CEER Input to the European Commission Roadmap for the Action Plan on the Digitalisation of the Energy Sector

CEER Note for the European Commission

10 September 2021

1   Introduction

The following section (2) consists of CEER's response to the European Commission's call for feedback on the "Roadmap to the Action Plan on the Digitalisation of the Energy Sector"[1]. According to the European Commission, "This action plan will help develop a competitive market for digital energy services and digital energy infrastructure that are cyber-secure, efficient and sustainable. It will support energy system integration, participation of 'prosumers' in the energy transition and ensure interoperability of energy data, platforms and services."[2]

2   Feedback

Digitalisation goes hand in hand with the green economy and plays a key role in achieving the goals of the European Green Deal, reducing carbon emissions by at least 55% in 2030 and reaching a climate neutral economy by 2050. CEER welcomes the European Action plan on the digitalisation of the energy sector, as profound changes are underway in the energy sector.

In order to fully unlock the potential of digitalisation in this sector, it is not sufficient to incentivise the roll-out of technology, it is also necessary i.a. to enable the use of the multiple types of data generated for intelligent solutions that contribute to energy efficiency and decarbonisation. Issues such as data portability, data access rights for third parties and government, data control and cybersecurity as well as privacy issues, the digital divide, implementation of and access to smart technologies and holistic digital solutions must be addressed within a harmonised framework.

In addition to guaranteeing adequate levels of customer protection, focus should be placed on empowering customers who wish to take part in these processes by ensuring equal access to the value propositions resulting from increased digitalisation of the energy sector. At the same time, it should be noted that customer engagement by digitalisation alone is not sufficient for the energy transition and that a holistic system change to a green and digital energy landscape requires a cooperative top-down approach which, concomitantly, takes customers on board and puts them at the centre in order to gain acceptance.

Customers can only exercise their possibilities of engagement within the borders that the system sets. Drafting of an action plan on the digitalisation of the energy sector should be done aiming to set up a systemic framework to guarantee that customer engagement by digitalisation is:

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[1] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13141-Digitalising-the-energy-sector-EU-action-plan_en

[2] Ibid.

A. Effective and actually empowering;

B. Sustainable and actually delivering the aims of a zero-carbon society; and

C. Accessible for all types of customers, overcoming hindrances, e.g. due to economic status or level of digital literacy.

The European Commission's Roadmap for the Action Plan on the Digitalisation of the Energy Sector defines five core problems that the action plan is meant to tackle – corresponding with five core areas the action plan will focus on:

1. Ending fragmentation by creating an overall strategy that creates synergies facilitating scalability, system integration, and customer/prosumer participation
→ Develop a European data-sharing infrastructure

2. Assessing if existing tools enable citizens and customers to exercise their rights effectively in a digitalised energy market in order to gain citizens' (and customers') trust and acceptance eventually
→ Empower citizens

3. Ensuring that all actors in the energy sector can fully benefit from the potential of digital technologies and further promote good examples and best practices
→ Enhance the uptake of digital technologies

4. Protecting the digitalised energy systems from cyberattacks and incidents that may jeopardize the security of energy supply
→ Enhance the cybersecurity of the energy sector

5. Substantially improving energy efficiency and transition to a completely decarbonised energy supply based on renewables in order to counteract the growing energy consumption of Information and Communication Technologies triggered by digitalisation
→ Support climate-neutral solutions for Information and Communication Technologies

The problems identified by the European Commission are indeed key issues to be resolved in the energy transition. However, CEER notes that some of these issues are already dealt with in existing or announced European Acts. Therefore, it is important not to duplicate existing rules, but to consolidate the respective Acts into an integrated legal acquis for the energy market.

CEER would like to take the opportunity to share some in-depth reflections about the abovementioned key issues identified by the European Commission:

Only a holistic approach to digitalisation can induce an evolution of the system. A fragmentary approach on the other hand risks losses of interoperability and synergies. It is, however, also necessary to overcome thinking in different energy carriers (electricity/gas/heating/cooling) as closed systems, but to extend the mission of ending fragmentation in digitalisation to sector coupling and power-to-X solutions.

Digitalisation must not take place to the detriment of customers. It is necessary to take customers on board in order to gain acceptance for the energy transition. Regarding digitalisation, this can be achieved by offering customers clear benefits that surpass potential costs accompanied by digitalisation measures. Customers' concerns must be considered and solutions must be found regarding potentially problematic issues like the inability to fully partake in digital services due to economic or social status, the digital divide, or lack of information. At the same time, it must be ensured that customers (particularly household customers) are not overburdened with information, but are rather provided with clear and precise as well as easily-understandable information, especially regarding their rights and redress possibilities. Moreover, customer rights must be robust enough to withstand growing problems that stem from digitalisation, e.g. dark patterns.

The digitalisation of the energy sector, as envisaged by the European Commission, can only be possible, when it comes to data generated by smart technologies, if such data is accessible and useful. In other words, data needs to be collated and made available not only to network operators but also to current and potential market participants. Furthermore, data must be interoperable, subject to appropriate cost-benefit analysis and lastly, secure, in line with cybersecurity and data protection requirements. On the other hand, governing the process also implies creating a regulatory framework that is adaptable and responsive to innovation. This means removing barriers to create a level playing field for new entrants (whether distributed resources or new retail business models), so the latter are not at a competitive disadvantage through lack of access to industry data. Thus, how the data is processed and made available for actors to use will be critical to the success of digitalisation. Where data is an increasingly valuable asset in a competitive market, unless there is adequate oversight, it can actually increase barriers to entry and expansion and make innovation more difficult.

When it comes to interoperability, which is part of the first focus area "Develop a European data-sharing infrastructure", overlapping and discrepancies that the concept carries with the right of data portability must not be overlooked. Interoperability in the field of the near real-time data – as recalled in Article 23 of Directive 944/2019 – calls indeed for the involvement of the European standardisation bodies (CEN/CENELEC/ETSI), to guarantee in this area the so-called "plug and play" (customer friendliness) concept which is one of the essential factors to an effective involvement of customers and to build their trust in the digitalisation of the energy sector.

As the European Commission has noted, digitalisation increasingly exposes the energy system to cyberattacks and incidents that may jeopardise the security of energy supply. CEER has been part of the efforts already put in place towards a system that is robust enough to withstand cyberattacks and data security concerns. In addition, a dedicated network code on cybersecurity for electricity trades is on the way (in July 2021, ACER published the non-binding framework guidelines[3] to be used as a guidance for the code itself) and cybersecurity is one of the risks to be considered under the plans developed pursuant to Regulation (EU) 2019/941. This applies to the large scale (i.e. the energy system as such). Nonetheless, further efforts for the small scale (i.e. single actors on a digitalised energy market) are required. In particular, consumer protection here means protecting consumers, their home appliances, their ITC systems and their personal and private data from cyberattacks.

Dangers to the energy system do not stem only from cyberattacks, but may also take a very physical form: The climate change-induced disasters of this year's summer (floods in north-western Europe,

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[3] See
https://documents.acer.europa.eu/Official_documents/Acts_of_the_Agency/Framework_Guidelines/Framework%20Guideliness/Framework%20Guideline%20on%20Sector-Specific%20Rules%20for%20Cybersecurity%20Aspects%20of%20Cross-Border%20Electricity%20Flows_210722.pdf

heat waves and wildfires in the Mediterranean) demonstrate that the energy system also needs to become more robust regarding the consequences of climate change. Digitalisation can also offer potential for climate change adaptation of the system, e.g. by making use of AI to find grid elements that are frail to extreme weathers and to come up with respective solutions.

The predicament of rising energy demand by increased use of Information and Communication Technologies – also known as rebound effect or take-back effect – is a problem that should indeed be tackled. The solution must be twofold: One part of the answer is, of course, an even stronger expansion path of installing renewable energies generation. Secondly, this has to go hand in hand with an improvement of energy efficiency.

In conclusion, CEER believes that a harmonised framework for digitalisation and decarbonisation must be based on the principles of sustainability, consumer-friendliness and economic efficiency, whilst safeguarding data access, data interoperability, data protection, and data security/cybersecurity. In practice, this implies that, where appropriate, relevant network and consumption data should be made available to current and potential market participants in an accessible and appropriate manner.

Furthermore, the opportunity to improve the interoperability of data and institutional arrangements for holding and sharing the data should be further explored. This framework, moreover, must ultimately benefit the system and customers alike. As customers are ultimately at the centre of the green transition, CEER stresses the importance of ensuring that digitalisation empowers energy customers through new services and products and does not create additional hurdles or feed the digital divide. Regulators have thus pledged to reserve particular attention to distributional issues, or rather, whether some parts of society are being "left behind", through continuous market monitoring and adaptable regulatory frameworks that balance innovation and data protection needs.

The European Action Plan on the Digitalisation of the Energy Sector could contribute to pursuing these objectives by providing a holistic approach towards digitalisation and the green transition. This has the potential to induce profound improvements of the energy system by combining decarbonisation and energy efficiency with smart systemic solutions, tying together the different European rules on all the issues touched upon in the roadmap (namely regarding energy market integration, digitalisation, renewable energies, decarbonisation, energy efficiency, data sharing, cybersecurity etc.) into one comprehensive and seamless systemic approach.

3   About CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national energy regulators. CEER's members and observers comprise 39 national energy regulatory authorities (NRAs) from across Europe.

CEER is legally established as a not-for-profit association under Belgian law, with a small Secretariat based in Brussels to assist the organisation.

CEER supports its NRA members/observers in their responsibilities, sharing experience and developing regulatory capacity and best practices. It does so by facilitating expert working group meetings, hosting workshops and events, supporting the development and publication of regulatory papers, and through an in-house Training Academy. Through CEER, European NRAs cooperate and develop common position papers, advice and forward-thinking recommendations to improve the electricity and gas markets for the benefit of consumers and businesses.

In terms of policy, CEER actively promotes an investment friendly, harmonised regulatory environment and the consistent application of existing EU legislation. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable Internal Energy Market in Europe that works in the consumer interest.

Specifically, CEER deals with a range of energy regulatory issues including wholesale and retail markets; consumer issues; distribution networks; smart grids; flexibility; sustainability; and international cooperation.

More information is available at www.ceer.eu.

4   Relevant CEER publications

CEER Report on Innovative Business Models and Consumer Protection Challenges, C20-CRM-DS-03-03, *2021 – to be published soon.*

CEER 2022-2025 Strategy Empowering Consumers for the Energy Transition, C21-SSG-06-05, June 2021.

CEER Paper on Cybersecurity in the Clean Energy for All Europeans Package, C20-CS-58-03, June 2020.

CEER Conclusion paper on Dynamic Regulation to Enable Digitalisation of the Energy System, C19-DSG-09-03, October 2019.

Implementing Consumer Rights of the Clean Energy for All Europeans Package, C19-CEM-120-03, August 2019.

Implementing Technology that Benefits Consumers in the Clean Energy for All Europeans Package, 22 July 2019.

Regulatory Aspects of Self-Consumption and Energy Communities, C18-CRM9_DS7-05-03, June 2019.

CEER Report on Smart Technology Development, C17-RMF-101-04, June 2018.

Roadmap to 2025 Well-Functioning Retail Energy Markets, C17-SC-59-04-02, February 2018.