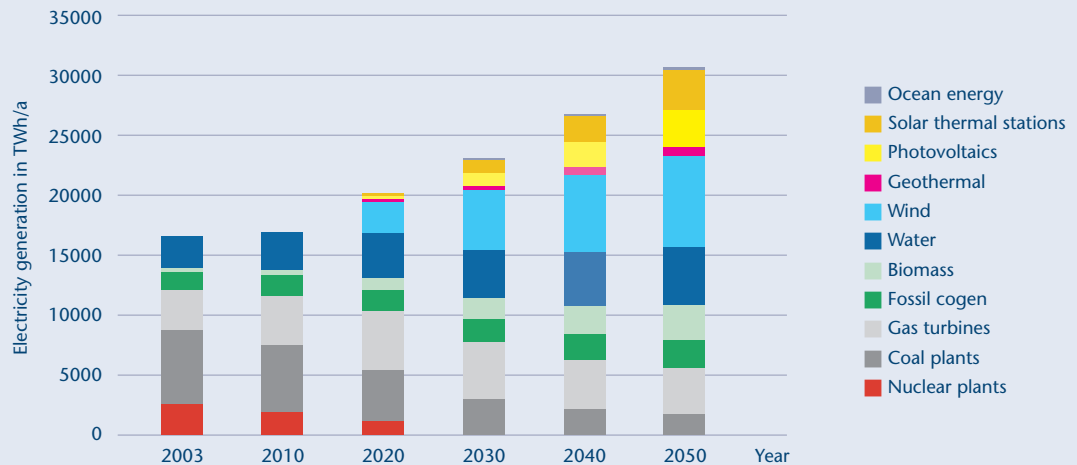


Technological impact assessment

Scenario for a global, sustainable electricity supply



The development of new energy technologies is taking place within a complex environment with numerous framework conditions involving technical, economic, ecological and energy policy aspects. Therefore a condition for a successful market launch is a preparatory and accompanying analysis of these relationships. New energy technologies and systems need to undergo continued comprehensive assessments in order to ascertain opportunities and risks, detect possible undesired developments early on, and develop alternative solution approaches.

At the same time, aspects such as the liberalisation and globalisation of the energy markets and the rules set by international climate protection policy need to be taken into account. System analyses provide a scientifically sound, reliable basis for decisions made in politics, the industry, and society so that the effects of new technologies can be assessed quickly and comprehensively. System analysis and technological impact assessment are therefore integral parts of the research strategy at the Renewable Energy Research Association.

Research requirements

- Technological and economic utilisation analyses to determine the best systems and their application potentials
- Life cycle analyses and ecological assessments
- System analyses for individual technologies to accompany research with improved technology foresight procedures
- Environmental and system analyses to support research planning and follow-ups
- Model calculations and scenarios for future energy supply systems
- Development of market launch and market penetration strategies with consideration of different geographical and chronological aspects and a derivation of recommendations for action in political consultancy
- Conceptual work to improve the integration and assessment of technologies from the point of view of sustainability
- Methodical approaches to further development of subsidy instruments close to the political process



Contact:

DLR

Dr. Wolfram Krewitt

Phone: +49 (0) 711/ 6862-766
email: wolfram.krewitt@dlr.de

Prof. Dr. Hans

Müller-Steinhagen

Phone: +49 (0) 711/ 6862-358
email: hans.mueller-steinhagen@dlr.de

ZSW

Dr. Frithjof Staiß

Phone: +49 (0) 711/ 7870-210
email: frithjof.staiss@zsw-bw.de

FZ Jülich

Jürgen-Friedrich Hake

Phone: +49 (0) 2461/ 61-3161
email: jfh@fz-juelich.de