

EU biodiversity strategy: Protect 30% (=10% set-aside +20% close-to-nature) EU's forest area in 2030 including all primary forests.

Method: Spatial explicit forest sector model (GLOBIOM-forest) based on state-of-art

data sets: 1) FAOSTAT database (2022)

2) Forest resource assessment (FRA 2022)

3) Global forest management map (Lesiv et al. 2022)

4) World database of protected areas (WDPA 2022)

5) European primary forest map (Sabatini et al. 2018)

6) Global biodiversity map (Jung et. al. 2021)

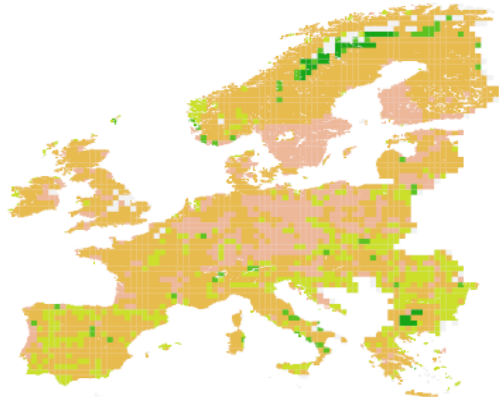
Main results:

- 1) EU biodiversity strategy has only a small impact on EU forest sector, because currently protected forest areas (set-aside 5%+19%=24%) cover most of the target
- 2) Overall and regional impact depends much how biodiversity strategy is implemented, which is not clearly specified in biodiversity strategy (Spatial allocation of protected areas, How close-to-nature management is defined ?)

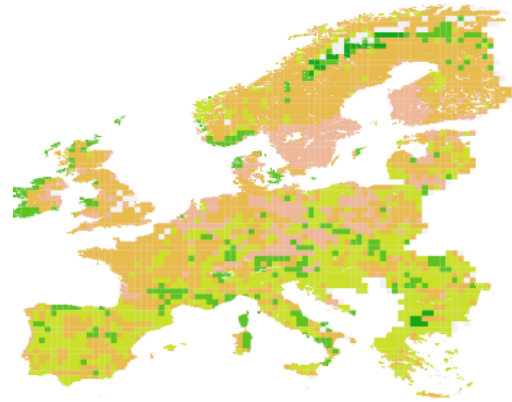
1. Spatial allocation of protected areas

-protection target 10%+20% can be applied in EU, country or grid level

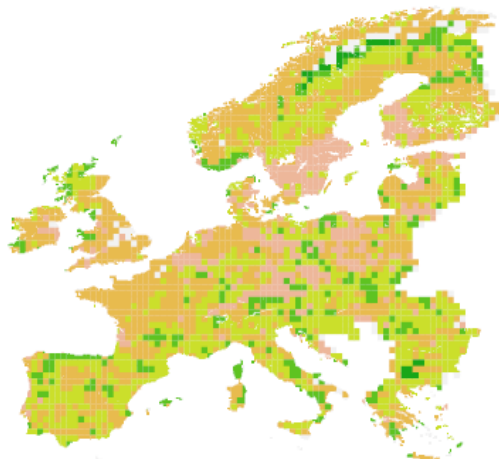
No target



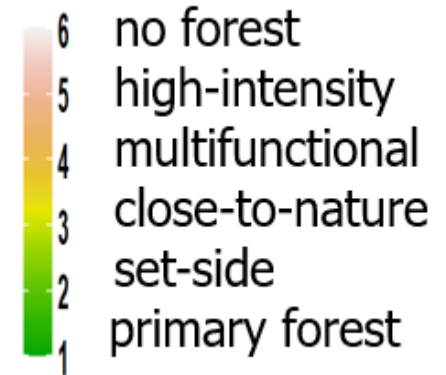
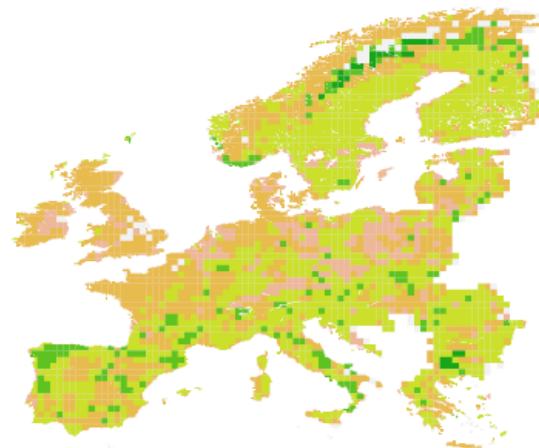
EU level target



Country level target



Grid level target



2. SCENARIOS

Baseline: no protection target

forceS10A20: EU level target + set-aside 10%+ close-to-nature 20%

forceS10A20_country: country level target + set-aside 10%+ close-to-nature 20%

forceS10A20_CR: grid level target + set-aside 10%+ close-to-nature 20%

forceS30: EU level target + 30% set-aside

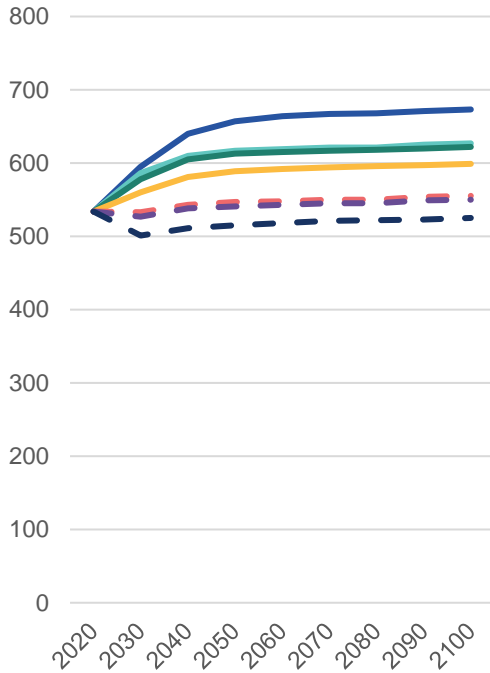
forceS30_country: country level target + 30% set-aside

forceS30_CR: grid level target + 30% set-aside

Close-to-nature=retention forestry which decrease availability of merchantable roundwood 50%

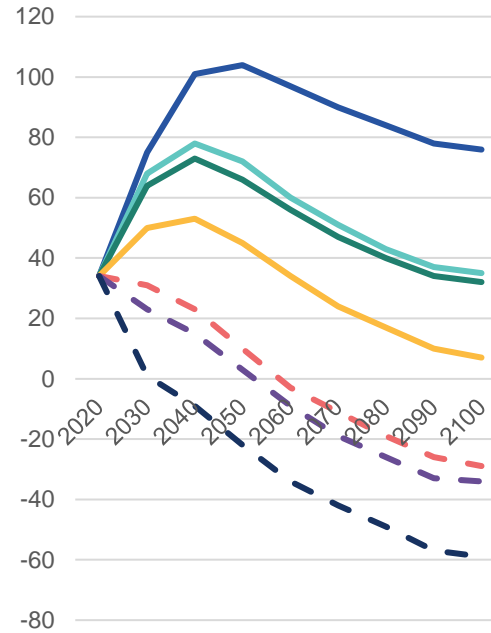
3. Harvest volumes, net-export and biomass stock

EU roundwood harvest (Mm3/yr)



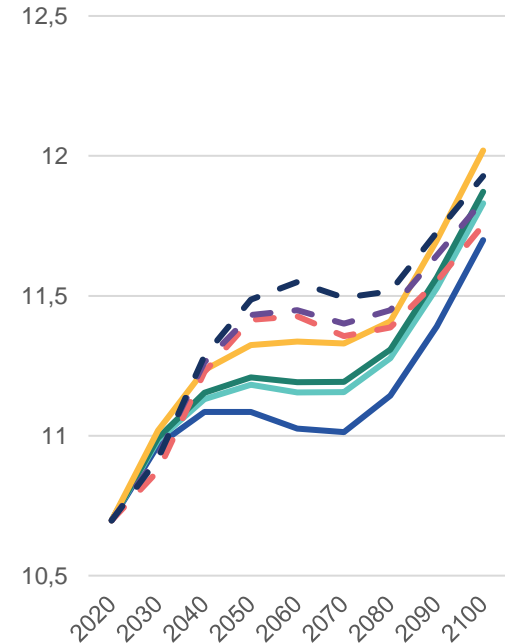
- baseline
- forceS10A20
- forceS10A20_country
- forceS10A20_CR
- - forceS30
- - forceS30_country
- - forceS30_CR

EU forest products net-exports (Mm3 RWeq/yr)



- baseline
- forceS10A20
- forceS10A20_country
- forceS10A20_CR
- - forceS30
- - forceS30_country
- - forceS30_CR

EU forest biomass stock (PgC)



- baseline
- forceS10A20
- forceS10A20_country
- forceS10A20_CR
- - forceS30
- - forceS30_country
- - forceS30_CR