

Recalculations - Nitrogen Oxides

Revision of NO_x emissions over time:



Changes within the **National Total reported for 1990 (-34 kt | -1.19 %)** are dominated by changes in **NFRs 1.A.3.b i, 1.A.3.b ii and 1.A.3.b iii** together with less significant revisions throughout NFRs 1, 2 and 3.

The most significant relative change occurs for **NFR 2.G with minus 58 %**.

Table 1: Changes of emission estimates 1990

NFR Code	absolute changes in emissions reported for 1990				Submission 2020	Submission 2021	Difference	Reasoning
	NATIONAL TOTAL	Energy	IPPU	Agriculture				
NATIONAL TOTAL	2.884,38	2.850,05	-34,33	-1,19%			see description and reasoning in: sub-category chapters	
NFR 1 - Energy	2.634,24	2.601,88	-32,36	-1,23%			sub-category chapters	
1.A.2.g vii	49,60	50,23	0,63	1,28%			here	
1.A.3.a i(i)	3,88	3,94	0,06	1,54%			here	
1.A.3.a ii(i)	2,85	2,80	-0,05	-1,90%			here	
1.A.3.b i	808,22	765,68	-42,54	-5,26%			here	
1.A.3.b ii	41,49	31,49	-10,00	-24,11%			here	
1.A.3.b iii	485,89	506,00	20,11	4,14%			here	
1.A.3.b iv	2,61	2,45	-0,16	-6,18%			here	
1.A.4.a ii	11,52	11,60	0,08	0,67%			here	
1.A.4.b ii	0,07	0,06	-0,01	-8,44%			here	
1.A.4.c ii	49,78	49,31	-0,475	-0,95%			here	
NFR 2 - IPPU	106,06	106,37	0,31	0,29%			sub-category chapters	
2.C.3	NA	0,74	0,74				here	
2.G	0,74	0,31	-0,43	-58,05%			here	
NFR 3 - Agriculture	143,55	141,27	-2,28	-1,59%			sub-category chapters	
3.B.1.a	0,72	0,67	-0,05	-7,07%			here	
3.B.1.b	0,79	0,70	-0,09	-11,65%			here	
3.B.4.g iii	0,00337	0,00339	0,00002	0,48%			here	
3.D.a.1	85,31	86,57	1,256	1,47%			here	
3.D.a.2.a	46,65	43,46	-3,19	-6,84%			here	
3.D.a.3	8,65	8,44	-0,21	-2,42%			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 2018 (+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 2018

absolute changes in emissions reported for 2018					Submission 2020	Submission 2021	Difference	Reasoning
NFR Code	[kt]				relative	see description and reasoning in: sub-category chapters		
NATIONAL TOTAL	1.202,28	1.210,50	8,22	0,68%	sub-category chapters			
NFR 1 - Energy	996,11	1.007,16	11,05	1,11%	sub-category chapters			
1.A.1.a	239,65	241,73	2,08	0,87%	here			
1.A.1.b	13,03	16,16	3,13	24,04%	here			
1.A.1.c	12,04	13,06	1,02	8,50%	here			
1.A.2.a	4,10	4,17	0,07	1,75%	here			
1.A.2.b	0,99	1,02	0,03	2,54%	here			
1.A.2.e	0,19	0,21	0,02	9,42%	here			
1.A.2.g vii	11,31	15,37	4,07	35,97%	here			
1.A.2.g viii	72,70	68,70	-4,00	-5,50%	here			
1.A.3.a i(i)	11,77	11,84	0,07	0,61%	here			
1.A.3.a ii(i)	2,31	2,67	0,35	15,27%	here			
1.A.3.b i	286,10	294,97	8,87	3,10%	here			
1.A.3.b ii	60,49	60,37	-0,12	-0,20%	here			
1.A.3.b iii	119,39	116,30	-3,09	-2,59%	here			
1.A.3.b iv	1,63	1,66	0,03	1,59%	here			
1.A.3.c	8,71	7,49	-1,23	-14,07%	here			
1.A.3.d ii	26,09	27,28	1,20	4,60%	here			
1.A.3.e i	1,50	1,50	0,01	0,45%	here			
1.A.4.a i	20,12	18,60	-1,52	-7,54%	here			
1.A.4.a ii	9,92	8,15	-1,77	-17,86%	here			
1.A.4.b i	52,65	54,48	1,83	3,49%	here			
1.A.4.b ii	0,499	0,501	0,002	0,32%	here			
1.A.4.c i	6,07	5,84	-0,23	-3,80%	here			
1.A.4.c ii	27,29	27,43	0,14	0,51%	here			
1.A.4.c iii	2,69	2,77	0,08	2,70%	here			
1.A.5.a	0,25	0,25	0,00	0,22%	here			
1.A.5.b	2,87	2,87	0,00	0,07%	here			
1.B.1.b	0,64	0,65	0,01	1,55%	here			
NFR 2 - IPPU	86,70	86,82	0,12	0,14%	sub-category chapters			
2.A.3	11,71	11,51	-0,20	-1,67%	here			
2.C.3	NA	0,53	0,53		here			
2.G	0,436	0,222	-0,214	-49,14%	here			
NFR 3 - Agriculture	118,64	115,69	-2,95	-2,49%	sub-category chapters			
3.B.1.a	0,520	0,488	-0,032	-6,21%	here			
3.B.1.b	0,566	0,497	-0,070	-12,31%	here			
3.B.3	0,3340	0,3352	0,0013	0,38%	here			
3.B.4.g i	0,0180	0,0178	-0,0001	-0,65%	here			
3.B.4.g ii	0,0180	0,0180	0,0000	-0,20%	here			
3.B.4.g iii	0,0108	0,0108	-0,0001	-0,67%	here			
3.B.4.g iv	0,0020	0,0020	0,0000	-0,72%	here			
3.D.a.1	59,01	59,11	0,10	0,17%	here			
3.D.a.2.a	39,94	37,80	-2,14	-5,35%	here			
3.D.a.2.b	0,56	0,51	-0,05	-8,55%	here			
3.D.a.2.c	11,77	11,55	-0,22	-1,91%	here			
3.D.a.3	5,66	5,13	-0,54	-9,47%	here			
3.I	0,177	0,172	-0,005	-2,68%	here			
NFR 5 - Waste	0,830	0,830	0,000	0,00%				
NFR 6 - Other	NA							