

NORTHERN FORESTS AND CLIMATE CHANGE

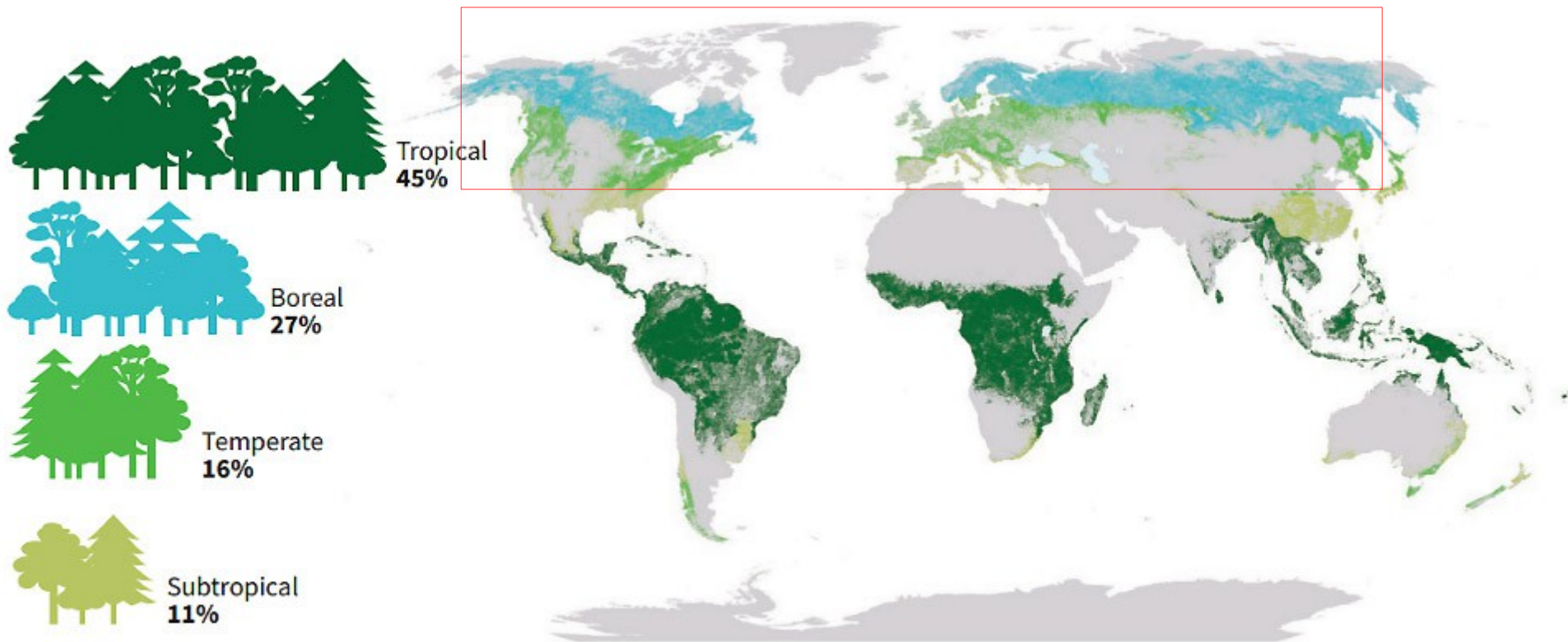
**NGO CONTRIBUTION TO
45TH JOINT ECE/FAO WORKING PARTY DISCUSSION ON
FORESTS AND CLIMATE CHANGE**

GENEVA, 23 MAY 2024

NORTHERN FORESTS AND CLIMATE CHANGE PROJECT

- NGO coalition: increase visibility of Northern Forests in international climate debate;
- Based on common demands:
 - Limit temperature rise to 1.5°C;
 - Protect and restore forests to deliver full range of ecosystem services;
 - Protect at least 30% of forests, incl. all primary forests, in every country;
 - Shift to ecosystem/close-to-nature management models.

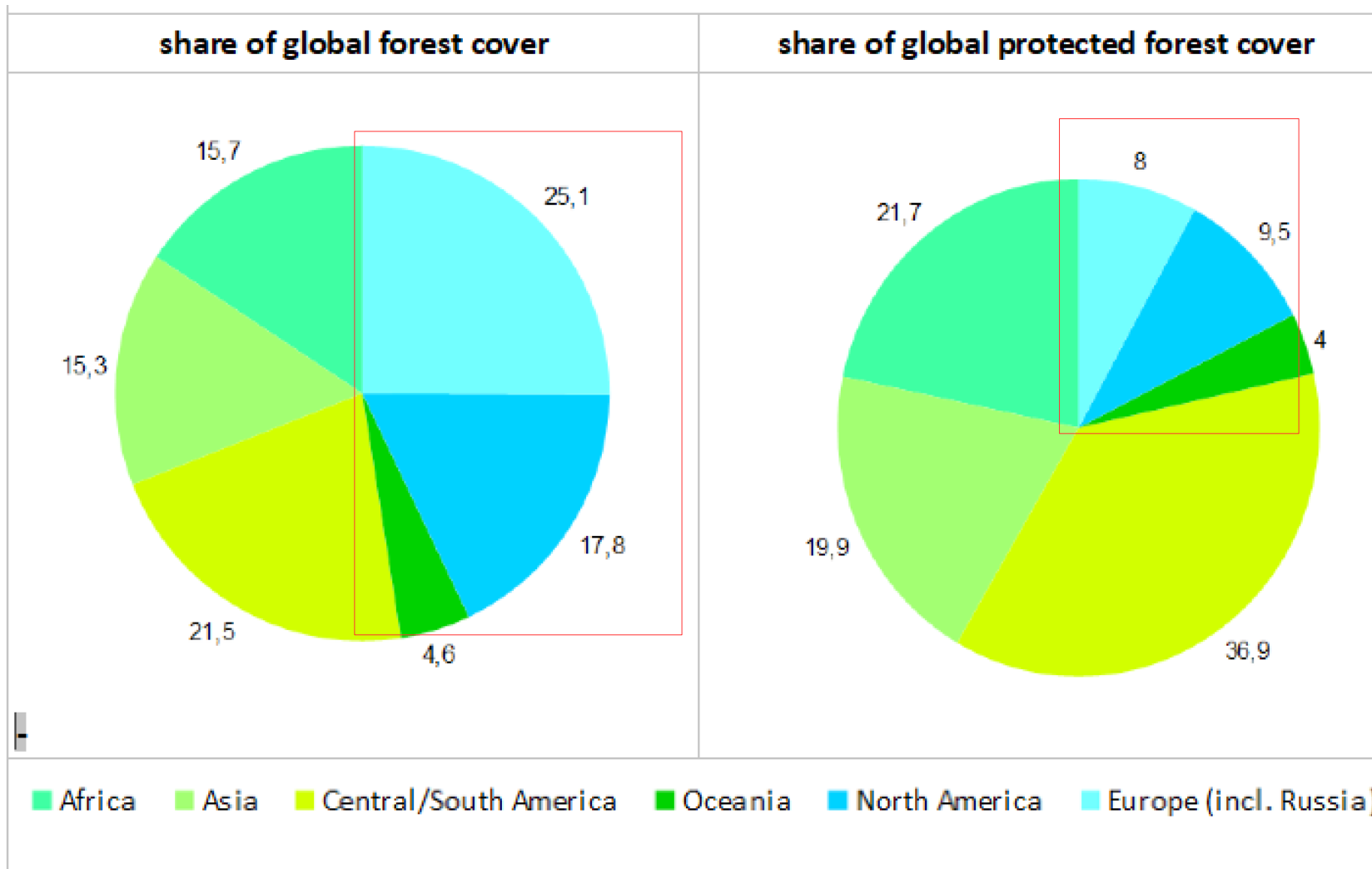
NORTHERN FORESTS



Source: Adapted from United Nations World map, 2020.

Includes boreal and temperate forests of North America and Europe, including Russia

>40% SHARE OF GLOBAL FOREST COVER
<20% SHARE OF PROTECTED FORESTS



Source: FAO Global Forest Resources Assessment 2020

ALMOST HALF OF GLOBAL CARBON STOCK

Global forest carbon stock

	Share of global forest carbon stock	share of carbon stock in forest biomass	share of carbon stock in forest soils
Northern Forests	47%	39%	57%
North America	21%	19%	23%
Russia	20%	15%	26%
Europe (excl. Russia)	6%	5%	7%
Other Forests	53%	61%	43%
Central & South America	23%	29%	15%
Asia	13%	12%	14%
Africa	12%	15%	9%
Oceania	5%	5%	5%

Source: FAO Global Forest Resources Assessment 2020

Climate impacts in northern forests

March 2024

- Higher than average temperature
- Increased droughts/fires, insects, ...
- Managed forests more vulnerable

INCREASED DROUGHT AND FIRES

Risk of wildfire damage per degree warming

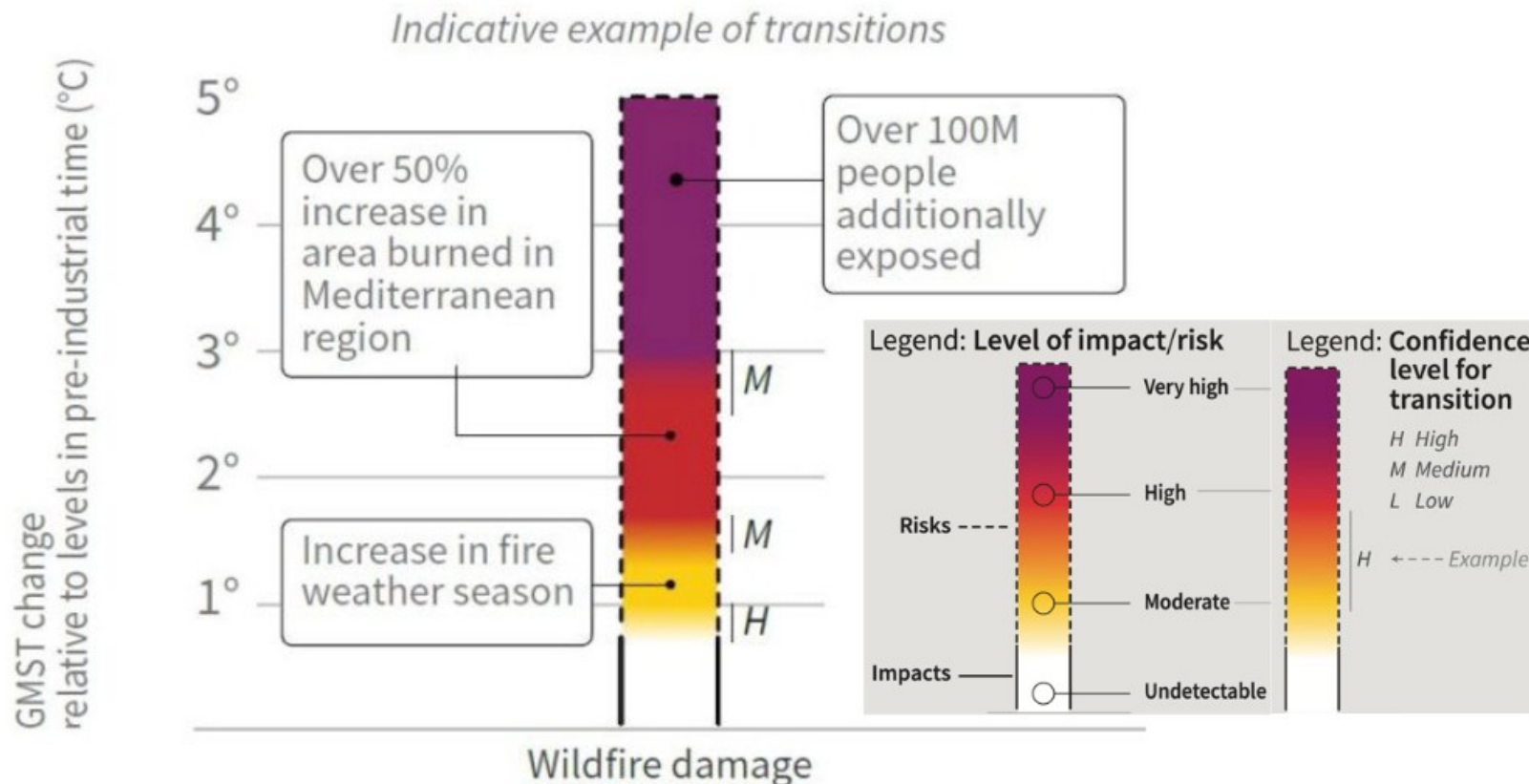


Figure 9: "Burning embers" showing the risk of wildfire damage in relation to global mean surface temperature change. The colour bar represents level of impact/risk while the confidence level for transition is given with the letter H for high and M for medium. Text boxes explain example impacts for the different levels of impact.⁶²

INCREASED PESTS AND INSECTS

Increased vulnerability to insect outbreaks

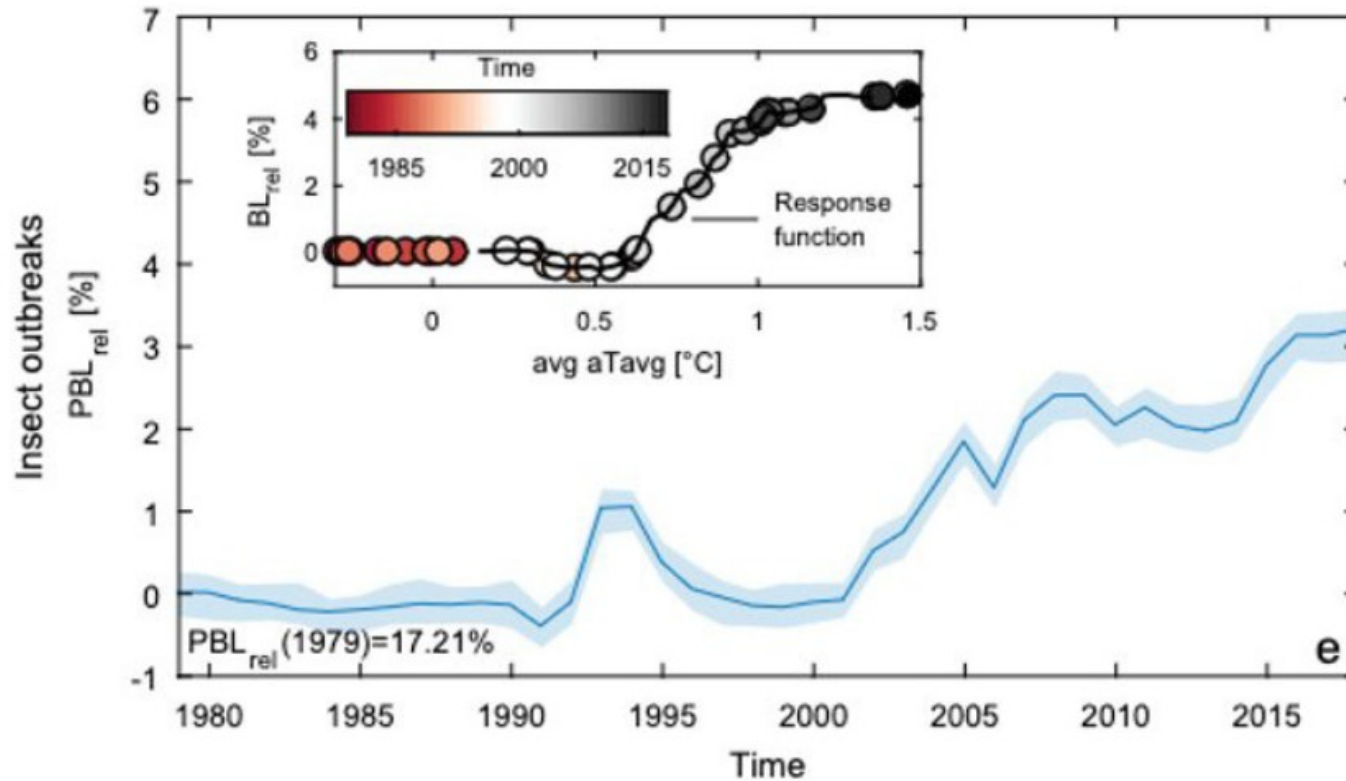
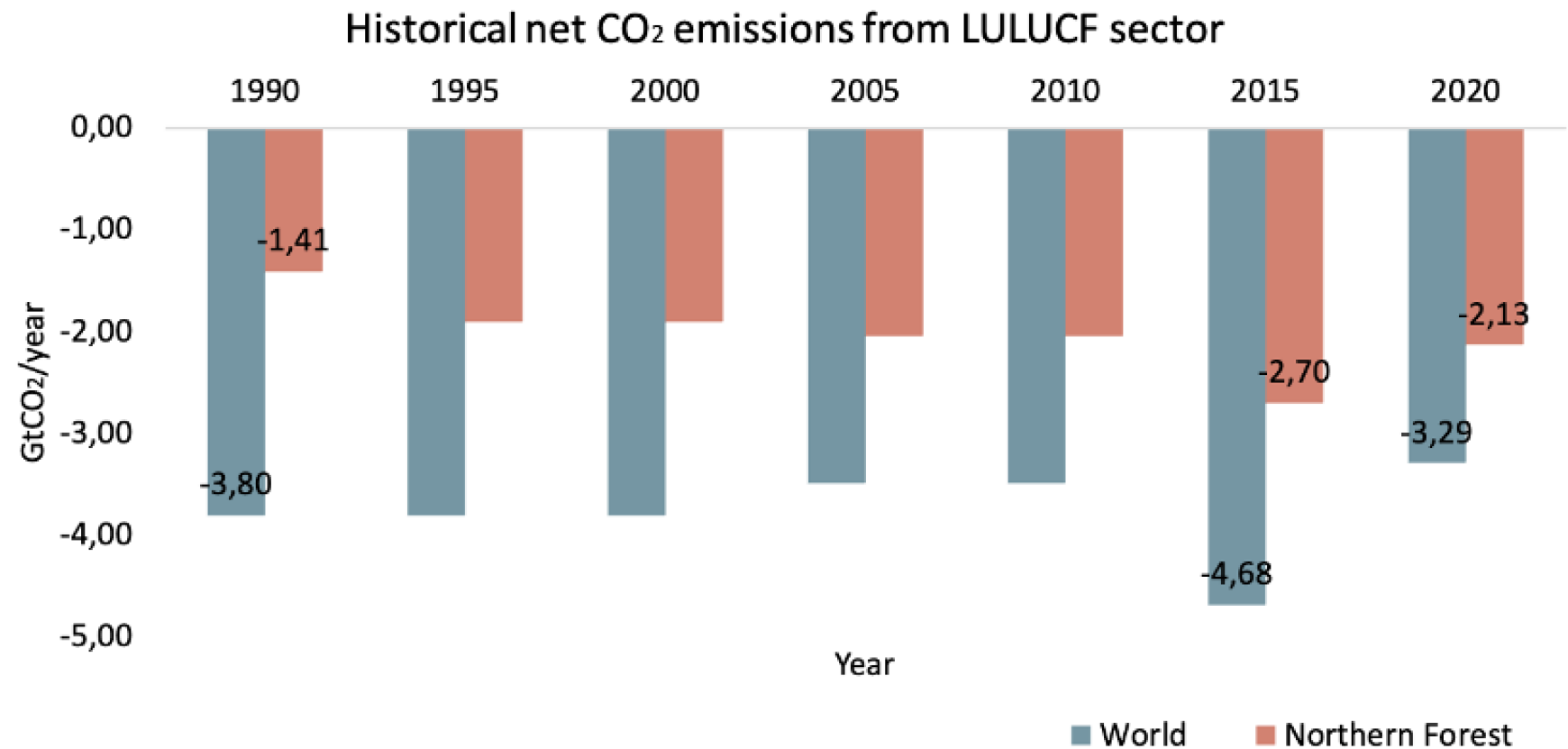


Figure 11: Insect outbreaks over time and the response function of insect pests to temperature anomalies in Europe. PBL and BL describe the potential biomass loss and biomass loss respectively and are measures for vulnerability.⁷⁰

CARBON SINKS GOING DOWN



Source: Climate Analytics based on FAO data

UNFCCC'S FIRST GLOBAL STOCKTAKE



United Nations



Framework Convention on
Climate Change

ADVANCE VERSION

FCCC/PA/CMA/2023/16/Add.1

Distr.: General
15 March 2024

Original: English

“28.(d) Calls on Parties to contribute to (..) transitioning away from fossil fuels”

Conference of the Parties serving as the meeting
of the Parties to the Paris Agreement

**Report of the Conference of the Parties serving as the
meeting of the Parties to the Paris Agreement on its
fifth session, held in the United Arab Emirates from
30 November to 13 December 2023**

Addendum

**Part two: Action taken by the Conference of the Parties serving as the
meeting of the Parties to the Paris Agreement at its fifth session**

Contents

**Decisions adopted by the Conference of the Parties serving as
the meeting of the Parties to the Paris Agreement**

Decision

[1/CMA.5](#) Outcome of the first global stocktake

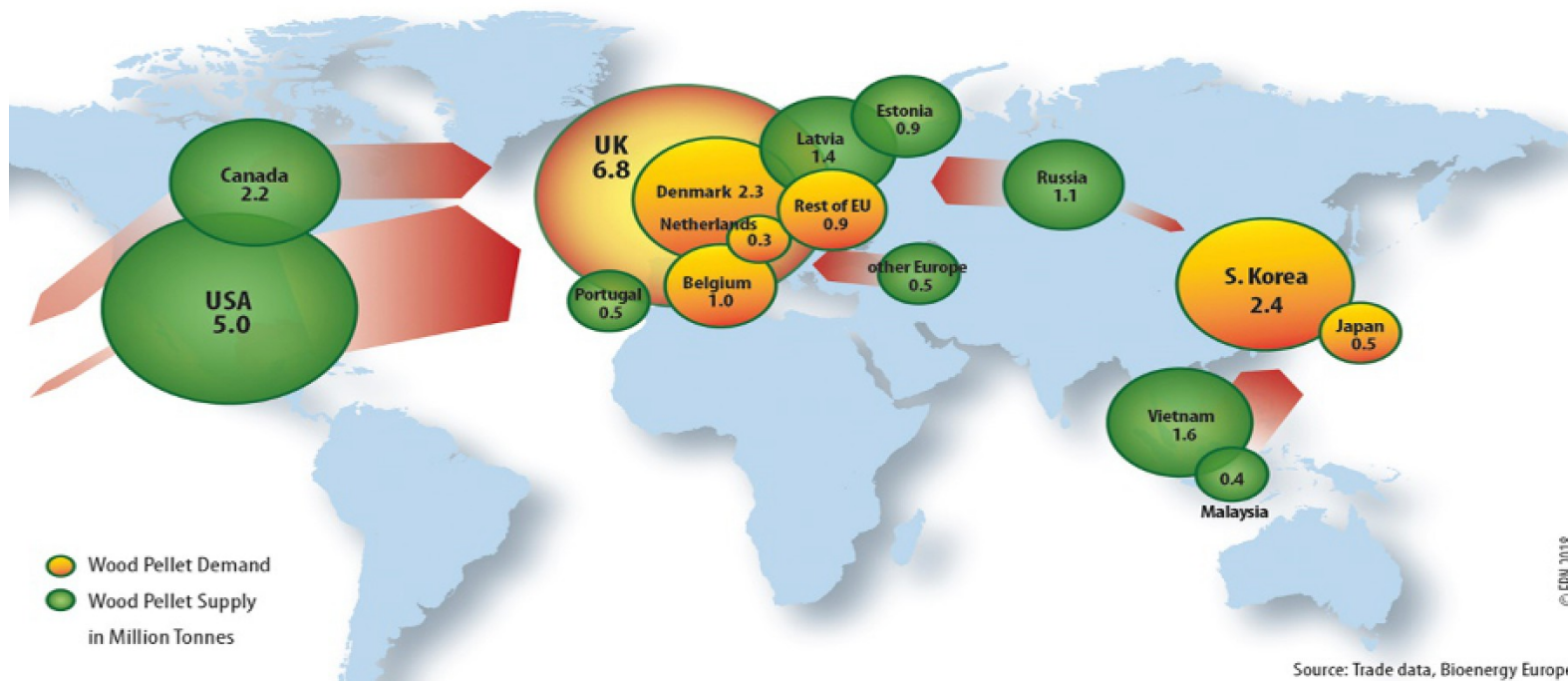
Paris

2

33. “Further emphasizes the importance of (..) enhanced efforts towards halting and reversing deforestation and forest degradation by 2030”

RISK OF INCREASING BIO-ENERGY PRODUCTION

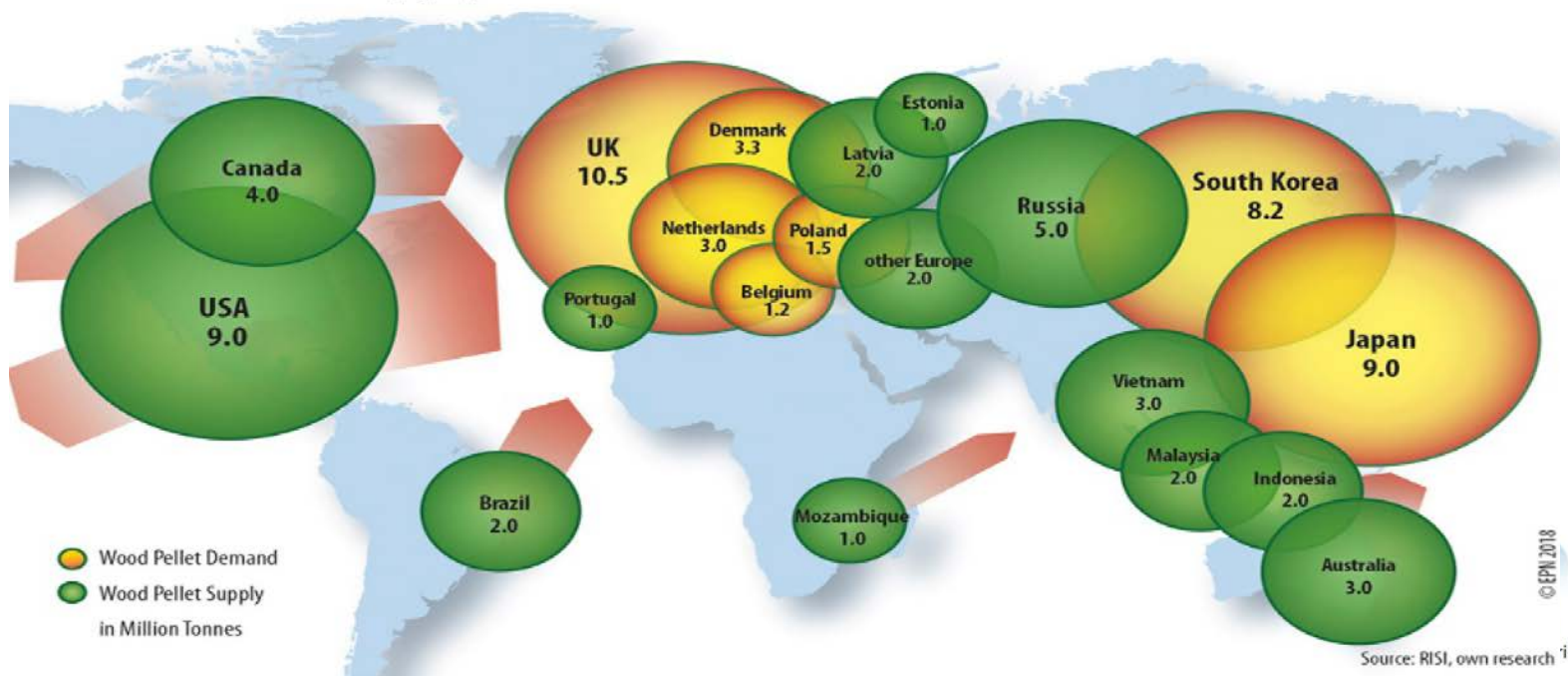
Demand and Supply of Industrial Wood Pellets in 2017



Source: Trade data, Bioenergy Europe

© EPN 2018

Demand and Supply of Industrial Wood Pellets in 2027

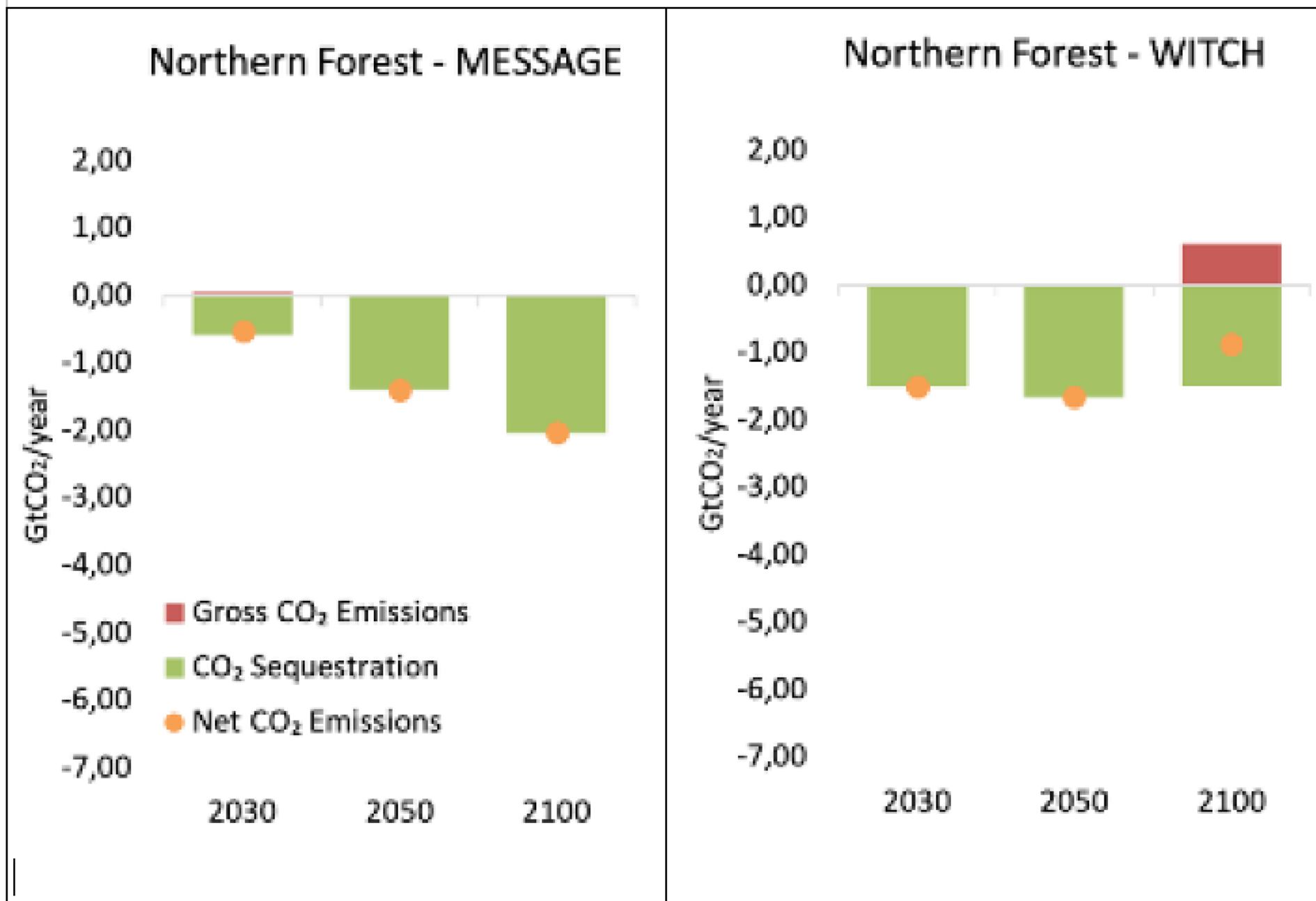


Source: RISI, own research

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NORTHERN FOREST IN MITIGATION SCENARIOS

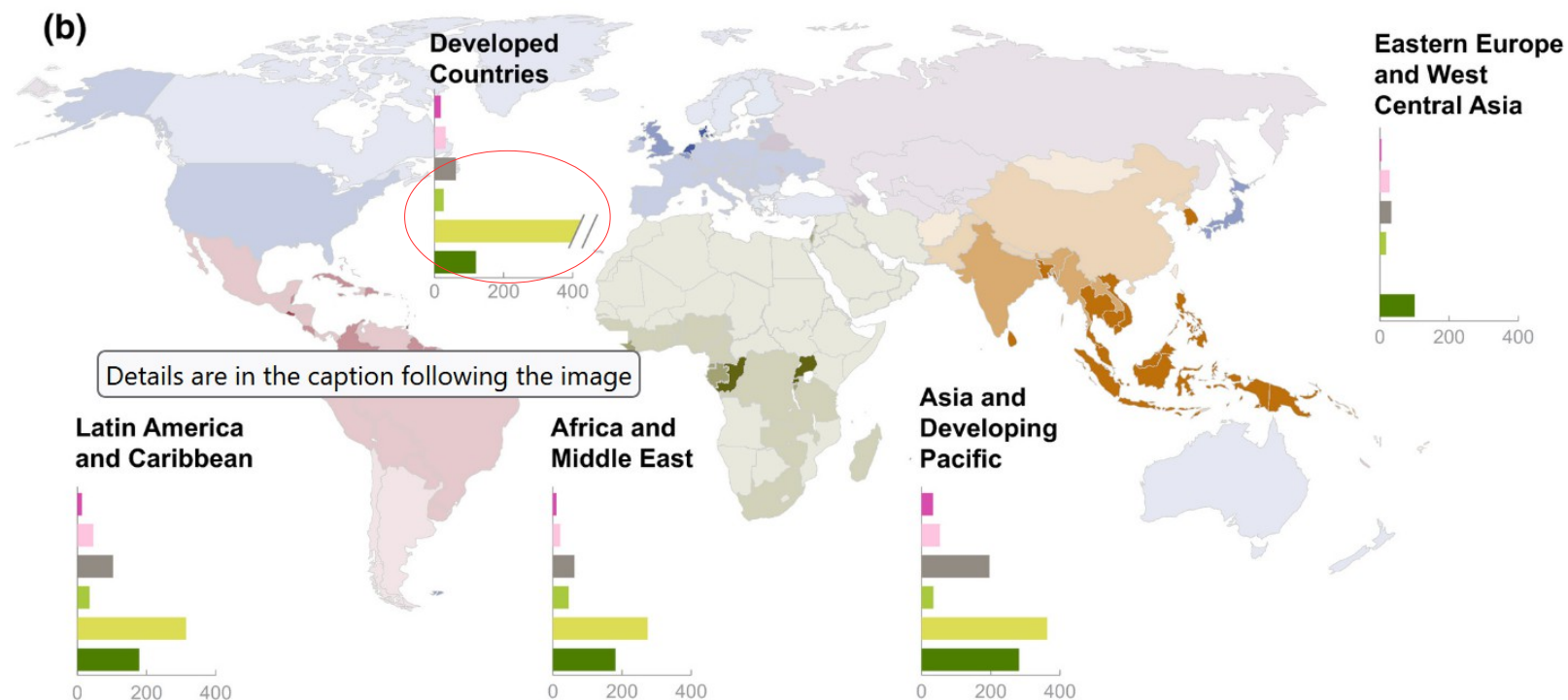
Modelled future CO₂ emissions pathways from LULUCF sector



Source: Climate Analytics

HUGE POTENTIAL IN PROTECTION AND RESTORATION

Regional map of land-based cost-effective mitigation potential density



Mitigation category for (a) and (b)

Sectoral:

- Forests and other ecosystems – manage
- Forests and other ecosystems – protect
- Forests and other ecosystems – restore

Agriculture – reduce emissions

Agriculture – sequester carbon

Demand-side

IAM:

- Forests and other ecosystems – protect (reduce land use change)
- Forests and other ecosystems – manage and restore (enhance carbon)
- Agriculture – reduce emissions
- BECCS

Density cost-effective potential (tCO₂ ha⁻¹)



Source: Roe et.al. Land-based measures to mitigate climate change (2021)

SUGGESTIONS FOR COP29 (BAKU) AND COP30 (BELEM)



- Synergy (UNFCCC/CBD/UNFF);
- Operationalisation Article 5 (Paris Agreement);
- Forests and Climate Change Dialogue;
- Glasgow Declaration Accountability Framework.

THANK YOU

more info:

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Northern Forests and Climate Change Project

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