Draft General Block Exemption Regulation (GBER)

SolarPower Europe reply

The costs of solar PV standalone and co-located with storage are now cheaper than fossil alternatives: this means that it is today cheaper to produce electricity or provide flexibility with solar than with conventional sources. It is also widely below commercial and industrial prices, providing consumers with a low-cost electricity, even in periods of volatile energy prices. This has resulted in a boom in the EU solar market, today on an exponential growth trajectory.

But to take the next step and put Europe on track of climate-neutrality, we still need a targeted public support for renewables. On the one hand, while solar projects are CAPEX-intensive, the increased volatility of electricity markets prices, across the lifetime of the solar plants (up to 30 years), impacts investor's long-term visibility. Public support therefore acts as a necessary remuneration insurance, allowing project developers to make investments at a reasonable financing cost[1]. On the other hand, **smart State Aid will shape the energy transition we want for Europe**: it can drive the development of the technologies that create the most jobs, that optimise the use of the land or that are the most sustainable.

The General Block Exemption Regulation (GBER) represents an important piece of the puzzle. It can accelerate the deployment of necessary frameworks for renewable energy deployment, by exempting member states from notification and authorisation procedures. In this regard, **we welcome the proposal to increase the budget threshold which can benefit from notification exemption**, as well as the general modernisation of the regulation which is in line with the objective of climate neutrality. Nevertheless, we believe the Regulation must be adapted by:

- Unlock the EU's solar rooftop potential by exempting projects under 3 MW from tendering requirements and by allowing aid to solar and storage in all commercial buildings
- Amending the definition of renewable energy to develop the right framework for solar and storage deployment
- Developing future-proof tendering processes, to deploy the most sustainable and land optimised solar projects
- Allow a proportionate exposure to negative prices, in order not to increase the financing cost of solar projects
- Ensure an enabling framework for the deployment of all sizes of electrolysers producing renewable hydrogen

1. Aid provided to small-scale renewable systems under 3 MW should be exempted from notification requirements and burdensome tendering processes (article 43.2 and 8)

The potential of rootop PV to decarbonise the electricity system is significant on Europe's trajectory to 55% greenhouse gases emissions reduction by 2030. The JRC has estimated that deploying rooftop PV on buildings in the EU could generate between 680 TWh[1] of electricity per year. SolarPower Europe estimates an economic potential of an additional 307 GW of solar PV systems below 1 MW by 2030. In parallel, rooftop PV can enhance the flexibility of the energy system through its collocation with battery storage systems or energy management systems, and increase the system resilience thanks to a closer integration of generation and consumption.

Yet, this potential remains largely unlocked. Market signals for solar rooftop prosumers are not fully realised, and do not allow them to remunerate themselves thanks to their flexibility. In addition, where the economics are there, installing solar PV on rooftops is still facing a number of obstacles in particular in the case of renovation of buildings.

We therefore need a well-designed aid framework to allow for ambitious policies to accelerate the deployment of solar PV on rooftops, by exempting from notification obligation aid granted to small scale renewables below 3 MW outside of tendering processes.

Tendering processes are problematic for rooftop PV owners on different fronts. They represent a **higher administrative burden** for rooftop owners. Tenders require candidates to evaluate their business case over a long-time span, fill in the required papers to submit the bid, then wait for several months for the award decision. They **increase revenue uncertainty for rooftop PV owners**. At the time of investment, the owner is not sure he will obtain the support, and offset its financing costs or realise its business case. Whereas this can be borne by certain large companies, this is not the case for smaller companies, which are likely to disengage from this investment.

As consequence, **rooftop PV owners will choose not to invest, or will undersize their installation** to go under the tender threshold. This is what happened in several member states. In France, the rooftop PV tender threshold for self-consumption support with a 100-kW threshold was largely undersubscribed and led the government to increase the tender threshold to 500 kW. In Germany, for systems between 300 kW and 750 kW, rooftop owners have two options: either get a Feed-in Tariff through a funding gap approach or a Contract for Difference through tenders. The tendering approach was also undersubscribed, with a particularly low participation of smaller-scale projects[2].

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[1] Joint Research Centre (2019) A high-resolution geospatial assessment of the rooftop solar photovoltaic potential in the European Union. https://www.sciencedirect.com/science/article/pii/S1364032119305179

[2] The results of the first auction round (of the second approach) in July 2021 showed an important decrease of the market: the volume of bids was at 210 MW in the first round, which could result into a total ~400 MW in 2021 if the second auction has a similar result in the second round. This a lot lower than the total volume of 800 MW in 2020. In addition, the average size of projects in the July 2021 tender was 1.3 MW, showing that all the smaller projects were not able to compete in the tender

Setting the threshold at 3 MW is necessary to encompass not only residential rooftops, but also businesses' rooftops, such as parking areas, industrial or agricultural warehouses, which can cover large surfaces. **On the contrary, the proposed threshold of 400 kW as of 2022 and 200 kW as of 2026 is also not adequate.** It comes from the Electricity Market Design Regulation, article 5, which defines the type of installations which can be exempt from balancing responsibility. The capacity of a small solar installation to cope with electricity market responsibilities, such as balancing responsibilities, depends on the possibility to access to a third-party service provider capable of performing the service at a competitive cost. On the contrary, the exemption from notification should aim at facilitating access to aid for rooftops where there is a high potential for solar PV generation.

2. Aid to energy efficiency in buildings should be coupled with flexibility-related investments and in all types of buildings, including commercial buildings (articles 38.3b and 39.2a)

A building can do much more than only optimise its on-site energy production and consumption. It can and will be a real flexibility provider responding to system operators' needs, supporting frequency stability or solving congestion management in the distribution grid.

This must be reflected in the type of investments that can be combined with aid to energy efficiency measures or projects. This means that **combined investments in storage must not be limited to assets with the sole purpose of storing on-site renewable electricity generated** but should be opened to assets dimensioned to provide grid services. Similarly, aid for the energy performance of building should be coupled not only with investments for charging infrastructure or for improving the smart readiness of buildings but **should also cover investments support also of charging stations (V2G).**

In addition, the combination of energy efficiency measures with other investments in solar and storage should not be limited to non-commercial buildings but be open as widely as possible. There is indeed an important potential on commercial buildings, which are particularly suffering from investment barriers. **We would therefore urge the Commission to clarify that such a combination is accessible to buildings used for commercial activities and not limited to the buildings listed on article 38.3b and 39.2a.**

3. The definition of electricity storage should be aligned with the Market Design (article 2.109 and article 41.1a)

Energy storage technologies, and in particular battery storage, will play an important role in the functioning of the future, renewable-based electricity system, as recalled by the Energy System Integration Strategy[3]. Energy storage will allow the further integration of new large- and small-scale solar PV projects in grids and markets, providing alternative sources of revenues to project developers. It will provide critical sources of clean flexibility services to

[3] COM(2020) 299 final - Powering a climate-neutral economy: An EU Strategy for Energy System Integration

compensate for the variability of renewable generation and of an increasingly electrified demand. It will finally support the technical functioning of the electricity grid in systems with limited or no thermal generation and allow for a large-scale penetration of renewables.

However, renewable electricity when stored cannot find a proper remuneration on markets. In practice electricity markets and regulatory frameworks are not fully developed or adapted to storage: aggregators of decentralised resources cannot access the markets, new products particularly suited for prosumer storage, such as locational flexibility, are not yet developed in Europe, double taxation of storage still hampers the level playing field on flexibility services. **Therefore, co-located energy storage with solar PV still relies on support frameworks for renewables (Feed-in remuneration or Guarantees of Origins).**

The current text of the draft GBER would however threaten this, and therefore the business case of solar and storage projects in the EU. Under our interpretation, the current definition of energy from renewable sources from does not allow electricity produced from renewable energy sources, stored in a battery storage behind the meter and later reinjected behind the meter or in the grid to be qualified as renewable energy, and therefore lose its right for support and its traceability (Guarantee of Origin).

> *(109) 'energy from renewable sources' or 'renewable energy' means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation),* but excludes electricity produced as a result of storage systems*;";*

This definition is not in line with the Electricity Market Design legislation[4], according to which energy storage stresses a delay in consumption *of the same energy* to a later point, without the energy losing its renewable quality. The current definition of "energy from renewable sources" should therefore be amended to be brought in line with the Electricity Market Design definitions, by removing the following mention "but excludes electricity produced as a result of storage systems".

In addition, the provisions on investment aid to energy storage co-located with renewable energy, suggesting that the storage investment should have the same capacity, as a maximum, than the connected renewable investment, must be clarified:

- While we agree that the investment aid should be targeted to storage integrated with a renewable project, it could be interesting to have a slightly higher battery storage project co-located with a renewable project to provide grid services. Even for standard use, research indicate that it is recommended to have a storage system capacity equivalent to 1.2 times the solar system capacity[5]. **We would therefore recommend that the storage investment has a maximum capacity of twice the capacity of the renewable investment.**

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[4] *(59) 'energy storage' means, in the electricity system,* ***deferring*** *the final use of electricity* ***to a moment later than when it was generated****, or the conversion of electrical energy into a form of energy which can be stored, the storing of such energy, and the subsequent reconversion of such energy into electrical energy or use as another energy carrier;*

[5] HTW Berlin, Dr. Quatschnig

- Due to delivery issues and growing lead time for batteries, it is likely that a battery and renewable energy investments are not connected at the same time and fall into the second case mentioned by the guidelines. In such case, **the requirement for the investments to be "integrated projects" must be further clarified.**
- In parallel, **the understanding of the notion of capacity must be clarified**. Renewable energy capacity corresponds to the peak electricity production possible by the inverter of an installation. Energy storage capacity can be expressed in the storage capacity in kWh and the capacity of the inverter of the battery in kW. We suggest to use the latter indicator as a reference.

4. Provisions on negative prices must not put at risk remuneration stability for renewables and result into barriers to investment (point 104)

While we acknowledge the issue of negative prices, the maximisation of sector coupling and incentives to flexibility, including incentives on end-users to absorb the oversupply of RES and developing a more complex and a wider range of balancing services, such as those developed by Ireland under the DS3 Programme or the UK, will be the key to address this issue in the medium-term.

In addition to such measures and until flexibility markets are mature, it may be necessary to limit state aid for beneficiaries during periods of negative prices. However, **strong safeguards should be introduced to preserve the revenue certainty of project developers, which is essential to trigger investments into new projects.** It can be addressed efficiently by a financial compensation for the outage work resulting from negative spot market prices, as it has been in the case in some countries: in France, aid is granted under negative prices in the limit of 15 hours/year; in Belgium, the Netherlands and Austria, aid is not granted for periods of 6 or more consecutive hours of negative prices; in Germany, the same applies for periods of 4 or more consecutive hours of negative prices. It should therefore be ensured that such safeguards are allowed under the State Aid guidelines.

5. The provisions on competitive bidding processes should be aligned with the CEEAG (article 2.114 and 42)

We welcome the new approach proposed to competitive bidding processes for renewable electricity. Member states will need to be allowed to have tenders in the design of tenders to adapt to future system but also social needs as renewable become mainstream, in line with the Renewable Energy Directive article 6.

Member states must be allowed to develop tenders specific to certain solar projects, such as agrisolar, floating solar or hybrid solar and storage. Such projects are critical to the future of the energy system: the former allow for an optimised use of land while the latter can provide essentially flexibility services to the energy system in the future. Yet, their slightly higher costs or the lack of experience in solar and storage projects makes it challenging for those projects to be competitive with ground-mounted projects. **Dedicated tenders are therefore necessary to**

deploy these capacities and must be allowed by the GBER. We would like to make the following remarks in that regard:

- **It should be confirmed that agrisolar or floating solar tenders are possible.** The new definition of new and innovative technology provided for in article 2.114 and article 42.3 does not correspond to the challenges of agri solar or floating solar. These are existing technologies do not need scale up, but which costs are structurally higher than ground mounted projects due to the additional benefits they bring. Allowing for separate tenders where there is a cost delta between different types of technologies or for specific tenders for specific types of renewable energy technologies would be a more appropriate approach.

- **It should be clarified that hybrid solar and storage auctions are allowed** under article 42.3.iii and iv, for instance by adding a footnote suggesting how to interpret the provision.

In addition, **we encourage the commission to allow member states to introduce a non-price selection criterion in competitive processes.** Such criteria have been used to value the CO2 content of projects, the innovative character of project, the possibility for citizens to participate.

Rather than a tool for a few exceptional cases, we view such bonus criteria, particularly environmental criteria, as the future of tenders, which will allow to support ongoing efforts to improve the sustainability profile of photovoltaic systems in the EU and respond to societal expectations beyond prices. They are successful and beneficial only if they are transparent, clearly defined, non-discriminatory, technology-neutral and not introduced or changed retroactively. They should be introduced in duly justified cases. They should also remain, at least in a first step, a bonus criterion, while the price of bids should remain the main selection criterion.

6. The provisions on depreciation of aid should be clarified and should not lead to additional risks and financing costs for projects (article 42.11)

The provisions of article 42.11 should be further clarified. In particular, it should not create additional uncertainties on the remuneration stability of projects. The increased perceived risk would lead to higher financing premiums and increase the overall costs of the projects, which are still CAPEX-driven.

7. The GBER must allow for an ambitious deployment of renewable hydrogen

Direct electrification is the fastest and most cost-efficient solution to achieve a sharp reduction of CO2 emission across key sectors of the economy and to accelerate the achievements of a

renewables-based energy system. But some energy uses, in particular in hard-to-abate sectors, could be too expensive or technically challenging to be fully electrified. In those cases, as well as in the case of uses of hydrogen as a feedstock, a targeted deployment of renewable hydrogen generation will be necessary to reach decarbonisation. Renewable hydrogen has a high potential for Europe: it is the most sustainable route to produce hydrogen, but it will also be the most competitive hydrogen source as of 2030 thanks to low renewable electricity prices. It is therefore paramount to target aid to renewable hydrogen to accelerate its deployment and maintain the European leadership in electrolysis.

We welcome the provisions of the draft Regulation and the necessary distinction of renewable hydrogen compared to low-carbon hydrogen. Nevertheless, we would like to make the following remarks:

- It must be stressed that operating costs take an important part in the electrolyser business model, therefore operating aid will be paramount. **Limiting operating aid to small-scale projects below 400 kW and 1 MW in the energy communities is unreasonably low and would exclude a number of projects.** As a reference, average capacities of smaller scale electrolysers is in the order of 20 MW, as opposed to 100 MW for large-scale electrolysers.

- We agree that there should be a correlation between the capacity of the electrolyser and the capacity of the related renewable investment, justifying the requirement for the capacity of the electrolyser to not exceed the capacity of the renewable generation unit. Nevertheless, **such a strict requirement could be limiting in the future by restricting investments in future projects**, in particular as renewables are deployed massively in the electricity grid.