

Recalculations - Sulphur Oxides

Revision of SO_x emissions over time



The marginal changes in the **National Total reported for 1990 (+1.51 kt | +0.03 %)** result almost entirely from revised emission estimates in **NFR 2.C.7.a** together with less significant changes throughout NFRs 1 and 2.

Table 1: Changes in emission estimates for 1990

NFR Code	Submission 2020	Submission 2021	Difference		Reasoning
	[kt]		absolute	relative	
NATIONAL TOTAL	5.472,91	5.474,42	1,51	0,03%	see description and reasoning in: sub-category chapters
NFR 1 - Energy	5.297,93	5.297,93	0,00	0,00%	sub-category chapters
1.A.2.g vii	3,78	3,84	0,06	1,63%	here
1.A.3.a i(i)	0,27	0,26	-0,01	-3,10%	here
1.A.3.a ii(i)	0,17	0,18	0,01	6,27%	here
1.A.3.b i	33,25	33,07	-0,18	-0,53%	here
1.A.3.b ii	3,60	2,34	-1,26	-35,09%	here
1.A.3.b iii	35,10	36,55	1,45	4,14%	here
1.A.3.b iv	0,24	0,22	-0,01	-6,18%	here
1.A.4.a ii	0,62	0,63	0,01	0,94%	here
1.A.4.c ii	4,55	4,49	-0,07	-1,48%	here
NFR 2 - IPPU	174,88	176,39	1,51	0,86%	sub-category chapters
2.C.7.a	1,43	2,94	1,51	106%	here
2.G	0,0542	0,0546	0,0003	0,62%	here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	0,11	0,11	0,00	0,00%	
NFR 6 - Other	NA				

The significant changes in the **National Total reported for 2017 (-13.76 kt | -4.36 %)** result mainly from revisions in **NFRs 1.A.2.g viii (-4.51 kt), 1.B.2.a iv (+ 4.51 kt) and 2.B.10.a (-9.18 kt)** together with less significant changes throughout NFRs 1 and 2.

However, the strongest relative changes occur for **NFR 1.B.2.a iv (+1,642,148 %)**, followed by **NFRs 1.A.3.a i(i) (+361 %)** and **1.A.3.a ii(i) (+293 %)**.

Table 2: Changes in emission estimates for 2017

NFR Code	Submission 2019	Submission 2020	Difference		Reasoning
	absolute, in [kt]		absolute	relative	
NATIONAL TOTAL	315.48	301.72	-13.76	-4.36%	see description and reasoning in: sub-category chapters
NFR 1 - Energy	235.50	231.00	-4.50	-1.91%	sub-category chapters
1.A.1.a	130.92	128.76	-2.16	-1.65%	here]
1.A.1.b	33.25	33.39	0.14	0.41%	here]
1.A.1.c	8.12	8.14	0.02	0.31%	here]
1.A.2.a	5.18	5.15	-0.03	-0.59%	here]
1.A.2.b	0.80	0.42	-0.38	-47.48%	here]
1.A.2.e	0.76	0.75	-0.01	-1.79%	here]
1.A.2.g vii	0.0182	0.0181	-0.0001	-0.58%	here]
1.A.2.g viii	33.86	29.35	-4.51	-13.32%	here]
1.A.3.a i(i)	0.14	0.65	0.51	361%	here]

1.A.3.a ii(i)	> 0.04	> 0.15	> 0.11	> 293%	< here]
1.A.3.b i	> 0.523	> 0.527	> 0.004	> 0.77%	< here]
1.A.3.b ii	> 0.04	> 0.06	> 0.02	> 47.56%	< here]
1.A.3.b iii	> 0.27	> 0.25	> -0.02	> -6.66%	< here]
1.A.3.b iv	> 0.0073	> 0.0071	> -0.0001	> -1.91%	< here]
1.A.3.c	> 0.226	> 0.225	> -0.001	> -0.36%	< here]
1.A.3.d ii	> 0.6293	> 0.6287	> -0.0005	> -0.08%	< here]
1.A.4.a i	> 0.93	> 1.11	> 0.18	> 19.28%	< here]
1.A.4.a ii	> 0.00512	> 0.00514	> 0.00002	> 0.33%	< here]
1.A.4.b i	> 12.90	> 12.43	> -0.47	> -3.64%	< here]
1.A.4.b ii	> 0.001620	> 0.001619	> -0.000001	> -0.04%	< here]
1.A.4.c i	> 3.80	> 2.49	> -1.31	> -34.43%	< here]
1.A.4.c ii	> 0.02338	> 0.02341	> 0.00003	> 0.14%	< here]
1.A.4.c iii	> 0.05144	> 0.05143	> -0.00001	> -0.02%	< here]
1.A.5.a	> 0.0304	> 0.0301	> -0.0003	> -1.06%	< here]
1.A.5.b	> 0.0277	> 0.0276	> -0.0001	> -0.22%	< here]
1.B.2.a iv	> 0.0003	> 4.5051	> 4.5049	> 1,642,148%	< here]
1.B.2.c	> 2.13	> 1.03	> -1.09	> -51.49%	< here]
NFR 2 - IPPU	> 79.84	> 70.58	> -9.26	> -11.60%	< sub-category chapters
2.A.1	> 6.53	> 6.53	> 0.00	> 0.00%	< here]
2.A.2	> 0.8818	> 0.8814	> -0.0004	> -0.04%	< here]
2.A.6	> 1.41	> 1.20	> -0.20	> -14.51%	< here]
2.B.10.a	> 20.26	> 11.08	> -9.18	> -45.30%	< here]
2.G	> 0.13	> 0.13	> 0.01	> 5.30%	< here]
2.H.1	> 0.51	> 0.63	> 0.12	> 22.45%	< here]
NFR 3 - Agriculture					= NA
NFR 5 - Waste	> 0.13	> 0.13	> 0.00	> 0.00%	<
NFR 6 - Other					= NA