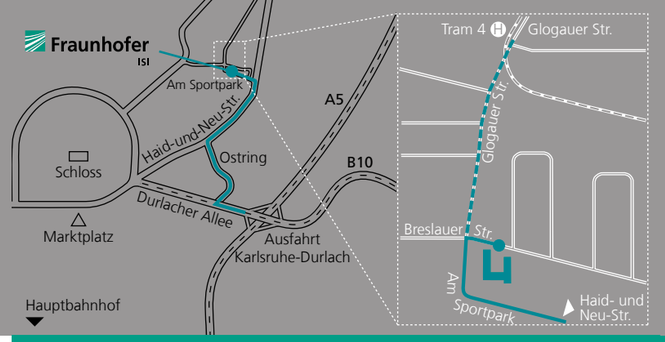
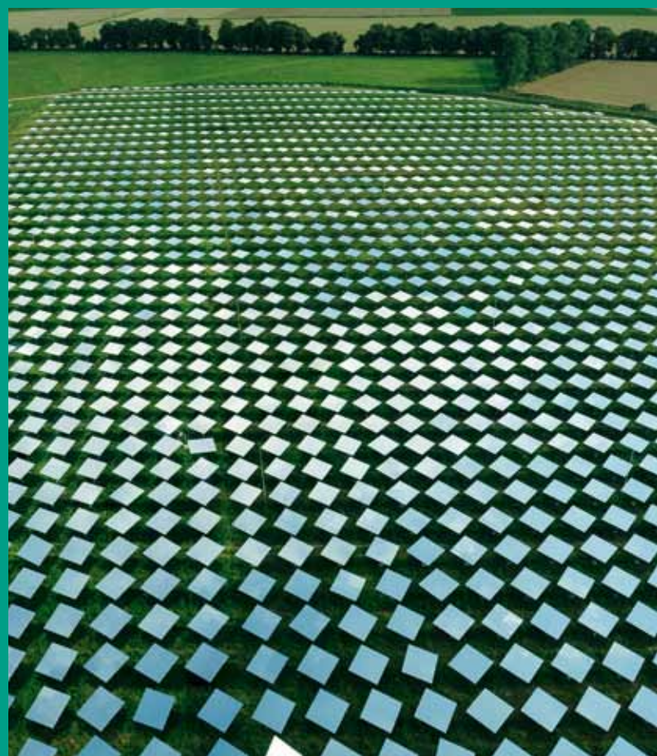


Fraunhofer ISI

FRAUNHOFER INSTITUTE FOR SYSTEMS AND INNOVATION RESEARCH
| VISIONS FOR DECISIONS

ENERGY POLICY AND ENERGY MARKETS



FACTS AND FIGURES

The Fraunhofer ISI has been shaping the innovation landscape both in Germany and internationally since its foundation in 1972. Its contractual partners and clients comprise industrial and service enterprises as well as the public sector. More than 15 percent of its budget comes from contracts with industry. About 50 percent is generated from publicly financed national research projects; around 15 percent is commissioned by the European Union.

SELECTED CLIENTS

The Federal Government
- Federal Ministry of Education and Research
- Federal Ministry of Economics and Technology
- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

European Commission

We work for the leading energy suppliers and technology producers in Germany.

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The Competence Center consists of three Business Units:
Renewable Energies
Energy and Climate Policy
Electricity Markets and Infrastructures

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HOW TO FIND US

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By tram | From the main train station (Hauptbahnhof), take Tram 4 in the direction of Waldstadt to the tram stop Glogauer Strasse (approx. 25 minutes).

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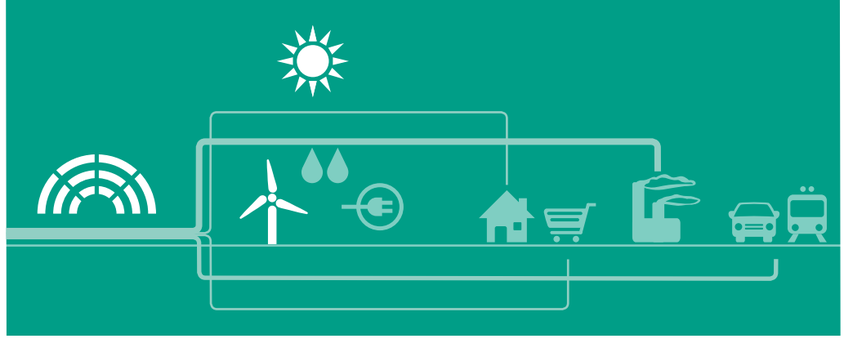


ENERGY POLICY AND ENERGY MARKETS

The Fraunhofer Institute for Systems and Innovation Research ISI analyzes the origins and impacts of innovations. We research the short- and long-term developments of innovation processes and the impacts of new technologies and services on society. On this basis, we are able to provide our clients from industry, politics and science with recommendations for action and perspectives for key decisions. Our expertise lies in a broad scientific competence as well as an interdisciplinary and systemic research approach.

OUR COMPETENCES

The Competence Center Energy Policy and Energy Markets contributes to developing the political and institutional framework for a sustainable energy system. The intensive utilization of renewable energy sources and improving energy efficiency are key strategies to satisfying energy demand, ensuring security of supply and protecting the climate in an environmentally-friendly and resource-saving way.

Renewable energies and climate protection technologies contribute to strengthening the competitive position of the export-oriented capital goods industry. In the coming decades, great market opportunities will open up here in domestic and international markets.

We design and evaluate energy and climate policy measures and instruments for a more rapid and cost effective development of a sustainable energy system as well as strategies for research and development. The integration of renewable energies in electricity markets and infrastructures, but also in the heat markets, will be a major challenge until the mid-century.

Our analytical work on the impacts of an increased utilization of renewable and energy-efficient technologies on employment, income, the economic structure and the environment help decision-makers with the practical design of effective policy instruments.

In addition, we advise our national and international clients from governmental and non-governmental organizations as well as industry on the introduction of future-oriented, technological, economic and institutional innovations.

OUR BUSINESS UNITS

Renewable energy sources provide chances for companies which means that worldwide investments are increasing. The *Business Unit Renewable Energies* evaluates the contribution of renewable energies to climate protection, security of supply as well as competitiveness, draws up scenarios for future development and studies the design of energy policy instruments.

Climate change will affect all areas of society in the long term. Energy and climate policy therefore increasingly intermeshes with other policy fields. The *Business Unit Energy and Climate Policy* focuses on the design of energy and climate policy instruments and their impact on innovations, the environment, industry and society.

Integrating increasing amounts of fluctuating electricity from renewable energy sources poses growing challenges for markets and infrastructures. Analyzing and developing strategies for policy-makers and enterprises in the electricity sector is a crucial task for the *Business Unit Electricity Markets and Infrastructures*. The Business Unit develops and applies spatially and temporally resolved models of the electricity sector with a time frame up to 2050.

OUR RANGE OF SERVICES

- Design and evaluation of instruments to diffuse renewable technologies
- Technology, energy and emission forecasts
- Examination of the potentials of renewable energies and CO_2-mitigation measures
- Sector and market analyses for new energy sources, energy-technology products and energy services
- Research on barriers, success factors and business strategies for the system and market integration of innovative technologies
- Consulting on the prioritization of R&D programs

SELECTED PROJECTS

- Model-based analysis of integrated electricity markets between Europe and North Africa (EU-MENA) for the Desertec Industrial Initiative dii
- Future of the Renewable Energy Law in Germany
- ODYSSEE-MURE 2010 – Monitoring of EU and national energy efficiency targets and policies
- The contribution of energy efficiency to climate protection in the European Union until 2050
- Evaluation and further development of the EU emission trading scheme