# Sustainability transitions: Bridging systems and organizational perspectives to tackle grand challenges

# Sub-theme proposal for the 36th EGOS Colloquium 2020 in Hamburg Jochen Markard, Birthe Soppe, Taran M. Thune

We live in a world facing a variety of grand challenges connected to environmental and societal sustainability, including food, water and energy security, climate change, natural disasters, poverty and inequality. How societies and organizations deal with such challenges, and commit to developing more sustainable futures, while discontinuing unsustainable businesses and practices is a key concern and research topic (Ferraro et al., 2015; Geels et al., 2017; George et al., 2016; Markard et al., 2012).

This session will bring together scholars who study grand sustainability challenges and transformation from different perspectives, including systems and organizations. We are particularly interested in contributions that explore new approaches, perspectives, and methods.

In organization studies, sustainability issues have received increasing attention in recent years (Bansal and Song, 2017; Linnenluecke and Griffiths, 2013; Whiteman et al., 2013). Organization scholars have addressed sustainability topics from different theoretical perspectives, including institutional theory (Lefsrud and Meyer, 2012; Slager et al., 2012), institutional entrepreneurship (Garud and Karnoe, 2003; Wijen and Ansari, 2007), social movements (Doblinger and Soppe, 2013; Sine and Lee, 2009), category studies (Georgallis et al., 2018), and political strategy and tactics (Hiatt et al., 2015; Levy and Egan, 2003).

In fact, we see much interest in organizational responses and business implications related to grand challenges, seeking to improve firm-level strategies and organizational processes. However, given the magnitude and persistence of today's sustainability challenges, there are also concerns that the focus on firm performance is too narrow and established theories and methods do not suffice (Delbridge and Fiss, 2013; Gladwin et al., 1995; Hahn et al., 2010).

One such field for new inspiration is emerging under the label of 'sustainability transitions' (Markard et al., 2012). Sustainability transitions are long-term, fundamental transformations of established socio-technical systems including energy, transport, water and food that are associated with, and triggered by, grand sustainability challenges. Like researchers in organizational studies, transition scholars are concerned with the role of organizations in developing more sustainable modes of production and consumption (Berggren et al., 2015; Farla et al., 2012). Transition research, however, has a strong focus on higher-level transformation, such as the disruption of existing socio-technical systems and industries. Taking a systems perspective, researchers study the interplay of a broad variety of actors, institutions, policies, and technologies in the development of more sustainable pathways.

We see significant potential to intensify research at the intersection between transition studies and organization studies. In fact, the systems-oriented sustainability transitions literature and the organization literature addressing sustainability have largely evolved independently of

each other, calling for much needed research bridging the two. We believe that organizational studies can greatly benefit from the insights of transitions research, and vice versa.

In line with the overall EGOS colloquium theme, we use this sub-theme to bring together innovative research on sustainability challenges and larger societal transformation that goes beyond the 'usual' approaches and frameworks. We invite research that explores the overlap between systems and organizational perspectives. We welcome researchers who share an interest in building bridges between different strands of research, different levels of analysis, or different theoretical perspectives (e.g. discursive, material, relational, systemic). Such connection and broadening are necessary to advance insights into the dynamics of sustainable transformation, including the role of and consequences for organizations.

# Possible topics include but are not restricted to:

- Incumbents and newcomers: What is the role of established businesses and industries in sustainability transitions (Mäkitie et al., 2018; Smink et al., 2015; Thune et al., 2018)? What is the relation between newcomers and incumbents? How and under which conditions can incumbent firms assume pro-actives roles in sustainability transformation? How do incumbents' roles, values, cultures, and identities alter during times of transitions?
- Struggle over pathways: How do organizations enact different sustainability transition pathways? How do struggles and conflicts unfold over sustainability targets?
- Decline: How do organizations react to industry decline in the context of sustainability transitions?
- Different actors: What kind of roles do diverse types of organizations (e.g. private firms, associations, public organizations, social movements, political parties etc.) play during sustainability transitions?
- Collaboration: What are novel forms of interorganizational collaboration that arise during times of transition, and the systemic changes that may consequently develop? How do organizations join forces to establish new systems of innovation and new institutional environments (Musiolik et al., 2018)?
- Old and new technologies: How to handle the simultaneous existence of both conventional and emerging (clean) technologies? How do organizations straddle divergent technology trajectories (Patala et al., 2017)?
- Multiple transitions: Organizations may witness more than one transition, as we currently witness with both the sustainability and digital transitions as a prime example. How do organizations deal with the complexity of transitions? How do organizations handle intersecting transitions and associated challenges?
- Fresh perspectives: How can we combine systems and organizational perspectives? How do studies of framing, framing contests, discourse and cultural narratives link to higher-level transformations?

#### References

- Bansal, P., & Song, H. C., (2017). Similar But Not the Same: Differentiating Corporate Sustainability from Corporate Responsibility. *Academy of Management Annals*, 11(1), 105-149.
- Berggren, C., Magnusson, T., & Sushandoyo, D., (2015). Transition pathways revisited: Established firms as multi-level actors in the heavy vehicle industry. *Research Policy*, 44(5), 1017-1028.
- Delbridge, R., & Fiss, P.C., (2013). Editors' Comments: Styles of Theorizing and the Social Organization of Knowledge. *Academy of Management Review*, 38(3), 325-331.
- Doblinger, C., & Soppe, B., (2013). Change-actors in the U.S. electric energy system: The role of environmental groups in utility adoption and diffusion of wind power. *Energy Policy*, 61, 274-284.
- Farla, J., Markard, J., Raven, R., & Coenen, L. (2012). Sustainability transitions in the making: A closer look at actors, strategies and resources. *Technological Forecasting and Social Change*, 79(6), 991-998.
- Ferraro, F., Etzion, D., & Gehman, J., (2015). Tackling Grand Challenges Pragmatically: Robust Action Revisited. *Organization Studies*, 36(3), 363-390.
- Garud, R., & Karnoe, P., (2003). Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. *Research Policy*, 32(2), 277-300.
- Geels, F.W., Sovacool, B.K., Schwanen, T., & Sorrell, S. (2017). Sociotechnical transitions for deep decarbonization. *Science*, 357(6357), 1242-1244.
- Georgallies, P., Dowell, G., & Durand, R., (2018). Shine on me: Industry Coherence and Policy Support for Emerging Industries, *Administrative Science Quarterly*, 1–39.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L., (2016). Understanding and Tackling Societal Grand Challenges through Management Research. *Academy of Management Journal*, 59(6), 1880-1895.
- Gladwin, T.N., Kennelly, J. J., & Krause, T.S., (1995). Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research. *Academy of Management Review*, 20(4), 874-907.
- Hahn, T., Kolk, A., & Winn, M., (2010). A New Future for Business? Rethinking Management Theory and Business Strategy. *Business & Society*, 49(3), 385-401.
- Hiatt, S.R., Grandy, J.B., & Lee, B.H., (2015). Organizational Responses to Public and Private Politics: An Analysis of Climate Change Activists and U.S. Oil and Gas Firms. *Organization Science*, 26(6), 1769–1786.
- Lefsrud, L.M., & Meyer, R.E., (2012). Science or Science Fiction? Professionals' Discursive Construction of Climate Change. *Organization Studies* 33(11), 1477-1506.
- Levy, D.L., & Egan, D., (2003). A Neo-Gramscian Approach to Corporate Political Strategy: Conflict and Accommodation in the Climate Change Negotiations. *Journal of Management Studies*, 40(4), 803-829.
- Linnenluecke, M.K., & Griffiths, A., (2013). Firms and sustainability: Mapping the intellectual origins and structure of the corporate sustainability field. *Global Environmental Change*, 23(1), 382-391.
- Mäkitie, T., Normann, H., Thune, T. & Gonzalez, J. S. (2018). The green flings: oil and gas industry's engagement in offshore wind power. *Energy Policy* (forthcoming).
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41(6), 955-967.
- Musiolik, J., Markard, J., Hekkert, M., Furrer, B., 2018. Creating innovation systems: How resource constellations affect the strategies of system builders. *Technological Forecasting and Social Change*, (forthcoming).
- Patala, S., Korpivaara, I., Jalkala, A., Kuitunen, A., & Soppe, B. (2017). Legitimacy under institutional change: How incumbents appropriate clean rhetoric for dirty technologies. *Organization Studies*, 1-25.
- Sine, W.D., & Lee, B.H., (2009). Tilting at windmills? The environmental movement and the emergence of the U.S. wind energy sector. *Administrative Science Quarterly*, 54(1). 123–155.
- Slager, R., Gond, J.P., & Moon, J., (2012). Standardization as Institutional Work: The Regulatory Power of a Responsible Investment Standard. *Organization Studies*, 33(5-6), 763-790.
- Smink, M.M., Hekkert, M.P., & Negro, S.O., (2015). Keeping sustainable innovation on a leash? Exploring incumbents' institutional strategies. *Business Strategy and the Environment*, 24(2), 86-101.
- Thune, T., Engen, O. A. & Wicken, O. (2018). Petroleum industry transformations: Lessons from Norway and Beyond. *Routledge*.
- Whiteman, G., Walker, B., & Perego, P., (2013). Planetary Boundaries: Ecological Foundations for Corporate Sustainability. *Journal of Management Studies*, 50(2), 307-336.
- Wijen, F., & Ansari, S., (2007). Overcoming Inaction through Collective Institutional Entrepreneurship: Insights from Regime Theory. *Organization Studies*, 28(7), 1079-1100.

#### Team of convenors

#### Jochen Markard (EGOS member no. 50634)

ETH Zurich, Switzerland jmarkard@ethz.ch

Jochen Markard is a senior researcher at the Group for Sustainability and Technology within the Department of Management, Technology, and Economics of ETH Zurich. In his research, Jochen studies the interaction of innovations, organizations, policies and society. A focus is on emerging and declining industries in the context of sustainability transitions. In his recent research, Jochen has analyzed technology life-cycles, legitimacy dynamics, technology decline, transition pathways, discourse and framing, alliances and inter-firm networks, and advocacy coalitions. Jochen's research has been published in Research Policy, Nature Energy, Technological Forecasting and Social Change, and California Management Review, among other journals.

## **EGOS** history:

Attended my first EGOS meeting in Rotterdam (2014). Co-convenor in Copenhagen (2017) together with Raghu Garud and Joel Gehman. Sub-theme 26 "The role of organizations in sustainability transitions" with 23 accepted papers (out of 50 submissions). Extensive experience in chairing sessions, organizing conferences & workshops. Actively involved in, and board member of, the Sustainability Transitions Research Network (STRN), which encompasses more than 1'7000 researchers from more than 40 countries (www.transitionsnetwork.org).

# Birthe Soppe (EGOS member no. 47138)

Innsbruck University, Austria birthe.soppe@uibk.ac.at

Birthe Soppe is Professor of Business Administration with a focus on Organization at the University of Innsbruck, Austria. Her research examines the fundamental social, institutional, and organizational underpinnings that shape new new market fields, innovations, and novel forms of organizing in the context of the sustainability and digital transition. Her research has been published in journals such as Organization Studies, Research in the Sociology of Organizations, Journal of Small Business Management, and Energy Policy.

## EGOS history:

Member of EGOS since several years. Regularly attending and presenting at EGOS through the last years, for example in Rotterdam (2014), Copenhagen (2017) and Tallinn (2018). In total, 5 paper presentations at EGOS, including sharing of sessions and discussant role. Although not having served as an EGOS convenor yet, regular contact and exchange with established EGOS convenors. Also having served as panelist, discussant, session chair, and workshop organizer in other settings.

Taran M. Thune (EGOS member no. 40982)

University of Oslo, Norway taranmt@tik.uio.no

Taran Thune is Professor of innovation management and policy at the Centre for Technology, Innovation and Culture at the University of Oslo, Norway. She works on issues connected to industrial transformations, combining innovation systems approaches with organizational theory, and has recently looked into transformations within incumbent industries and connections to emerging niches. Her work has been published in journals such as Research Policy, Energy Policy, Journal of Sustainable Production, Public Administration and more.

# **EGOS** history:

Member of EGOS since several years. Has regularly attending and presented work at EGOS through the last years, including Montreal (2013), Athens (2015), Copenhagen (2017) and Tallinn (2018). In total, 7 paper presentations at EGOS, including chairing of sessions and acting as discussant. Has acted as convener on multiple other conferences, and have served as panelist, discussant, session chair, keynote speaker, and workshop organizer in other settings. Has also edited special issues.