

Overview of information submitted by MS on Decision 529/2013/EU in the Land Use, Land Use Change and Forestry (LULUCF) sector

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Decision No 529/2013/EU on accounting rules on GHG emissions and removals resulting from activities relating to LULUCF and on information concerning actions relating to those activities

Member States (MS) shall prepare and maintain accounts of all emissions and removals resulting from the following activities:

afforestation, reforestation, deforestation, forest management

MS shall, prior to 1 January 2022, provide and submit to the Commission by 15 March each year initial, preliminary and non-binding annual estimates of emissions and removals from
cropland management, grazing land management

For each accounting period, MS may also prepare and maintain accounts of emissions and removals resulting from

revegetation and wetland drainage and rewetting

The accounts referred to all activities shall cover emissions and removals of the
carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O)

and any changes in the carbon stock of the following carbon pools:

above-ground biomass, below-ground biomass, litter, dead wood, soil organic carbon, harvested wood products

Note: Submitted = number or notation key, non submitted = empty cells



Overview of information submitted by MS on Decision 529/2013/EU in the LULUCF sector (data submitted until 22/05/2015)

Activities accounting for base year (BY):

Cropland management (CM) and Grazing land management (GLM)

- *submitted by **23 MS***
- *non submitted by **5 MS** (CYP, GRE, HUN, LUX, MLT)*

*the most used **notation keys** for CM and GLM:*

RE - reported and NO – not occurring

*the most reported **carbon pools** for CM and GLM:*

above ground biomass (19/16 MS), mineral soil (19/17 MS)

*the most reported **GHG sources** CM:*

nitrogen mineralization of the soils - N_2O (8 MS)

*the most reported **GHG sources** GLM:*

biomass burning - CH_4 , N_2O (8 MS)

Cropland management		CHANGE IN CARBON POOL REPORTED ⁽¹⁾							GREENHOUSE GAS SOURCES REPORTED ⁽²⁾							
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾		
						Mineral	Organic			N ₂ O	CH ₄			N ₂ O	N ₂ O	N ₂ O
R	19	15	6	7	19	14			4		8		3	5	5	
NO	1	2	10	11	1	5			11		2		12	12	12	
NA	1	1	1	1	1	1			2		2		2	2	2	
NE	1	1	2	2	1	1			5		2		2	2	2	
NR	1	1	2	2	1	2			2		2		1	1	1	
IE	0	3	2	1	0	0			0		8		5	3	3	
Number of reported MS		23	23	23	24	23	23			24		24		25	25	25

CM – base year, number of MS submitted individual notation keys, carbon polls and GHG sources

Grazing land management		CHANGE IN CARBON POOL REPORTED ⁽¹⁾							GREENHOUSE GAS SOURCES REPORTED ⁽²⁾							
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾		
						Mineral	Organic			N ₂ O	CH ₄			N ₂ O	N ₂ O	N ₂ O
R	16	13	6	6	17	14			5		4		5	8	8	
NO	1	2	9	11	2	4			10		8		7	8	8	
NA	1	1	1	1	1	1			2		2		2	2	2	
NE	4	4	3	3	2	1			5		3		2	2	2	
NR	1	1	2	2	1	3			2		2		2	2	2	
IE	0	2	2	1	0	0			0		4		5	2	2	
Number of reported MS		23	23	23	24	23	23			24		23		23	24	24

GLM – base year, number of MS submitted individual notation keys, carbon polls and GHG sources

Overview of information submitted by MS on Decision 529/2013/EU in the LULUCF sector (data submitted until 22/05/2015)

Activities accounting for reporting year 2013:

Cropland management (CM) and Grazing land management (GLM)

- submitted by **24 MS**
- non submitted by **4 MS** (CYP, GRE, LUX, MLT)

*the most used **notation keys** for CM, GLM:*

- *RE - reported and NO – not occurring*

*the most reported **carbon pools** for CM and GLM:*

- *above ground biomass (20/16 MS), mineral soil (19/18 MS)*

*the most reported **GHG sources** for CM*

- *nitrogen mineralization of the soils - N₂O (10 MS)*

*the most reported **GHG sources** for GLM:*

- *biomass burning - CH₄, N₂O (9 MS)*

Cropland management		CHANGE IN CARBON POOL REPORTED ⁽¹⁾						GREENHOUSE GAS SOURCES REPORTED ⁽²⁾								
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾		
						Mineral	Organic ⁽³⁾			N ₂ O	CH ₄ ⁽⁷⁾			N ₂ O	N ₂ O	N ₂ O
R	20	14	5	6	19	14			3		10		4	5	5	
NO	0	1	12	13	1	6			14		2		11	12	12	
NA	2	2	2	2	2	2			3		3		3	3	3	
NE	0	1	1	1	0	0			4		2		2	2	2	
NR	2	2	2	2	2	2			0		2		0	1	1	
IE	0	4	2	1	0	0			1		6		7	4	4	
Number of reported MS		24	24	24	25	24	24			25		25		27	27	27

CM – 2013, number of MS submitted individual notation keys, carbon polls and GHG sources

Grazing land management		CHANGE IN CARBON POOL REPORTED ⁽¹⁾						GREENHOUSE GAS SOURCES REPORTED ⁽²⁾								
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾		
						Mineral	Organic ⁽³⁾			N ₂ O	CH ₄ ⁽⁷⁾			N ₂ O	N ₂ O	N ₂ O
R	16	12	6	6	18	16			5		5		6	9	9	
NO	1	2	10	12	1	3			11		8		7	8	8	
NA	2	2	2	2	2	2			3		3		3	3	3	
NE	3	3	2	2	1	0			5		3		3	3	3	
NR	2	2	2	2	2	3			1		1		1	1	1	
IE	0	3	2	1	0	0			0		4		4	1	1	
Number of reported MS		24	24	24	25	24	24			25		24		24	25	25

GLM – 2013, number of MS submitted individual notation keys, carbon polls and GHG sources

Overview of information submitted by MS on Decision 529/2013/EU in the LULUCF sector (data submitted until 22/05/2015)

Activities accounting for reporting year 2013:

Afforestation/Reforestation (ARF), Deforestation (D)

- *submitted by **22 MS***
- *non submitted by **6 MS** (CYP, GRE, LUX, LAT, MLT, POL)*

*the most used **notation keys** for ARF and D:*

- *RE - reported and NO – not occurring*

*the most reported **carbon pools** for ARF and D:*

- *above ground biomass (21/22 MS), mineral soil (19/21 MS)*

*the most reported **GHG sources** for ARF:*

- *biomass burning CH₄, N₂O (12 MS)*

*the most reported **GHG sources** for D:*

- *nitrogen mineralization of the soils - N₂O (14 MS)*

Afforestation and reforestation		CHANGE IN CARBON POOL REPORTED ⁽¹⁾							GREENHOUSE GAS SOURCES REPORTED ⁽²⁾								
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾			
						Mineral	Organic ⁽³⁾			N ₂ O	CH ₄ ⁽⁷⁾			N ₂ O	N ₂ O	N ₂ O	CO ₂ ⁽¹⁰⁾
R	21	16	16	11	19	10	10	1	5	7	6	6	8	12	12		
NO	1	1	1	6	1	12	7	16	16	16	7	14	9	9	9		
NA	0	0	0	0	1	0	1	0	0	0	2	0	0	0	0		
NE	0	0	0	0	0	0	1	0	3	1	2	1	0	0	0		
NR	0	0	2	2	1	0	0	0	0	0	1	0	1	1	1		
IE	0	5	3	3	0	0	3	5	0	0	5	1	6	2	2		
Number of reported MS		22	22	22	22	22	22	22	24	24	23	22	24	24	24		

ARF – 2013, number of MS submitted individual notation keys, carbon polls and GHG sources

Deforestation		CHANGE IN CARBON POOL REPORTED ⁽¹⁾							GREENHOUSE GAS SOURCES REPORTED ⁽²⁾								
		Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾			
						Mineral	Organic ⁽³⁾			N ₂ O	CH ₄ ⁽⁷⁾			N ₂ O	N ₂ O	N ₂ O	CO ₂ ⁽¹⁰⁾
R	22	17	18	19	21	10	9	0	4	4	14	3	7	10	10		
NO	0	0	0	0	0	11	2	16	19	19	7	13	12	12	12		
NA	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0		
NE	0	0	0	0	0	0	1	0	1	1	0	0	1	0	0		
IO/NR	0	0	0	0	0	0	8	0	0	0	1	0	0	0	0		
IE	0	5	4	4	0	1	1	6	0	0	1	6	3	1	1		
Number of reported MS		22	22	22	23	22	22	22	24	24	23	22	23	23	23		

D – 2013, number of MS submitted individual notation keys, carbon polls and GHG sources

Overview of information submitted by MS on Decision 529/2013/EU in the LULUCF sector (data submitted until 22/05/2015)

Activities accounting for reporting year 2013:

Forest management (FM)

- *submitted by **22 MS***
- *non submitted by **6 MS** (CYP, GRE, LUX, LAT, MLT, POL)*

*the most used **notation keys** for FM:*

- *RE - reported and NO – not occurring*

*the most reported **carbon pools** for FM:*

- *above ground biomass (22 MS), harvested wood products (19 MS)*

*the most reported **GHG sources** for FM:*

- *biomass burning CO₂, CH₄, N₂O (12/19/19 MS)*

Forest management	CHANGE IN CARBON POOL REPORTED ⁽¹⁾							GREENHOUSE GAS SOURCES REPORTED ⁽²⁾							
	Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		HWP ⁽⁴⁾	Fertilization ⁽⁵⁾	Drained, rewetted and other soils ⁽⁶⁾		Nitrogen mineralization in mineral soils ⁽⁸⁾	Indirect N ₂ O emissions from managed soil ⁽⁵⁾	Biomass burning ⁽⁹⁾		
					Mineral	Organic ⁽³⁾			N ₂ O	CH ₄ ⁽⁷⁾			N ₂ O	N ₂ O	N ₂ O
R	22	18	15	16	14	13	19	2	5	7	5	3	12	19	19
NO	0	0	2	2	3	9	1	14	16	15	16	15	2	3	3
NA	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	1	0	3	2	1	0	1	0	0
IO/NR	0	0	3	2	5	0	1	0	0	0	0	0	1	1	1
IE	0	4	3	3	0	0	0	7	0	0	0	4	8	0	0
Number of reported MS	22	22	23	23	23	22	22	23	24	24	22	22	24	23	23

FM – 2013, number of MS submitted individual notation keys, carbon polls and GHG sources

Another accounting activities for reporting year 2013:

Revegetation and Wetland drainage and rewetting

- *submitted by 12 MS, but only 1 MS (ROM) reported the numbers, the rest of MS used the notation keys: NA – not applicable (10 MS) or NR – not reported (2 MS)*

Natural disturbances for FM

- *submitted by 9 MS, 4 MS (BEL, EST, FIN, IRL) calculated the background level and the margins*

Natural disturbances for ARF - submitted by 1 MS (IRL), also calculated the background level and the margins

Natural disturbances for DEF - not submitted



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