

The second part of this book aims to provide an overview of the status of the *Energiewende* in 2015/2016, i.e. about five years after its official launch and 15 years after the expansion of renewable energies (RE) was significantly accelerated by the introduction of the GREA and the first agreement was concluded to shut down all nuclear power plants.

Therefore, the questions subsequently to be answered are:

- Have the **targets** of the *Energiewende*—more precisely, the milestones to be reached on the way to the target state set out for 2050—actually been achieved?
- Have the underlying political **motives** for the *Energiewende* been satisfied as intended along the path taken so far?
- Have the **framework conditions** underlying German energy policy been complied with so far?
- Where does Germany stand with regard to the **systemic consequences** of the *Energiewende*?

Before we address these four questions consecutively, a number of remarks in advance.

1. According to the concept of this book, we will limit ourselves to answering these questions with regard to the “electricity part” of the *Energiewende*, i.e. we will not address the heating and transportation sectors.

(The percentage of RE in the heating sector has stagnated at 12–13% since 2011, and the share of renewable energies in the transportation sector has stagnated at 5–6% since 2011.)

2. The *Energiewende* is a political and social project with a timeline of 40 years (2010/2011 to 2050); only 15% of that time has elapsed. Given this fact, i.e. the fact that from an sober perspective Germany is still only in the initial phase of the *Energiewende*, one could raise the following objection against the “interim conclusion” proposed in this second part of the book: At such an early stage of a

project, it is not reasonably possible to draw an “interim conclusion”, and any such conclusion would be of very limited value.

This objection is definitely worth serious consideration. No matter the detailed answers to the above questions, *judgement of the overall “Energiewende” project on this basis is definitely not possible*—that is, unless an aspect had come to light in the relatively short initial period, leading to the certain conclusion that the project is impossible in terms of technology or economics. However, this is clearly not the case.

3. There are three main reasons why we nevertheless devote considerable space to the question “*Energiewende*—where does Germany stand today?” in this book:
 - An analysis of the implementation of the *Energiewende* up until now is instructive. We will see in the course of this second part that, despite the relatively short duration of the overall project so far, the systemic consequences presented in the first part are already clearly visible and tangible.

In other words, a look at the current situation in Germany does give a thorough impression of structural challenges which will have to be solved in the next 35 years up to 2050 in terms of the hierarchy of energy politics motives, in terms of ensuring compliance with the framework conditions and in terms of the choice of a specific path from the numerous ways of implementing the *Energiewende*.

- In the public debate in Germany about the *Energiewende*, the issue of whether the implementation so far has been successful or not is also being discussed widely and controversially—giving rise to, actually unduly, differing attitudes to the *Energiewende* as a whole. This part in particular will therefore strive to list the relevant facts to generate a reliable picture.
 - Finally, as regards the international perspective, a closer look at the implementation path taken so far reveals some important experiences concerning an energy transition process. This part will thus allow us to identify important lessons to be learned in view of projects in other countries similar to the *Energiewende*.
4. We will base our assessment throughout this second part on the year 2015, comparing the actual figures of 2015 with the planned figures set as milestones for 2015 in the Lead Study 2011, scenario 2011A. Where already available upon completion of the book, we will also provide the (preliminary) figures for 2016.