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# Policy implications of the EFI climate policy and forest-based sector study

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# Outline

1. Background: what is the policy and science setting?
2. Estimates of the EU forest sector potential contribution to mitigation
3. What should be done to realize the mitigation potential?
4. Key criteria for good climate policy, and what do they imply?

 FROM SCIENCE TO POLICY 2

A new role for forests and  
the forest sector in the EU  
post-2020 climate targets



Gert-Jan Nabuurs, Philippe Delacote, David Ellison, Marc Hanewinkel,  
Marcus Lindner, Martin Nesbit, Markku Ollikainen and Annalisa Savaresi



# Background

- Paris Agreement & EU 2030 framework
- Complexity of the phenomenon, policy and science
- Focus on the big picture and objectives
- Scientists have values, and commissioned science may reflect the interest of the commissioner
- Science input is essential and helps to bring forward “hidden” possibilities, impacts, synergies, trade-offs and choices

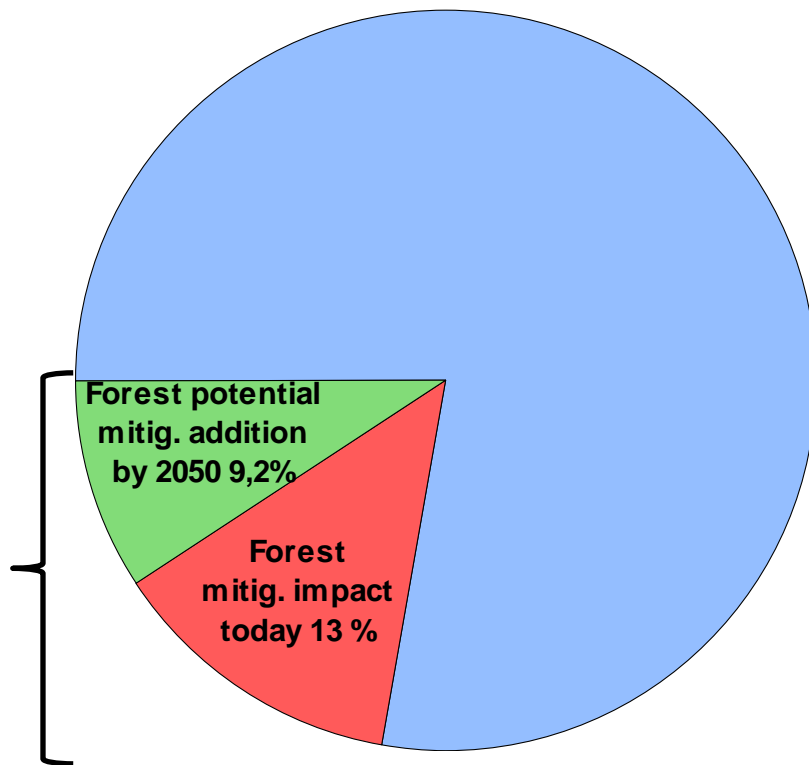


# What can the EU forest & forest sector do for climate change mitigation?

# Estimated EU forest & forest sector mitigation potential relative to total EU CO<sub>2</sub> emissions

The EU total CO<sub>2</sub> emissions in 2012

It is estimated that an equivalent of 22 % of the total EU CO<sub>2</sub> emissions in 2012 could be potentially mitigated by forest & forest sector by 2050



*The forest sector can play a major role!*

*Estimates based on: Nabuurs, Delacote, Ellison, Hanewinkel, Lindner, Nesbit, Ollikainen & Savaresi. 2015. A new role for forests and the forest sector in the EU post-2020 climate targets. From Science to Policy 2. European Forest Institute.*

# Where would that additional 9% mitigation potential come from?

Mitigation source / <i>role</i>	Measures needed	Estimated mitigation impact / year
Forests / <i>sink</i>	Forest management to increase carbon storage	170 Mt CO <sub>2</sub>
Abandoned farmland transferred to forest / <i>sink</i>	Afforestation of estimated 12–17 Mha of abandoned farmland	70 Mt CO <sub>2</sub> (+ <i>potential additional wood production of 100 Mm<sup>3</sup></i> )
EU domestic woody biomass residues and low-quality thinning wood / <i>substitution</i>	Substitution of fossil based energy and materials	180 Mt CO <sub>2</sub>
<b>Total potential additional mitigation impact</b>		<b>420 Mt CO<sub>2</sub></b>





# What should be done to realize this mitigation potential?

Climate Smart Forestry (CSF) (*Nabuurs et al. 2015, EFI*):

- Use **triple S impacts** – sink, substitution and storage
- Create new policy incentives
- Tailoring policies and incentives at the regional level – *one size does not fit all*
- Finding synergies between climate and other benefits (*e.g., bioeconomy, biodiversity*)
- Strive to conciliate mitigation with adaptation



# The EU climate policy





# Main options for integrating LULUCF into the EU 2030 framework

1. To create a separate LULUCF pillar
2. To create a Land use sector pillar merging the LULUCF and the agricultural sector
3. To incorporate LULUCF in the Effort Sharing Decision (ESD)

*Note! A fourth option (not on table) would be to include LULUCF activities in the Emission Trading System (ETS)*



# Key criteria for climate policy



# Criteria for successful climate policy

## 1. Results

- It needs to achieve the EU climate target

## 2. Realistic

- It has to be politically feasible to implement

## 3. Economic efficiency

- It has to be as cost effective as possible

## 4. Fair and socially acceptable

- It needs to create acceptable burden sharing between Member States, and different societal groups within the Member States



# What do criteria imply for EU climate policy?

## 1. Results

- All the EU options can be designed in a way that the target is met

## 2. Realistic

- The more flexibility there is in ways to meet the target, the more likely it is that it is politically realistic (*enhance synergies, avoid trade-offs*)

## 3. Economic efficiency

- The more flexibility there is in ways to meet the target, the more cost effectively the target can be met

## 4. Fair and socially acceptable

- The more flexibility there are to meet the target, the more easier it is to make it fair and socially acceptable



## Conclusions & Key Messages

- Increase **flexibility** and avoid sectoral isolation in policy (*e.g., favors option 3. rather than 1.*)
- Provide **incentives** to do more and utilize **regional** strengths
- Seek **synergies** with other policies, avoid creating trade-offs
- Utilize all the possibilities of forest & forest sector to contribute to mitigation: **sink**, **substitution** and **storage** (SSS)
- Acknowledge and take advantage of the fact that forest sector **mitigation** and **adaptation** are married



# *It will not be simple, we need more new tools*

- Technology and science provides more policy options than 20 years ago (*c.f. Kyoto Protocol time*)
- Utilize piloting experiments and gradually increasing targets for new policies
- Invest in R & D
- Studies on how the EU regions can best contribute to climate targets, and what policy incentives are need to generate these benefits?
- Increase science cooperation and syntheses





*No policy - no matter how ingenious -  
has any chance of success  
if it is born in the minds of a few  
and carried in the hearts of none!*

*Henry Kissinger*



# *Thank you!*



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