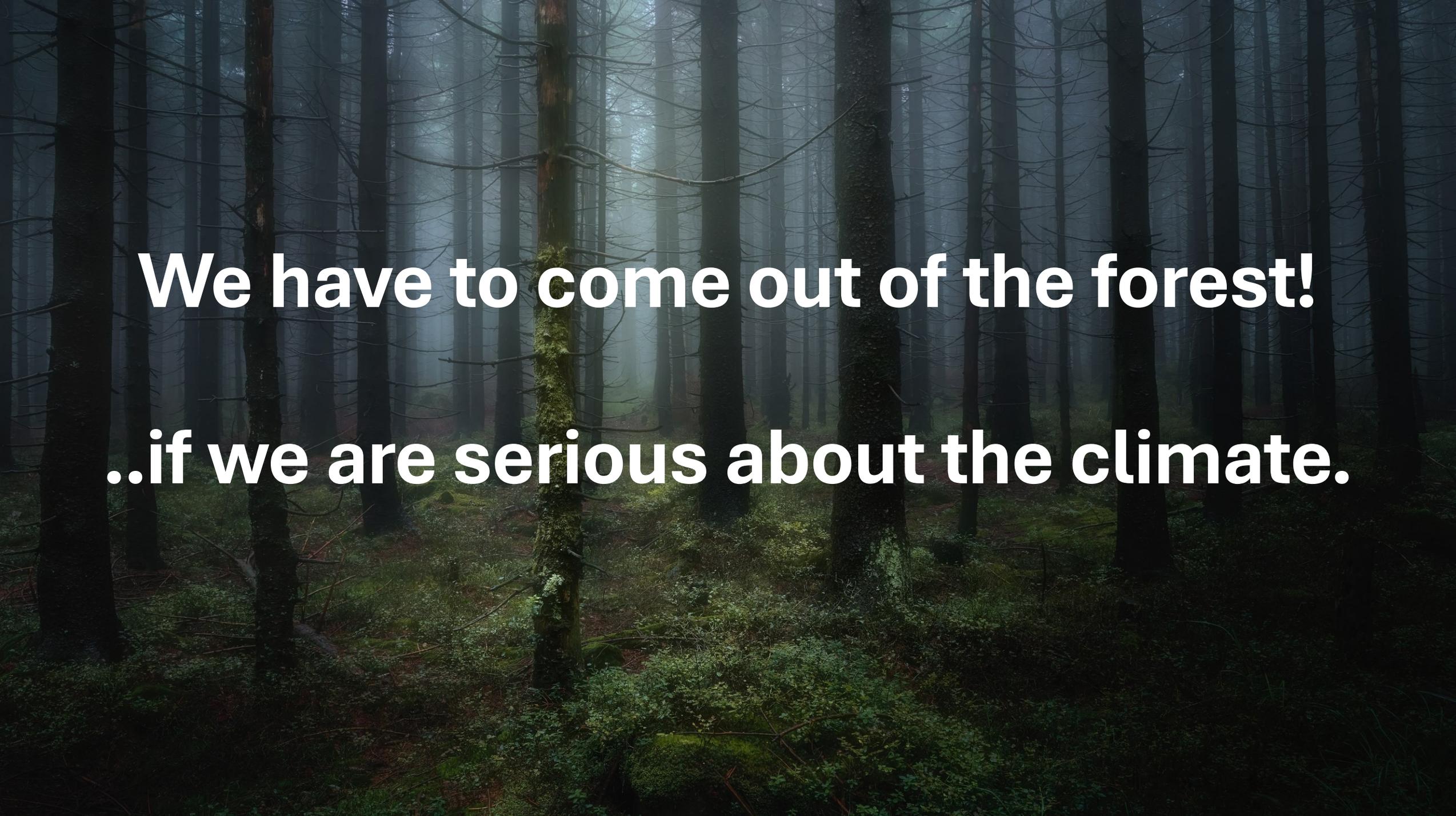


Framework for corporate climate reporting in the wood-based sector

Peter Holmgren

17 oktober 2024

A dark, misty forest with tall, thin trees and a mossy ground. The scene is dimly lit, with a blueish-grey mist filling the air. The trees are mostly bare, with some green moss or lichen on the trunks. The ground is covered in low-lying green plants and moss.

We have to come out of the forest!
..if we are serious about the climate.

1. Policy frameworks, existing

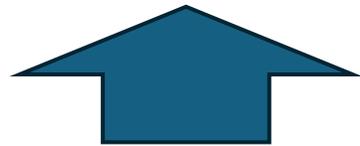
Climate convention basics since 1992

Two separate climate change mitigation goals:



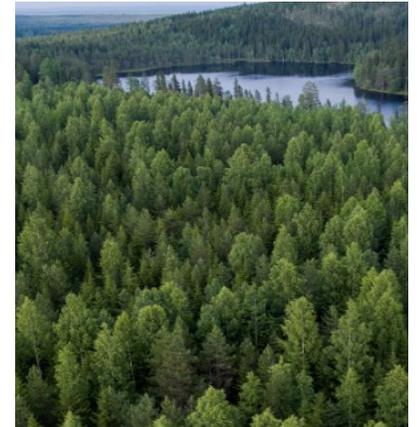
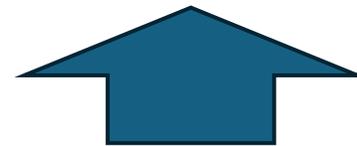
1.
Reduce emissions.

The big task.
>80% of the problem.



2.
Enhance sinks

Forests store a lot of
carbon



PROBLEM:
Forests are only
considered as a
sink

**SOLUTION: Forests and
wood-based products serve both goals.**

IPCC Common Reporting Framework (CRF)

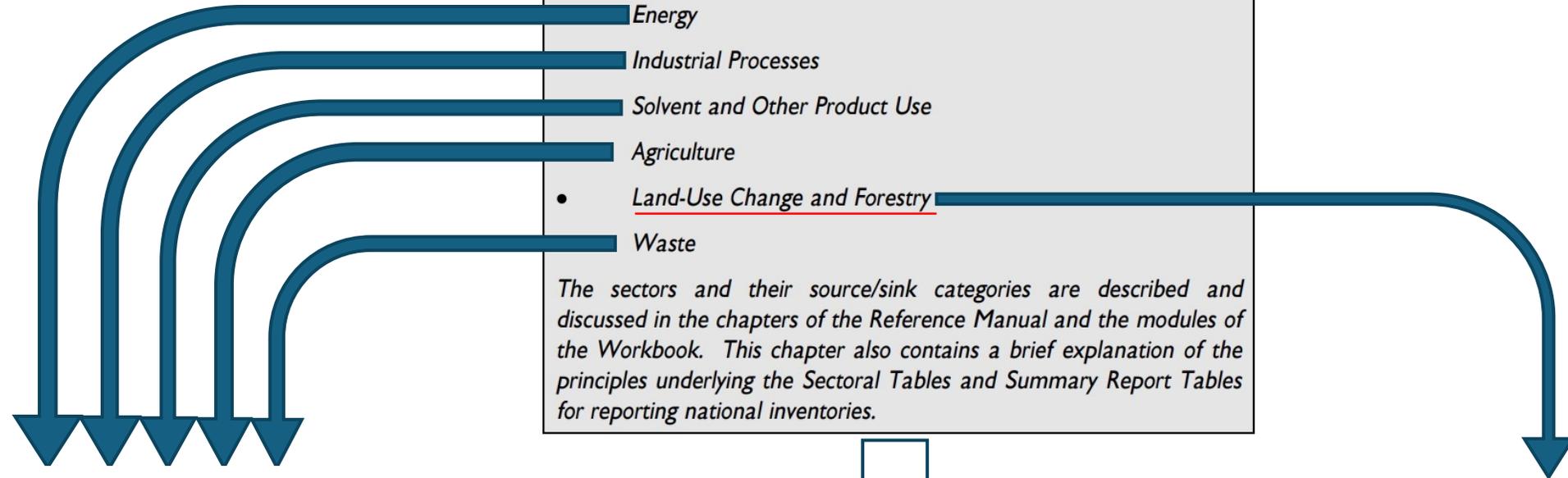
1996 IPCC Guidelines for National Greenhouse Gas Inventories (remains as basic structure in climate reporting)

UNDERSTANDING THE COMMON REPORTING FRAMEWORK

This chapter contains a listing, with definitions, of the categories you should use when reporting emissions and removals. The source/sink categories have been grouped into sectors as follows:

- Energy
- Industrial Processes
- Solvent and Other Product Use
- Agriculture
- Land-Use Change and Forestry
- Waste

The sectors and their source/sink categories are described and discussed in the chapters of the Reference Manual and the modules of the Workbook. This chapter also contains a brief explanation of the principles underlying the Sectoral Tables and Summary Report Tables for reporting national inventories.



(c) Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors;

(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

Responding to 1992 UNFCCC Climate Change Mitigation objectives

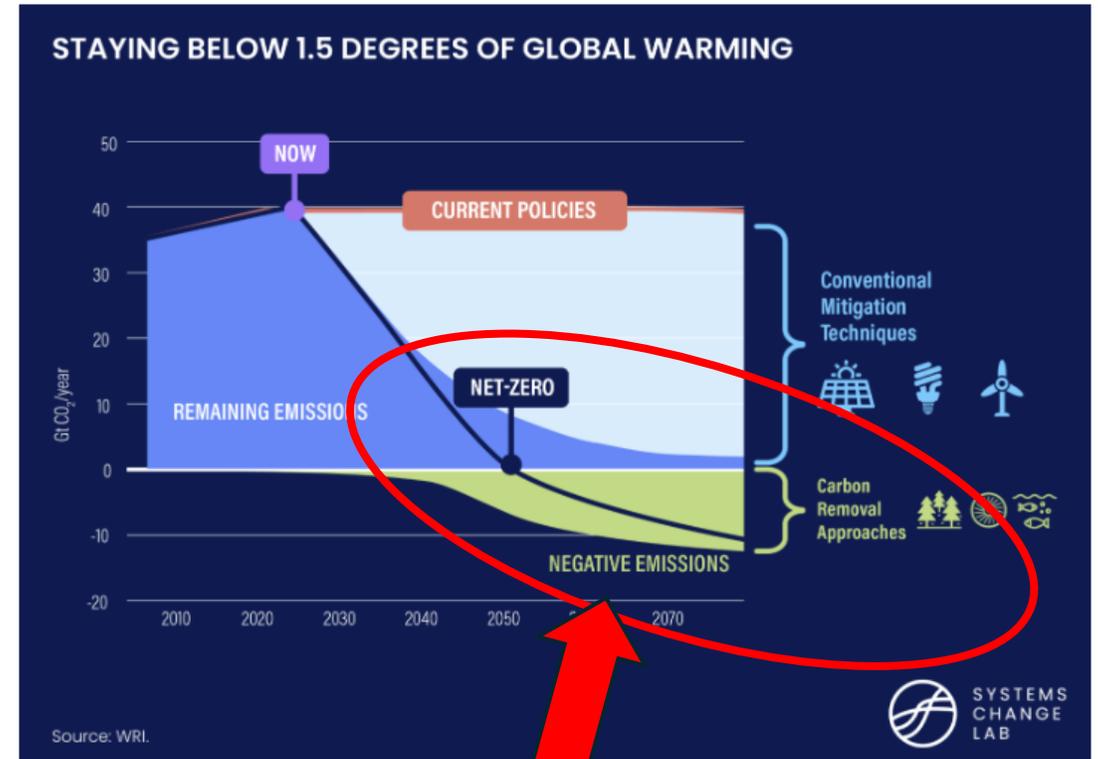
1. Reduce emissions

2. Enhance sinks & reservoirs

Paris Agreement and new “**Net-Zero**” problem

..overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.”

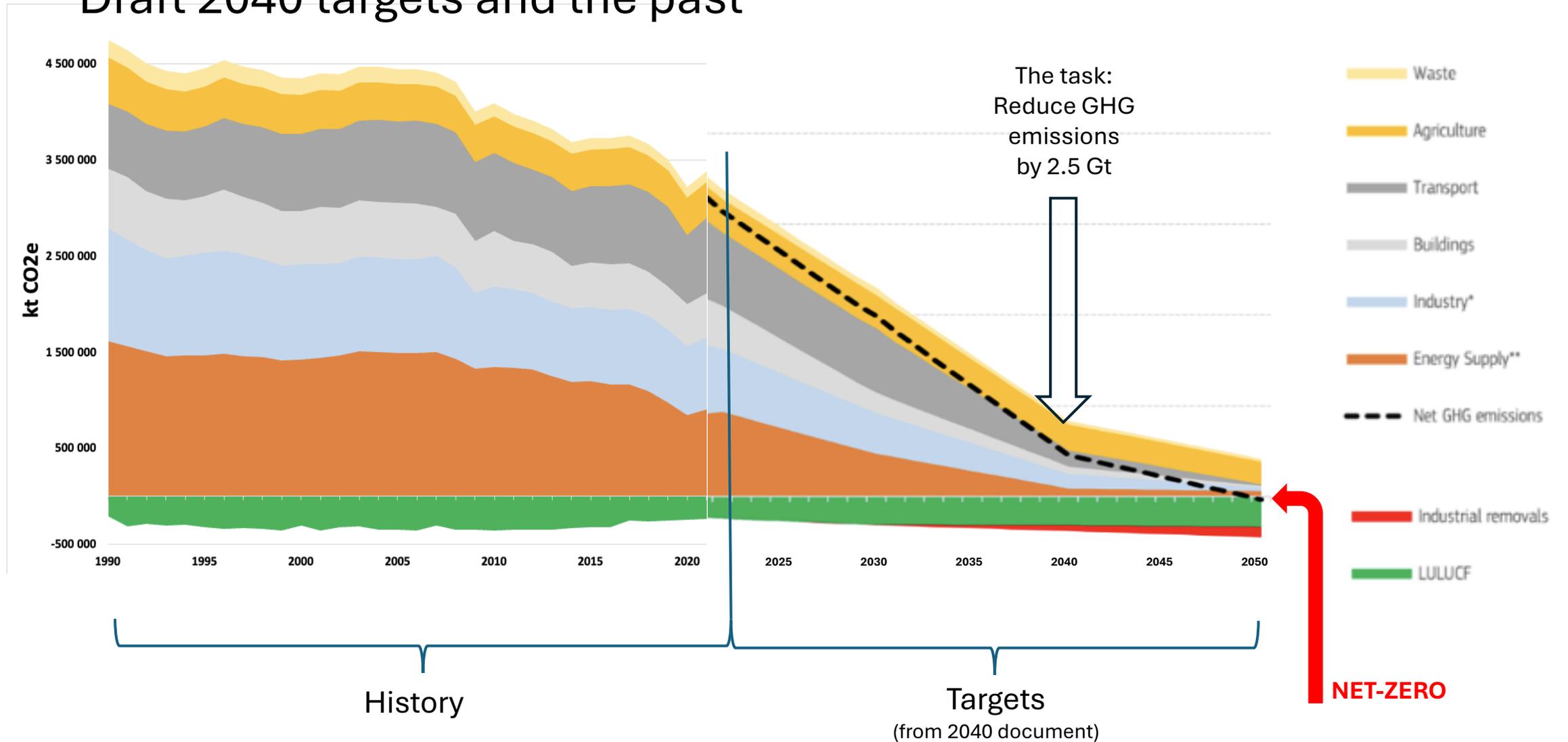
...achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century. -> **NET-ZERO**



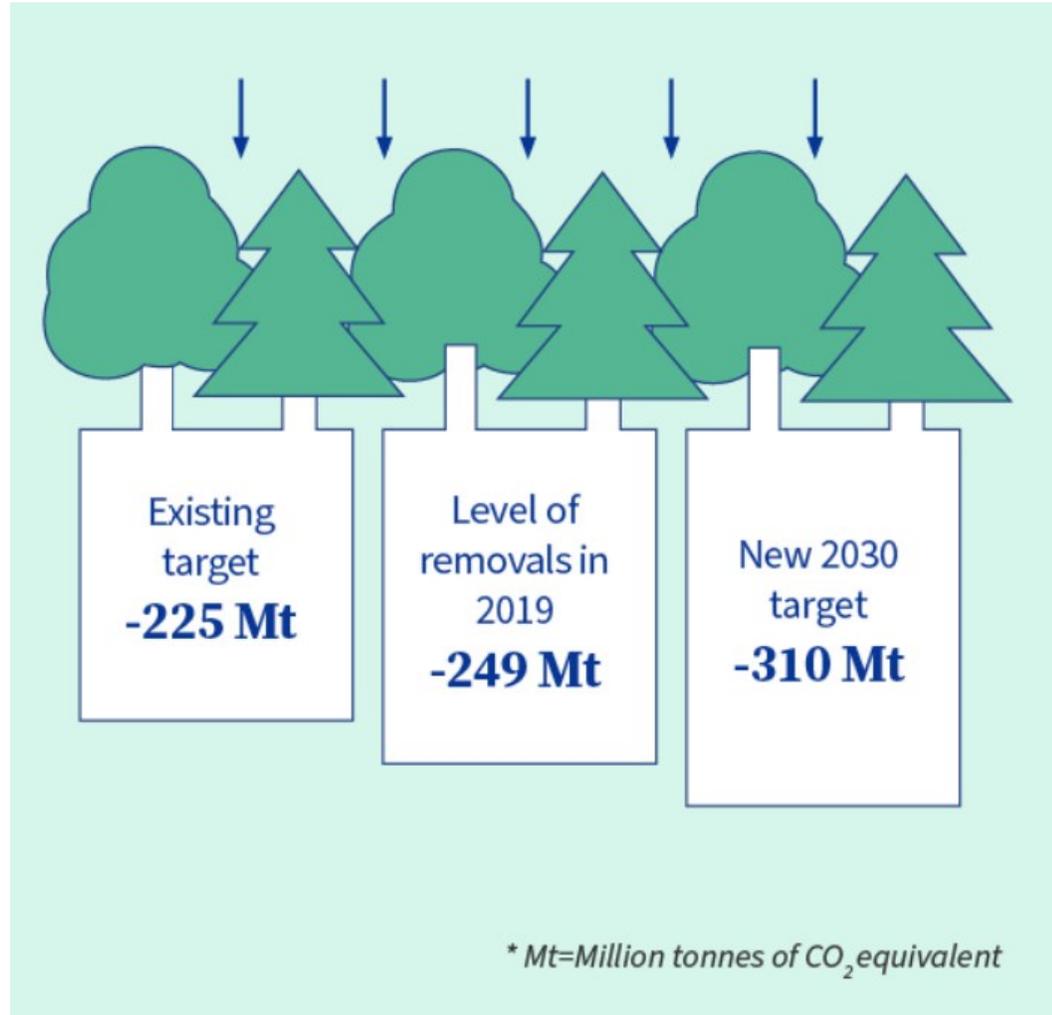
This is where it goes wrong wrt forests and climate change!

EU Climate legislation

Draft 2040 targets and the past



EU LULUCF (Land use, land use change and forestry)



- Tied to the overall climate legislation
 - To ensure **“net-zero”** through compensation of remaining GHG emissions in 2050
- Unrealistic
 - Few countries will meet targets
- Counterproductive
 - Only option in Sweden for short-term targets is drastic reduction of wood harvest.
 - Which will result in
 - leakage,
 - less C in products and
 - more fossil emissions

Swedish climate law 2017

Sweden's Climate Act and Climate Policy Framework

In 2017 Sweden adopted a new climate policy framework. The framework consists of a climate act, climate targets and a climate policy council. Sweden's long-term target is to have **zero net** greenhouse gas emissions by 2045 at the latest.

Supplementary measures

To achieve the target of **zero net** emissions of greenhouse gases by 2045 and the milestone targets by 2030 and 2040, supplementary measures may be utilized, such as:

- increased uptake of carbon dioxide by forests** as the result of additional measures;
- verified emission reductions carried out outside the Swedish borders; and
- carbon capture and storage based on the combustion of biomass, known as bio-CCS.

2. Reporting frameworks, existing

2 examples

National Inventory Reports

- Annual reports by “Annex 1” countries
- Defined by national boundary
- Uses CRF format (still)
- LULUCF is included, but excluded from totals

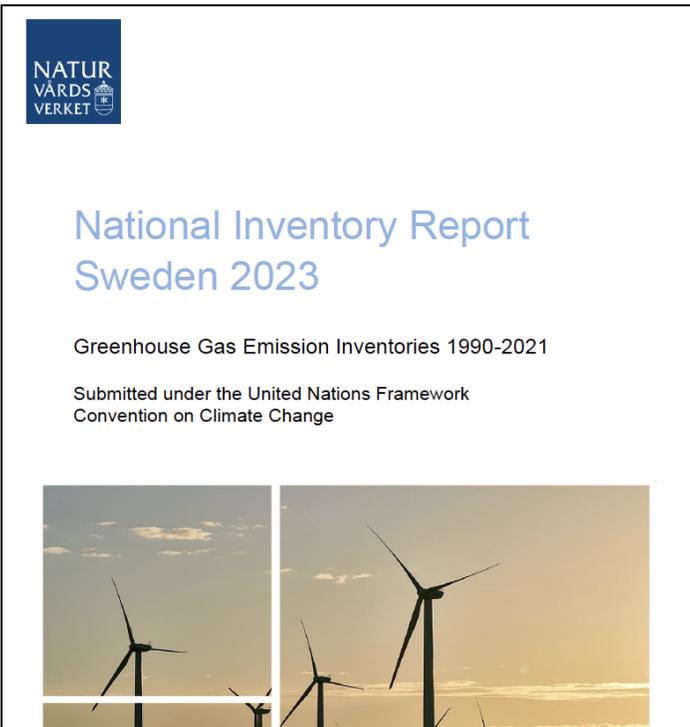


Table ES.3. CRF sectors and data sources used in the inventory.

CRF	Sector	Main source for activity/emission data
1	Energy	
	-Stationary combustion -Transport	Statistical survey on energy consumption Transport authorities
2	Industrial processes and product use	Environmental reports
		Direct contact with companies
		CO ₂ Data from the European trading scheme (ETS) National data from the Products register at the Swedish Chemicals Agency, National statistics, and National experts
3	Agriculture	Official statistical reports Organisations and researchers
4	Land Use, Land Use Change and Forestry	Swedish University of Agricultural Sciences Swedish Forest Agency
5	Waste	Swedish Association of Waste Management
		The Swedish Forest Industries Federation
		Statistics Sweden Swedish Environmental Protection Agency Environmental reports

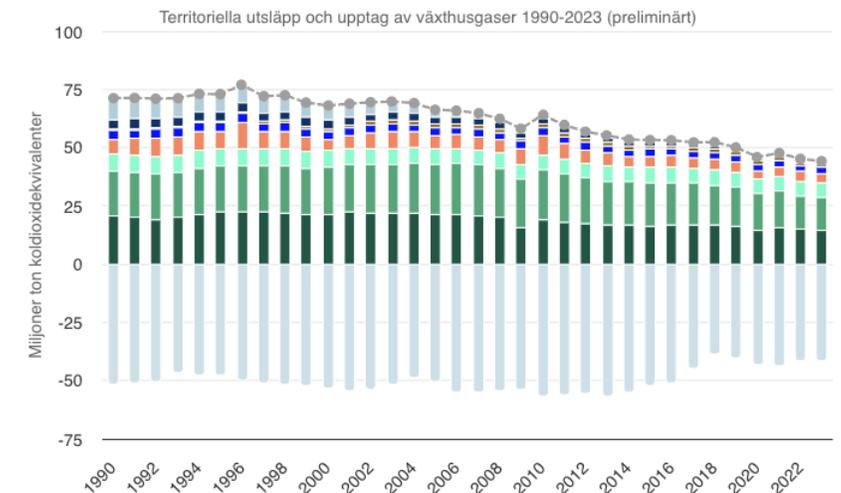
Sweden's emissions and uptake of greenhouse gases

Reviewed : June 19, 2024

According to preliminary statistics for 2023, Sweden's territorial emissions of greenhouse gases amounted to 44.2 million tonnes of carbon dioxide equivalents (excluding LULUCF). This means a reduction of 38 percent since 1990. The reduction compared to 2022 was tentatively just over 2 percent.

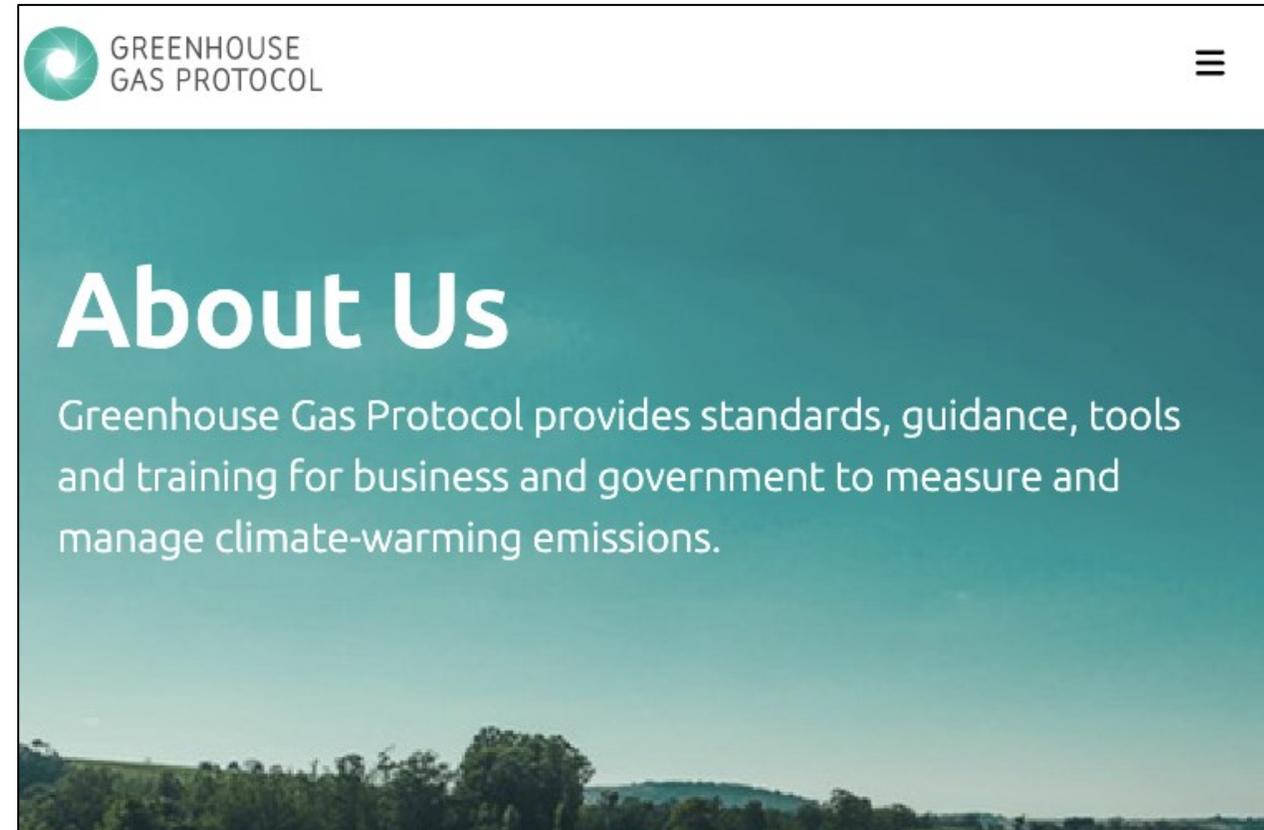
[DISPLAY AS GRAPH](#)

[VIEW AS TABLE](#)



Greenhouse Gas Protocol

- Corporate reporting
- *de facto* “standard”
- Emissions Scope 1-3
 - Addresses only the emission goal
- Attempts to include “land emissions”
 - cf LULUCF
 - Contested approach, issues on governance



3. What's NOT in above frameworks?

Existing frameworks are siloed

- Missing: Impact in other sectors
 - For example when wood-based products help reduce emissions in housing, transportation, food system, energy.
 - Practically all wood-based products are used in other sectors.
- Missing: Impact in other countries/jurisdictions
 - For example when wood-based products are exported and help reduce emissions in other countries.
 - 85% of Sweden's wood-based products are exported

Interference for forest-climate solutions

- Counterproductive policy
 - LULUCF
- Counterproductive advocacy
 - Wrong: “Synergy between conservation for biodiversity and forest contribution to climate solution”
- Focus on less significant factors
 - “long-lived products” (only refers to sink/storage, not emission reduction)
- Less focus on forest growth
 - Focus on carbon storage and reducing harvest will reduce carbon uptake, which in turn reduces opportunities for solutions.

4. So what do we do?
A new reporting model.

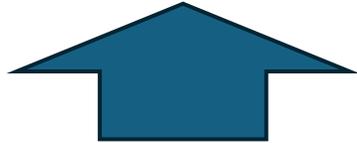
Recall: Climate convention basics since 1992

Two separate climate change mitigation goals:



1.
Reduce emissions.

The big task.
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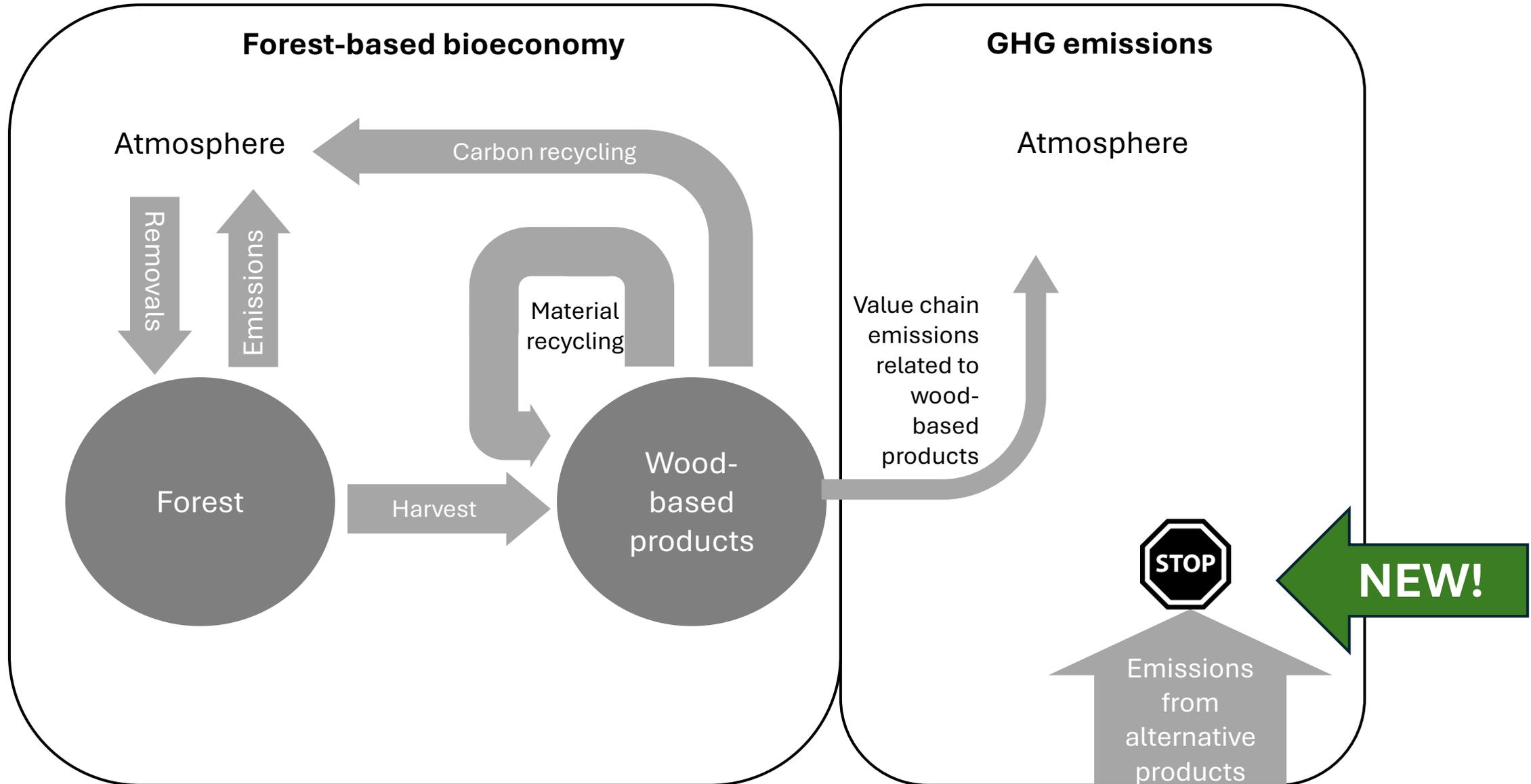
PROBLEM:
Forests are only
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SOLUTION: Forests and wood-based products serve both goals.

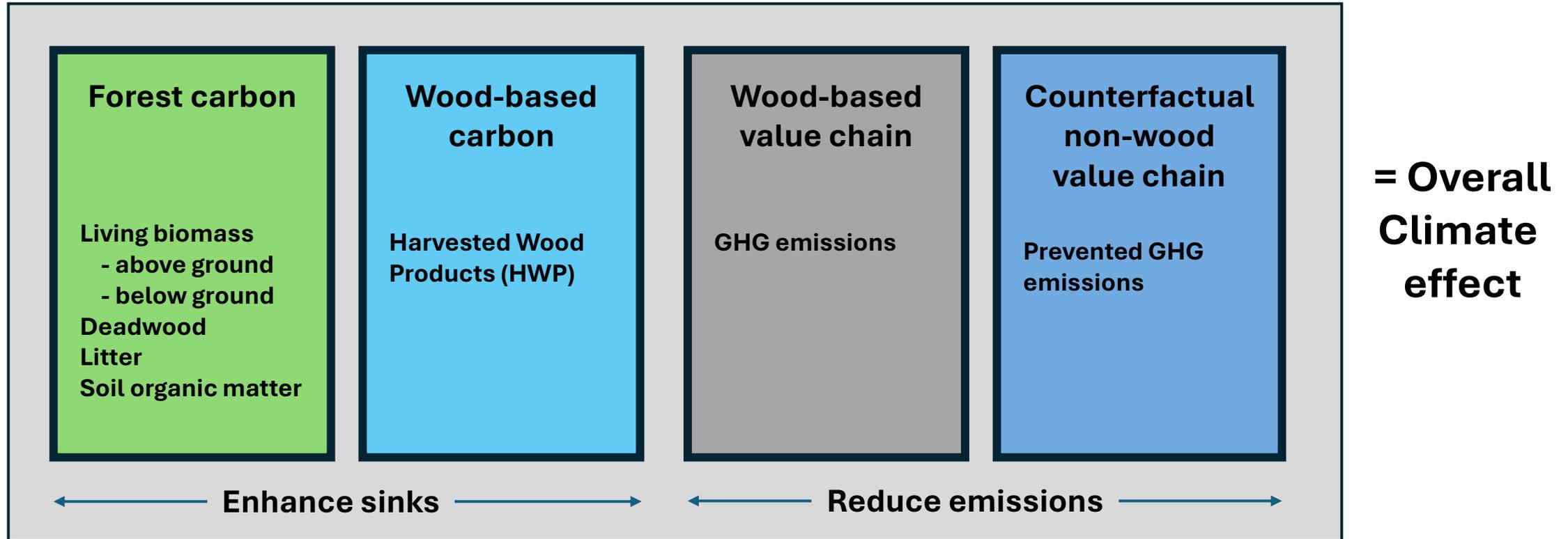
Towards a complete model

Goal 2: Enhance sinks

Goal 1: Reduce GHG emissions

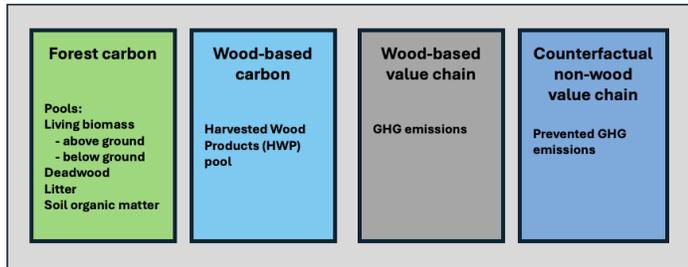


Four component model for corporate reporting



ISO 13391 approved, to be published early 2025

Greenhouse Gas dynamics of Wood and Wood-based Products



Participating countries:



The screenshot shows the ISO website interface for the draft standard ISO/DIS 13391-1. The page includes a navigation bar with 'Standards', 'Sectors', 'About ISO', 'News', 'Taking part', and 'Store'. A search bar is located in the top right corner. The main content area features the title 'ISO/DIS 13391-1' and the subtitle 'Wood and wood-based products — Greenhouse gas dynamics'. Below this, it specifies 'Part 1: Framework for value chain calculations' and indicates the status as 'Under development'. A 'Read sample' button is visible. On the right side, there is a pricing section showing 'CHF 63' and an 'Add to cart' button. The bottom section contains an 'Abstract' and 'General information'.

ISO/DIS 13391-1
Wood and wood-based products — Greenhouse gas dynamics
Part 1: Framework for value chain calculations
Under development
This Draft International Standard is in the enquiry phase with ISO members.

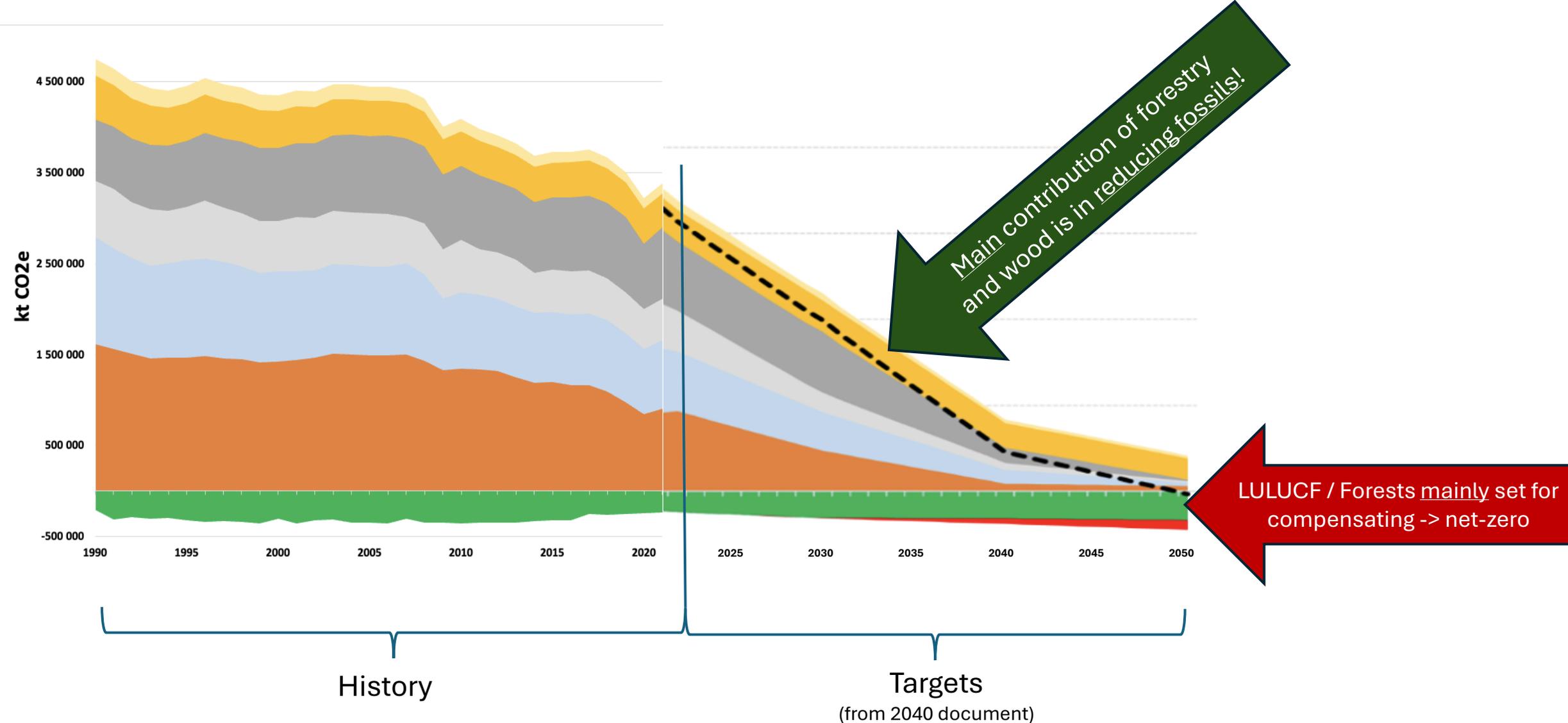
Abstract
This document specifies how calculations of different parts can be combined into a carbon balance calculation for the entire value chain related to wood and wood-based products. NOTE This document will gradually mature over time as methodology evolves. This document sets general requirements and overarching terminology. This document includes information on how to bring calculation results forward in the value chain. It also includes information on how claims and declarations can be worded based on this standard, both within the value chain and to customers and consumers.

General information
Status : Under development
Stage : Close of voting [40.60]
Edition : 1
Number of pages : 31
Technical Committee : ISO/TC 287
ICS : 79.020 13.020.40
RSS updates

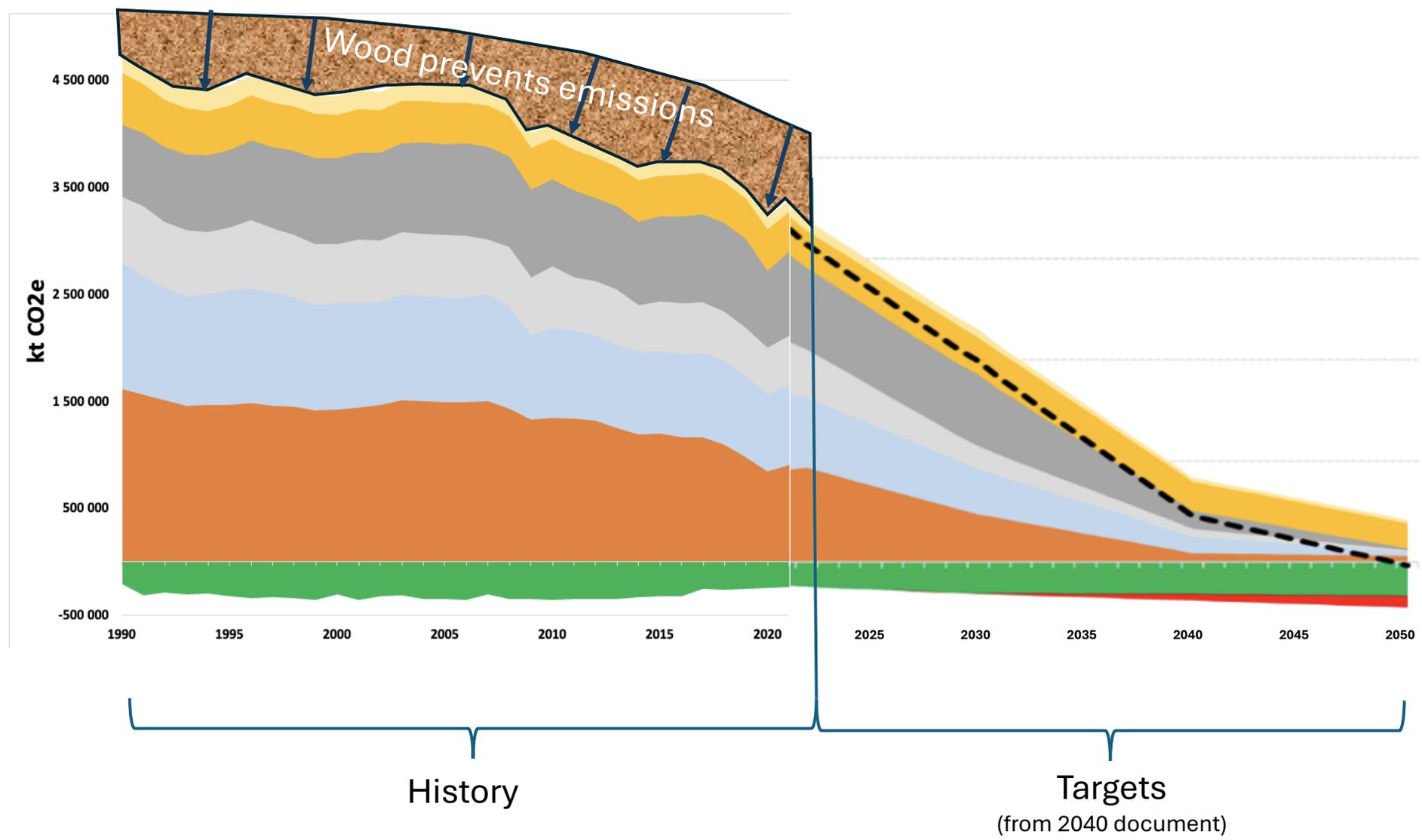
5. This gives us a new perspective

Recall, EU 2040 targets: It's the fossils we must focus on!

Forests and the bioeconomy are major factors for succeeding in other sectors!

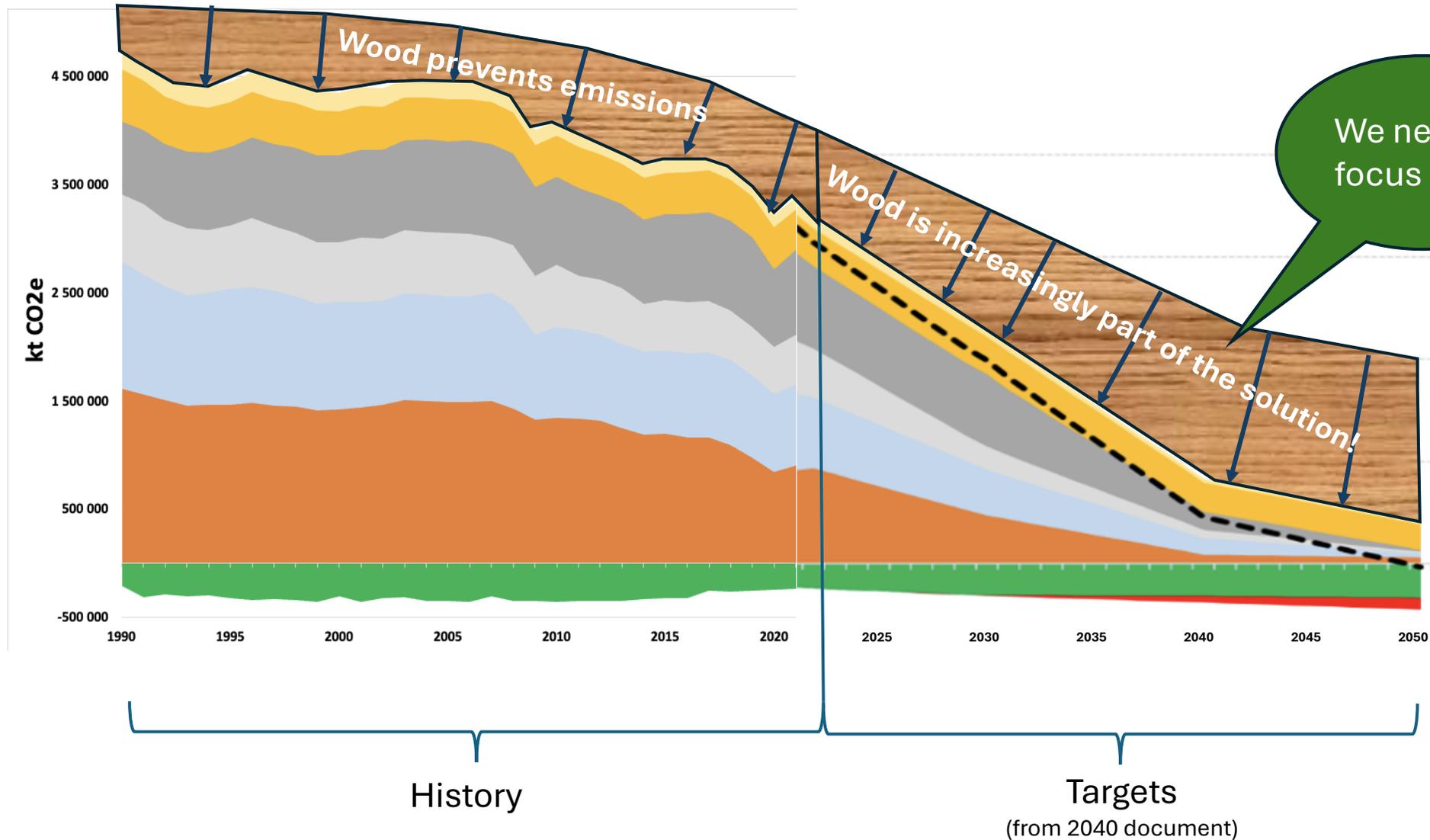


The wood-based sector already massively prevents GHG emissions
Without wood-based products, GHG emissions would be much higher!

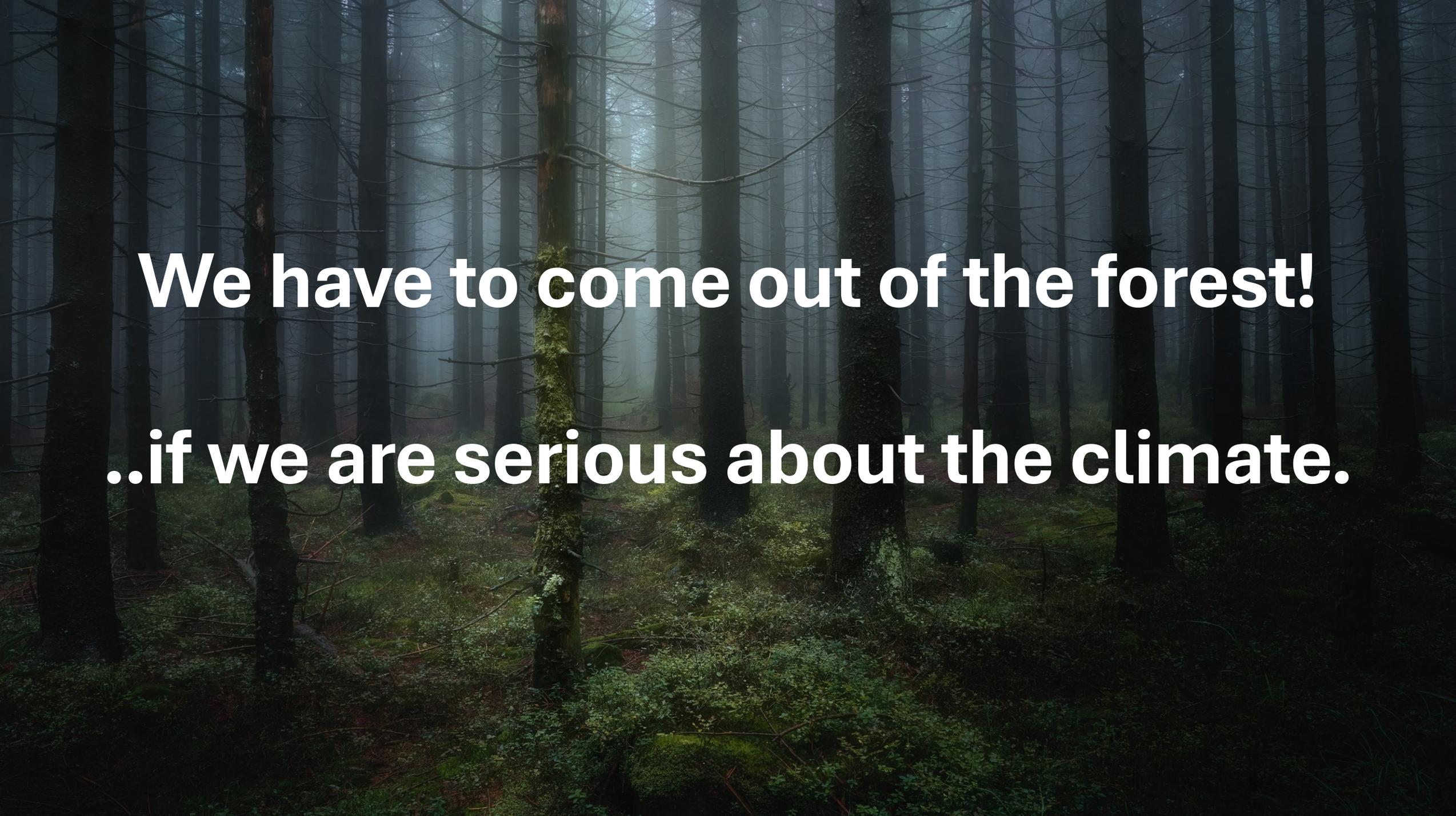


What is the potential future contribution of wood-based products?

More wood, more efficient value chains and new user solutions can raise the bar!



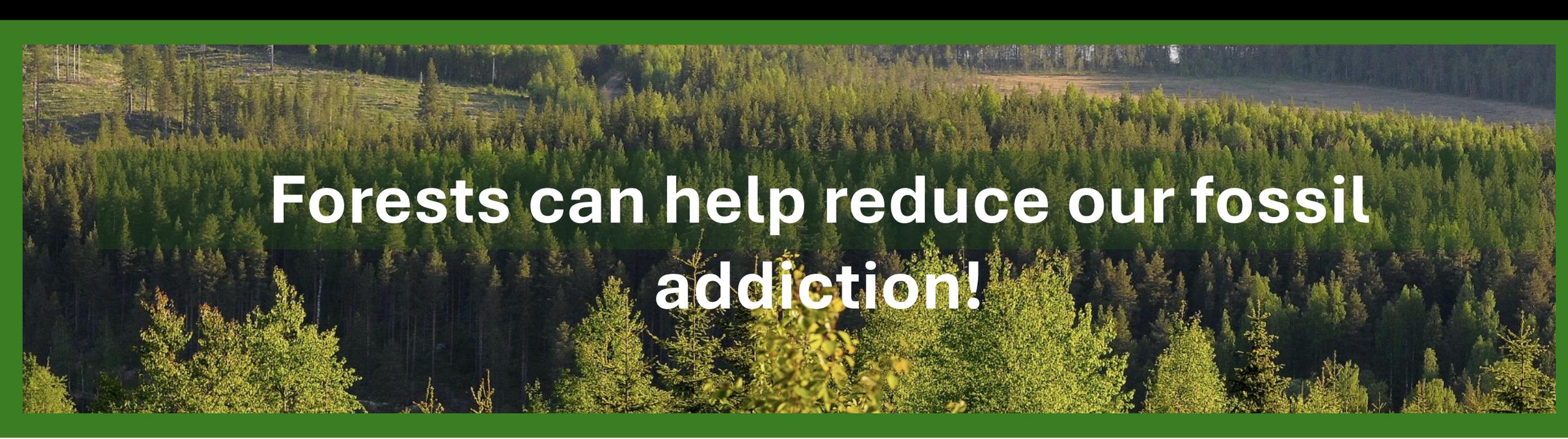
Three take homes

A dark, misty forest with tall, thin trees and a mossy ground. The scene is dimly lit, with a blueish-grey mist filling the air. The trees are mostly bare, with some green moss or lichen on the trunks. The ground is covered in low-lying green plants and moss.

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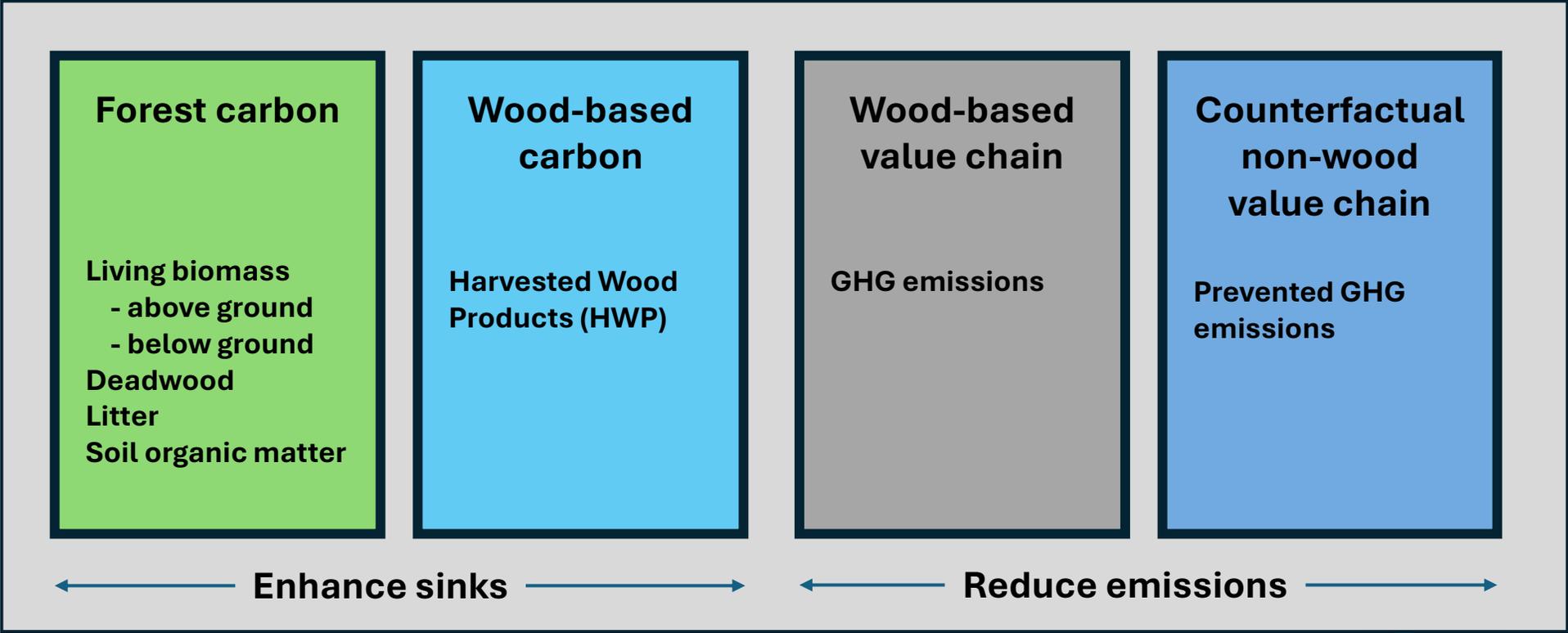


“It’s the fossils, Stupid.”



Forests can help reduce our fossil addiction!

SOLUTION: Four component model



ISO standard

