

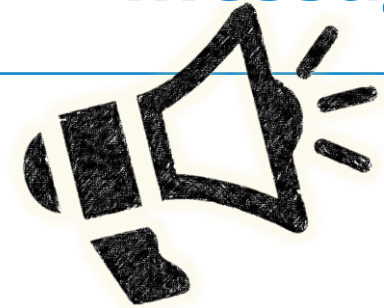


Smart
Energy
Systems
ERA-Net

POLICY BRIEF 2022 EDITION

JOINT PROGRAMMING PLATFORM
SMART ENERGY SYSTEMS

Messages from the Working Groups



The Joint Programming Platform (JPP) Smart Energy Systems (SES) initiative unites scientific experts in smart energy systems within its Knowledge Community. On the basis of their profound experience and expertise, these researchers develop an informed opinion of key aspects which – according to their perspective – should be considered by decision makers on different levels. With its Working Groups, the JPP SES initiative provides a platform for developing expert recommendations.



The Joint Programming Platform Smart Energy Systems initiative has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements no. 646039, 775970 and 883973.

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The views expressed in this material are those of the authors and do not necessarily reflect the views of the JPP SES initiative. Any references included do not imply the endorsement by the JPP SES initiative.



Messages from the Working Group Consumer and Citizen Involvement



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Policy Brief

Policy Recommendations

- 🔊 **Recommendation A:** Include social sciences in Research, Development and Innovation programmes and projects
- 🔊 **Recommendation B:** Involve potential user groups through agile, co-creative and user-centred technology design and development from the outset
- 🔊 **Recommendation C:** Integrate citizens and consumers targeted, consciously and smartly
- 🔊 **Recommendation D:** Shed light on the paths ahead with one voice and one direction
- 🔊 **Recommendation E:** Integrate Small and Medium Enterprises as key players in the energy system
- 🔊 **Recommendation F:** Leverage Energy Communities to counteract energy poverty
- 🔊 **Recommendation G:** Empower citizens and consumers through access to interoperable technologies and tools

Please find the Policy Brief with the detailed recommendations on [expira](#) and on the [website](#).

Please click on the logos for more information on the projects.

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Messages from the Working Group Regional Matters



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Policy Brief

Policy Recommendations

- 🔊 **Recommendation A:** Develop a common EU-dataset based on available information to properly design, smarten and upgrade the policy measures on energy efficiency and decarbonisation
- 🔊 **Recommendation B:** Provide guidelines for local cooperation and interaction
- 🔊 **Recommendation C:** Adopt a consistent terminology for Energy Communities (including, but not limited to Citizen and Renewable Energy Communities)
- 🔊 **Recommendation D:** Incentivize users' behaviour and better appreciation of demand flexibility
- 🔊 **Recommendation E:** Foster exchange on Citizen and Renewable Energy Communities between researchers and local authorities
- 🔊 **Recommendation F:** Provide clear EU policies and financing programmes to support efficient and standardised planning procedures
- 🔊 **Recommendation G:** Build a climate of multilevel trust and cooperation among different actors in the energy sector

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Messages from the Working Group Regulatory and Market Development



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Policy Brief

Policy Recommendations

- ✦ **Recommendation A:** Assess and test support schemes to enable deployment of Citizen and Renewable Energy Communities
- ✦ **Recommendation B:** Enable context-based roles and regulation of energy sharing practices in Energy Communities
- ✦ **Recommendation C:** Consider regional requirements to ensure local quality and security of supply of electricity as well as heating in Energy Communities
- ✦ **Recommendation D:** Implement open-access regulatory sandbox programmes for Energy Communities based on innovative concepts
- ✦ **Recommendation E:** Designate a single National Regulatory Authority for electricity and gas (and possibly heat) to take better account of the evolution of sector coupling
- ✦ **Recommendation F:** Clearly define and regulate new actors and their relationship in the establishment of local electricity and flexibility markets
- ✦ **Recommendation G:** Adjust economic regulation to support grid owners and service providers in procuring optimised storage services

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Messages from the Working Group Storage and Cross Energy Carrier Synergies



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Policy Recommendations

- 📣 **Recommendation A:** Plan energy systems holistically across energy carriers and sectors
- 📣 **Recommendation B:** Exploit flexibility to stabilize low-carbon integrated system
- 📣 **Recommendation C:** Plan storage for local energy production
- 📣 **Recommendation D:** Enable low-temperature district heating networks
- 📣 **Recommendation E:** Certify and validate low-carbon fuels for future energy systems
- 📣 **Recommendation F:** Promote digitalisation of energy systems / district heating to maximize energy efficiency and utilisation of waste heat
- 📣 **Recommendation G:** Promote utilisation of waste heat and thermal storages

Please find the Policy Brief with the detailed recommendations on [expira](#) and on the [website](#).

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Messages from the Working Group System Architecture and Implementation Modelling



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Policy Recommendations

- 📣 **Recommendation A:** View energy transition and climate neutrality holistically
- 📣 **Recommendation B:** Develop a clear terminology for Distributed Energy Systems
- 📣 **Recommendation C:** Make system and market architecture models comprehensive and easy to use
- 📣 **Recommendation D:** Develop a holistic perspective on interoperability in energy systems
- 📣 **Recommendation E:** Strengthen the use of open resources for interoperability testing
- 📣 **Recommendation F:** Allow for defined and protected local access to system data
- 📣 **Recommendation G:** Fight vendor lock-in effects in the system

Please find the Policy Brief with the detailed recommendations on [expira](#) and on the [website](#).

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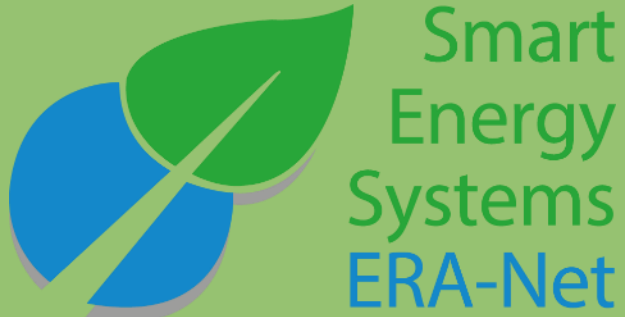
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Funding Partners



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