PUBLICATION

- Report
- Economics
- Climate
- Consumer Policy
- Digitalization
- Energy

European Smart Home Market Development
PUBLIC VIEWS ON TECHNICAL AND ECONOMIC ASPECTS ACROSS THE UNITED KINGDOM, GERMANY AND ITALY

[1]

Consumer perception regarding reliability and data privacy risks, as well as high costs of technologies

act as significant barriers to consumer acceptance of smart homes.

Smart homes offer significant potential to enable new energy saving services and capabilities offered via smart grids. However, research reveals that consumer perception regarding reliability and data privacy risks, as well as high costs of technologies act as significant barriers to consumer acceptance of smart homes. In a paper, published in *Energy Research and Social Science*, Benjamin Boteler and co-authors investigated the differences and similarities in technical and economic drivers and barriers to smart home market development in the UK, Germany, and Italy. The paper European smart home market development: Public views on technical and economic aspects across the United Kingdom, Germany and Italy is available for download.

The threat of climate change, continually fluctuating energy prices and growing concerns about energy supply and security, mean that finding new ways of producing, delivering and consuming energy are becoming increasingly important. Smart grids and smart cities have gained increasing attention in both policy and academic communities as a mode to address current energy consumption. At the domestic level, smart homes could potentially enable new services and capabilities offered via smart grids and smart cities to be fully realized by householders such that their needs, requirements and preferences are met in tandem with the grid constraints. Through the ability to control all devices and appliances within a home from a single control unit remotely or manually, smart homes might allow consumers to control and manage their energy use more efficiently while increasing their comfort and convenience for a variety of household activities.

The paper [European smart home market development: Public views](#)

[on technical and economic aspects across the United Kingdom, Germany and Italy](#) [2] illustrate differences and similarities in the technical and economic drivers and barriers to smart home market development. The paper is an in-depth review of the selected countries including consumer focus groups. The research reveals key barriers to the adoption of smart homes across the countries studied such as reliability, data privacy, and costs of smart home technologies. Housing stock characteristics, both age of buildings and tenure reveal deeper cross-country differences in attitudes and perceptions towards these technologies. The research highlights the need for smart home services that go beyond energy consumption and management services. Only when such a holistic approach is adopted, where other applications such as health or security – suited to the householders' needs and making positive contribution to their daily lives are enabled – will the benefits of smart homes become clear to the consumer.

Attachments

- 📄 public-views-on-smart-homes-2014.pdf

Main Link

Public views on smart homes

Ecologic Related Articles

- Comparing Consumer Preferences for Smart Homes in the UK, Germany and Italy

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Author(s)

Benjamin Boteler

Author(s)

Nazmiye Balta-Ozkan (Policy Studies Institute)
Oscar Amerighi (Unità Centrale Studi e Strategie (ENEA))

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