



EA EUROPEAN ACADEMY
OF TECHNOLOGY AND INNOVATION ASSESSMENT

Designing viable energy systems – safe and secure energy supply for the long-term

Scientific expert group of the EA European Academy provides recommendations for energy policy

Bad Neuenahr-Ahrweiler, 20 January 2015. – Building up long-term viable energy systems is one of the biggest challenges facing us today. They should be usable for a long-term, safe and secure supply of energy without exceeding limits of environmental burden, societal acceptability and resource availability.

On this subject a scientific working group of the EA European Academy has just published a memorandum: *“Improving Energy Decisions. Towards Better Scientific Policy Advice for a Safe and Secure Future Energy System”*. The three-year working group of experts in the areas of energy economics, economics, ethics, theory of science, technology assessment and political science developed several recommendations including:

- 1) **Dynamic stability and social robustness:** Scientific policy advice should seek recommendations which are as stable as possible with respect to uncertainty, but flexible with respect to the chosen options. Furthermore, they should not contradict major societal and socio-economic interests and central value commitments.
- 2) **Avoiding misjudgements:** Neglecting uncertainty can produce misjudgements and wrong decisions. In order to prevent this, several points should be met by policy advice, for example: all known potential options and involved uncertainties should be revealed and politicians should be prepared to accept inherent uncertainty.
- 3) **Meaningful studies:** In order to be able to draw meaningful statements to several concrete questions from study results, a plurality of single studies and reflecting meta studies should be encouraged, each of them providing large transparency and extensive indications of the sensitivity of their results.
- 4) **Trans-, inter- and multi-disciplinary perspectives:** The majority of pure techno-economic studies should be extended by further disciplinary aspects, e.g. social, political, resource-based, and non-climatic environmental issues. Only in this way can a sufficiently complete picture of available development alternatives be obtained.

With their interdisciplinary study, worked out in common authorship, the experts address actors from science, politics, and energy business as well as from the interested public. The study is available at Springer Publishers (Heidelberg/New York).

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Memorandum:

B. Droste-Franke, M. Carrier, M. Kaiser, M. Schreurs, C. Weber, T. Ziesemer (2015): **Improving Energy Decisions. Towards Better Scientific Policy Advice for a Safe and Secure Future Energy System**, EA series "Ethics of Science and Technology Assessment", Vol. 42, Springer Publishers: Heidelberg/New York (Hardcover: 80,24,- €; eBook: 63,06,- €)

- Book order: <http://www.springer.com/energy/systems,+storage+and+harvesting/book/978-3-319-11345-6>
- Download of book excerpt: http://www.ea-aw.org/fileadmin/downloads/Projektgruppen/Improving_Energy_Policy_excerpt.pdf

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