

# MULTIFOREST - Management for multifunctionality in European forests in the era of bioeconomy

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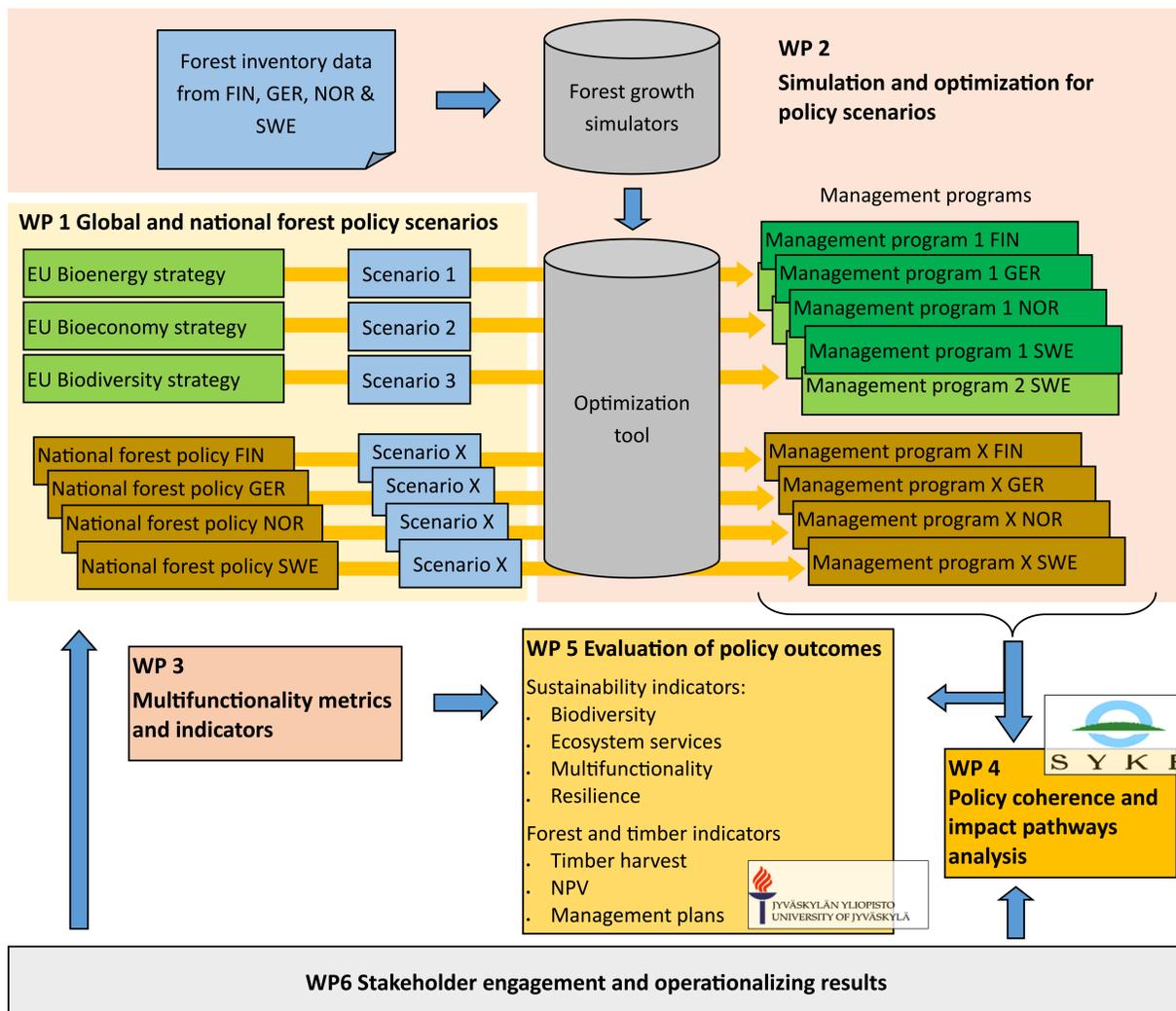
## BACKGROUND:

Forest management is subject to societal demands placing varying emphasis on social, economic and ecological goals. These demands are dealt with by a plethora of European and national sector policies with sometimes competing objectives, instruments and management paradigms. The implementation of sectoral policies is often not coordinated, nor are impacts monitored across the policies and the scales. The inconsistency between policies may negatively impact the sustainability and multifunctionality of forests. When developing new policies and management practices, a systematic analysis of current policies, their long-term impacts and trade-offs is thus required.

## PROJECT AIM:

The project aims to lay a solid basis for solving the socio-ecological land-use conflicts in European boreal and temperate forests caused by incoherent EU and national policies. Novel insights are provided to forest policy, forest management and land-use planning by qualitative and quantitative impact analyses of policies and their related management practices. Forest management programs are designed to maintain biodiversity and ecosystems services simultaneously and that ensure long-term sustainability of multifunctionality in the era of bioeconomy.

## WORKFLOW AND WORK PACKAGES (WP):



## RESEARCH QUESTIONS:

1. How do policy documents translate into scenarios and timber demands (EU, national and regional level)? (WP 1)
2. What are the requirements of EU and national forest related policies for forest management practices? (WP 2)
3. How to assess forest multifunctionality with policy relevant and widely applicable metrics? (WP 3)
4. How do policies and their impact pathways produce incoherence and how can coherence be improved? (WP 4)
5. What are the quantitative effects on biodiversity and ecosystem service sustainability? (WP 5)
6. Which governance (WP 4) and management (WP 5) activity can reduce incoherence and promote multifunctionality in the long run?

## EXPECTED RESULTS AND IMPACT:

- The cross-policy analysis method at the regional and national level is novel in its breadth and multidisciplinary collaboration.
- We expect incongruence between national and EU level policies.
- Knowledge is generated for decision-makers to improve coherence and to integrate forest, bioeconomy and biodiversity policy.
- Coherent policies and a coordinated land-use planning improve the efficient resource utilisation and non-timber demands and minimize losses to multifunctionality from intensified land-use.
- By focusing on boreal and temperate forest ecosystems, results are significant for large parts of Europe and similar biomes worldwide.

## PARTNERS:

-  International Institute for Applied Systems Analysis (IIASA) WP 1: Nicklas Forsell, Fulvio di Fulvio, Anu Korosuo, Pekka Lauri
-  Technical University of Munich (TUM) WP 2: Hans Pretzsch, Enno Uhl, Astor Torano, Peter Biber
-  Swedish University of Agricultural Sciences (SLU) WP3: Tord Snäll
-  Norwegian Institute of Bioeconomy (NIBIO) WP 6: Clara Antón-Fernández, Rasmus Astrup
-  FINNOPT WP 2: Markus Hartikainen, Karthik Sindhya