

# The grassroots of sustainable transition

A generic approach to describe Local Energy Initiatives in the Northern Netherlands.

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**Research focus:** Everyone increasingly realises that the communities, organizations and societies they live and work in need to become more sustainable in order to secure their social, environmental and economic futures (Coyle 2011, Müller et al. 2011). The underlying motivations vary but can often be traced towards increased need for certainty or security. The search for solutions is in part practically orientated towards resilience to different forces of decline. Whilst sometimes manifested in individuals it is more often evident within local initiatives seeking common ground and related to perceived needs for local independence or increased self determination (Musall & Kuik 2011, Seyfang & Haxeltine 2012).

In our project and in this paper, our focus is on local initiatives rather than on regional, national or systemic levels. In the Northern Netherlands such local initiatives often are comprised of a group of villagers or a rural community, however local initiatives also exist in urban areas and cities. Most if not all of these local initiatives focus on energy issues and solutions, while they might expand their interests to other sustainability issues after a prolonged and successful existence. In this abstract and in our paper we

refer to these local or communal activities as 'local energy initiatives' that are at the grassroots of sustainability transitions.

**Theoretical approach:** While other contributions in the literature emphasize the potential for renewable regional or national energy systems, or analyse national economic factor models in energy systems, in our project we focus primarily on the actor (or multiple stakeholder) perspectives in local energy initiatives. First, by describing the various interests and positions of the different actors in local energy initiatives we aim to analyse the grassroots process of local energy transition, and to make the processes at different localities comparable. Secondly, based on this actor analysis we are subsequently developing a comparative instrument that aims to analyse and compare various local energy initiatives in terms of potential and actual achievement. And thirdly, we are developing a 'Practical Program' including several options and scenarios of how local energy initiatives may best structure and organize their efforts towards their local sustainability goals. This Practical Program will be used to assist and support local sustainability initiatives in their endeavours. In the paper we present an elaborated theoretical foundation for our method which is rooted in Science and Technology Studies (STS) and Actor Network Theory (ANT).

**Empirical approach:** The aim of the paper is to present a theoretically grounded and practically applicable method to analyse and compare local actor perspectives, accompanied by the Practical Program to facilitate change and to assist local energy initiatives. Both the Comparative Method and the Practical Program are inherently multidisciplinary since they involve actor perspectives from engineering, energy infrastructure, local politics, commercial businesses, environmental groups, citizens, local farmers, housing associations etcetera.

The method that we are developing and that we present in the final paper will be illustrated by qualitative empirical data from 3 ongoing pilot studies of local energy initiatives in the Northern Netherlands.

**Conclusion:** The conclusion of the paper will propose that important patterns in the arena of interests can be identified within bottom-up initiatives and that local communities are highly comparable in their approach. Citizens as well as local companies are generally focused on energy cost savings and independence from large energy suppliers. Local politics and municipalities frequently concentrate on realising sustainability targets as well as on cost saving for their own operations and buildings. There is a logic in the observable patterns that points towards the significance of socio-economic factors above the availability of innovative techniques in the generation of renewable energy (for instance). Nonetheless, conditions of economic competitiveness, being dependent upon efficiency, determine the manner in which local communities require practical assistance and demand an approach that is both socially and technically well founded.

#### **Key references:**

Coyle, Stephen J. (2011), *Sustainable and Resilient Communities: A Comprehensive Action Plan for Towns, Cities, and Regions*, Wiley.

Müller, Mattias O., Adrian Stämpfli, Ursula Dold & Thomas Hammer (2011), Energy Autarky: A conceptual framework for sustainable regional development, in: Energy Policy, vol. 39, pp. 5800-5810.

Musall, Fabian D. & Onno Kuik (2011), Local acceptance of renewable energy – A case study from southeast Germany, in: Energy Policy, vol. 39, pp. 3252-3260.

Seyfang, Gill & Alex Haxeltine (2012), Growing grassroots innovations: Exploring the role of community-based social movements for sustainable energy transitions, in: Environment and Planning C Government and Policy, Vol. 30, No. 3, pp 381-400.