

Recalculations - Ammonia

Revision of NH₃ 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 109 %**.

Table 1: Changes in emission estimates for 1990

| NFR Sector | Submission 2022 | Submission 2023 | Difference | | Reasoning |
|----------------------------|-----------------|-----------------|--------------|---------------|---|
| | [kt] | | | relative | |
| NATIONAL TOTAL | 718,16 | 725,52 | 7,36 | 1,02% | see description and reasoning in: sub-category chapters |
| NFR 1 - Energy | 15,54 | 15,89 | 0,35 | 2,28% | sub-category chapters |
| 1.A.2.g vii | 0,00789 | 0,00790 | 0,00001 | 0,14% | here |
| 1.A.3.a i(i) | 0,053 | 0,049 | -0,003 | -6,58% | here |
| 1.A.3.a ii(i) | 0,037 | 0,035 | -0,002 | -6,58% | here |
| 1.A.3.b i | 7,37 | 7,73 | 0,36 | 4,92% | here |
| 1.A.3.b ii | 0,023 | 0,024 | 0,001 | 3,84% | here |
| 1.A.3.b iii | 0,085 | 0,080 | -0,004 | -4,99% | here |
| 1.A.3.b iv | 0,027 | 0,028 | 0,001 | 3,84% | here |
| 1.A.4.a ii | 0,001799 | 0,001797 | -0,000002 | -0,11% | here |
| 1.A.4.b ii | 0,000160 | 0,000160 | 0,000000 | -0,02% | here |
| 1.A.4.c ii | 0,00882 | 0,00881 | -0,00001 | -0,16% | here |
| NFR 2 - IPPU | 14,68 | 14,68 | 0,00 | 0,00% | |
| NFR 3 - Agriculture | 687,79 | 686,62 | -1,17 | -0,17% | sub-category chapters |
| 3.B.1.a | 62,19 | 62,10 | -0,09 | -0,14% | here |
| 3.B.1.b | 91,43 | 81,36 | -10,07 | -11,02% | here |
| 3.B.3 | 121,81 | 120,10 | -1,71 | -1,41% | here |
| 3.B.4.g i | 11,31 | 11,41 | 0,10 | 0,91% | here |
| 3.D.a.2.a | 275,21 | 285,58 | 10,37 | 3,77% | here |
| 3.D.a.2.c | 0,01 | 0,24 | 0,23 | 2,11% | here |
| 3.D.a.3 | 22,23 | 22,24 | 0,01 | 0,05% | here |
| NFR 5 - Waste | 0,16 | 0,34 | 0,18 | 109% | sub-category chapters |
| 5.B.1 | 0,16 | 0,34 | 0,18 | 109% | here |
| NFR 6 - Other | 0,00 | 8,00 | 8,00 | | |

Changes within the **National Total** reported for **2020 (-7.49 kt | -1.4 %)** result mainly from several larger revisions in **NFR 3 (-17.2 kt) and newly implemented emission estimates from NFR 6 (+ 8 kt)** together with less significant changes throughout NFRs 1, 2 and 5.

The most significant relative change occurs for **NFR 1.A.4.a i with plus 38 %**.

Table 2: Changes in emission estimates for 2019

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

| | Submission 2022 | Submission 2023 | Difference | | Reasoning |
|----------------------------|-----------------|-----------------|---------------|-----------------------------------|------------------------------|
| NFR Sector | [kt] | | relative | see description and reasoning in: | |
| NATIONAL TOTAL | 537,27 | 529,78 | -7,49 | -1,39% | sub-category chapters |
| NFR 1 - Energy | 12,31 | 13,20 | 0,89 | 7,19% | sub-category chapters |
| 1.A.3.b ii | 0,197 | 0,220 | 0,023 | 11,64% | here |
| 1.A.3.b iii | 0,743 | 0,726 | -0,017 | -2,30% | here |
| 1.A.3.b iv | 0,0221 | 0,0224 | 0,0003 | 1,14% | here |
| 1.A.3.c | 0,007 | 0,008 | 0,000 | 5,20% | here |
| 1.A.3.d ii | 0,0052 | 0,0052 | 0,0000 | -0,01% | here |
| 1.A.4.a i | 0,36 | 0,50 | 0,14 | 37,57% | here |
| 1.A.4.a ii | 0,001875 | 0,001884 | 0,000009 | 0,48% | here |
| 1.A.4.b i | 1,531 | 1,524 | -0,01 | -0,40% | here |
| 1.A.4.b ii | 0,00038 | 0,00030 | -0,00008 | -21,40% | here |
| 1.A.4.c i | 0,052 | 0,050 | -0,003 | -5,09% | here |
| 1.A.4.c ii | 0,0101 | 0,0102 | 0,0001 | 1,40% | here |
| 1.A.5.a | 0,00373 | 0,00375 | 0,00001 | 0,39% | here |
| 1.A.5.b | 0,01966 | 0,01963 | -0,00003 | -0,16% | here |
| 1.B.1.b | 0,00192 | 0,00193 | 0,00002 | 0,89% | here |
| NFR 2 - IPPU | 9,139 | 9,590 | 0,45 | 4,93% | sub-category chapters |
| 2.A.1 | 1,01 | 1,11 | 0,10 | 9,45% | here |
| 2.A.3 | 1,10 | 1,13 | 0,03 | 2,76% | here |
| 2.B.7 | 0,92 | 1,25 | 0,32 | 35,20% | here |
| 2.C.1 | 0,075598 | 0,075595 | -0,000004 | -0,01% | here |
| NFR 3 - Agriculture | 512,27 | 495,10 | -17,18 | -3,35% | sub-category chapters |
| 3.B.1.a | 59,09 | 54,85 | -4,24 | -7,17% | here |
| 3.B.1.b | 70,41 | 49,64 | -20,77 | -29,49% | here |
| 3.B.3 | 84,75 | 78,56 | -6,19 | -7,30% | here |
| 3.B.4.g i | 8,17 | 6,80 | -1,36 | -16,70% | here |
| 3.B.4.g ii | 8,21 | 8,27 | 0,06 | 0,74% | here |
| 3.B.4.g iii | 9,08 | 9,07 | -0,02 | -0,17% | here |
| 3.B.4.g iv | 1,54 | 1,53 | -0,01 | -0,38% | here |
| 3.D.a.1 | 36,97 | 35,94 | -1,04 | -2,80% | here |
| 3.D.a.2.a | 158,67 | 170,65 | 11,98 | 7,55% | here |
| 3.D.a.2.b | 1,90 | 1,67 | -0,23 | -12,25% | here |
| 3.D.a.2.c | 50,12 | 54,33 | 4,21 | 8,40% | here |
| 3.D.a.3 | 12,30 | 12,68 | 0,38 | 3,12% | here |
| 3.l | 3,14 | 3,18 | 0,04 | 1,16% | here |
| NFR 5 - Waste | 3,54 | 3,55 | 0,01 | 0,32% | sub-category chapters |
| 5.B.1 | 1,96 | 2,03 | 0,07 | 3,70% | here |
| 5.B.2 | 1,59 | 1,53 | -0,06 | -3,84% | here |
| NFR 6 - Other | 0,00 | 8,34 | 8,34 | | |
| 6.A | NA | 8,34 | 8,34 | | here |