

SOLARPOWER EUROPE POLICY RECOMMENDATIONS AHEAD OF MARKET DESIGN TRIALOGUES

The Electricity Market Design is the key to Europe's energy transition. It will ensure the development of "future-proof" electricity markets, adapted to the increasing contribution of solar and of new sources of flexibility such as storage and demand-response. As such, it is crucial legislation, with huge ramifications for the growth of the solar sector in Europe.

The future electricity market design should ensure that solar producers, aggregators, and flexibility providers will be able to compete on a level playing-field with conventional energy sources, with their specificities being reflected in the future market settings.

Until such markets are in place, it is essential to guarantee a step-wise integration for renewables, acknowledging the benefits of small scale, clean, and locally owned solar installations.

Fostering the flexibility of Europe's electricity system is another crucial step to guarantee a cost-efficient energy transition. The uptake of storage and demand response will facilitate integration of increasing shares of solar energy into the system and support the electricity grid by smoothing short-term variability and providing ancillary services.

In parallel, avoiding any lock-in of inflexible generation capacities to the system will be key to integrate more renewables. The Market Design Regulation is therefore a powerful tool to guarantee that capacity mechanisms will be implemented as a last resort option, and that the most polluting and inflexible generation capacities will not be eligible to participate in such mechanisms, in line with Europe's climate commitments.

1 DEVELOP TRANSPARENT, FLEXIBLE, AND LIQUID MARKETS FIT FOR RENEWABLES (ARTICLES 3, 5, 6, 7 OF THE REGULATION)

The future Market Design Regulation must develop future-proofed electricity market rules, fostering the integration and participation of renewable energies and new flexibility providers

- **Electricity trading should be closer to real-time** to maximize the participation of renewables. Encouraging first steps have been taken in that direction in network codes, but further evolution of markets is possible and must be achieved.
- **At the same time, bidding products should adapt to the specificities of new market players** - renewables, aggregators, energy storage - to optimise their remuneration through the market. Smaller product size, as well as the separation of upward and downward procurement of balancing capacity is crucial to unlock the full potential of solar in Europe's electricity markets.
- **All participants should have access to the market, and benefit from a level-playing field.** Service providers such as aggregators should therefore be subject to proportionate procedures and administrative obligations.
- **Finally, transparent market rules are crucial to foster the uptake of new services, and the participation of new flexibility providers.** Market rules should be made available to market participants and their implementation should be subject to reporting by regulatory authorities.

2 INCENTIVIZE NETWORK OPERATORS TO ADAPT AND MODERNIZE ELECTRICITY GRIDS BY IMPLEMENTING STRONG REQUIREMENTS FOR RENEWABLE CURTAILMENT RULES (ARTICLE 5 AND 12 OF THE REGULATION)

The evolution of curtailment practices is a key indicator of the electricity system's performance relating to integration of renewable energies, this is an under-estimated driver to foster a cost-efficient integration of renewable energies into the system.

Currently, renewable energies are the first to be curtailed, while inflexible and polluting power plants benefit from a de facto priority dispatch. Such an approach does not incentivise system operators to modernize their network, but rather relies on the ease of curtailment of renewables to compensate for the lack of flexibility in the system.

Such an approach can be very harmful in the long-run, as it doesn't support the integration of renewables and leads to major economic inefficiencies. This is due to the fact that European energy consumers are billed both for supporting renewable kWh produced, and the curtailment compensation through network tariffs.

- **Curtailment rules should be objective, market-based and incentivise network operators to foster the efficient integration of renewable into the system.** Renewable curtailment should only be allowed as a last resort or to prevent disproportionate costs and limited to no more than 5% of annual renewable production.
- **Curtailed renewables should be fully compensated:** this is essential to ensure a level-playing field for all energy sources, and guarantees revenue predictability for renewable producers.

3. CREATE A FUTURE-PROOF AND FLEXIBLE ELECTRICITY SYSTEM (ARTICLES 2, 13, 15, 17, 36, 54 OF THE DIRECTIVE AND ARTICLE 16, 18, 18A, 19, 21, 23, 59 OF THE REGULATION)

A cost-efficient energy transition demands a more flexible electricity system, encouraging the participation of cleaner and more effective flexibility providers, while phasing out inflexible and polluting conventional capacities.

The uptake of storage and demand response will facilitate the integration of increasing shares of solar and renewable energies, and support the electricity grid by smoothening short-term variability, and providing ancillary services to the system. To unlock this potential, several conditions should be fulfilled:

- **System operators should not be allowed to own, develop, manage or operate storage facilities.** Derogations to this principle should be clearly justified and controlled by the regulatory and market authorities.
- **The market uptake and participation of aggregation and storage should be encouraged, as they provide ancillary services closer to the system's needs** and will unlock additional flexibility sources in the residential and commercial sector. It is estimated that the volume of controllable smart appliances only in the building sector could provide load-shifting potential of about 150 GW by 2030.¹
- **Finally, "active customers » and « self-consumers » should not be exposed to discriminatory and disproportionate administrative obligations, procedures or charges.** Network tariffs should be proportionate and reflect the effective impact on the grid, including the benefits for the system.

¹ Smart Readiness Indicators

In parallel, any lock-in of conventional or inflexible generation capacities to the system should be avoided, as it will hold back the cost-efficient development of renewables, and the uptake of clean flexibility sources such as storage and demand-response. The Electricity Market Design Legislation should therefore cautiously address the proliferation of capacity markets in Europe, and ensure that the following provisions are considered:

- **Capacity remuneration mechanisms should be implemented as a last resort option.** Member States should justify that all alternative measures have been implemented to tackle the identified adequacy concern.
- **Capacity mechanisms should be strictly limited to address a verified adequacy concern, justified by an EU adequacy assessment:** They should be temporary and framed to limit the distortions on the markets. The EU adequacy assessment should be conducted yearly by ENTSO-E and will enable a comprehensive and European-wide consideration of the adequacy issues.
- **Generation capacities emitting more than 550gr CO₂/kWh should not be able to participate in capacity remuneration mechanisms.** This is crucial to achieve Europe's long-term decarbonisation goals and ensure that capacity remuneration mechanisms will not lock-in inflexible and polluting generation capacities to the system, through public subsidies.
- **Capacity mechanisms should be open to all clean resources,** including demand response, renewables and storage capacities which can contribute actively to system balancing.

4. PROMOTE A STEP-WISE MARKET INTEGRATION FOR SMALL-SCALE RENEWABLES (ARTICLES 4 AND 11 OF THE REGULATION)

The approach outlined in sections 1, 2, and 3 of this document are necessary pre-requisite conditions for a cost-efficient integration of renewable energies into the system. Until such criteria are met, it is crucial to ensure a step-wise market integration for renewables.

Investor predictability remains the key criteria for a successful and cost-efficient energy transition. In Europe, the perception of regulatory risk associated with the development of renewable projects can increase capital costs which account for 20% to 50% of a project's total cost.

- **The principle of non-retroactivity for the introduction of balancing responsibility and removal of priority dispatch should therefore be guaranteed** for existing and future renewable installations.

Until markets are "Fit for RES", it is crucial to acknowledge the specificity of smaller, and locally owned renewable installations. Small-scale renewable installations are very diverse and reflect the commitment of European countries towards smarter distributed business models, empowering energy consumers (households, hospitals, public buildings, hotels) to produce their own sustainable electricity.

While not being able to cope with the same financial and administrative requirements as larger operators, small-scale renewable installations provide significant benefits to the European economy - well beyond a clean and affordable energy supply - which justifies a cautious approach towards market integration.

Small-scale renewables **support the competitiveness of industrial and commercial consumers**, providing European local businesses with stable, clean and affordable energy.

Small-scale renewable installations are also **driving technological developments, and Europe's global industrial leadership**: the increasing penetration of small-scale renewables in all sectors of the economy, will foster new business models across all layers of society (equipment, the construction sector, installation, operation and maintenance, digital and smart appliances), and procure valuable services to the electricity grids

Finally, small-scale installations **provide qualified and local jobs for Europe**. Rooftop solar installations could support more than 150.000 jobs in the EU28 by 2020. Today the sector employs over 80,000 people, thus a doubling in employment can occur with the right framework for self-consumption.

The Electricity Market Design Regulation should therefore secure the uptake of small-scale, and locally owned renewable installations in Europe. The prevention of disproportionate administrative or financial requirements related to balancing responsibilities and electricity trading is key, as such responsibilities will be prohibitive for small actors including small and medium sized enterprises who wish to engage in the opportunities clean energies like solar can bring them.

- **Exemptions from balancing responsibility and priority dispatch must be maintained for installations under 500kW**, if the market does not fulfil certain conditions in terms of market liquidity, competitiveness, and fair access to aggregation and balancing services.

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