CALL FOR EVIDENCE
FOR AN INITIATIVE (without an impact assessment)

This document aims to inform the public and stakeholders about the Commission's work, so they can provide feedback and participate effectively in consultation activities.

We ask these groups to provide views on the Commission's understanding of the problem and possible solutions, and to give us any relevant information they may have.

TITLE OF THE INITIATIVE	Innovative forms of solar energy deployment – recommendation to promote their development
LEAD DG – RESPONSIBLE UNIT	DG ENER – C1: Renewables and Energy System Integration Policy
LIKELY TYPE OF INITIATIVE	Commission Recommendation and Guidance (Staff working document)
INDICATIVE TIMING	Q2 2024
ADDITIONAL INFORMATION	Solar energy (europa.eu) EUR-Lex - 52022DC0221 - EN - EUR-Lex (europa.eu)

This document is for information purposes only. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by this document, including its timing, are subject to change.

A. Political context, problem definition and subsidiarity check

Political context

The EU Solar Energy Strategy, adopted in 2022 as part of the REPowerEU Plan, aims to accelerate the deployment of solar energy, including innovative forms of deployment, to contribute to the phase out EU's reliance on Russian fossil fuels and meet the ambitious REPowerEU renewable energy targets.

The Renewable Energy Directive (EU)2018/2001 on the promotion of the use of energy from renewable sources was revised in 2023. The amending Directive ((EU) 2023/2413), which entered into force on 20 November 2023, raises the binding Union renewable energy target to 42,5% by 2030, with an aspiration to reach 45%. Solar energy will play a key role in achieving this target, according to the Member States' updated draft National Energy and Climate Plans.

Problem the initiative aims to tackle

The EU Solar Energy Strategy sets out ambitious solar deployment targets for 2025 and 2030 and foresees that, in order to reach them, the EU needs to install, on average, around 45 GW_{AC} per year over this decade.

The strategy points out that the deployment of solar energy has so far been based primarily on ground-mounted and rooftop installations. In terms of annual new solar PV installations, typically about 1/3 are ground-mounted and 2/3 rooftop installations. These traditional forms of deployment are expected to continue to grow but will face increasing constraints, in particular competition with other uses of land for ground-based deployment,. To meet these renewable energy targets, other more innovative forms of deployment, that currently face barriers to their development, will have to play an important and increasing role.

The EU Solar Energy Strategy identified five types of innovative forms of deployment that either allow for multiple use of space (agri-PV, floating PV, transport infrastructure PV) or are integrated with other products (building-integrated PV and vehicle-integrated PV). These forms of deployment take advantage of the flexibility and modularity of solar energy technologies, which makes them adaptable to a wide range of uses and locations and helps mitigate competition for land use. They have the potential to bring benefits and synergies in terms of land/sea use, and environment.

These innovative forms of deployment face several categories of barriers. Regulatory barriers are common in many Member States, for instance as regards the difficulty to secure the required permits to combine multiple uses of a piece of land or a water body. Other regulatory barriers are related to safety rules or certification

procedures, depending on the form of deployment. Non-regulatory barriers, for instance insufficient awareness and public acceptance of these innovative solutions, economic factors, the role of support schemes, also need to be considered to pave the way for these forms of deployment.

To help Member States identify and tackle these barriers, the EU Solar Energy Strategy announced as a follow-up action a "Guidance for Member States to promote innovative forms of solar energy deployment", which will accompany a Commission Recommendation.

Basis for EU action (legal basis and subsidiarity check)

Legal basis

The legal basis for this initiative is Article 292 of the Treaty on the Functioning of the European Union.

Practical need for EU action

While the current levels of deployment of solar energy, based mainly on rooftop and ground-mounted installations, are relatively high (in 2023, solar PV was responsible for 8% of the electricity generated in the EU and it was the fastest growing technologies), they are not sufficient to meet our targets. Innovative forms of deployment need to play an increasingly important role.

A recommendation to Member States accompanied by guidance on good practices can contribute to identifying solutions to overcome the common barriers these innovative forms of solar deployment face across the EU.

B. What does the initiative aim to achieve and how

This initiative will focus on the main barriers identified to the development of these five innovative forms of solar energy deployment and on recommendations and examples of good practices to overcome them. It will mainly concentrate on barriers within the competence of the Member States but may also include barriers at other levels.

The guidance will focus on subjects such as:

- Barriers of a regulatory nature;
- Barriers of a non-regulatory nature, i.e. natural, social, , technological, economic, industrial;
- Examples of good practices on how to overcome them.

Some of the barriers are common to most of the innovative forms of deployment identified, but the guidance will take into account the specificities of each.

The guidance will mainly focus on EU Member States, but may also cover some non-EU countries, especially in the good practice section.

Where applicable, the guidance will also consider the role of solar thermal technologies and factors that are specific to certain regions (e.g. outermost regions, EU islands).

Likely impacts

This initiative is expected to help Member States accelerate the development of the five types of innovative forms of deployment identified in the EU Solar Energy Strategy by providing them with recommendations and examples of good practices to overcome the main regulatory and non-regulatory barriers.

Future monitoring

Member States are asked to report on the measures to accelerate renewable energy deployment in their integrated national energy and climate progress reports pursuant to the Governance Regulation. Since this guidance is aimed at assisting Member States in the promotion of innovative forms of solar energy deployment, the results will be monitored through the Governance progress reports, as well as through further exchanges with Member States authorities and other relevant stakeholders.

C. Better regulation

Impact assessment

No impact assessment is required since this is not a legislative initiative; this Recommendation and guidance will focus on identifying barriers to innovative forms of solar energy deployment and sharing good practices to

overcome these and will not contain policy proposals or commitments to actions.

Consultation strategy

This call for evidence will be the main consultation activity. The target audiences are public authorities (Member States, regional and local authorities), renewable energy producing companies, renewable energy associations, research and innovation associations, non-governmental organisations, representatives from the agricultural community and citizens. In addition to this call for evidence, a study by an external consultant incorporating interviews with relevant stakeholders will feed into the initiative.