6 DECEMBER 2022
16.00 - 18.00
In person event

CLIMATE-READY EU FORESTS

EUROPEAN BIODIVERSITY CONFERENCE
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

rate of carbon sequestration in forest biomass is curbing
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

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

Marc Hanewinkel, Dominik A. Cullmann, Mart-Jan Schelhas, Gert-Jan Nabuurs, and Niklaus E. Zimmermann
Actuality: Spruce mortality. Estimated > 200 million m³. Climate change pressure more imminent
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
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

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

Dramatic: source of 15.5 Mt CO2 in 2019
Not only mortality, also subtle growth changes. Harvest getting close to increment. Sink is declining, in several countries reaching 0.
Harvest on increase: 7% since pre recession (faostat)
State of degradation: EEA Eionet habitat reporting

Arbitrary ???

e.g. Panonic woods status in Eionet

e.g. oak in Atlantic. 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 years 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
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
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
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

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 Belgium

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

Els Martens, JGI Board member
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’

**Inspiring hope through action**
- R&S at schools
- Info session local authorities
- Involving local communities for tree planting
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

Climate, Community & Biodiversity Standards
Verified Carbon Standard

Jane Goodall Institute
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.
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 was 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.)
### 8.5. FAOSTAT DATA UP TO 2020 AND GFPM OUTPUT TABLES 2050 BY REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Asia</td>
<td>137 119</td>
<td>87 737</td>
<td>144 580</td>
<td>274 743</td>
<td>299 008</td>
<td>381 026</td>
<td>391 407</td>
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<tr>
<td>Southern Asia</td>
<td>39 341</td>
<td>19 612</td>
<td>19 662</td>
<td>21 965</td>
<td>31 430</td>
<td>36 516</td>
<td>40 023</td>
</tr>
<tr>
<td>South-eastern Asia</td>
<td>33 714</td>
<td>27 610</td>
<td>33 186</td>
<td>33 266</td>
<td>50 322</td>
<td>55 437</td>
<td>59 466</td>
</tr>
<tr>
<td>Northern Africa, Western &amp; Central Asia</td>
<td>20 998</td>
<td>27 910</td>
<td>53 589</td>
<td>55 022</td>
<td>60 871</td>
<td>75 055</td>
<td>85 197</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>14 229</td>
<td>13 055</td>
<td>14 725</td>
<td>17 597</td>
<td>17 534</td>
<td>19 808</td>
<td>21 634</td>
</tr>
<tr>
<td>Latin America &amp; the Caribbean</td>
<td>44 486</td>
<td>59 295</td>
<td>56 654</td>
<td>42 080</td>
<td>53 061</td>
<td>58 516</td>
<td>62 390</td>
</tr>
<tr>
<td>Europe</td>
<td>402 475</td>
<td>242 148</td>
<td>219 058</td>
<td>228 835</td>
<td>229 562</td>
<td>242 778</td>
<td>249 511</td>
</tr>
<tr>
<td>Northern America</td>
<td>233 373</td>
<td>281 051</td>
<td>186 511</td>
<td>239 845</td>
<td>250 900</td>
<td>253 363</td>
<td>274 547</td>
</tr>
<tr>
<td>Oceania</td>
<td>12 933</td>
<td>15 201</td>
<td>15 667</td>
<td>15 804</td>
<td>17 607</td>
<td>20 026</td>
<td>21 417</td>
</tr>
<tr>
<td>Total World</td>
<td>938 668</td>
<td>773 629</td>
<td>743 632</td>
<td>929 157</td>
<td>1 010 295</td>
<td>1 152 524</td>
<td>1 205 592</td>
</tr>
</tbody>
</table>

+30%
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.

- 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 2018-21.
- 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

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 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.”

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

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

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.
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.
Concluding Remarks

Jurgen TACK, ELO Scientific Director