

Recalculations - Nitrogen Oxides

Revision of NO_x emissions over time:



Changes within the **National Total reported for 1990 (-14.72 kt | -0.52 %)** are dominated by changes in NFRs **1.A.3.d ii** (-9.73 kt) and **2.B.2** (-5.68 kt) together with less significant revisions throughout NFRs 1, 2 and 3.

The most significant percental change occurs for **NFR 1.A.4.c iii with minus 52 %**.

Table 1: Changes of emission estimates 1990

NFR Code	[kt]			relative	see description and reasoning in: sub-category chapters
	Submission 2021	Submission 2022	Difference		
NATIONAL TOTAL	2.850,05	2.835,33	-14,72	-0,52%	sub-category chapters
NFR 1 - Energy	2.601,88	2.592,15	-9,73	-0,37%	sub-category chapters
1.A.3.a i(i)	3,94	3,94	0,00	-0,02%	here
1.A.3.a ii(i)	2,80	2,78	-0,01	-0,38%	here
1.A.3.b iii	506,00	505,99	-0,01	0,00%	here
1.A.3.c	45,05	45,32	0,26	0,59%	here
1.A.3.d ii	60,65	51,47	-9,18	-15,13%	here
1.A.4.b ii	0,06	0,08	0,02	30,65%	here
1.A.4.c iii	0,81	0,39	-0,42	-51,95%	here
1.A.5.b	41,60	41,20	-0,40	-0,96%	here
NFR 2 - IPPU	106,37	100,73	-5,64	-5,30%	sub-category chapters
2.B.2	16,98	11,30	-5,68	-33,44%	2.B.2 - Nitric Acid Production
2.B.6	NE	0,04	0,04		2.B.6 - Titanium Dioxide Production
NFR 3 - Agriculture	141,27	141,92	0,65	0,46%	sub-category chapters
3.B.1.b	0,6958	0,6896	-0,01	-0,89%	here
3.B.3	0,26	0,28	0,02	6,48%	here
3.B.4.g i	0,01443	0,01427	0,00	-1,145%	here
3.B.4.g iv	0,00251	0,00248	-0,00003	-1,33%	here
3.D.a.2.a	43,46	44,14	0,68	1,58%	here
3.D.a.3	8,44	8,40	-0,04	-0,49%	here
NFR 5 - Waste	0,53	0,53	0,00	0,00%	
NFR 6 - Other	NA				

The small changes within the **National Total reported for 2019 (+8.22 kt | +0.68 %)** are dominated by changes in **NFRs 1 and 3**. Here, the most significant relative change occurs for **NFR 2.G with minus 49 %**.

Table 2: Changes of emission estimates 2019

absolute changes in emissions reported for 2018					Submission 2021	Submission 2022	Difference		Reasoning
NFR Sector		[kt]					relative	see description and reasoning in:	
NATIONAL TOTAL		1.136,79		1.108,82		-27,97	-2,46%	sub-category chapters	
NFR 1 - Energy		938,97		938,49		-0,48	-0,05%	sub-category chapters	
1.A.1.a		208,92		208,57		-0,34	-0,16%	here	
1.A.1.b		16,66		16,66		0,01	0,05%	here	
1.A.1.c		12,01		13,38		1,37	11,43%	here	
1.A.2.a		3,95		4,15		0,21	5,25%	here	
1.A.2.b		1,01		0,98		-0,03	-2,88%	here	
1.A.2.e		0,21		0,21		0,00	-0,67%	here	
1.A.2.f		IE		IE		#WERT!	#WERT!	here	
1.A.2.g vii		14,81		14,74		-0,07	-0,47%	here	
1.A.2.g viii		68,68		67,08		-1,61	-2,34%	here	
1.A.3.a i(i)		11,77		11,93		0,16	1,37%	here	
1.A.3.a ii(i)		2,61		2,65		0,03	1,28%	here	
1.A.3.b i		275,95		271,75		-4,20	-1,52%	here	
1.A.3.b ii		56,31		55,69		-0,61	-1,09%	here	
1.A.3.b iii		106,05		106,65		0,60	0,56%	here	
1.A.3.b iv		1,61		1,60		-0,02	-1,10%	here	
1.A.3.c		7,33		7,99		0,66	8,94%	here	
1.A.3.d ii		24,70		24,75		0,05	0,22%	here	
1.A.4.a i		20,65		20,43		-0,22	-1,06%	here	
1.A.4.a ii		7,96		7,92		-0,04	-0,55%	here	
1.A.4.b i		56,94		60,05		3,11	5,47%	here	
1.A.4.b ii		0,4913		0,5745		0,08	16,94%	here	
1.A.4.c i		6,03		7,01		0,98	16,21%	here	
1.A.4.c ii		26,87		26,87		0,00	0,00%	here	
1.A.4.c iii		0,5584		0,3768		-0,18	-32,53%	here	
1.A.5.a		0,22		0,23		0,01	4,92%	here	
1.A.5.b		3,52		3,10		-0,43	-12,09%	here	
1.B.2.a iv		0,7171		0,7172		0,0001	0%		
NFR 2 - IPPU		84,76		58,71		-26,05	-30,73%	sub-category chapters	
2.A.1		12,49		12,49		0,00	0,00%	here	
2.A.2		3,843		3,843		0,000	0,00%	here	
2.A.3		11,14		10,67		-0,47	-4,20%	here	
2.A.5.a		NA		NA		#WERT!	#WERT!	here	
2.A.5.b		NA		NA		#WERT!	#WERT!	here	
2.A.5.c		NA		NA		#WERT!	#WERT!	here	
2.A.6		2,13		2,13		0,00	0,04%	here	
2.B.1		2,95		2,95		0,00	0,00%	here	
2.B.2		26,69		1,07		-25,62	-96,00%	here	
2.B.3		0,13		0,13		0,00	0,00%	here	
2.B.5		NA		NA		#WERT!	#WERT!	here	
2.B.6		NE		0,04		#WERT!	#WERT!	here	
2.B.7		NA		NA		#WERT!	#WERT!	here	
2.B.10.a		NA		NA		#WERT!	#WERT!	here	
2.B.10.b		NA		NA		#WERT!	#WERT!	here	
2.C.1		21,12		21,12		0,00	0,00%	here	

absolute changes in emissions reported for 2018						Submission 2021	Submission 2022	Difference		Reasoning
NFR Sector		[kt]			relative				see description and reasoning in:	
NATIONAL TOTAL		1.136,79	1.108,82	-27,97	-2,46%				sub-category chapters	
NFR 1 - Energy		938,97	938,49	-0,48	-0,05%				sub-category chapters	
2.C.2		NE	NE	#WERT!	#WERT!				here	
2.C.3		0,51	0,51	0,53	104,34%				here	
2.C.4		NA	NA	#WERT!	#WERT!				here	
2.H.1		2,95	2,94	0,00	-0,11%				here	
NFR 3 - Agriculture		112,24	110,79	-1,44	-1,29%				sub-category chapters	
3.B.1.a		0,489	0,507	0,017	3,52%				here	
3.B.1.b		0,487	0,515	0,029	5,88%				here	
3.B.3		0,3276	0,2616	-0,0660	-20,14%				here	
3.B.4.d		0,00187	0,00191	0,00004	2,35%				here	
3.B.4.e		0,0362	0,0386	0,0024	6,67%				here	
3.B.4.g i		0,0180	0,0182	0,0003	1,46%				here	
3.B.4.g ii		0,0179	0,0139	-0,0039	-21,88%				here	
3.B.4.g iii		0,0108	0,0100	-0,0007	-6,78%				here	
3.B.4.g iv		0,00202	0,00205	0,00002	1,06%				here	
3.D.a.1		55,97	55,34	-0,62	-1,11%				here	
3.D.a.2.a		37,54	37,05	-0,49	-1,30%				here	
3.D.a.2.b		0,51	0,56	0,05	10,17%				here	
3.D.a.2.c		11,55	11,56	0,01	0,08%				here	
3.D.a.3		5,10	4,73	-0,37	-7,21%				here	
3.I		0,172	0,169	-0,003	-1,86%				here	
NFR 5 - Waste		0,826	0,830	0,004	0,50%				sub-category chapters	
5.C.2		0,283	0,288	0,004	1,44%				here	
NFR 6 - Other			NA							