

Governing the Energy Transition

Reality, Illusion or Necessity?

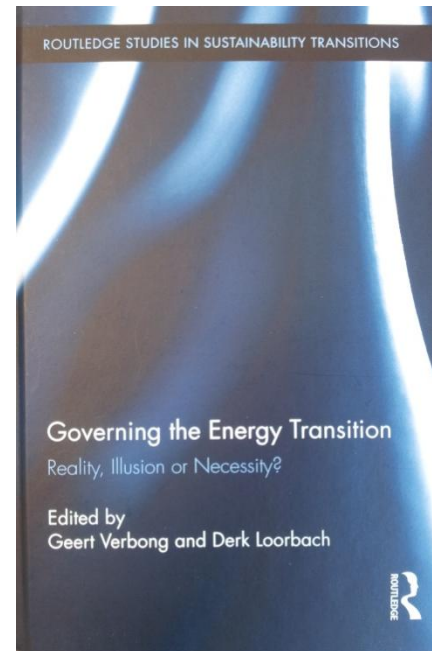
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Our modern society has become highly dependent on energy supply systems. Black-outs effectively demonstrate that without electricity the fabric of modern life immediately starts to disintegrate. Unfortunately, these fossil fuel based systems are very vulnerable. Technological complexity, resource depletion, geopolitical instability and dependency and large price fluctuations pose serious threats for the future of these systems. They also have a negative impact on the natural environment, in particular the large contribution to climate change. The limited sustainability of our current energy supply systems necessitates a transition to a more sustainable system. Achieving such a transition to a more sustainable system is therefore one of the great challenges of the 21st century. At the same time such transitions are notoriously difficult to achieve because of path dependency and lock-in. Is it really possible to achieve such a change or will it prove to be an illusion? And, when the answer is positive, how can we achieve such a transition?

The aim of this book (scheduled to appear in 2011) is to provide new insights into this challenge and the available options for bringing about sustainability transitions within the energy sector. The authors start from a theoretical frame specifically developed for understanding and directing system innovations. The book presents the latest on research of the dynamics and steering of energy transitions based on such fields as Science, Technology & Society studies, innovation sciences, users perspective, system theory, and transition management. Furthermore, the authors draw on extensive experiences with actual experiments and the Dutch policy practice involving energy transition management. *Governing the Energy Transition. Reality, Illusion or Necessity* is divided into four parts. In Part I the authors address how past and present energy transitions should be interpreted. They also consider how non-sustainable processes in the energy sector can be transformed in a more sustainable way. Part II analyzes which new developments take place within this sector and how the various parties respond to

it. This includes reactions from the vested interests as well as alternatives put forward by other social groups.

Part III centers on the question whether it is possible and, if so, how, to manage a turn to more sustainability. This will involve an assessment of the Energy Transition Project started by the Dutch government in 2000. What has it produced so far and what are its current challenges? Finally, in the last part the authors put the energy sector in a broader perspective. The authors draw conclusions with regard to the current dynamics of energy transitions and the main challenges for the near future, in research as well as in energy-related practices. Is it possible to design a governance approach has general appeal but is also capable of guiding concrete action? However, it is already clear that the quest for energy transitions will take a sustained effort over an extended period of time and it will need much creativity, on the part of the government, the energy sector and society.

Description

The Energy Transition, the inevitable shift away from cheap, centralized, largely fossil-based energy systems, is one of the core challenges of our time. This book provides a coherent and novel insight into the nature of this challenge and possible strategies to accelerate and guide such transitions. It brings together prominent European scholars and practitioners from the fields of energy transition research and governance to draw attention to the current complex dynamics in the energy domain, and offer elegant and provocative explanations for current crises and lock-ins. They identify multiple energy transition pathways that emerge and increasingly compete, and emphasize the need and possibilities for novel governance. By analysing the complexity of energy transition processes and the difficulties in shifting to sustainable pathways, this text questions the extent to which actually governing energy transitions is already reality, just an illusion, or a bare necessity.

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