).

The main purpose of this workshop is to address the relationships connecting industries, training institutions (universities, high school, etc., for vocational training and/or lifelong learning activities) and professionals involved in the energy sector co- enacting the transition. What does it their vision of the energy future? How they image the territories that host (or will host) the energy facilities and the energy users? What are the emerging training and professional needs? What difficulties are challenging their actions? In the context of the energy transition, local administrations seem to play a

role in promoting or resisting the process, as well as, in managing the local impacts (both positive and negative ones). In this case, what are their needs? What kind of new professional skills are needed in the public administration?

Inviting position papers from key actors and expert *witnesses* of the energy transition in the UE countries (environmental and consumers associations, energy cooperatives, training institutions, etc.), we aim to put in dialogue a broad spectrum of actors dwelling the topic, collecting presentation of their vision of the energy future and transition. The purpose is to unfold the visions and interests involved in the sustainable energy transition visions retrace possible synergies and common line of actions to featured concrete initiatives and policies. For this reason, the workshop is open to academic and non-academic contributions.

Any participant have to prepare an abstract – title, author(s) and affiliation(s), text max 1,000 words, 3 keywords – focusing on three points: their vision of the energy transition, the main problematic aspects of it, educational/training needs to achieve the energy change.

## References

Geels, F.W. (2011). The multi-level perspective on sustainability transitions: responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1(1): 24-40.

Geels, F.W. (2014). Regime resistance against low-carbon energy transition: Introducing politics and power in the multi-level perspective. *Theory, Culture & Society*, 31(5): 21-40.

Hargreaves, T., Lounghurst, N., Seyfang, G. (2013). Up, down, round and round: connecting regimes and practices in innovation of sustainability. *Environment and Planning A*, 45: 402-420.

Shove, E. (2010). Beyond the ABC: climate change policy and theories of social change. *Environment and Planning A*, 42: 1273-1285.

Shove, E., Spurling, N. (eds.) (2013). *Sustainable practices: social theory and climate change*, Routledge, London.

Shove, E., Watson, M., Spurling, N. (2015). Conceptualizing connections: Energy demand, infrastructures and social practices. *European Journal of Social Theory*, 18(3), 274-287.

Smith, A., Stirling, A. (2011). The politics of socio-ecological resilience and sustainable socio-technical transitions. *Ecology and Society*, 15(1), 11.

Spurling, N. (2013). Demand by design: how our infrastructure and professions shape what we do. DEMAND, Working Paper n. 2.

Strengers, Y., Nicholls, L., Maller, C. (2016). Curious energy consumers: humans and nonhumans in

assemblages of household practice. *Journal of Cultural Studies*, 16(3), 761-780.

## **Who is transforming what in electricity transitions: seeking identity and control in turbulent environments?**

**Convenor: Gerhard Fuchs**, University of Stuttgart

In the discussion about global transitions and future challenges, activities related to climate adaptation loom large. Meanwhile there is an established body of research, which on the one hand is often normative oriented and deals with the question what should be done and why are people not doing what is supposedly best for them. On the other hand, there is a lot of research dealing with the question of how processes of climate mitigation are “guided” by governments or international treaties.

The proposed panel invites papers, who are analyzing what “real” people (Scharpf 2000) are doing, when developing new structures to deal with climate related issues especially in the field of electricity generation and distribution. In other words the panel is interested in discussing, how new structures and organizations come into existence (cp. Padgett/Powell 2012), combining an analytical with an empirical interest.

As Harrison White (2008) has argued, social organization has two faces: blockage and allowance of fresh action. Insofar if we are interest in transformation, the following questions need to be addressed: By what means, and when, does it become possible to break through rigidity in social organization to get fresh action at large scale and small? How can one effect action by intention despite social context and technological rigidities?

## **Workshop: The heating transition, still on the back burner?**

**Convenors: Tineke van der Schoor**, Hanze University of Applied Sciences, Groningen, The Netherlands, **Henny van der Windt**, University of Groningen, The Netherlands

Until recently the main focus of local energy initiatives has been the transition from fossil centralized electricity production to a sustainable, decentralized and more democratic electricity provision. However, a large proportion of energy is used for heating. Therefore, interest in the transition to sustainable heating systems is growing, at least in the Austria, Belgium, Germany and the Netherlands.

In the Netherlands, which is up till now heavily dependent on natural gas, the search for new heating systems got a considerable impetus after earthquakes caused by gas mining started to plague the

province of Groningen. Many municipalities and also local citizen initiatives are now developing new district heating systems, often inspired by the experiences in Denmark with its wide-spread district-heating systems. In Germany and Austria, several villages and regions aim to become fully based on bioenergy-based heating systems.

The transformation towards sustainable heating systems is increasingly attracting the interest from social researchers. Changes of heating systems may require considerable investments of homeowners and they need to adapt their routines. From a transition management perspective, it is hypothesized that the nature of the heating transition, with a plethora of local stakeholders and the need for made-to-measure solutions for individual households and neighbourhoods, causes a slower development path, compared to more centralized technologies such as large wind turbines. Other debates focus on the responsibilities for the heating system and on the sustainability of the sources for heating systems, such as biomass or geothermal sources.

Our workshop hopes to gather together the community of researchers of the heating transition and develop a network for exchange of knowledge.

### **Format**

We aim to involve participants through an active format. Participants are asked to supply an abstract of their envisaged contribution. In the workshop itself inputs will be in the form of a pecha kucha, so that each participant gets the opportunity to present their research with 20 sheets in less than 7 minutes. Presenters are asked to identify two main issues or questions and to invite participants to reflect on these problems.

Call for abstracts

We invite contributions from participants in the form of abstracts.

**Workshop: Constructing, exploring and conceptualising 'energy democracy' from below**  
**Convenors: Elisabet Rasch** [elisabet.rasch@wur.nl](mailto:elisabet.rasch@wur.nl) (Wageningen University and Research),  
**Michiel Köhne** [michiel.kohne@wur.nl](mailto:michiel.kohne@wur.nl) (Wageningen University and Research)

In this workshop we aim at exploring energy practices related to renewable energy through the concept of 'energy democracy'. Renewable energy is often seen as a straightforward solution in discussions on climate change, disregarding the multiple and varied ways in which people may experience, conceptualize, and evaluate 'energy matters'. Energy democracy offers a possible avenue for understanding the different ways that communities might react to and organize around the production of renewable energy. In this workshop we aim at unravelling both the energy practices

through which energy democracy is enacted as well as the norms and ideas about just ways of producing energy.

Energy democracy as a social movement is rooted in the long-standing social and environmental justice movements and goes beyond simplistic frameworks of the 'transition to 100% renewables' to offer a deeper understanding of the cultural, political, economic, and social dimensions of energy transition (Fairchild and Weinrub, 2017: 1, Angel, 2016). It emphasizes the importance of efforts by citizens to exercise more control over energy decisions and over their energy future. The energy democracy movement seeks to advance democratization through democratically- planned and public- and community-owned and -operated renewable energy systems. Re-establishing control over energy production is viewed as an essential step in this process (Burke and Stephens, 2018). Renewable systems and democratic politics can be mutually supporting, and therefore it is proposed that renewable energy transitions be approached as means for democratic development. At the same time, opposition to the construction of large scale renewable energy infrastructures, especially from local communities living on or close to proposed wind farm sites and solar parks. Renewable energy is thus not only about clean, healthy and carbon neutral energy, it is also about social justice and local ownership; about energy democracy.

For this workshop we invite papers that explore the concept of energy democracy through ethnographic case studies about how communities (re)appropriate the production of renewable energy, as well as ethnographic case studies that research resistance towards large scale renewable energy projects. We invite participants to write short, 3000 words, papers before August 25th on the basis of which we will prepare discussion points for the workshop. The aim of the workshop is to further the conceptualization of 'energy democracy' in relation to our case studies as preparation for later publication in a special issue.

Angel, J (2017) 'Towards an Energy Politics In-Against-and-Beyond the State: Berlin's Struggle for Energy Democracy', *Antipode*, vol 49 no 3, pp557-576.

Burke, M.J. and Stephens, J.C. (2018) 'Political power and renewable energy futures: A critical review', *Energy Research & Social Science*, vol 35, pp78–93.

Fairchild, D. and Weinrub, A. (eds.) (2017). *Energy democracy. Advancing equity in clean energy solutions*. Island Press, Washington DC.

### **Workshop: The Role of Constructing Social Change in Achieving Sustainable Energy Justice Transition in Europe and the Mediterranean**

**Convenor: Carmit Lubanov** 3[carmit@aeji.org.il], Association of Environmental Justice in Israel (AEJI)

On November 2018 the European Commission issued an ambitious call for a climate- neutral Europe by 2050. The frame of the call is 'strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050'<sup>4</sup>. The Commission's vision for a climate-neutral future covers nearly all EU policies and is in line with the Paris Agreement objectives to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C.

The detailed plan shows 'how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance, or research – while ensuring social fairness for a just transition'<sup>5</sup>. As the document indicated the Climate-Neutral Europe strategy, which targeting the economy, could increase social and regional disparities in the EU.

The proposed workshop, to be held two years after the launching the 2050 Climate Plan, will focus on ways aimed to ensuring social fairness for just energy transition.

The goal is to present case studies of field models, geographical plans and research analysis for achieving the low carbon economy while ensuring a fair and socially acceptable transition. The emphasis will be noted to social construction as by itself challenges economy in transition, including cross-continent migration and will

<sup>4</sup> [https://ec.europa.eu/clima/policies/strategies/2050\\_en](https://ec.europa.eu/clima/policies/strategies/2050_en) <sup>5</sup> Ibid.

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<sup>3</sup> Carmit is the Director of AEJI. In 2018 initiated and co-coordinator of 'Cross-Border Africa-Mediterranean- Europe Climate Migration forum' and the initiative of "Climate of Hope" to engage local Palestinian women in energy transition.

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address cases and paradigms relating to social and economic mobility, green jobs, consumer behavior, and other aspects related for climate neutral transition<sup>6</sup>.

One of the case studies to be presenting is of AEJI new initiative "Climate of Hope" where women lead implementing of "Waste to energy" on domestic level in rural regions in the Mediterranean.

Preferable cases studies to be presenting are from remote or conflictual regions as the Ex-Yugoslavia, the Balkan, South Europe and the Mediterranean, that might be with potential for long term collaboration.

**Workshop: “Renewable energy landscapes. Technical knowledge and social innovation”** **Convenor: Bruno Zanon**, University of Trento

The transition to a low carbon economy is a multi-faceted challenge requiring technical innovation, institutional change, social learning. The new energy needs of the society and the economy are met by making use of new technologies which cause modifications - of different scale - to the traditional landscape organisation and image. Though social acceptance of these change processes is generally high, there are sometimes conflicts concerning the landscape as the shared representation of the living space of the local communities, as stated by the European Landscape Convention. This defines the landscape as an institutional and social arena for understanding and discussing the energy transition challenges. Such a perspective requires innovating the usual sectoral approaches, centred on specific disciplines, professional practices, institutional competencies, promoting innovation by breaking down barriers and constructing shared perspectives.

The workshop proposal builds on the experience done within the Cost Action RELY (Renewable Energy and Landscape Quality) and on the Horizon 2020 MSCA-RISE research and innovation project PEARLS (Planning and Engagement for Renewable Energy Arenas). The introduction will be done by prestigious speakers, experts in this multi-disciplinary field, giving space to presentations of cases concerning:

- spatial planning, landscape change and public engagement in renewable energy technologies allocation;
- experiences in renewable energy source exploitation - conflicts and best practices;
- energy landscapes and social innovation. The discussion of the cases presented will contribute to the state of the art of the issues debated.

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<sup>6</sup> [https://ec.europa.eu/clima/sites/clima/files/docs/pages/vision\\_3\\_social.pdf](https://ec.europa.eu/clima/sites/clima/files/docs/pages/vision_3_social.pdf)

**Special UERA Session on Smart Cities and Energy**

**2) Workshops without a call for presentation**

## **Energy justice (EJ) as a multidimensional concept – the „old” and new perspectives for sociological research**

**Proposed by: Environmental Sociology Section of the Polish Sociological Association**

**Prepared by: Katarzyna Iwińska, Aleksandra Lis, Krzysztof Mączka, in cooperation with: Krzysztof Niedziałkowski, Marianna Strzelecka**

Energy justice (EJ) has gained a great interest within the social sciences as an ethical framework to examine the energy transition, which involves dilemmas concerning the allocation of costs and benefits of changing modes of energy production between various societal groups nationally, internationally and between current and future generations.

Researchers propose EJ framework can serve as a policy-oriented tool for understanding justice implications of energy transition (McCauley et al. 2013, Sovacool 2013, Jenkins et al 2016, Sovacool and Dworkin 2015). In general, studies on EJ focus on distribution of power, risks and benefits associated with technologies, transformations and their impacts. But EJ scholars have increasingly discussed multidimensionality of energy transition that in addition

to distribution (of costs, responsibilities, rights, and benefits), encompasses procedures by which decisions are made (who is recognized and included and has equal status), and which local views get to be represented through them. The three tenets of EJ: distribution, recognition and procedural, can constitute empirical, analytical and action-oriented lens that provide opportunities for researchers to generate new ideas and underline the interdisciplinary character of an ongoing energy transition.

During the workshop, we will critically discuss the normative and contextual character of the EJ concept in the light of partially overlapping theories of social justice (Fraser, 2009), environmental justice (Schlosberg, 2007), and climate justice (Shue, 2014; Schlosberg and Collins, 2014). Taking into account the most

relevant literature as well as some case studies we will examine the challenges of the current conceptualization of EJ and consider new ways of understanding justice in the context of energy transition.

Exemplary issues that will be brought up through the workshop:

- What are the main aspects of energy transition related to EJ concept? Are there any theoretical and/or empirical gaps? In what way the concept covers the range of challenges related to climate and environmental justice?

- In what way are injustices embedded in the 'low carbon transition' project? How do they relate to fuel and energy poverty?
- What are the obstacles to a just energy transition at global, national as well as local scales?
- Who is recognized as equal and included in energy transition efforts? • How can EJ aspects of energy transition be mapped within the EU? **Target group:** PhD students and researchers, activists engaged in energy transition **Methods:**

We will use active methods to engage all the participants. Depending on the number of participants we will use case study and/or teamwork exercise concluded with discussion.

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### **How to navigate new waters... Plan and develop your career in the field of Energy-SSH.**

An *Energy-SHIFTS* workshop **Convenors: Tadeusz Rudek<sup>1</sup>, Aleksandra Wagner<sup>1</sup>, Chris Foulds<sup>2</sup>, Sarah**

**Royston<sup>2</sup>, Rosie Robison<sup>2</sup>**

<sup>1</sup> Jagiellonian University <sup>2</sup> Anglia Ruskin University **Target of the workshop:**

To discuss how Early Stage Researchers can best plan, develop and create career paths within energy-related Social Sciences and Humanities (energy-SSH) research.

### **Questions:**

1. What are the opportunities associated with the different careers' paths available to energy-SSH researchers post-PhD?

- a. Research?
- b. NGOs?
- c. R&D/industry? Business?
- d. Teaching?

2. What are the most useful skills and experience for ESR?

- a. Being a part of big international research projects?
- b. Networking?
- c. Publishing papers in (distinguished) journals?
- d. Project managing?
- e. Proposal writing and winning funding?
- f. Cross-sectoral co-operation?

3. What are the most significant barriers for early stage energy-SSH researchers? a. How to avoid them? b. What are the most useful tools to overcome them?

4. What do ESRs expect from other senior colleagues during their collaboration?

**Target group:**

Early Stage Researchers, who we broadly classify (according to the European Commission) as researchers in the first four years of their research career, including PhD research. Nevertheless, we will intentionally have an open invitation to all

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conference attendees who self-identify with the early-career label and/or are interested ways that they may better support their early career colleagues.

## Methods:

The workshop will be divided into two parts:

- **Part 1 (60 min)** will be conducted using the **World Café method**. Participants will be divided into 4 groups. Six discussion tables will be named:

- o **Participation** (what are the most useful experiences for ESRs?); o **Networking** (how to best develop an ESR's research network?); o **Engagement** (how do ESRs get a job); o **Expand** (how to promote your research in #SocialMedia, if indeed it

- matters?); o **Gain** (how to gain international research grants and funds?); o **Support** (what do ESRs expect from their senior research co-workers).

Each table will have specific tasks and will be equipped with creative materials to use. Each group can visit every discussion table.

- **Part 2 (30 min)** involves presenting results of each group discussion back in plenary, as part of creating best development paths. Creative methods will be used to aid the creation of these paths, e.g. mapping, visual materials, puzzles, short videos.

**Outcome:** A map of the most important assets and risks for ESRs.

## Results of the workshop:

Map of the crucial skills and experience for ESRs in the field of Energy-SSH, containing risks and chances for young researchers.

Catalogue of expectations

Results could be included into the [Energy SHIFTS](#) final report (Final report from the Energy SHIFTS project – funded within the Horizon 2020 framework)

Participants will be encouraged to use their #SocialMedia during the workshop.

**Increasing the understanding on the Food-Water-Energy Nexus across disciplines – does participatory modelling help?**

**Convenors:** **Monika Heyder, Enrique Kremers, Pia Laborgne** (European Institute for Energy Research)

The Food-Water-Energy Nexus comprises environmental, technical as well as social and political aspects, thus requiring an interdisciplinary and transdisciplinary approach.

Reviews on the assessment methods on FWE Nexus identified a variety of participatory and collaborative approaches, one of which is the participatory modeling. **Participatory Modelling (PM) is defined “as a purposeful learning process for action that engages the implicit and explicit knowledge of stakeholders to create formalized and shared representations of reality”**. PM is an approach to understand, to communicate and to improve the understanding barriers and to develop alternative strategies for natural resource management. We think it is especially valuable to bring different stakeholders together and discuss their understanding of a given system.

Together with the participants to the workshop we want to engage in a participatory modelling exercise on the Food-water-energy nexus in mixed groups, in order to create conceptual models that will be tools for communication across disciplines.

The session will be structured as follows:

- 1) Getting to know each other
- 2) Introduction of the Food-Water-Energy Nexus and PM
- 3) Introduction to concept
- 4) Group work:
  - a. Brainstorming exercise
  - b. Development of a conceptual model describing the FEW Nexus
  - c. Group presentations and wrap-up
- 5) Group discussion on the method

#### **With this we aim at**

- Better understanding the value of PM and conceptual models to identify interfaces between the FEW Nexus
- Better understand the value of conceptual models to engage and communicate between different disciplines or stakeholder groups

#### **Deep decarbonization and wide societal changes – identifying and sharing matters of concern through embodied interaction**

**Convenors: Marius Korsnes**, Norwegian Centre for Energy Transition Strategies (NTRANS), NTNU, Norway. **Giulia Sonetti**, Interuniversity Department of Regional & Urban Studies and Planning, Politecnico di Torino

Deep decarbonization is a cross-sectoral, society-wide transformation, involving changing the logics of production, distribution, and consumption of electricity, mobility, and other goods and services across society. Transforming towards deep decarbonization requires looking beyond single technologies and sectors to understand how the energy transition can be achieved. The current energy transition is purposive, directed towards achieving a more sustainable society, which requires new development paths beyond business as usual and in which policy has a vital role. Sustainability transitions in general and energy transitions in particular, are inherently socio-technical processes (Labussière & Nadaï 2018). Consequently, social sciences and humanities (SSH) research offers important insights connecting the development and implementation of new technologies to everyday practices, energy cultures, social relations, political processes and so on – knowledge that is pivotal to be able to realise the deep transformation of our energy systems and societies needed in order to meet sustainability goals.

The Norwegian Centre for Energy Transition Strategies (NTRANS) is a new eight-year national social science research centre which will look broadly at energy transition in Norway. In this workshop, we want to test a new, embodied method that can enhance transdisciplinary research and contribute to a better societal embedding of transition. Using a transdisciplinary approach (Polk 2015) and inspired by recent STS theoreticians such as Stenger's (2018) 'Another Science is Possible', and Haraway's (2016) 'Staying with the Trouble' this workshop aims to explore ways in which a diverse set of actors can coproduce and work together. The ultimate aim is therefore to produce tools and insights that can help to ensure just, inclusive, and democratic action towards deep decarbonization, and to provide knowledge of key controversies and trade-offs in energy transitions.

The point of departure is that instead of debating ontological beliefs and knowledge claims, a fruitful way forwards is to recognize certain matters of concern (Latour 2004), that are shared amongst participants. The aim is not to force a consensus but to sensitize each other to the different perspectives that exist in a relational way. Our hypothesis is that this requires engaging the whole body including our affective and cognitive abilities. Using techniques from improvisational theatre and image theatre, the workshop explores ways of knowing together which are not only cognitive but also embodied. Given that it can be challenging to negotiate different values, identity and affective needs, the workshop aims to establish a trustful environment which builds on acceptance, listening and failing together. Such techniques could let participants connect on a deeper level and may lead to greater understanding between participants with different experiences, backgrounds and knowledges. Keywords are exploring, co-producing and discovering.

### **Workshop design:**

The workshop starts off with warm-up and ice-breaking activities in order to get to know each other

better. Then, with energy transition as an overarching topic, participants will be accompanied through a series of embodied activities that focus on different ways of knowing, understanding and interpreting together. Each activity allows for group reflection. Lastly, the workshop will reflect in plenum on the overall workshop design and exercises, focusing on how (if at all) this technique can be used to facilitate transdisciplinary group work in energy transition settings.

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### **Sustainable Energy Transition Lab: Integrating geographical, social and political aspects in future energy models**

**Convenors: Diana Süsser\*** (diana.suesser@iass-potsdam.de), **Johan Lilliestam\*** and **Hannes Gaschnig\***, \*Institute for Advanced Sustainability Studies Potsdam (IASS), Berliner Str. 130, 14467 Potsdam, Germany **Embeddedness of the workshop theme**

In the framework of Sustainable Energy Transition Laboratory (SENTINEL) project, the new model *Quantification of Technological Diffusion and Social Constraints* (QTDIAN) is developed, which forms a link between future scenario social storylines (such as those of the IPCC's SSPs), quantified scenarios for key drivers of the speed of technology diffusion, and the impacts of those drivers on key variables needed as inputs for energy system planning models. The model is based on the multi-level perspective of technological transitions, and the empirical literature on acceptance of new infrastructure. In the workshop, to date findings of the research are discussed and new inputs generated which will contribute to the further model development. The transition to a renewable energy system involves a major redesign of the current energy system. Existing energy models are based on a fossil-fuelled energy system, in which resource availability is only constraint by (global) resource availability. Renewable energy, however, brings new dynamics in the energy system.

Aspects

such as decentralisation, fluctuation and democratisation of the renewable energy production make

social, temporal and spatial issues much more important. Thus, new energy models are needed that are capable of dealing with the multifaceted challenges of a renewable energy transition. The proposed workshop takes this as a starting point to explore what and how geographic, social and political aspects could be integrated in future energy system models.

### **Objectives and aim of the workshop**

The aim of the workshop is to identify and jointly analyse different geographic, social and political “ingredients” of future energy system models in order to inform political decision-making about what, where and when renewable energy technologies are implemented. In order to gain relevant insights on the requirements of future energy system models, the participants detect and debate key drivers and barriers influencing the socio-technological diffusion, how those ingredients are interlinked and could be integrated as part of future energy system planning models.

### **Workshop method**

The workshop starts with a short plenary input by the organisers and discussion on potential, multifaceted “ingredients” of future energy systems planning models, such as geographic, social, planning and political details, and their relevance. In the main part of the workshop, the participants analyse the nature and impacts of different “ingredients” on the socio-technological diffusion in more detail within small table- “labs” consisting of up to 8 people. The “labs” are equipped with materials to discuss different aspects and experiment to visualise them in a model surface. The results of the table-“labs” are presented in the plenary afterwards, and key take-away conclusions are drawn on what and how to integrate geographic, social and political details in future energy system models, such as the QTDIAN model of the SENTINEL project. Further exchange is encouraged between researchers working on energy system modelling beyond the workshop.

There will be no call for abstracts by conference participants – but a call for active participation.