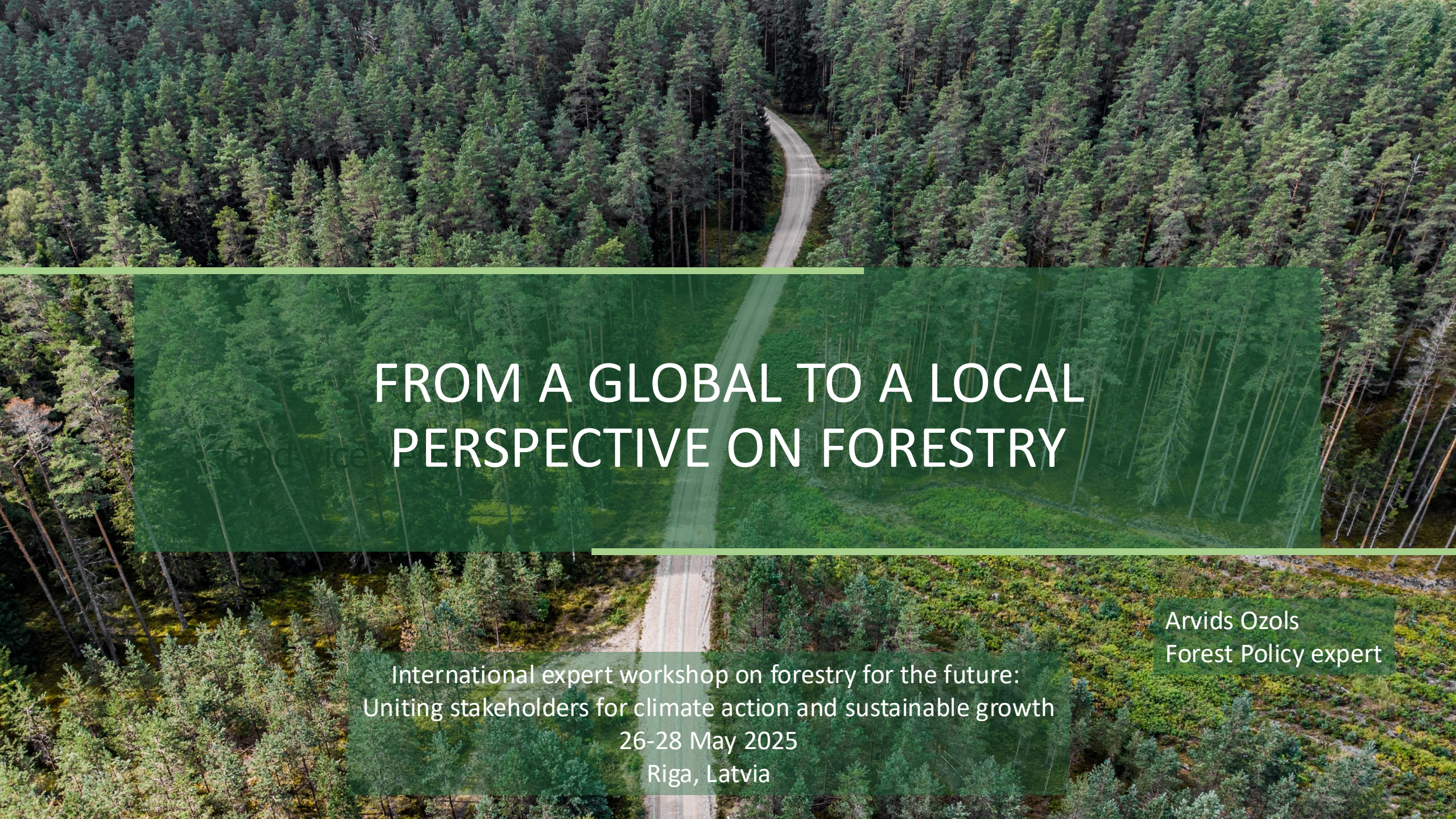


An aerial photograph of a dirt road winding through a dense forest of tall, thin trees. The road is light-colored and curves through the green canopy. A semi-transparent green box is overlaid on the center of the image, containing the main title.

FROM A GLOBAL TO A LOCAL PERSPECTIVE ON FORESTRY

International expert workshop on forestry for the future:
Uniting stakeholders for climate action and sustainable growth
26-28 May 2025
Riga, Latvia

Arvids Ozols
Forest Policy expert

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1. Sustainable Forest Management concept and its contribution to sustainable development
2. Scope of the story
3. Some issues to consider
4. Global and Regional dimension of Forest policy and Institutions
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Sustainable Forest Management concept and its contribution to sustainable development

- **In international decisions:**

- The term Sustainable forest management (SFM) emerged in common use in parallel with “sustainable development”, defined by the World Commission on Environment and Development (1987)
- It has been reemphasized in Forest Principles and chapter 11 of Agenda 21
- In Europe clear definition was agreed in 1993 in Second Ministerial Conference on the Protection of Forests in Europe

- **In fact:**

- Basic theory of SFM was described by Hans Carl von Carlowitz back in 1713 in Saxony (and this had great influence on Latvian forestry and not only)
- This is now widely recognized that some part of process can be sustainable **if the whole value chain** (including products, services and related policies) **can be sustainable**
- **This means that all policies contributing to Sustainable development have to be coherent**

The understanding of sustainable forest management (SFM) has evolved significantly over time, shaped by changing environmental, economic, and social priorities

1. Pre-20th Century – Utilitarian Focus

- Forests were primarily seen as sources of timber and land for agriculture.
- Management, if any, focused on maximizing wood production.
- Little attention was paid to ecological or social impacts.

2. Early to Mid-20th Century – Scientific Forestry

- Introduction of systematic forest inventories and yield regulation.
- Emphasis was on sustained yield — producing a continuous supply of timber.
- Biodiversity, indigenous rights, and ecosystem services were partly ignored.

3. 1970s–1980s – Rise of Environmental Awareness

- Global concerns about deforestation, especially in the tropics, emerged.
- Concepts of ecological balance and conservation began entering forest policy.
- The idea of forests as ecosystems rather than just timber resources took hold.

The understanding of sustainable forest management (SFM) has evolved significantly over time, shaped by changing environmental, economic, and social priorities

4. 1992 – Rio Earth Summit (UNCED)

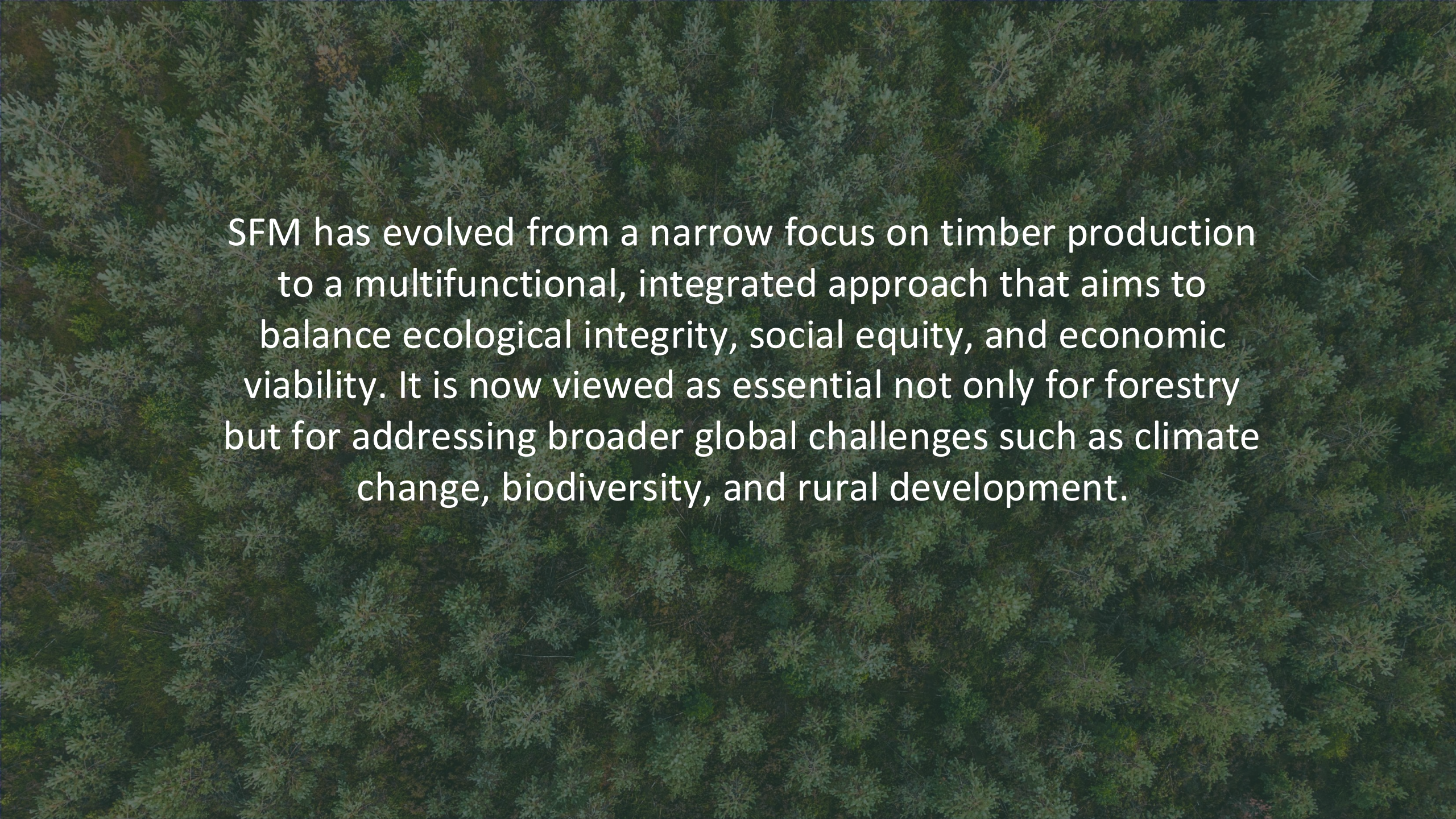
- A turning point for global sustainable development discourse.
- Led to the Forest Principles and Agenda 21, endorsing broader forest values.
- SFM began to include environmental, economic, and social dimensions.

5. 1990s–2000s – Institutional and Certification Developments

- Regional processes (e.g., Montréal Process, Helsinki Process) defined criteria and indicators for SFM.
- Emergence of forest certification schemes (e.g., FSC, PEFC) to verify sustainable practices.
- More inclusion of indigenous knowledge and community participation.

6. 2010s–Present – Holistic and Climate-Focused Approaches

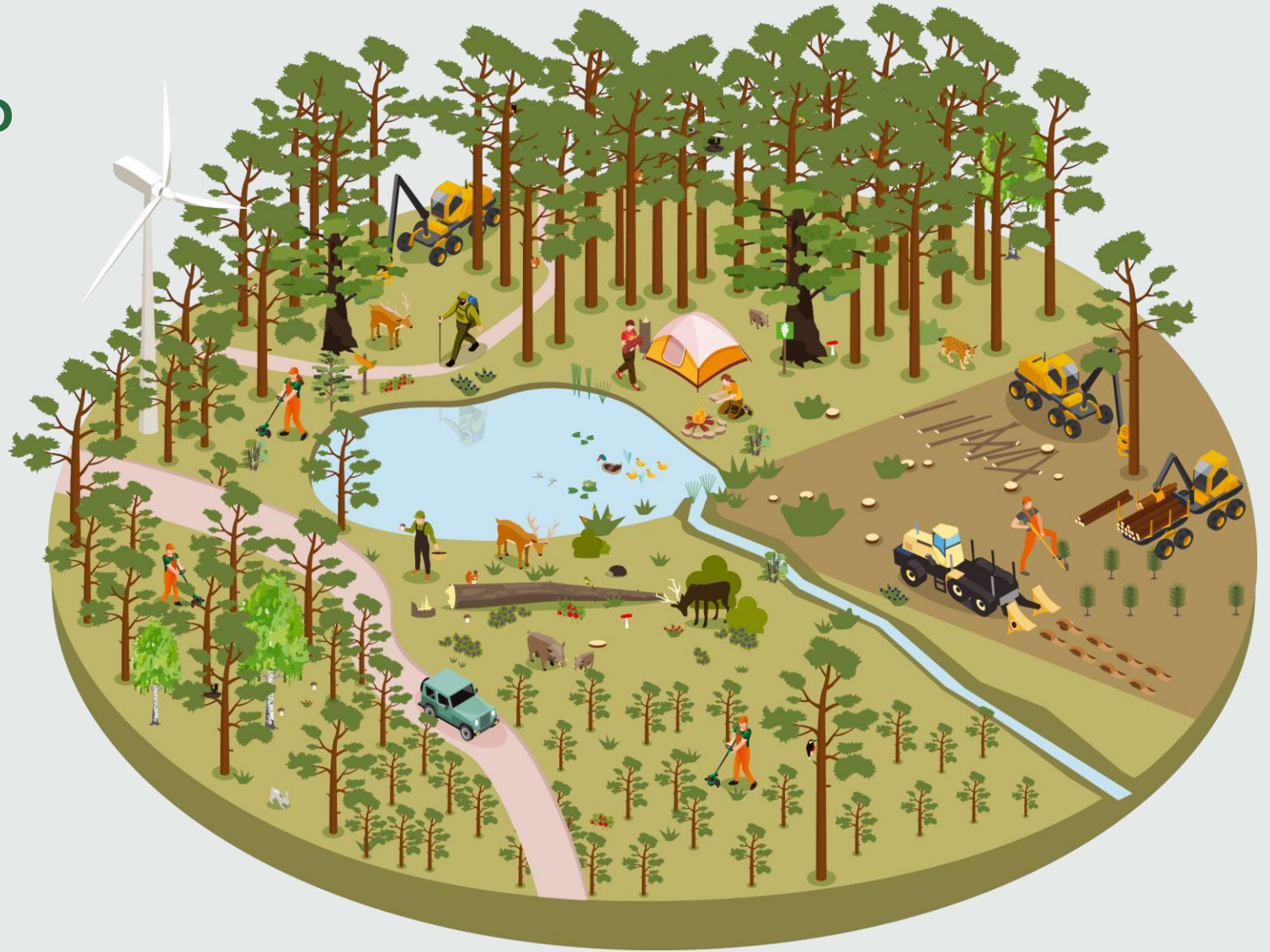
- Integration of SFM into climate strategies (e.g., REDD+, carbon sequestration).
- Forests seen as critical for biodiversity conservation, climate regulation, and livelihoods.
- Increasing focus on resilience, restoration, and landscape-level planning.
- Use of technology (e.g., remote sensing, AI) for better monitoring and management.

The background of the slide is a high-resolution aerial photograph of a dense forest. The canopy is composed of numerous evergreen trees, likely spruce or fir, with their needles creating a textured, dark green surface. The lighting is even, highlighting the intricate patterns of the branches and foliage from above.

SFM has evolved from a narrow focus on timber production to a multifunctional, integrated approach that aims to balance ecological integrity, social equity, and economic viability. It is now viewed as essential not only for forestry but for addressing broader global challenges such as climate change, biodiversity, and rural development.

Scope of the story ?

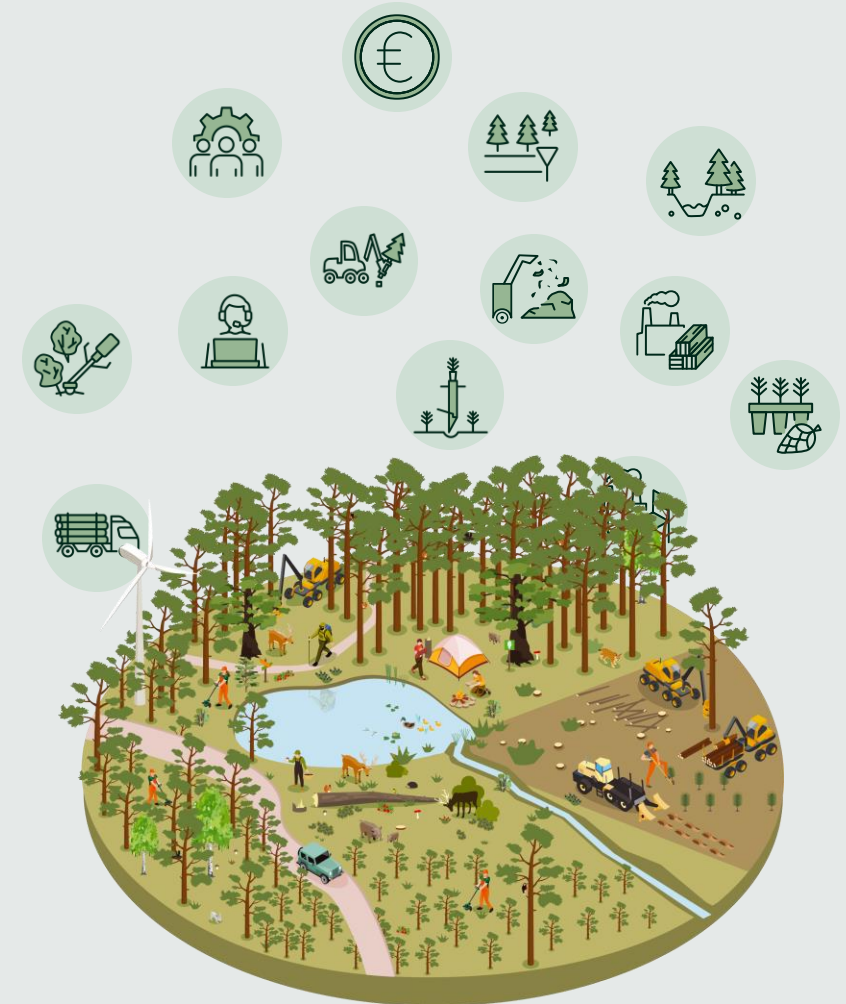
**Forest
management cycle
(around 100 years)**



Scope of the story ?

Forestry and forest-based industries – businesses and jobs in OECD members

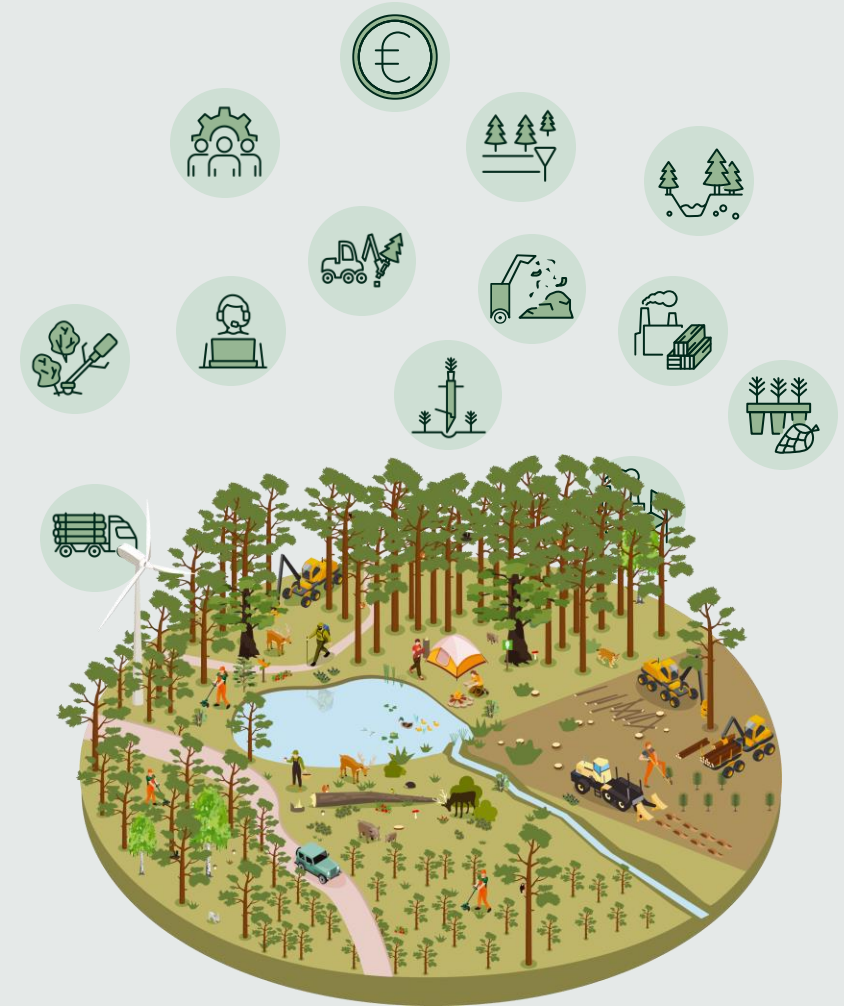
Sub-sector (ISIC-Rev.4 / NACE-Rev.2)	Typical activities	Jobs (× 1 000)	Enterprises / employer establishments
Forestry & logging (A 02)	Silviculture, harvesting, forest services	≈ 1 000	≈ 220 000 (mostly micro-firms and sole-traders)
Wood & cork products (C 16)	Sawmills, panels, builders' carpentry, pellets, cork	≈ 1 300	≈ 150 000
Wooden furniture (C 31 – wood share)	Household & office furniture, kitchen cabinets, mattresses	≈ 1 600	≈ 170 000
Pulp, paper & board (C 17)	Pulp mills, paper & packaging, tissue	≈ 900	≈ 15 000
OECD - total (direct)		≈ 4 800 – 5 200	≈ 560 000



Scope of the story ?

Snapshot of the direct economic footprint of the forest & forest-based industries in OECD members

- OECD economies gives an **aggregate forestry-and-logging GVA of roughly US \$ 110 – 120 billion** for 2022.
- The downstream **forest-based-industry GVA comes in between US \$ 450 and 500 billion**, i.e. about **0.8-0.9 % of total OECD GDP**.
Wood-products and pulp-&-paper account for ~60 %, furniture & printing the remainder.



Scope of the story ?



Everything mentioned before plus:

- Home for and source of biodiversity
- Climate change mitigation and adaptation
- Societies needs (other than sustainable jobs) and expectations like recreation, green urban and periurban environment, preservation of cultural heritage etc.



Valuation of ecosystem services – number of methods and approaches exist but only part of them are market based, some have «political value»

Ecosystem services value

Best-available, order-of-magnitude snapshot of what forests in the 38 OECD member states are estimated to generate each year in ecosystem-service flows (not asset values)

Ecosystem-service group	Examples of what's being valued	Marketed flows (user pays a price)	Non-market flows (no price, imputed by accounting/valuation)
Provisioning	Roundwood (stumpage), fuel-wood, cork, maple syrup, paid hunting & angling licences	≈ US \$ 75 bn/yr • Timber resource rent ~ US \$ 60 bn (scaled from € 14.7 bn timber rent in the EU-27 INCA accounts) Academia • Non-timber forest products ~ US \$ 5 bn (FAO & national royalty data) • Licenced recreation & access fees ~ US \$ 10 bn (U.S. National Forests ≈ US \$ 14 bn consumer surplus but only ~ US \$ 1 bn in fees) U.S. Forest Service	not applicable
Regulating	Carbon sequestration & storage, water purification, flood-risk mitigation, air-quality regulation, soil retention	—	≈ US \$ 370 bn/yr • Carbon sequestration ~ US \$ 110 bn (US forests present value ≈ US \$ 649 bn → ≈ US \$ 18 bn/yr; EU forests € 9.2 bn/yr; scaled to full OECD) U.S. Forest ServiceAcademia • Water purification & flow regulation ~ US \$ 165 bn (EU forests € 55.6 bn → ~ US \$ 61 bn, tripled to cover non-EU OECD) European Commission • Flood control, erosion-protection, air filtration, habitat regulation ~ US \$ 95 bn (literature mid-point, scaled by forest area)
Cultural / recreation (non-priced)	Hiking, hunting without fees, landscape aesthetics, spiritual & heritage values	—	≈ US \$ 150 bn/yr (consumer-surplus methods; U.S. National Forests ≈ US \$ 14 bn/yr U.S. Forest Service; EU "nature-based recreation" € 50.4 bn/yr Academia, scaled to OECD)
Supporting (biodiversity, nutrient cycling, etc.)	Underpin other services rather than yield final goods	—	≈ US \$ 45 bn/yr (shadow-price meta-analyses of habitat & gene-pool functions, pro-rata for OECD forest area) ScienceDirect
— OECD total —		≈ US \$ 75 bn (≈ 12 %)	≈ US \$ 565 bn (≈ 88 %)

Ecosystem services value

Some precaution:

- **Scale, not precision** – These are *indicative*; a ± 20 % swing is plausible if you choose a different social-cost-of-carbon or recreation-valuation method.
- Marketable wood and other forest goods still matter, but **four-fifths of the economic contribution of OECD forests sits in services that markets do not price**. That is why carbon credit schemes, water-funds, recreation concessions and biodiversity payment programmes are proliferating: they try to turn part of the blue column into the green one.
- **May be some overlap** – Some regulating services (e.g., flood control) indirectly support marketed sectors such as insurance and agriculture; the table counts them only once to avoid double-counting.

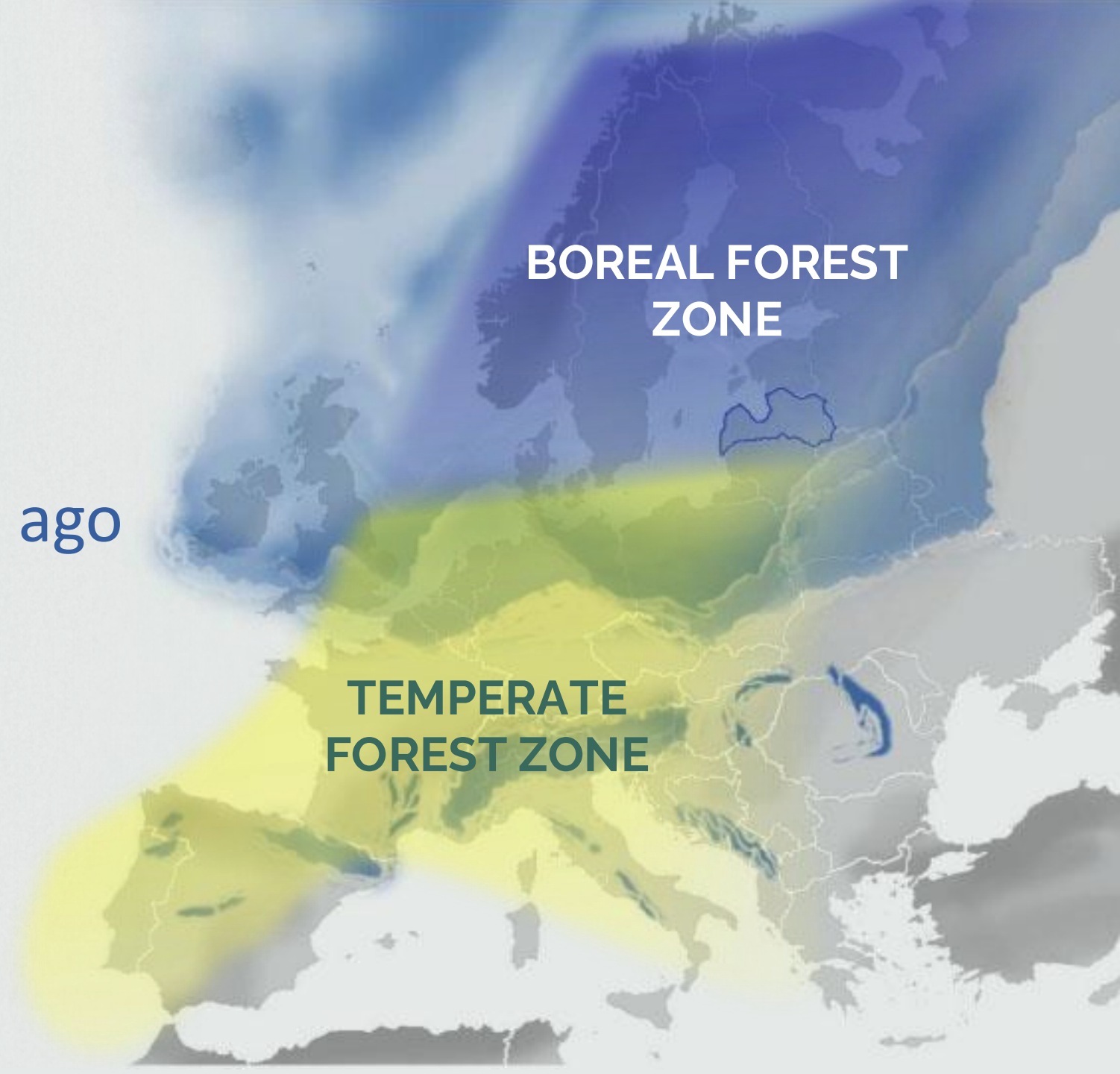
Some issues to consider

- **Time span**
- **Forest policy development**
- **Governance approaches – Global and Regional**
- **Regulatory framework – Legally binding instrument on Forest**

Europe

Forests in Europe

Ice age 20,000-18,000 ago



Time span

- **Geological** – out of our influence
- **Biological** – we can **try to understand it** in best possible ways and **use this knowledge** in our forest management planning resulting in long term forest management plans – from number of **decades to** number of **millennia**.
- **Investment** – **depends** where you invest – in forestry or forest-based industries – **decades**.
- **Political** – election cycle – normally four years – **miserable to other**.
- Political decisions **can not influence natural processes** but only human activities.
- Setting **political targets** and implementing them in legal documents requires reality check with laws of nature and their time perspective.

Forest policy development

- From **property to production to protection**. Early rules defended royal property; 19th-century codes chased steady timber yields; late-20th-century law adds wildlife, water and recreation; today climate stability and biodiversity dominate.
- **Internationalization grows**. Until 1945 forest law was purely national; since FAO and ITTO, nearly every big policy shift has come with a treaty, a UN resolution or a voluntary partnership.
- **Soft law and markets now carry weight**. Certification (FSC, PEFC), corporate zero-deforestation pledges and carbon markets increasingly steer behavior where state enforcement is weak.

Forest policy development

- Forest policy has marched from **guarding the king's oaks** to **guarding the planet's climate and biodiversity**. Each wave has layered new objectives—timber security, rural jobs, ecosystem health, carbon sinks—onto the same hectares, making today's forest governance a dense weave of national laws, global agreements and private standards
- There are at least two questions from this observation:
 - Is this possible to achieve all these objectives on the same hectare - at least with current approach?
 - Who feels most comfortable in this complex 'ZOO' of objectives, legislation, agreements, standards and opinions – forest owners, managers, forest-based industries and «ordinary citizen» or opinion makers, standard setters, policy makers, legislators and law enforcement agencies?
- ZOO is getting bigger and wider but people are still speaking about climate crisis, biodiversity crisis and forest decline – **something probably has to be done differently.**

Global and Regional dimension of Forest policy and Institutions

Functionally Global setting can be viewed in groups:

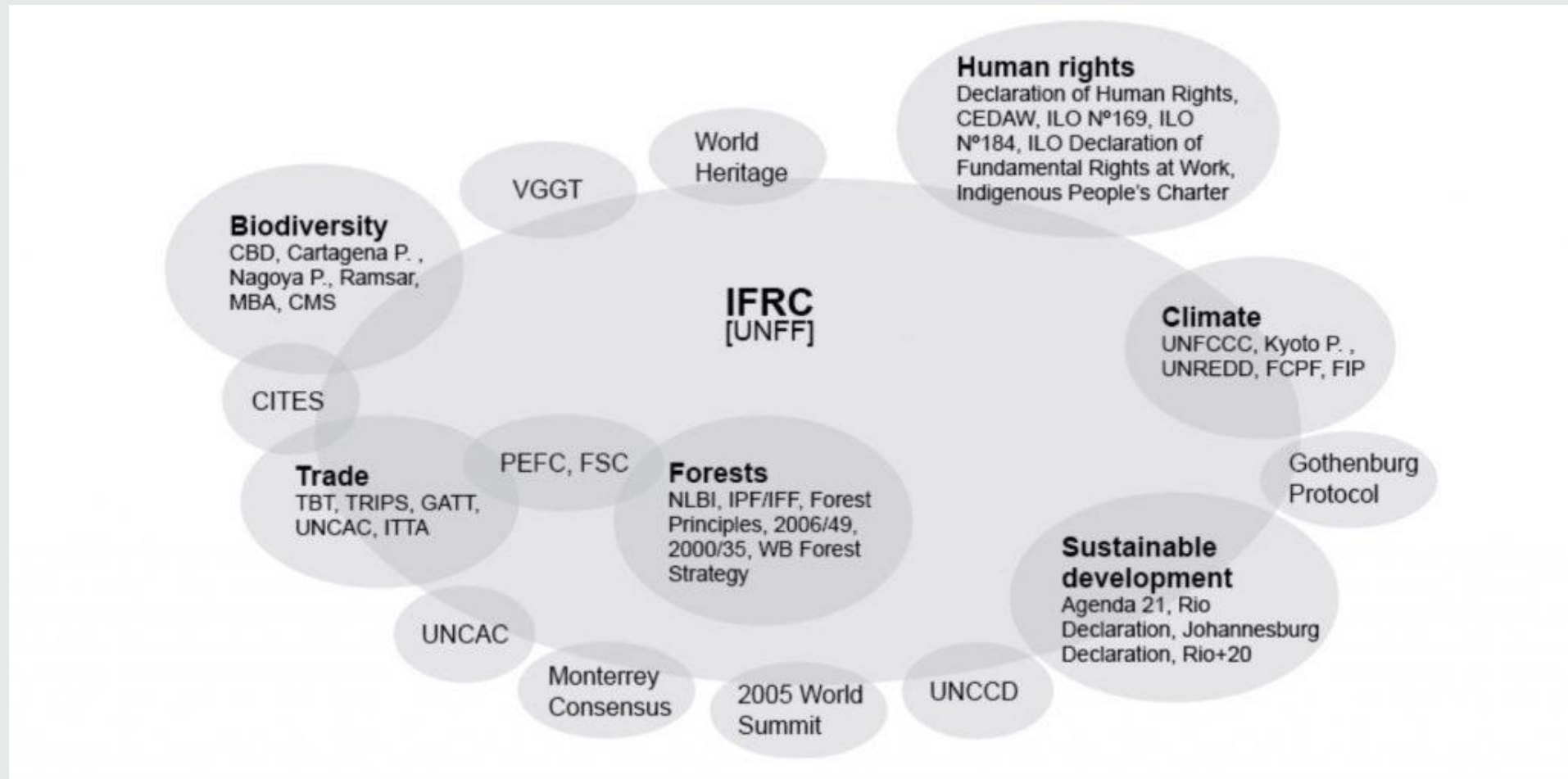
- **Policy-setting & coordination** (UN Forum on Forests (UNFF), FAO – Forestry Division & Committee on Forestry (COFO), Collaborative Partnership on Forests (CPF), International Tropical Timber Organization (ITTO))
- **Climate & forest-finance partnerships** (UN-REDD Programme (FAO + UNDP + UNEP), Forest Carbon Partnership Facility (FCPF) (World Bank))
- **Science & knowledge networks** (CIFOR-ICRAF (CGIAR centre), IUFRO – International Union of Forest Research Organisations)
- **Market standards & certification** (Certification bodies (PEFC, FSC and number of others).

Global and Regional dimension of Forest policy and Institutions

How they fit together

- UNFF **sets the big political targets** (Global Forest Goals 1-6); FAO/COFO implements technical norms and field programmes.
- CPF **is the glue** – it forces the big agencies and treaty secretariats to talk to each other and launch joint initiatives.
- ITTO, UN-REDD and FCPF **move the money and markets** for sustainable timber and forest carbon.
- Research networks (CIFOR-ICRAF, IUFRO) **feed new science** into organisations and investments.
- Certification bodies (FSC, PEFC) translate policy goals into on-the-ground standards that companies and consumers recognize – and are now being stress-tested by tougher EU, UK and USA import rules.

Global and Regional dimension of Forest policy and Institutions



Global and Regional dimension of Forest policy and Institutions

All 38 OECD members belong to at least one regional forest policy process.



Europe dominates **FOREST EUROPE**, while Anglophone & Pacific states dominate the **Montréal Process**.



Consumer-market engagement in tropical-forest governance is visible in the long ITTO list (many OECD countries are “consumer members”).

Instruments on forest

Currently we can distinguish three groups of documents



Global treaties that actually carry legal force for forests,



Regional or sub-regional agreements that do the same,



Attempts that did not reach the treaty stage but shaped today's patchwork.

Global treaties that carry legal force for forests

International Tropical Timber Agreement – ITTA 1983 → 1994 → 2006	Trade in tropical timber + obligation to manage producer members’ forests “sustainably and legally”; overseen by the ITTO.
Convention on Biological Diversity (1993)	Forest ecosystem targets, incl. the Kunming-Montréal Framework (2022) pledge to halt forest loss by 2030.
UNFCCC & Paris Agreement (1994/2016)	Article 5 recognises REDD+ and links forest sinks to NDCs; parties must account for land-sector emissions.
UNCCD (1996)	Dry-zone afforestation & land restoration targets.
CITES (1975)	Trade permits for listed timber species (e.g., mahogany, rosewood).

Regional or sub-regional agreements that do the same

European Union	LULUCF Regulation 2018/841, amended 2023/839 – legally fixes each Member State’s forest-carbon sink target for 2030 • Deforestation-Free Products Regulation 2023/1115 – due-diligence on timber, soy, beef, cocoa, etc. from Dec 2025
Pan-European mountains	Alpine Convention (1991) + Protocol on Mountain Forests (2002, in force) • Carpathian Convention (2006) + Protocol on Sustainable Forest Management (signed 2013, entered into force 2021)
Southern Africa (SADC)	Protocol on Forestry (2002, in force for ratifying States)
Central Africa (Congo Basin)	Yaoundé/COMIFAC Treaty (2000)
Amazon Basin	Amazon Cooperation Treaty (1978, amended 1998)
Southeast Asia	ASEAN Agreement on Transboundary Haze Pollution (2003)
Trade bilateral (EU)	FLEGT Voluntary Partnership Agreements with 15 producing countries (Honduras 2024, Côte d’Ivoire 2025...)*

Attempts that did not reach the treaty stage but shaped today's patchwork

- FOREST EUROPE LBA attempt (2011-15, 2018-21) – negotiations for a pan-European forest convention ended without consensus in 2021.
- UN Forest Instrument (2007, revised 2017) – sets four Global Forest Goals but is expressly non-binding.
- Soft-law certification & corporate pledges – FSC (1994), PEFC (1999) and dozens of 2030 zero-deforestation supply-chain commitments now interact with the binding EU and US due-diligence laws.

Attempt to create instruments on forest

Where is the “world forest convention”?

- Two negotiation waves (1991-92 at UNCED and 1995-2000 in the IPF/IFF process) collapsed for lack of North-South consensus.
- The UN General Assembly therefore adopted only a Non-Legally Binding Forest Instrument in 2007, revised 2017;
- UNFF-20 (May 2025) has again postponed any decision on reopening treaty talks

Why No Legally Binding Instrument Yet? - mainly because:

- Countries have divergent interests: developed vs. developing nations, forest-rich vs. forest-poor.
- Sovereignty concerns: Many countries are hesitant to allow international regulation of their forest resources.
- Other issues (like climate change and biodiversity) have overshadowed standalone forest treaties.

Some ideas for discussion and further approaches

Clarify which issues relate to what:

- Deforestation **is not** a forestry issue – this is **land use policy issue** and **forest management is not a source of deforestation**.
- How forests and SFM and whole forest sector **can really contribute** to climate change mitigation (not only as a carbon warehouse).

Some ideas for discussion and further approaches

Changing the cycles *(not reinventing the wheel)*

- Diversifying the forest management cycle to fit the specific purposes (efficient use of forest land – TRIAD principle, segregation)
- Increasing the carbon storage cycle (acknowledging the role of forest products AND substitution effect)
- Breaking the biodiversity-punishment cycle (implementing safe-harbor principle, working with, not against forest owners)
- Improving the water cycle *via* forests management (forestry)

Some ideas for discussion and further approaches

One size does not fit all:

- **Forests are very different** in various regions, thus various solutions are required.
- Global climate change requires tailored **adaptation** solutions .
- **Strong bioeconomy** is irreplaceable to ensure climate change mitigation. Bioeconomy relies on use of **renewable material**. Forestry is the cleanest source of such material.
- **Forest owners are crucial players** (not passive observers) in the game to ensure increased biodiversity, water quality and timber flow for bioeconomy.

Still some challenges to consider



**Managed forestry
cycle versus
unmanaged forest
(can one conserve
and freeze
biodiversity
status?)**



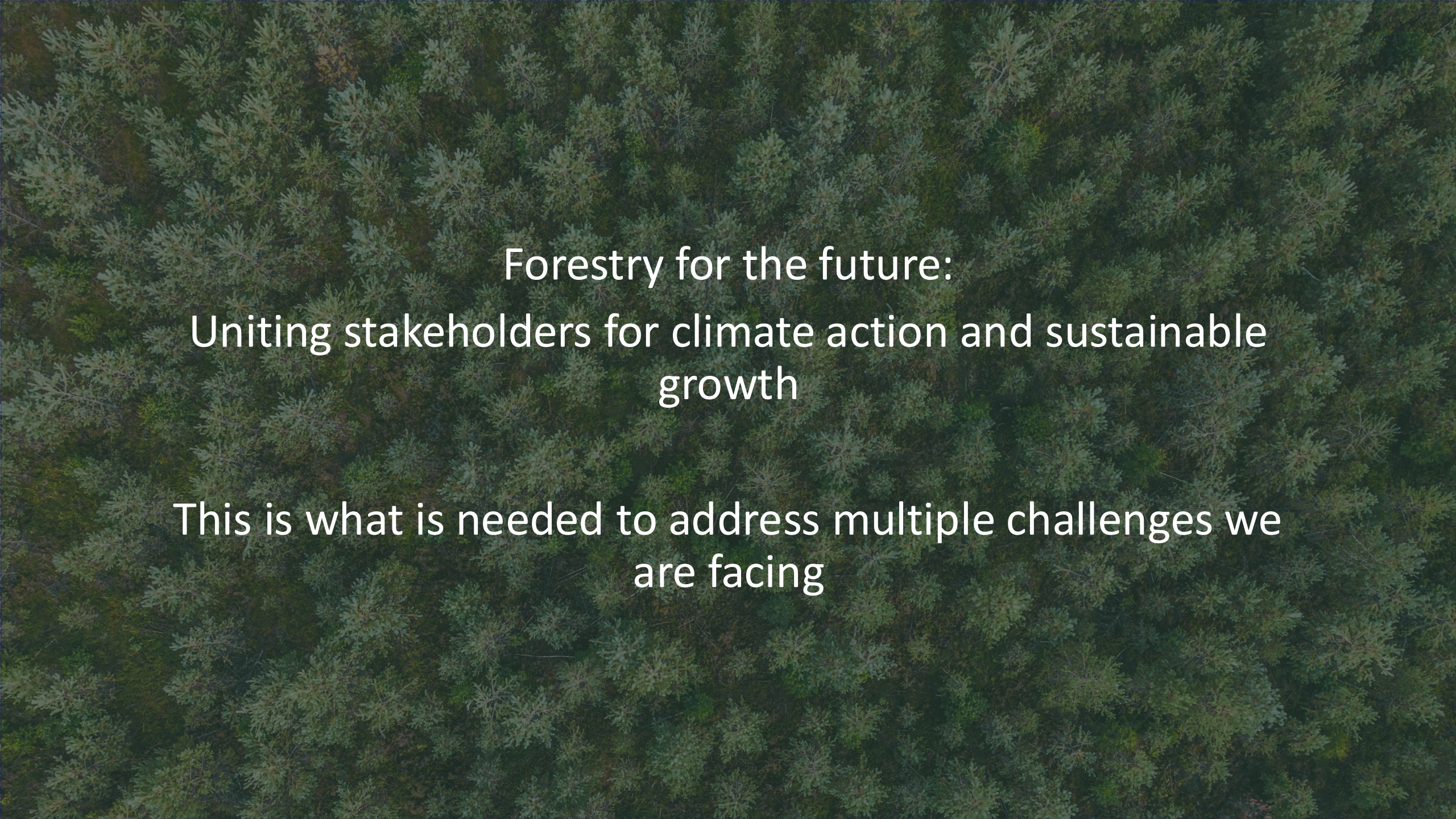
**Dynamic versus
fixed biodiversity
(also spatially)**



**Knowledge gap – lack
of research data within
multiple forest
(management or
biological) cycles
according to
harmonized
methodology**



**Renewable versus
fossil - is still there
a fight for market
share?**

An aerial photograph showing a dense, textured canopy of evergreen trees, likely spruce or fir, in various shades of green. The text is overlaid in the center in a white, sans-serif font.

Forestry for the future:
Uniting stakeholders for climate action and sustainable
growth

This is what is needed to address multiple challenges we
are facing

A large group of people are gathered on a long, narrow wooden raft constructed from many logs, floating on a calm river. The raft is divided into several sections by cross-logs. People are standing, sitting, and talking throughout the raft. The river is surrounded by lush green grassy banks and a dense forest of tall trees in the background. The scene is bright and sunny, with reflections on the water. A yellow flag is visible on the far end of the raft.

Thank You!

**We all are on the same raft in
the same river**