# Skogen och Klimatet

10 August 2023 Peter Holmgren

# "It's the fossils, Stupid."

### Forests can help reduce our fossil addiction!

## Wood-based products keep fossils in the ground!

- Construction
- Packaging
- Many other fibre-based products
- Energy
- New products and uses
- Almost every wood-based product <u>displace</u> fossil emissions.
- This is what we need!

### Examples

#### Paper cup vs. Plastic cup







#### Displaces fossils at <u>5 times</u> its own weight

Displaces fossils at <u>1.4 times</u> its own weight

#### But:

#### Forest and Climate policy often fails to

#### see outside the forest for all the trees.

#### Why is that?

Climate convention basics from 1992 Two climate change mitigation goals:



- Control, reduce and prevent fossil emissions.
  - The big task. >80% of the problem.
- Conservation and enhancement of sinks and reservoirs.
  - This is where the forest ends up



This split locks up the forest for carbon storage and hinders real solutions!

#### Forests contribute to both goals!



![](_page_7_Picture_0.jpeg)

# Example: EU Green Deal -> "Net-Zero"

![](_page_8_Figure_1.jpeg)

#### Our problem: The forest is locked up for <u>compensating</u> fossils. When the main contribution is wood <u>pushing out</u> fossils!

![](_page_9_Figure_1.jpeg)

## So what to do?

# Focus on the products!

# 1. Emphasize the huge overall values that wood-based products bring to society

![](_page_11_Figure_1.jpeg)

Foundation: Forest management that is Sustainable Climate positive Nature positive

**Opportunities:** Rich variety of products Supporting well-being and development <u>in all other sectors</u>

# 2. Recognize the huge climate benefits of wood-based products

![](_page_12_Picture_1.jpeg)

3. Connect the forest to the fossil emission problem for a complete climate approach & assessment

![](_page_13_Figure_1.jpeg)

## Harvested wood carries the climate value!

### Climate convention basics from 1992

Two climate change mitigation goals.

1. Control, reduce and prevent fossil/process emissions.

2. Conservation and enhancement of sinks and reservoirs.

![](_page_16_Picture_4.jpeg)

#### From Article 4.1 in the UNFCCC text:

- (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;
  - ) 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;

# Climate change mitigation policies follow this structure along separate tracks!

- Two goals (UNFCCC 1992 Article 4.1):
  - 1. Control, reduce, prevent emissions
  - 2. Conserve and enhance sinks and reservoirs
- Structure flows through Paris, EU Green Deal, national goals, corporations
  - Has given us "Net Zero" and "Carbon neutrality"

![](_page_17_Figure_6.jpeg)

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.

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Responding to 1992 UNFCCC Climate Change Mitigation objectives This division is problematic!
It leads to isolated, suboptimal policy & legislation.
Such as LULUCF.
Because forest-based sector contributes to BOTH mitigation

objectives!

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;

1. Reduce emissions 2. Enhance sinks & reservoirs

![](_page_19_Figure_0.jpeg)

## Sweden has 300 m<sup>3</sup> growing trees per capita

![](_page_20_Figure_1.jpeg)

### What does this mean for the climate?

- Sweden 1990-2020
  - Forest net storage: 1.4 Gt CO<sub>2</sub>e
  - Displacement of fossil emissions: 1.3 Gt CO<sub>2</sub>e
  - By comparison: Sweden's territorial emissions: 1.9 Gt CO<sub>2</sub>e
- Territorial emissions go down.
- Forest contributions go up!
  - A lot of these are exported

![](_page_21_Figure_8.jpeg)