



Empowering consumers: Leveraging digital technology to facilitate voluntary energy reductions

Learn how digital tech empowers voluntary energy reduction by consumers, paving the way for a Common European Reference Framework for energy-saving applications.



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To achieve climate neutrality and energy independence, it is essential to explore all possible ways of reducing energy consumption and promoting sustainable practices through a deep and sustainable digital transformation of the energy system.

In response to the [Digitalising the energy system: EU Action Plan \(https://energy.ec.europa.eu/communication-digitalising-energy-system-eu-action-plan-com20225522_en\)](https://energy.ec.europa.eu/communication-digitalising-energy-system-eu-action-plan-com20225522_en) that called for the development of a Common European Reference Framework for energy-saving applications, this landscape analysis [authored by ETRA I&D \(http://www.grupoetra.com\)](http://www.grupoetra.com) serves as a first step towards the creation of the respective framework.

The report highlights the potential of digital technology in creating a more efficient and reliable energy system, offering a range of solutions that can help consumers make informed decisions about their energy usage and identify areas where they can save energy.

It focuses on 5 groups of energy-saving applications and platforms for domestic consumers., These include those from retailers and distribution system operators (DSOs), transmission system operators (TSOs), third parties with non-personalised information on energy retail prices, third

parties with personalised information of consumption and production in real-time, and national energy data platforms.

Energy monitoring has been identified as one of the key solutions with the potential to save energy and reduce energy billing. The applications and platforms provide personalised data in real-time, mostly from smart meters, such as energy consumption, historical data, carbon footprint, energy costs, and power demand. The applications also provide information about the customer's environmental impact, power outages, energy-saving recommendations, and smart consumption advice.

The report also suggests implementing a Common European Reference Framework that integrates different solutions in an efficient way to address the needs of all energy users and stakeholders and reach a win-win situation. Furthermore, it identifies several early warning systems channels in place in the EU that may be used to issue early warnings on energy blackouts.

By promoting sustainable and efficient energy practices, we can mitigate the impact of energy on our daily lives and work towards achieving our climate neutrality goals. The report concludes by highlighting the importance of digital technology in engaging citizens as active participants in finding solutions to current problems, and inspiring further innovation and uptake in this field.

Related Links

[Digitalisation of the energy system](#)

(https://energy.ec.europa.eu/topics/energy-systems-integration/digitalisation-energy-system_en)

Related documents

- [Communication: Digitalising the energy system - EU action plan](#)
(https://energy.ec.europa.eu/communication-digitalising-energy-system-eu-action-plan-com20225522_en)
- [Staff Working Document](#)
(https://energy.ec.europa.eu/staff-working-document-digital-energy-action-plan-swd2022341_en)
- Media package: EU action plan on digitalising the energy system
 - [Press release](#)
(https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6228), [Questions and Answers](#)
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