"Data Sharing" in the Renewable Energy Directive

30 May 2022

MEP Eva Maydell (EPP) and other MEPs in the European Parliament Committee on Industry, Research and Energy (ITRE) have proposed several amendments to the upcoming revision of the Renewable Energy Directive (RED III) centred around support for greater access to data and of creating data sharing frameworks (see Annex 1 – Data Sharing Amendments). We believe the amendments mentioned in this statement would be powerful measures for promoting digitalisation and creating a framework for data sharing in the renewable energy industry. We call on the key players in the RED III discussions in the European Parliament to support the amendments mentioned, either 'stand-alone' or within Compromise Amendments.

Sharing data from renewable energy plants in operation

Applying Big Data techniques to operating plants can optimise O&M strategies and plant designs, ultimately driving down the cost of reaching 2030 targets. With greater data sharing capabilities, large datasets could be exploited by AI technologies to optimise the performance and predictability of generation assets. Data can also be used to prepare better models of the energy system and its components.

It is the right time to focus on the role of data for generating plants: Sensors, data storage, and AI agents are all cheaper and/or better performing than the last time the EU overhauled its clean energy strategy in 2018-19.

The principles for an effective data sharing framework are:

• Agreements for accessing and possibly warehousing data

The <u>Common European Energy Data Space (CEEDS)</u>, referenced in **Amendment 1271** is a promising initiative that could help EU industry to rally behind a common data sharing architecture. Other amendments, like **Amendment 514** or **Amendment 563**, would ensure data is made available to share.

• Shared data to be of high quality and FAIR (Findable, Accessible, Interoperable and Reusable)

Amendment 651 requires the public bodies monitoring electricity supplied by large energy installations to make available "accurate" datasets "with high temporal resolution" "a short time after acquisition" along with relevant metadata. The data would be gathered at the grid connection point which these bodies already monitor closely.

• Driven from the top

Data sharing, if it is to take off, needs encouragement from the top. **Amendment 557** underlines to Member States the responsibility they bear in creating a data sharing culture in the renewable energy industry. It asks them to use their <u>National Energy and Climate Plans</u> (NECP) to describe their strategies.

Important data-sharing amendments in other contexts

The amendments listed above would advance data sharing in the specific context of optimising the output from and management of operating plants. There are other important amendments helping to advance the role of data in relation to energy system management that also deserve support.

Amendment 172 and Amendment 174 clarify that system-wide measures are necessary to adequately address the need of access to data in energy systems and across various renewable technologies; Amendment 736 assigns the Commission a timeline to adopt implementing measures and specify interoperability requirements

and transparent procedures for access to data. All three stipulate that any cost associated with sharing data should not fall on the data owner. This implies it would fall on the entity gathering the data, which seems fair, and in any case these costs are expected to be low as with any electronic transfer.









Fraunhofer Group for Energy Technologies and Climate Protection









INTERNATIONAL DATA SPACES ASSOCIATION



MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE





Annex 1 – Data Sharing Amendments

MEP Eva Maydell (EPP) has proposed several amendments – all centred around support greater access to data and creating data sharing frameworks – to the upcoming revision of the Renewable Energy Directive (RED III):

Amendment 514

Article 1 – paragraph 1 – point 2 a (new)

Text proposed by the Commission

Amendment

(2a) Support schemes for electricity from renewable sources shall specify tenders that, in appropriate circumstances and in consultation with the scientific community, require the gathering of high-quality data from the beneficiary plants and its sharing under conditions clearly specified in the tender.

Amendment 557 Article 15 – Paragraph 8

Text proposed by the Commission

8. Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements, and shall remove unjustified barriers to, and promote the uptake of, such agreements, including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement.

Amendment

8. Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements, and shall remove unjustified barriers to, and promote the uptake of, such agreements, including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement.

Member States shall describe their policies and measures promoting access to high-resolution data related to plants in operation for scientific purposes in their integrated national energy and climate plans referred to in Articles 3 and 14 of Regulation (EU) 2018/1999 and progress reports submitted pursuant to Article 17 of that Regulation.

Amendment 563 Article 15 – Paragraph 8

Text proposed by the Commission

Member States shall describe their policies and measures promoting the uptake of renewables power purchase agreements in their integrated national energy and climate plans referred to in

Amendment

Member States shall describe their policies and measures promoting the uptake of renewables power purchase agreements in their integrated national energy and climate plans referred to in Articles 3 and 14 of Regulation (EU) 2018/1999 and progress reports submitted pursuant to Article 17 of that Regulation. They shall also provide, in those reports, an indication of the volume of renewable power generation supported by renewables power purchase agreements.; Articles 3 and 14 of Regulation (EU) 2018/1999 and progress reports submitted pursuant to Article 17 of that Regulation. They shall also provide, in those reports, an indication of the volume of renewable power generation supported by renewables power purchase agreements.;

Where the Renewable Energy Financing Mechanism set up under Commission Implementing Regulation (EU) 2020/1294 must be used to address a shortfall in a Member State's renewable energy consumption, its support to projects shall be conditional on those projects accepting data-sharing obligations.

Amendment 651 Article 18 – paragraph 3

Text proposed by the Commission

3. Member States shall ensure that certification schemes are available for installers and designers of all forms of renewable heating and cooling systems in buildings, industry and agriculture, and for installers of solar photovoltaic systems. Those schemes may take into account existing schemes and structures as appropriate, and shall be based on the criteria laid down in Annex IV. Each Member State shall recognise the certification awarded by other Member States in accordance with those criteria.

Amendment

3. Member States shall ensure that certification schemes are available for installers and designers of all forms of renewable heating and cooling systems in buildings, industry and agriculture, and for installers of solar photovoltaic systems. Those schemes may take into account existing schemes and structures as appropriate, and shall be based on the criteria laid down in Annex IV. Each Member State shall recognise the certification awarded by other Member States in accordance with those criteria.

Member States shall require competent bodies to make publicly available datasets with high temporal and spatial resolution relating to the output of installations over 10 MW, and require the owners of such installations to provide this information accurately and a short time after acquisition. The data shall be the power delivered at the grid connection point. Owners, or the competent body on their behalf, will provide installation metadata including plant location and a set of high-resolution copyright-free timestamped photos of the installation and installation sub-systems.

Amendment 1271 Article 3 – paragraph 1 – point 3

Text proposed by the Commission

Amendment

(b a) Member States shall adopt the Common European Energy Data Space, a framework derived from it, or equivalent national initiatives that articulate with it as a repository or clearing house for data from renewable energy plants The following are other data-friendly amendments proposed to the Renewable Energy Directive, namely on behalf of the Greens/EFA Group, the EPP and the Renew Europe Group:

Amendment 172 Recital 16

Text proposed by the Commission

(16) In order for flexibility and balancing services from the aggregation of distributed storage assets to be developed in a competitive manner, real-time access to basic battery information such as state of health, state of charge, capacity and power set point should be provided under non-discriminatory terms and free of charge to the owners or users of the batteries and the entities acting on their behalf, such as building energy system managers, mobility service providers and other electricity market participants. It is therefore *appropriate* to introduce measures addressing the need of access to such data for facilitating the integration-related operations of domestic batteries and electric vehicles, complementing the provisions on access to battery data related to facilitating the repurposing of batteries in [the proposed Commission regulation concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020]. The provisions on access to battery data of electric vehicles should apply in addition to any laid down in Union law on type approval of vehicles.

Amendment

In order for flexibility and balancing (16)services from the aggregation of distributed storage assets to be developed in a competitive manner, real-time access to basic battery information such as state of health, state of charge, capacity and power set point should be provided under non-discriminatory terms, in full compliance with the relevant provisions in Regulation [(EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)] and at no-cost to the owners or users of the batteries and the entities acting on their behalf, such as building energy system managers, mobility service providers and other electricity market participants. It is therefore *necessary* to introduce measures addressing the need of access to such data for facilitating the integration-related operations of domestic batteries and electric vehicles, complementing the provisions on access to battery data related to facilitating the repurposing of batteries in [the proposed Commission regulation concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020]. The provisions on access to battery data of electric vehicles should apply in addition to any laid down in Union law on type approval of vehicles.

Amendment 174 Recital 16 a (new)

Text proposed by the Commission

Amendment

(16a) Beyond domestic and electric vehicle batteries, a variety of other appliances such as smart heating and cooling devices, hot water tanks, thermal energy storage units and other smart devices have a significant demand response potential which should urgently be tapped to allow consumers to provide their flexibility to the energy system. It is therefore necessary to

introduce measures enabling real-time access to data relevant for demand response to users, as well as to third parties acting on the owners' and users' behalf, such as electricity market participants, under non-discriminatory terms and at no cost, in full compliance with the relevant provisions in Regulation (EU) 2016/679.

Amendment 736 Article 20a – paragraph 1a

Text proposed by the Commission

Amendment

1 a. In order to optimise flexibility for a better integration of renewable energy on the demandside, Member States shall ensure consumers have access to data associated with their own decentralised energy resources. Data shall also be made available to eligible parties, such as energy service providers, building energy management companies and electromobility service providers, through a standardised communication interface, subject to consumers' consent. No additional costs shall be charged to final customers for access to their data or to a request to make their data available to eligible parties.

By ... [one year after the entry into force of this amending Directive], the Commission shall adopt an implementing act in accordance with Article 35 to supplement this Directive by specifying interoperability requirements and nondiscriminatory and transparent procedures for access to the data.