Unlock demand-side flexibility for European consumers, innovation and the climate

Signatories of this letter welcome the Clean Energy Package as the means to set in place new rules for a consumer-centred European energy system by implementing the three stated EU objectives: putting energy efficiency first, achieving global leadership in renewable energies and providing a fair deal for consumers.

Demand-side flexibility is a resource that not only benefits and empowers individual consumers, both private and professional, but also reduces total system costs, facilitates renewables integration and contributes to building Europe’s smart energy leadership.

However, this remarkable resource however suffers from important market failures that the ‘Clean energy for all Europeans’ package attempts to address. Signatories of this letter, all strong advocates for demand-side flexibility, urge you to include the necessary proposals to develop demand-side flexibility in the final legislation, and ensure consistent enforcement through thorough planning and reporting obligations in the Governance regulation report.

The stakes are high. Not delivering Europe’s demand-side flexibility potential risks affecting Europe’s competitiveness, undermining its decarbonisation efforts, undermining its benefits for consumers and jobs and growth opportunities for Europe as a whole.

The following points highlight key steps necessary to develop demand-side flexibility by creating functioning wholesale energy markets; opening markets to consumers and third parties; and remunerating demand-side flexibility fairly.
1. Creating functioning wholesale energy markets

The electricity directive and regulation can significantly contribute to establishing well-functioning energy markets that reflect the availability or scarcity of supply and the adequacy of the network. In particular,

- Reform short-term markets functioning to help increase the overall flexibility of the power system (Electricity Regulation Chapter 2).
- Harmonise features of intraday and balancing markets to encourage trading of energy across borders, and as close as possible to the time of delivery\(^1\) (Electricity Regulation, Articles 5 and 7).
- Tackle overcapacity of generation to re-establish long-term price signals for investors and minimise the risks that capacity mechanisms create for the development of efficient wholesale markets, as well as consumer empowerment, demand response and the deployment of innovative low carbon and energy efficiency technologies. The best way to minimise such risks is to:
  - Only implement capacity mechanisms as a last resort, when proven strictly necessary by a European adequacy assessment which factors in the contribution of renewables, self-consumption and on-site generation (including cogeneration) and assesses flexibility needs (Electricity Regulation, Article 18).
  - Ensure capacity mechanisms are open to all resources such as energy efficiency, demand response, storage, all generation technologies, and cross-border capacity (to add to Electricity Regulation, Article 23).
  - Review the need for capacity mechanisms regularly:
    - So as to ensure consistency between procurement of capacity and the size of the adequacy concerns (to add to Electricity Regulation, Article 23) on the basis of the latest European resource adequacy assessment
    - So as to ensure consistency with the overall competitiveness and decarbonisation objectives
  - Ensure that the duration of the capacity contract is short enough to correspond to the regular reviews.
  - Require Transmission System Operators (TSOs) to report on redispacth and countertrading measures they undertake, including underlying costs, and the level of effectiveness and openness of market-based curtailment or re-dispatching mechanisms to all energy resources. In turn, the creation of liquid and efficient markets and the deployment of demand-side flexibility resources will reduce the need for additional measures to guarantee system adequacy.

2. Ensuring market access for consumers and third parties

Rules must be established and enforced so that demand-side resources have unhindered access to all energy markets (wholesale, balancing, ancillary services) in all timeframes, including through product requirements fit for supply and demand-side resources alike. This also means direct market access for consumers and new market entrants, including third party aggregators and ESCOs.

In particular:

- Give consumers the right to participate in energy markets with dynamic price contracts. This includes providing customers information on actual time of use at near real time and the right to respond to price signals, as well giving consumers the right to sell flexibility independently of any\(^1\) E.g. reduced gate closure times. In particular, the balancing mechanism should start only after the intraday market has closed to encourage system users to adjust their potential imbalances in the market.
contractual arrangements to procure energy, directly or through an (independent) aggregator. Smart metering is a pre-requisite as the certified basis for billing consumers using multiple tariffs for market-based pricing. It also forms the foundation for the development of additional consumer services (Electricity Directive, Articles 11, 17, 20, 21).

- Enable fair market access for Demand Response and service providers. Deployment of demand-side flexibility has so far been impeded by outdated market rules, insufficient market access for service providers and ineffective price signals. Demand response should have non-discriminatory access to all markets (Electricity Regulation, Articles 1, 3, 4, 5, 6, 7, 11, 12, Electricity Directive, Articles: 3, 15, 16, 17) and Demand Response Aggregators should be enabled to access the market without prior agreement of other market parties who are often competitors (Electricity Directive Article 17).

- Network tariffs should be fully transparent and allow the development of self-consumption and self-generation. They should be based on the marginal costs of the use of the system and take into account the avoided capital (e.g. grid investments) and operational expenditures due to flexible generation and flexible load embedded at the local level, as well as avoided CO₂ emissions. (Electricity Regulation Article 16; Electricity Directive Article 15).

- Accelerate the cost-efficient decarbonisation of the existing building stock, notably through reaping the flexibility benefits of technical building systems and other appliances to support consumer empowerment: set in place a proper framework for the deployment of infrastructures (i.e. on-site renewable electricity generation, high efficiency cogeneration, smart metering or electro-mobility) and of demand-responsive devices that will facilitate the buildings’ integration into a wider energy ‘eco-system’ where active prosumers self-generate, self-consume, aggregate, trade and sell surplus electricity to the grid. In this new setting, buildings will no longer be a load but a micro-energy hub contributing to consumer empowerment and cost-efficiency of the energy system. The smartness indicator of buildings should support consumer empowerment and the development of buildings as part of the energy system.

- Create a comprehensive framework for grid monitoring, so as to increase the visibility of flexibility, including demand-side flexibility. It should be based on information that TSOs and DSOs would publish regularly as regards to the performance of their networks², in particular the volumes and sources of curtailed energy (Electricity Directive, Article 59). Comprehensive reporting on grid evolution, together with appropriate tariff structure, will be an essential basis for cost-effective network management and enable the targeted acquisition of flexibility services from the market by system operators instead of CAPEX only investments (Electricity Directive, Article 32).

- Ensure enforceability of the right for citizens and businesses to self-generate, self-consume, and valorise their flexibility; (Electricity regulation Article 16; Electricity directive Article 15).

- Establish a constructive framework for energy storage which takes into account the specificity of the energy storage technologies, and recognizes that TSOs and DSOs should not own, develop, manage or operate storage assets, unless a market-based procurement based on an open and transparent tendering procedure is proven not to be possible and is regularly reviewed. (Electricity Directive, Articles 36 and 54)

Signatories of this letter are convinced that such a way forward will provide consumers with the satisfaction of managing their own energy consumption while optimising their overall carbon and environmental performance.

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² E.g. grid losses, the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI), use of dynamic line ratings etc.