

ALTERNATIVE MODELS AND ROBUST DECISION-MAKING FOR FUTURE FOREST MANAGEMENT

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Ecosystem services WG

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What is ALTERFOR?

A project aimed at developing new forest management models which will help to meet major challenges of the 21st century

- increased use of bioenergy
- uncertainties such as climate change
- complex dynamics of evolving global markets
- increased focus on forest's social values

ALTERFOR Objectives

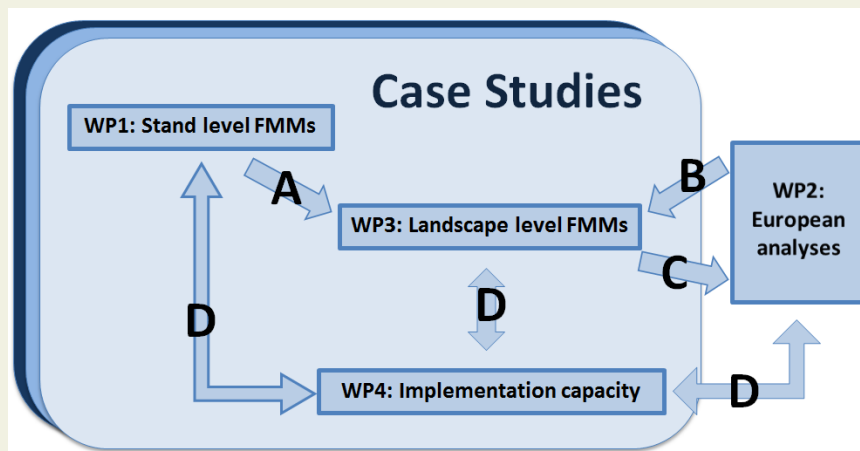
1. To identify and **develop forest management models (FMMs)**
2. To assess the impact of different FMM combinations in terms of resultant **ES baskets under different scenarios**
3. To facilitate the **implementation of desired FMMs** through the integration of scientific research and its practical utilisation.

(Project duration 2016-2020)

How does ALTERFOR work?

20 partners from 10 countries will carefully evaluate the improved management models:

- under different future climate change scenarios
- with respect to desired ecosystem services
- incorporate the actual behaviour of forest owners and managers, to be of value for policy makers and practical forestry



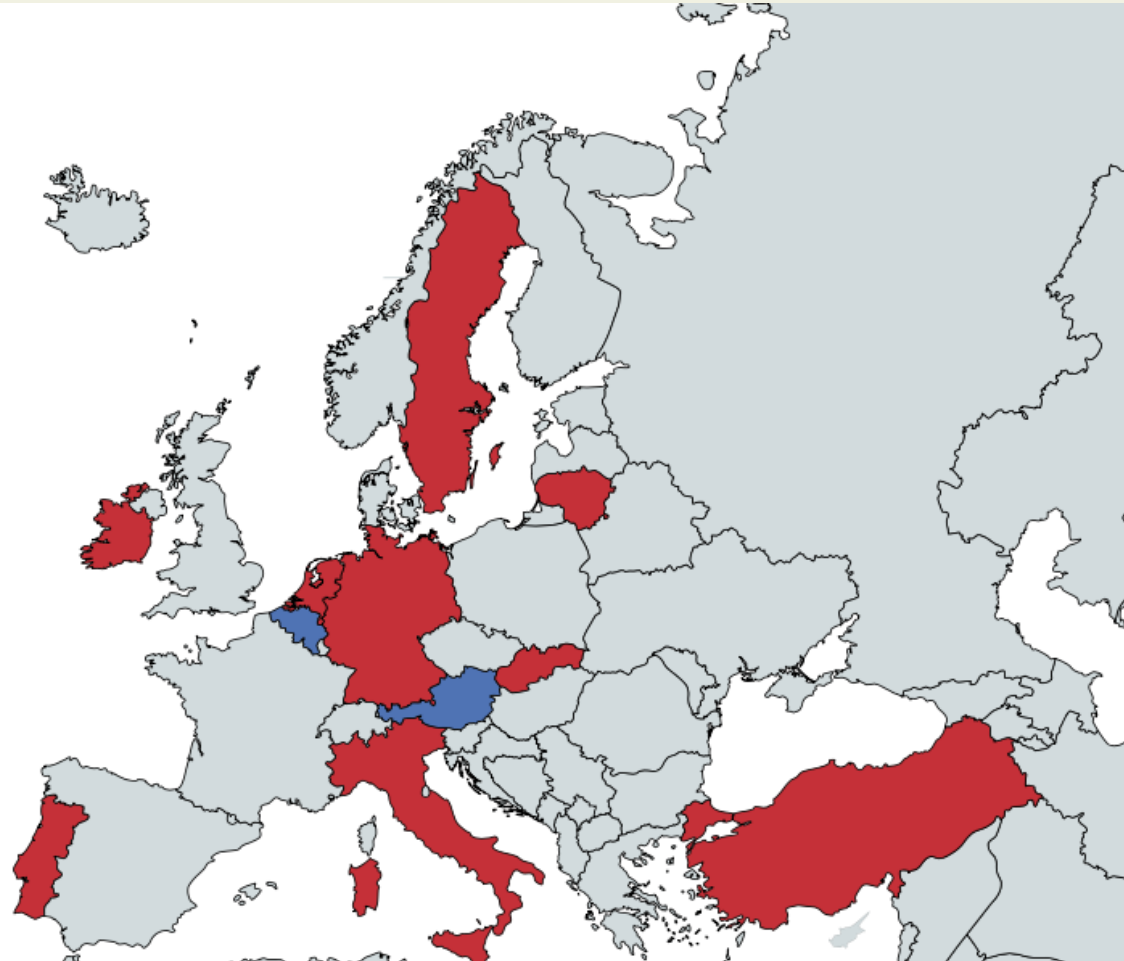
ALTERFOR: CS are the main working units, WPs coordinate and integrate

Consortium overview



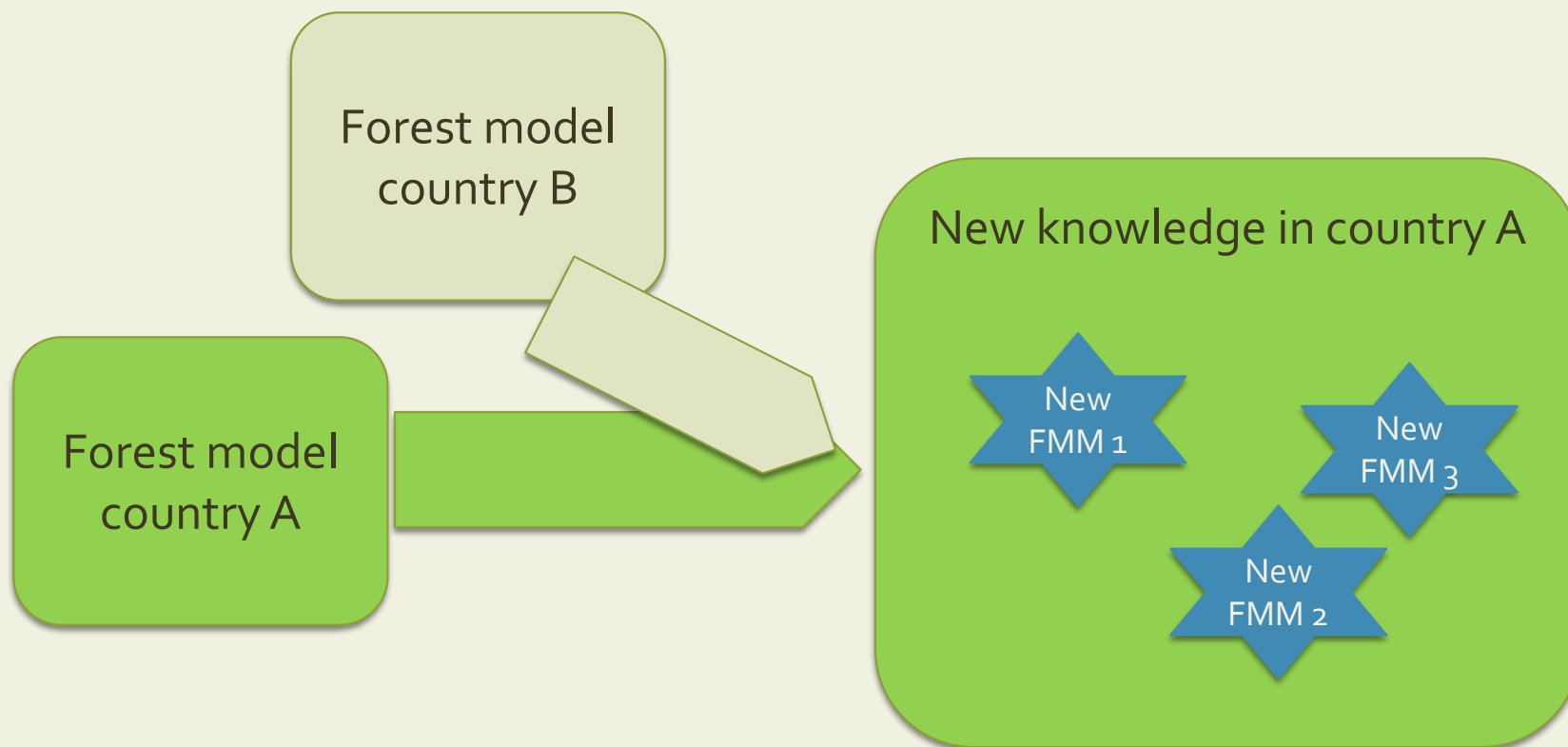
Case Studies

- Sweden
- Germany
- Ireland
- Italy
- Lithuania
- The Netherlands
- Portugal
- Slovakia
- Turkey



Knowledge transfer

Future Global/EU scenarios

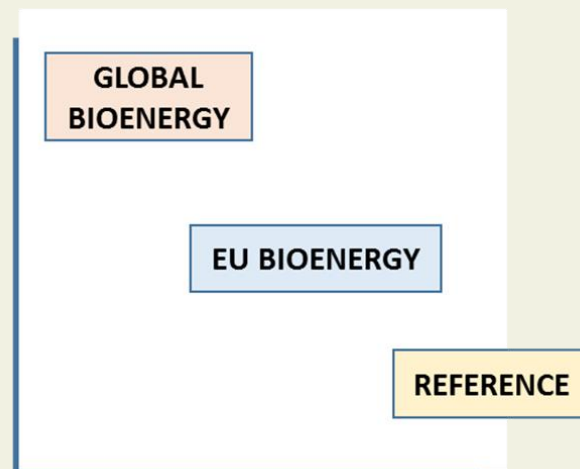


ALTERFOR = Knowledge management

Combination of global and EU policies: ALTERFOR scenarios prepared by IIASA



Forest harvests
Bioenergy demand
Mitigation efforts



Climate change (effect
on forest growth)

► REFERENCE

- Current EU policies, targets until 2020
- Weak global climate change policies

► EU BIOENERGY

- Strong emission reductions in the EU by 2050
- Intermediate global climate change policies

► GLOBAL BIOENERGY

- Strong emission reductions in the EU by 2050
- Strong global climate change policies

Capros, P., et al. 2013. *EU Energy, Transport and GHG Emissions Trends to 2050 - Reference Scenario 2013*. European Commission.

Forsell, N. et al. 2016. *Study on impacts on resource efficiency of future EU demand for bioenergy (ReceBio)*. Final report.

Fricko, O. et al. 2016. *The marker quantification of the Shared Socioeconomic Pathway 2: A middle-of-the-road scenario for the 21st century*. GEC.

Description of ES for FMM in case studies



- ▶ Biodiversity
- ▶ Carbon sequestration
 - ▶ All pools except soils
 - ▶ HWP and product substitution
- ▶ Cultural value
- ▶ Water
- ▶ Biomass

