

# Recalculations - Ammonia

Revision of NH<sub>3</sub> emissions over time:



The small changes within the **National Total** reported for **1990 (+7.4 kt or +1 %)** result almost entirely from **newly implemented emission estimates from NFR 6 (+ 8 kt)** together with less significant changes throughout NFRs 1 and 3.

The most significant percental change occurs for **NFR 5.B.1 with plus 110 %**.

Table 1: Changes in emission estimates for 1990

NFR Sector	Submission 2022	Submission 2023	Difference		Reasoning
	[kt]			relative	
<b>NATIONAL TOTAL</b>	<b>718,16</b>	<b>725,52</b>	<b>7,36</b>	<b>1,02%</b>	see description and reasoning in: <b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>15,54</b>	<b>15,89</b>	<b>0,35</b>	<b>2,28%</b>	<b>sub-category chapters</b>
1.A.2.g vii	0,0079	0,0079	0,0000	0,14%	<a href="#">here</a>
1.A.3.a i(i)	0,05	0,05	0,00	-6,58%	<a href="#">here</a>
1.A.3.a ii(i)	0,04	0,03	0,00	-6,58%	<a href="#">here</a>
1.A.3.b i	7,37	7,73	0,36	4,92%	<a href="#">here</a>
1.A.3.b ii	0,023	0,024	0,001	3,84%	<a href="#">here</a>
1.A.3.b iii	0,085	0,080	-0,004	-4,99%	<a href="#">here</a>
1.A.3.b iv	0,027	0,028	0,001	3,84%	<a href="#">here</a>
1.A.4.a ii	0,001799	0,001797	-0,000002	-0,11%	<a href="#">here</a>
1.A.4.b ii	0,000160	0,000160	0,000000	-0,02%	<a href="#">here</a>
1.A.4.c ii	0,00882	0,00881	-0,00001	-0,16%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>14,68</b>	<b>14,68</b>	<b>0,00</b>	<b>0,00%</b>	
<b>NFR 3 - Agriculture</b>	<b>687,79</b>	<b>686,62</b>	<b>-1,17</b>	<b>-0,17%</b>	<b>sub-category chapters</b>
3.B.1.a	62,19	62,10	-0,09	-0,14%	<a href="#">here</a>
3.B.1.b	91,43	81,36	-10,07	-11,02%	<a href="#">here</a>
3.B.3	121,81	120,10	-1,71	-1,41%	<a href="#">here</a>
3.B.4.g i	11,31	11,41	0,10	0,91%	<a href="#">here</a>
3.D.a.2.a	275,21	285,58	10,37	3,77%	<a href="#">here</a>
3.D.a.2.c	0,01	0,24	0,23	2,11%	<a href="#">here</a>
3.D.a.3	22,23	22,24	0,01	0,05%	<a href="#">here</a>
<b>NFR 5 - Waste</b>	<b>0,16</b>	<b>0,34</b>	<b>0,18</b>	<b>109%</b>	<b>sub-category chapters</b>
5.B.1	0,16	0,34	0,18	109%	<a href="#">here</a>
<b>NFR 6 - Other</b>	<b>0,00</b>	<b>8,00</b>	<b>8,00</b>		

Changes within the **National Total** reported for **2019 (-11.7 kt | -2 %)** result mainly from several larger revisions in **NFR 3 (-9.6 kt)** together with less significant changes throughout NFRs 1, 2 and 5.

The most significant relative change occurs for **NFR 2.A.3 with plus 68 %**.

Table 2: Changes in emission estimates for 2019

NFR Sector	Submission 2022	Submission 2023	Difference		Reasoning
	[kt]			relative	
<b>NATIONAL TOTAL</b>	<b>537,27</b>	<b>529,78</b>	<b>-7,49</b>	<b>-1,39%</b>	see description and reasoning in: <b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>12,31</b>	<b>13,20</b>	<b>0,89</b>	<b>7,19%</b>	<b>sub-category chapters</b>
1.A.1.a	0,62	0,60	-0,02	-3,18%	<a href="#">here</a>
1.A.1.b	0,541	0,545	0,004	0,80%	<a href="#">here</a>
1.A.1.c	0,0243	0,0246	0,0002	0,96%	<a href="#">here</a>
1.A.2.a	0,095	0,093	-0,002	-1,83%	<a href="#">here</a>
1.A.2.b	0,0063	0,0070	0,001	12,16%	<a href="#">here</a>
1.A.2.e	0,0018	0,0012	-0,0006	-33,75%	<a href="#">here</a>
1.A.2.f	0,0218	0,0215	-0,0003	-1,34%	<a href="#">here</a>
1.A.2.g vii	0,0083	0,0085	0,0002	2,07%	<a href="#">here</a>
1.A.2.g viii	0,365	0,369	0,003	0,95%	<a href="#">here</a>
1.A.3.a i(i)	0,058	0,054	-0,004	-6,63%	<a href="#">here</a>
1.A.3.a ii(i)	0,015	0,014	-0,001	-6,73%	<a href="#">here</a>
1.A.3.b i	7,59	8,36	0,77	10,13%	<a href="#">here</a>
1.A.3.b ii	0,197	0,220	0,023	11,64%	<a href="#">here</a>

	Submission 2022	Submission 2023	Difference		Reasoning
NFR Sector	[kt]		relative	see description and reasoning in:	
<b>NATIONAL TOTAL</b>	<b>537,27</b>	<b>529,78</b>	<b>-7,49</b>	<b>-1,39%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>12,31</b>	<b>13,20</b>	<b>0,89</b>	<b>7,19%</b>	<b>sub-category chapters</b>
1.A.3.b iii	0,743	0,726	-0,017	-2,30%	<a href="#">here</a>
1.A.3.b iv	0,0221	0,0224	0,0003	1,14%	<a href="#">here</a>
1.A.3.c	0,007	0,008	0,000	5,20%	<a href="#">here</a>
1.A.3.d ii	0,0052	0,0052	0,0000	-0,01%	<a href="#">here</a>
1.A.4.a i	0,36	0,50	0,14	37,57%	<a href="#">here</a>
1.A.4.a ii	0,001875	0,001884	0,000009	0,48%	<a href="#">here</a>
1.A.4.b i	1,531	1,524	-0,01	-0,40%	<a href="#">here</a>
1.A.4.b ii	0,00038	0,00030	-0,00008	-21,40%	<a href="#">here</a>
1.A.4.c i	0,052	0,050	-0,003	-5,09%	<a href="#">here</a>
1.A.4.c ii	0,0101	0,0102	0,0001	1,40%	<a href="#">here</a>
1.A.5.a	0,00373	0,00375	0,00001	0,39%	<a href="#">here</a>
1.A.5.b	0,01966	0,01963	-0,00003	-0,16%	<a href="#">here</a>
1.B.1.b	0,00192	0,00193	0,00002	0,89%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>9,139</b>	<b>9,590</b>	<b>0,45</b>	<b>4,93%</b>	<b>sub-category chapters</b>
2.A.1	1,01	1,11	0,10	9,45%	<a href="#">here</a>
2.A.3	1,10	1,13	0,03	2,76%	<a href="#">here</a>
2.B.7	0,92	1,25	0,32	35,20%	<a href="#">here</a>
2.C.1	0,075598	0,075595	-0,000004	-0,01%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>	<b>512,27</b>	<b>495,10</b>	<b>-17,18</b>	<b>-3,35%</b>	<b>sub-category chapters</b>
3.B.1.a	59,09	54,85	-4,24	-7,17%	<a href="#">here</a>
3.B.1.b	70,41	49,64	-20,77	-29,49%	<a href="#">here</a>
3.B.3	84,75	78,56	-6,19	-7,30%	<a href="#">here</a>
3.B.4.g i	8,17	6,80	-1,36	-16,70%	<a href="#">here</a>
3.B.4.g ii	8,21	8,27	0,06	0,74%	<a href="#">here</a>
3.B.4.g iii	9,08	9,07	-0,02	-0,17%	<a href="#">here</a>
3.B.4.g iv	1,54	1,53	-0,01	-0,38%	<a href="#">here</a>
3.D.a.1	36,97	35,94	-1,04	-2,80%	<a href="#">here</a>
3.D.a.2.a	158,67	170,65	11,98	7,55%	<a href="#">here</a>
3.D.a.2.b	1,90	1,67	-0,23	-12,25%	<a href="#">here</a>
3.D.a.2.c	50,12	54,33	4,21	8,40%	<a href="#">here</a>
3.D.a.3	12,30	12,68	0,38	3,12%	<a href="#">here</a>
3.I	3,14	3,18	0,04	1,16%	<a href="#">here</a>
<b>NFR 5 - Waste</b>	<b>3,54</b>	<b>3,55</b>	<b>0,01</b>	<b>0,32%</b>	<b>sub-category chapters</b>
5.B.1	1,96	2,03	0,07	3,70%	<a href="#">here</a>
5.B.2	1,59	1,53	-0,06	-3,84%	<a href="#">here</a>
<b>NFR 6 - Other</b>	<b>0,00</b>	<b>8,34</b>	<b>8,34</b>		
6.A	NA	8,34	8,34		<a href="#">here</a>