Bio-energy use to combat climate change – what role for FSC?

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FSC and Climate Change


- FSC applauds the global community of governments for the Paris Agreement, [which] highlights the importance of forests in responding to climate change, calling on all countries to conserve and enhance reservoirs and sinks of carbon in forests.

- In coming years, demand for forest products will increase substantially, partly due to climate-inspired policies. In the construction sector, wood’s relatively low energy footprint is making it an increasingly widely-used building material.

- But the biggest impact on forests may come from policies in the energy sector, where the promotion of bio-energy as an alternative to fossil fuels is partly based on forest resources.

- These shifts towards using wood as a renewable and sustainable source of materials and energy are positive.
FSC and Climate Change

- **However**, if not followed by strong action to secure sustainable forest management, they also bring with them risks of increased deforestation, forest degradation, and failure to reduce carbon emissions from energy production.

[...] **FSC expects from governments:**
- **Climate change policies that promote energy efficiency and efficient material use**, including the cascaded use of forest resources (i.e. producing material products first and energy at the end of the life-cycle).
- **Strict, enforceable requirements for the use of biomass for energy production** that lead to a genuine, quantified reduction of greenhouse gas emissions compared to fossil fuel use, and prevent negative impacts on biodiversity.

[FSC cannot provide most of this itself]
Biomass to produce energy

Globally >50% of forest biomass is directly used to produce energy
About 90% of this traditional, including local/regional charcoal

In modern power/heat production: bio-energy now modest place
But: is the most used **renewable** energy source

Very different expectations about increased use:
25% (WB 2010), from 2005 by 2030,
   Traditional use – very small decline
   Modern use -- + 150% -- > 35% total use

**or more:**
WWF Living Forest Reports (2012): possible scenarios (compared to 2010):
   by 2030: +150-180% additional fuelwood demand
   by 2050: +350-450%

Currently a main driver is climate policy --- most clearly in the EU
In EU discussion is heating up
(ahead of possible EU-wide rules for 2020-2030)

“Increasing the carbon storage in existing forests is a cost-effective measure to decrease net carbon emissions, but EU policies are currently biased towards the use of forest biomass for energy with potential negative effects on the climate over the short to medium term” (European Academies Science Advisory Council, April 2017) + advice for long time storing of carbon by stimulating wood use in durable commodities and construction

“Increasing the share of renewable sources of energy, such as biomass from forests, is consistent with reducing greenhouse gas emissions.” Assuming SFM, ”developing new markets and end uses for all types of biomass from forests could increase the efficient use of currently unused feedstock, such as the raw material derived from thinning.” (joint statement European forest owners organisations, April 2017.)
Conditions for promoting bio-energy use

- Achieve real climate benefits
- Prevent negative environmental (and social) impacts

**Achieving climate Benefits:**

- Real reductions of GHG emissions compared to business-as-usual
  - How fast do these reductions have to be achieved (carbon debt)?
  - Can we rely on LULUCF? – not calculating emissions at smokestack? - also in case of considerable imports?
  - NGO solution: only residues and waste – no stems and stumps

**Prevention Negative Impacts:**

- Will bio-energy promotion lead to over-exploitation of forests?
  - How to ensure SFM? [FSC, PEFC, SBP]?
  - Revisions/additions to SFM-definition needed?
Role of FSC

In Forestry – P&CV5 + follow up instruments:
- Defines “carbon sequestration and storage” as ecosystem function
- Followed by option of using FSC's Ecosystem Services Procedure to demonstrate maintenance/enhancement of carbon (available 2018)

In CoC: consultation December 2016 on possible “FSC Carbon Footprint Procedure”
- To identify carbon footprint, when desired, for all kinds of products
- Using the forest tools as added value compared to existing bio-energy calculation tools

38 responses: – 21 clear yes – 10 against – rest ambivalent

However: responses also indicated relevant challenges
Challenges from the Consultation:

Contrasting:
- **No need**: FSC to perceive bio-energy as carbon neutral: is logical consequence of applying SFM (regeneration of lost carbon stock); and for GHG emissions of transport/processing methods already exist.
- **Limitations**: FSC to focus on forest-impacts; no tools to calculate GHG emissions during and after use;
- **Potentially perverse results**: footprint may seem/be higher:
  - Lack of good reference values for non-FSC forests
  - More intensive harvesting ~ less GHG/m3
  - Longer transportation due to FSC feedstock choice

Practical:
- Science evolving – do not fix a method now (IPCC 2018)
- Cooperation of entire supply chain needed
- What about Controlled Wood?
- FSC capacity to apply this?
Purpose of this side-event

- How does FSC ensure climate benefits and prevent negative impacts?
  Presentation by Chris Henschel, Manager of FSC Ecosystem Services Program

- Discuss a potential wider role for FSC with stakeholders:
  - Should we be worried
  - Should we engage in the overall debate about biomass use
  - Should we develop

  Janne Näräkkä - Finnish Forest Industries
  Gijs Breukink – WWF International
  Carsten Huljus – Sustainable Biomass Program