Review of the 2022 submission under Decision 529/2013 “The final act”

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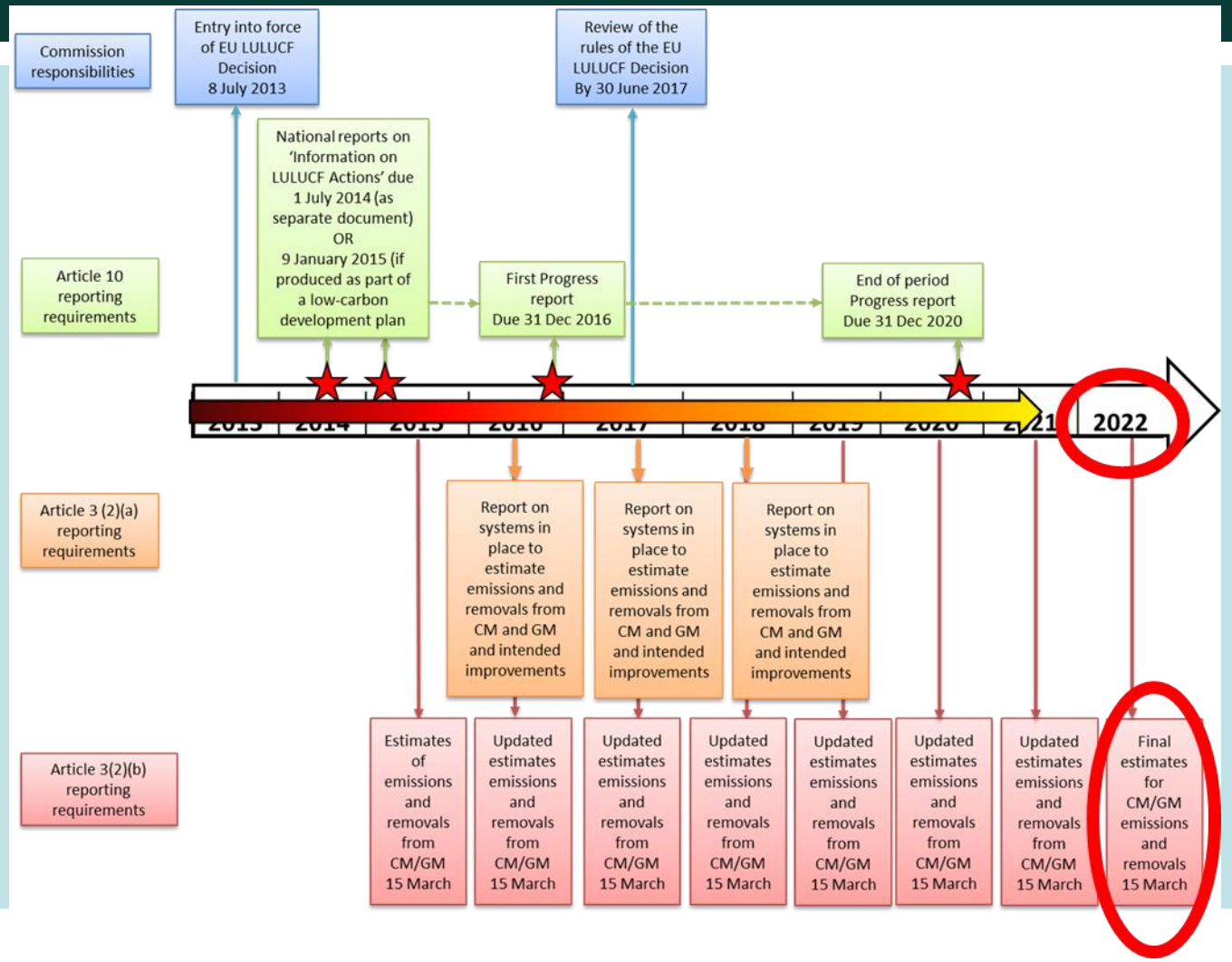
European Commission

Decision 529/2013: it's been a long way!



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Decision 529/2013: goal

3) Decision No 406/2009/EC requires the Commission to **assess modalities to include greenhouse gas emissions and removals resulting from activities relating to LULUCF into the Union's greenhouse gas emission reduction commitment, whilst ensuring the permanence and environmental integrity of the contribution of the sector**,[…].

This Decision should, therefore, as a first step, set out accounting rules applicable to greenhouse gas emissions and removals from the LULUCF sector and thereby contribute to policy development towards the inclusion of the LULUCF sector in the Union's emission reduction commitment, as appropriate[…].

Decision 529/2013: goal

8)This Decision should provide for accounting rules applicable on a mandatory basis to the activities of afforestation, reforestation, deforestation and forest management, **as well as to the activities of grazing land management and cropland management**, subject to specific provisions with a view to improving Member States' reporting and accounting systems during the first accounting period.

Decision 529/2013: art 3.2 b and c

(b) Member States 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 and grazing land management using, where appropriate, IPCC methodologies. […]

(c) Member States shall, no later than 15 March 2022, submit their final annual estimates for accounting of cropland management and grazing land management.

Decision 529/2013 - Status of the submissions 2022

Red: missing/incomplete

Grey: MS elected CM and/or GM (no need to report under 529)

	2022	
	529/ 3(2)b (CRF tables)	749 / 40 (methodologies)
AT	✓	✓
BE	✓	✓
BG	✓(empty)	✓
CY		
CZ	✓(only 2020)	✓
DE		
DK		
EE	✓	✓
GR	✓	✓
ES	✓	✓
FI	✓	✓
FR	✓	✓
HR	✓	✓
HU	✓	✓
IE		
IT		
LT	✓	✓
LU	✓	✓
LV	✓	✓
MT		
NL	✓	✓
PL	✓	✓
PT		
RO	✓ (empty)	✓
SE	✓	✓
SI	✓	✓
SK	✓ (only CM)	

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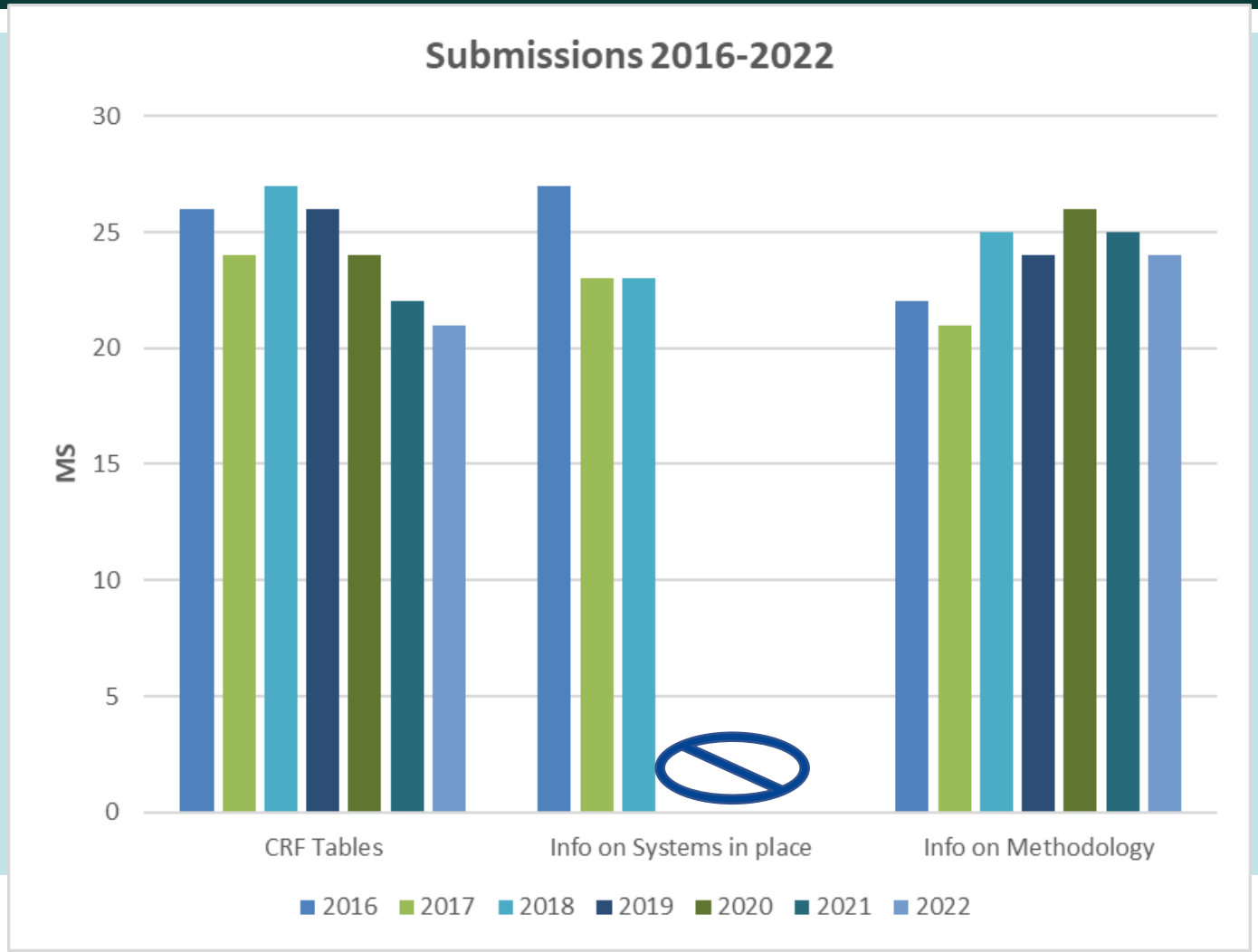
Decision 529/2013 - Status of the submissions

- NB: 27 MS from 2020.
- Format issues!!! (naming conventions, etc)
- Decrease in the number of complete submissions



Cropland Management: Completeness (Notation Keys)

CM	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_2O emissions from managed soil[5]	Biomass burning[9]		
					Mineral	Organic[3]		N_2O	CH_4[7]	N_2O	N_2O	N_2O	CO_2[10]	CH_4	N_2O
Austria	R	R	NA	NA	R	NO			NA		R		NA	NA	NA
Belgium	R	NO	NO	NO	R	R			NO		R		NO	NO	NO
Bulgaria	NA	NA	NA	NA	NA	NA			NA		NA		NA	NA	NA
Croatia	R	R	NO	NO	R	R			NO		R		R	R	R
Cyprus															
Czech Republic	NA/R	NA/R	NA/R	NA/R	NA/R	NA/R			NA/NO		NA/R		NA/NO	NA/NO	NA/NO
Denmark	R	R	NO	NO	R	R			R		R		NO	NO	NO
Estonia	R	R	NO, NE	R	R	R			NA		R		NO, NE	NO, NE	NO, NE
Finland	R	R	R	R	R	R			R		R		IE	IE	IE
France															
Germany	R	R	IE	IE	R	R			R		R		NO	NO	NO
Greece	R	IE	NO	NO	R	R			NO		R		NO	NO	NO
Hungary	R	NA	NA	NA	R	NA			NA		R		IE	R	R
Ireland	R	IE	NO	NO	R	NO			NO		IE		NO	R	R
Italy	R	R	NO	NO	R	R			NO		R		R	R	R
Latvia	R	R	NA	R	R	R			R		R		NA	R	R
Lithuania	R	IE	R	NO	R	R			R		R		NO	R	R
Luxembourg	R	R	NO	NO	R	NA			NA		NA		NA	NA	NA
Malta	NA	NA	NA	NA	NA	NA			NA		NA		NA	NA	NA
Netherlands	R	R	NO	NO	R	R			NE		R		NO	NO	NO
Poland	R	R	NR	NR	R	R			NO		NO		NO	NO	NO
Portugal	R	R	R	NO	R	NO			NO		R		R	R	R
Romania	NA	NA	NA	NA	NA	NA			NA		NA		NA	NA	NA
Slovakia	R	NO	NO	NO	R	NO,NE			NO		R		NO	NO	NO
Slovenia	R	R	R	R	R	R			NO		R		NO	NO	NO
Spain	R	IE	NR,R	NR	R	NO			NO		NE,R		NO,R	IE,NO,R	IE,NO,R
Sweden	R	R	R	R	R	R			R		R		R	R	R

Cropland Management: Completeness

CM	CHANGE IN CARBON POOL REPORTED[1]						GREENHOUSE GAS SOURCES REPORTED[2]							
	Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		Fertilization[5]	Drained, rewetted and other soils[6]		Nitrogen mineralization in mineral soils[8]	Indirect N_2O emissions from managed soil[5]	Biomass burning[9]		
					Mineral	Organic[3]	N_2O	$CH4$[7]	N_2O	N_2O	N_2O	CO_2[10]	CH_4	N_2O
R	21	14	5	5	21	14		6		17		4	8	8
NO	0	2	9	11	0	4		10		1		10	8	8
NA	3	4	6	5	3	5		7		4		6	5	5
NE	0	0	0	0	0	0		1		0		0	0	0
NR	0	0	1	2	0	0		0		0		0	0	0
IE	0	4	1	1	0	0		0		1		2	1	1
Tot	24	24	22	24	24	23		24		23		22	22	22
Not Complete	2	2	2	2	2	2		2		2		2	2	2
Not correct	1	1	3	1	1	2		1		2		3	3	3

✓ AG Biomass and mineral soils pools are reported most often.

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Grazing Land Management: Completeness

GM	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 mineralizat	Indirect N_2O emiss	Biomass burning(9)		
					Mineral	Organic(3)		N_2O	$CH4^{(7)}$	N_2O	N_2O	N_2O	CO_2(10)	CH_4	N_2O
Austria	R	R	R	R	R	R			R		R		R	R	R
Belgium	R	R	NO	NO	R	R			R		R		NO	NO	NO
Bulgaria	NA	NA	NA	NA	NA	NA			NA		NA		NA	NA	NA
Croatia	R	R	NO	NO	R	R			NO		NO		R	R	R
Cyprus															
Czech Republic	NA/R	NA/R	NA/R	NA/R	NA/R	NA/R			NA/NO		NA/NO		NA/NO	NA/NO	NA/NO
Denmark	R	R	NO	NO	R	R			R		R		R	R	R
Estonia	R	R	NO	R	R	R			NA		NO		IE, NO	R	R
Finland	R	R	R	R	R	R			R		R		R	R	R
France	R	R	R	R	R	R			R		R		R	R	R
Germany	R	R	IE	IE	R	R			R		R		NO	NO	NO
Greece	R	IE	NO	NO	R	NO			NO		R		NO	R	R
Hungary	NA	NA	NA	NA	R	NA			NA		R		IE	R	R
Ireland	R	IE	NO	NO	R	R			R		IE		NO	R	R
Italy	NO	NO	NO	NO	R	NO			NO		NO		NO	NO	NO
Latvia	R	IE	NA	R	R	R			R		R		NA	R	R
Lithuania	R	IE	R	NO	R	R			R		NO		NO	R	R
Luxembourg	R	R	NO	NO	R	NA			NA		NA		NA	NA	NA
Malta	NO	NO	NO	NO	NO	NO			NO		NO		NO	NO	NO
Netherlands	R	R	NO	NO	R	R			NE		R		R	R	R
Poland	R	R	R	R	R	R			NO		NO		R	R	R
Portugal	R	R	R	NO	R	NO			NO		R		R	R	R
Romania	NA	NA	NA	NA	NA	NA			NA		NA		NA	NA	NA
Slovakia	R	NO	NO	NO	R	NO			NO		R		NO	NO	NO
Slovenia	R	R	R	R	R	NO			NO		NO		NE	NE	NE
Spain	NR	NR	NR	NR	R	NO			NO		NE		NE	NE	NE
Sweden	R	R	R	R	R	R			R		R		R	R	R

Grazing Land Management: Completeness

GM	CHANGE IN CARBON POOL REPORTED[1]						GREENHOUSE GAS SOURCES REPORTED[2]								
	Above-ground biomass	Below-ground biomass	Litter	Dead wood	Soil		Fertilization[5]	Drained, rewetted and other soils[6]		Nitrogen mineralization in mineral soils[8]	Indirect N_2O emissions from managed soil[5]	Biomass burning[9]		
					Mineral	Organic[3]	N_2O	CH_4[7]	N_2O	N_2O	N_2O	CO_2[10]	CH_4	N_2O
R	20	15	9	9	23	15		10		13		9	15	15
NO	2	3	11	12	1	7		9		7		8	5	5
NA	3	3	4	3	2	4		6		4		5	4	4
NE	0	0	0	0	0	0		1		1		2	2	2
NR	1	1	1	1	0	0		0		0		0	0	0
IE	0	4	1	1	0	0		0		1		2	0	0
Tot	26	26	26	26	26	26		26		26		26	26	26
Not Comple	1	1	1	1	1	1		1		1		1	1	1
Not correct	0	0	0	0	0	0		0		0		0	0	0

✓ Mineral soils pool is reported most often, followed by AG biomass.

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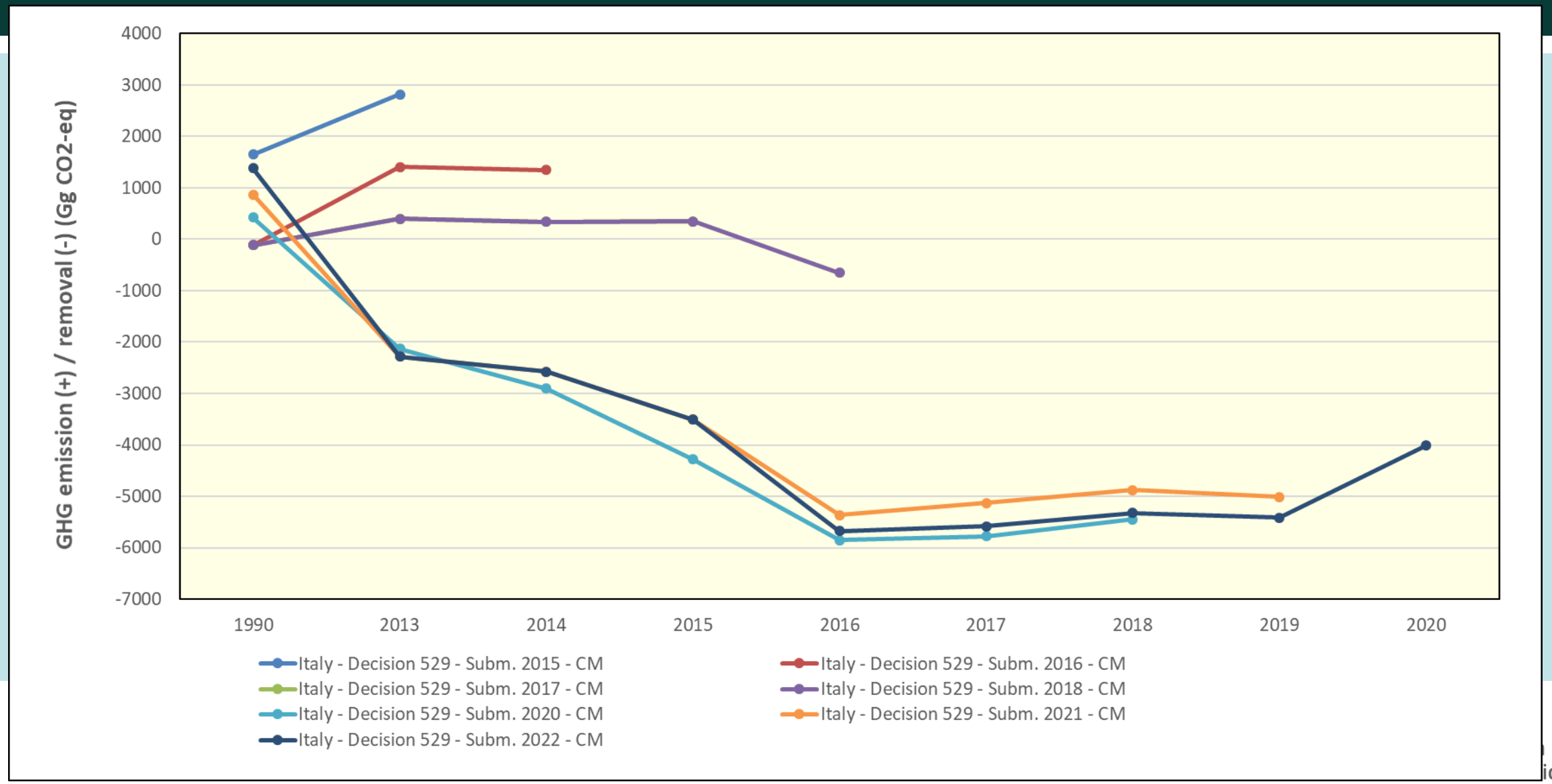
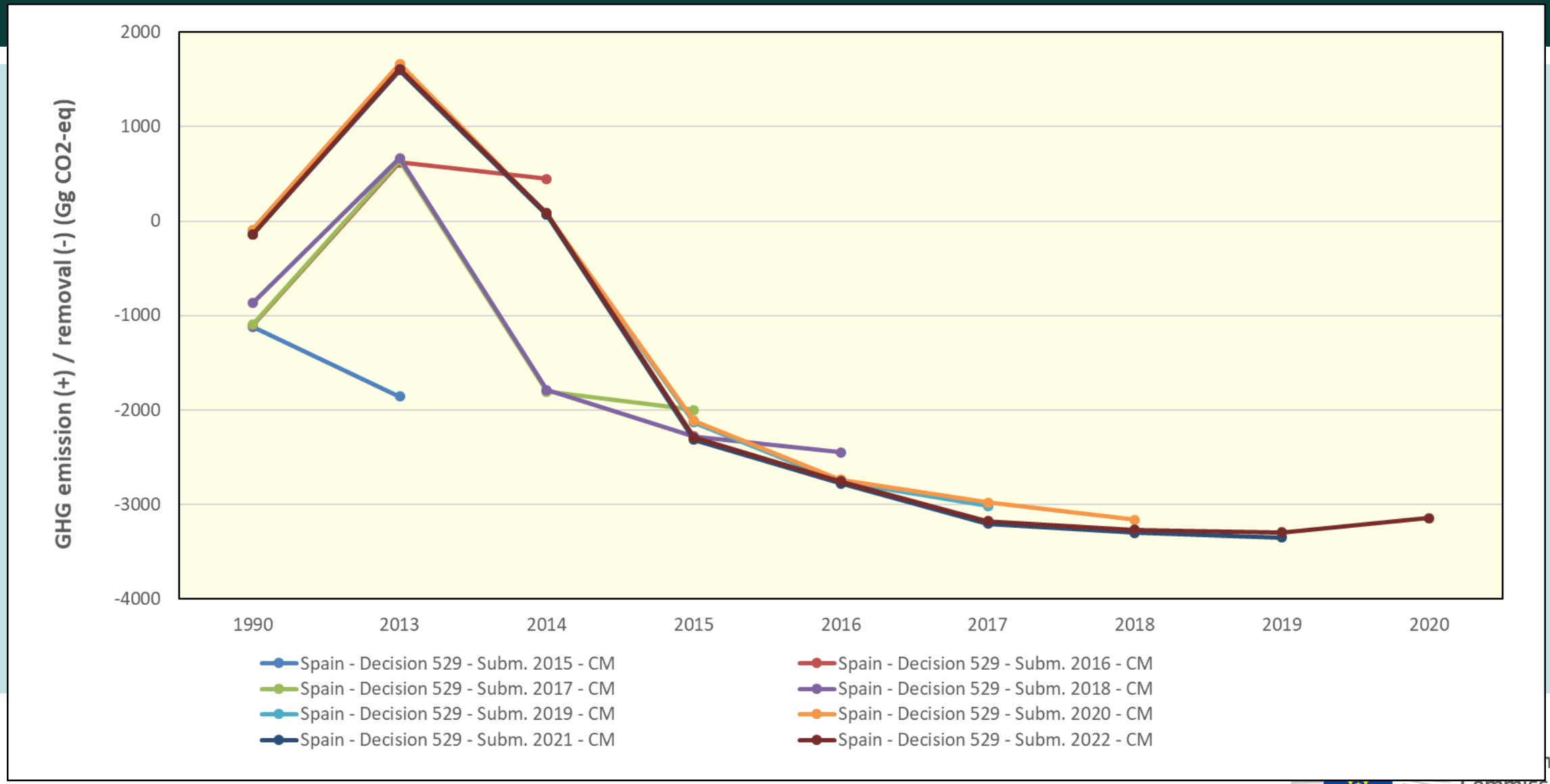
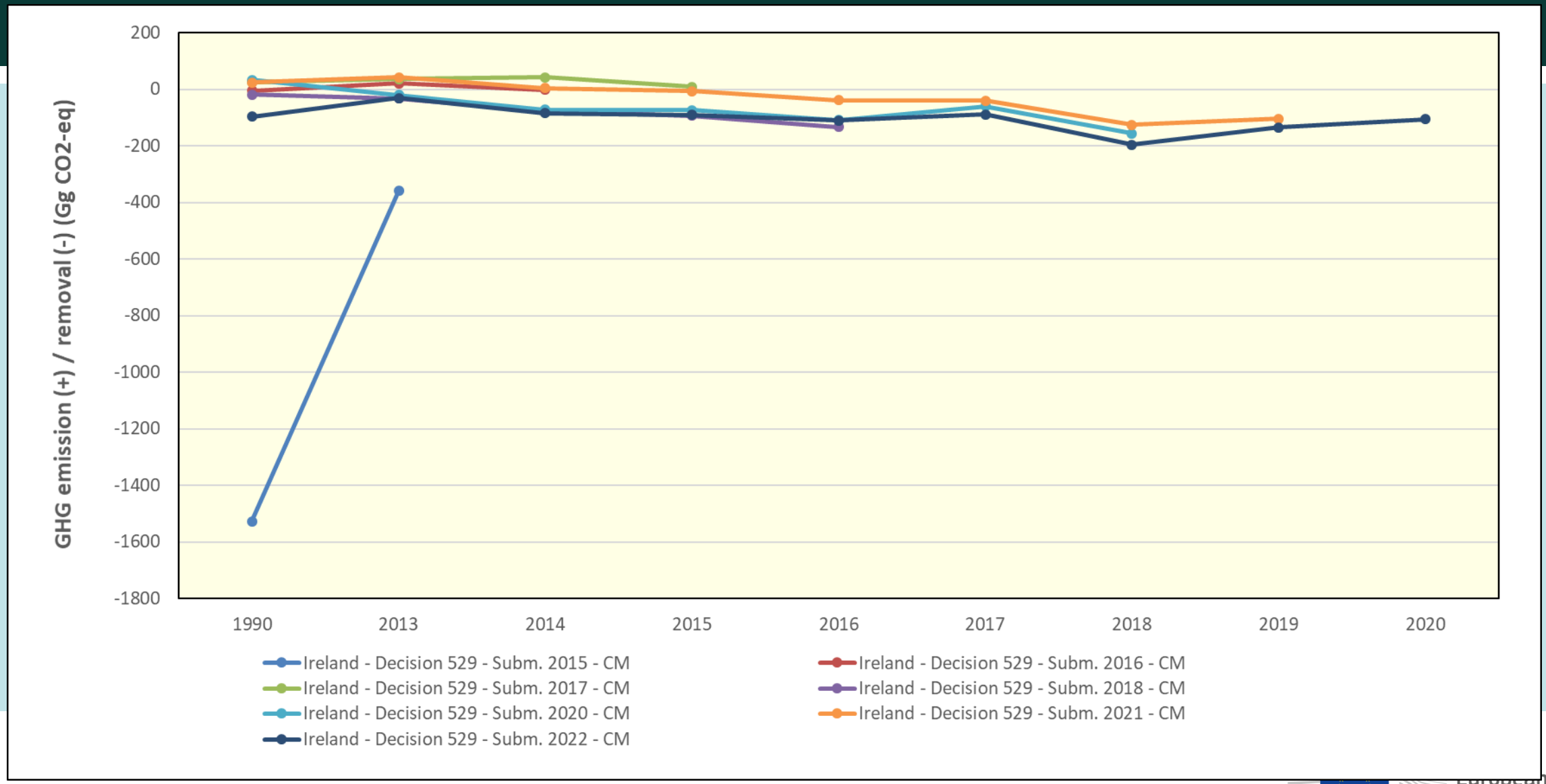
Differences among submissions: examples



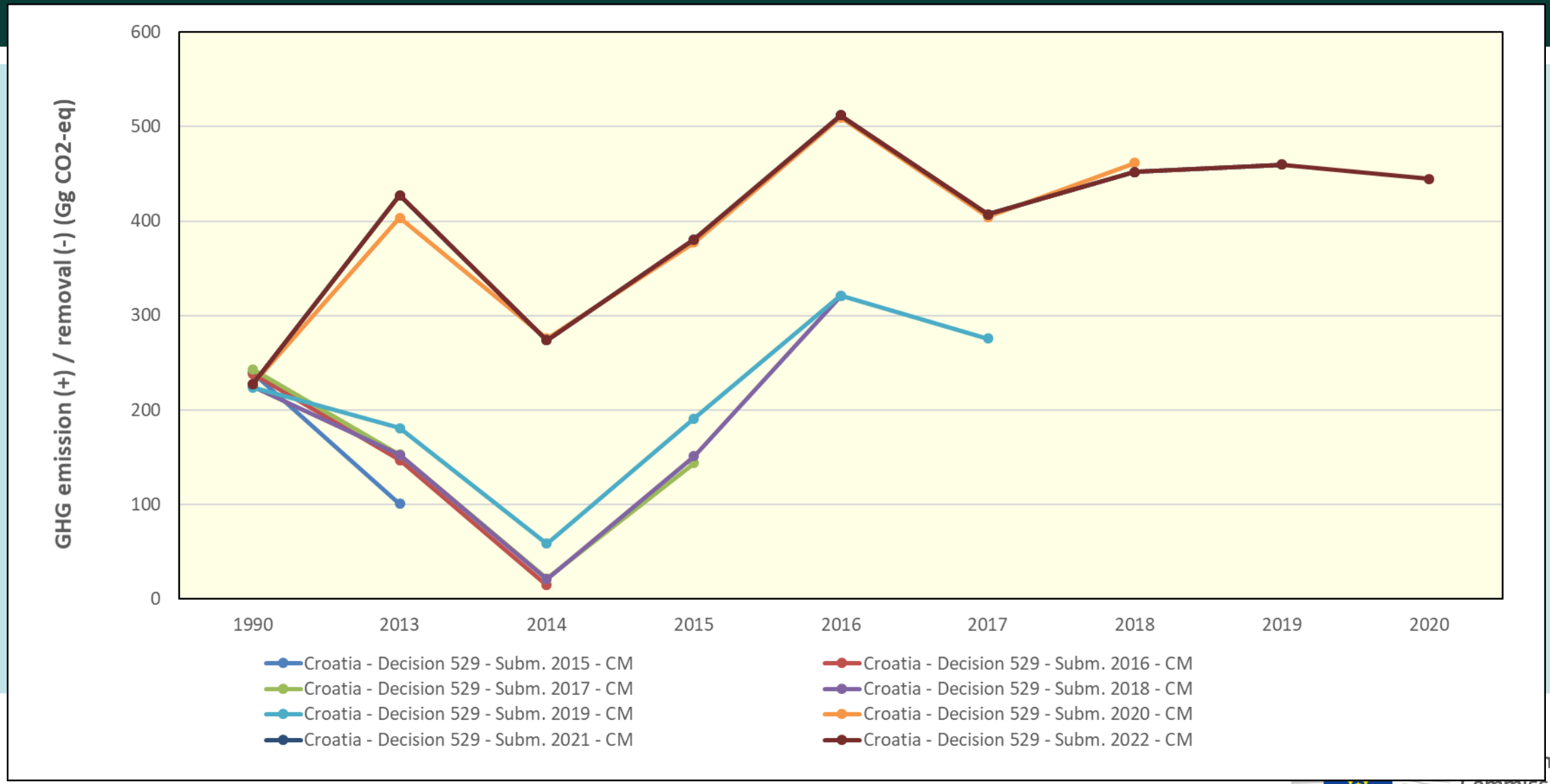
Differences among submissions: examples



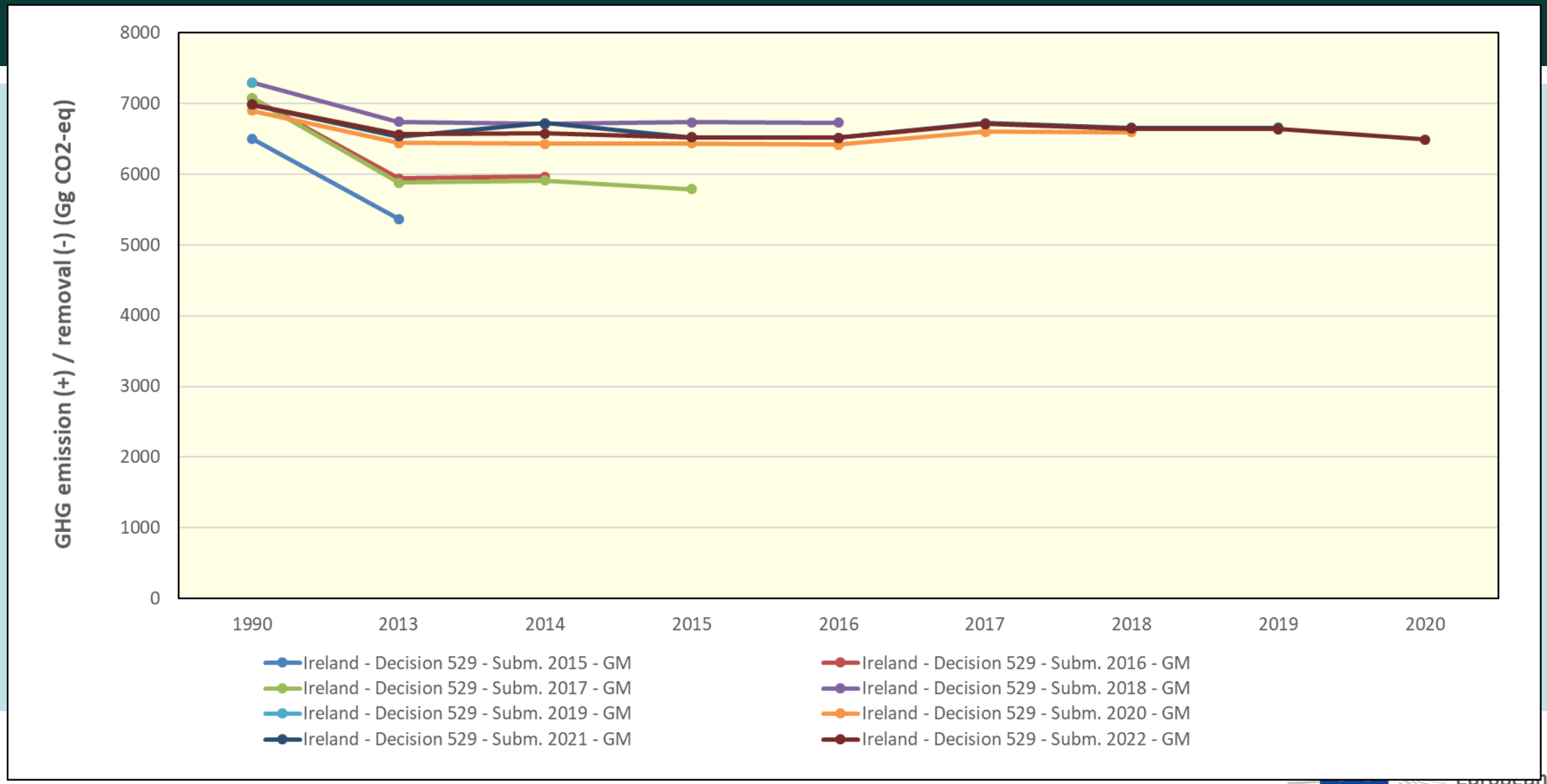
Differences among submissions: examples



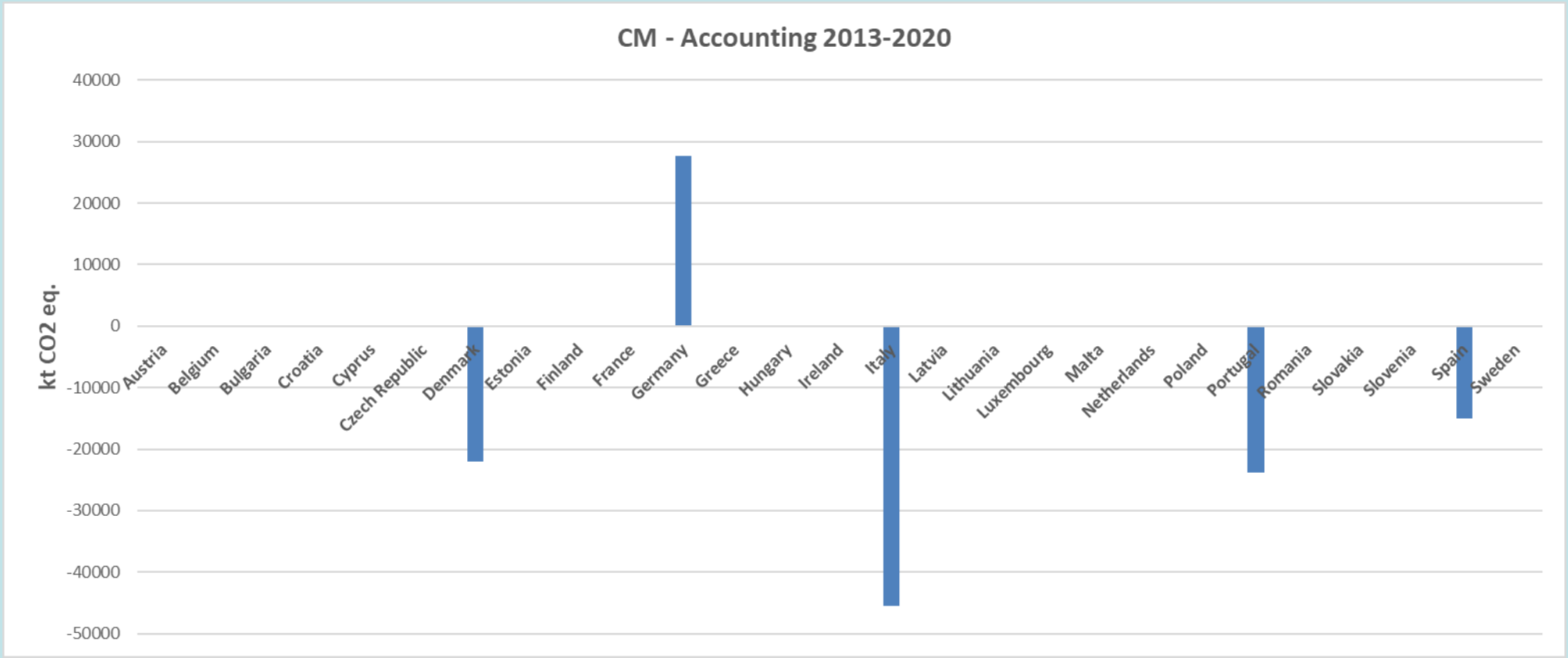
Differences among submissions: examples



Differences among submissions: examples



Accounting: KP only



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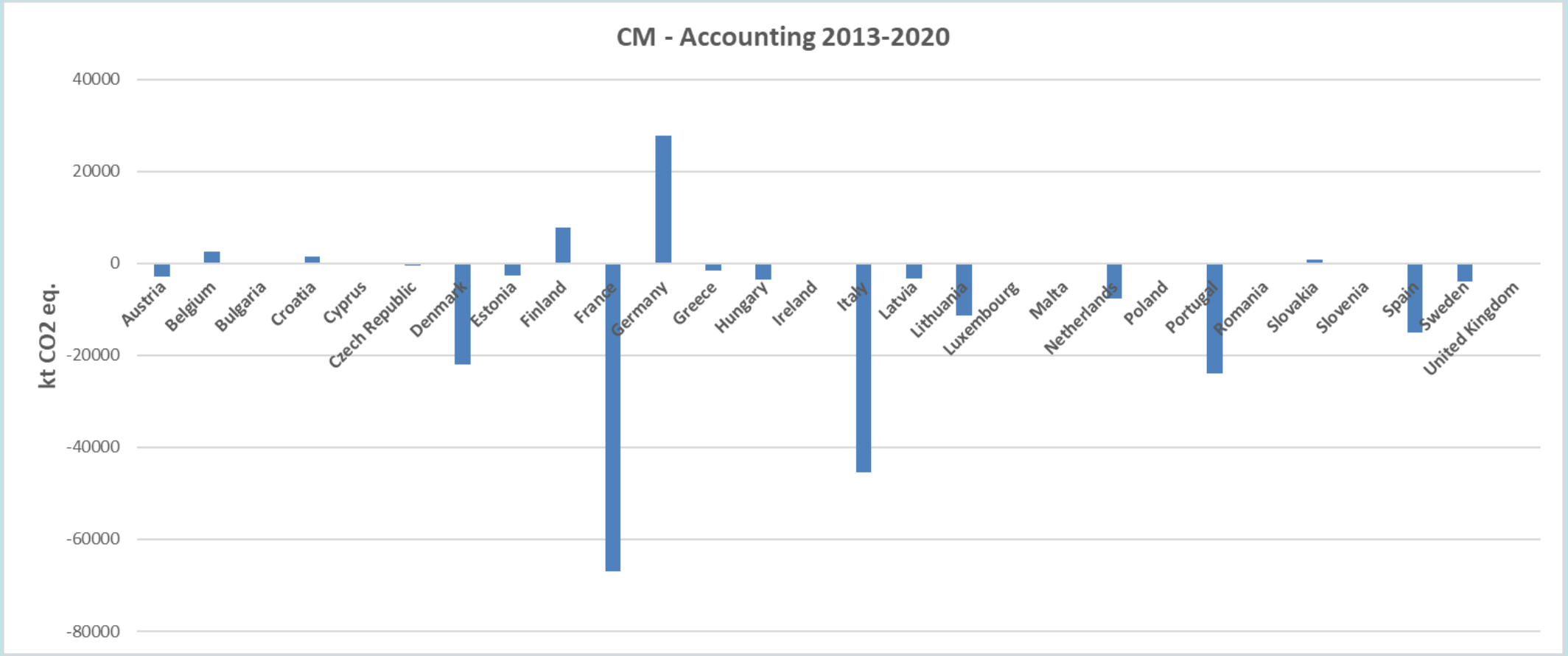
Accounting: KP and Decision 529



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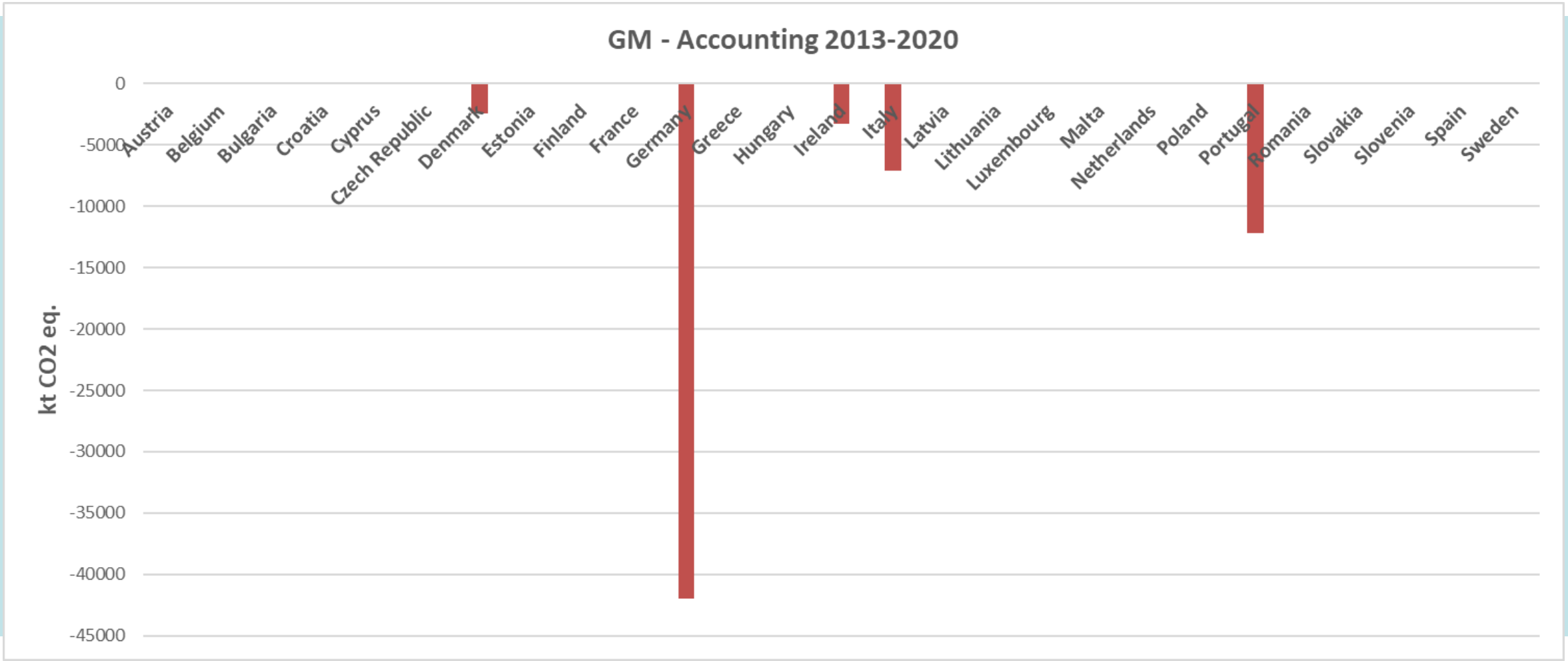
Accounting: KP only



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Accounting: KP and Decision 529

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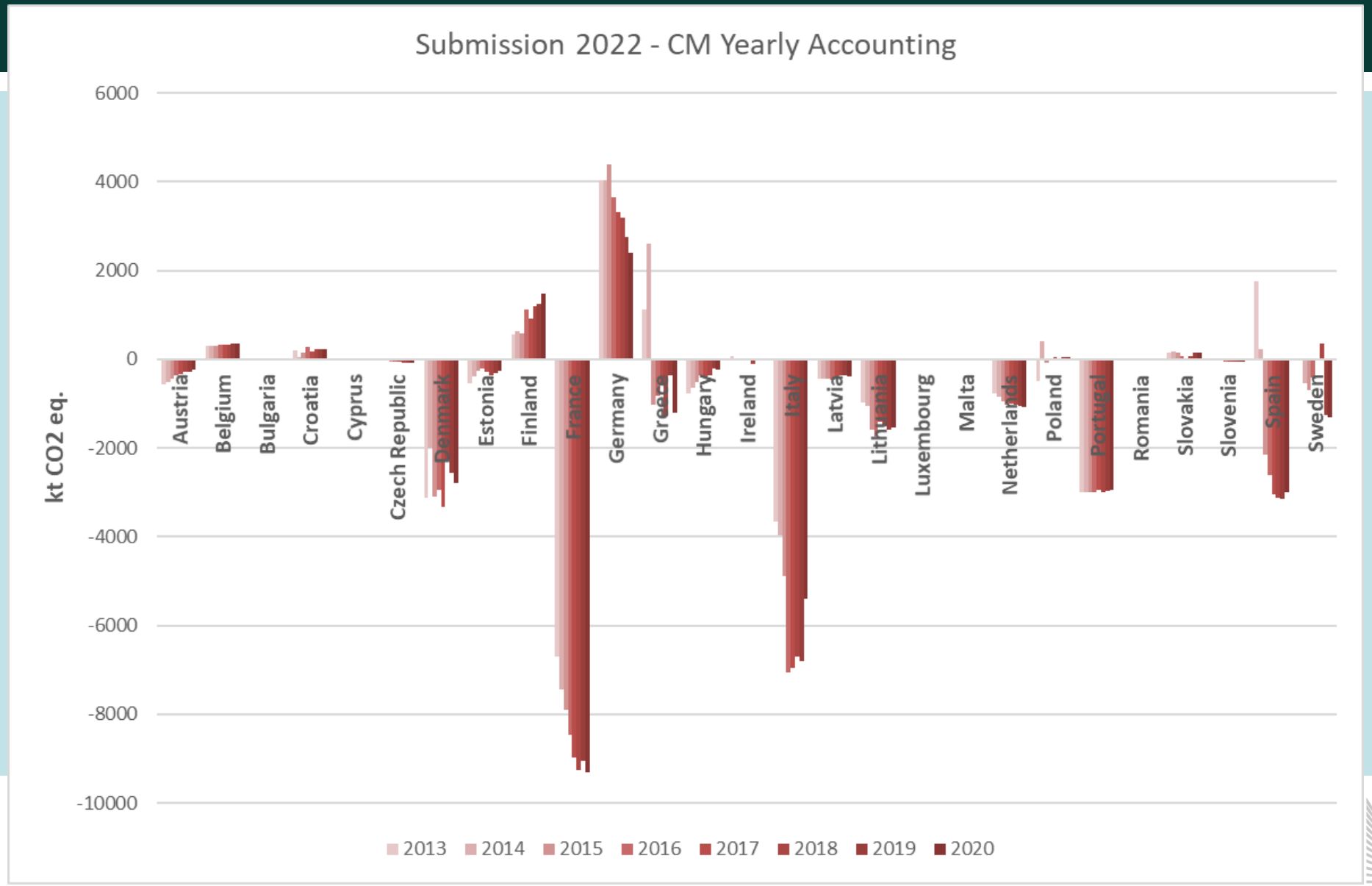
Accounting



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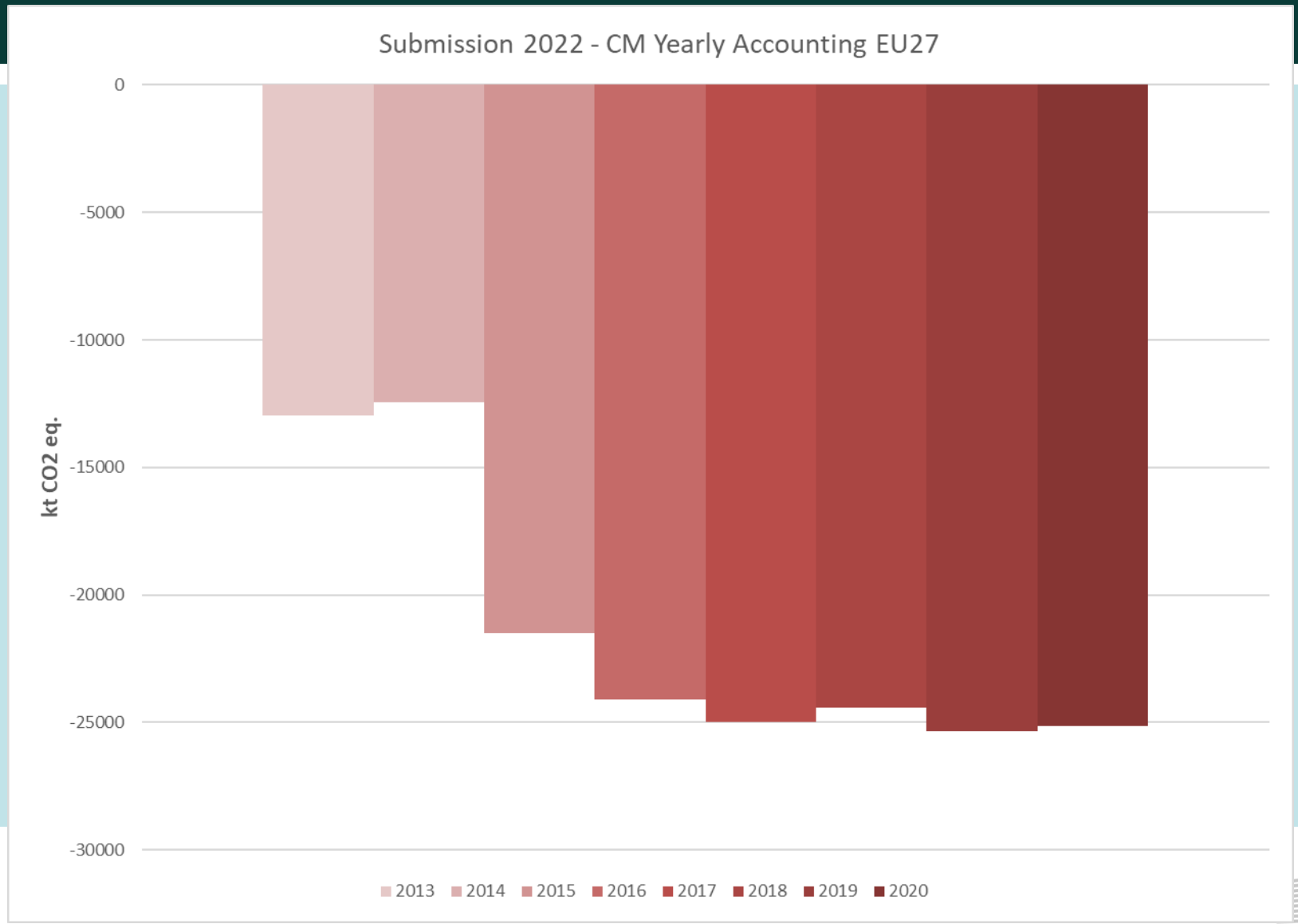
Accounting – EU27 totals – Cropland Management



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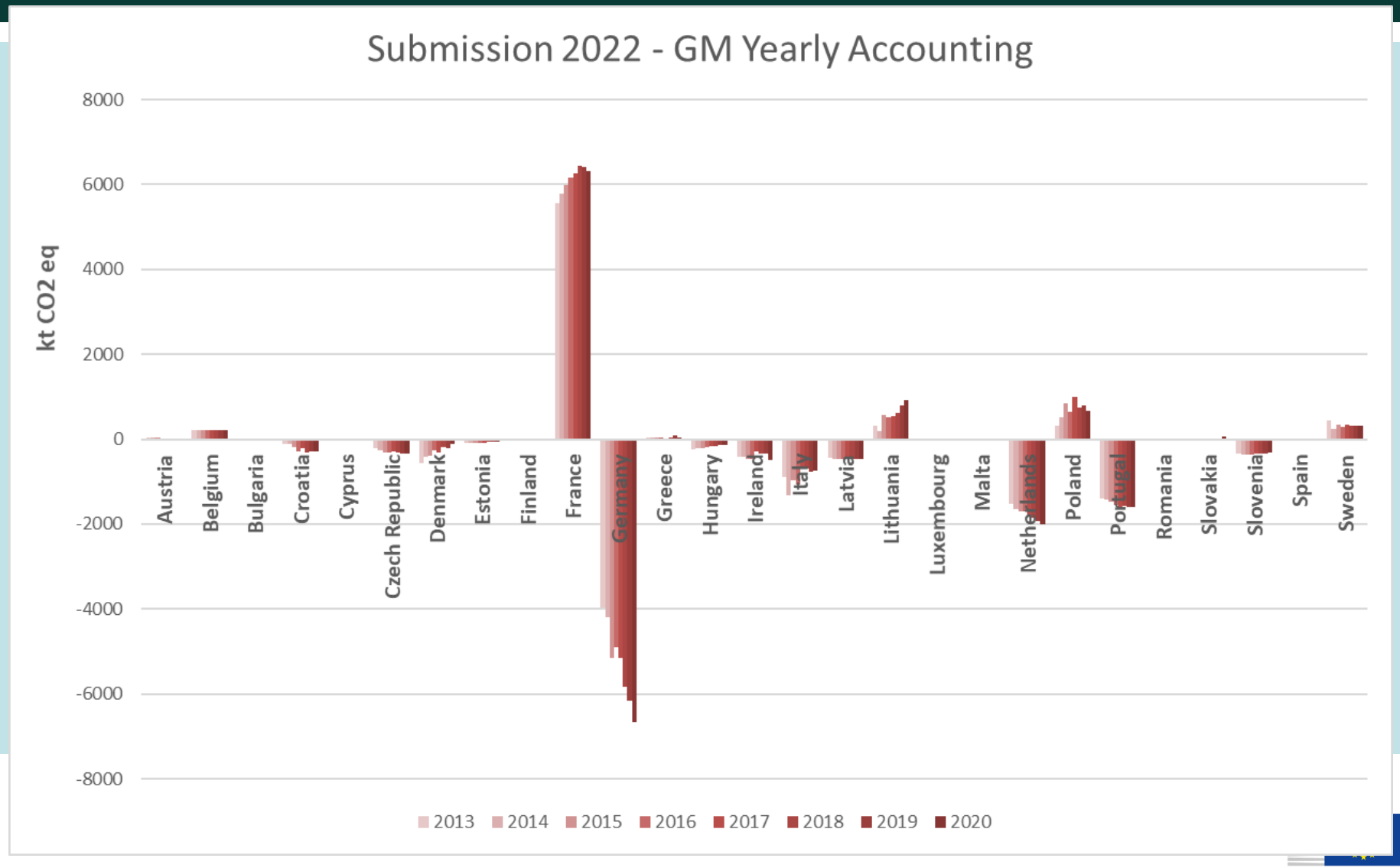
Accounting



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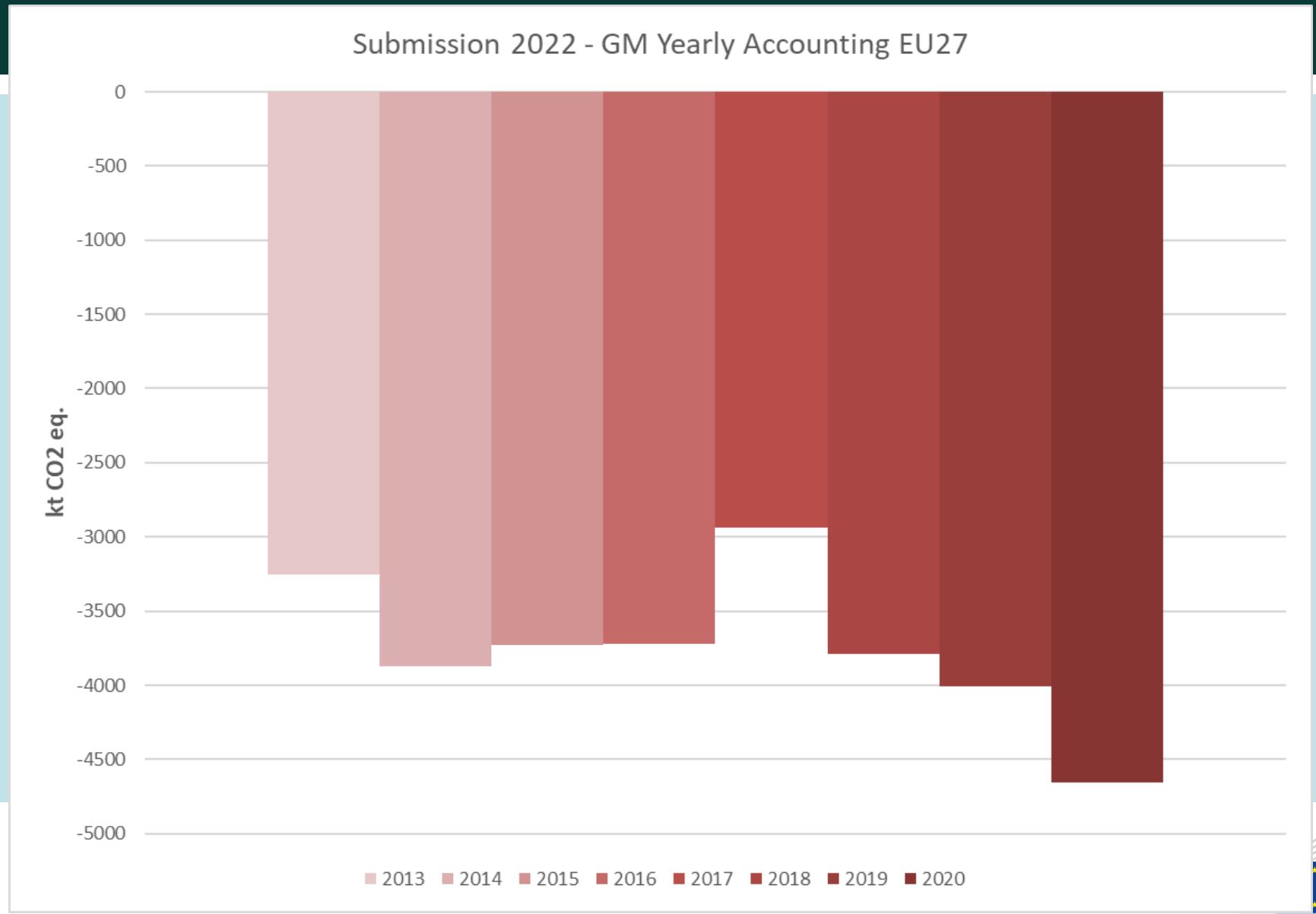
Accounting – EU27 totals – Grazing Land Management



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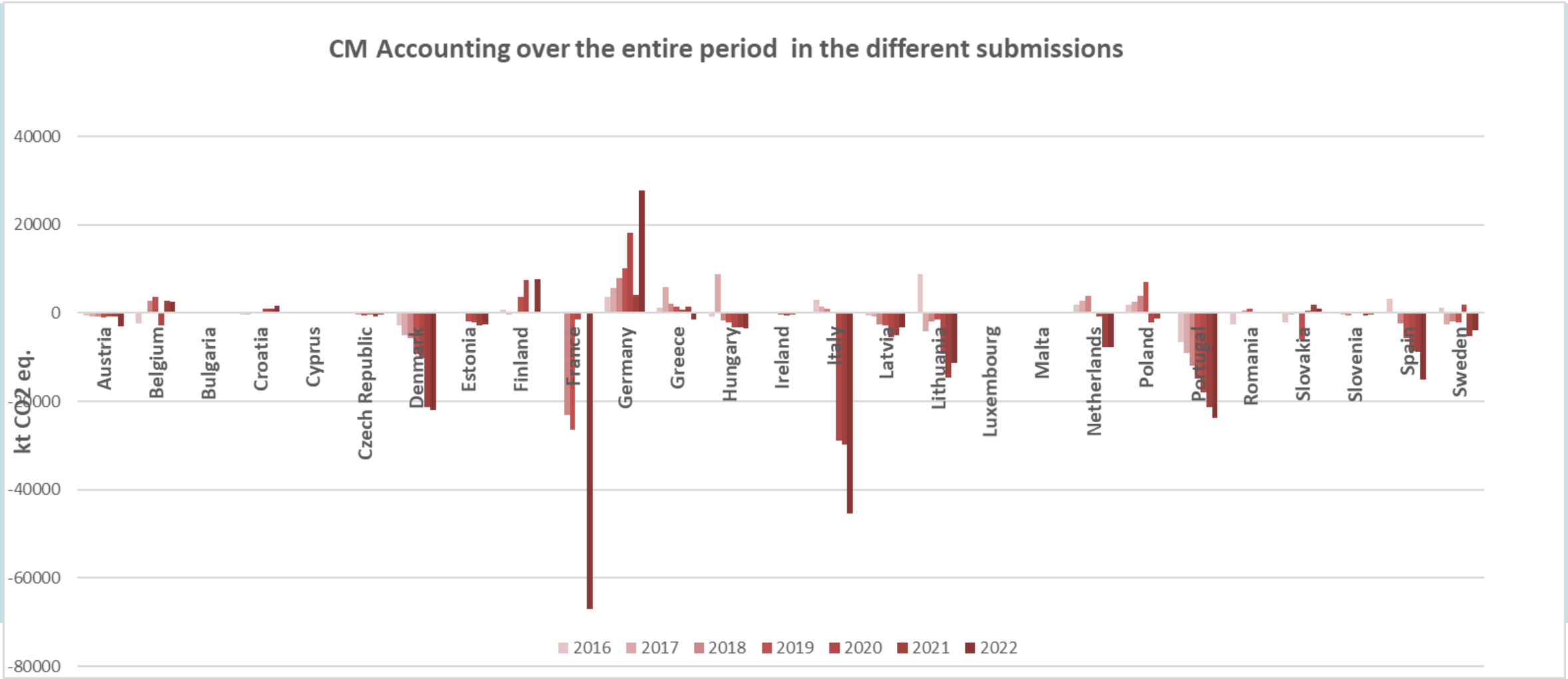
Accounting



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Conclusions

- ✓ It’s confirmed an increased stability in the estimates, probably due to more robust and established methodologies, reflected in the methodological documentation.
- ✓ Although in a certain sense “overtaken” by the events (end of KP, new land use-based accounting categories, perceived as an improvement by most) the Decision contributed to a more robust and complete LULUCF accounting.
- ✓ The work on Decision 529 highlighted the need for a stronger action to facilitate the sharing of data within institutions (e.g. LPIS). Also the usefulness of a EU Emission Factors Database was highlighted.
- ✓ Also, it highlighted the need for action and common rules for the production of local data (e.g. CLC LULUCF). for the production of a common monitoring approach (e.g. LULUCF layer under CLC).
- ✓ Some MS still have to submit their final estimates.

Thank you for your attention