



4th Policy Steering Committee Meeting April 2024

ForestNavigator researchers provided updates on the Adapt4Model database, biophysical modeling developments, and G4M-X biodiversity modelling. Six members of the Policy Steering Committee (PSC) provided detailed feedback on this work and discussed how ForestNavigator could contribute to support the Forest Monitoring Framework legislation currently in development.

Fulvio Di Fulvio introduced the Adapt4Model database, which encompasses a systematic collection of current and alternative forest management systems for main tree species across Europe. Hillevi Eriksson emphasized the need for measures to mitigate climate change risks and its associated costs and highlighted the potential of genetic improvement and biological methods for species protection. Shane Flanagan and Enrico Pompei highlighted management adaptation specific needs in Ireland and Italy. Tomáš Krejzar emphasized the lack of clear and consistent forest management systems definitions across Europe. Nicolas Robert noted altitude-based forest management variations and the additional complexities managing multifunctional forests located in the vicinity of cities, which face competing interests (e.g. climate goals and recreation).

Andrey Lessa presented significant model enhancements, incorporating features such as photosynthesis modeling, mortality routines, management, and natural disturbance modules. He discussed the impact of climate change on forest growth, disturbance from windthrow and bark beetle infestations and its early results, as well as geographical variation in climate impacts. Furthermore, he examined the future impact of bark beetle damage, providing valuable insights into forest management strategies in response to evolving environmental challenges. Nicolas Robert commented, '**Remarkable big piece of work so many different inputs presented together in a coherent way**'. PSC members discussed the results, the importance of understanding the overall impact of climate change vs the impact of increased temperature (global warming) and commented on the use of the 2018 drought experience to improve the models further.

Maximilian Hesselbarth showed recently completed BIOCLIMA project results, which showed important interaction between climate mitigation and biodiversity. A key result was the joint consideration of biodiversity and climate policies increases synergies. The ForestNavigator project will expand on this work by including more detailed forest structural variables. Maximilian presented details of the Species Distribution Models modelling framework, which ForestNavigator will use to estimate the biodiversity outcomes in the EU member states. PSC members discussed the country variations in data availability and existing spatial bias in the input data.





Julia Bognar presented early findings of a coherence assessment aimed at understanding conflicts in policies between Member States (MS) and between MS and the EU including the Forest Monitoring Framework (FMF). She highlighted synergies between the FMF and various regulations including the LULUCF Regulation, Renewable Energy Directive, Nature Restoration Law, and Carbon Removal Certification Framework, emphasizing opportunities for alignment with the 2030 policy framework and NECP/NRP requirements. Julia outlined how FMF proposed indicators such as removals, disturbances, biomass metrics, and biodiversity measures can be aligned with NECP/NRP requirements, highlighting ForestNavigator real-time updates to support strategic planning and assess progress towards national and EU targets. PSC members highlighted the complex but important contribution of the ForestNavigator to provide yearly data updates for monitoring progress towards policy targets.

