Energy Futures
Session Proposal

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Application requirements
Please submit your 250-word abstracts to the session organizer(s) by December 15th, 2019. All abstracts must include a title, your name, institutional affiliation, and contact information.

From local to global: The role of knowledge, transfer, and collective action for successful energy transitions

The future of energy and mobility transitions relies heavily on individual and societal changes in behavior, utilization patterns, and acceptance and support of governance measures with the aim of mitigating climate change. Collective action, such as in local community energy projects, play a growing role in shaping these transition processes. However, it is still mostly unclear, what factors – individual, institutional and societal – contribute to peoples' behavior and their willingness and ability to engage in collective energy and mobility action. Many scholars have reasoned that knowledge about climate change, the risks it poses to nature and society, and potential mitigation processes would impact peoples' willingness to act in a climate-friendly, energy-saving manner. Empirical studies, however, have shown unclear and ambiguous results regarding the role of knowledge. A comprehensive literature review (Mittenzwei et al., 2019) revealed that existing assessment instruments for climate change still primarily take declarative knowledge into account and do not focus on climate literacy or on conceptual knowledge about climate change, nor do they address scientific practices. In order to examine what drives people towards energy-saving behavior and collective action, it seems necessary to reconsider the concepts under investigation. From an educational perspective, it makes sense to move from an assessment of climate and energy *knowledge* towards climate *literacy*, with literacy involving competencies, attitudes and values.

Besides climate literacy, institutional, societal and infrastructural factors play a role for people's engagement in collective action. In order to design such collective action in a way that it appeals to people and gets them involved, it is important to meaningfully model the factors that guide their behavior and what impact these factors have. Thus, for this session, we would like to invite contributions from all fields of research that add to the theoretical foundations of modelling energy-saving behavior and collective action (e.g. community energy) and its prerequisites. Contributions could add to the discussion about the role of knowledge and knowledge transfer, as well as to other factors underlying individual behavior and collective action and to the conceptualization and potential impacts of these factors. Furthermore, contributions could take a perspective on how governance and policy measures can (or should) take the above-mentioned considerations into account. Contributions can be theoretical or empirical in nature and could respond – or relate – to one (or more) of the following questions:

- Which individual and systemic prerequisites are important for sustainable energy behavior and participation in collective action?
- How can energy and mobility behavior and collective action (e.g. participation in community energy projects) be modelled?
- What is the effect of climate and energy literacy on efficacy expectations, self-efficacy beliefs and mobility patterns and behavior?
- Which variables can be influenced and how can and should corresponding interventions be efficiently designed? How can curricular and extracurricular interventions be designed to empower and motivate citizens to participate in mobility decisions?