

MITECO consultation on the storage strategy



EFET response – 19 June 2020

The European Federation of Energy Traders (EFET*) welcomes the opportunity to provide our comments to MITECO's consultation on the storage strategy.

The question of electricity storage is gaining greater importance as a result of technological improvements combined with changing patterns in the production and consumption of electricity. We have seen the regulatory debate start at national level in many European countries, as well as at Union level.

However, it is increasingly accepted that decarbonisation by 2050 will be impossible without molecules. Not all industrial use of energy can be electrified, there are not yet efficient mechanisms for storage of electricity over weeks, months and seasons in the volumes that will be necessary, and the intermittency of electricity supply at higher levels of penetration of renewable generation are all challenges that the gas system is well-placed to help address. However, we agree that gas must decarbonise in order to contribute¹².

Below you will find our comments to the detailed questions:

1. *¿Qué aspectos considera que debe recoger la estrategia de almacenamiento?*

It is key that the strategy is technology agnostic and is set behind desired outcomes. Also, it should be flexible on how the potential asset owners decide to monetise these infrastructures.

That said, an important aspect that the strategy needs to cover is the actual aim of the strategy, as well as acknowledging the pan-EU framework and potential interaction and coordination with neighbouring Member States.

The storage strategy should foster a decarbonised electricity system based on market principles in order to become more efficient and sustainable.

¹ EFET response to the Commission's consultation on the Roadmap for an EU Hydrogen Strategy is available at the following link: https://efet.org/Files/Documents/Internal%20Energy%20Market/EFET_response_to_H2_roadmap_strategy_final.pdf

² See also [EFET recommendations for a future EU strategy on energy system integration](#)

* The European Federation of Energy Traders (EFET) promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and enable the transition to a carbon neutral economy. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org

2. *En su diseño, ¿qué retos y oportunidades existen en la actualidad que deba afrontar la estrategia de almacenamiento?*

The value of flexibility

Understanding “flexibility” is of utmost importance. At EFET, we define flexibility as the ability to use capacity with minimal or no limitations – thus flexibility is a characteristic of capacity: capacity (in the form of electricity generation, demand, or storage assets) is “flexible” only to the extent that constraints upon the use of that capacity at any level, at any time and for any duration, according to need or a bid, are limited³.

It thus follows:

- Flexibility is not a standard product as such.
- There is no such animal as a “flexibility market”: the energy-only market (i.e. the market in power as a commodity) is the place where “flexible capacity” can create value, not only from delivering efficient market allocation in the day ahead market, but also from the ancillary service markets (balancing, reserve, etc) . Accordingly, it cannot be the role of TSOs/ DSOs to provide “flexibility”.

The income from the energy market (day ahead plus ancillary service market) can provide a signal to the value of this investments if this will entail a reform of the Spanish spot and balancing markets to allow the free fluctuation of the price on the interaction of supply and demand, which will reflect the value to be extracted over volatile periods hence providing an investment signal.

We see that the current operation of wholesale power markets in Europe (e.g. Great Britain) does afford opportunities for market participants with access to flexible capacity:

- Energy products, which signal certain flexible characteristics of capacity, are already traded on the wholesale market (base vs. peak forwards and futures, options, profiles...). Excessive interventions may reduce the ability of existing standard base and peak load profiles to adequately attribute value to flexibility.
- New products with smaller granularity will help provide price signals for more flexible capacity when the market signals this need (e.g. 15 min settlement periods, shorter-term products, but also shorter duration/delivery forwards/futures).
- Policy makers should continue to focus on improving the efficiency of the markets (incl. removing administrative restrictions to price formation, enlargement of markets, flexible access to interconnections in intraday, open balancing markets), so that market participants are exposed to the correct price signals and can make correct decisions.
- A level playing field is of upmost importance, i.e. equal rights and obligations for any type of technology. In other words, there should not be markets by technology but by products, in which different players can compete on the same level playing field.

As a natural consequence of the principles we highlighted above, we consider that electricity storage has the potential to respond to the flexibility needs of the market and the

³ See also [EFET response to the CRE survey on battery storage](#)

system, alongside electricity generation and demand response. Each of the different technologies and assets have different characteristics and complement each other. Battery storage is an efficient tool to respond to very short-term, fast ramping needs of the market or the system.

However, it is not the best tool to respond to long periods of activation. Hence battery storage should only be considered as one of the answers to the flexibility needs of the market and the system and be treated on an equal footing to electricity generation and demand response.

Guaranteeing system unbundling in the provision of storage

Furthermore, we believe that electricity storage, just like demand response and generation, are competitive activities that are in the realm of the market. As a principle, they should not be regulated activities carried out by system operators (TSOs or DSOs). Strict unbundling rules are the corner stone of a sustainable liberalisation process in a network-backed industry like electricity. The separation of regulated monopoly system operation from all the other competitive activities in the sector ensures that TSOs and DSOs act as neutral facilitators of the market⁴.

Therefore, we welcomed the principle enshrined in articles 36 and 54 of the recast Electricity Directive (Clean Energy Package) that TSOs and DSOs shall not be allowed to own, manage and operate electricity storage facilities. Storage assets – in the same manner as generation assets or demand-response capacities – should never be considered as part of a network unless they can only be used for purposes other than system operation (such as, e.g., transmission lines, phase-shifters or transformers).

System operators who identify a specific need for the system to perform their duties should procure this capacity from market participants. As a rule, system operators should procure their needs in a technology neutral manner, leaving the choice to market participant to use the type of capacity they wish to respond to this need, as they are best placed to provide cost-efficient.

Therefore, the expression of system needs by TSOs and DSOs should neither, de facto or de jure, be restricted to storage assets, or exclude them. Only that way can owners and operators of all types of flexible capacity compete on a level-playing field.

There are also economic efficiency arguments to restricting very tightly the possibility for system operators to own or operate storage:

- **Economically inefficient use of the TSO-owned assets:** as we highlight in our paper on the roles and responsibilities of system operators regarding access to electricity storage, should TSOs be allowed to own and operate storage assets directly, then it should be expected that these assets would be under-used. Indeed, the TSOs could not use them for any competitive activity.
- **Economically inefficient congestion management practices:** when a TSO owns and operates assets, including storage, there is an inherent risk of unfair competition to respond to the TSO needs. Indeed, it would pose questions regarding the choice by the TSO between the use of its own energy storage assets

⁴ See also [EFET position paper on the ownership and operation of storage assets](#)

versus other assets (batteries or other) owned and operated by market participants to remedy congestions in the grid. First, there is no guarantee that using batteries is the most efficient action to undertake in order to solve a specific congestion. Second, should the congestion be best resolved with the use of batteries, the TSO could exercise a preference to use its own energy storage assets in order to ensure their return on investment. The principle of unbundling was enacted to avoid precisely this sort of situation.

- **Economically inefficient investment signals to the market:** as indicated above, storage assets owned by a TSO will inevitably be under-used compared to the use that market participants could make of them. In addition, keeping these assets under such economically inefficient ownership and management structure, whose risk-free investment costs are borne by the consumer, would weaken the business case for further private investments in storage assets, as it would suppress signals of the value of storage capacity on the market.

3. *En la “Estrategia de Almacenamiento”, se incluirán las medidas que sea necesario adoptar para que los sistemas de almacenamiento contribuyen a la transición a la descarbonización. Desde su punto de vista, ¿qué medidas tendría que incluir la Estrategia?*

As raised in our response to question 2, we consider that the strategy should identify and remove the limits to efficient price formation in the power market which limit the necessary price signals to incentivise investment into storage.

An excellent starting point are the market failures which may be identify by a market adequacy assessment as required on a regional basis by the EU’s Electricity Regulation of the Clean Energy Package. Some of the market failures to consider are: regulated tariffs, distorting subsidies, administrative payments to selected technologies and markets where price fluctuations may be restricted (e.g. price caps, need to bid solely based on costs, etc). Therefore, the strategy should include the definition and running of an adequacy assessment of this kind to identify the market failures affecting the Spanish spot market.

4. *En su opinión, ¿cómo debería ser el almacenamiento en el sector eléctrico? ¿Qué medidas serían necesarias para impulsar exitosamente el despliegue de activos de almacenamiento, así como la innovación en modelos de negocio con impacto en el sector eléctrico y más allá?*

We refer you to our previous responses, but in summary, here are the principles we would like MITECO to keep in mind if and when formalising the legal and regulatory framework around storage⁵⁶:

- ✓ Removing market failures preventing efficient price formation in the balancing and spot markets.

⁵ See also [EFET position paper on the ownership and operation of storage assets](#)

⁶ See also [EFET response to ENAGAS consultation on Winter Plan 2020-2021](#)

- ✓ Not picking winners - battery storage is just one form of flexible capacity among many others;
- ✓ all flexible capacities (batteries, other forms of storage, generation of all types and demand response) should compete on a level-playing field in the market and for ancillary services – same rights, same opportunities;
- ✓ TSOs and DSOs should not be allowed to own and/or operate storage assets, in the same manner as they are not allowed to own and/or operate power plants or portfolios of clients engaged in demand response;
- ✓ when needed, TSOs should procure flexibility services based on neutrally formulated needs in order for market participants to respond to these needs with the most economically efficient technology (including, possibly, battery storage).

5. *¿Qué papel puede tener el almacenamiento para favorecer la participación activa de la ciudadanía y el conjunto de sectores en el sector eléctrico, y cómo puede aprovecharse este potencial?*

No comments.

6. *¿Qué tecnologías de almacenamiento y factores son claves para el sector industrial en España?*

As mentioned elsewhere, we consider that the strategy should not seek to identify ‘winning’ technologies through an administrative means. Competitive auctions and efficient markets should provide a number of different solutions as well as the most efficient approach.

7. *En el sector de transporte, ¿qué aspectos será necesario considerar para el desarrollo del almacenamiento?*

As mentioned, it is of paramount importance to guarantee the unbundling requirements set in European legislation. The transport infrastructure should be focused in the provision of the transport network, not in the provision of energy or its storage.

8. *En el sector de la edificación, ¿qué tecnologías de almacenamiento pueden ser útiles y qué papel pueden tener?*

9. *¿Qué papel puede desempeñar España en el liderazgo tecnológico e industrial del almacenamiento? ¿Cómo se puede optimizar el acompañamiento de este desarrollo y su implantación desde las administraciones públicas?*

No comments.

10. *A su juicio, ¿qué oportunidades presenta el acoplamiento de sectores para el almacenamiento?*

EFET welcomes MITECO’s specific question on energy system integration. The proposed European Commission strategy on energy system integration aims at strengthening links

between electricity and gas systems and end-use sectors across the EU economy. The objectives of the strategy reflect the interest of EFET in potential decarbonisation of the gas sector by harnessing market mechanisms and closer coupling of the gas and power markets at wholesale level⁷.

Although electrification is recognised as one of the important means for achieving the climate neutrality objective, alongside inter alia the deployment of renewable, decarbonised and low carbon gases, it is crucial to ensure technological neutrality of Europe's approach to energy system integration and decarbonisation.

A level playing field for technology developers must also be ensured. This can be achieved by way of establishing a framework which recognises the environmental benefit of a wide range of available technologies and rewards carbon abatement in a market-based, technology neutral way.

Any support schemes for technologies facilitating decarbonisation and energy system integration, if required, must be strictly market based, technology neutral, non-distortive, tradable and open across EU borders, harmonised as early as possible and aligned with the EU ETS.

Therefore, we also propose that MITECO in its strategy seeks further coordination between the gas and electricity TSOs and other Member States in Europe.

11. ¿Qué oportunidades presenta el almacenamiento en el camino hacia la neutralidad climática?

More efficient provision and harnessing of existing generation technologies through the use of storage should minimise the needs to undertake additional investment in generation as storage provides a tool to use power supply for efficiently. Also, an efficient market will minimise distortions which may exist due to inefficient market allocation which is solely based on cost and not on a more rounded assessment of economic efficiency as determined by less restrictive markets.

12. En su opinión, ¿Qué nuevos retos a nivel de ciberseguridad y protección de datos de carácter personal pueden emerger con la creciente conectividad y digitalización de las redes que implican estas nuevas tecnologías? ¿Cuál debe ser el papel de la Administraciones Públicas?

13. ¿Qué aspectos transversales, es decir, sociales, medioambientales, de equidad deben considerarse? ¿En qué aspectos puede contribuir la Estrategia de Almacenamiento a alcanzar los objetivos de la Estrategia de Transición Justa?

⁷ See [EFET recommendations for a future EU strategy on energy system integration](#)

14. *¿Qué factores y/o criterios de análisis es necesario contemplar y tener en cuenta para comparar soluciones de almacenamiento, sus beneficios e impactos en un sentido amplio?*

No comments.