

Transforming the UK energy system

National policy goals for reliable, cost-efficient and environmentally sustainable energy will demand a transformation of our whole 'energy system' - including resources and technologies for energy supply, infrastructure, consumer technologies and behaviours, stakeholder interaction, and regulation and policies.

Developing different energy scenarios - often through expert modelling or engaging with stakeholders - is a key method for informing decision-making about energy system change. However, this means that energy system visions are based on these contributors' perspectives, while the wider public perspective on system transitions is less explored. A greater understanding of public views on energy change could improve dialogue, encourage more robust decision-making, and highlight potential points of contention.

Researchers at the UK Energy Research Centre (UKERC), which is funded by Research Councils UK including the ESRC, have examined public values and perspectives on whole energy system change through a series of deliberative workshops with public participants and a nationally representative survey.

The synthesis report *Transforming the UK energy system: Public values, attitudes and acceptability* outlines public views on the drivers of energy policy, the different elements of energy system change, and the underlying values and principles that people draw on when they engage with this issue.

The main conclusion is that the British public are positive about the need to change the energy system - both how energy is supplied and consumed. The research also reveals a set of core values that people wish to see underpinning the future energy system.

Key findings

- The British public wants and expects change with regard to how energy is supplied, used and governed, and are positive about the need for energy system change.
- How much people will accept energy system change depends on how well it fits into their set of values - such as social justice, avoiding energy waste, protecting the environment, having a secure energy supply, and gaining a real system improvement.
- There is a strong public commitment to improve energy efficiency and reduce energy demand, through investments in renewable energy, a shift away from fossil fuels, and the development of technology and infrastructure to support lifestyle changes.
- Although energy security, affordability and climate change are generally recognised as drivers for change in energy production and delivery, they do not necessarily determine people's preferences for a particular energy system.
- There is uncertainty and ambivalence about alternative supply technologies such as new nuclear power, biofuels, and carbon capture and storage. Typically, people will only accept these technologies provided they can see how the technologies support a longer-term vision of renewable energy and lifestyle change.
- Despite general public support for changes in energy consumption, there is ambivalence about specific aspects of change - for instance concerns about electric cars' range and performance.
- There is some support for measures to manage households' energy demand. Whilst sharing energy use data is mostly accepted, a significant proportion of people are resistant to this.

Policy relevance and implications

- Public acceptance of energy system change may only be achieved if it is rooted in people's value system, forming the basis of a social contract for change.
- Conversely, if the public's value system is ignored in decision-making, resistance to energy system transformations or conflict over particular issues is more likely. The public is unlikely to settle for a form of change that does not show signs of commitment to longer-term trajectories following these values.
- Policymakers should provide public engagement opportunities, to ensure different perspectives and knowledge on energy system transitions are included in the process and treated as valid contributions.
- Policymakers and other actors involved in energy system transformation need to make clear how current and proposed changes to the energy system fit into a long term strategy, incorporating different policy areas and time scales.



BRIEF DESCRIPTION OF THE PROJECT

The UKERC report *Transforming the UK energy system: Public values, attitudes and acceptability – Synthesis Report* explores public attitudes using a 'whole-system' approach, examining views on the drivers of energy policy, the different elements of energy system change, and the underlying values and principles that people draw on when they engage with this issue. The researchers conclude that the British public is positive about the need to change the energy system – both on the supply and the demand side.

Web: www.esrc.ac.uk/_images/Transforming%20the%20UK%20Energy%20System%20-%20Public%20Values%2C%20Attitudes%20and%20Acceptability_tcm8-27103.pdf

FOR MORE INFORMATION

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The UK Energy Research Centre (UKERC) carries out world-class research into sustainable future energy systems. It is funded by the Research Councils' Energy Programme, with ESRC as a co-funder.
Web: <http://www.ukerc.ac.uk>

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The views expressed in this evidence briefing are those of the authors and not necessarily those of the ESRC.

The British public are positive about the need for energy system change. How much people will accept change depends on how well it fits into their set of values.