Full paper session proposal to IST 2021 – Mainstreaming sustainability transitions

Conference track
Movements, culture, and civil society in transitions

Session organisers
Sabine Hielscher, University of Sussex, UK (S.Hielscher@sussex.ac.uk) &
Julia Wittmayer, DRIFT, Erasmus University Rotterdam, The Netherlands
(wittmayer@drift.eur.nl)

Session outline

Full paper session title

Social movements and sustainability transitions: Matters of democracy, power and institutional change?

Session theme
Several scholars have started to bridge social movement studies and sustainability transitions research when examining challenges and questions regarding radical and systemic changes in societies throughout the last decade (e.g. Tornberg 2018; Hess 2018; Avelino et al. 2019). Social movements and collective actions (including grassroots and social innovations) surrounding sustainability issues have been considered to be a vital source of critique in innovation and transition pathways in modern societies (Banks 1972). They challenge taken for granted futures through generating new ways of doing, thinking and organising whilst exploring alternative future pathways. Over the past decade, their contentious activities have become visible in increasing criticisms of production systems and consumption patterns related to food, energy, clothing and mobility, or in large-scale and global protest events e.g., 'Ende Gelaende' and 'Extinction Rebellion'. They also engaged in prefigurative activities, visible in increasing numbers of alternatives to the criticized status quo, such as collectively owned production sites, crowd-based financial mechanisms or participatory decision making.

Much research in sustainability transitions research has gone into investigating the latter activities and also in conceptualising their role in wider sustainability transitions through notions of scaling and replication amongst others. Despite this research and the importance of social movements and collective actions for democracy, we know little about their processes and dynamics in broader sustainability transitions. Who is driven to take to the streets to protest, who finds other forms of resistance? How are narratives constructed and how do they materialise in different forms of action? Which engagements foster democracy, which promote discrimination and inequalities? How do elite power constellations relate to grassroots action and thereby shape sustainability transformations? These are just some of the questions, the papers in this paper session aim to address.

This session aims to explore the processes and dynamics of social movements and collective action, pursuing different pathways towards sustainability including both contentious and prefigurative activities. Attention is given to the politics and powers surroundings the processes through which social movements and collective actions shape societal dynamics. The aim is to build a critical understanding of both, how

social movements emerge, institutionalise and mobilise people across space and time (Paper 1) to produce alternative pathways (Paper 2), and how they are co-shaped by dominant institutions (Paper 3) and develop strategies in relation to elite power constellations (Paper 4). We specifically focus on:

- Processes through which social movements and collective actions emerge and institutionalise (or not) over time,
- Critical approaches to social movements and collective actions to build a better understanding of politics and power issues within movements,
- Roles of elite power constellations and dominant institutions within processes of institutionalisation and sustainability transitions.

Format

This will be a 120-minute session for presentation and discussion of four original research papers. Authors will submit a draft of their full paper in advance of the conference. It will start with a succinct presentation of accepted papers, each ending with a statement in relation to the panel's main focus. It then brings together participants in the session to exchange their experiences and knowledge around said statements based on own research and interest.

Papers to be presented at the session

Paper 1

Social Movements, Sustainability Transitions and Social Innovation

Avelino, F., Monticelli, L., and Wittmayer, J.

Numerous initiatives worldwide aspire to contribute to sustainability transitions. In this paper, we focus on the phenomena of translocal social movements and social innovation initiatives and their role in processes of transformative change. We define social innovation as changing social relations, involving new ways of doing, thinking and organising (Avelino et al. 2019, Wittmayer et al. 2019). Social innovations are "transformative" to the extent that they challenge, alter and/or replace dominant structures and institutions in the social context (Pel et al. 2020). Social movements have been defined as (a) mostly informal networks of interaction, based on (b) shared beliefs and solidarity, mobilized around (c) contentious themes through (d) the frequent use of various forms of protest (Della Porta & Mattoni 2016).

Based on a succinct, comparative literature review of the three fields: (1) sustainability transition, (2) social movements and (3) social innovation, we characterise transformative innovation movements and formulate a conceptual framework to empirically distinguish and analyse their role in contributing to sustainability transitions. The key research question then is: How do transformative innovation movements mobilize and contribute to sustainability transitions?

We then move on to analyse four case-studies that can be characterised as social movements that work on social innovation(s) and that have explicit transformative ambitions to contribute to sustainability transitions: (1) community energy/ decentralised energy prosumption, (2) the global ecovillage movement, (3) the Impact Hub of social 'impact' entrepreneurs, and (4) the international movement of participatory budgeting. We use an embedded case-study approach, based on in-depth interviews,

participant observation and document review, to study these four case-studies at two different scales: translocal networks and local initiatives.

While these case-studies are significantly diverse in their innovation focus (socio-technical, socio-ecological socio-economic and/or socio-political) and their institutional orientation (NGO, community, market and/or state), they share a number of important characteristics. In our comparative analysis, we distinguish five mechanisms through which these movements contribute to transitions: (1) "prefiguration" as a way to 'reproduce in the present the kind of society they envision for the future', (2) diverse socio-material innovation across societal systems, (3) translocal empowerment by being locally rooted as well as globally connected, (4) a diverse repertoire of actions (incl. protest, lobbying, education etc.), and (5) engaging in strategic collaboration across (overlapping) movements.

After the analysis of each case, a comparative discussion across the cases allows us to draw insights on the transformative potential of social movements and social innovation initiatives for sustainability transitions, as well as formulate avenues for future research.

Presenting author – Flor Avelino has been working for DRIFT as a researcher and lecturer on sustainability transitions and transformative social innovation since 2005. With a background in political science, she specialises in power theories in relation to social change and innovation. She has a particular interest in understanding how people and networks are (dis)empowered to contribute to change and how power relations are being challenged and/or reproduced through translocal social movements striving for more just and sustainable futures.

Paper 2

Framings against fossil fuel energy pathways: A comparison of social innovation in energy in the United Kingdom, Poland and the Netherlands

Wittmayer, J., Hielscher, S., and Dańkowska, A.

Transforming European energy systems into more sustainable configurations by the middle of the 21st century has become a priority in the European Union (European Commission 2017). The commitment to lowering carbon dioxide emissions as well as increasing concerns over energy security have triggered changes to fossil fuel-based energy systems. As part of these developments, alternative framings have been developed and mobilised by multiple actors, e.g., NGOs, informal groups and networks, communities and residents that work locally, regionally, nationally but also internationally and aim to, for example, change societal debates about fossil fuel energy pathways or conduct direct actions against the dominant industries. Actors involved in developing and institutionalising these different framings have had to be inventive, resilient and persistent over the past years because of powerful state and energy companies' efforts 'to facilitate the suppression of protest' and other activities challenging the status quo (see Brock 2020:1).

From a neoinstitutional perspective, the systemic change away from fossil fuel energy pathways implies substantial alterations to current institutional arrangements (regulative, normative and cultural-cognitive) in the energy sector. This paper takes such a perspective to examine how such alternative framings emerge and institutionalise over time. To do so, we conceptualise these framings and their materialisation

in different forms of action as social innovations (Wittmayer et al. 2020), thus as novel ways of thinking about energy issues whilst making use of objects and actions to counter fossil fuel energy pathways. The focus on institutions and social innovations rests both on the sustainability transitions and the social innovation literatures and links them to the social movement literature through the focus on contentious action through framings. The former uses the notion of long-term transformative change which captures the idea that comprehensive system innovations are needed for fundamental changes to current dominant institutional arrangements within the energy systems. These innovations pertain to novel configurations of actors, institutions and practices (Weber and Rohracher 2012). Within the latter, institutional dynamics, among others, are argued to be key in explaining social innovation processes (e.g. Cajaiba- Santana 2014, Pel et al. 2020).

This paper draws on case study work (including document review, interviews and participant observation) in which we trace histories of how various framings against fossil fuel energy pathways (in particular coal and natural gas) emerged and developed over a ten-year period within broader institutional dynamics towards transformative change in the UK, Poland and the Netherlands. We particularly focus on how these framings gain interpretive authority, and become more acceptable or even taken for granted over time. This involves a certain knowledge politics including questions about whose and which forms of knowledge count, and how framings are negotiated and their legitimacy constructed. Our comparative analysis demonstrates how actors on different levels of aggregation and from different societal spheres, embedded in different institutional contexts, attempt to reconfigure dominant arrangements in the three national energy systems but also reproduce them over time. The paper reveals how the institutionalisation processes related to alternatives to fossil fuel energy pathways require fundamental changes in the common meaning system. Implementing these changes will remain a challenge as long as powerful actors try to maintain existing institutional arrangements or change them to their benefit.

Presenting author – Julia Wittmayer holds the position of Assistant Professor with the Erasmus School of Social and Behavioural Sciences (ESSB) and works as senior researcher and advisor at DRIFT. Her work has focused on the changing social relations between and meaning making of societal actors in processes of transformative change. To create knowledge and support transformative action, she also develops and implements collaborative research formats regarding societal challenges in urban areas and on local scale or within the context of energy system change.

Paper 3

Grid governance; what new roles for the community energy movement?

van der Schoor, T.

In the Netherlands, energy cooperatives are increasingly active in the production of renewable energy. Many cooperatives have concrete plans to invest in energy projects, such as solar fields and wind turbines. Unfortunately, in the coming years there will hardly be any room for such projects in the electricity grid. In their quest to help solve this predicament, energy cooperatives develop new and innovative energy services, for example delivering grid services to distribution system operators (DSOs). However, in this endeavor they encounter legal as well as economic obstacles.

We studied how the community energy movement is developing ways to expand their activities. New roles for energy communities are emerging, for example as aggregators or to balance responsible parties.

Some also want to engage in energy trading. On an EU-level, such new roles are made possible by the Clean Energy Package. Although not all member states have incorporated the new rules in their legal system yet, it is expected that this will stimulate community energy throughout the EU.

For our analysis, we rely on Social Movement Theory. A social movement is basically a conflict over governance of resources. In our case, we argue that the community energy movement represents a social conflict about the production and appropriation of energy resources, with the potential to foster new forms of organisation and governance of sustainable energy production. Ultimately, this conflict represents a struggle about how modern societies should provide energy in a more sustainable, but also a more democratic way.

However, it remains to be seen how the incumbent energy companies react when they find an increasing number of energy communities take on roles traditionally undertaken by themselves. In the literature, we already find some reports on the opposition by regime players to innovative newcomers. Therefore, we also include transition theories linked to energy, such as the Multilevel Perspective, to aid in our analysis. Empirically, we have undertaken several workshops with community energy organisations, both local cooperatives and regional umbrella organisations. These workshops were organised in cooperation with DSOs and SMEs from the energy sector. Furthermore, we plan to carry out a Delphi study, preliminary results will be reported on in the full paper.

The activities that we find in our present study show that the community energy movement has come a long way from the early days of organising individual prosumer actions. Indeed, the community energy movement has developed from such actions, through the setup of collective production facilities, to the development of grid services. This means that energy cooperatives now take up roles in the full energy chain: as energy producer, distributor, provider and prosumer.

Nevertheless, to develop and manage grid services takes a heavy toll in the form of knowledge acquisition, negotiation skills, organisation strength, and last but not least the capacity to take financial risks. Thus, the jury is still out if the community energy movement will be up to this challenge.

In our paper, we will report on how the community energy movement manages to find ways to realise their vision within an emerging regulatory framework, while it continues to challenge the present governance of the energy system.

Presenting author – Dr Tineke van der Schoor started her career in the field of sustainable development. She has worked for multiple environmental NGOs and as a sustainable development consultant. She also was a delegate for NGOs to several UN-meetings on environment and development. In 2010 she joined the Hanze University of Applied Sciences as a researcher, focusing primarily on the energy transition. In this period, she carried out several research projects on the community energy movement. Other research topics are historical buildings and energy renovation.

Paper 4

Coping with decarbonisation: the impact of elite power constellations on social responses to low carbon transitions

Brisbois, M.C., Sovacool, B., Cantoni, R., Upham, P., and Kanger, L.

Decarbonisation efforts are forcing rapid whole-systems transitions in carbon-intensive regions. Local economies built up around coal, oil and gas are experiencing systemic disruptions in employment, and also in related social relationships, identities and institutions. In the face of this disruption, actors are coping with change in different ways. The "coping strategies" pursued by different actors depend upon who they are, the capacities that they have available to them, and the context in which they are embedded. However, in these situations, identities, capacities and contexts are in flux. Those who are able to exert elite power (i.e. those with a disproportionate ability to realise their goals), are shifting. With these shifts come changes in our understanding of how to understand and support coping strategies that lead to sustainable societal decarbonisation.

This contribution present initial findings from a global inventory cataloguing the coping strategies that actors undertake in response to decarbonisation efforts in carbon-intensive regions. Our analysis examines how decarbonisation is (re)shaping who is considered "elite" and how elite power is being exercised in ways that can either support or hinder overall decarbonisation. Coping strategies in the inventory are characterised according to *who* is doing the coping, *how* the action (or non-action) is targeted, and *what* is being pursued.

In order to determine *who* is coping, we make use of Avelino and Wittmayer's (2016) Multi-actor Perspective to classify actors as individuals, organisations or sectors who can operate at different levels, using different business models. To identify *how* the action is targeted, we build upon Axsen and Kurani's (2012) typology of intended benefits. This is a matrix of actions intended to benefit either private interests or the collective, and characterised as either functional (i.e. things people "do") or symbolic (i.e. things people "say"). To account for the contribution to decarbonisation, strategies are further classified as "supportive" or "hindering" of decarbonisation efforts. To classify *what* is being pursued, we group outcomes into broad categories (e.g. social, political) based on Sovacool et al. (2020). We also note whether strategies are intended to adapt to changing conditions, resist changes, or if they try to modify or transform conditions (O'Brien 2012), and the intended timescale of impact.

Together, these constellations of variables allow us a clearer picture of patterns in social and political movements in response to decarbonisation. For example, early results indicate that elites – incumbent and those newly empowered by shifts to renewables – tend to engage in long-term, high-level formal adaptation strategies (e.g. collaborative research, retraining programs). Consistent with social movement theory (SMT), non-elites without clear options for political change often pursue resistance or transformation strategies (e.g. public protests, engagement in intentional communities) (Hess 2018). The connections we map across actors, will help enhance our understanding of how different actions are emerging, and the ways in which equitable, socially sustainable approaches to decarbonisation can be best supported.

Presenting author - Dr Marie Claire Brisbois is a Lecturer in Energy Policy and Co-Director of the Sussex Energy group at the University of Sussex. She works on the politics and governance of energy transitions with a focus on decentralisation and localisation. Her current projects investigate the political implications of shifts to local energy ownership (Powershifts), how carbon-intensive communities cope with decarbonisation efforts (Horizon2020, CINTRAN), and the justice implications of the digitalisation of local solar (JPI Solstice, ROLES). She also is the Sussex PI for the UKERC-funded project, Whole Person, Whole Place.

Biographies of session organisers

Sabine Hielscher holds the position of Senior Research Fellow at Science Policy Research Unit (SPRU), University of Sussex, UK. Her work has mainly focused on studying novel activities derived from groups in civil society, for instance, community energy initiatives and community-based digital fabrication workshops. Prior to joining SPRU, Sabine completed a EPSRC funded PhD in Art and Design at Nottingham Trent University on sustainable consumption and everyday life.

Julia Wittmayer holds the position of Assistant Professor with the Erasmus School of Social and Behavioural Sciences (ESSB) and works as senior researcher and advisor at DRIFT. Her work has focused on the changing social relations between and meaning making of societal actors in processes of transformative change. To create knowledge and support transformative action, she also develops and implements collaborative research formats regarding societal challenges in urban areas and on local scale or within the context of energy system change.

References

Avelino, F., 2017. Transformative Social Innovation and New Economies, in European Society for Ecological Economics. Budapest.

Avelino, F., Monticelli, L., Wittmayer, J.M., 2019. How Transformative Innovation Movements contribute to Transitions, in: Howaldt, J., Kaletka, C., Schröder, A., Zirngiebl, M. (Eds.), Atlas of Social Innovation. 2nd Volume - A World of New Practices. oekom Verlag GmbH, Munich, pp. 70–74.

Avelino, Flor, and Julia M. Wittmayer. 2016. Shifting Power Relations in Sustainability Transitions: A Multi-Actor Perspective. Journal of Environmental Policy & Planning 18(5):628–49.

Axsen, Jonn, and Kenneth S. Kurani. 2012. Interpersonal Influence within Car Buyers' Social Networks: Applying Five Perspectives to Plug-in Hybrid Vehicle Drivers. Environment and Planning A 44(5):1047–65.

Banks, J.A., 1972. The Sociology of Social Movements. Journal of European Studies. Pan Macmilliam.
Della Porta, D. and Diani, M., 2009. Social Movements an Introduction. Blackwell Publishing.

Brock, A., 2020. "Frack off': towards an anarchist political ecology critique of corporate and state responses to anti-fracking resistance in the UK. Political Geography, 82: 1-15.

Cajaiba-Santana, G., 2014. Social innovation: Moving the field forward. A conceptual framework, Technological Forecasting and Social Change. Elsevier B.V., 82(1), pp. 42–51.

European Commission, 2017. Platform on Coal and Carbon-Intensive Regions. Terms of Reference. Available at: https://ec.europa.eu/energy/sites/ener/files/crit_tor_fin.pdf.

Hess, D.J., 2018. Energy democracy and social movements: A multi-coalition perspective on the politics of sustainability transitions. Energy Res. Soc. Sci. 40, 177–189.

O'Brien, Karen. 2012. Global Environmental Change II: From Adaptation to Deliberate Transformation. Progress in Human Geography 36(5):667–76.

Sovacool, Benjamin K., Mari Martiskainen, Andrew Hook, and Lucy Baker. 2020. Beyond Cost and Carbon: The Multidimensional Co-Benefits of Low Carbon Transitions in Europe. Ecological Economics 169:106529.

Toernberg, A., 2018. Combining transition studies and social movement theory: towards a new research agenda. Theor. Soc. 47:381-408.

Weber, K. M. and Rohracher, H., 2012. Legitimizing research, technology and innovation policies for transformative change: Combining insights from innovation systems and multi-level perspective in a comprehensive "failures" framework, Research Policy. Elsevier B.V., 41(6), pp. 1037–1047.