

Robust and credible accounting rules for forests

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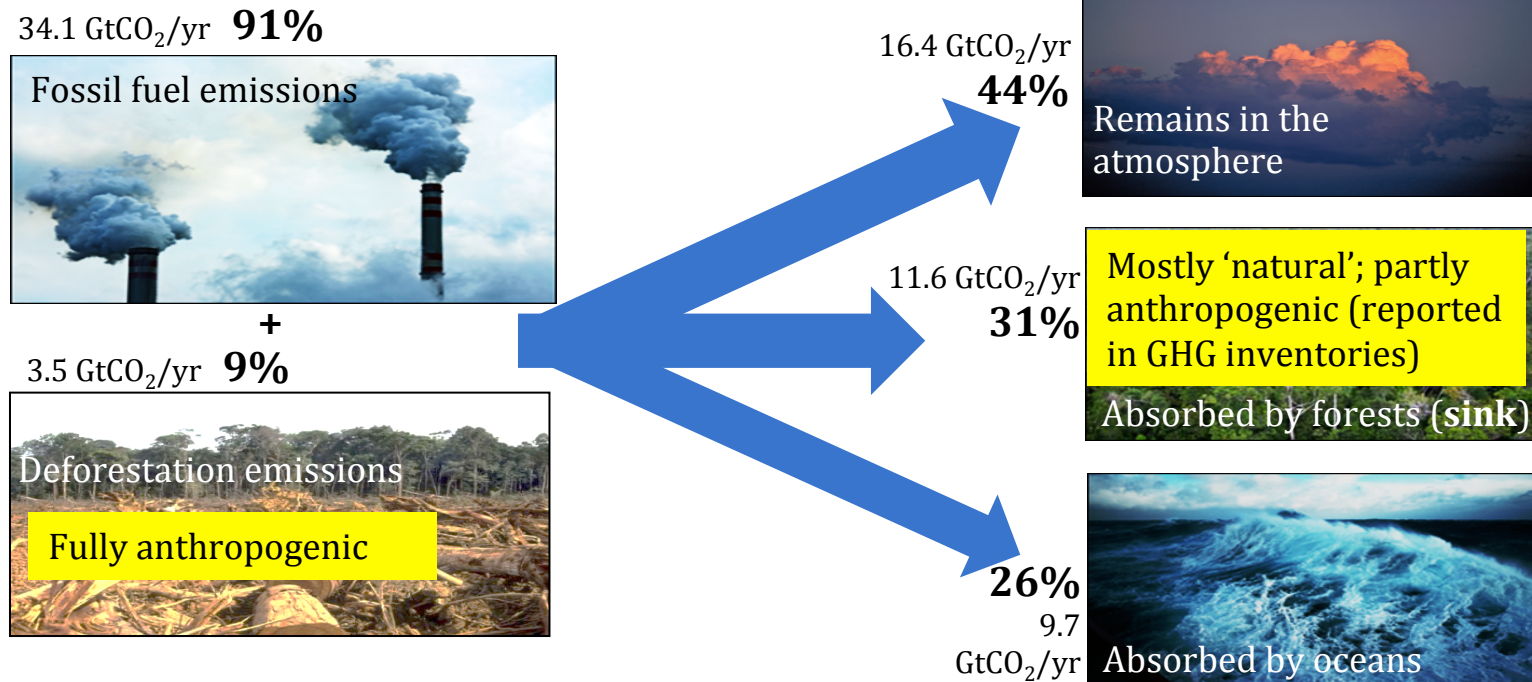
Joint Research Centre, European Commission
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Public Hearing on
"Meeting the EU's 2030 emission reduction targets: the role of the land use and forestry sectors (LULUCF)"
Bruxelles, 30 January 2017, European Parliament

The global context

Global sources and sinks of anthropogenic CO₂ emissions

2006-2015 averages from Global Carbon Project 2016



The Paris Agreement recognizes the key role of forests

- < 2°C → balancing *anthropogenic* emissions and removals in the 2nd half of century
- Among mitigation options, countries asked “*actions to conserve and enhance sinks*”

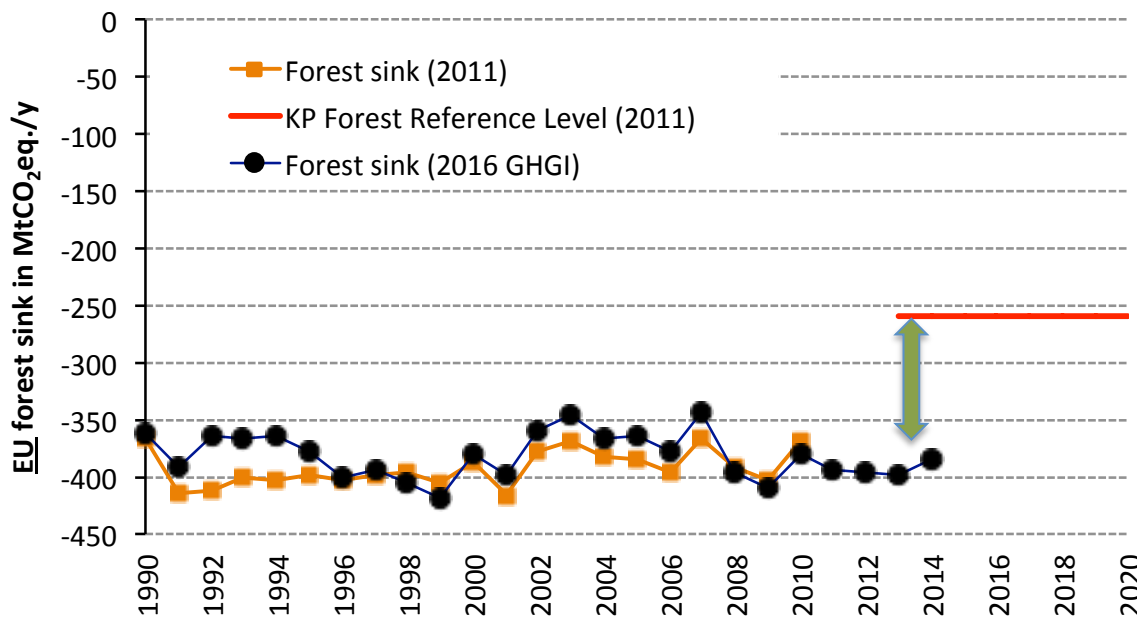
How to ensure robust and credible **accounting rules** for EU managed forests ?

Rules aimed to reflect the additional
impact of human actions (mitigation)

Forest Reference Level (FRL): country *baseline* for future forest emissions / removals, against which the actual emissions/removals will be compared for accounting purposes

Under Kyoto (2013-2020), the **EU MS' FRLs** were based on **projections**, including the impact of forest aging + assumptions on the future impact of existing policies + markets

Reported
sink in
2016
(EU27):



ACCOUNTING

The forest sink in now **100-120 MtCO₂/yr** greater than FRL (≈2% of total 1990 total EU emissions)



Why is reality so different from projections? (*impact of policies? economic crisis? projections inflated with flawed assumptions on harvest?*)

Does the inclusion of policy assumptions affect the **credibility** of future FRL setting?

Impact of forest aging and policies on the forest sink

Forests getting older: need of more harvest → temporary sink decline

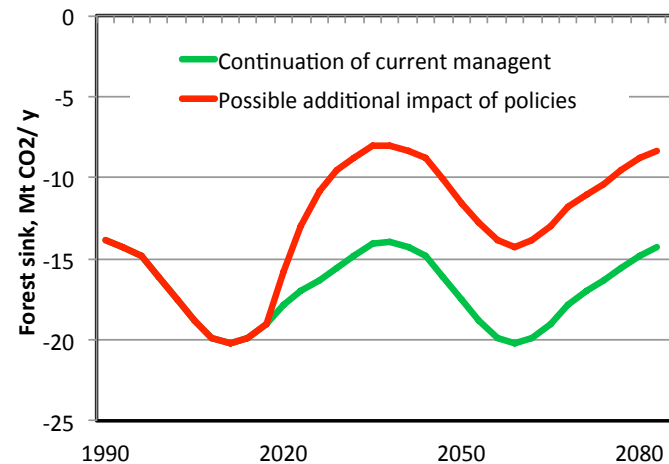
Extra policies stimulating harvest:

> *decline of the sink* → LULUCF 😞

> *GHG substitution* → other GHG sectors 😊

“forest sector”

“for~~est~~” mitigation



Extra wood for substitution:



Lessons from Kyoto: policy assumptions hampers credibility of FRL

E.g. **bioenergy** [biomass burning emissions are not counted under energy: assumed to be counted in LULUCF]

An existing policy plans to build 8 new biomass plants → extra harvest in the FRL. In reality, it may happen that:

- 2 plants built → less harvest than expected: credits reflect to a deviation from (not reviewable) assumptions → FRL a *“baseline set so low that success is guaranteed”*?
- 8 plants built → a policy-driven, real-world increase of emissions is included in the FRL and disappears from the accounts → **bioenergy NOT counted in LULUCF**

NEW forward-looking FRL: continuation of current forest management

- **FRL entirely based on national circumstances:** current forest management and the age-class structure dynamics are *factored in the projections*
- **The FRL does not project *future* impact of policies/markets**, but will implicitly reflect the impact of past policies (like the base year for any other sectors)

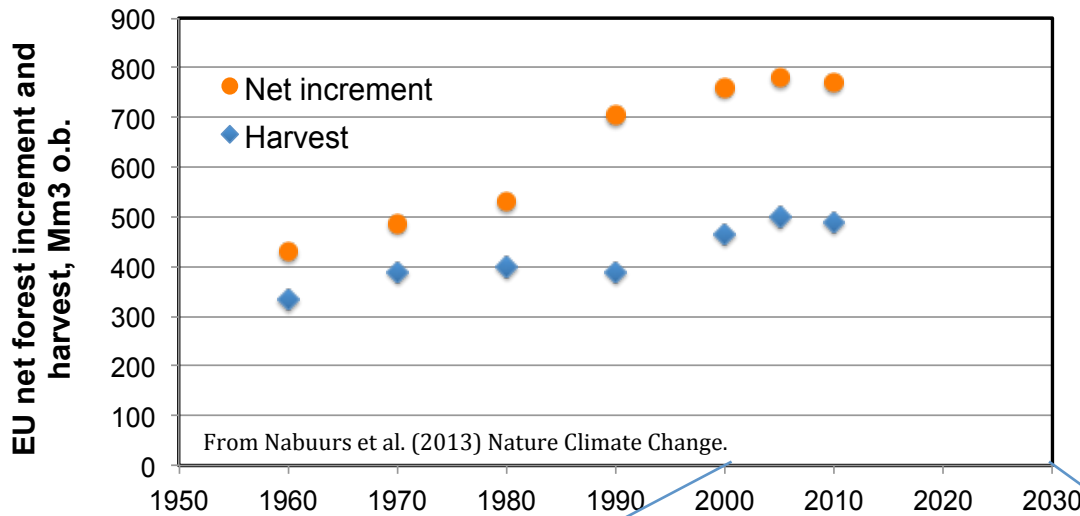


The accounting will reflect only *changes in management practice and intensity* relative to historical period (like any other sector)

Does the factor below affect the accounting?	Other GHG sectors	LULUCF	
		FRL under KP	FRL in EU post-2020
<u>Assumed future</u> impact of policies/markets/owners' behavior	NO	YES	NO
Change in management relative to historical period	YES	YES	YES

Which is the concrete expected impact of this FRL approach?

Long-term forest increment and harvest trends in the EU



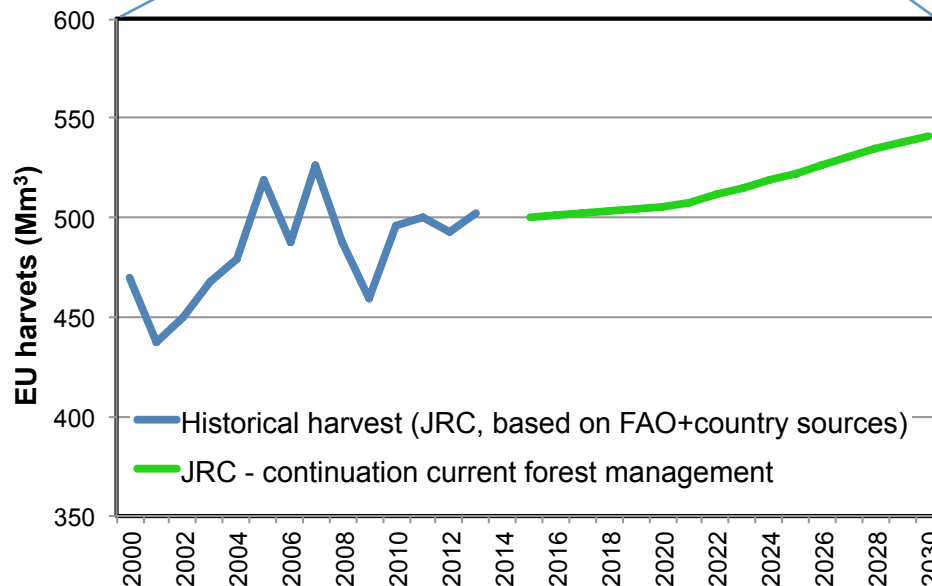
Forests getting older in most MS:

→ the increment is saturating

→ more forests reach maturity

... and the expected impact of the proposed FRL

(preliminary simulation by JRC using the Carbon Budget Model)



Harvest in 2021-2030 projected to be $\approx 10\%$ higher than in 2000-2009

(while net increment 2% lower)

The age-related extra harvest needed to continue the current management will enter in the FRL → will not be accounted as a debit

Conclusions

The **proposed FRL** incorporates the forest-aging dynamics, ensuring reviewability, credibility (i.e. bioenergy) and comparability with other GHG sectors.

In contrast, including policy assumptions into the FRL would seriously undermine:

(1) the credibility of forest mitigation

Risk of “easy” forest credits and/or an increase of emissions disappears from the accounts

up to 2% of total 1990 total EU emissions

(2) the EU long-term climate objectives

The EU objective of reducing GHG emissions of -40% by 2030 (80-95% by 2050) compared to 1990 (excl. LULUCF) is based on the IPCC 2°C trajectory for developed countries¹, which in turn assumes decreasing LULUCF net emissions². *Increasing* LULUCF net emissions through policies should be correctly accounted, otherwise we lose consistency with IPCC.

Hiding emissions due to policies doesn't put us on track with IPCC. Instead, we should further reduce the emissions in other GHG sectors. Ready for that?

¹ 'A Roadmap for moving to a competitive low carbon economy in 2050', COM(2011) 112 final

² RCP database. <http://tntcat.iiasa.ac.at/RcpDb/dsd?Action=htmlpage&page=welcome>

Forests have always been central in climate negotiations



Forests emerged as an essential 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