

Recalculations - Carbon monoxide (CO)

The significant changes in the **National Total** reported for **1990 (+273 kt or +2.1 %)** are dominated by a revision in NFRs **1.A.3.b i** (+268 kt) and **1.A.3.b ii** (+13 kt) . Furthermore, CO emissions from NFR **2.H.1** have been estimated for the first time (NE -> 0.11 kt).

Additional smaller changes occur throughout NFRs 1 and 2.

Table 1: Changes in emission estimates for 1990

	Submission 2022	Submission 2023	Difference		Reasoning
NFR Sector	[kt]			relative	see description and reasoning in:
NATIONAL TOTAL	13.046,02	13.319,09	273,07	2,09%	sub-category chapters
NFR 1 - Energy	11.772,32	12.045,28	272,96	2,32%	sub-category chapters
1.A.2.g vii	82,70	82,82	0,12	0,15%	here
1.A.2.g viii	65,70	65,70	0,00	0,00%	here
1.A.3.a i(i)	3,64	3,42	-0,22	-5,96%	here
1.A.3.a ii(i)	6,31	6,18	-0,13	-2,07%	here
1.A.3.b i	6.647	6.915	268	4,03%	here
1.A.3.b ii	315,30	328,37	13,07	4,15%	here
1.A.3.b iii	135,46	128,59	-6,87	-5,07%	here
1.A.3.b iv	226,62	225,59	-1,03	-0,46%	here
1.A.4.a ii	7,04	7,03	-0,01	-0,16%	here
1.A.4.b ii	54,00	54,02	0,02	0,04%	here
1.A.4.c ii	100,83	100,78	-0,05	-0,05%	here
NFR 2 - IPPU	1.248,66	1.248,77	0,11	0,01%	sub-category chapters
2.H.1	NE	0,11	0,11		here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	25,04	25,04	0,00	0,00%	
NFR 6 - Other	NA				

The remarkable changes in the **National Total** reported for **2019 (-132 kt | -4.60 %)** result mainly from a revision within **NFR 1.A.2.f (-141 kt)** together with other more or less significant revisions in NFRs 1, 2, 3 and 5.

Table 2: Changes in emission estimates for 2019

	Submission 2021	Submission 2022	Difference		Reasoning
NFR Sector	[kt]			relative	see description and reasoning in:
NATIONAL TOTAL	2.882,74	2.750,27	-132,47	-4,60%	sub-category chapters
NFR 1 - Energy	2.061,08	1.894,50	-166,59	-8,08%	sub-category chapters
1.A.1.a	94,47	91,42	-3,05	-3,23%	here
1.A.1.b	2,15	2,14	-0,01	-0,43%	here
1.A.1.c	10,74	12,92	2,18	20,27%	here
1.A.2.a	32,14	29,16	-2,98	-9,27%	here
1.A.2.b	0,150	0,146	-0,005	-3,15%	here
1.A.2.e	0,081	0,077	-0,005	-5,62%	here
1.A.2.f	142,36	1,42	-140,93	-99,00%	here
1.A.2.g vii	126,74	124,61	-2,13	-1,68%	here
1.A.2.g viii	17,93	17,77	-0,15	-0,85%	here
1.A.3.a i(i)	6,56	6,26	-0,30	-4,53%	here
1.A.3.a ii(i)	6,23	2,91	-3,33	-53,37%	here
1.A.3.b i	796,91	778,21	-18,70	-2,35%	here
1.A.3.b ii	38,16	38,03	-0,14	-0,36%	here
1.A.3.b iii	38,78	38,89	0,10	0,27%	here
1.A.3.b iv	71,40	70,62	-0,78	-1,10%	here
1.A.3.c	1,06	1,17	0,11	10,48%	here
1.A.3.d ii	3,60	3,81	0,21	5,75%	here

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NFR Sector	[kt]			relative	see description and reasoning in:
NATIONAL TOTAL	2.882,74	2.750,27	-132,47	-4,60%	sub-category chapters
NFR 1 - Energy	2.061,08	1.894,50	-166,59	-8,08%	sub-category chapters
1.A.4.a i	46,73	47,70	0,98	2,09%	here
1.A.4.a ii	2,375	2,372	-0,003	-0,12%	here
1.A.4.b i	424,49	427,59	3,10	0,73%	here
1.A.4.b ii	113,39	111,87	-1,51	-1,33%	here
1.A.4.c i	14,03	15,05	1,02	7,30%	here
1.A.4.c ii	52,76	52,24	-0,52	-0,99%	here
1.A.4.c iii	0,05	0,03	-0,02	-33,19%	here
1.A.5.a	0,78	1,09	0,31	39,74%	here
1.A.5.b	11,49	11,44	-0,05	-0,46%	here
1.B.1.b	4,71	4,73	0,02	0,33%	here
1.B.2.a iv	0,3537	0,3538	0,0001	0,01%	
1.B.2.c	0,12009	0,12011	0,00002	0,01%	
NFR 2 - IPPU	803,293	837,145	33,85	4,21%	sub-category chapters
2.A.2	IE	11,76	11,76		here
2.A.3	IE	0,87	0,87		here
2.B.1	NA	0,29	0,29		here
2.B.6	NE	20,93	20,93		here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	18,36	18,62	0,26	1,44%	sub-category chapters
5.C.2	18,27	18,53	0,26	1,44%	here
NFR 6 - Other	19,55	19,55	0,00	0,00%	