A comprehensive European approach to energy storage

2019/2189(INI) - 10/07/2020 - Text adopted by Parliament, single reading

The European Parliament adopted by 556 votes to 22, with 110 abstentions, a resolution on a comprehensive European approach to energy storage.

Parliament called on Member States to fully explore their energy storage potential. It called on the Commission to draw up a comprehensive strategy on energy storage to enable the transformation to a highly energy-efficient and renewables-based economy taking into account all available technologies as well as close-to-market technologies and keeping a technology-neutral approach to ensure a level playing field. It should identify necessary measures to improve cross-border connections and coordination, reduce regulatory burdens for market entry, and improve access to capital, skills and raw materials for storage technologies, with a view to boosting the competitiveness of the European market and industry.

Regulatory barriers

Parliament called on the Commission and Member States to remove regulatory barriers that prevent the development of energy storage projects. In particular, it called for:

- the introduction of an effective taxation system that prohibits double taxation of energy storage projects in its forthcoming proposal for a revised directive on energy taxation;

- the establishment of common requirements for grid connection and to address other barriers preventing the integration of storage into electricity markets;

- the urgent revision of the Trans-European Energy Networks (TEN-E) Regulation as regards eligibility criteria and categories of electricity infrastructure, in order to better address the development of energy storage facilities before the adoption of the next list of projects of common interest (PCIs);

- account to be taken of the important role of storage in the energy transition when revising the State Aid Guidelines.

Chemical storage (green hydrogen)

Parliament highlighted the high potential of green hydrogen and synthetic methane as well as biomethane for seasonal energy storage in high volumes and as an energy carrier, as a fuel and feedstock for energy-intensive industries and as a sustainable fuel for several modes of transport.

The Commission is invited to:

- support research and development relating to the hydrogen economy and to assist in the development of technologies for the conversion of electricity into other energy carriers, in particular by supporting an initiative on hydrogen as an important project of common European interest (PIIEC);

- develop clear standards for hydrogen, both for the gas grid and for end-users, and to develop a harmonised definition of green hydrogen, based on a transparent methodology;

- conduct a comprehensive impact assessment, cost-benefit analysis and availability analysis of retrofitting gas infrastructure or building dedicated new infrastructure, which is important for the use of green hydrogen.

Electrochemical storage (batteries)

Convinced that battery technologies are of paramount importance in ensuring the European Union's strategic autonomy and resilience in electricity supply, Parliament welcomed the Commission's efforts to create standards for European batteries.

Parliament expressed concern that the EU has a very low lithium-ion battery manufacturing capacity and that it relies on production sourced from outside Europe with little transparency.

It therefore welcomed the European Battery Alliance and the Strategic Action Plan on Batteries and called for continued support for them.

Members are also concerned about the EU's heavy dependence on imports of raw materials for battery production, including from sources whose extraction involves environmental degradation and violation of labour standards. They emphasised the potential of raw material sources from within the European Union, believing that enhanced recycling schemes for batteries could provide a significant share of the raw materials needed for battery production within the European Union.

In view of the potential for used electric vehicle batteries to be reused for energy storage in private homes, Parliament called on the Commission to clarify extended producer responsibility schemes related to reused batteries and to consider that the manufacturer who reintroduces the battery to the market should assume producer responsibility and provide guarantees of performance and safety.

New storage solutions

Members also proposed to develop other solutions such as:

- mechanical storage, given the crucial role that pumped storage plays in energy storage;

- thermal storage (such as large-scale boilers);

- decentralised storage through home batteries, domestic heat storage, vehicle-to-grid technology and smart home energy systems.