

THE FUTURE DEVELOPMENT OF ENERGY DEMAND

How energy demand develops not only influences the success of the sustainable energy transition and the share of renewable energies, it is also critical for using and planning new generation capacities. Energy demand is influenced simultaneously by many different factors: Alongside weather and climate, these include economic development, the diffusion of emerging technologies and changes in policy instruments and consumption behavior. Many simulation models that are used to project energy demand only take a few of these factors into account, resulting in incomplete information. The FORECAST model integrates all the factors mentioned and enables customer-specific studies to be made of energy demand using scenario analyses.



WHAT WE DO

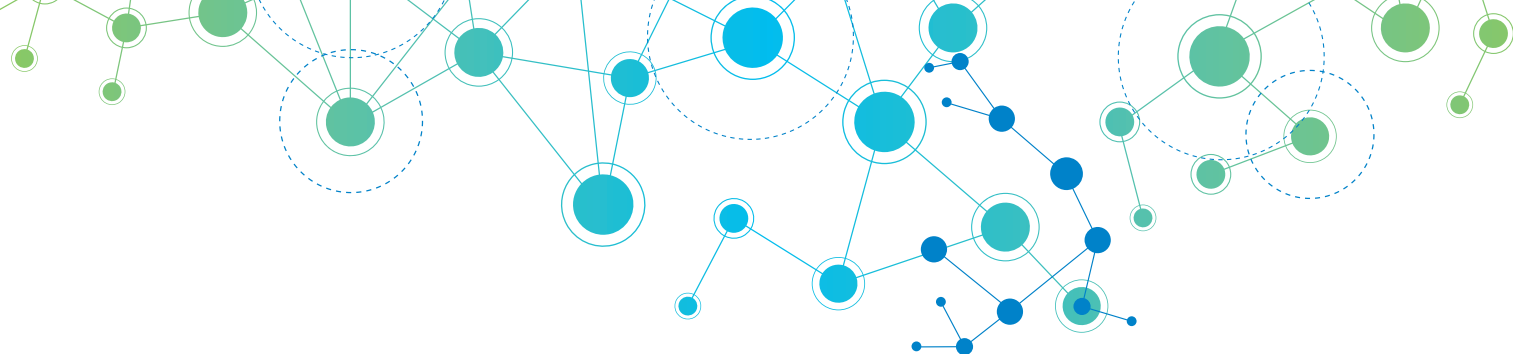
The bottom-up model FORECAST considers factors with a short-term influence like the weather and the current economic situation as well as those with a more long-term influence like socioeconomic trends, technology change and energy efficiency policies. The projections of final energy demand can be evaluated for individual energy carriers, for example electricity, gas, heating oil, solar or biomass.

The model is being worked on continuously and further developed and its technology database updated to include the latest trends. Our database and the model that is calibrated over a period of several years allow efficient studies to be made of selected countries like Germany, Switzerland, United Kingdom, France, Turkey or Brazil as well as of the EU and its member states.



OUR SERVICES

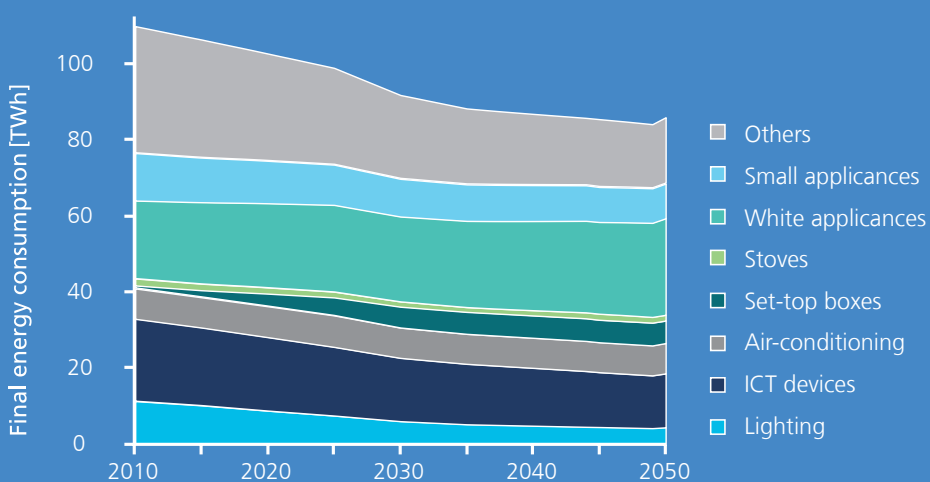
- Constructing internally consistent scenarios of energy demand development in the EU and selected European countries up to 2050
- Analyses of individual energy carriers or sectors (e.g. heating demand)
- Constructing scenarios to explore individual factors of influence (e.g. stronger energy efficiency policies, changed energy prices or technology trends)



When working on studies, we attach great importance to a shared understanding and close cooperation with our clients – especially when defining scenarios that are tailored to your requirements.

HOW YOU BENEFIT

The high resolution results of the FORECAST model give you a better grasp of the factors influencing energy demand compared to conventional simulations. Our team of independent experts from the Fraunhofer ISI, TEP Energy and IREES GmbH guarantees you the expertise you need to assess current developments with regard to emerging technologies, energy efficiency policy and macroeconomic trends.



Example of model results: Development of the electricity demand of individual household applications in Germany up to the year 2050.

