Increased Wood Mobilisation and the Environment – a WWF perspective

Karin Wessman
Policy Manager, WWF International
E- mail: kwessman@wwfint.org

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1. Our starting point
2. Renewable energy and biodiversity/conservation
3. Keys to success & role for MCPFE
4. NGO involvement

WWFs climate change strategy include:

- Energy efficiency
- Reduced consumption of energy
- A drastic reduction of fossil fuel use.
- Renewable energy sources

WWF strongly advocates an increased use of bioenergy, BUT:

Scientists estimate that the global bioenergy potential could be as high as 1/3 to 3 times the current global energy consumption with woody biomass having a significant share, but is this enough?

→ ***Bioenergy is one of the means to cut greenhouse gas emissions.***

The kind of biomass used to produce bioenergy, how and where it was produced can have significant environmental and social impacts – e.g. forest degradation, deforestation, biodiversity loss, soil erosion, water over-abstraction and land-use conflicts.

→ ***Bioenergy is not automatically sustainable just because it is a renewable resource.***

Biomass/energy issues cannot be dealt with in isolation geographically (Europe vs rest of the world), within a separate industry, or as requiring a separate sustainability perspective.

→ ***Think Global, act Local (local land-use effects)***

→ ***Seek local involvement (land-use, trade-offs, knowledge)***

→ ***Use existing standards.***







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Is there a "trade-off" between the need for renewable energy (implying more intense forest management?) and biodiversity / conservation (implying less intense forest management?)

Can there be a sustainable supply of renewable energies from forests?







Opportunities & impacts

In case of biomass for heat and electricity

- increased utilisation of forest resources in commercial forests

- increased use of annual increment (in forests with high utilisation rate): in most of the large forest holdings the use of annual increment is high (70-80%), while in forest owned by small private owners utilization rate is much lower (45-50%).

- further decreasing quantities of deadwood. A WWF report published in 2004 states that temperate forests need at least 20-30 m^3 /ha of deadwood. 1/3 of the species living in temperate forests depend on deadwood.

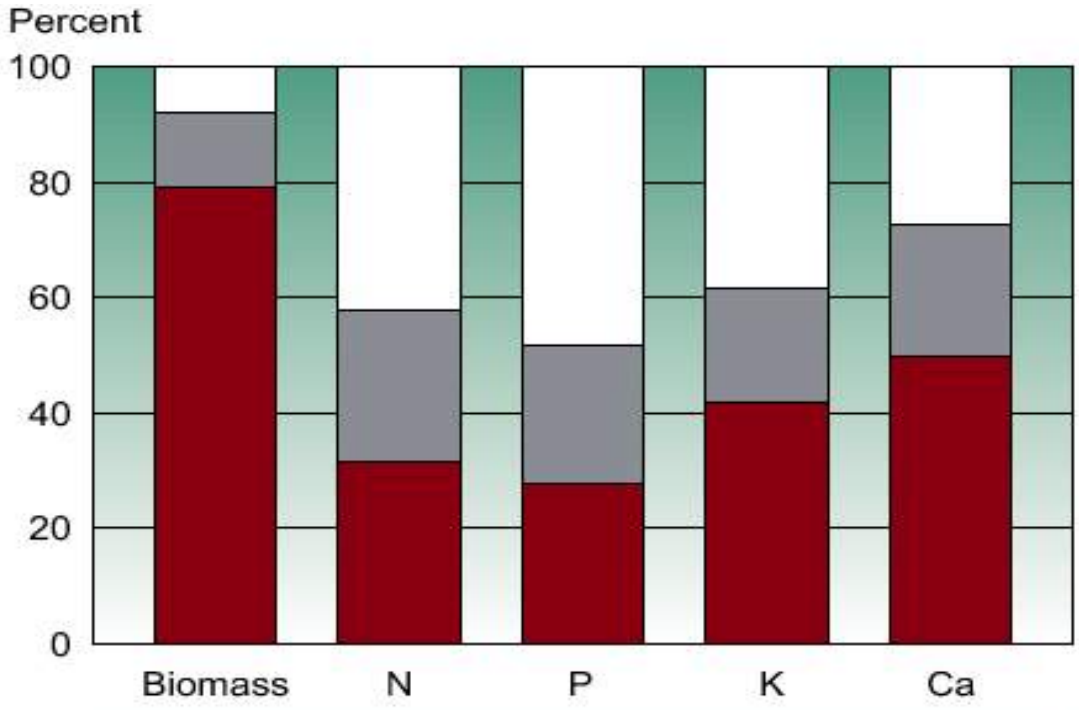
In Austria according to recent research there is 6 m^3 /ha deadwood. Taking into account the WWF recommendation 50 million m^3 of wood should be left in the Austrian forests. 13-14 million m^3 is harvested annually.







- increased harvest of woody biomass (up to whole tree harvesting)
which can lead to nutrient scarcity, disturbance due to increased transport.



Distribution of biomass and nutrients in spruce

Stem

Branches

Needles

Source: The Biomass Centre 2003

- increased utilisation of forest resources in non-commercial forests

- increased pressure on protected forests

- increased pressure on protective forests which can lead to decreased role in soil protection and watershed protection

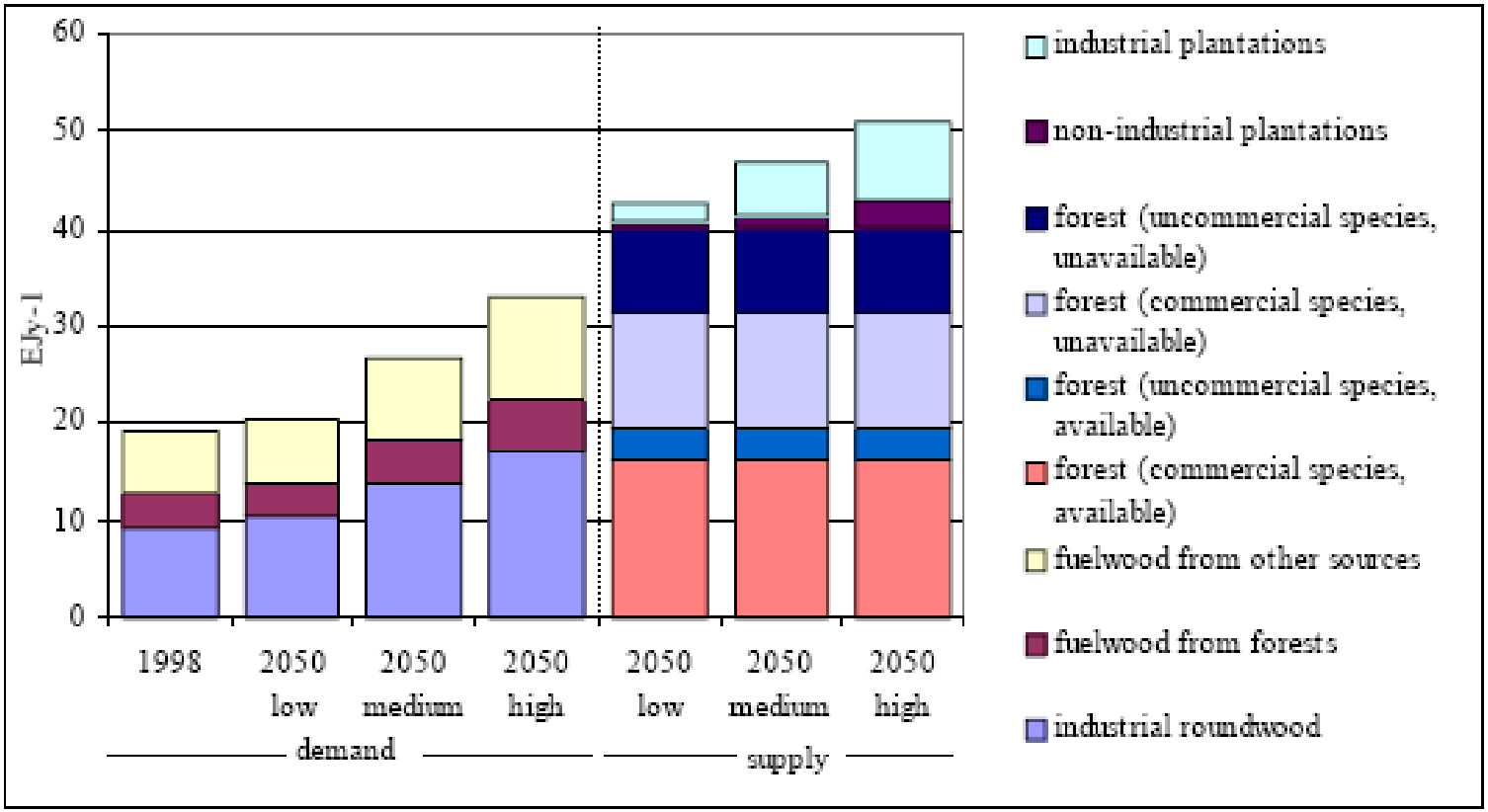
In Austria more than half of the potentially available biomass is located on slopes steeper than 40%.

- increased utilisation of forest with non-commercial species.









Roundwood demand and supply in 2050 assuming no deforestation (un)c.s. = uncommercial species, (un)av.= unavailable[26].
Sources: (FAO 1998b, 2001, 2002a), own calculations.

- The total (technical) surpluses of annual forest growth is 29 EJy^{-1} (medium demand scenario and medium plantation establishment scenario), with a range of 20 to 38 EJy^{-1} dependent on the combination of demand and supply scenarios.

However...

- “ Roughly half of the global forest areas is old-growth undisturbed forest. ***If excluded from production → surplus bioenergy production potential decreases from 33 to 8 Ejy^{-1}.***

- Some two third of the annual forest growth consists of species that are presently commercially harvestable (commercial species). For the remaining production, there is presently no market. ***If the use of wood from natural forest growth is limited to commercial species, the bioenergy potential decreases from 29 to 5 EJy^{-1}.***

- Not all forest areas are available for wood production. ***If the production of roundwood is limited to available areas only, the surplus bioenergy production decreases to 1 EJy^{-1}.”***







How much bioenergy can Europe produce without harming the environment? EEA report 2006

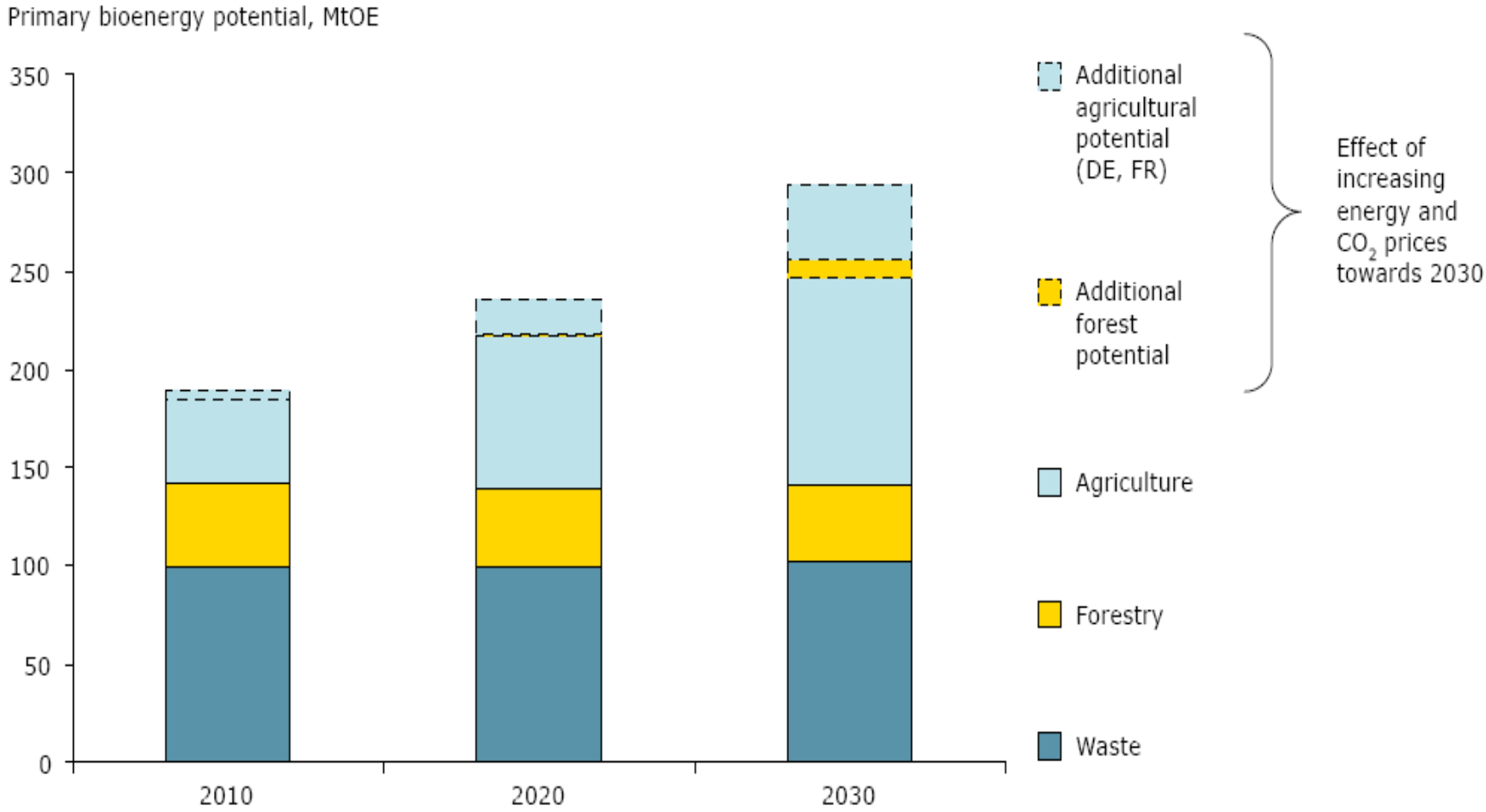
Environmental criteria included:

1. No intensification of use on protected forest areas.
2. Foliage and roots are always left on site.
3. The extraction rate for residues from stem and branches is limited according to the suitability of the site.









-40-50 Mtoe available which roughly means 140 million m^3 forestry products



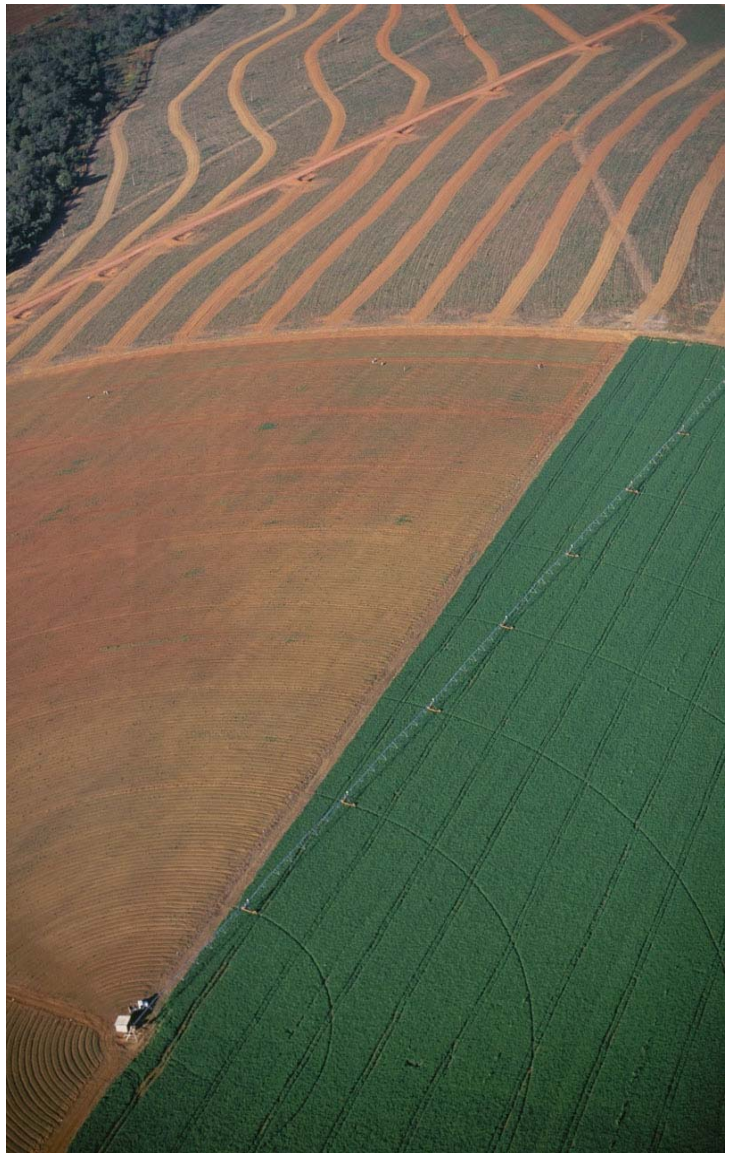




EXAMPLE biofuels produced outside Europe (I. Generation)

Palm Oil: area of oil palm plantation in Indonesia increased by 320% in the last decade. Demand is expected to double by 2020.

Soy: Area planted increased by two thirds in Latin America since 1995. World consumption more than doubled in the last decade. Demand is expected to increase by 40% by 2020.









Potential benefits are many and include

- Increased incomes for the forest owners;
- Positive influence on rural economies & nature conservation
- Opportunities for forest restoration & market for low quality wood
- Climate benefits

- Priorities for action..







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Keys to success for governments

Keep track of overall target = reduce GHG emissions
Recognise that we are discussing land-use, not forest use.

- Incorporate environmental and social safeguards;
- Measures must support sustainable development on local level;
- Key groups: small forest owners, small farmers, entrepreneurs, local communities;
- Implement participatory landscape planning processes such as mapping of High Conservation Value Forest (HCVF)
- Best management practices and certification of crops is carried out where appropriate.
- Local involvement in land-use planning is needed to ensure political stability..
    - Thinking outside the box – new technologies, new working constellations etc;
    - Find win-win solutions: support local small-scale development, strengthen nature conservation, contribution to global solution.






Role of MCPFE

Specific recommendation with respect to MCPFE *(see handout),* including:

- Commit to all uses of forests – including for biomass and energy production - follow the principles and criteria of Sustainable Forest Management (SFM) and ensure compliance with the Habitat and Bird directive, the Water Framework Directive, CBD etc

- Acknowledge that the import of bio-fuels can lead to further deforestation and degradation of forests in other regions of the world → ensure that imports of bio-fuels are based on the principles and criteria of SFM and on other effective and tested tools ensuring environmental and social responsibility such as credible certification and the principles and criteria for sustainable palm-oil production (RSPO).






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NGOs – again!!!

NGO involvement - WHY?

Crosscutting nature and speed of development brings new opportunities and challenges for multi-stakeholder involvement

We all need to work together on the climate challenge, and aim for consensus between stakeholders (forest industry, energy industry, governments, forest owners, conservationists)

We believe NGOs have a key role to play:

- avoiding/mitigation of conflict
- constructive engagement – grassroot to international level
- help identifying solutions with broad based support






NGO involvement - HOW?

Mobilization of Wood resources:

- Use existing platforms and working relationships with social and environmental NGOs;
-Strengthen standards to ensure sustainable forest management, whatever purpose the wood is being used for (e.g. FSC);
- Proactive involvement of NGOs in goal/vision planning for national climate strategy;
- Make sure local stakeholders (including NGOs) are involved from the start..;
- ..in particular in goal/vision planning for national climate & land-use strategies;
- Think Global, act Local.






What is WWF planning/doing (1)

Major building blocks in our work:

1. Deforestation (20-30% of global CO2 emissions) and climate change in the post 2012 Kyoto Negotiations create mechanisms to reduce deforestation and reach our targets on climate change.

2. Forests as source of biomass for heat or electricity and the impact of biofuels on forests

3. Adaptive management in existing forests because climate change (will become) one of the top drivers of biodiversity loss. In general close to Natural ecosystem have a much higher resistance and resilience in case of disturbances.






What is WWF planning/doing (2)

On European level:

- Certification: EU level, but also national level (Germany, Netherlands). Production criteria and GHG balance criteria.
- Best management practices for a) plantations and b) harvesting from existing forests. Focus on regions where intensive harvesting will take place.
-Technical potential vs. environmentally sustainable potential.
-Mapping, land use planning: HCVF mapping. Focus Eastern Europe and Russia.
-Links to footprint work, e.g. paper recycling vs. burning for energy.
-Further reserach on the bioenergy use in the pulp and paper industry.

We want you involved






Thank you for your attention!

Additional contacts at WWF

László Máthé
Forest and Bioenergy Officer
E-mail: laszlo.mathe@wwf.hu

Jean-Philippe Denruyter
Global Bioenergy Initiative Co-ordinator
E-mail: **jdenruyter@wwfepo.org**