

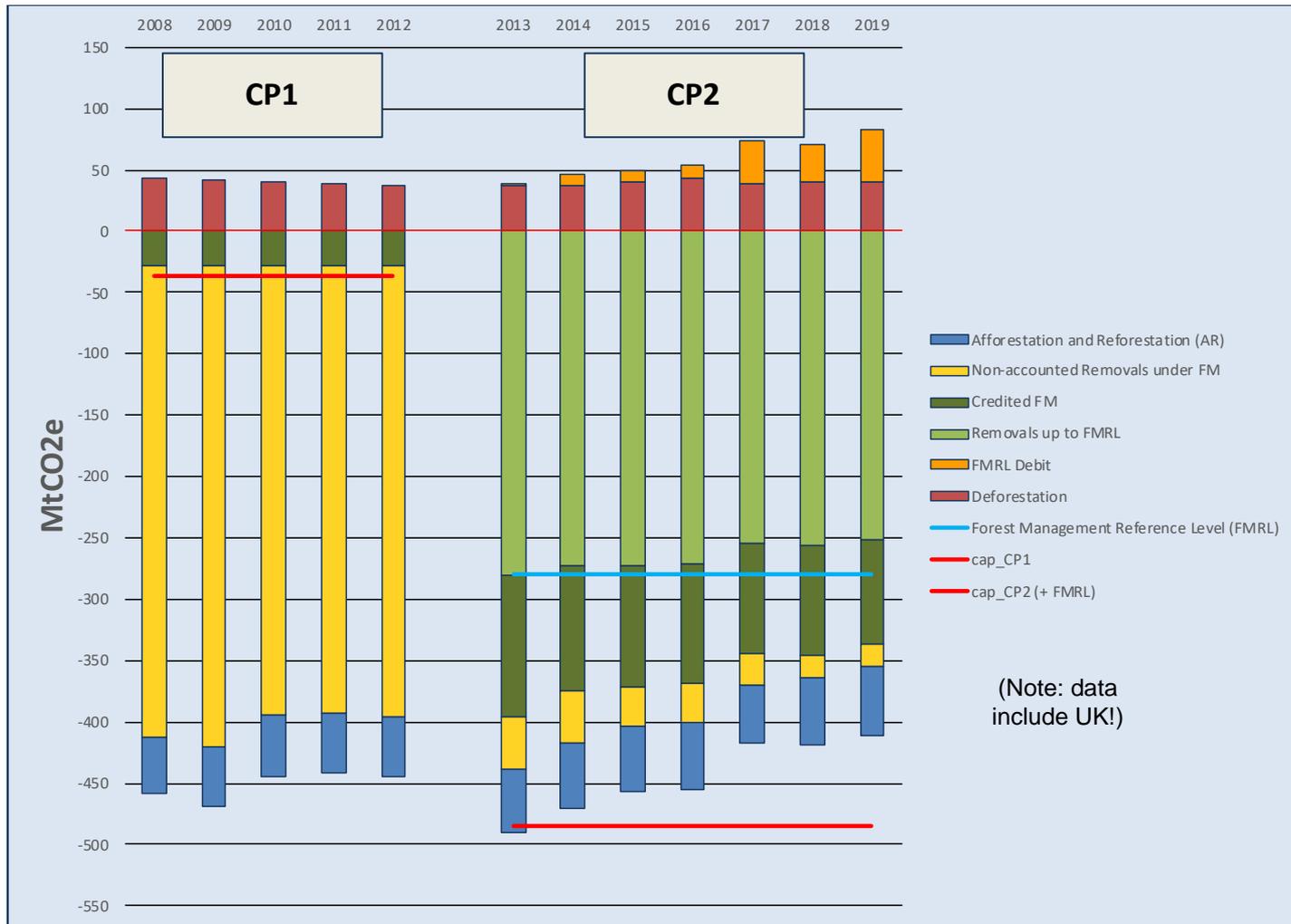
# Europe's Forest Sink Obsession

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# Does Europe Have a Forest Sink Obsession?



- Clearly, there is a declining sink.
- But what is the best way to solve this problem? (FRL?, cap?)
- Does it need to be solved...? (Substitution vs. sink?)

“If such a high rate of forest harvest continues, the post-2020 EU vision of forest-based climate mitigation may be hampered, and the additional carbon losses from forests would require extra emission reductions in other sectors in order to reach climate neutrality by 2050.” (*JRC, Ceccherini et al. 2019*)

According to LULUCF proposal (COM(2021) 554 final):

“To become carbon neutral by 2050, the European Union (EU27) net carbon sink from forests should increase from the current level of about -360 Mt CO<sub>2</sub>e yr<sup>-1</sup> to -450 Mt CO<sub>2</sub>e yr<sup>-1</sup> by 2050.” (Pilli et al. 2022)

**Should we focus on More Protected Forests?**

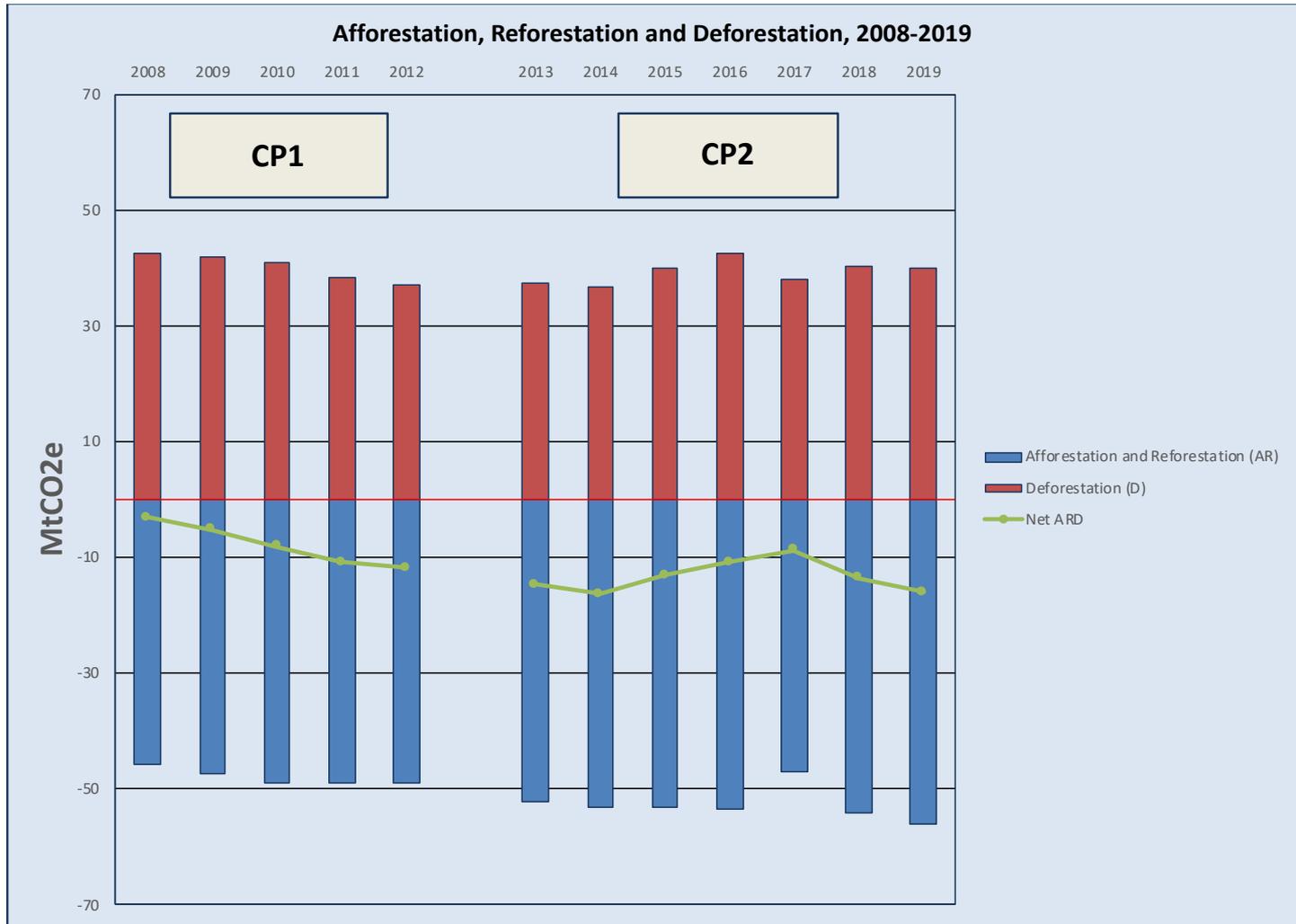
**Less Forestry? (Is harvest intensity really the principal concern?)**

**What is really the argument here?**

**And what are the most appropriate tools/goals?**



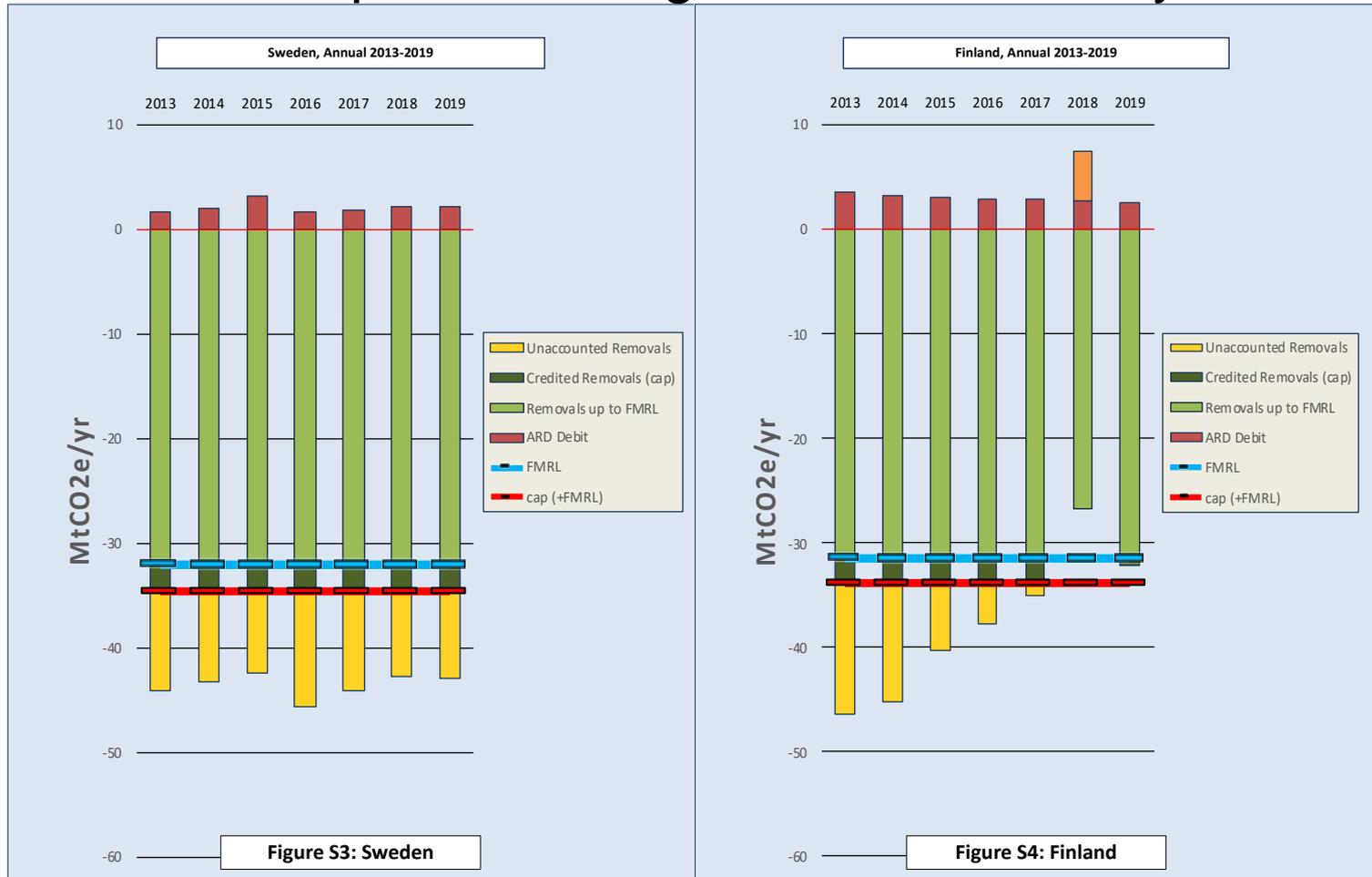
# Should we focus on Less Forestry, More Protected Forests?



Net ARD in 2019 represents only -16 MtCO<sub>2</sub>e (MFL: -410 MtCO<sub>2</sub>e)

# Why Pick on Sweden and Finland?

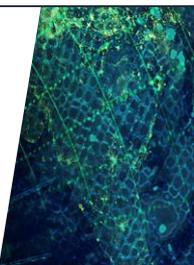
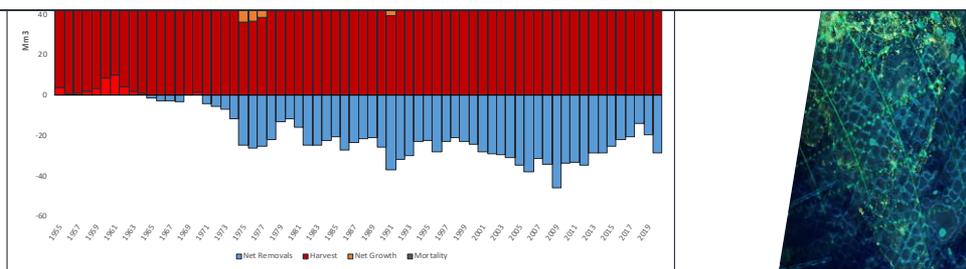
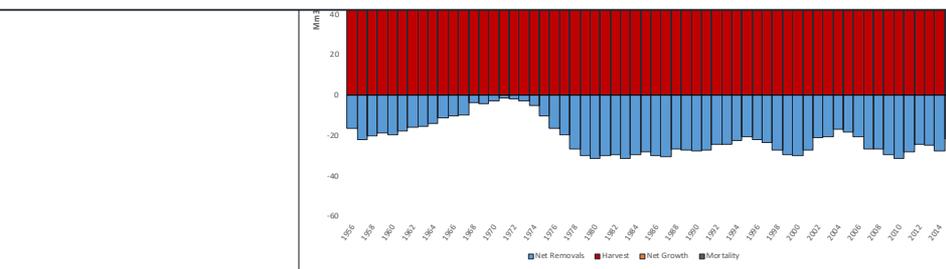
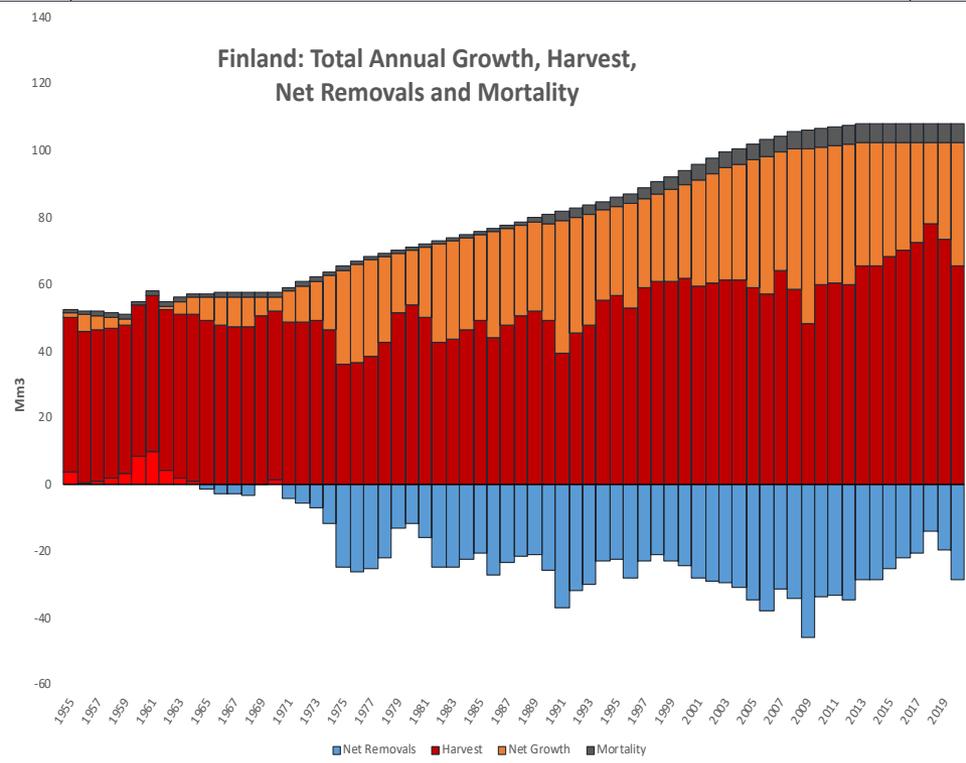
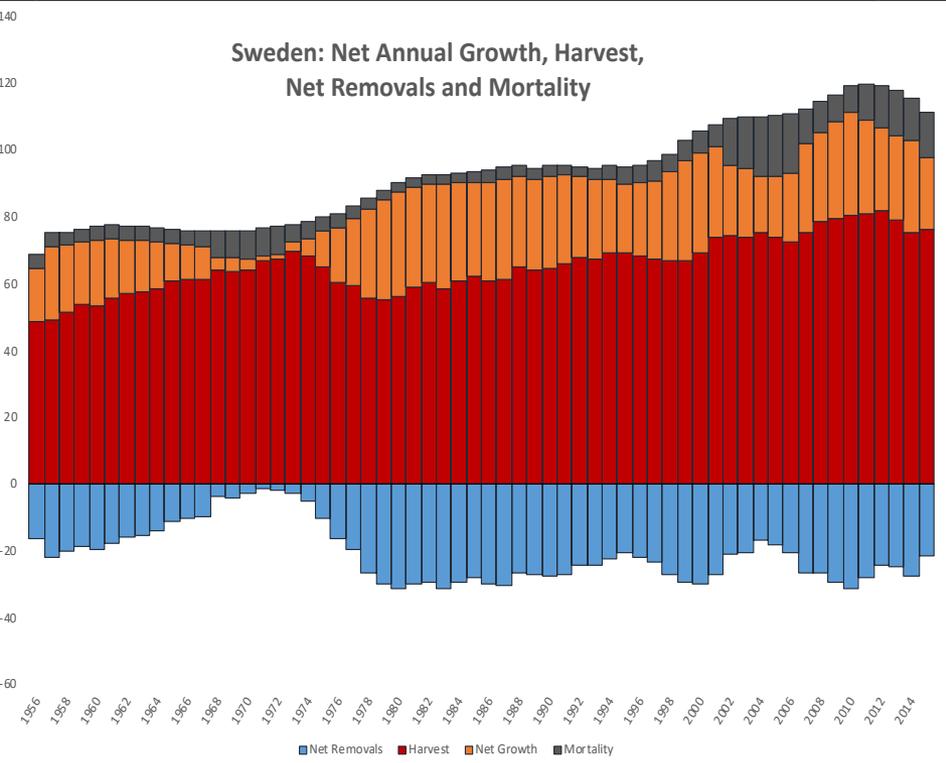
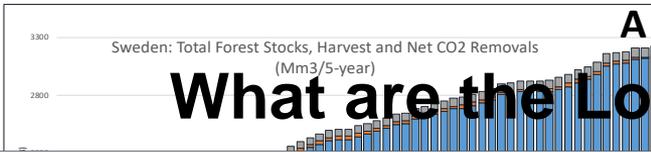
## How Important is High Harvest Intensity?



## Bioeconomy Strategy vs. Focus on Land Carbon Sink?

- Note: GFC data used by the JRC overestimates harvest activity in Sweden and Finland by 851% and 188%, respectively (Breidenbach et al., 2022).

# What are the Long-Term Trends?



# How can these Dilemmas be Resolved?

- What factors weaken the EU strategy?
- Why has it failed to deliver increasing net removals?
  - Harvest vs. other factors...? (disturbances, CC, etc.)
- Are Mixed Incentives a Problem?
  - How are the investment strategies of land and forest owners affected by EU LULUCF policy? (cap, FRL)
  - What messages do rising FRLs send to bioeconomy aspirations?
- The EU LULUCF framework was written to govern Member states. It was NOT written as a policy framework for driving micro-level action by land and forest owners. Consequently, land and forest owners and the motivations that drive them are almost entirely ignored.
- In addition, however, we should recognize the fact that the EU LULUCF Framework was *not designed to mobilize* forestry. (Limits, caps, FRL, compartmentalization).

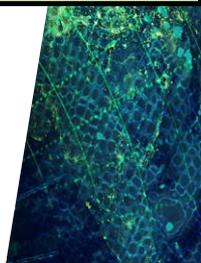


# Why Mixed, Unaligned Incentives Matter

## Incentives Faced by Forest Owners and National Governments (Parties) under the New EU LULUCF Policy Framework for Commitment Period 3 (2021-2030)

EU Managed Forest Land Framework			Party/Government perspective		Landowner perspective		Logic	Possible Mechanisms
Scenario	Net Removals (From-To)	Accounting Options	Paris Agreement and NDC-based Incentives	Promote Growth (G)/ Harvest (H)?	Economic Drivers	With Government Intervention & Incentives		
			(1)	(2)	(3)	(4)	(5)	(6)
(1)	0 - FRL	Debits Only (Target/Commitment)	Harvest for bioenergy, HWP not significantly different from Standing Forest	G/H	HWP, Bioenergy	Standing Forests, HWP and Bioenergy	fully incentivized G/H	Carbon Price (Tax/ETS), carbon neutrality, CS Standing Forest Payments, HWP Carbon Pool incentives
(2)	FRL - cap	Credits Only	Harvest for bioenergy, HWP not significantly different from Standing Forest	G/H	HWP, Bioenergy	Standing Forests, HWP and Bioenergy	fully incentivized G/H	
(3)	Surplus beyond cap to Flexibility Limit	Credits can be transferred to LULUCF activities & ESR	Harvest for bioenergy, HWP not significantly different from Standing Forest	G/H	HWP, Bioenergy	Standing Forests, HWP and Bioenergy	fully incentivized G/H	
(4)	Flexibility Limit - Total MFL removal	Credits for HWP removals (only)	Harvest for HWP and Bioenergy (with cascading, preference for HWP)	H	HWP, Bioenergy	Harvest for HWP and Bioenergy (with cascading, preference for HWP)	Standing forests not incentivized H	+ Legislate Cascading

- Even if Member states want to mobilize the forest use sector, the EU framework sets relatively strict limits on its carbon offsetting potential.



# *Imaginative & Inventive* Climate Policy Frameworks

- Can a LULUCF strategy be devised to resolve these problems?
  - Yes.
  - Flexibility (no Pillars/no Compartmentalization)
  - Neutrality (no favoring individual strategies)
  - Additional Floating Commitment (FRL equivalent)
    - Member states choose optimal strategy
  - Eliminate the FRL and the cap
  - Account all LULUCF emissions/removals from a “0” baseline
  - Allow tradable credits, all removals, no limits
  - IPCC, negative emission role of forests?



A photograph of a forest with many tall, thin, grey-barked trees. The ground is covered in a dense layer of low-lying vegetation, including small green plants and patches of reddish-brown moss or lichen. The lighting is soft, suggesting a forest interior.

**Thanks for Listening!**  
**Comments Welcome**  
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