

Ownership scenarios for the housing-energy-mobility nexus

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Project description

In addition to climate change problems, concerns over affordability of housing, energy and mobility have emerged. An increasing number of authors argues for just sustainability transitions, which address both environmental concerns and social equity.

The study considers a sustainability transition in the nexus of housing, mobility and energy. New technologies such as domestic energy generation (e.g. solar panels), electric vehicles and vehicle-to-grid technologies increasingly connect these domains. The emergence of a nexus of these previously disconnected domains also risks bringing about non-linear effects in the accumulation of power and inequalities. For example, one company can become an integrated provider for the now-related services of housing, energy and mobility, which increases its power vis a vis consumers.

The project investigates how political economy structures influence social justice outcomes of transitions in the housing-energy-mobility nexus via ownership structures. Two political economy scenarios are discussed: continuing neoliberalism as well as a revived social democracy. The former refers to a market-dominated form of capitalism, whereas the latter entails a form of stakeholder capitalism in which the state takes a prominent role. The two types of political economies influence the mix of ownership structures (rental, co-ownership, private ownership and public ownership) in the housing-energy-mobility nexus. In turn, the mix of ownership structures affects the outcome of sustainability transitions in terms of distributional, procedural and recognition justice.

Empirically, the project starts by mapping current ownership structures for the domains of housing energy and mobility separately. It does so for the Netherlands, which is a frontrunner in terms of technological innovation in these domains. Examples are identified across domains: For rental (privately rented homes, leased solar panels, leased cars), for individual ownership (home ownership, solar panel ownership, car/electric bike ownership), for co-ownership (housing co-operatives, solar co-operatives, car-sharing co-operatives) and for public ownership (Public housing, municipal energy companies, public transport electric bikes). We then proceed by describing emerging examples of ownership structures that connect the domains of housing mobility and energy. These include public housing organizations providing shared cars, as well as privately rented homes which include solar panels.

Starting from this analysis, scenarios are developed for the development of the mix of ownership structures in the housing-energy-mobility nexus for Western Europe for the period till 2040. A Delphi approach is taken, and experts are surveyed as to develop the scenarios. As part of the project you will review literature, interview experts and help develop scenario's.

Job requirements

You have an interest in innovation and/or political economy. You are skillful at conducting interviews with experts.