

# SUMMARY

3<sup>rd</sup> Think Tank Meeting

15 – 16 June 2023

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Connecting science and business: How policy, socioeconomic and environmental drivers impact future forest goods and services in Europe

Hosted by TEAMING UP 4 FORESTS

A forest, science and business platform

Summary prepared by Carola Egger

## Key messages and meeting outcomes



### SCIENTIFIC INSIGHTS

The future of the forest-based sector and the supply of forest goods and services is significantly impacted by a range of important factors (drivers) creating complex challenges.

#### Environmental drivers

Climate change and forest management

#### Governance drivers

Forest and forest-related policies, laws, and property rights

#### Socio-economic drivers

Forest ownership, demographic and geopolitical developments

#### Technological drivers

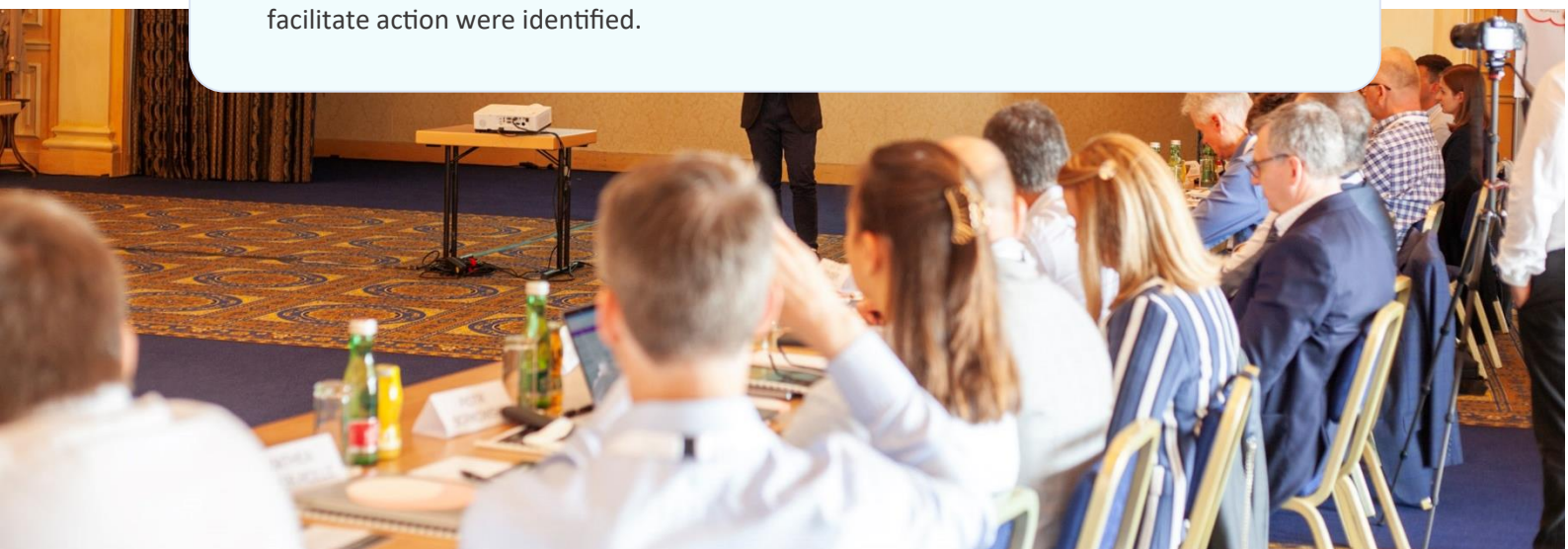
Forest-based innovations, emerging products, and market trends

### CHALLENGES FOR THE FOREST-BASED INDUSTRY

- Businesses are challenged with securing fibre supply and face a potential resource scarcity and competition for wood fibre in the future.
- A high flexibility of the forest-based industry is needed for adaptation.

### OPPORTUNITIES AND RESPONSE OPTIONS

- The circular bioeconomy, immediate action, long-term planning, and shared goals in the forest-based sector were highlighted in the discussions.
- Suggested adaptation measures for the industry and forest management included upscaling technologies and innovations, cascading wood use, diversification, and added-value products, underpinned by adaptive and sustainable forest management.
- Collaboration and communication were seen as key aspects to realize solutions collectively.
- Education and knowledge exchange were emphasized to engage various groups in the forest-based sector and support technology advancement and effective adaptation.
- Needs for cohesive policies and regulatory frameworks and targeted policy responses to facilitate action were identified.





## Introduction

The third TEAMING UP 4 FORESTS Think Tank Meeting, hosted by IUFRO and Mondi, was held in Vienna on 15-16 June 2023 and brought together over 40 representatives from science, business, and forestry stakeholders to discuss challenges of pan-European forests and the forest-based sector in the face of climate change, with the aim to jointly identify solutions and response measures.

Participants engaged in lively discussions to provide their view and work on response options building onto a scientific base. The meeting substance built on previous Think Tanks and Stakeholder Dialogues. This document provides an overview of the key messages and major outcomes of the meeting.

The event was hosted by TEAMING UP 4 FORESTS, a science business platform that aims to better understand climate change impacts on forests and identify response measures in line with the Sustainable Development Goals. The Think Tank event series focuses on bringing science and business together for an intensive exchange. Further information can be found on <https://teamingup4forests.com/>.

## Preliminary scientific study findings

A team of scientific experts presented preliminary findings of a TEAMING UP 4 FORESTS synthesis study on the future of forest goods and services in Europe.

### **BACKGROUND AND GOALS OF THE STUDY**

Climate change significantly impacts European forests, affecting health, productivity, and the provision of goods and services. The study aims to synthesize knowledge addressing a wide range of relevant factors for the future of the forest-based sector with a focus on wood supply. The overarching goal is to identify response options by the private sector, policymakers, and stakeholders.



## KEY MESSAGES

The study explores four main drivers influencing the future supply of wood and other forest goods and services. For each driver, scientific experts from the study authors team summarized the following key messages for the audience.



### Environmental drivers: Climate change and forest management

- Climate change will have strong effects on tree growth and mortality.
- Forest disturbances will increase and cannot be fully controlled by management.
- Adaptive management can mitigate negative effects on ecosystem services.



### Governance drivers: Forest and forest-related policies, laws, and property rights

- EU and national forest policies are incoherent, affecting forests and wood supply differently.
- Countries have diverging policy priorities that affect forests in multiple ways.
- Remarkable differences in forest property rights have impacts on wood supply.



### Socio-economic drivers: Forest ownership, demographic and geopolitical developments

- Different private forest owner types and behaviours hamper wood mobilization.
- European demographic developments pose challenges on wood supply.
- Geopolitical trends such as import bans and regionalization limit wood imports.

### Technological drivers: Forest-based innovations, emerging products, and market trends

- Sustainability in the forest sector can facilitate the transition to a circular bioeconomy.
- Diversification can create added value for the forest-based sector.
- Securing supply requires joint efforts in sustainable mobilization and logistics.



**STUDY TEAM OF SCIENTIFIC EXPERTS**

**Metodi Sotirov**

Chair, expert on policy  
*ALU-FR, Freiburg, Germany*

**Ragnar Jonsson**

Author, expert on socio-economic drivers  
*SLU, Sweden*

**Andreas Kleinschmit von Lengefeld**

Author, expert on innovation  
*Homo Silvestris, France, Germany*

**Andrey Krasovskiy**

Author, expert on climate change impacts  
*IIASA Laxenburg, Austria/International*

**Florian Kraxner**

Author, expert on climate change impacts  
*IIASA Laxenburg, Austria/International*

**Manfred Lexer**

Author, expert on forest management  
*BOKU, Vienna, Austria*

**Špela Pezdevšek Malovrh**

Author, expert on ownership and property rights  
*University of Ljubljana, Slovenia*

**Anne-Christine Ritschkoff**

Authors, expert on innovation and technology  
*VTT Technical Research Centre of Finland Ltd.*

**FEEDBACK BY PARTICIPANTS**

Following the scientific presentation, participants engaged in a gallery walk, providing feedback and interacting with the experts at four poster stations representing the main drivers. The feedback is summarized below and complemented the scientific work with new insights.

**Environmental aspects**

- There is an urgent need to mitigate climate change and reduce related impacts.
- Sustainable and adaptive forest management with emphasis on resilience is key.
- Adaptation strategies require investigating types of future forests and forest management.

**Governance aspects**

- Implementing a cascading wood use poses a significant innovation-governance challenge.
- Platforms such as TEAMING UP 4 FORESTS can play a major role in informing policy.
- Property rights of forest owners might conflict with other interest groups.

**Socio-economic aspects**

- Other forest ecosystem services (health, tourism, education) are highly relevant.
- Private forest owners may lack knowledge and industry connections.
- The diversity of forest owners can provide opportunities.
- Demographic trends indicate a need for green jobs for youth.

**Technological aspects**

- Pan-European knowledge exchange and innovation and tech evaluation are necessary.
- Carbon capture and new products are essential under limited biomass supply.
- A major challenge will be prioritizing fibre uses and replacing fossils.

## The business perspective on securing fibre supply

Business representatives from the forest-based sector shared insights on securing fibre supply, addressing various local contexts and business environments. The points below highlight key aspects of their talks.

### Environmental challenges for businesses

- Climate change is and will in future impacts wood supply, forest composition, productivity, growth, and ultimately wood supply.
- Businesses are facing a potential scarcity of wood availability.
- Climate-fit models need to include both mitigation *and* adaptation.

### Political challenges for businesses

- Complex policy developments are hard to follow and increase management and operational requirements significantly.
- Policies and increasing protected forest areas in Europe have a negative impact on fibre availability.
- Rapidly changing geopolitical frameworks create uncertainties.
- Forests and land-use should be considered for biodiversity frameworks.

### Operational challenges for businesses

- A high flexibility of the forest-based industry is needed for adaptation.
- Adaptation measures by the industry are planned but hampered by insecurities.
- Decarbonization efforts and biomass competition affect the traditional forest-based sector.

### Information needs of businesses

- The amount and complexity of forest science should be structured and simplified to provide a comprehensive overview for the industry.
- Science and business must collaborate more effectively to identify future pathways and find economic, ecological, and political balances.



The business speakers pointed to measures to address these challenges, including sustainable forest management, certification, partnerships, projects, research and development, training, and education.



**PRESENTERS FROM THE FOREST-BASED INDUSTRY**

**Gottfried Joham**  
Chairman of the  
Supervisory Board  
*Papierholz Austria*

**Paula Guimarães**  
Sustainability Manager  
*The Navigator Company*

**Piotr Borkowski**  
Executive Director  
*European State Forest  
Association (EUSTAFOR)*

**Opportunities and response options in the forest-based sector**



A plenary discussion highlighted emerging opportunities in the forest-based sector. The second day of the meeting focused on identifying response options, with participants forming focus groups in a World Café setting, discussing potential solutions on three tables representing different future scenarios. These hypothetical future narratives ranged from a fossil-based economy under business-as-usual over a bioeconomy scenario to an environmental sustainability scenario, stimulating participants to think about their responses under different circumstances.

Participants stressed that continuing business-as-usual inevitably leads to planning instability, resource insecurity, and socio-political and economic problems dominating daily life. This emphasized the urgent need of immediate action and proactive measures. The points captured below reflect a broad picture of the discussions. Detailed response options will be presented in the final TEAMING UP 4 FORESTS study report which will be published later this year.





### Forest-based sector targets

- The circular bioeconomy, changing managerial concepts, and viewing the forest-based sector as part of a larger system were emphasized.
  - A need for long-term planning and a holistic approach to address challenges was identified.
  - Fostering a "We-Culture" in the forest-based sector with shared goals was proposed.
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### Adaptation of the industry and forest management

- Upscaling technologies, innovations, cascading wood use, diversification, added-value products, and substituting fossil resources with forest products provide solutions to multiple challenges.
  - Adaptive and sustainable forest management is essential to enhance ecosystem resilience.
  - Integrative thinking, mosaic planning and synergies on landscape-level are needed to establish decision support tools for forest protection and production systems.
  - Aligning with climate and biodiversity targets and reducing consumption was seen as crucial.
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### Collaboration and communication

- An active exchange between science and business can enable science-based decision support.
  - A stronger collaboration between forest owners and the industry is needed.
  - A union of private forest owners could ensure their representation and ease collaboration.
  - The forest-based sector needs to align with other industries and society.
  - Communication within and outside the sector plays a key role for identifying future pathways.
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### Education and knowledge exchange

- Knowledge and best practice exchange across pan-Europe could enhance technology advancement and efficient adaptation for a circular forest-based sector.
  - Extension services and education are vital for engaging private forest owners and youth.
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### Policy responses

- Cohesive policies and regulatory frameworks are needed to provide efficient guidance, realistic expectations of forest functions, and clear priorities.
- Targeted policy responses, including subsidies and public funds, are required to facilitate actions.



## Facilitation

### MODERATOR

Verena Scherfranz, BOKU

### HOST

TEAMING UP 4 FORESTS

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## List of participants

| LAST NAME                 | FIRST NAME       | AFFILIATION  |
|---------------------------|------------------|--|
| Avdibegović               | Mersudin         | University of Sarajevo   |
| Boehnke                   | Daniel           | IUFRO  |
| Bolanos                   | Jose             | IUFRO  |
| Borkowski                 | Piotr            | European State Forest Association (EUSTAFOR)   |
| Bruder                    | Otto             | proNARO  |
| Brunner                   | Susan            | Mondi  |
| Buck                      | Alexander        | IUFRO  |
| Burns                     | Janice           | IUFRO  |
| Egger                     | Carola           | IUFRO  |
| Euler-Rolle               | Mathea           | Mondi  |
| Guimarães                 | Paula            | The Navigator Company  |
| Haussmann                 | Thomas           | Forest Europe  |
| Heino                     | Petri            | Ministry of Environment - Finland  |
| Ingemarson                | Fredrik          | IUFRO Congress 2024 Secretariat  |
| Joham                     | Gottfried        | Papierholz Austria - PHA / Mondi   |
| Jonsson                   | Ragnar           | Swedish University of Agricultural Sciences  |
| Kammerhofer               | Alfred           | Federal Department of Environment, Transport, Energy and Communication - Switzerland |
| Kautz                     | Roland           | Austrian Federal Forests - ÖBF   |
| Kleine                    | Michael          | IUFRO  |
| Kleinschmit von Lengefeld | Andreas-Nikolaus | Homo Silvestris Europae  |
| Kogler                    | Andreas          | Papierholz Austria - PHA   |

|                   |                |  |
|-------------------|----------------|--|
| Krasovskiy        | Andrey         | International Institute for Applied Systems Analysis - IIASA                         |
| Kraxner           | Florian        | International Institute for Applied Systems Analysis - IIASA                         |
| Längin            | Dirk           | Mondi  |
| Lehner            | Lisa           | Federal Ministry of Agriculture, Forestry, Regions and Water Management              |
| Lexer             | Manfred        | University of Natural Resources and Life Sciences - BOKU                             |
| Lovrić            | Nataša         | European Forest Institute - EFI  |
| Mäkipää           | Raisa          | Natural Resources Institute Finland - LUKE   |
| Pezdevšek Malovrh | Špela          | University of Ljubljana  |
| Pircher           | Herbert        | Stora Enso   |
| Popov             | Denis          | Mondi  |
| Purret            | Andre          | IUFRO  |
| Putz              | Anton          | Lenzing AG   |
| Reinhard          | Michael        | Federal Department of Environment, Transport, Energy and Communication - Switzerland |
| Rindler           | Johann         | Mondi  |
| Ritschkoff        | Anne-Christine | Technical Research Centre of Finland - VTT   |
| Ruthner           | Christian      | Mayr-Melnhof   |
| Scherfranz        | Verena         | University of Natural Resources and Life Sciences - BOKU                             |
| Schmid            | Björn          | UPM  |
| Seedre            | Meelis         | Ministry of the Environment - Estonia  |
| Sotirov           | Metodi         | University of Freiburg   |
| Steindlegger      | Gerald         | Integrated Sustainability Solutions - ISS  |
| Unterrainer       | Doris          | Mondi  |
| Wolfrum           | Gerda          | IUFRO  |

