

## Disperse Innovation in the Turning German Energy Market

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**Abstract :** German energy market is under historical change. Turning-off the nuclear power plants and intensive subsidization of the renewable energies causes a paradigm change from big central energy production and distribution to more local structures, bringing the energy production near to the consumption. The formerly big energy market with only a few big energy plants and grid operating companies is changing into a disperse market with growing numbers of small and medium size companies (SME) generating new value-added products and services. This change in then energy market, in Germany called the “Energiewende”, inverts also the previous innovation system. Big power plants and large grids required also big operating companies. Innovations in the energy market focused mainly on big projects and complex energy technologies. Innovation in the new energy market structure is much more dispersed. Increasing number of SME is now able to develop energy production and storage technologies, smart technologies to control the grids, and numerous new energy related services. Innovation is now regional distributed, which is a remarkable problem for the old big energy companies. The paper will explain the change in the German energy market and the paradigm change as well as the consequences for the innovation structure in the German energy market. It will show examples how SME participate from this change and how innovation systems, as well for the big companies and for SME, can be adapted.

**Keywords :** changing energy markets, disperse innovation, new value-added products and services, SME

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