

Forests and climate change

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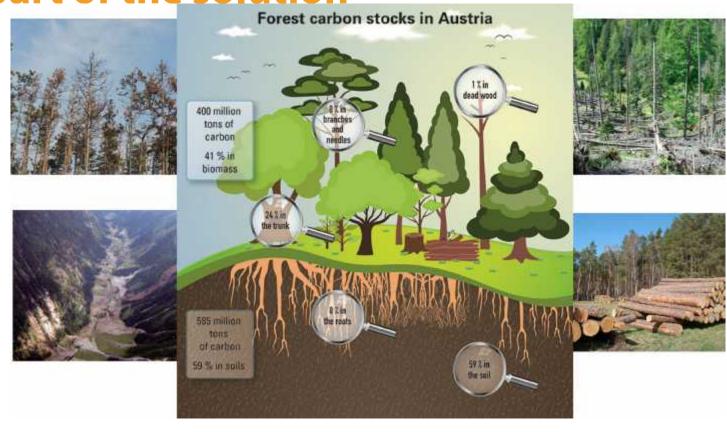
Meeting the EU's 2030 emission reduction targets: the role of the land use and forestry sector

Brussels, 30 January 2017



Forests – affected by climate change and part of the solution

Forest carbon stocks in Austria





Climate Policy – multilevel governance





Other policies – target conflicts ?!





Forests and Wood – more than a C-sink

The effects of sustainable forest management and harvested wood products on the GHG balance along the value chain

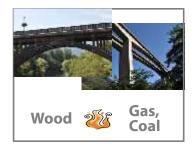
- "Forest Management" incl. "Harvested Wood Products" accounted in the 2nd Commitment Period
- Emissions/removals of substitute products to wood products are not/ not directly assessed in the GHG balance
- A GHG optimized strategic planning requires a common GHG assessment including substitute emissions



Forest management



Wood products



Substitution – product and energy wood



Wood chain project for Austria



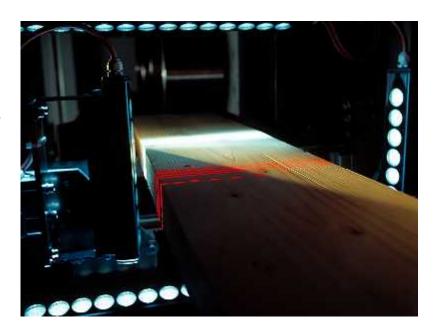
5 Scenarios

■ Reference: Business as usual

■ 1a: Increasing demand of wood for energy

■ **1b**: Increasing demand of wood for products

- 1c: like 1b but optimistic import possibilities for round wood
- 2: reduced harvest, stock increase based on implementation of enhanced nature protection measures
- 0: Immediate abandoning of harvesting activities







Wood chain project for Austria





Methods

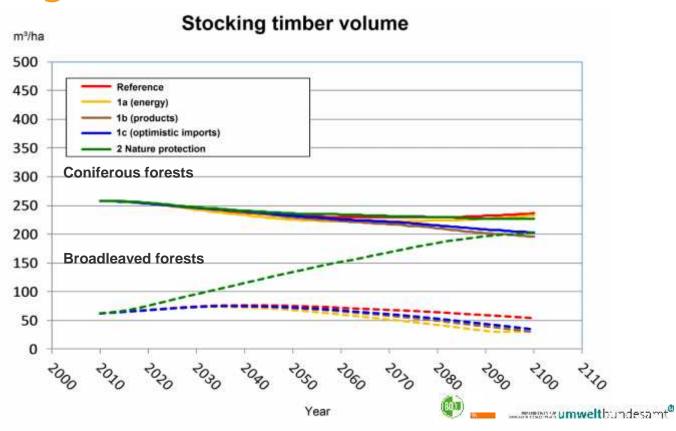
Four models were used

- CALDIS: Forest Growth and yield model (BFW)
- YASSO: Soil C model (BFW)
- FOHOW2: Economic wood products model (University BOKU)
- GEMIS: Ecobalance model (Environment Agency)





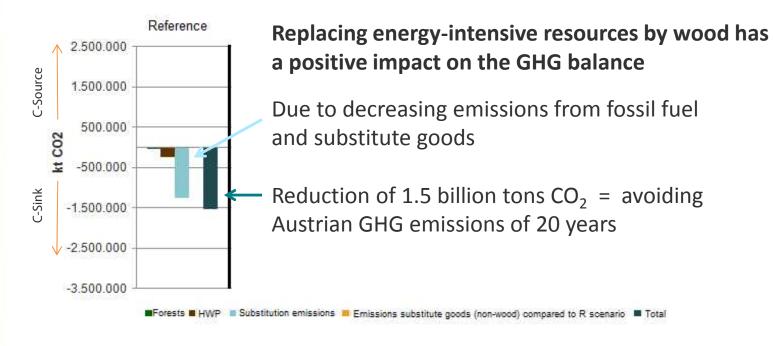
Scenarios: Effects on wood utilization and stocking volume







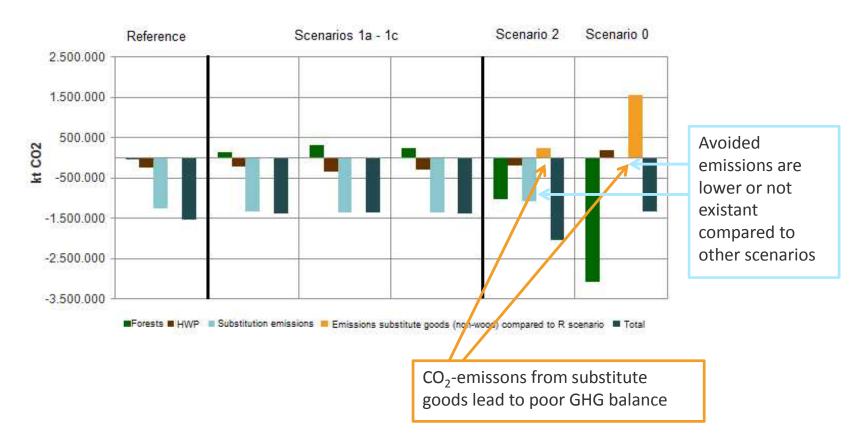
Substitution effect







Substitution effect







Key messages

- Sustainable forest management and wood utilization has a positive impact on GHG balance
- Substitution effects and avoided emissions lead to a positive GHG balance
- Forests fit for climate change understanding adaptation important
- Cross sectoral policy making decisive
- Long-term planning for forests and climate change demands forward-looking strategies > 2030





Picture | Filmstyle from "See Aural Woods" (Jurna Laurisch & Takamovsky)

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