Identification and Analysis of Systemic Failures in Austrian Innovation System

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Abstract:

Today, we face fundamental sustainability challenges in several domains. Energy supply, for example, is confronted with a rapid depletion of natural resources, air pollution and greenhouse gas emissions, nuclear risks, uncertainties related to short- and long-term security of supply, and energy poverty (IEA, 2011).

Against this background, the issue of how to promote and govern a transition toward sustainability, i.e., a fundamental transformation towards more sustainable modes of production and consumption, has received increasing attention both in the policy arena and in social-science research, too.

So, in this project we provide an insight into the development of renewable energy technology in sustainable transition context. In doing so, we discuss about some new global born approach in developing transition technologies. This is done by practical insights that help identify the opportunities and bottlenecks related to such trajectories. It does this by applying a model of innovation named "technological innovation system (TIS)". This Model of Innovation focuses on the dynamics of emerging sustainable energy systems.

In this regard, a case study methodology was chosen to unveil drivers and barriers of Renewable energies. To enable a rich analysis, we made use of a qualitative data analysis with a mixed data sources to reconstruct the interactive process and cross-validate the findings.

The aim of this project is to create insight into the underlying factors which leads to troublesome trajectory in Austrian renewable energies by applying a new "structure of systemic failures based on TIS". The results of this study will be used for policy makers and other practitioners that aspire to understand and influence emerging sustainable energy technologies in this field, also definitely develop the borders of Innovation systems as a new paradigm of technological change.

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