



ACCELERATING WIND AND SOLAR DEPLOYMENT WITH CITIZENS, LOCAL COMMUNITIES AND BIODIVERSITY AT ITS HEART

Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 170 member organisations from 38 European countries, representing over 1.500 NGOs and more than 47 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

Submission to the consultation on permit-granting processes and the consultation on the EU solar energy strategy

Introduction

CAN Europe welcomes the consultation on permit-granting processes and the consultation on the EU solar energy strategy. To ensure we reach net zero emissions by 2040 and to meet our climate and biodiversity targets, EU Member States need to phase out fossil fuels and commit to a strong reduction in energy consumption and a transition of our energy system to one that is 100% based on renewable energy sources (RES) by 2040. In the coming decade and beyond, EU Member States need to significantly increase the deployment of wind and solar energy. Wind and solar will be key technologies of the future energy system. The accelerated deployment should be handled with respect for biodiversity and ensure citizens and local communities are involved in the energy transition.

This document aims to contribute to the discussion on how the deployment of solar and wind can be accelerated. It is clear that reducing the burden in administrative procedures and permit-granting processes, is part of the answer. However, the focus of the discussion should not be limited only to this.

Opportunities for accelerating the deployment of solar and wind should be seized while ensuring nature protection and effective engagement of citizens and local communities are guaranteed. Rooftop solar PV and better use of brownfields are examples of this. But current policies are not supportive enough to ensure these opportunities are fully grasped. With the right policies in place, these opportunities can boost progress, but more action will be needed.

Furthermore, more structural approaches, such as spatial planning and mapping, which is instrumental in order to fully exploit the local potential of renewable energy resources, are needed.

In case properly implemented, planning and mapping can contribute to more stable and predictable conditions for investments in renewable energy projects.

Overall, in all of their actions, Member States should keep track to ensure national renewable energy contributions, in line with the Paris Agreement objective, will be reached while keeping in mind the EU and its Member States need to move to 100 % renewables by 2040. Constructive dialogues, involvement of different actors and transparency in this debate is absolutely needed to ensure support for the energy transition at local level.

Accelerated deployment of solar and wind

Member States need to significantly increase the deployment of sustainable renewable energy. The proposal for amending the Renewable Energy Directive (RED) that was launched in July 2021 by the European Commission, is seeking to accelerate the take-up of renewables in the EU and proposes to double the current renewables share in a decade, by including a renewables share of at least 40 % by 2030.

Following the invasion of Ukraine by Russia, the European Commission made clear in its recent REPowerEU¹ communication, that “*the case for a rapid clean energy transition has never been stronger and clearer*”. The Commission mentioned in the communication, that given the circumstances, the co-legislators might want to consider boosting the Fit for 55 proposals with higher or earlier targets for renewable energy and energy efficiency. The proposal envisages ramping up wind and solar PV. The proposed level of ambition is however still too low and not in line with the Paris Agreement’s objective to limit temperature rise to 1.5°C.

CAN Europe supports an EU binding target for the share of energy from renewable sources in gross final energy consumption of at least 50% by 2030². Already in this decade renewable electricity generation, in particular through solar and wind, should at least triple³.

Despite improvements made through the previous revision of the Renewable Energy Directive, there are still too many complex and long administrative procedures, uncertainties and delays due to lack of administrative capacity that remain a barrier for increased and faster deployment of renewable energy. This is clearly hampering an accelerated deployment of wind and solar that is urgently needed. In addition, there is still a lack of policies and measures that ensure citizens and communities can actively engage in and benefit from the energy transition as renewable energy producers, local energy communities, and prosumers. The transition will only be successful when it is just, participatory, transparent and inclusive. At the same time, we need to recognise that the climate and the biodiversity crisis are strongly interlinked. Climate change is a significant driver of biodiversity loss while the loss of biodiversity worsens the climate crisis. Climate, energy and biodiversity policies should be looked at holistically and reinforce each other. Cross compliance between the Renewable Energy Directive, the Biodiversity Strategy, the Water

¹ REPowerEU: Joint European Action for more affordable, secure and sustainable energy. COM(2022)108/3

² For more information on the CAN Europe position about the 2030 EU energy targets see: <https://caneurope.org/can-europe-s-position-on-the-eu-2030-energy-targets/>

³ For more details on the PAC scenario – the Paris Agreement Compatible Scenarios for Energy Infrastructure, see <https://caneurope.org/building-a-paris-agreement-compatible-pac-energy-scenario//>

Framework Directive, the Birds & Habitats Directives, the Marine Directives and the upcoming EU nature restoration law should be strengthened to ensure that increased renewable energy deployment is handled with respect for biodiversity.

Removing barriers that hamper faster deployment

There are several provisions in the current Renewable Energy Directive (RED) dealing with simplifying or reducing burden in administrative procedures and permit-granting processes. Member States had to transpose the current RED by June 2021 but several failed to do so. It is imperative that Member States do not further delay the transposition and firm and transparent Commission enforcement action is needed.

A recent report⁴ showed that currently, no EU Member State has fully adequate policies that ensure the necessary deployment of solar PV and wind energy during the next decade and beyond. Numerous barriers block, slow or hinder the deployment of these technologies. Barriers related to administrative processes were shown to be the biggest roadblock to developments in Europe. Especially high complexity, long duration and low transparency of administrative procedures are registered.

Also shortcomings in the political and economic framework are still hampering the deployment of solar and wind. The most widespread barriers were lack of an applicable renewable energy or climate strategy, issues connected to support schemes as well as the overall remuneration for renewable energy.

Barriers linked to self-consumption (as a market barrier) are also still an issue in several EU countries, such as problems with net metering (or lack thereof), tax systems that do not benefit self-consumption, etc. The supportive framework for local, renewable energy communities and prosumers described in the RED is not established in many countries.

Seizing opportunities for accelerated deployment

Maximise rooftop solar PV as part of short term solutions

Even though there was already an urgent need to speed up the deployment of renewables, since the invasion of Ukraine by Russia, pressure increased on Member States to act quickly. Member States need to ensure the acceleration of the energy transition is beneficial for citizens while avoiding negative impacts on biodiversity.

In the PAC⁵ scenario - the Paris Agreement Compatible Scenarios for Energy Infrastructure - solar PV makes solar energy the second most important electricity source by 2030. A Joint

⁴ Eclareon (2022). Barriers and best practices for wind and solar electricity in the EU27 and UK. https://www.eclareon.com/sites/default/files/res_policy_monitoring_database_final_report_01.pdf and RES Policy Monitoring Database <https://resmonitor.eu/en/>

⁵ For more details on the PAC scenario – the Paris Agreement Compatible Scenarios for Energy Infrastructure, see <https://caneurope.org/building-a-paris-agreement-compatible-pac-energy-scenario/>

Research Centre (JRC) analysis⁶ showed that rooftop solar PV in the EU could potentially produce 680TWh of solar electricity annually (representing 24.4% of current electricity consumption), two thirds of which at a cost lower than the residential tariffs (based on 2016 levels).

(Slovenia) In 2018, a report⁷ contained a critical review of the literature in the field of photovoltaic systems. Based on the obtained data and research methodology, calculations of different potentials (physical, technical, economic) for obtaining electricity from rooftop solar PV were made. They also included the estimated area of degraded land and parking areas, which could be used for installation of photovoltaic systems (although less than 3.5% were deemed as suitable).

The technical potential of solar energy in Slovenia was estimated to be over 27 TWh per year, which is almost twice the electricity production in Slovenia (16.5 TWh).

The study is currently being updated.

Even though there is a lot of potential for rooftop solar PV, it is clear that not every EU Member State has put in place the right regulatory framework to ensure that the full potential is tapped. It is imperative that Member States take the necessary steps to remove current barriers quickly and ensure the current policy framework is improved and the right incentives are in place for a higher uptake of rooftop solar PV. Depending on national situations, Member States can take several measures to boost installation of rooftop solar PV and a higher self-consumption, including:

- Adapt **tax systems** to benefit self-consumption and maximize **incentives** to stimulate higher uptake of rooftop solar PV, including by providing specific support for low income families and multi-family houses, together with support for energy renovation of buildings
- Foresee **consumer friendly modalities** (of self-consumption, for instance) with access to the grid that requires as little paperwork as possible, exemption of permits, etc.
- Ensure **transposition** and implementation of provisions in the RED2 requiring quick **grid connection**. This should be supported by grid-expansion plans.
- Improve provisions for **energy sharing/collective self-consumption** within multi apartment buildings and ideally also beyond a building, including as few limits as possible (proximity requirements, size restrictions) and requiring easy to achieve majority rules to reduce conflicts among neighbours
- Roll-out **digital meters** with access to data by energy users to facilitate efficient (collective) self-consumption schemes and grid integration
- Finalise national assessments of **potentials and barriers for self-consumption and renewable energy communities** by the end of 2022, with an action plan that includes annual milestones with specific and ambitious objectives
- Support the **creation of renewable energy communities** and allow them to also use public roofs for community projects

⁶ Bodis, K., Kougiyas, I., Jaeger-Waldau, A., Taylor, N. and Szabo, S., A high-resolution geospatial assessment of the rooftop solar photovoltaic potential in the European Union, Renewable and Sustainable Energy Reviews, ISSN 1364-0321, 114, 2019, p. 109309, JRC113070

⁷ https://www.podnebnapot2050.si/wp-content/uploads/2020/06/Deliverable_C_1_1-Part-5B-Potencial-son%C4%8Dnih-elektrarn-na-strehah-objektov-v-Sloveniji.pdf

- Consider mandatory **solar PV on all new and renovated buildings** under certain circumstances, following the energy efficiency first principle.
- Follow up of the **implementation of operational processes** among public administrations, DSOs, energy suppliers and consumers on a regular basis to ensure removal of bottlenecks and hurdles.
- Support programs to ensure sufficient and well **qualified installers**, energy planners and architects
- Establish and provide sufficient **funding to local and regional renewable energy agencies** which support citizens, SMEs and local authorities with expertise and with the clear mandate to increase the renewable energy share in their areas.
- Launch renewable energy **awareness raising programs** and training for administrative staff as well as national, regional and local policy makers to make them aware of their crucial role in the energy transition. All administrative levels should establish renewable energy targets for their jurisdictions and implement measures to achieve them.
- Launch **awareness campaigns** to the larger public and ensure easy access to information

Member States should also consider other areas where solar PV can be expanded, such as parking lots, along highway and train tracks.

More supportive policies to use the potential of brownfields

Member States should look more into options of using brownfields such as old quarries, closed mines or old industrial areas. In addition to the reuse of land, developing brownfields for renewable energy can in many cases offer additional benefits such as proximity to urban areas, more localised energy supply to areas with high energy demand, lower transmission loss and proximity to substations, grid connection and road networks. However, there are also challenges such as contamination⁸.

After decommissioning, coal-mining areas, especially open cast lignite areas, cannot easily be reused for agriculture or settlements. Nevertheless, those areas can effectively be converted to be used for renewable energy sources like solar or wind⁹. In 2019, JRC published a study in which they calculated the potential for wind and solar in operating open-pit coal mines in Europe (75 in operation in 2017). The technical capacity of wind and solar varied across the coal regions. The total technical potential was found to be at about 1.4 GW of wind power and 2.7 GW of solar¹⁰.

Deindustrialisation has also resulted in the creation of brownfield sites throughout all the traditional industrial regions of Europe. There are however still barriers which hamper bringing brownfields back to use. These vary from lack of government programs for support of brownfield

⁸ Hairl S. Mohd. Radzuan (2020). Utilisation of brownfield sites for renewable energy generation in building sustainable cities.

⁹ Examples in Germany can be found here: https://www.bee-ev.de/fileadmin/Publikationen/Studien/BEE_Strukturwandel_Best-Practice.pdf

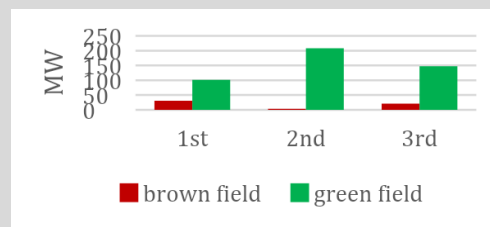
¹⁰ Kapetaki, Z., Ruiz, P. et al., Clean energy technologies in coal regions: Opportunities for jobs and growth: Deployment potential and impacts, Kapetaki, Z. (editor), EUR 29895 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-12330-9, doi:10.2760/063496, JRC117938

renewal, lack of incentives for redevelopment, problems related to potential contamination and costs of remediation, unsolved ownership issues, etc.

Member States should :

- map and assess potential of brownfields while including information on the contamination levels
- develop a regulatory framework which stimulates and supports project developers to develop renewable energy projects on brownfields

In the Hungarian feed-in premium system, applicants for tenders need to declare whether the project site is a brownfield or not. According to the tender calls, in the evaluation process, projects are sorted by bidding price whereby brownfield projects will be listed first, in case the bidding price is not higher than a non-brownfield project. However, from the first three tenders, only 10% of the successfully evaluated projects are brownfield based.



There are two main reasons that clarify why there is a lower amount of selected brownfield projects. First of all, project developers are not encouraged enough to find brownfields for project development. Secondly, there is no clear definition of what brownfield entails and a lack of a connected database indicating land use.. There are examples where the land use type was changed before the tender submission, while before, the land was still used for agriculture (clearly not qualifying to be called brownfield).

The government should speed up the development of a clear database. Secondly, the government should also look into possibilities to compensate the additional cost of brownfield development, either by providing a fund for brownfield revitalisation or by developing specific tenders for brownfield projects.

Source: WWF Hungary

Planning and mapping of renewable energy resources without delay

In order to fully exploit the local potential of renewable energy resources, sufficient areas at regional or local level should be designated as a priority or suitable for the deployment of renewable energy, taking also into account the corresponding grid infrastructure. This planning and mapping should create more clarity – including for the larger public - where renewable energy projects can be developed while promoting cautious use of land, seas and natural resources. In

case properly implemented, planning and mapping can contribute to more stable and predictable conditions for investment in wind and solar energy projects.

It is up to national governments to coordinate these processes to assess and map potential space for the deployment at local or regional level, while building on principles/guidelines such as the following:

- National governments shall ensure that a bottom up approach is guaranteed, meaning competent authorities are involved in the process.
- Enough funding for qualified staff and resources to conduct appropriate planning at local/regional level shall be made available.
- The process shall support the deployment of local renewable energy, ensuring national renewable energy contributions for 2030, in line with the Paris Agreement objective, will be reached, while keeping in mind the EU and its Member States need to move to 100 % renewables by 2040. Reliable regulations on the space needed to deploy wind and solar energy projects need to be established. This requires a scientific assessment of the amount of renewable electricity needed by 2030 and 2040 from which capacities and space requirements can then be derived.
- Low impact zones (socially and environmentally) should be identified and prioritized. This could include brownfields (see chapter here above), areas along transport corridors (highways and train tracks), etc.
- Planning and mapping should guide technical best projects to the least sensitive sites. Spatial planning needs to be informed by sensitivity maps, which identify areas where the development of renewable energy negatively impacts sensitive communities of species and habitats. Monocultures should not necessarily be excluded from the deployment of renewable energy as their biodiversity values are lower
- Minimum space needed for the deployment of solar and wind energy should be legislated and safeguarded by existing laws on regional spatial planning. Unreasonable regulations on general minimum distances should be abolished. These rules rather intensify conflicts instead of avoiding them. Public acceptance can be successfully increased through active engagement of citizens, and local communities in the energy transition, with preference for locally controlled developments.
- Best available knowledge and science-stakeholder involvement should be considered. Citizen science and engaging the public in gathering data can also improve biodiversity mapping. In certain countries (eg Estonia), where necessary control systems are in place, this data gathering has already delivered valuable and reliable input.
- Radar installation for civil aviation and military interests are hampering the permitting and development of renewable energy projects in several EU Member States. Even though national security needs to be maintained, the planning and mapping exercise should look into possible solutions that allow the lifting of certain restrictions and allow more land to be available for renewable energy projects.
- Stakeholder involvement in the different stages of the process must be guaranteed
- Regular updates are needed

Combining technologies and uses to reduce impacts on land, sea and biodiversity

In order to reduce impacts on land, sea and biodiversity, renewable energy projects can be a combination of different technologies or with different land and sea uses. Whenever a renewable energy project is being designed, project developers should be encouraged to look more into these options. Member States should look into policy options to stimulate these approaches.

Through agrivoltaic projects (AgriPV), solar PV projects are being combined with agricultural activities. In addition to reducing competition for land, this kind of projects could also bring benefits for agriculture including protection against losses due to hail, frost and droughts.¹¹ Just like other renewable energy projects, AgriPV projects should only be employed with respect for biodiversity. Member States should develop enabling legal frameworks for AgriPV.

Agreement on good practice principles can benefit the acceleration of wind and solar deployment

It can take several years for larger wind and solar projects to develop. Development of good practice principles at regional or national level, can help in ensuring larger projects can be deployed without too much delay. In several countries, NGOs, renewable energy associations and companies have agreed on criteria for the deployment of renewable energy projects.

(Germany). In 2021 Naturschutzbund (NABU) and the German solar energy association (BSW-Solar) agreed on a joint paper¹² with criteria for nature friendly development of ground mounted solar projects. The criteria look into site selection, planning and design, construction, grid connection, operation and dismantling. They agreed that priority should be given to areas with high level of pollution or low levels of nature conservation and agreed on areas where no development should take place.

(Belgium) In 2021, 4 Belgian NGOs (BBL, Greenpeace Belgium, Natuurpunt and WWF Belgium) and the Belgian Offshore Platform launched a letter of intent¹³; in which they agreed they will work together for the development of wind energy in the Belgian part of the North Sea to benefit both nature and climate. Based in part on the findings of more than 10 years of scientific research on existing wind farms (WinMon.BE 2020), they are convinced that further development of offshore wind energy can go hand in hand with the protection of the marine environment and

¹¹ <https://agri-pv.org/en/synergies/cultural-protection-and-agricultural-yields/>

¹² https://www.nabu.de/imperia/md/content/nabude/energie/solarenergie/210505-nabu-bsw-kriterien_fuer_naturvertraegliche_solarparks.pdf

¹³ https://www.greenpeace.org/static/planet4-belgium-stateless/2021/06/a29cdb15-offshorewindpark-eng-vfinal_24062021.pdf

marine biodiversity, provided that one starts from the biodiversity or other natural habitats to be protected.

Ensure fast permitting is effectively leading to faster deployment

Because Member States need to significantly increase the deployment of sustainable renewable energy, there have been several calls for faster permitting of renewable energy projects.

Overall, the opportunities for faster permitting of renewable energy projects should be explored. However faster permitting or allowing priority status for certain types of solar and wind projects might not necessarily lead to faster deployment. Unclear or untransparent decision processes might in the end lead to the opposite: a slower deployment rate, higher costs and a lower public acceptance. When rules for faster permitting will be developed, it will be in everybody's interest to ensure a transparent and participatory debate under which circumstances faster permitting can take place.

- Low impact zones (with low social and environmental impact) should be identified during the spatial planning process and indicate, where wind and solar energy projects can be prioritized and where faster permitting could be considered.
- Avoiding and reducing negative impacts on land, sea and biodiversity will reduce uncertainty and costs for project developers, including through considering environmental criteria in auctioning procedures. If better impact assessments on habitats and/or species are carried out early in the spatial planning phase, there will be a possibility to speed up further down the permitting process. These assessments should be based on an ex-ante analysis of potentially threatened species by the respective project. The analysis should be used to create a standardised framework at national level which simplifies evidence-based decision-making for authorities.
- Faster permitting should not lead to less opportunities for citizens and local communities to engage in the permitting process. On the contrary, early involvement of stakeholders might result in faster permitting because it could potentially reduce problems further down the process.
- Digitalization of the permitting process will not only help in speeding up the process, but might also lead to fewer mistakes made during the submission of formal documents. If procedural mistakes or changes occur (such as minor technological adaptations of the wind turbine or the solar panel) during the permitting process, the process should not be relaunched but adjusted accordingly.
- Relevant authorities should be equipped with sufficient qualified staff. Differing competencies of relevant authorities at national/regional level must be distributed unequivocally.
- In case Member States consider to update and streamline Environmental Impact Assessment (EIA) procedures, this can only be done without compromising the depth of thematic studies and evaluations in regard to the project siting and the physical environment. Strengthening the capacity and expertise of the competent agencies is crucial as well. EIA procedures can profit from better integration with spatial planning.

- Exemptions of EIAs, such as for repowering, cannot be generally awarded. Repowering should be used to strengthen the deployment of wind and solar energy within low impact zones while decommissioning the systems in less favourable locations.
- A comprehensive and up-to-date overview of projects for which there is a permit request should be publicly available. Transparency is crucial. Easy access to a register with maps and additional information of all projects (above a certain size) presented or approved should be made available for the larger public.

(Latvia) In April, the Ministry of Environmental Protection and Regional Development will come up with a legislative proposal for a faster permitting process for large wind parks (above 50 MW). The informative report¹⁴ preceding the legal act suggests replacing the Environmental Impact Assessment (EIA) with a fast-track “technical specifications” of environmental requirements. This proposal has caused criticism from environmental organizations as well as members of the wind energy association. While optimization of the EIA procedure is supported by most stakeholders, its substitution with an alternative has not been discussed nor approved by independent environmental experts. Although the new wind parks will have the status of “objects of national interest”, it is unlikely that the project siting can be solved outside the established EIA and local planning procedures. However, the government asserts that the fast-track procedure is a special energy crisis measure and will take into account all available environmental information.

(Germany) In an effort for a faster expansion of onshore wind, the German government presented changes to species protection requirements in relation to the permitting process. Their aim is to shift the focus from the protection of the individual species to the protection of the population. WWF Germany proposes that a reliable derogation for the individual prohibition of killing, enshrined in Union law, should be elaborated and legislated in laws on regional spatial planning. The derogation should be based on the scientific data gained through the geospatial analysis as well as through the ex-ante assessment of potentially threatened species. The derogation should be applicable only within zones of concentration which were established as part of regional spatial planning in due consideration of species protection. Such zones are designated areas in which the deployment of wind turbines takes precedence over other forms of land use. The reliable derogation must ensure that the overall state of the population remains unaffected. “Density zones” with a high prevalence of protected and wind energy-sensitive species should be excluded from the deployment of wind energy.

¹⁴ https://tapportals.mk.gov.lv/legal_acts/845206f0-27f6-4846-bd90-3a9ee7613ff2#