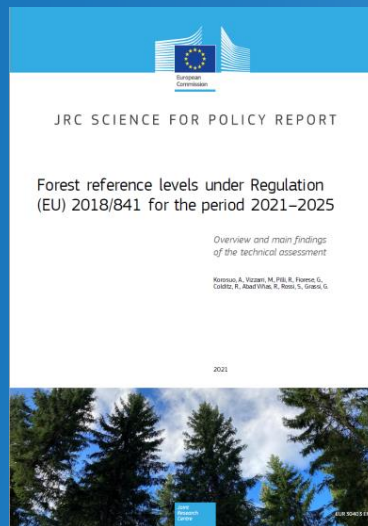




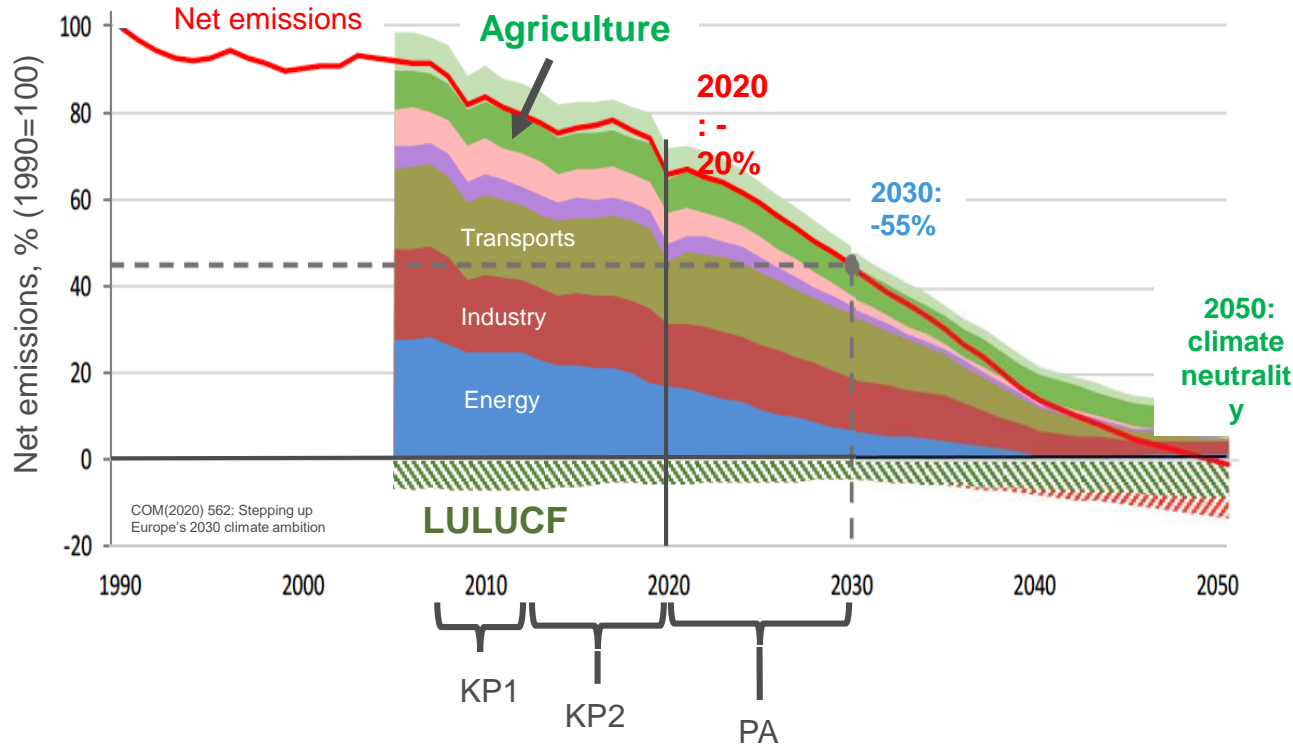
Forest reference levels for 2021-2025



*A. Korosuo, M. Vizzarri, R. Pilli, G. Fiorese, R. Colditz,
R. Abad Vinas, S. Rossi, G. Grassi*

JRC LULUCF workshop, 8 June 2021

LULUCF in the EU climate targets: a long and winding road



COM(2020) 562: “to track progress towards climate neutrality the full net LULUCF sink needs to be included”.



- Further increased confidence in numbers
- Stop & reverse the current decline of LULUCF sink

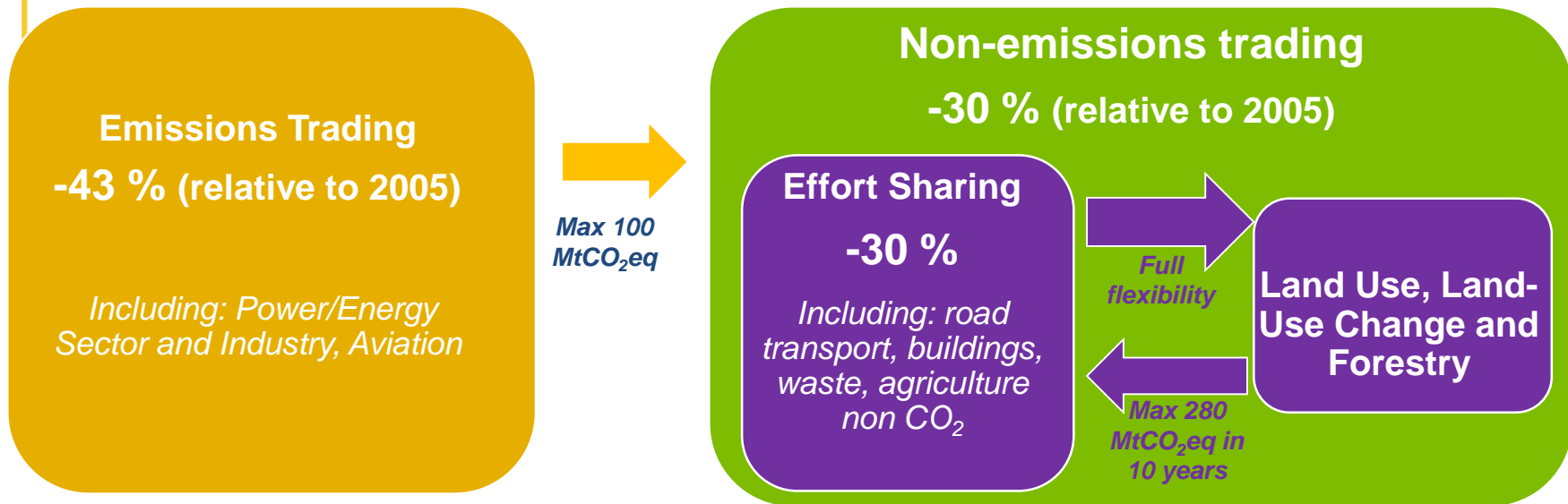


- 2018/841
- Fit-for-55 proposals by Commission (upcoming)

Reporting	*	**	***
Accounting	*	**	***

→ The progressive inclusion of LULUCF in the climate targets follows the confidence on its numbers

LULUCF in the current EU 2030 climate policy (-40% emissions in 2030 relative to 1990)

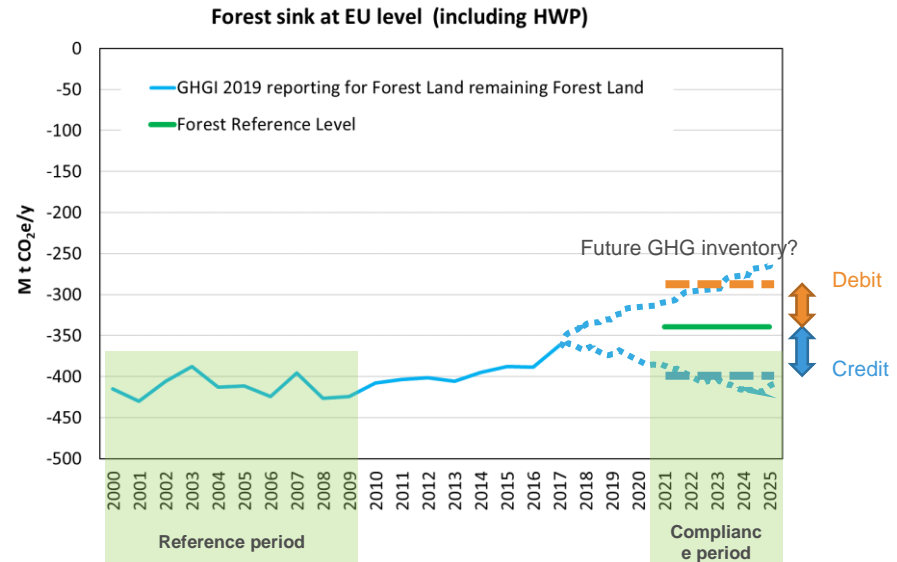


The **Regulation 2018/841** brought LULUCF into the EU climate framework, including:

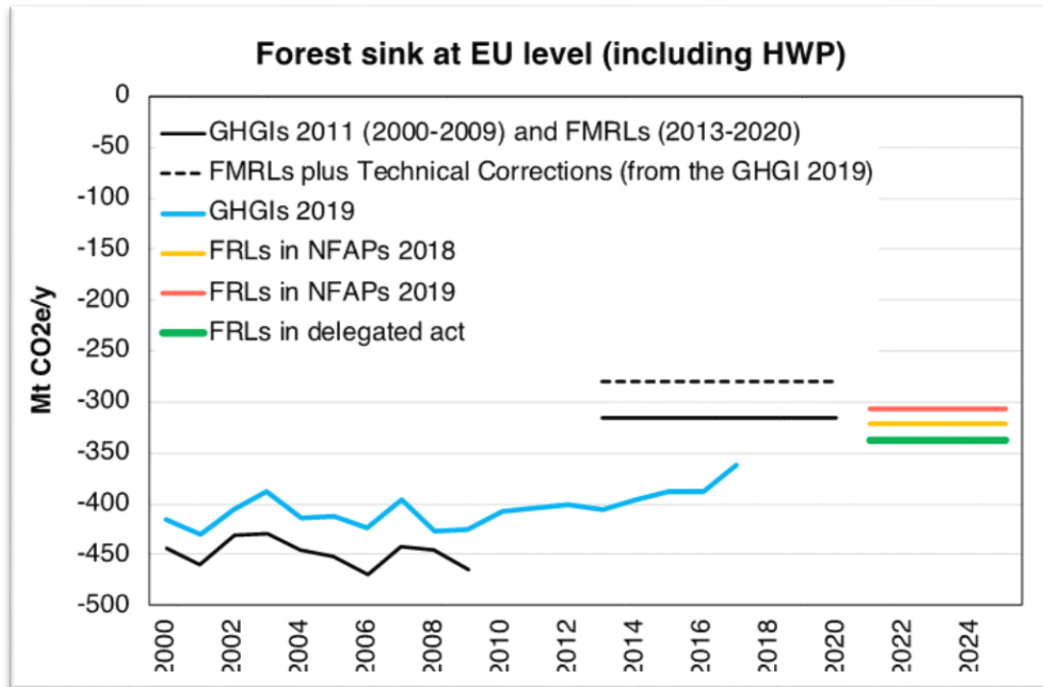
- **Flexibility** with Effort Sharing
- Specific **LULUCF accounting rules** to reflect the impact of mitigation actions

Forest Reference Level (FRL)

- Benchmark for measuring forests' role towards the EU targets under the 2030 Climate and Energy Package
- Show what the greenhouse gas emissions and removals from forests would be in each EU Member State in 2021-2025, **if forest management continued as it was** in 2000-2009
- No assumptions on future policy development
- Reported as a part of National Forestry Accounting Plans (NFAPs)



FRL for 2021-2025



2021-2025 benchmark is now known:
delegated act was adopted on 28
October 2020

Sum of EU27+UK FRLs:
-337 Mt CO₂ yr⁻¹

Assessment process



- **Draft NFAPs** by the Member States
- Technical assessment of the draft NFAPs by the LULUCF Expert Group
- Technical recommendations by the Commission
- Bilateral discussions with the Member States to clarify recommendations
- LULUCF Expert Group meeting to discuss frequently occurring issues
- **Revised NFAPs** by the Member States
- Assessment of the revised NFAPs by the Commission
- LULUCFEG meeting to discuss findings
- Delegated act laying down the FRLs



Assessment focus

Article 8.5 (principles)

What the FRL should be

Annex IV Part A (criteria)

How the FRL should be determined

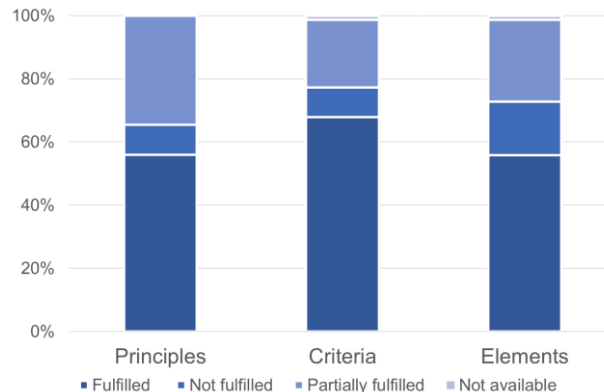
Annex IV Part B (elements)

What the NFAPs should contain

Accuracy



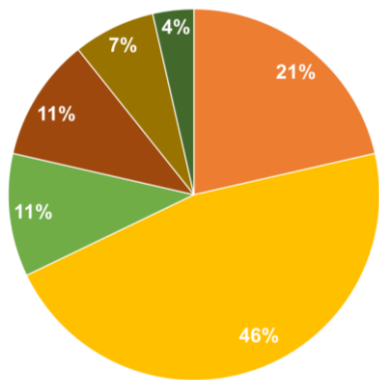
Transparency



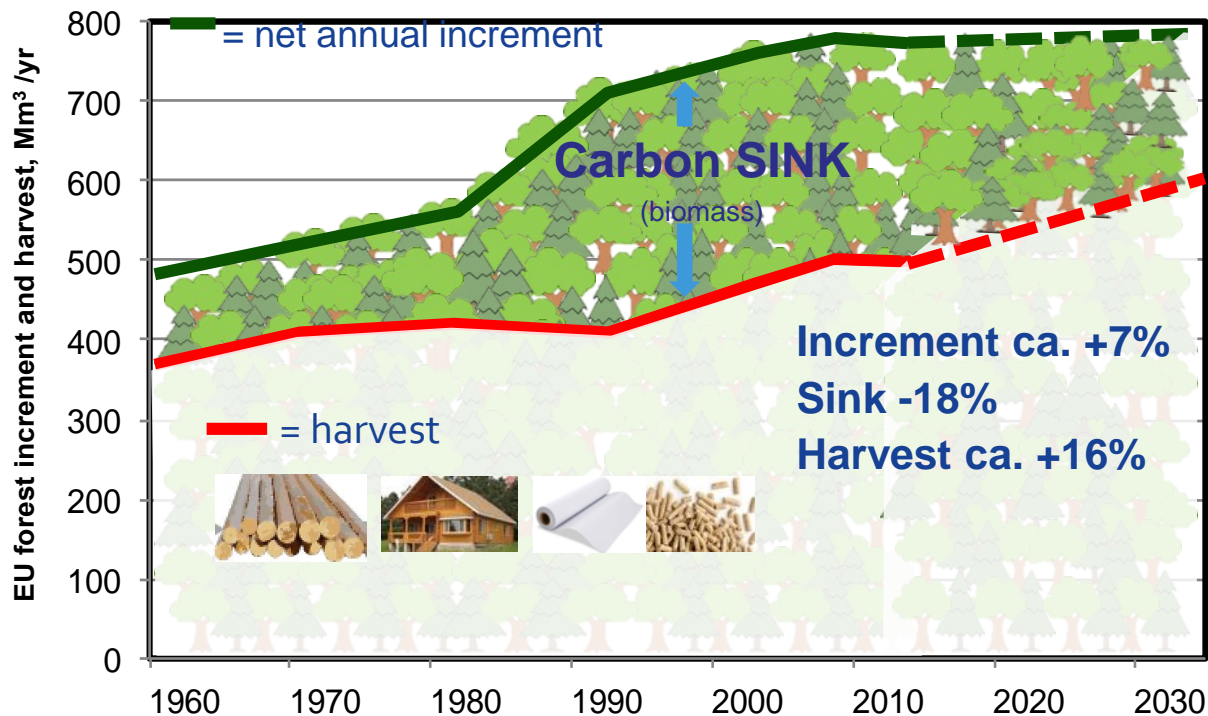
Main challenges

- Modelling age dynamics and continuation of forest management practices (*Art 8.5, principles*)
- Consistency between historical estimates (GHG inventories) and national projections (*Annex IV part A, criteria*)
 - Forest definition and area consistency, inclusion of carbon pools (dead wood!), biomass burning (inclusion of all gases)
- Transparency (input data and model outcomes) (*Annex IV part B, elements*)
 - Reporting of the development of increments, age-related parameters

Modelling of harvest intensity



- Harvest probabilities by strata or age class
- Harvest volume per growing stock
- Harvest area per area available for harvest
- Harvest per increment
- Harvest volume per hectare
- No harvest



17

FRL approved as such

BE, DK, EE,
ES, HR, IT, LT,
LU, HU, NL,
AT, PT, RO,
SI*, SK, SE,

UK

*within the legal boundaries of the Regulation

6

FRL
amended

IE, EL,
FR, LV*,
MT, FI

5

FRL
recalculat

BG, CZ,
DE, CY,
PL*

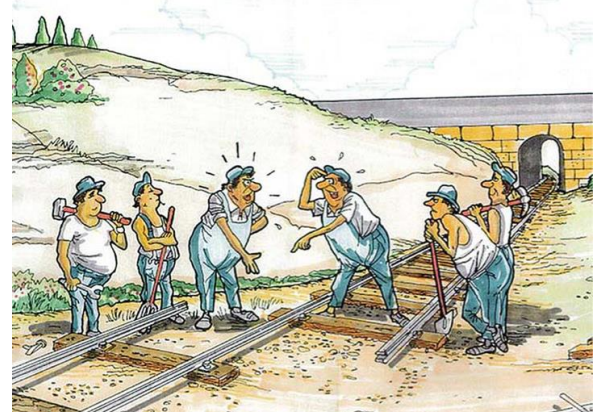
Assessment outcome

Main reasons for recalculations

- Inconsistencies with GHG inventories (area, pools and gases)
- Biased simulation of harvest intensity

Key learnings 1

- Unprecedented effort, requiring integration of forest modelling teams and GHGI experts in the Member States
- Technically, the most challenging aspects were:
 - Data availability
 - Projection vs. consistency with the GHG inventory
 - Inclusion of all carbon pools and gases
- Natural disturbances are an increasingly crucial question in climate change mitigation and adaptation

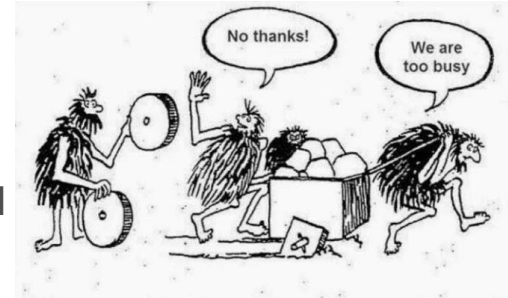


AP Explains: Deadly mega-fires bring new challenge to Europe
By BARRY HATTON July 22, 2019

October 8, 2019
Czech forest owners face losses of US\$ 1.70 billion due to the bark beetle infestation

Key learnings 2

- Member States could now report their own projections – a notable improvement from the previous experiences under the Kyoto Protocol
- MS-driven process required careful checking of assumptions
- Active participation of Member States and other experts: mutual learning and hopefully also future collaboration, although time-intensive
- The NFAPs provide a wealth of data and information on national models and data, often not previously available to international community



Thank you



Useful links on the FRLs for 2021-2025 and their assessment:

- JRC report: <https://publications.jrc.ec.europa.eu/repository/handle/JRC121803>
- Commission Staff Working Document: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020SC0236&qid=1622745253032>
- Delegated act: http://data.europa.eu/eli/reg_del/2021/268/oj

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