



Beyond Monitoring

Unlocking Climate Action through Earth Observation

Takeaways

On 26 June 2025, ESPI and ISPRS co-hosted a session at the ESA Living Planet Symposium focused on the role of Earth Observation (EO) in enabling climate action, beyond the proved value of monitoring functions. The session gathered experts across the European Commission, European Space Agency, national agencies, and academia.

1. From policy interest in Earth Observation to full integration within the policy cycle

The willingness to use satellite data is growing across ministries and European Commission DGs, driven by the need to achieve policy objectives faster and more efficiently. This is creating opportunities for the uptake of EO solutions by increasingly aware and interested policymakers.

In particular, as climate adaptation needs expand, EO provides critical (neutral) evidence for resilience planning, infrastructure management, and risk-informed policymaking. Political momentum from the Green Deal is accelerating demand for EO-based tools at European and increasingly national levels.

Earth Observation is not only an early-stage monitoring tool, on the contrary, it is evolving into a central pillar of climate action. Lasting impact requires embedding EO across the full policy cycle – from identifying risks to enabling targeted intervention and assessing outcomes.

2. The key role of a new, targeted communication strategy

There is a need to close the gap between scientific outputs and policymaking through sharper, transparent communication, with more accessible language, inclusive dialogue and users focus.

In this context, trusted intermediaries, such as civil society actors and NGOs, play a vital role in building public confidence in science and thus fully benefitting from EO application.

3. Co-design and ownership of solutions by users

Effective, scalable EO solutions are grounded in user needs, including in the policy domain. Co-designing solutions with end users ensures immediate relevance and lasting impact, rather than relying on externally defined or one-size-fits-all approaches.

4. Tailored solutions and approaches to most vulnerable countries

Equatorial countries are often at the frontlines of environmental and societal vulnerabilities and climate impacts. Despite possessing valuable in-situ knowledge, these countries still face barriers to access and fully benefit from EO data and solutions.

In this context, locally tailored solutions, resulting from inclusive collaboration rather than top-down approaches, are key. This includes improving data accessibility, strengthening regional capacities and embedding local perspectives into the design and delivery of EO solutions.

5. Earth Observation to demonstrate the economic opportunities in climate action

Reframing climate action as an economic and societal opportunity would widen public and political support, moving the issue beyond partisan labels.

Earth Observation should provide key evidence to initiate and support multilateral efforts demonstrating the economic value of climate action and developing a positive and forward-looking narrative. EO can help building shared understanding and agreement on this matter.