

# FRA and pan-European 2020 reporting content –

## *Criterion 1* (Forest resources, growing stock and carbon) - reporting forms, linkages between FRA and pan-European reporting, definitions

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## 1.1 FOREST AREA

Categories (1000 ha)	Reporting	
	Pan-European 2020	FRA 2020
<b>Forest</b>	Yes (1.1a)	Yes (1a)
<b>... of which available for wood supply</b>	Yes (1.1a)	No
<b>Other wooded land</b>	Yes (1.1a)	Yes (1a)
<b>Other land</b>	Yes (1.1a)	Yes (1a)
<b>... of which with tree cover</b>	Yes (1.1a)	Yes (1f)
<b>Forest types</b>	Yes (1.1b)	No

Process	Reporting years									
	1990	2000	2005	2010	2015	2016	2017	2018	2019	2020
<b>Pan-European</b>	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes
<b>FRA</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### Notes:

- Please ensure the compliance of data reported to both processes (pan-European SoEF and global FRA) for common reporting years, also in cases when interpolation/extrapolation techniques are used to fill in FRA tables.
- Please ensure that the area of Forest in Table 1.1a equals the sum of its sub-categories in Table 1.1b

## 1.1 FOREST AREA

**FOREST** - Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.

See also explanatory notes

**Comment:** The same definition for both processes

### **...of which available for wood supply**

Forests where there are no environmental, social or economic restrictions that could have a significant impact on the current or potential supply of wood. These restrictions could be based on legal acts, managerial owners' decisions or other reasons.

**Comment:** pan-European sub-category, not reported in FRA 2020

## 1.1 FOREST AREA

**OTHER WOODED LAND** - Land not defined / classified as “Forest”, spanning more than 0.5 hectares;

- with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds in situ;
- or with a combined cover of shrubs, bushes and trees above 10 percent.

It does not include land that is predominantly under agricultural or urban land use.

See also explanatory notes

**Comment:** The same definition for both processes

**OTHER LAND** - All land that is not classified as forest or other wooded land.

See also explanatory notes

**Comment:** The same definition for both processes

**...of which with tree cover**

Land classified as “other land”, spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity.

See also explanatory notes

**Comment:** The same definition for both processes

## 1.1 FOREST AREA

**FOREST TYPES** - Three sub-categories are reported within the forest types:

- **predominantly broadleaved** woodland: Forest on which more than 75 percent of the tree crown cover consists of broadleaved species.
- **predominantly coniferous** woodland: Forest on which more than 75 percent of the tree crown cover consists of coniferous species.
- **mixed broadleaved and coniferous** woodland: Forest on which neither coniferous, nor broadleaved species account for more than 75 percent of the tree crown cover.

Comment: pan-European sub-categories, not reported in FRA 2020

## 1.2 GROWING STOCK

Categories ( <u>million m<sup>3</sup> over bark</u> )	Reporting	
	Pan-European 2020	FRA 2020
<b>FOREST</b>	Yes (1.2a)	Yes (2a)
... of which coniferous	Yes (1.2a)	No
... of which broadleaved	Yes (1.2a)	No
... of which available for wood supply	Yes (1.2a)	No
... of which coniferous	Yes (1.2a)	No
... of which broadleaved	Yes (1.2a)	No
<b>Other wooded land</b>	Yes (1.2a)	Yes (2a)
<b>Forest types</b>	Yes (1.2b)	No
– Predominantly coniferous forest		
– Predominantly broadleaved forest		
– Mixed forest		
<b>Naturally regenerating forest</b>	No	Yes (2a)
<b>Planted forest</b>	No	Yes (2a)
... of which plantation forest		
... of which other planted forest		

Categories ( <u>m<sup>3</sup>/ha over bark</u> )	Reporting	
	Pan-European 2020	FRA 2020
<b>Naturally regenerating forest</b>	No	Yes (2a)
<b>Planted forest</b>	No	Yes (2a)
... of which plantation forest		
... of which other planted forest		
<b>FOREST</b>	No	Yes (2a)
<b>Other wooded land</b>	No	Yes (2a)

## 1.2 GROWING STOCK

Process	Reporting years									
	1990	2000	2005	2010	2015	2016	2017	2018	2019	2020
<b>Pan-European</b>	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes
<b>FRA</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**GROWING STOCK** - Volume over bark of all living trees with a minimum diameter of 10 cm at breast height (or above buttress if these are higher). Includes the stem from ground level up to a top diameter of 0 cm, excluding branches.

See also explanatory notes

Comment: The same definition for both processes

## 1.2 GROWING STOCK - COMPOSITION

Categories (million m <sup>3</sup> over bark)	Reporting	
	Pan-European 2020	FRA 2020
<b>Growing stock by species</b> (10 tree species ranked in terms of volume + remaining tree species)	Yes (1.2c)	No
<b>Growing stock by native tree species</b> <b>Growing stock by introduced tree species</b> (10 tree species ranked in terms of volume + remaining tree species in both subcategories)	No	Yes (2b)
<b>Total Growing stock (FOREST)</b>	Yes	Yes

Process	Reporting years					
	1990	2000	2005	2010	2015	2020
<b>Pan-European</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>FRA</b>	Yes	Yes	No	Yes	Yes	Yes



## 1.2 GROWING STOCK - COMPOSITION

Pan-European	FRA
<p><b>Broadleaved</b> All trees classified botanically as <i>Angiospermae</i>. They are sometimes referred to as “<i>non-coniferous</i>” or “<i>hardwoods</i>”.</p> <p><b>Coniferous</b> All trees classified botanically as <i>Gymnospermae</i>. They are sometimes referred to as “<i>softwoods</i>”.</p>	<p><b>Native tree species</b> A tree species occurring within its natural range (past or present) and dispersal potential (i.e. within the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).</p> <p><b>Introduced tree species</b> A tree species occurring outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).</p> <p><i>Explanatory notes:</i> Naturally regenerated forest of introduced tree species should be considered as “introduced” up to 250 years from the date of original introduction. Beyond 250 years, the species can be considered naturalized.</p>

### 1.3A AGE STRUCTURE – EVEN-AGED STANDS

Categories (1000 ha)	According to development phases	Reporting	
		Pan-European 2020	FRA 2020
<b>Forest</b>	– Total area – Regeneration – Intermediate – Mature – Unspecified	Yes (1.3a1)	No
<b>Available for wood supply</b>		Yes (1.3a1)	No
<b>... of which Predominantly coniferous forest</b>		Yes (1.3a1)	No
<b>... of which Predominantly broadleaved forest</b>			
<b>... of which Mixed forest</b>			

Categories (1000 m <sup>3</sup> )	According to development phases	Reporting	
		Pan-European 2020	FRA 2020
<b>Forest available for wood supply</b>	– Total volume – Regeneration – Intermediate – Mature – Unspecified	Yes (1.3a2)	No
<b>... of which Predominantly coniferous forest</b>		Yes (1.3a2)	No
<b>... of which Predominantly broadleaved forest</b>			
<b>... of which Mixed forest</b>			

Process	Reporting years				
	1990	2000	2005	2010	2015
<b>Pan-European</b>	Yes	Yes	Yes	Yes	Yes
<b>FRA</b>	No	No	No	No	No

### 1.3B AGE STRUCTURE– UNEVEN-AGED STANDS

Categories ( <u>1000 ha</u> , <u>1000 m<sup>3</sup></u> )	Reporting	
	Pan-European 2020	FRA 2020
Forest:	Yes (1.3b)	No
Uneven-aged stands	Yes (1.3b)	No
... of which Forests available for wood supply	Yes (1.3b)	No

Categories ( <u>1000 m<sup>3</sup></u> )	According to diameter classes ( <u>1000 m<sup>3</sup> o. b.</u> )	Reporting	
		Pan-European 2020	FRA 2020
Forest:			
Uneven-aged stands	– ≤ 20 cm	Yes (1.3b)	No
	– 21 – 40 cm	Yes (1.3b)	No
... of which Forests available for wood supply	– 41 – 60 cm	Yes (1.3b)	No
	– ≥ 60 cm		
	– unspecified		

Process	Reporting years				
	1990	2000	2005	2010	2015
Pan-European	Yes	Yes	Yes	Yes	Yes
FRA	No	No	No	No	No

## 1.4 FOREST CARBON

Forest carbon (million metric tonnes)	Reporting	
	Pan-European 2020	FRA 2020
Carbon in above-ground biomass	Yes (1.4a)	No
Carbon in below-ground biomass	Yes (1.4a)	No
Carbon in dead wood	Yes (1.4a)	No
Carbon in litter	Yes (1.4a)	No
Soil carbon	Yes (1.4a)	No
Forest biomass (tonnes/ha)	No*	No
Above-ground biomass	No*	Yes (2c)
Below-ground biomass	No*	Yes (2c)
Dead wood	No*	Yes (2c)
Forest carbon (tonnes/ha)	No*	No
Carbon in above-ground biomass	No*	Yes (2d)
Carbon in below-ground biomass	No*	Yes (2d)
Carbon in dead wood	No*	Yes (2d)
Carbon in litter	No	Yes (2d)
Soil carbon	No	Yes (2d)
Other wooded land carbon (million metric tonnes)	Pan-European 2020	FRA 2020
OWL carbon in each of pools: AGB, BGB, DW, Litter, Soil	Yes (1.4a)	No
Total Forest and Other wooded land carbon (million metric tonnes)	Pan-European 2020	FRA 2020
Forest and OWL carbon in each of pools: AGB, BGB, DW, Litter, Soil	Yes (1.4a)	No
Harvested wood products (million metric tonnes)	Pan-European 2020	FRA 2020
Carbon stock in harvested wood products	Yes (1.4b)	No

## 1.4 FOREST CARBON

**Comment:** The same definitions for both processes

### Notes:

Please ensure the compliance of data reported to those reported under UNFCCC.

The biomass figures are generally derived from the Growing stock figures through biomass conversion and expansion factors.

In order to facilitate reporting on these variables for countries that do not have specific national data on forest biomass and carbon, a **biomass calculator** (Excel file) is available for download on the FRA 2020 platform. The calculator, based on main ecological domains, provides the possibilities to produce biomass and carbon estimates, starting from data on the forest area and growing stock already provided in particular tables and using expansion factors according IPCC 2006 Guidelines (Annex 2 Guidelines and specifications FRA 2020).

In order to allow annual calculations of biomass and carbon for reporting to the SDGs, also biomass and carbon stocks will be reported annually in FRA 2020 starting from 2015.

Process	Reporting years									
	1990	2000	2005	2010	2015	2016	2017	2018	2019	2020
<b>Pan-European</b>	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes
<b>FRA</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes