

## **'The household junction': Households as friction zones in infrastructure transitions**

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Urban infrastructures such as electricity, heat and transport systems are becoming increasingly interdependent, particularly under the pressure of moving towards more efficient and sustainable configurations. Managing the coupling and interaction of these systems, however, is only to some extent happening at the technical level. Much more, these couplings depend on social practices and activities of infrastructure users in households. Households thus constitute a critical junction for the interlinkage of infrastructures as they are the sites for coordinating demand with – sometimes contradictory – requirements of managing the supply-side load of electricity, heat, electro-mobility and micro-generation.

The main aim of this presentation is to think and reconsider the transition, interlinkage and management of future urban infrastructures through the perspective of its users. The hypothesis is that the opportunities and tensions created at this junction of infrastructures are an important source of systemic innovation processes towards future infrastructures and at the same time link infrastructure change with broader socio-political and institutional questions: Are the requirements and capacities of monitoring and control coming along with some concepts of sustainable infrastructures moving us increasingly towards a 'surveillance society'? Are these new types of infrastructure creating new boundaries of inclusion and exclusion? Is the demand for active users and prosumers at the centre of many of these concepts a new way of enrolling and integrating users into corporate demands? Is the household at the same time a potential arena to resist, negotiate or reframe such requests? Speaking of households as an innovation junction thus not only relates to new socio-technical configurations to manage infrastructure integration (such as 'smart homes'), but also refers to households as a site of possible reframings and recontextualisation of infrastructure innovations.