



## ***EARSC Contribution***

### ***EU Renewable Energy Rules - Review***

The European Association of Remote Sensing Companies (EARSC) is a trade association based in Brussels, Belgium that represents the European Downstream services sector creating added-value services and products based on Earth Observation satellite data. EARSC has more than 130 members across 25 European countries.

EARSC welcomes the revision of the Renewable Energy Directive and would like to take this opportunity to stress the importance of Earth observation data, such as Copernicus data, to increase the global share of renewable energy sources and contribute to a higher EU climate ambition.

Energy transition is a major challenge for the EU. Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 32 %. Policy and decisions-makers will need accurate information to ensure the transition to an energy system based on renewable technologies at the national and regional level.

In line with the European Green Deal, the Agenda 2030 for Sustainable Development, and the Paris Agreement, Earth observations (EO) can be used to monitor the global share of renewable energy sources as sources of clean and competitive energy, such as solar energy, on and offshore wind, ocean energy, hydropower, bioenergy, and geothermal energy. In combination with energy efficiency, EO data providing detailed view of carbon dioxide and methane - two of the most important human-made gases driving global warming- can contribute to reduce the greenhouse emissions and help limit a further rise in global temperature. The data can support countries to assess the effectiveness of decarbonisation policy and action, validate national emissions inventories and track progress towards meeting their Paris climate agreement emissions reduction commitments.

Earth observation data has proven to be a useful and reliable tool to monitor and forecast fluctuations in hydropower, solar, ocean and wind energy sources by assessing and predicting the environmental impacts of energy exploration, extraction, transportation and consumption activities. Data coming from satellites can play an important role towards energy resource assessments, production plant siting, operations (including safety) and various decision-making processes by allowing visualizations contributing to better understand potential impacts or community benefits. As the Directive stresses the necessity of increasing transparency and clarity through renewable energy action plans and progress reports, EO data could help reach these objectives.

For the production and management of solar energy, EO data, such as data coming from Sentinel missions (of the European Copernicus Programme), can identify potential sites for solar energy and help cities to exploit unused roofs or parking spaces to produce green energy. Offshore wind energy production is also “essential” in reaching national and international climate and energy targets. The European Commission wants to increase offshore wind from 23 GW today to up to 450 GW, in its scenarios for a climate neutral Europe by 2050. Satellite data can provide accurate and timely information on a variety of environmental parameters such as wind and waves, weather conditions, topography and vegetation cover. Selecting the optimal location for windfarms is very important and EO data can provide readily available information on offshore wind resources for pre-feasibility assessments and show where the most wind energy can be harnessed while minimising the cost and impact to the environment.

Consequently, EARSC believes that the Directive should specify that Earth Observation data and added-value services are operational solutions which shall be used to achieve the 2030 climate targets. EARSC remains at your disposal to work together on this objective.