

# Recalculations - Sulphur Oxides

The changes in the **National Total reported for 1990 (-14.4 kt | -0.26 %)** result almost entirely from revised emission estimates in NFRs **1.A.3.d ii** (-13.80 kt), **2.B.6** (+1.73 kt) and **2.B.10.a** (-2.58 kt) together with less significant changes throughout NFRs 1 and 2.

Here, the strongest percental change occurs for **1.A.3.d ii with minus 56 %**.

Table 1: Changes in emission estimates for 1990

NFR Code	Submission 2021	Submission 2022	Difference		Reasoning
	[kt]			relative	see description and reasoning in:
<b>NATIONAL TOTAL</b>	<b>5.474,42</b>	<b>5.460,02</b>	<b>-14,40</b>	<b>-0,26%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>5.297,93</b>	<b>5.284,38</b>	<b>-13,55</b>	<b>-0,26%</b>	<b>sub-category chapters</b>
1.A.3.a ii(i)	0,18	0,18	0,00	-0,03%	<a href="#">here</a>
1.A.3.c	7,73	8,24	0,51	6,56%	<a href="#">here</a>
1.A.3.d ii	24,67	10,87	-13,80	-55,94%	<a href="#">here</a>
1.A.4.c iii	0,36	0,19	-0,18	-48,74%	<a href="#">here</a>
1.A.5.b	3,55	3,47	-0,08	-2,27%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>176,39</b>	<b>175,54</b>	<b>-0,85</b>	<b>-0,48%</b>	<b>sub-category chapters</b>
2.B.6	C	1,73	1,73		<a href="#">here</a>
2.B.10.a	56,50	53,93	-2,58	-4,56%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>		<b>NA</b>			
<b>NFR 5 - Waste</b>	<b>0,11</b>	<b>0,11</b>	<b>0,00</b>	<b>0,00%</b>	
<b>NFR 6 - Other</b>		<b>NA</b>			

Changes in the **National Total reported for 2019 (+2.8 kt | +1 %)** result mainly from revisions in **NFR sub-categories 1.A.1.a, 1.A.1.b, 1.A.1.c and 1.A.2.g viii** together with less relevant changes throughout NFRs 1 and 2.

Table 2: Changes in emission estimates for 2018

NFR Sector	Submission 2021	Submission 2022	Difference		Reasoning
	[kt]			relative	see description and reasoning in:
<b>NATIONAL TOTAL</b>	<b>263,53</b>	<b>259,70</b>	<b>-3,84</b>	<b>-1,46%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>195,50</b>	<b>193,90</b>	<b>-1,59</b>	<b>-0,81%</b>	<b>sub-category chapters</b>
1.A.1.a	99,43	99,78	0,35	0,36%	<a href="#">here</a>
1.A.1.b	32,80	32,91	0,11	0,34%	<a href="#">here</a>
1.A.1.c	8,86	7,73	-1,13	-12,72%	<a href="#">here</a>
1.A.2.a	4,73	4,87	0,14	2,96%	<a href="#">here</a>
1.A.2.b	0,382	0,378	-0,004	-1,05%	<a href="#">here</a>
1.A.2.c	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.d	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.e	0,79	0,77	-0,01	-1,64%	<a href="#">here</a>
1.A.2.f	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.g vii	0,01824	0,01825	0,00001	0,05%	<a href="#">here</a>
1.A.2.g viii	27,27	25,67	-1,59	-5,84%	<a href="#">here</a>
1.A.3.a i(i)	0,65	0,65	0,01	1,10%	<a href="#">here</a>
1.A.3.a ii(i)	0,165	0,166	0,001	0,64%	<a href="#">here</a>
1.A.3.b i	0,517	0,516	-0,001	-0,13%	<a href="#">here</a>
1.A.3.b ii	0,062	0,061	-0,001	-1,06%	<a href="#">here</a>
1.A.3.b iii	0,2419	0,2416	-0,0003	-0,13%	<a href="#">here</a>
1.A.3.b iv	0,0070	0,0069	-0,0001	-1,10%	<a href="#">here</a>
1.A.3.b v	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.A.3.b vi	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.A.3.b vii	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.A.3.c	0,225	0,239	0,014	6,45%	<a href="#">here</a>
1.A.3.d i(ii)	IE	IE	#WERT!	#WERT!	

1.A.3.d ii	0,61	0,38	-0,23	-37,88%	<a href="#">here</a>
1.A.3.e i	0,00300	0,00300	0,00	0,00%	<a href="#">1.A.3.e i - Pipeline Transport ]</a>
1.A.3.e ii	NA	NA	#WERT!	#WERT!	<a href="#">1.A.3.e ii - Other Transport: Other ]</a>
1.A.4.a i	0,90	1,24	0,34	37,36%	<a href="#">here</a>
1.A.4.a ii	0,003990	0,003994	0,000004	0,10%	<a href="#">here</a>
1.A.4.b i	9,47	10,41	0,93	9,84%	<a href="#">here</a>
1.A.4.b ii	0,00155	0,00162	0,00007	4,50%	<a href="#">here</a>
1.A.4.c i	2,32	1,82	-0,50	-21,61%	<a href="#">here</a>
1.A.4.c ii	0,02161	0,02164	0,00003	0,12%	<a href="#">here</a>
1.A.4.c iii	0,02	0,01	-0,01	-45,52%	<a href="#">here</a>
1.A.5.a	0,011	0,012	0,001	7,94%	<a href="#">here</a>
1.A.5.b	0,04	0,02	-0,02	-39,13%	<a href="#">here</a>
1.B.1.a	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.B.1.b	0,800	0,804	0,004	0,48%	<a href="#">here</a>
1.B.1.c	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.B.2.a i	NA	NA	#WERT!	#WERT!	
1.B.2.a iv	4,2097	4,2104	0,0006	0,01%	
1.B.2.a v	NA	NA	#WERT!	#WERT!	
1.B.2.b	0,00	0,00	0,00	0,00%	
1.B.2.c	0,9525	0,9526	0,0001	0,01%	
1.B.2.d	NA	NA	#WERT!	#WERT!	
<b>NFR 2 - IPPU</b>	<b>67,90</b>	<b>65,66</b>	<b>-2,24</b>	<b>-3,30%</b>	<b>sub-category chapters</b>
2.A.3	9,88	7,64	-2,24	-22,70%	<a href="#">here</a>
2.A.6	1,2034	1,2039	0,0005	0,04%	<a href="#">here</a>
2.B.6	C	0,95	0,95		<a href="#">here</a>
2.B.10.a	10,91	9,96	-0,95	-8,75%	<a href="#">here</a>
2.H.1	0,620	0,619	-0,002	-0,27%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>		<b>NA</b>			
<b>NFR 5 - Waste</b>	<b>0,137</b>	<b>0,138</b>	<b>0,001</b>	<b>0,66%</b>	<b>sub-category chapters</b>
5.C.2	0,063	0,064	0,001	1,44%	<a href="#">here</a>
<b>NFR 6 - Other</b>		<b>NA</b>			