

# Renewable energy projects - permit-granting processes & power purchase agreements

Fields marked with \* are mandatory.

## Introduction

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### BACKGROUND FOR THIS CONSULTATION

An overhaul of the energy system, which accounts for more than 75% of the EU's greenhouse gas emissions and is still dominated by fossil fuels, will be needed to achieve the ambition of the [European Green Deal](#). In particular, such overhaul will be needed to reach the EU's increased climate target for 2030 and the objective of climate-neutrality by 2050, while tackling biodiversity loss, pollution and resources depletion. An integrated energy system largely based on renewable energy plays a central role in the successful implementation of this EU flagship initiative.

With the [proposal for a revision of the Renewables Directive](#), the Commission sets out its aim of doubling the share of renewables in the energy mix compared to 2020, so as to reach at least 40% in 2030. The current pace of project deployment will need to accelerate significantly to meet the needed capacity increase on time.

However, permit-related and other administrative barriers constitute a major bottleneck for the deployment of renewable energy due to regulatory complexity, uncertainty and lengthy procedures, which discourage investors, delay projects and make them more expensive. Barriers also hamper the development of renewable Power Purchase Agreements (PPAs), which should become a major driver for increased market-based renewables deployment in the coming years.

### What is the purpose of the guidance?

[The 2018 Renewable Energy Directive \(RED\)](#), with a transposition deadline of 30 June 2021, already introduced new requirements on permit application and granting procedures for all renewable projects, and required the Member States to identify and remove unjustified barriers to long-term renewable PPAs. However, the transposition and implementation of the relevant articles may present a challenge for the relevant authorities. Furthermore, industry stakeholders have identified additional permit-related barriers outside the scope of the RED and have requested clarification of the regulatory provisions concerning administrative procedures relating to project preparation and sharing of best practice, which could guide the permitting authorities in applying the procedures.

While the majority of renewables deployed are still driven by publicly-funded support schemes, the number of renewable PPAs with corporates is increasing significantly and should become a major driver for more

market-based renewables deployment in the coming years. A more complex set of long-term contracting options will be used by renewable projects, based on public support, on PPAs taking a variety of forms, or on a combination of both. Although Member States were required to report and remove any barriers to these renewable PPAs in their national energy and climate plans, only eight Member States have done so.

The planned guidance will highlight the most pervasive permit-related and administrative barriers to renewable energy projects as well as general challenges in the transposition of the relevant articles of the Renewable Energy Directive, and showcase corresponding good practice examples. It will also highlight the remaining bottlenecks preventing PPAs from achieving their full potential to deliver additional renewables generation capacity; and to provide good-practice examples/solutions in this regard.

### **What is the purpose of this consultation?**

This questionnaire aims to collect views on permitting and Power Purchase Agreements from renewable energy producing companies, energy communities, and branch organizations, as well as public authorities, citizens and companies (including SMEs), as well as other relevant energy stakeholders. The questionnaire is divided into the following three sections:

- Accelerating permit procedures for renewable energy projects – questions to public authorities
- Accelerating permit procedures for renewable energy projects – questions to project promoters and associations
- Facilitating Power Purchase Agreements

You may choose to respond to either of these sections, or to all.

### **How can I participate?**

You can complete this questionnaire on the Commission website up to 12 April 2022. Please use the buttons at the bottom of each part of the questionnaire (on permits and on PPAs) to upload feedback in other document formats.

A synopsis report of this public consultation and a summary of all consultation activity results will be published on this page at the end of the consultation period.

## **RESPONDING TO THIS CONSULTATION AND FOLLOW-UP**

In line with ‘better regulation’ principles, the Commission is launching this public consultation designed to gather stakeholder views on good practices designed to accelerate permit-related procedures for renewable energy projects and to facilitate Power Purchase Agreements.

This public consultation is part of a planned larger stakeholder consultation which will feed into the Commission’s work on the guidance. Views are welcome from all stakeholders.

Please note: To ensure a fair and transparent consultation process only responses received through our online questionnaire will be taken into account and included in the report summarising the responses. Should you have a problem completing this questionnaire or if you require particular assistance, please contact ENER-C1-SECRETARIAT-1@ec.europa.eu.

## **About you**

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\* Which part(s) of the questionnaire do you want to fill in?

- ☐ Permitting - questions to public authorities
- ☒ Permitting - questions to project promoters and associations
- ☒ Questions on Power Purchase Agreements

## Permits for renewable energy projects

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To project promoters and associations

6. What are the key barriers that have prevented your project(s) from materialising in the last 5 years, if any? (Please rank their importance, 1 being the most important)

	1	2	3	4	5	no opinion
Length of administrative procedures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complexity of the applicable requirements or procedures	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of clarity on the applicable authority(-ies) with whom to coordinate each required permit	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulatory changes impacting the business case	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of access to capital/finance due to uncertainty	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Target conflicts with environmental regulations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Land or sea conflicts with aviation or defence-related activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Land or sea conflicts with other users (e.g. farmers, fishermen)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of public acceptance / conflict between public goods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Court proceedings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of political support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grid connection issues linked to lack of available grid capacity	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grid connection issues linked to reserved but unused capacities	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other grid connection issues (e.g. cost, unclear rules, technical issues) – please specify	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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## Please specify (Grid Connection Issues)

500 character(s) maximum

Many energy storage projects could be designed to support the local network and reduce capacity constraints. However, network planners are unable to offer firm connections for storage. The concern is that energy storage could act to worsen network constraints, e.g. by charging at times of high demand, or discharging at times of high local generation. In practice, this is unlikely to happen, but the concern would be alleviated if network operators were encouraged to own and operate storage.

## 8. What good practices (if any) have you encountered in the areas of simplified permit-related and administrative procedures? (can be EU/national or international)

500 character(s) maximum

In Great Britain, there is now a standardised connection application format for energy storage projects, across all Distribution Network Operators (DNOs), which helps simplify procedures for the operators.

In other countries, some public administrations have developed specific regulations regarding the deployment of renewable assets. These are a kind of fast-track procedures aimed at facilitating and accelerating permitting processes, which have proved very helpful.

## 9. Has any of your renewable or electricity infrastructure projects been classified as being of “overriding public interest” as defined in Article 6(4) of the [Habitats Directive](#)?

- ☐ Yes
- ☐ No

## \* 10. Are you planning lifetime extension, repowering (as defined in Art 2(10) of the [Renewable Energy Directive](#)) or decommissioning of your installations in the next 5 years?

- ☐ Lifetime extension
- ☐ Repowering
- ☐ Decommissioning
- ☒ None of these

## 11. If applicable: what is the main driver behind your decision to repower? (select top 3)

at most 3 choice(s)

- ☐ End of public support
- ☐ Site/resource-related considerations
- ☐ Lower cost/improved efficiency of technology
- ☐ Potential for projects involving e.g. renewable hydrogen production or storage

- ☐ End of building permit
- ☐ End or change in land/sea lease permit or ownership contract
- ☐ End of operation/maintenance contract
- ☐ End of lifetime of the asset
- ☐ Familiarity of the local community with the project
- ☐ Simplified permit procedure taking into account only the additional elements of the repowered installation
- ☐ Lower cost than dismantling
- ☐ Other

12. What do you see as the main constraint or barrier to repowering? (select top 3)

*at most 3 choice(s)*

- ☐ Lack of a suitable regulatory framework to simplify permit for repowering
- ☐ Lack of a business case
- ☐ Restrictions related to grid capacity
- ☐ Lack of social acceptance / conflict between public goods
- ☐ (Additional) construction or spatial planning procedures
- ☐ (Additional) environmental assessment needs
- ☐ Other
- ☐ No opinion

13. What bad practices (if any) have you encountered in the areas of permit application/granting and administrative procedures specifically for repowering?

*500 character(s) maximum*

14. What good practices have you encountered in the areas of permit application /granting and administrative procedures specifically for repowering, if any? (can be EU/national or international)

*500 character(s) maximum*

In Great Britain, recent changes in relevant regulations have clarified the status of hybrid renewable and storage projects, which helps simplify the application procedures.

15. What regulatory changes at EU or national level, if any, would be beneficial to create a more supportive framework for combined technology power plants (e.g. wind combined with solar), or renewable energy power plants combined with an electrolyser for renewable hydrogen production or a storage facility?

*500 character(s) maximum*

Energy storage should be defined as a separate asset class, distinct from generation, distribution & transmission, and consumption, to prevent double taxation (as in Germany) and allow for a market price of capacity. In addition, there should be no distinction in permitting procedures between standalone storage plants and storage collocated with renewable facilities. A strictly technology-neutral approach should be adopted, preventing discrimination between different types of storage.

16. What bad practices (if any) have you encountered in the area of early public involvement and public participation (including financial participation) in renewable energy projects?

*500 character(s) maximum*

Lack of specific knowledge regarding energy storage technology and how it impacts the energy system (as well as the different solutions available).

17. What good practices, if any, have you encountered in the area of early public involvement and public participation (including financial participation) in renewable energy projects?

*500 character(s) maximum*

Pilot projects that were co-funded by public institutions and now have led to a more helpful and comprehensive regulation.

18. What bad practices of public authorities, if any, have you encountered in spatial planning, helping developers in identifying suitable sites?

*500 character(s) maximum*

For some local administrations, renewable assets are seen as a source of additional taxation, thus potentially impeding the proliferation of renewable power plants.

19. What good practices of public authorities, if any, have you encountered in spatial planning, helping developers in identifying suitable sites?

*500 character(s) maximum*

In advance designation of specific areas for developments has helped a lot and facilitated deployment. Planning tools, while currently with their own limitations, are also necessary and play a key role.

20. What good practices, if any, have you encountered in the area of multiple use of space for renewable energy projects?

*500 character(s) maximum*

Specific regulation regarding rooftop solar has pushed many owners to invest on this technology. Solar greenhouses also have a great potential still to be developed. On the other hand, hybrid renewable plants are becoming popular quite recently, but need much more attention.

21. In the countries where you operate, has (maritime) spatial planning helped developers in identifying and securing suitable sites?

- ☒ Yes  
☐ No

How?

*500 character(s) maximum*

Where the planning has been carried properly out and in time, yes. But constant delays and missing specific regulations are still quite frequent.

22. Do you/your company/your organisation have further comments on accelerating permitting of renewable energy projects?

*1000 character(s) maximum*



As renewables are inherently variable, it is necessary to ensure that they are accompanied by adequate energy storage solutions. Otherwise, the reliance on fossil fuel plants as back-up will persist. Renewable projects should therefore have the requirement to self-balance and be capable to dispatch against a schedule, which would encourage renewable projects to be either physically collocated with or electrically /commercially connected to storage facilities. Increased uniformity in permitting procedures across the EU Member States is also needed. Our members have noted that as energy storage providers, they are not able to install their solutions across different Member States without looking for local partners, which leads to additional administrative hurdles and prolonged wait periods. An additional hindrance is lack of regulations on installing and operating batteries in the grid (e.g., in Germany and Austria), which makes it difficult to reach agreements with grid operators.

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Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

## Facilitating Power Purchase Agreements

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\* 23. Which of the below best describes your situation:

- ☐ I am involved in PPAs as a seller of electricity
- ☐ I am involved in PPAs as a purchaser / off-taker of electricity
- ☐ I am involved in PPAs as an intermediary or facilitator (e.g. utility, trader, network operator)
- ☐ I am involved in several of these activities
- ☐ I am not involved yet but I am planning to do
- ☒ I am not involved and I am not planning to be (anymore).

24. What is/was the main driver behind your willingness to engage in PPAs?

*at most 3 choice(s)*

- ☐ Hedging electricity price over the mid to long term
- ☐ Secure power over the mid to long term
- ☐ Demonstrating the purchase of renewable energy for disclosure purposes
- ☐ Need to find new forms of revenue stabilisation as public support decreases
- ☐ Other

25. What is the main barrier you have encountered when entering into PPAs?

*at most 3 choice(s)*

- ☐ Market prices volatility or market price uncertainty in general
- ☐ Lack of transparency and information on PPA prices



- ☐ Restrictions from publicly-funded support schemes preventing sellers from offering attractive PPAs terms
- ☒ Length of preparing ad hoc documentation and contracts and lack of template / standard agreements
- ☒ Administrative or regulatory barriers specific to PPAs
- ☐ Lack of possibility to combine the PPA with a Guarantee of Origin or other certificates
- ☐ Lack of possibility to book capacity (physical or financial) across bidding zones
- ☐ Variable generation profile of renewable energy sources
- ☒ Lack of facilitative platforms supporting the matching of sellers with interested off-takers; lack of aggregation options
- ☐ Difficulty finding off-take volumes beyond the largest corporates
- ☐ Low credit worthiness of off-takers
- ☐ Duration of the PPA typically not matching the tenor of the debt required for project financing
- ☐ Other

26. Have you encountered any **good practices** in relation to solving the barriers listed in question [21] above?

*500 character(s) maximum*

27. What **regulatory changes** (in current EU legislation or national-level legislation) , if any, would you consider most important to foster the deployment of corporate PPAs in Europe in the next few years?

*500 character(s) maximum*

A distinction needs to be made between renewable energy and renewable power. Renewables curtailment is inefficient and expensive. There should be emphasis on using more renewable power instantaneously at any given time, rather than just having more renewable energy in general. A requirement is needed for users to get an increasing amount of their energy from renewable sources on an ongoing basis. Currently, the proportion of renewable energy is aggregated and checked over longer periods.

28. Which form of **financial support** (including debt or guarantee instruments) would you consider most effective in fostering the deployment of corporate PPAs in Europe in the next few years?

*500 character(s) maximum*

Financial institutions need to work much closer to certification institutions. Associated technology risks might be preventing some potential investors and off-takers.

**29. Do you/your company/your organisation have any further comments on facilitating Power Purchase Agreements?**

*1000 character(s) maximum*

An increasing number of customers want to ensure that the electricity they buy is 100% renewable. However, due to the variability of renewable resources, more energy storage solutions are needed to replace the fossil fuel plants which are currently used as back-up. Currently, the most attention at the EU level is dedicated to storage technologies capable of up to 4 hours of storage. However, studies show that for a 100% renewable-based system, more storage solutions of 8-10 hours will be needed. A requirement to time-stamp Guarantees of Origin would be important to not only increase the demand for renewable energy, but also the associated long-duration storage solutions (LDES), as LDES storage can store the green electricity produced during peak production times and discharge when needed. In addition, more funding at the EU level is needed to ensure the deployment of sufficient levels of LDES technologies.

**Please upload your file(s)**

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**Contact**

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