

EO realizing the ambitions of the European Green Deal

The European Commission has set out an ambitious goal with its 6 priorities in its own 5-year plan (2019 – 2024). The Green Deal has the objective that Europe becomes the first climate-neutral continent by 2050 by making its economy sustainable. How can the EO industry play a role in this transition and where will the opportunities emerge? This is the overarching question this EO Café addressed which was discussed by me and our two guests Ricardo CONDE, President of the Portuguese Space Agency and Agnieszka LUKASZCZYK, Senior Director for European Affairs with Planet and Director of EARS-C.

The Green Deal will have many components, will be implemented using many instruments and many actions will be taken to move towards this goal. Many existing policies will be revised to reflect new actions or more ambitious targets. New or strengthened measures to monitor and control actions being taken which will require new reporting. New technology will be developed through Horizon Europe and its successors and R&D can be expected to be a strong component. The means for this will come from a number of budget lines including the European Recovery Plan. This high degree of complexity means that this one EOcafé can only start to look at the subject and future EOcafé meetings will take some specific aspects to go into more detail.

Ricardo CONDE -President of the Portuguese Space Agency- confirms the Green Deal relies on many cross sectors, to achieve its goals and create a common understanding amongst the member states while creating harmonised environmental policies. For this, the development of environmental applications using EO data is currently needed and yet still lacking in the downstream sector at the moment. One barrier is access to high-resolution EO imagery. Removing this barrier would mean that not only in Europe but worldwide, more EO sources can be accessible to various sectors to monitor these environmental concerns. In consequence, business models need to be changed to have the possibility to develop more applications in the downstream sector.

Agnieszka LUKASZCZYK- Senior Director for European Affairs with Planet and Director of EARS-C- explained how EO and also the EU EO programme Copernicus can contribute concretely with the Green Deal policies^[1] to be tackled by member states using EO imagery. In addition, the EO industry can foster synergies with other technologies such as AI and Big Data to be provided to governments as a tool to support their decision-making process. Thus, private-public partnerships (PPP) play a key role in this environmental case. For example, Agnieszka introduced several partnership mechanisms where the environment and EO sectors meet. One of them was the creation of a Geospatial centre under the basis of a PPP, where a central hub located in the EU can provide to the Commission monitoring tools for priority policy areas. Another idea mentioned was the establishment of a Commercial App Ecosystem by making available environmental apps.

The audience pointed out as well another key aspect which is the end-user or the customer. In order to shape the PPPs and foster the EO-environmental synergy, it is crucial for the industry to understand who the customer is and what are his/her specific needs. For example, to develop more dedicated environmental services, besides the existing ones provided by the Copernicus Climate and Monitoring Services, the industry needs to know precisely the customer's needs and even pay more for specific satellite data to develop dedicated services and with this, reach that extra mile.

An important point raised by Agnieszka was the fact that public and private services should be complementary and not in competition. There will be public needs that only the public sector can provide, and a similar case as the market opportunities with private services provision. Copernicus Services can always be complementary to the ones offered by the industry regarding the environmental sector, as it is well known that the more sources the better quality of apps and services will be.

One important component of Green Deal is the future [European Climate Law](#) (proposal drafted in March 2020) that will make binding the overarching goal for Europe's economy and society to become a net-zero greenhouse gas emissions by 2050. This means the ambitious goal of cutting emissions, investing in green technologies and protecting the natural environment in the EU. In addition, this Climate Law aims to ensure that all EU policies contribute to this goal and that all sectors of the economy and society play their part. Earth Observation technologies can be useful and even essential to achieve the complex and ambitious goals of the Green Deal and possibly to support the future European Climate Law.

Another element to consider is how the [EU's Destination Earth \(DestinE\)](#) and [ESA's Digital Twin Earth](#) can support the New Green Deal goals? There is still no clarity on how these space-driven programmes will work and contribute to other EU policies. Regarding the international sphere, it was made clear that the New Green Deal should be used as a diplomacy tool where Europe can position itself as a key player not only in the environmental sector but also disruptive in the EO sector if these two forces join.

The European Green Deal cannot happen in isolation and will require and will affect many international relations. Synergies and international cooperation are crucial to tackling climate and environmental challenges as these are clearly not a domestic or regional issue but a global problem that has been shown by COVID-19 pandemic and the sanitary situation the world currently faces. Some of the geopolitical aspects of the policy are addressed by Bruegal in a recent paper.

Having tried to expose a wider perspective of the Green Deal, EOcafé will meet again in the future to go into more detail of various aspects. In the near future, we plan to look at it from the R&D perspective and the priorities of the Horizon Europe workprogramme. This will include the "Mission Areas" which includes the one on climate adaptation as well as others that will be relevant. All stakeholders from the EO and non EO value chain, from the public and the private sectors, can play a role in more efficient protection of the environment.

Further reading:

A plan for the future of the planet by European Investment Bank (Climate Bank Roadmap): <https://www.eib.org/en/stories/climate-bank-roadmap>

[The geopolitics of the European Green Deal](#) published by the Bruegal Group

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^[1]1) Food production policy under the 'Farm to Fork' Strategy, 2) Preserving and restoring ecosystems by stopping biodiversity loss, forest restoration and protection, and 3) sustainable and smart mobility