

## PROJECT

Consumer Policy  
Democracy  
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Energy  
Governance

# Old Energy World - New Energy World: An Explaining and Clarifying Overview on the Digitalisation of the Energy System



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Which trends and developments characterise the energy system?  
How are digital technologies and data-based business models changing the energy system? What challenges do different actors face? These questions are the subject of a short study written by the Ecologic Institute on behalf of the Heinrich Böll Foundation.

The interim results of this study were presented on 26 September 2018 in the technical talk Digital Readiness at the Heinrich Böll Foundation and discussed with representatives from politics, associations, and the (energy) industry.

The short study serves to better understand the energy system as a basis for policymaking. The focus lies on the actors, their interests and shifts in their areas of responsibility. Three overlapping phases of change are identified: The Old Energy World, the Transition and the New Energy World.

Currently, we are in the transition phase. It is characterised by increasing digitisation and expansion of renewable energies. The trends of decentralisation, participation, flexibility, and automatisisation characterise this phase. However, digitalisation in

the energy system is ambivalent: Its opportunities lie in comprehensive efficiency gains. Its risks concern privacy issues and rebound effects.

In the New Energy World, structures are expected to shift from a linear to a circular system. The roles of the various actors are less clearly defined and overlap more and more. The smart grid is becoming reality. On the one hand, prosumers and consumers have increasing influence. On the other hand, they depend on data processing companies. The small-scale and flexible system is increasingly dependent on bundling actors and marketplaces. Network operators and utilities must manage the growing complexity of the small-scale system.

Politics can shape the development of the New Energy World by making data protection a central task, by strengthening smaller players and by preventing the rebound effects of digital technologies. The editors are planning a follow-up study to develop specific policy recommendations.

#### **Main Link**

Study: Alte Energiewelt - Neue Energiewelt

#### **Related Articles**

- Alte Energiewelt - Neue Energiewelt
- Accompanying Projects: Smart Energy Showcases - Digital Agenda for the Energy Transition (SINTEG)

#### **Further Links**

- Digital Energy Transition
- Digital Energy Transition? Charge with values!

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**Links**

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