



EARSC Statement

Revamping the Strategic Energy Technology Plan (SET Plan)

The European Association of Remote Sensing Companies ([EARSC](https://www.earsc.org)) is a trade association based in Brussels, representing the European downstream services sector. EARSC counts more than 135 members across 25 countries of Europe.

EARSC welcomes the European Commission's consultation on the EU research and energy policy – revamping the Strategic Energy Technology Plan (SET Plan) with the main objective to meet the objectives of the European Green Deal and REPowerEU through renewing policy aims and targets for the development of innovative clean energy solutions and preparing for their deployment.

The Strategic Energy Technology Plan is at the forefront to accelerate the EU energy system transformation in a cost-effective way and renewable technologies are at the heart of the energy system. Satellite-based Earth Observation (EO) data and services offer opportunities to improve access to reliable, sustainable, and renewable energy. The data provided by Copernicus¹ and commercial missions can support applications such as solar and wind energy production forecasting, renewable energy site selection, biomass monitoring or water level monitoring. It therefore has the capacity to support the efficient exploitation of renewable energies, which will help to meet the growing global energy demands without increasing CO2 emissions.

¹ <https://www.copernicus.eu/en/about-copernicus/impact-copernicus/energy-and-natural-resources>

Solar, wind and wave energy are all renewable sources of power, and interest in this energy sector is on the rise. Satellite data can assist with this process by helping to select the best sites for building new renewable energy plants ensuring they work to optimum capacity² for example (i) on solar plant pinpointing the sunniest slopes within a specific landscape for site selection (ii) on onshore/offshore wind the satellite information on land use, surface topography and radar-derived values for roughness could supplement the regional wind atlases currently used to choose a location (iii) assisting the energy-network on their infrastructures with a vegetation management and change detection services to identify vegetation encroachment or risk events in the proximity of the network infrastructures (iv) hydropower by improving decision-making by identifying sediment baseline and seasonal trends, monitoring and reporting on sediment dynamics and other environmental impacts for planning purposes, visualising the evolution of algae bloom across the reservoir and plant.

Earth Observation data, including satellite imagery, in situ data and artificial intelligence techniques, are key assets in the development of services that can help improve performance, reduce costs, and mitigate any problems that might arise from the management, maintenance, and operation of the energy-network infrastructure. Consequently, EARSC believes that the Strategic Energy Technology Plan should specify that satellite derived data and added-value services are operational solutions, which shall be used for the raw materials management framework. EARSC remains at your disposal to work together on this objective.

² https://www.esa.int/Applications/Observing_the_Earth/Benefiting_Our_Economy/Renewable_energy_development
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