Comments to the EFI report on Climate-Smart Forestry
(in the context of EC LULUCF proposal)

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Options for mitigating climate change through forest management

Option		current offset of total EU emissions (%)	Short-term *relative* impact of > harvest	
Increase in C stock	in existing forests (CO_2 sink or "removal") 	≈ 10% (only 1% accounted under KP in 2008-2012)	<<	*Reported/accounted in:* LULUCF
	in wood products 	≈ 1%	>	
Substitution effects by wood (approximate figures)	Material 	≈ 1-2%	>	Other GHG sectors
	Fossil-fuel energy 	≈ 4-5%	*	

Forest !

* While the emission saving by material substitution are immediate, when wood replaces fossil fuels the emissions saving highly depends on the context, assumptions and time frame.

Trade-offs exist between options, each with its **temporal dynamics** of emissions. E.g. *more harvest may mean less forest sink in the short term but more substitution effects.*

The most effective forest mitigation strategy is the one that optimizes the sum of the above options in a given time frame.

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What science says on the best forest mitigation strategy?

short answer is:

IT DEPENDS

The optimal mix of mitigation options is very much country-specific

The Climate Smart Forestry report goes in the right direction, very optimistically: "*EU Member States can achieve an additional combined mitigation impact of **448 Mt CO2/yr by 2050***": is it realistic?

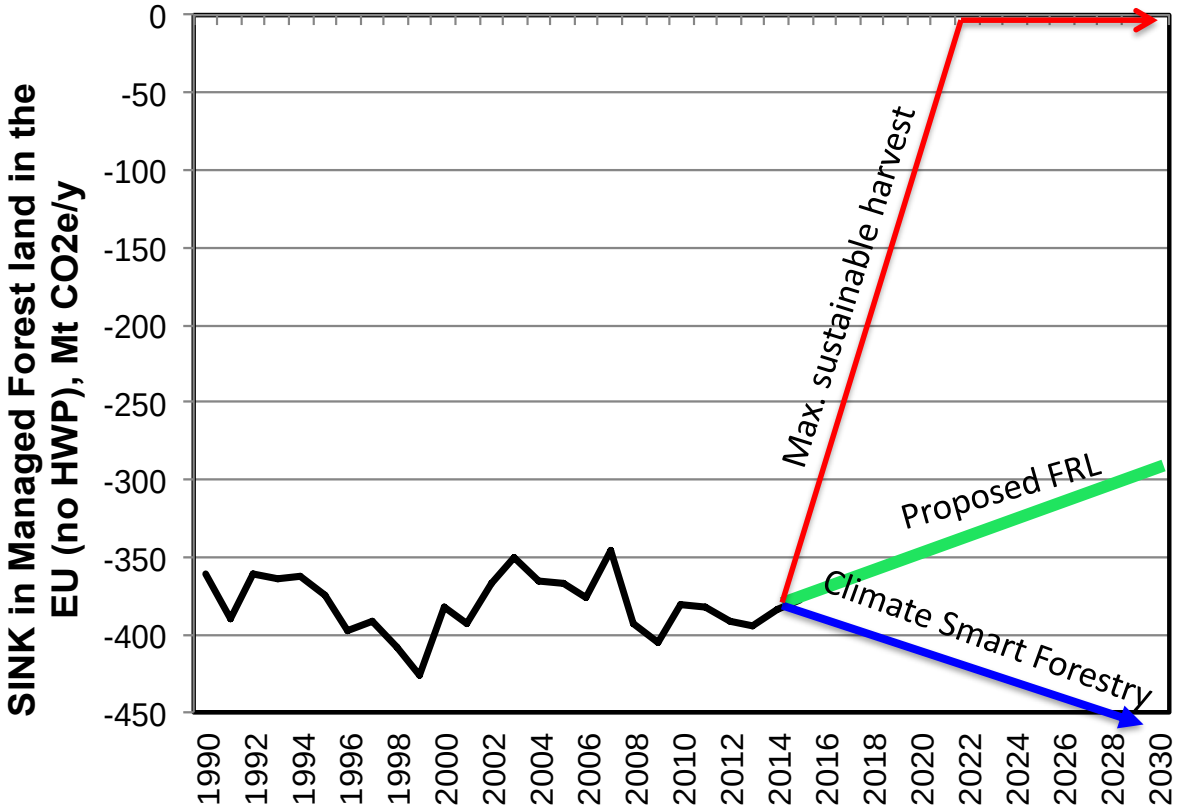
The EU LULUCF legislation does not identify the best mitigation strategy (harvesting more or less), but promotes an **accounting** which is **accurate** and **comparable to other GHG sectors**, including for **bioenergy**

The FRL proposed by the Commission is based on the **continuation of forest management practice and intensity**, as documented in the historical Reference Period (RP).

- The **future accounting will reflect emissions and removals resulting from *changes in management practices and intensity*** relative to RP (as in other sectors), but excludes the impact related to natural forestry cycle (age structure dynamics)
- **It does not project the assumed *future* impact of policies/markets**

Proposed FRL, Climate Smart Forestry and max sustainable harvest: impact on future EU sink

(note: the overall GHG impact depends on the use of the wood: a climate-smart use of wood may provide extra mitigation, through HWP and substitution effects)



Harvest = increment

While it is an unlikely scenario, if we make it possible in principle, how to explain it outside the EU?

Age-related sink decline (JRC)

(≈ IIASA's Ref Scenario with policies)

EFI report 2015

"forest carbon storage in EU forests could continue to increase from 2010 to 2030 by around 20%, providing additional sequestration of up to 170 Mt CO_2 /y by 2050"

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Conclusions

The **Climate Smart Forestry report** goes in the right direction, i.e. holistic (beyond LULUCF) and regional-specific solutions to optimize the forest mitigation options.

The case studies are useful, and correctly show some trade-offs between options.

Despite some optimistic assumptions, scaling up results of case studies at EU level would NOT give an *extra* 448 $MtCO_2/y$…

Substitution effects do not need new accounting, but ***better communication***.

The **LULUCF regulation** needs to combine active forest management and credibility of EU climate targets.

The FRL proposal is already a compromise:

- **Stimulates an increase in harvest at EU level** (when age-related) → extra material and energy substitution, with benefits in other GHG sectors
- **Ensures credibility of accounting**: no risk that that policy-driven increase in emissions will disappear from the accounts (→ essential for bioenergy)

Forests have always been central in climate negotiations

Forests emerged as an <u>essential</u> element of the Paris Agreement,
as long as the *credibility* of mitigation efforts is ensured.
(credibility is not a easily renewable resource)

Don't miss the forest (EU climate objectives) for the trees

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Thank you!

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