European Commission

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

TITLE OF THE INITIATIVE	EU strategy for solar energy
LEAD DG – RESPONSIBLE UNIT	DG ENER – C1
LIKELY TYPE OF INITIATIVE	Commission Communication
INDICATIVE TIMING	Q2-2022
ADDITIONAL INFORMATION	https://ec.europa.eu/energy/topics/renewable-energy_en

A. Political context, problem definition and subsidiarity check

Political context

The ambition of the European Green Deal, including the EU's increased climate target for 2030 and the objective of climate neutrality by 2050, requires an overhaul of the energy system, which is responsible for 75% of EU greenhouse gas (GHG) emissions. Accelerating renewable energy deployment plays a central role in the success of the European Green Deal; it will also contribute to decreasing EU dependence on imported fossil fuels and to lowering energy prices. Solar energy's contribution to this transition will need to grow significantly in order to power an integrated energy system, electrify end-use sectors and support the targeted rollout of renewable hydrogen.

On 14 July 2021, the European Commission tabled a comprehensive legislative package to deliver on the European Green Deal. It included proposals covering the Emissions Trading System, energy efficiency, charging infrastructure and energy taxation. It also featured a revision of the Renewable Energy Directive, setting forward the target to double the EU's 2020 renewables share to reach at least 40% of final energy consumption by 2030 and including additional measures aimed at facilitating the deployment of renewables. The Commission also updated, in May 2021, its Industrial Strategy, referring to the strengthening of the value chain of the EU solar sector.

In this context, the Commission's 2022 work programme includes an EU strategy on solar energy, also reflected in the report on the State of the Energy Union. Its aim is to help unlock solar energy's potential to contribute to the European Green Deal's climate and energy targets, building on the legislative package presented in July and the ongoing implementation of the clean energy package. The strategy will analyse the state of play of solar energy across the EU, identify barriers, propose measures to accelerate deployment, ensure that the public reap related opportunities, and enhance system integration. It will also consider avenues to foster EU competitiveness along the solar energy value chain.

Problem the initiative aims to tackle

In 2020, solar renewable energy supplied 5% of the EU's electricity mix, up from 3% in 2015. After years of slow pace in the installation of solar energy in the EU, figures started to rise in 2018, reaching 20 GW installed in 2020, but progress differs among Member States. To deliver on the European Green Deal target of 40% renewables by 2030, deployment needs to increase even faster, by a factor of 3.5, from 120 GW in 2020 to 420 GW by 2030.

The strategy will therefore consider challenges to solar energy deployment and generation in areas such as tendering procedures, financial support schemes, permitting, grid connection, or guarantees of origin. It will look at specific challenges for all forms of deployment, both photovoltaic and thermal, from residential to utility-scale installations, including innovative modalities, such as building-integrated photovoltaics.

The strategy will also consider the issue of ensuring uninterrupted access to solar energy products that are affordable and competitive, while fostering high sustainability standards, including with regard to environmental impact and efficient use of raw materials (e.g. through regulatory requirements in the context of Ecodesign and

Energy Labelling). These standards can contribute to the continued acceptability of solar energy among the general public. Analysis of the supply-side aspects of solar energy in the EU will also take into account benefits and potential risks that result from global supply chains and assess how innovation in the EU can contribute to address these challenges.

The clean energy package promoted an energy model where citizens and communities can play a more active role, through provisions that are now entering national legislation - a development that is especially relevant for solar energy. This shift will enable SMEs and citizens to directly take advantage of the opportunities brought by the reduction in solar energy costs and by emerging energy transaction models, creating value added at local level and addressing the challenge of energy poverty. In addition, the proliferation of electric vehicles, batteries, heat pumps and other smart components will keep pushing up demand for electricity, system integration and interoperability needs. If the remaining technical and regulatory barriers hampering this process are identified and addressed, these developments can contribute to further decarbonise the energy system and empower consumers to take control of their energy assets and participate in the market.

Basis for EU action (legal basis and subsidiarity check)

Legal basis

The legal basis for this initiative is Article 194(2) TFEU.

Practical need for EU action

A cost-efficient accelerated development of solar energy within a more integrated energy system cannot be sufficiently achieved by Member States alone. An EU approach is needed to provide the right incentives to Member States with varying levels of ambition to accelerate, in a coordinated way, the energy transition towards a more integrated and energy-efficient energy system based on renewable generation. An EU-level strategy on solar energy will contribute to addressing this challenge.

B. What does the initiative aim to achieve and how

The initiative aims at identifying the policy measures at EU, national and other levels that can help optimise the contribution of solar energy to the achievement of the European Green Deal objectives, including in terms of growth and jobs. The strategy will also explore how solar energy can contribute to addressing the challenges of just transition and energy poverty.

The strategy will strive to identify policy measures with three main objectives:

- accelerating deployment through demand-side measures to deliver on the 2030 renewable targets, focussing on the potential and the barriers for market-driven deployment and the ways to promote it as much as possible;
- ensuring secure supplies of affordable and sustainable solar energy products through supply-side measures, including high sustainability standards and global photovoltaic supply chain resilience; and
- maximising the socio-economic benefits, potential and value of solar energy as part of a well-integrated, consumer-centric energy system, through enhancing inter alia the interoperability and compatibility of relevant devices and communication and data management policies.

Likely impacts

This initiative is expected to contribute to an increased pace of installation and use of solar energy in EU Member States and enhance the technology's integration within the energy system.

Future monitoring

Member States are asked to update their national energy and climate plans by 2023. This will provide an opportunity to report on the solar energy developments, plans and the measures to achieve them, following adoption of the strategy.

C. Better regulation

Impact assessment

This initiative sets out a general policy approach and does not commit to actions. Therefore, an impact assessment is not being conducted to support its preparation.

Consultation strategy

The main consultation activities will be carried out by means of an online open public consultation lasting 12 weeks, launched at the same time as this call for evidence. All citizens and organisations can contribute to the online public consultation. The open public consultation will be available via the Commission consultation website “Have your say”. A synopsis report will be published there after the consultation has been completed.

Why we are consulting?

The aim of the online open public consultation is to gather feedback from Member States, stakeholders and citizens on the proposed scope and content of the strategy and on additional elements that the strategy should cover.

Target audience

The main stakeholders for the development of solar energy in the EU are: public authorities; solar energy companies such as product manufacturers, project developers or undertakings related to the integration of solar installations, such as aggregators or providers of digital solutions, including SMEs; energy communities; consumer organisations; non-governmental organisations; research and innovation organisations and individuals that produce or consume solar energy or are simply interested in it.