From research to policy: PathFinder's vision for European forest monitoring

Pierre LE MAITRE
Project & Policy Officer, ELO

On 16 June 2026, the PathFinder Final Conference brought together researchers, policymakers, European institutions and stakeholder organisations in Brussels to discuss the future of forest monitoring in Europe.

Building a European monitoring system

The conference marked the conclusion of the PathFinder project and presented its European Forest Monitoring System (EFMS) prototype. By combining National Forest Inventories (NFIs), ICP Forests field observations and Earth Observation technologies, the project explored how Europe could produce more consistent, timely and policy-relevant information on its forests.

Participants were introduced to high-resolution mapping tools, statistical estimation methods, scenario modelling and an interactive portal. Together, these tools demonstrate how field data and remote sensing can be combined to improve forest information and support areas such as greenhouse gas reporting under the LULUCF sector.

Combining field data and remote sensing

A key conclusion emerged clearly: no single source of information is sufficient on its own. Earth Observation technologies are particularly useful for identifying and mapping forest disturbances quickly and across large areas, but satellite imagery cannot replace high-quality observations collected in the field.

National Forest Inventories and ICP Forests therefore remain essential. Their long-term datasets provide the reference information needed to interpret remote-sensing data accurately and understand changes in forest condition, biodiversity and carbon stocks over time.

The project also showed that combining field observations with remote sensing can improve both forest maps and statistical estimates, confirming that an integrated European approach is technically feasible.

Governance at the heart of the debate

Beyond the scientific results, governance was a recurring theme throughout the conference. The proposed European Forest Monitoring and Analysis framework, EUFEMIA, would require close cooperation between the European Commission, Member States, National Forest Inventories and forest stakeholders.

Panel discussion at the Pathfinder's conference

These questions came to the fore during the closing panel discussion with Jurij KRAJCIC of DG CLIMA, Valerie LAINER-FINDEIS of Land&Forst Betriebe Österreich, Roberto STELSTRA of EUSTAFOR, Zoltan KUN of WILD Europe, Rasmus ASTRUP of NIBIO and Jurgen TACK of ELO.

Panellists discussed how greater European coordination could improve the consistency, comparability and usability of forest information while respecting national responsibilities and existing monitoring systems. Data ownership, confidentiality and the sharing of National Forest Inventory information were also highlighted as important issues for future implementation.

Better information for better decisions

For landowners and forest managers, the debate is not only about what can be measured, but also about how information is used in policy. Monitoring should support better decisions without creating unnecessary administrative burdens or overlooking the diversity of forest conditions and management approaches across Europe.

The conference concluded with a clear message: integrated European forest monitoring is both achievable and increasingly necessary. By combining reliable field observations with modern Earth Observation technologies, Europe can strengthen the evidence base for climate action, biodiversity conservation and sustainable forest management. Its success, however, will depend as much on governance and trust as on technology.