EASE reply to European Commission's Public Consultation – "Digitalising the energy sector – EU action plan"

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EASE – European Association for Storage of Energy

Avenue Adolphe Lacomblé 59/8 – B-1030 Brussels – tel: 02.743.29.82 – fax: 02.743.29.90 – info@ease-storage.eu – www.ease-storage.eu

INTRODUCTION

The Commission opened a public consultation for the adoption of an Action Plan on the Digitalisation of the Energy Sector: feedback was opened until the 24th of January. Adoption is planned for the second quarter of 2022.

Digitalisation has the possibility to play a key role in the energy transition providing benefits to the energy sector and supporting the decarbonisation path. The integration of digital technologies in the energy system creates opportunities and presents a lot of potentials for energy storage systems in their consumption sectors.
As stated by the Commission, the Action Plan aims to accelerate the implementation of digital solutions and the integration of energy systems and it will also support the implementation of the Clean Energy Package.

EASE prepared a reply to this consultation to promote the integration of digital solutions in the energy system in a way that is favourable to the energy storage sector.

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Public Consultation

5) To what extent do the following areas require further EU policy action when it comes to digitalisation of energy? *[Please rank from 1 (highest priority) to 5 (lowest priority)]*

	1	2	3	4	5
Developing a European data-sharing infrastructure for new energy services	○	○	○	◉	○
Empowering individuals to fully participate in the energy transition	○	◉	○	○	○
Enhancing the uptake of digital technologies in the energy system	○	○	◉	○	○
Enhancing the uptake of digital technologies in the energy system	○	○	○	○	◉
Ensuring climate neutrality of ICT	◉	○	○	○	○

6) Which other areas would you consider important to further support the digitalisation of the energy system?

For the digitalisation of the energy system, the European Union should focus more on the role of flexibility, and in particular energy storage solutions, in helping to achieve a truly integrated and intelligent energy system. Improving the interoperability of these solutions is key to allow a.o. better demand-side flexibility, smart charging and vehicle-to-grid services for electric vehicles.

7) What are the three main risks that the integration of digital solutions may bring to the energy system and which should be addressed?

at most 3 choice(s)

- ☐ Lack of investments
- ☐ Complexity of technologies and lack of simple plug-and-play solutions
- ☑ Lack of a consistent regulatory framework
- ☑ Lack of market flexibility, understood as market structures that are unable to promptly integrate intermittent renewables
- ☑ Lack of interoperability because of insufficient use of commonly agreed standards for data exchange for systems and devices
- ☐ Risks related to privacy and data protection
- ☐ Lack of sufficient data exchange due to commercial confidentiality/ existing business models
- ☐ Lack of digital competences and skills
- ☐ Lack of trust and/or public acceptance
- ☐ Risk of cyber attacks
- ☐ Other

2) Consumer empowerment and citizen engagement in the energy transition

16) What are the most important ways for digitalisation of the energy system to significantly improve the engagement of citizens and the empowerment of consumers in the clean energy transition?

at most 3 choice(s)

- ☐ Facilitating decision-making by making it easier for consumers to access relevant information.
- ☐ Raising awareness about energy consumption (e.g. via accessing real-time data, historical comparisons, benchmarking and metering data).
- ☐ Providing tailored advice to reduce the carbon footprint (e.g., energy saving tips based on consumers' past behaviour) and their energy bill(s) for gas and electricity.

- [x] Improving the understanding of the functioning of the energy system so to reduce their potential distrust (e.g. communication and awareness raising campaign).
- [x] Empowering consumers to better understand their energy needs and consumption patterns (e.g. keep track of their spending, check their prices, and help save money on their bills).
- [ ] Empowering consumers to choose their supplier / service provider.
- [x] Encouraging consumers to change their consumption patterns and reduce their energy use during peak times.
- [ ] Enabling more mobilisation at local and regional level by facilitating exchanges and data sharing through energy communities, peer-to-peer trading and group purchasing.
- [ ] Other

17) What are the most important services that digital tools can provide to engage citizens or empower consumers in the energy transition?
at most 3 choice(s)

- [ ] Accessing data in a safe, secure and timely manner.
- [ ] Raising awareness through applications that facilitate social interaction and community action.
- [ ] Facilitating the access and visualisation of energy data and information to all in a safe, secure, timely and cost-effective manner.
- [x] Easier identification of the origin of energy (e.g. if it is produced from renewables or not).
- [x] Offering services that enable consumers to better understand, control and eventually change without cost their contract (e.g. by tailoring it to their needs in terms of power required on a continuous basis, on a seasonal basis or over a limited period of time), or their behaviour based on their energy production/consumption patterns (with the aim to lower their energy consumption bills also accessible to non-smart phone users (e.g. older persons) or persons with disabilities.
- [ ] Offering smart home services that combine energy services with non-energy services and benefits (e.g. health, safety, convenience).
- [x] Offering innovative tailor-made services (e.g. analysis of energy efficiency improvements or investments, peer-to-peer exchange and energy sharing).
- [ ] Other

18) What are the most important barriers to address so that digital solutions help citizens to engage actively and easily in the energy transition?
at most 3 choice(s)

- [ ] Lack of social acceptance and mistrust in data sharing.

- [ ] Lack of appropriate digital tools for individuals to understand and use easily.
- [x] Lack of knowledge and awareness from consumers of digital solutions in energy, their use and their benefits.
- [ ] Lack of skills in using digital solutions in the energy system.
- [ ] Lack of a framework that fully unleashes the potential benefits of digital solutions for end-consumers (e.g. public incentives, clarity on contractual conditions or switching procedures).
- [x] Perceived or real cost of deployment of digital solutions compared to unclear or insufficient benefits.
- [ ] I do not know/No opinion.
- [x] Other

18a) If other, please specify
100 character(s) maximum

Lack of standards to ensure full interoperability of energy storage solutions for end-users.

23) What are the most important barriers for the ICT sector in the EU to invest in sustainable energy and energy efficiency?
at most 3 choice(s)

- [ ] Lack of available climate neutral solutions for the ICT sector
- [ ] Lack of regulatory measures, common standards or rules for greening the ICT sector
- [ ] Lack of private investment in climate neutral solutions for the ICT sector
- [ ] Lack of public investment in research and innovation
- [ ] Lack of awareness or interest of the ICT sector to invest in sustainable energy solutions
- [x] Lack of interest from consumers to use/procure IT solutions based on sustainable energy
- [ ] Lack of coordination between ICT companies and energy companies (e.g. to use excess heat from data centres for heat supply to buildings, industries or storage)
- [x] Lack of capital to invest in sustainable energy solutions
- [ ] Lack of sectoral goals for renewable energy sources (RES)
- [ ] Greening requirements would harm the competitiveness of the solutions and industry
- [x] Other

Question23a) If other, please specify
100 character(s) maximum

Lack of clear rules on communication standards and protocols for i.e. EV charging infrastructure.

3) Enhancing the uptake of digital solutions in the energy system

33) Among the following potential benefits of integrating digital solutions in the energy system, what would you say are the most important ones?

at most 3 choice(s)

- [x] Increasing flexibility and resilience of the energy system (e.g. increasing average time between failures, and limiting the consequences of power failures to a smaller number of users and for a smaller period of time).
- [ ] Increasing the efficiency of the management of the energy system
- [ ] Increasing the energy efficiency and sustainability of the energy system
- [ ] Decreasing the GHG emissions of the energy system and its impact on climate
- [ ] Improving the safety and productivity of the energy system
- [ ] Increasing the share of renewable energy in the energy system
- [x] Optimising the use of energy in different sectors, better balancing energy supply and demand
- [ ] Reducing the use of energy use in different sectors (buildings and homes, transport, industry)
- [ ] Improving the engagement of market actors, including empowering consumers and engaging citizens.
- [x] Integrating sectors, notably electricity, heating and cooling and transport
- [ ] Integrating energy services with non-energy services and benefits
- [ ] Other

4) Data exchange, data spaces and data sharing infrastructure for new energy services

40) Among the potential benefits of data exchange for the clean energy transition listed below, what would you say are the three most important ones?

at most 3 choice(s)

- [x] Enabling better strategic planning and decision-making for the development of the energy system, in particular for infrastructure.
- [x] Optimising the efficiency of energy production by using data for better asset management.
- [x] Balancing energy supply and demand through demand response and flexibility markets.

- [ ] Better linking infrastructure investment and use of the various energy carriers – electricity, heat, cold, gas, solid and liquid fuels – with each other and with the end-use sectors, such as buildings, transport or industry.
- [ ] Developing new and providing better data-driven energy services to consumers.
- [ ] Empowering consumers to engage in the clean energy transition, for example through increased awareness, energy communities or behavioural changes.
- [ ] Facilitating investments in building renovations.
- [ ] I do not know
- [ ] Other

41) What are the most important barriers to unlock the potential of data for the EU's energy transition...?

41a) ...at an operational level:

- [ ] Lack of experience in data sharing and valorisation.
- [ ] Lack of possibilities to access or share data in a safe and reliable manner.
- [ ] Fear of loss of autonomy and control on the use of data once shared.
- [ ] Uncertain or unbalanced data monetisation models (e.g. due to single or collective market power or dominance of one or more enterprises)
- [x] Little incentives for the data provider/generator to share data
- [x] The lack of interoperability for data exchange between devices and/or actors (e.g., energy suppliers, citizens, network operators, building managers, public authorities).
- [x] The lack of common EU-wide standards for data exchange between devices and actors (e.g., energy suppliers, citizens, network operators, building managers, public authorities).
- [ ] The lack of open Application – Programming Interfaces (API's) for data exchange between devices and/or actors.
- [ ] The lack of easy and digital identification to validate access to consumer/customer data (e.g. the use of a digital identity)
- [ ] The lack of a European cloud infrastructure that can safely manage data exchange between EU companies.

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About EASE

The European Association for Storage of Energy (EASE) is the voice of the energy storage community, actively promoting the use of energy storage in Europe and worldwide. It supports the deployment of energy storage as an indispensable instrument within the framework of the European energy and climate policy to deliver services to, and improve the flexibility of, the European energy system. EASE seeks to build a European platform for sharing and disseminating energy storage-related information and supports the transition towards a sustainable, flexible and stable energy system in Europe.

For more information please visit www.ease-storage.eu

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Disclaimer

This response was elaborated by EASE and reflects a consolidated view of its members from an energy storage point of view. Individual EASE members may adopt different positions on certain topics from their corporate standpoint.

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Contact: | EASE | Jacopo Tosoni | j.tosoni@ease-storage.eu