



EUROPEAN BIODIVERSITY CONFERENCE

6 DECEMBER 2022

16.00 - 18.00

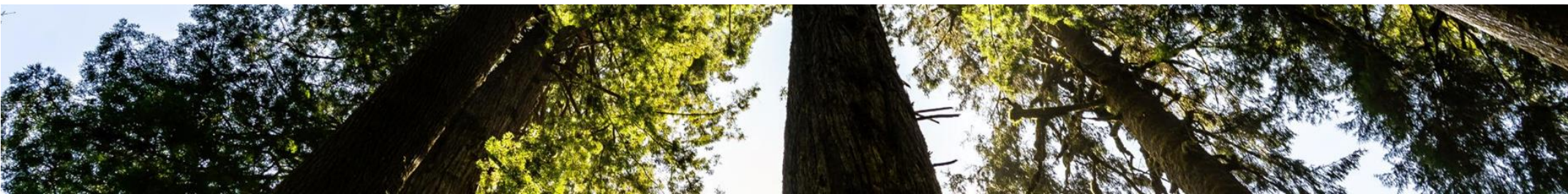
In person event

CLIMATE-READY EU FORESTS



Opening remarks

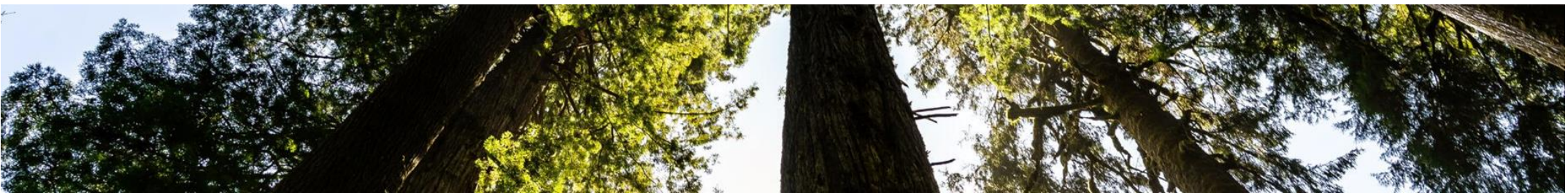
- Simone SCHMIEDTBAUER, MEP, Vice-President of the Intergroup
- Roby BIWER, European Committee of the Regions, member of the ENVE and NAT Commissions





Keynote: Gert-Jan NABUURS

European Forest Resources, Wageningen University and Research



Climate-ready EU forests

ELO

6 Dec 2022, Brussels

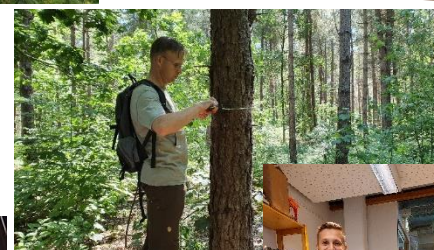
Gert-Jan Nabuurs

Prof. European Forest Resources

IPCC Coordinating Lead Author

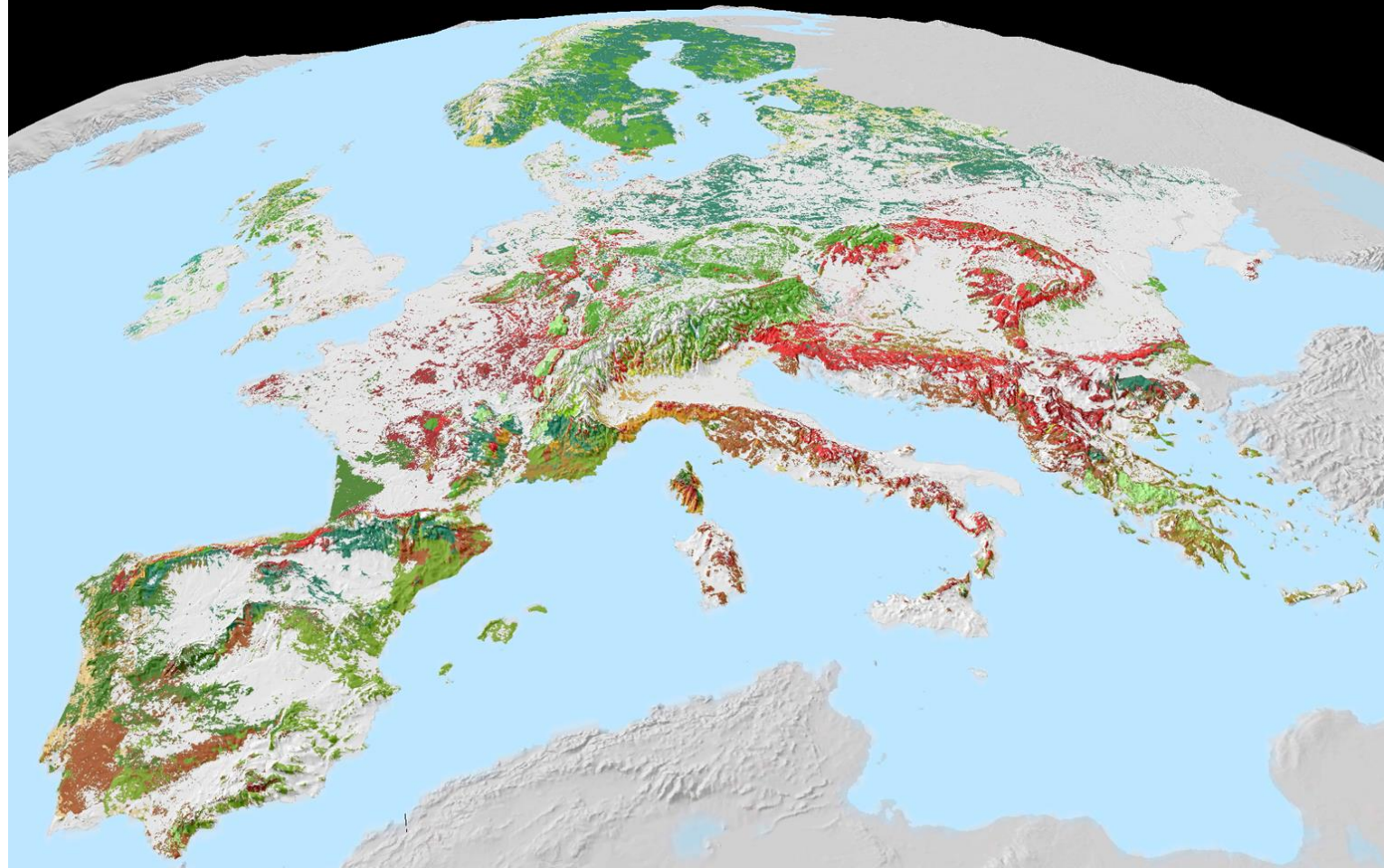


Team: European resources, selection work, NFI, Dutch pilots, carbon-climate, wood chain, LULUCF, EU-projects



Europe: 160 Mha in EU. 220 Mha in map here

Tree species map 1x1 km.
Brus, Hengeveld , Nabuurs (2006)



More forest
than ever since
Medieval times.

Practically all
managed.

Increasing
growing stock,
increasing dead
wood

diverse in
management
and
governance.

60% of
growing stock
is formed by 4
species

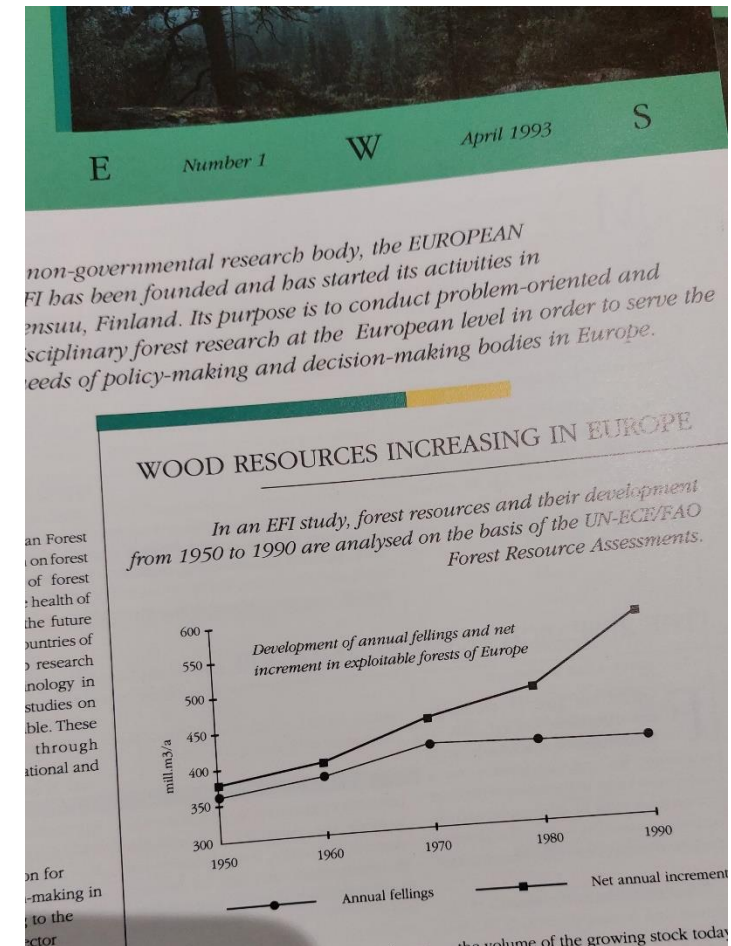
Europe: changing paradigms

1980s: acid rain.

Changes to 1990s: more resources than ever

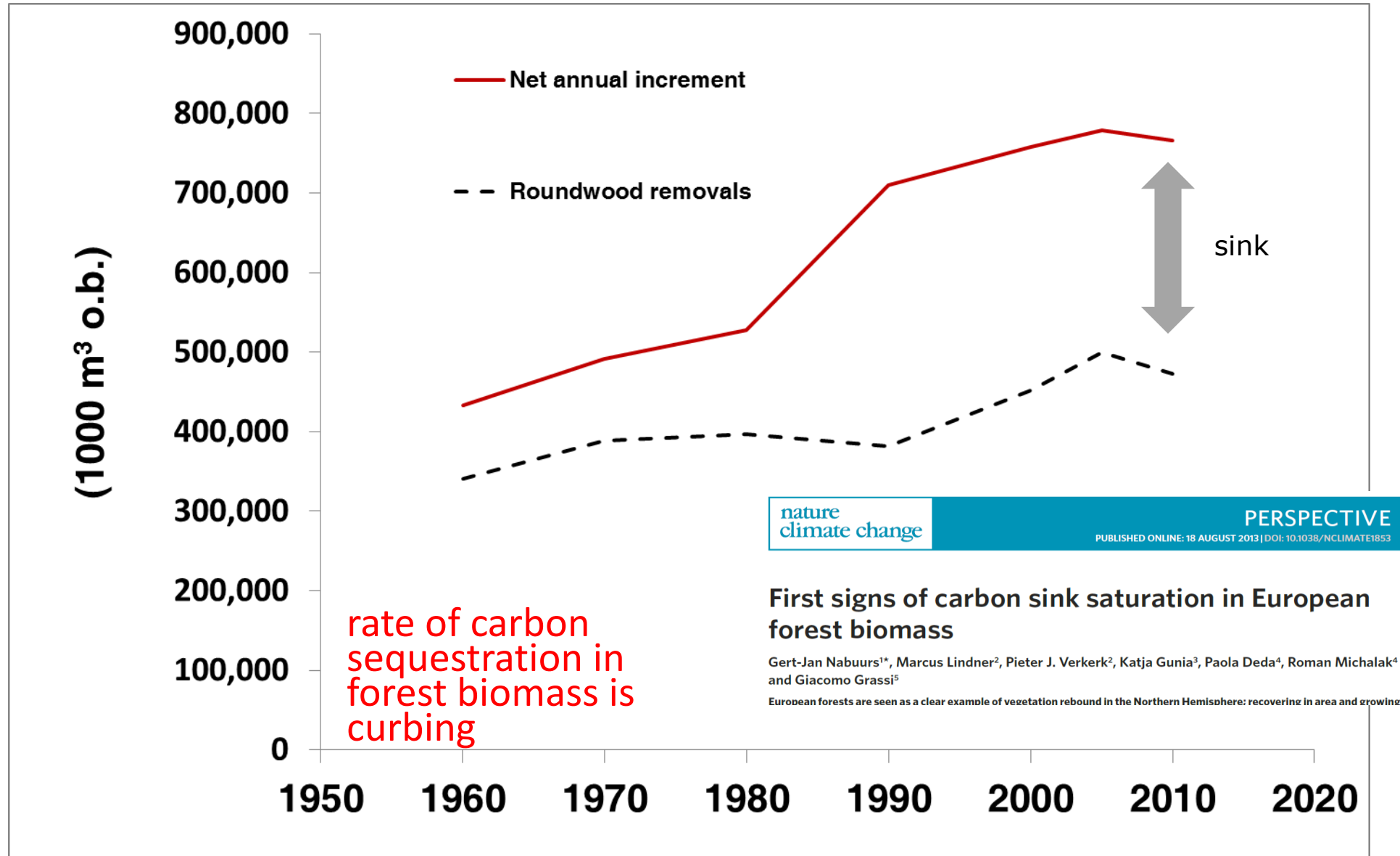


EFI publishes
first newsletter
in 1993 with
'more resources'



Growth & harvest at European scale.

2013: first signs saturation

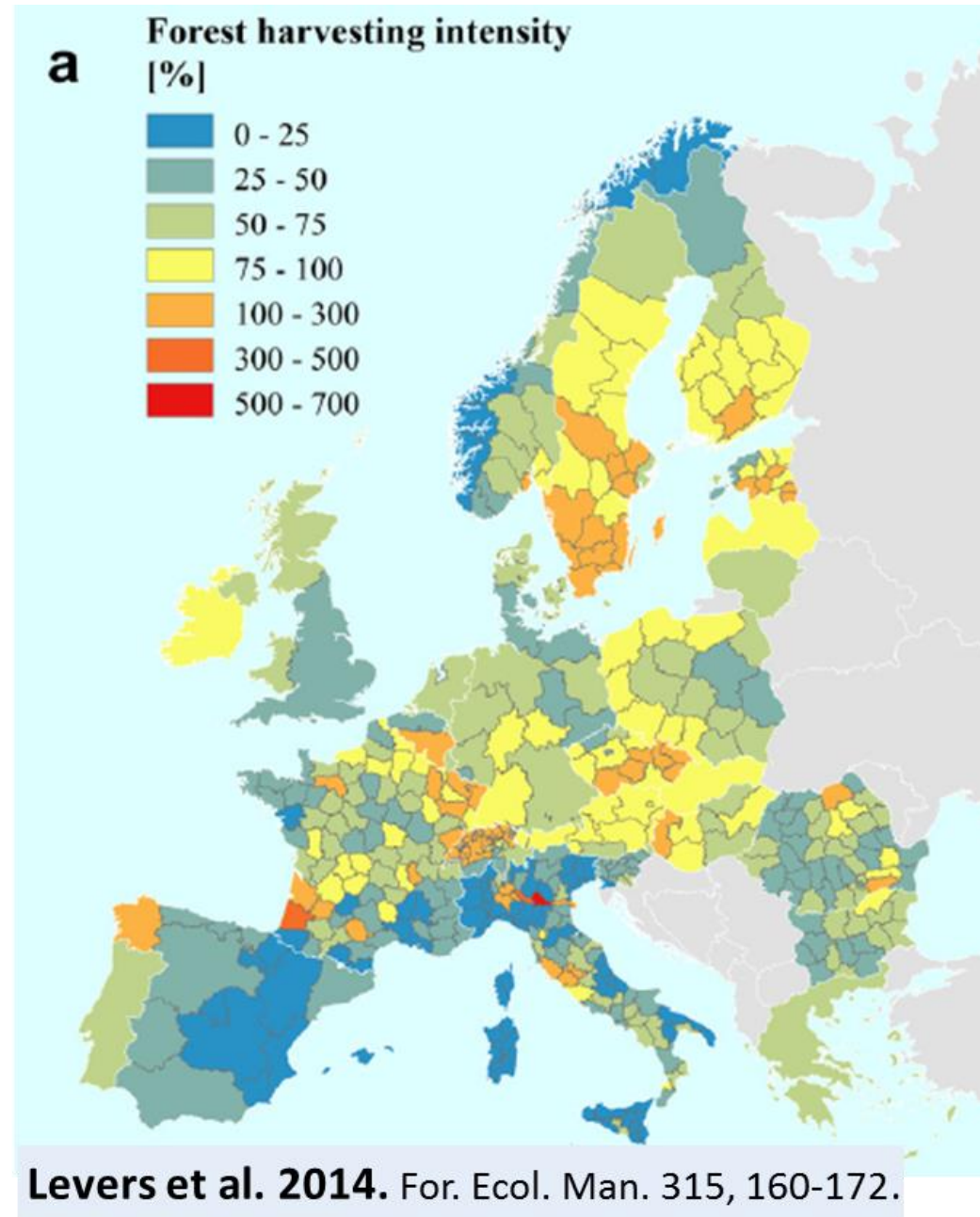


At regional scale

In many regions
harvest is close to
increment, i.e. the
sink/source balance is
delicate

EFISCEN (European
forest information
scenario model)

<https://www.wur.nl/nl/project/european-forest-resource-analysis-tools.htm>



And is the resource under pressure?

Potential future ranges;
future seemed far away

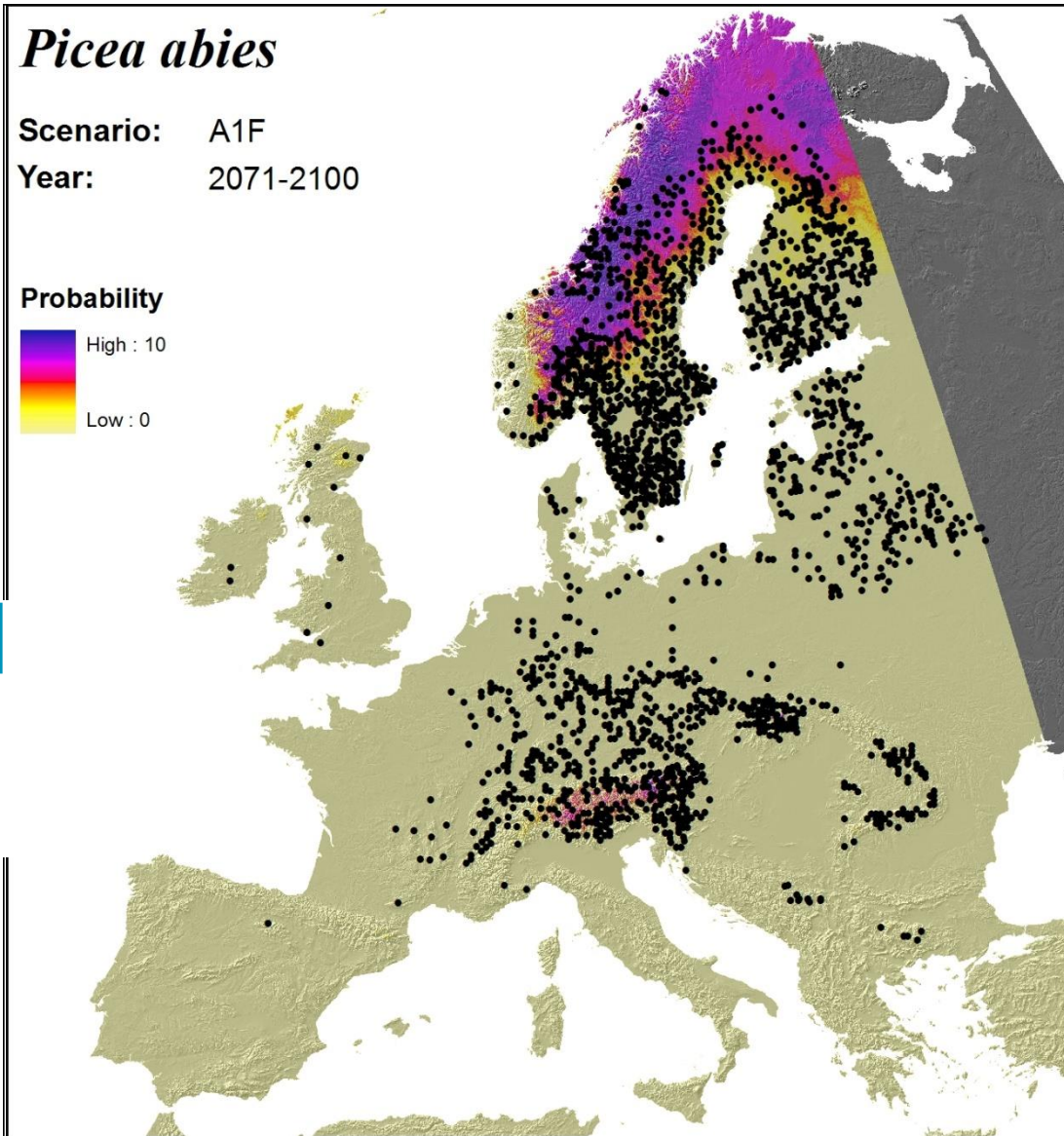
nature
climate change

LETTERS

PUBLISHED ONLINE: 23 SEPTEMBER 2012 | DOI: 10.1038/NCLIMATE1687

Climate change may cause severe loss in the economic value of European forest land

Marc Hanewinkel^{1,2*}, Dominik A. Cullmann³, Mart-Jan Schelhaas⁴, Gert-Jan Nabuurs⁵
and Niklaus E. Zimmermann⁶



Actuality: Spruce mortality. Estimated > 200 million m³. climate change pressure more imminent

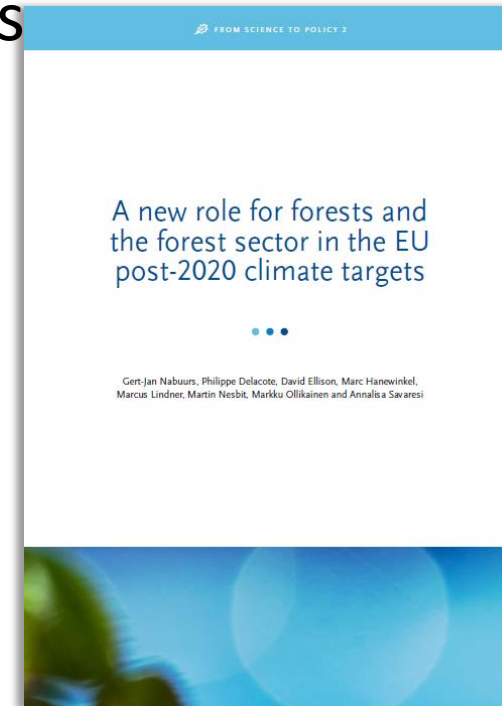
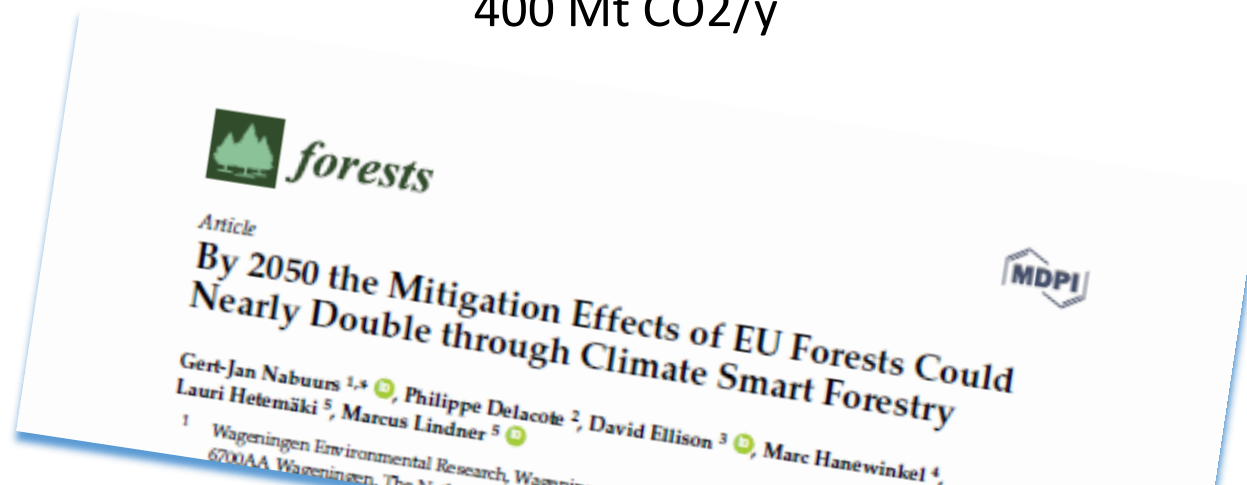


Harz. 2019

In study for EFI we introduced 'Climate Smart Forestry'

Aims at 1) sustainably increasing **forest productivity** and incomes; 2) adapting and building **resilience** to climate change; and 3) reducing and/or removing **greenhouse gas** emissions.

- Regards the whole chain incl wood products
- Regionally specific measures
 - Current sink is less than 400 Mt CO₂/y

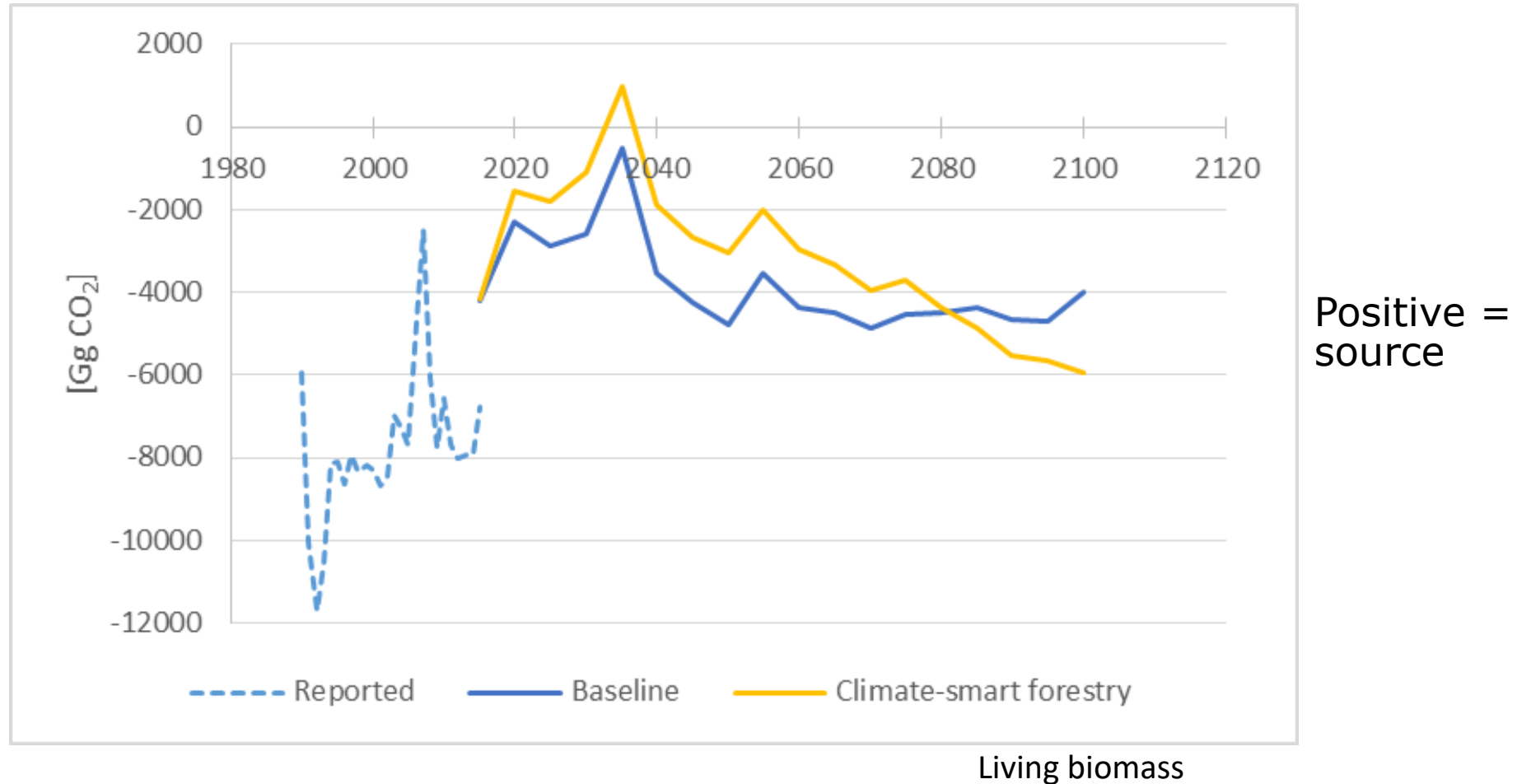


Case: Czech Republic

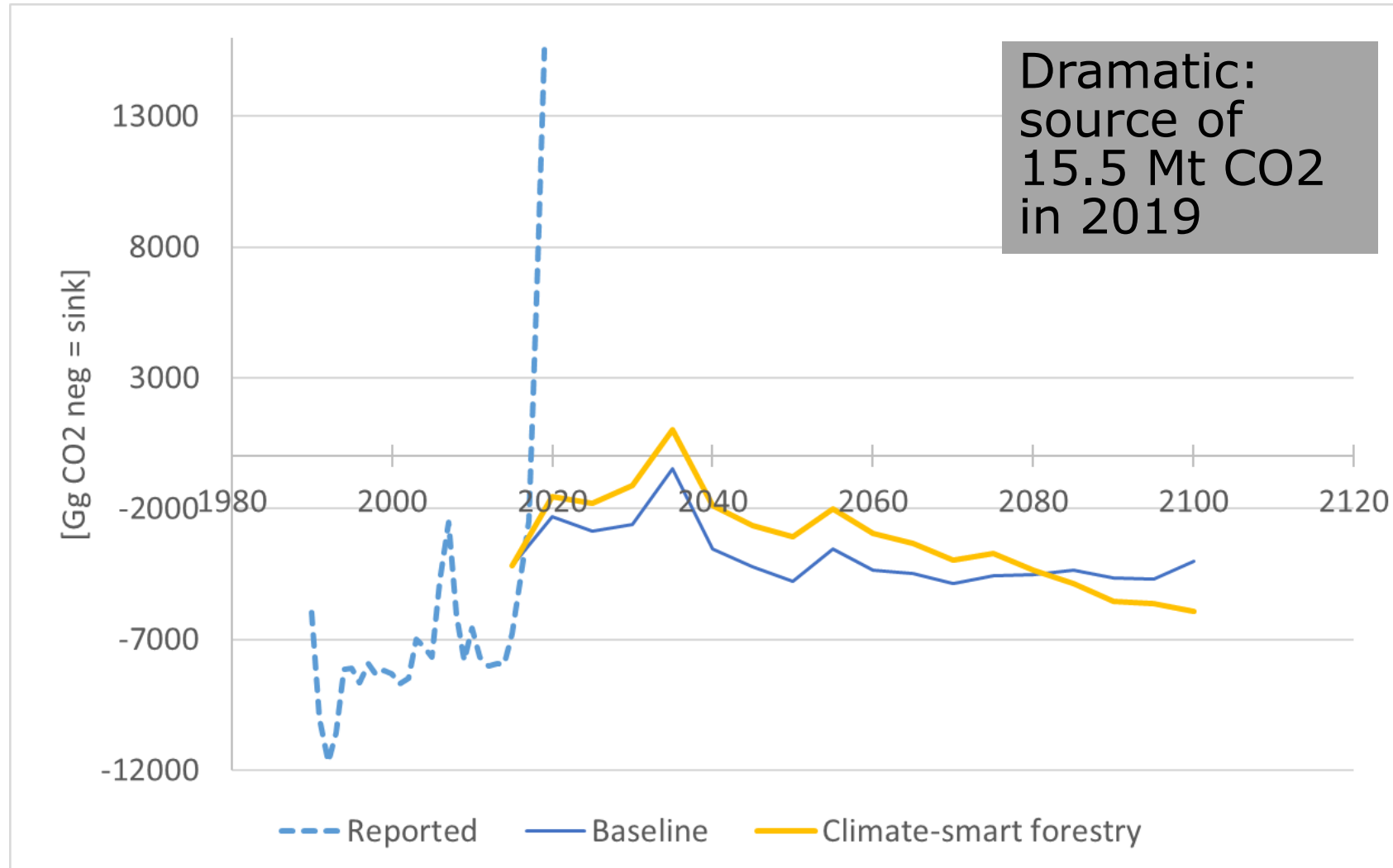
Spruce with health problems: in 2019, 90% of fellings was a sanitary felling / *EFISCEN simulation model used. Fellings are higher than increment*
How to convert this to a more stable forest resource ??

Photo: Cienciala

Results for Czech forests with reported data (dashed) to UNFCCC till 2015



And how it is developing in reality (reported data till 2019)

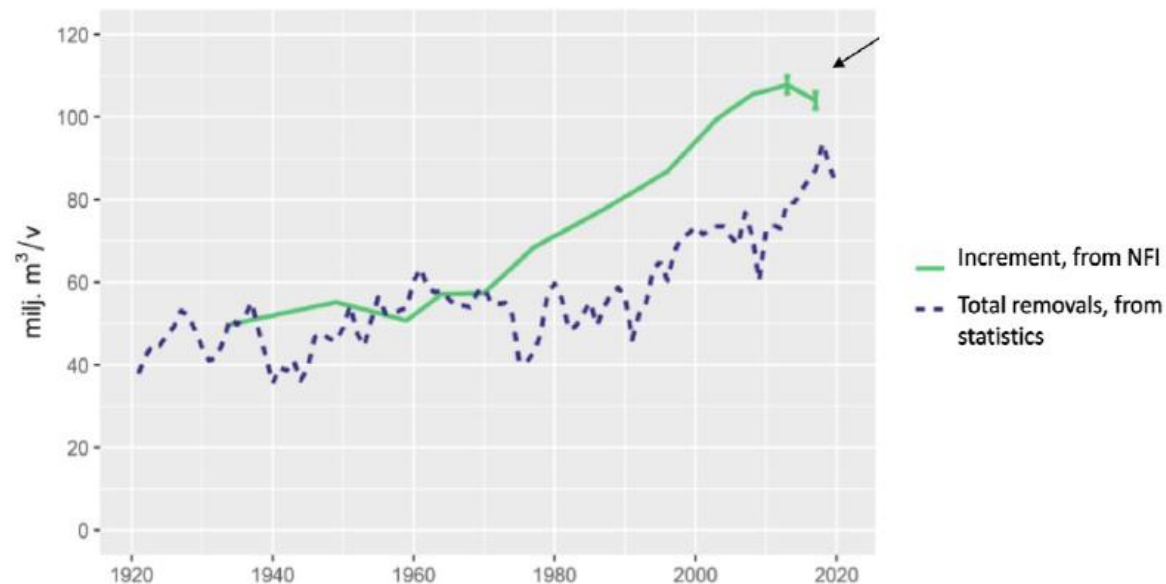


Not only mortality, also subtle growth changes

Harvest getting close to increment. Sink is declining, in several countries reaching 0

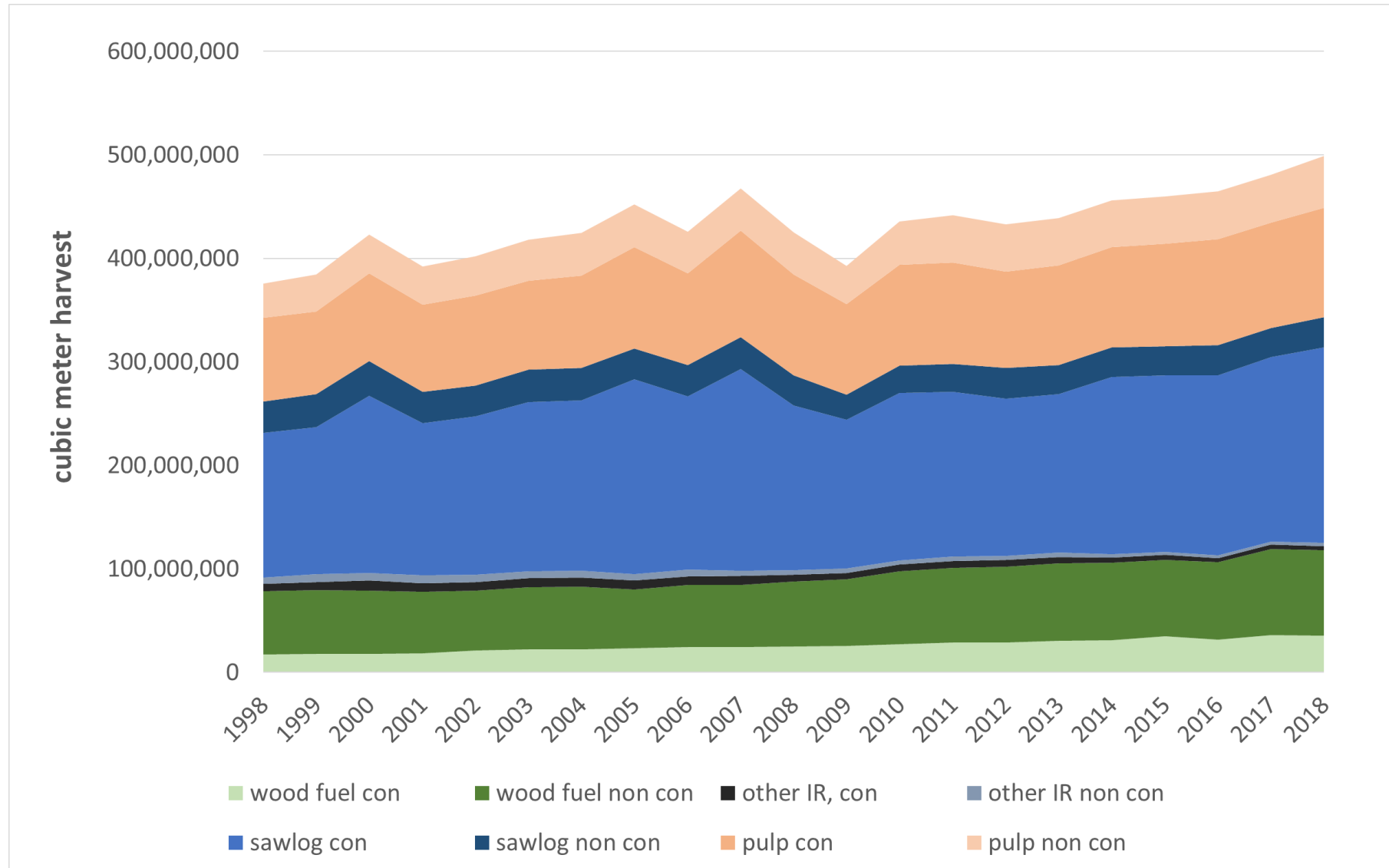
Emerging signals from National Forest Inventories

Finland: Recent observed decline in annual increment from NFI, in parallel to recent increase in total removals (as derived from statistics).



Courtesy Antti Asikainen, LUKE

Harvest on increase: 7% since pre recession (faostat)

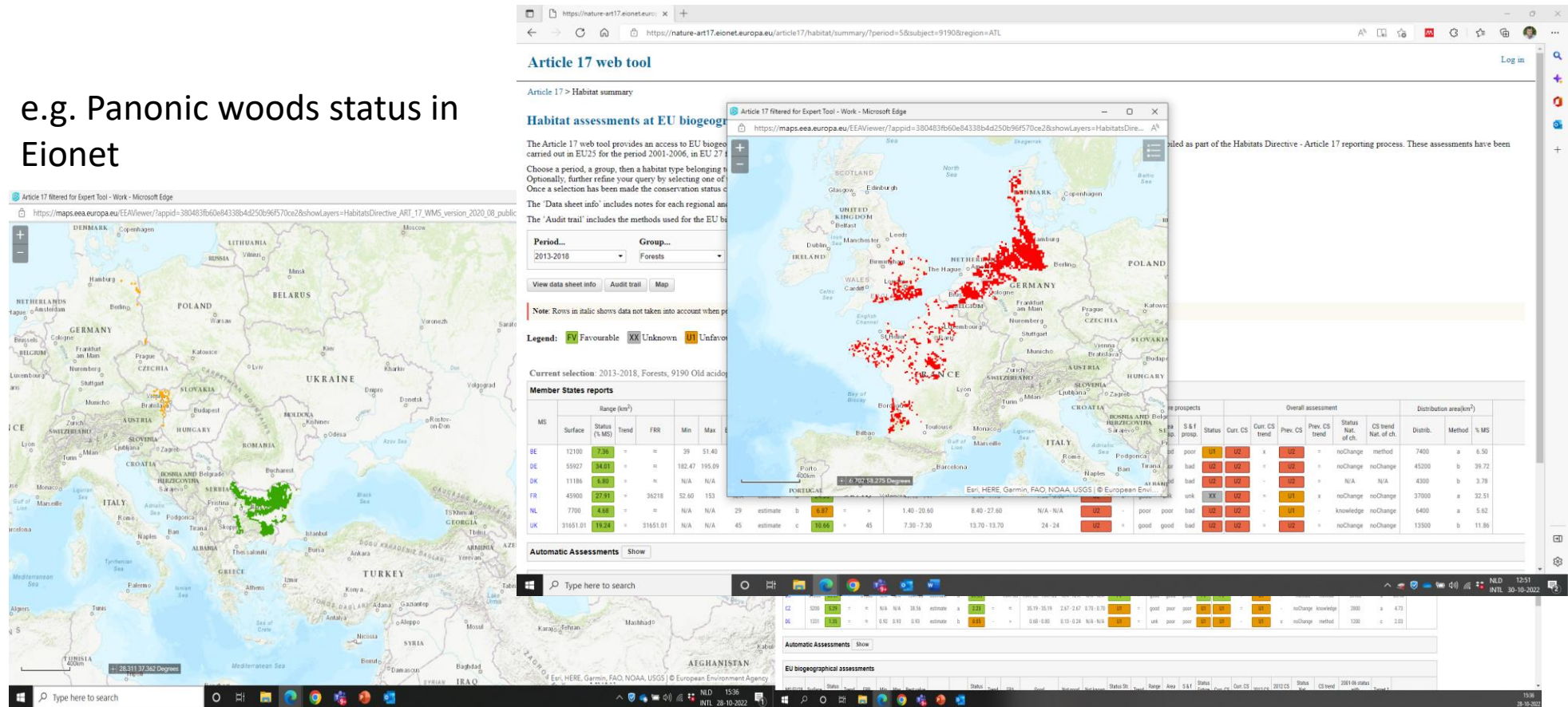


State of degradation: EEA Eionet habitat reporting

Arbitrary ???

e.g. oak in Atlantic. status in Eionet

e.g. Panonic woods status in Eionet

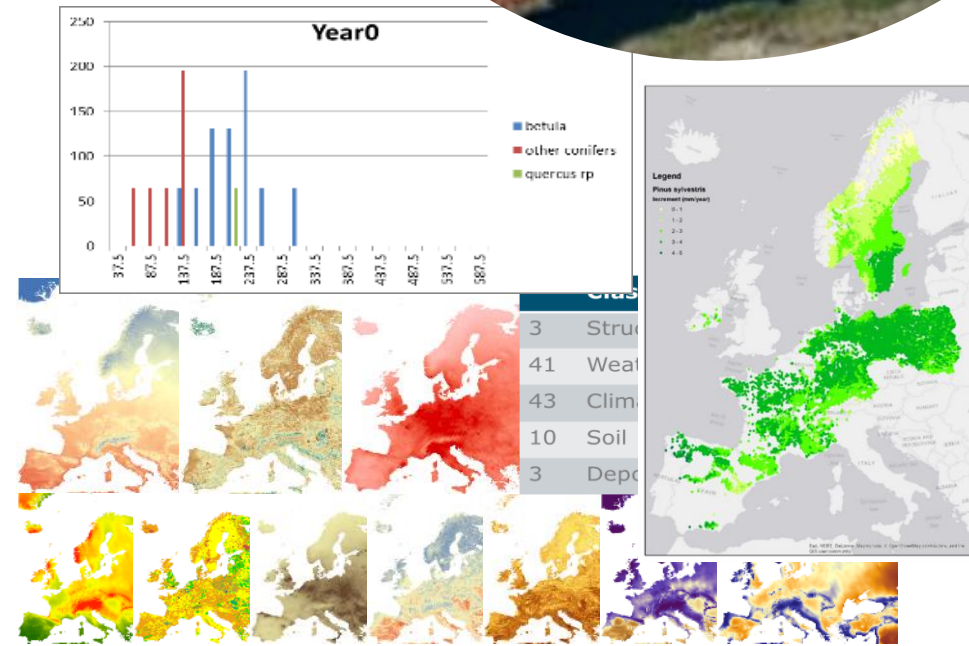
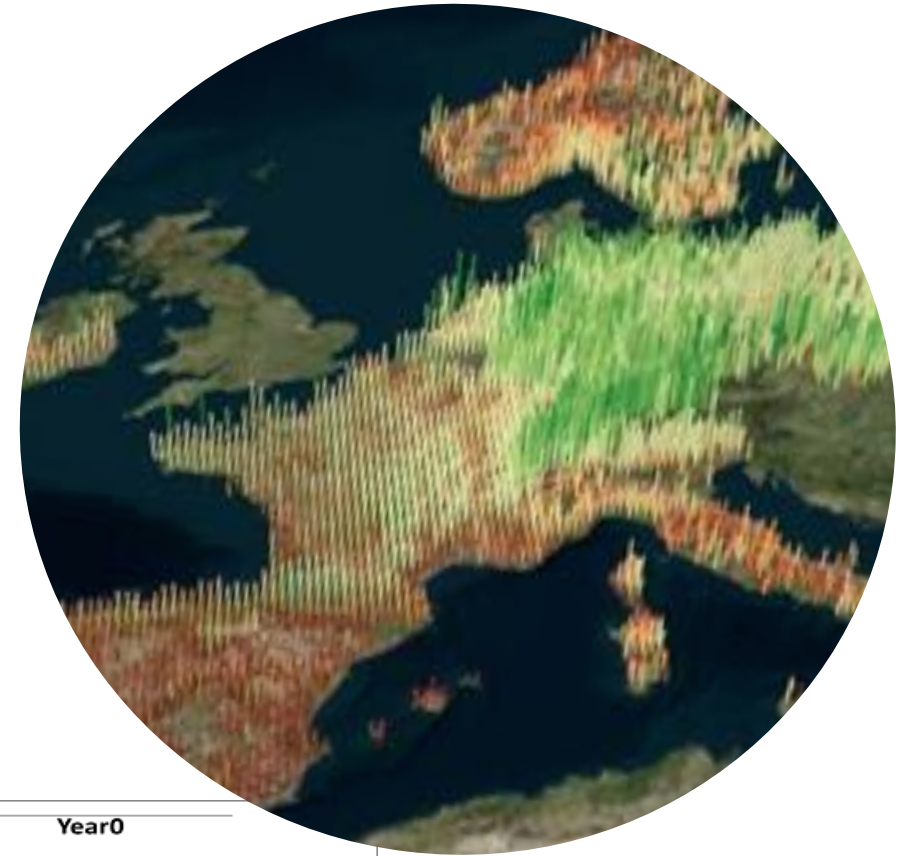


How we contribute

- High-resolution European forest resources simulator
- Empirically based (tree-wise observations from NFIs)

Outputs:

- Growing stock, harvest, costs
- Forest structure, biodiversity, dead wood,
- Soil organic carbon (SOC)



Up to six year ago we complained
Brussels did not care about forests..



*Scottish forestry and land moving from
clearcut system to continuous cover
forestry*

...we have nothing to complain about anymore.... a few:

- Green Deal: Fit for 55: *less emissions*
- LULUCF package: *more sinks*
- Restoration Regulation: *30% of habitats needs to restored*
- Biodiversity strategy: *protection*
- Sustainable Finance Initiative: *strict criteria*
- Bioenergy: REDIII: *more bioenergy, strict criteria*
- Carbon farming: *certification*
- Bauhaus initiative...*CLT coming up*
- Bioeconomy strategy
- Monitoring regulation coming.
-

Messages

- *Rapidly changing environmental circumstances*
- *Rapidly changing policy arena*
- *Many pressures and (increasing) demands on Europe's forests*
- *Sink is declining while more demands for wood and services*
- *Fragmented governance: opposing forces*
- *Rapid changing wood market*

Near Washington DC: Trump tried to protect his own forest industry with import tax on Canadian wood. Now US imports sawnwood (dead spruce) from EU



What to do:

- *Member States have to open up: they have to accept the role of Brussels*
- *Find balance between active management (incl wood products) with some set aside and protection (No 'one size fits all').*
- *Invest in reforestation & adapted tree species (habitats are shifting) (adapt 1Mha/y ~10 billion Euro/y)*
- *Private investments (industry!), together with public funding*
- *People in rural areas to do the job !*
- *ELO's role: funding mechanisms, case studies, capacity building, advocacy*



A group of cyclists is riding away from the camera on a narrow, snow-covered path through a forest. The path is muddy in the center, suggesting it has been ridden on frequently. The trees are bare, with some snow on the branches and ground. The scene is captured in a wide-angle shot, looking down the path.

Thank you

Gert-jan.nabuurs@wur.nl

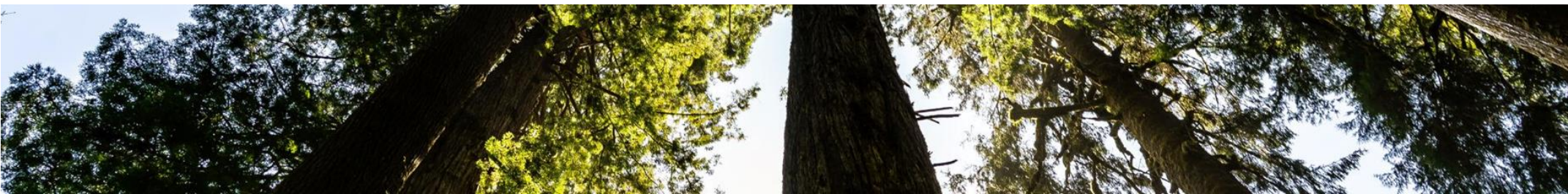
www.toerklub.nl



Panel I- What strategies to adapt EU Forests to climate change?

Moderator, Emmanuelle Mikosz, ELO Director

- Directorate General for Agriculture and Rural Development, European Commission, Team Leader-Forestry team, Argyro ZERVA
- Directorate-General for Climate Action, Adaptation and Resilience to Climate Change unit, Policy Officer, Peter LOFFLER

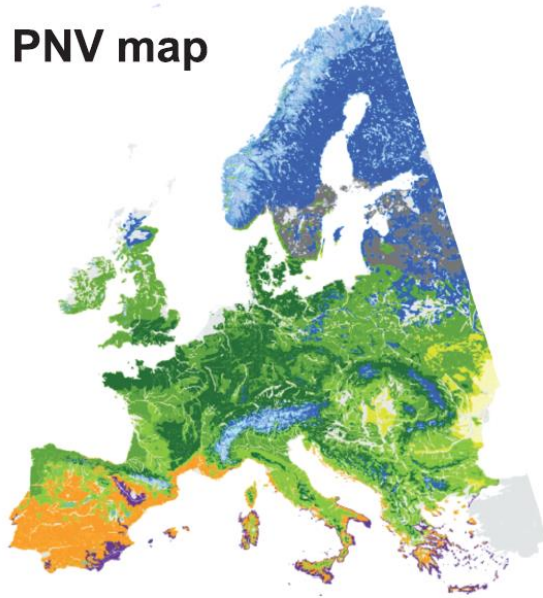


What strategies to adapt EU Forests to climate change?

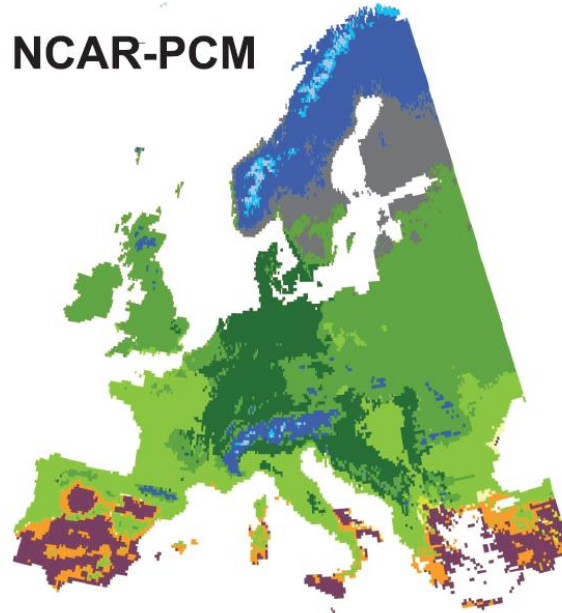
ELO European Biodiversity Conference
'Climate-ready EU forests'
Brussels, 6 December 2022
European Commission, DG Climate Action
Peter Löffler

Climate change = forest change

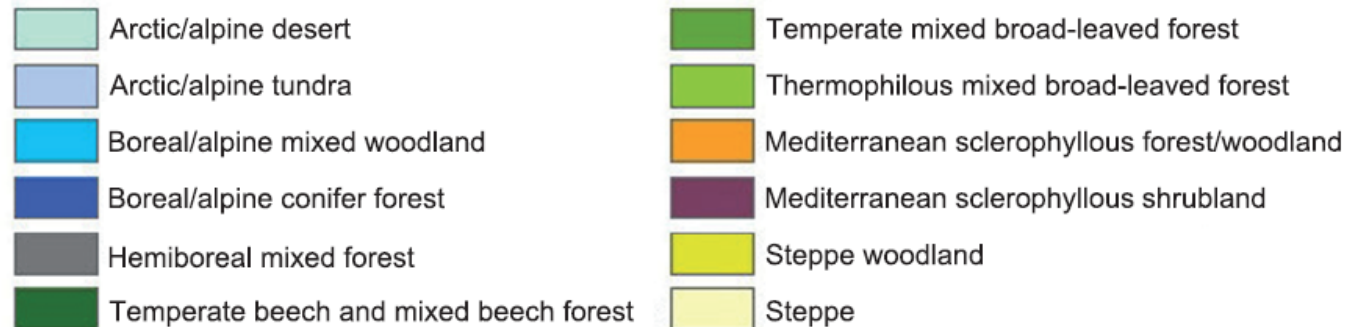
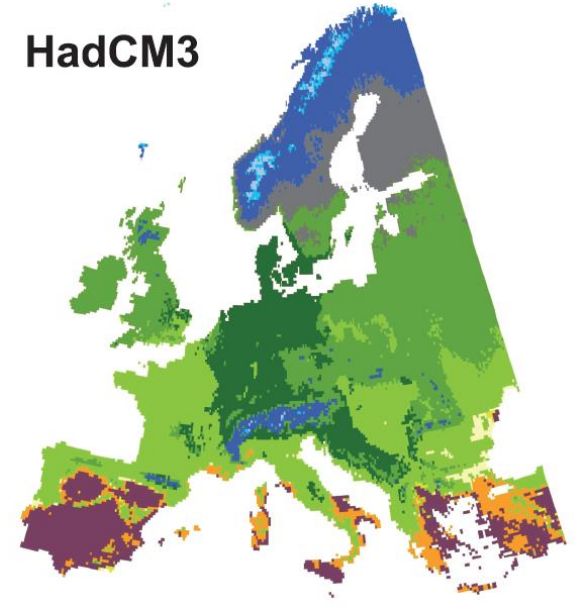
PNV map



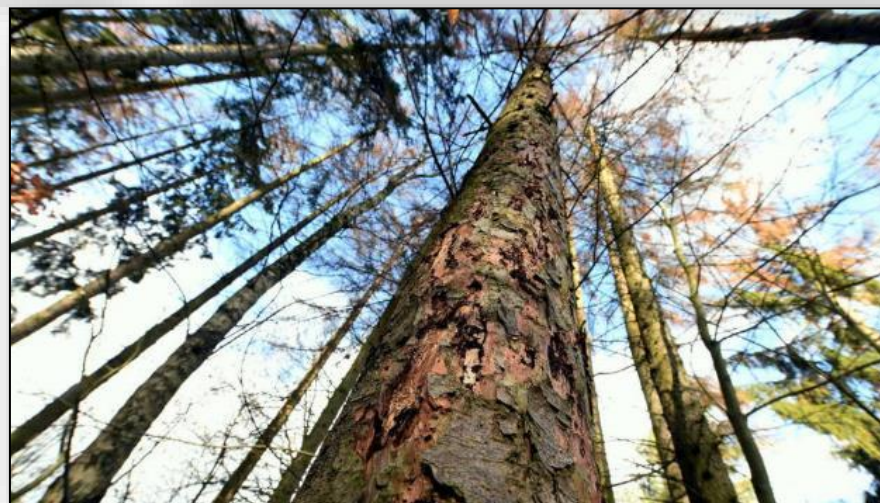
NCAR-PCM



HadCM3



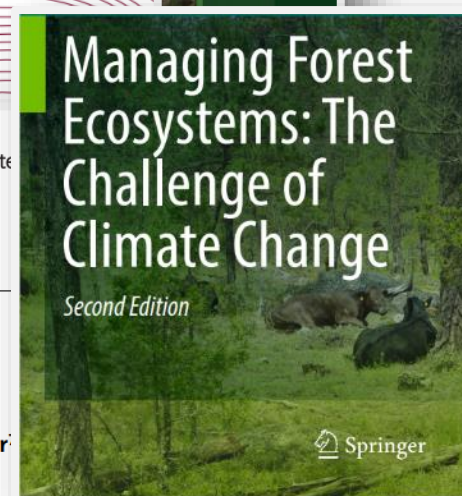
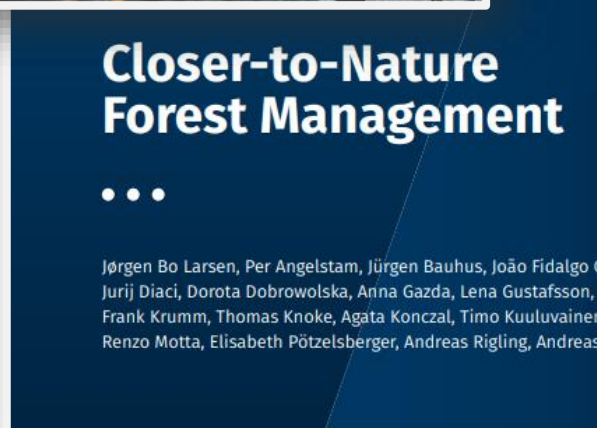
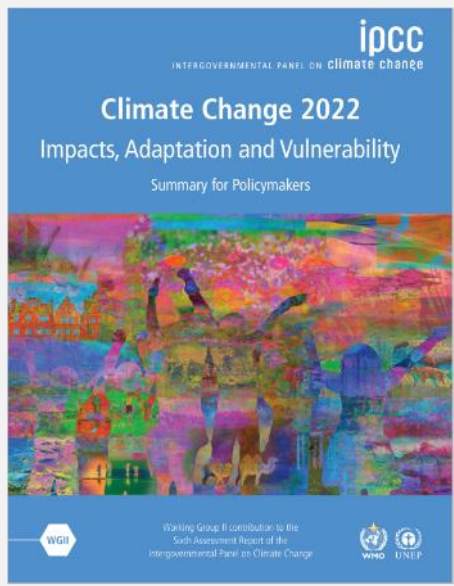
Extreme events & their impacts are already here





Forest management is a new game

- Urgent need to restructure and adapt forests in order to minimise climate risks
- Growing need for disaster preparedness, response and post-disaster forest recovery



A close-up photograph of a person's hand holding a young tree seedling. The seedling has a thin green stem and a few small green leaves at the top. At the base of the stem, a large, dark, oval-shaped seed is attached. The background is a blurred green forest.

EU policies supporting forest adaptation

Policy-setting

- EU Adaptation Strategy
- EU Forest Strategy
- EU Biodiversity Strategy
- EU Soil Strategy

Legislation

- LULUCF framework & Carbon Farming
- Nature Restoration Law
- Forest reproductive material
- Forest Monitoring and Strategic Planning



EU policies supporting forest adaptation

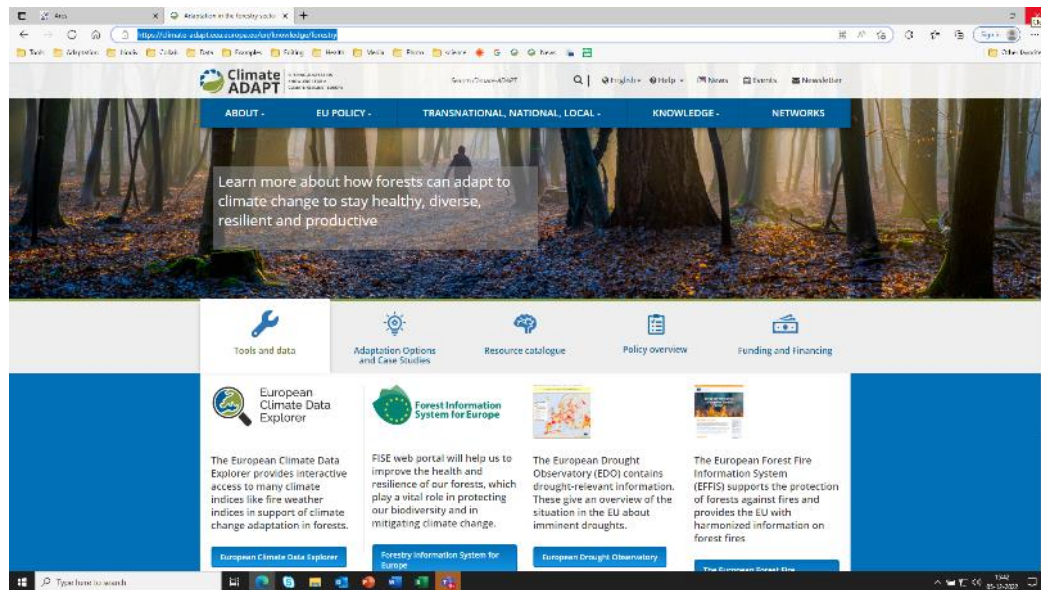
Funding, financing

- Structural and Investment Funds
- Recovery and Resilience Facility
- Technical Support Instrument
- Horizon Europe, including Adaptation Mission
- LIFE

Data and knowledge exchanges

- Climate-ADAPT
- Forest Information System for Europe (FISE)
- European Forest Fire Information System (EFFIS)

New: Climate-ADAPT section on forests



<https://climate-adapt.eea.europa.eu/en/knowledge/forestry>

Objective

Collect, disseminate and promote knowledge on how to adapt forests to climate change and strengthen their resilience

Looking for case studies on...

- good forestry practices which reduce vulnerability, enhance resilience and adaptive capacity ('no regret measures')
- Good practices of forest disaster prevention, preparedness, disaster response, and post-disaster recovery
- Good (financial) risk management and prevention practices

Thank you

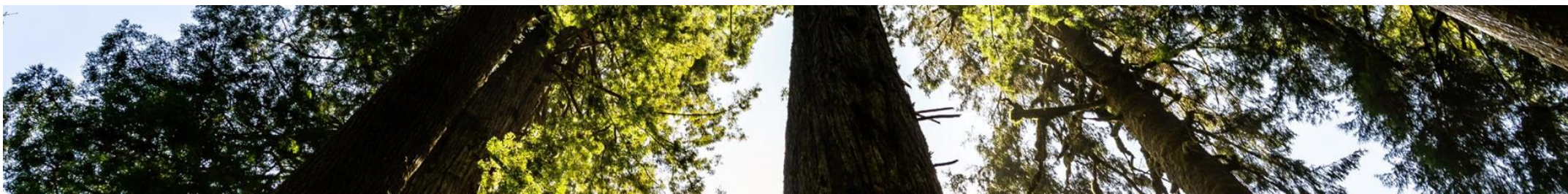
peter.loeffler@ec.europa.eu



Panel II- How to move concretely into action?

Moderator, Luc BAS, Head of Coordination, Networks & Strategy at EEA Climate and Nature Ambassador

- Board Member, Jane Goodall Institute (Belgium), Els MARTENS
- Vice President, SVOL - Czech private owners forestry association Czech Republic, Constantin KINSKÝ
- Secretary General, European Organisation of the Sawmill Industry, Silvia MELEGARI





Jane Goodall Institute

Jane Goodall Institute Belgium

How we encourage action for forests and biodiversity
and relation with climate change

Els Martens, JGI Board member



Jane Goodall Institute

1. Forest planting - Forest in One Day

- Supported by Forest Groups and Sylva Nova: choice of tree species:
=> More climate robust tree species, adapted to soil condition of location
- Financial support from partners: Luminus, UPS, Flemish Dept. ENV
=> Per tree planted here several trees in Burundi = unique relation
- Programme on CO² offset certification

2. Youth empowerment - Roots & Shoots programme

- Work sessions at schools on SDGs => stimulate sustainable life habits
- Greening schoolyards: vegetable garden, insect hotel, (fruit) trees and scrubs
- Project subsidies from QiGreen, Flemish Dept. ENV – cooperation with GP

3. Advocacy - at our events + joining campaigns eg. 'no deforestation in my plate'

- **Actions in Belgium**



- R&S at schools
- Info session local authorities
- Involving local communities for tree planting





Jane Goodall Institute

JGI Belgium: impact & visibiliteit – February 2022



190+

Chimpanzees
cared for in
our JGI
sanctuaries.



78,000+

Trees planted in
Belgium since **2014**,
17 forests created.



4.8m

Trees planted
in Burundi.



50+

JGI Be
volunteers.



600

Roots & Shoots
participants.

Inspiring hope through action



- **Tree planting in Burundi:**
- - awareness on need of forest protection
- - nursery and planting with local communities
- - involving R&S groups and schools

JGI impact in Burundi

Guillaume Verger, JGI Belgium

ENVIRONMENTAL & SOCIAL



100

Chimpanzees
isolated in 3 small
areas of endangered
forest in the south
of Burundi



1-6M

Trees to be
planted in the
south of Burundi



15-60K

Tonnes of **CO2**
absorbed per year



20K

Local people
involved in planting
trees and develop
the agroforestry



96

Schools involved
in education &
empowerment to
protect their
wildlife &
biodiversity



10

**Sustainable
Development
Goals** to be
worked on at a
time

SUSTAINABLE
DEVELOPMENT
GOALS



Jane Goodall Institute



Climate, Community
& Biodiversity Standards
A VERRA STANDARD



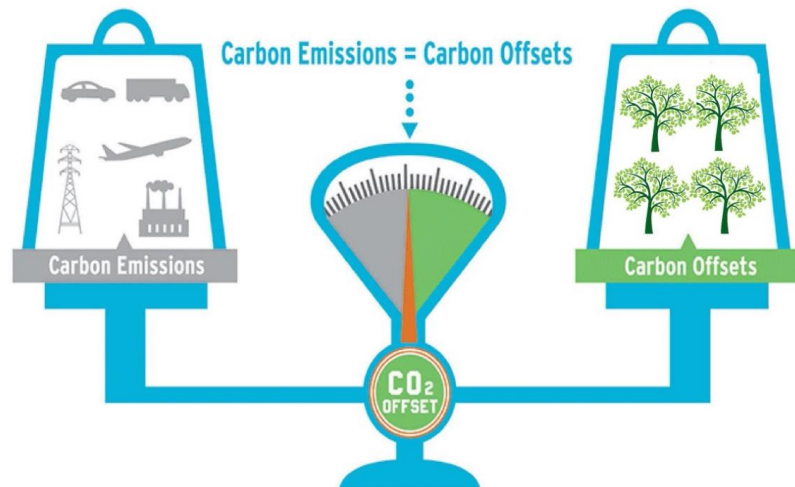
Verified Carbon
Standard
A VERRA STANDARD

VOLUNTARY CARBON OFFSET

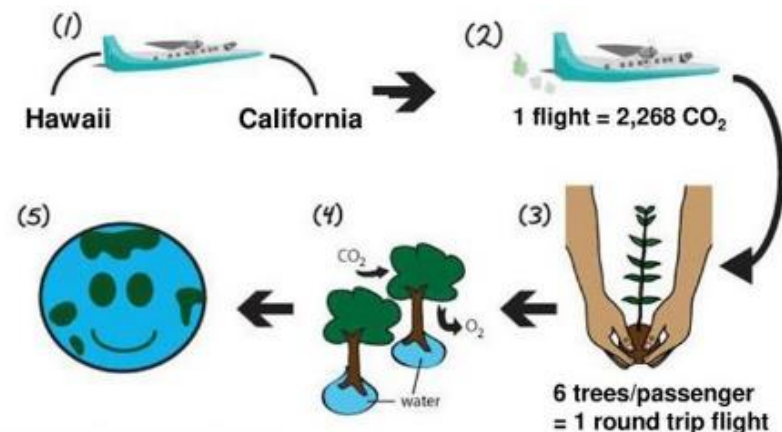
The voluntary carbon market enables private investors, governments, non-governmental organizations, and businesses to voluntarily purchase carbon offsets to offset their emissions.

Companies that are unable to reduce their emissions can purchase carbon offsets from verified suppliers to offset their emissions.

The revenues collected are used to finance the carbon reduction project.



How Carbon Offset Works:



Guillaume Verger, JGI Board



Jane Goodall Institute

Want to support JGI Belgium?

- see our website: <https://www.janegoodall.be/join-us>
⇒ For campaigns, volunteering, partnerships
- and also: <https://www.janegoodall.be/support-the-institute>
⇒ Chimp guardianship, membership, sponsor trees
- for R&S sessions at the school or youth organisation of your kids:
=> Send mail to: rootsandshoots@janegoodall.be

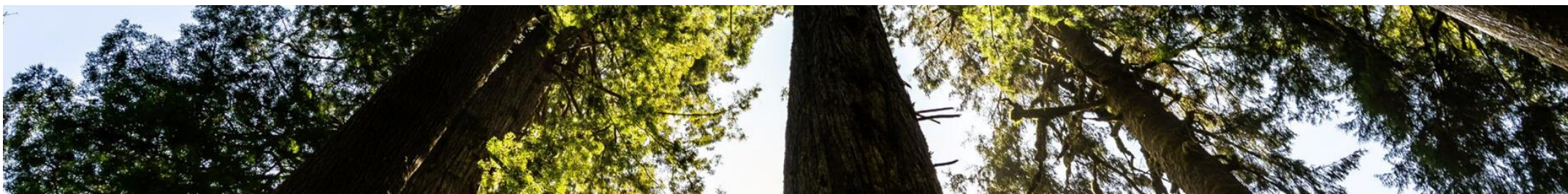
Thank you for your attention



Panel II- How to move concretely into action?

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CLIMATE-READY EU FORESTS

European Biodiversity Conference by ELO- 6 December 2022

THE SAWMILL INDUSTRY: GROWTH FOR EUROPE



35,000 sawmills
around EU
mainly located in
rural areas



The sawmill industry
accounts for a
yearly production
value of over EUR
37 billion



It employs about
250,000 people
across Europe



Beyond Sustainability: Our Commitment

Over 90% of logs used come from European Forests (currently 100% due to the sanctions to Russia);
Compliance with the EUTR plus several sawmills had already in place technologies to trace the movement of timber and guarantee transparency & legality in the supply chain.

FUTURE DEMAND FOR WOOD - FORECAST 2050 BY FAO

8.5. FAOSTAT DATA UP TO 2020 AND GFPM OUTPUT TABLES 2050 BY REGION

Sawnwood consumption 1 000 m ³ (RWE)	1990	2000	2010	2020	2030	2040	2050
Eastern Asia	137 119	87 737	144 580	274 743	299 008	381 026	391 407
Southern Asia	39 341	19 612	19 662	21 965	31 430	36 516	40 023
South-eastern Asia	33 714	27 610	33 186	33 266	50 322	55 437	59 466
Northern Africa, Western & Central Asia	20 998	27 910	53 589	55 022	60 871	75 055	85 197
Sub-Saharan Africa	14 229	13 055	14 725	17 597	17 534	19 808	21 634
Latin America & the Caribbean	44 486	59 295	56 654	42 080	53 061	58 516	62 390
Europe	402 475	242 148	219 058	228 835	229 562	242 778	249 511
Northern America	233 373	281 061	186 511	239 845	250 900	263 363	274 547
Oceania	12 933	15 201	15 667	15 804	17 607	20 026	21 417
Total World	938 668	773 629	743 632	929 157	1 010 295	1 152 524	1 205 592

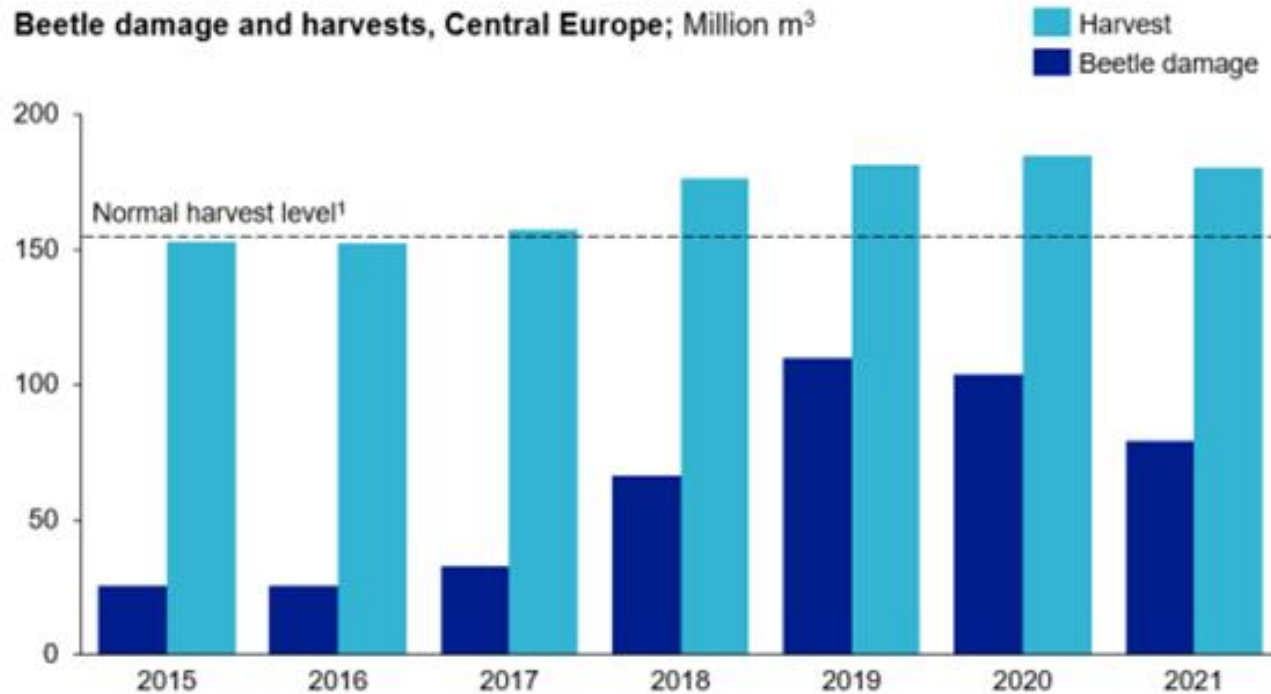
+30%



IMPACT OF CLIMATE CHANGE ON FORESTS

According to JRC , forest fires are increasing and over the last five years and area as big as Belgium has been destroyed by fires. 2022 might beat the record year in terms of area burnt.

Beetle damage and harvests, Central Europe; Million m³




1. Average 2010-2017

Source: UNECE; FEA. WRI/OA analysis

- Harvests rose from pre-outbreak average of 155 mln m³ to peak of 185 mln m³ in 2020.
- Additional supply of ~100 mln m³ (~25 mln m³ per year) in 2018-21e.
- Coincided (fortunately) with strong lumber markets in 2020-21.
- Harvest already declining, 2022 expected to be ~4% below peak (2020).



WOOD AS CLIMATE FRIENDLY MATERIAL



“Wood is the only sustainable structural material which can enable a substantial and quick decarbonisation of the built environment working to science-based targets. Wood is one of our oldest natural building materials can provide a vision for future urban habitats, providing vast carbon sinks in our rural areas and huge carbon stores in our cities.”

Substituting wood for conventional building materials reduces emissions by 69%.

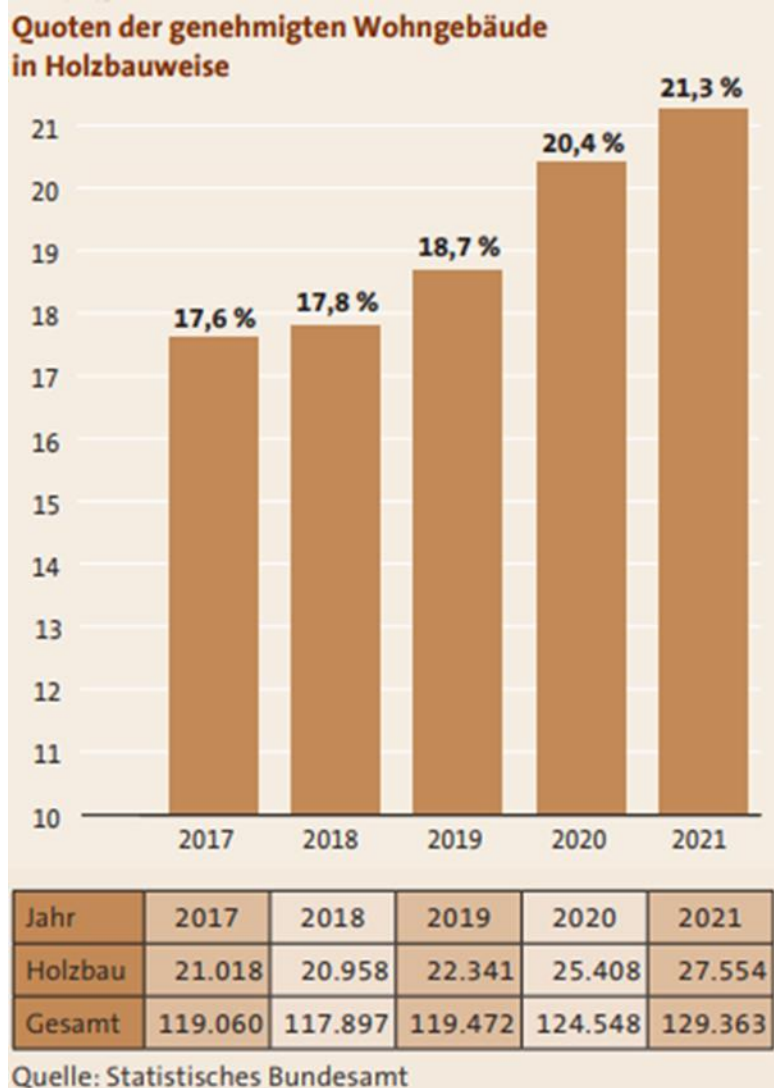
Using wood in half of new urban construction may achieve 9% of 2030 emissions goals.



Wood also helps reduce energy consumption: its cellular structure make it a poor conductor of heat and 10 times more insulating than concrete, 400 times more than steel and 1,700 times more than aluminium.

WOOD GAINING MARKET SHARE IN EU

Holzbauanteil gesamt in Österreich



AT: from 14 to 24 % in relation to the total usable space in building construction between 1998 and 2018



DE : Residential building (new building) 2021
Permits with wood as predominantly used material



In 2020, The share stood at 15.6% across all building categories in 2020.

CONCLUSIONS:

Assess the impact of all policies/legislations/decisions affecting the use of forest resources => need to be more coherent, thus considering cross-sectoral effects of wood product use and net impacts on the bioeconomy.

A very crucial factor in the sawmill sector is the future availability of raw material.

For this reason, it is of utmost importance to:

1. Implement climate policy objectives which do not neglect a sustainable mobilization of wood resources.
2. Encourage afforestation & reforestation measures taking into **EQUAL consideration** both environmental and industrial needs;
3. Identify new wood species to be used in construction and develop standards;
4. Organize EU-wide collection of calamity-felled trees in coordination with the EU wood processing industry.





The European Sawmill Industries





Concluding Remarks

Jurgen TACK, ELO Scientific Director

