

## **Call for papers: NIG research colloquium on energy and climate governance**

Chairs: Thomas Hoppe (TU Delft), Frans Coenen (U. Twente), Michiel Heldeweg (U. Twente) and Anna Butenko (U. of Tilburg/Mun. U. of Amsterdam).

Innovation in the European energy sector used to be characterized as mostly incremental and top-down. At the same time, it is an important sector that is also traditionally highly regulated. With the intensifying tempo of technology and governance innovation, catalyzed inter alia by the energy transition, and accompanied by new formats of innovation (disruptive and bottom-up), the question arises whether the existing governance framework sufficiently allows for such innovation and supports its further development.

Moreover, the traditional European energy system in terms of its technical and commercial/ market design, as well as the governance framework supporting it, is still organized according to the traditional value chain of energy production, transport, storage and distribution. This system has formed in the 20th century; however, the current European energy market is far from static. In recent years many developments have changed its structure. First, liberalization and drive towards integrated internal market pushed the dynamics of the energy market towards a pan-European, harmonized and coordinated model. Secondly, against the backdrop of technological innovation, intensifying security of supply and climate change concerns triggered the emergence of renewable energy sources (RES) in the energy mix of the Member States. RES are usually produced in a more decentralized manner compared to traditional fossil energy sources. Combined with an increased level of energy-related awareness of the population, as well as technological progress and respective increasing affordability of technology, this creates a bottom-up pull in the energy market towards distributed and smaller-scale energy production.

Thereby the European energy market is experiencing a number of conflicting forces: First, on the vertical axis, there is a multi-level governance issue, and namely push towards more centralization at the European level, and at the same time there is a pull towards more decentralization. Second, on the horizontal axis, there is a multi-actor governance issue, such as the governance of decentralized RES production by citizens, as well as market and government actors.

Whereas the central pull towards European harmonization has often been the locus of academic investigation, the latter, that of innovative decentralization of energy production on the national level and that of regulatory responses to it, has received relatively less attention. The current colloquium aims to contribute to filling this academic gap, especially from a governance, policy & law perspective. Moreover, in the current colloquium we aim to focus both on the 'traditional' regulatory responses to innovation taking place in the energy sector, and on the more recent regulatory responses to current innovations, such as for example local sustainable energy initiatives, smart grids, the rise of local low carbon citizens' initiatives (i.e. 'REScoops', small scale LNG, new forms of decentralized low carbon policies, etc.

The theoretical focus of the colloquium is on understanding the transition towards a sustainable energy economy from a governance and policy, as well as a law perspective. This is innovative since the dominant theoretical approach in analyzing transitions (or rather called 'system innovation') stems from other disciplines like economics and Science and Technology Studies, in which the research object – the transition from a traditional 'dirty' energy economy towards a 'sustainable-sound' or 'circular' energy economy – is for instance analyzed from ecological evolutionary, or neo-institutional economic perspective. Not surprisingly, analytical efforts remain one-sidedly economic and only focus on historical long term developments. In our opinion, the role of government, governance and law (also considering short term 'how'-questions), and the institutional conditions and settings under which transitions may occur, need more attention.

We welcome papers that address topics that are relevant to the research colloquium thematic focus. Both conceptual and empirical papers are welcome.

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