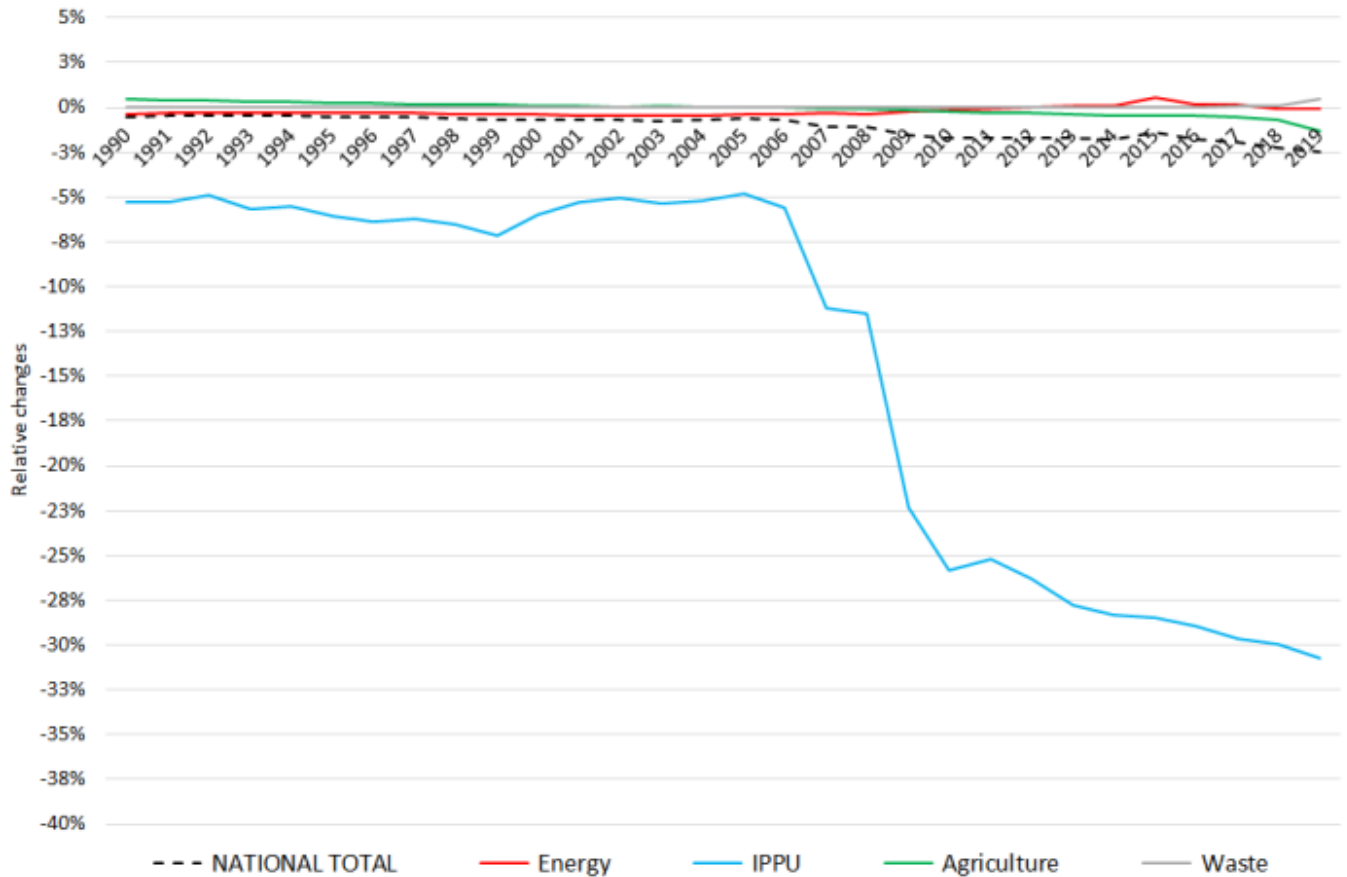
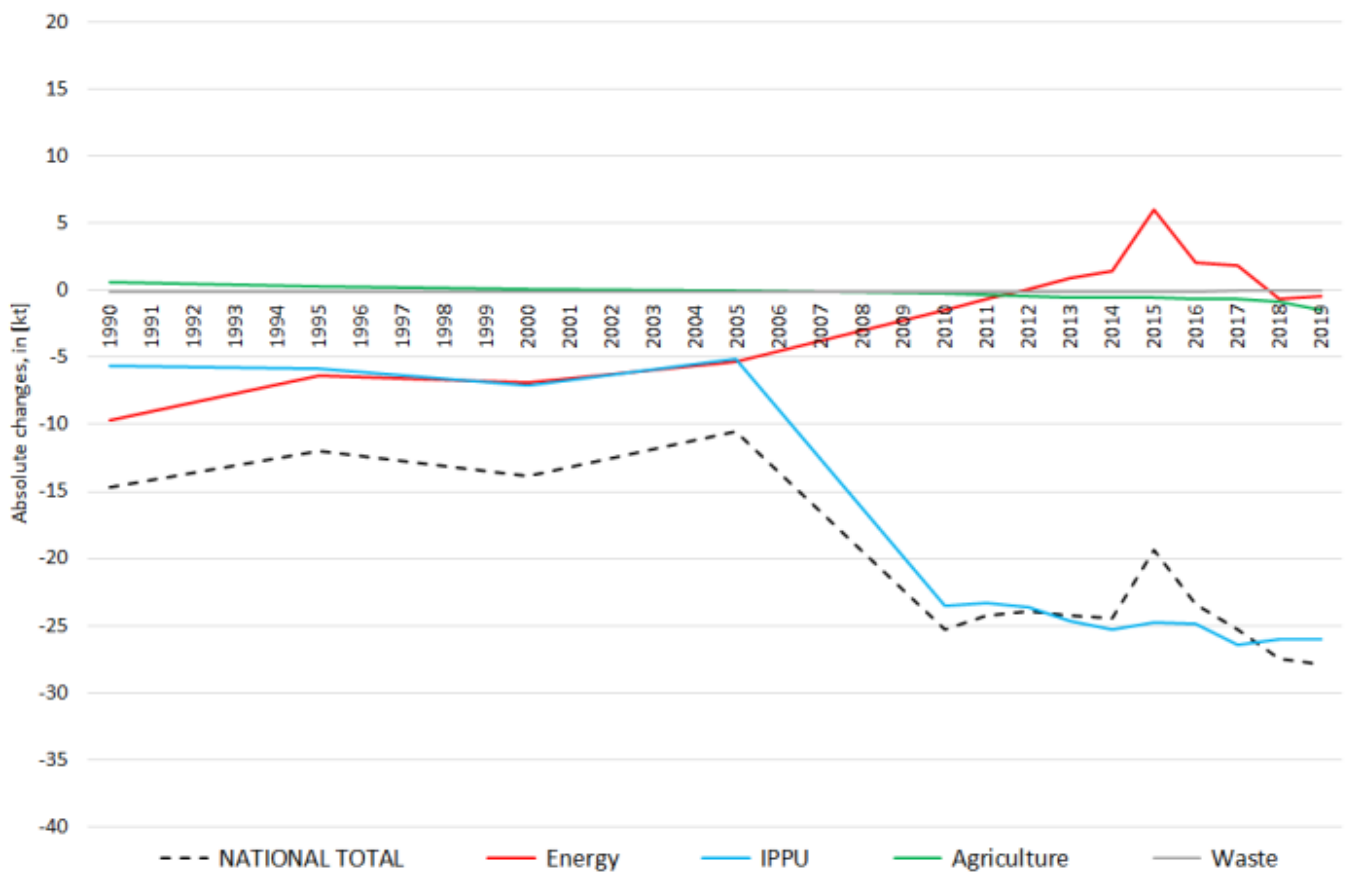


Recalculations - Nitrogen Oxides

Revision of NO_x emissions over time:



Changes within the **National Total** reported for **1990 (-14.72 kt or -0.52 %)** are dominated by changes in NFRs **1.A.3.d ii** (-9.18 kt) and **2.B.2** (-5.68 kt) together with less significant revisions throughout NFRs 1, 2 and 3.

The most significant percental change occurs for **NFR 1.A.4.c iii with minus 52 %**.

Table 1: Changes of emission estimates 1990

| NFR Sector | Submission 2021 | Submission 2022 | Difference | | Reasoning |
|----------------------------|-----------------|-----------------|---------------|----------------|--|
| | [kt] | | | relative | |
| NATIONAL TOTAL | 2.850,05 | 2.835,33 | -14,72 | -0,52% | see description and reasoning in: sub-category chapters |
| NFR 1 - Energy | 2.601,88 | 2.592,15 | -9,73 | -0,37% | sub-category chapters |
| 1.A.3.a i(i) | 3,94 | 3,94 | 0,00 | -0,02% | here |
| 1.A.3.a ii(i) | 2,80 | 2,78 | -0,01 | -0,38% | here |
| 1.A.3.b iii | 506,00 | 505,99 | -0,01 | 0,00% | here |
| 1.A.3.c | 45,05 | 45,32 | 0,26 | 0,59% | here |
| 1.A.3.d ii | 60,65 | 51,47 | <u>-9,18</u> | -15,13% | here |
| 1.A.4.b ii | 0,06 | 0,08 | 0,02 | 30,65% | here |
| 1.A.4.c iii | 0,81 | 0,39 | -0,42 | <u>-51,95%</u> | here |
| 1.A.5.b | 41,60 | 41,20 | -0,40 | -0,96% | here |
| NFR 2 - IPPU | 106,37 | 100,73 | -5,64 | -5,30% | sub-category chapters |
| 2.B.2 | 16,98 | 11,30 | <u>-5,68</u> | -33,44% | 2.B.2 - Nitric Acid Production |
| 2.B.6 | NE | 0,04 | 0,04 | | 2.B.6 - Titanium Dioxide Production |
| NFR 3 - Agriculture | 141,27 | 141,92 | 0,65 | 0,46% | sub-category chapters |
| 3.B.1.b | 0,6958 | 0,6896 | -0,01 | -0,89% | here |
| 3.B.3 | 0,26 | 0,28 | 0,02 | 6,48% | here |
| 3.B.4.g i | 0,0144 | 0,0143 | 0,0001 | -1,15% | here |
| 3.B.4.g iv | 0,00251 | 0,00248 | -0,00003 | -1,33% | here |
| 3.D.a.2.a | 43,46 | 44,14 | 0,68 | 1,58% | here |
| 3.D.a.3 | 8,44 | 8,40 | -0,04 | -0,49% | here |
| NFR 5 - Waste | 0,53 | 0,53 | 0,00 | 0,00% | |
| NFR 6 - Other | NA | | | | |

The changes within the **National Total** reported for **2019 (-28 kt or -2.46 %)** are dominated by changes in **NFR 2.B.2** (-25.6 kt) together with less significant revisions **throughout NFRs 1 and 3**.

Here, the most significant percental changes occur for NFRs **2.C.3 with plus 104 %** and **2.B.2 with minus 96 %**.

Table 2: Changes of emission estimates 2019

| NFR Sector | Submission 2022 | Submission 2023 | Difference | | Reasoning |
|-----------------------|-----------------|-----------------|---------------|---------------|--|
| | [kt] | | | relative | |
| NATIONAL TOTAL | 1,136.79 | 1,108.82 | -27.97 | -2.46% | see description and reasoning in: sub-category chapters |
| NFR 1 - Energy | 938.97 | 938.49 | -0.48 | -0.05% | sub-category chapters |
| 1.A.1.a | 186.93 | 186.02 | -0.91 | -0.49% | here |
| 1.A.1.b | 13.98 | 14.42 | 0.44 | 3.16% | here |
| 1.A.1.c | 12.85 | 13.10 | 0.25 | 1.97% | here |
| 1.A.2.a | 3.61 | 3.57 | -0.04 | -1.06% | here |
| 1.A.2.b | 0.93 | 0.92 | -0.01 | -1.04% | here |
| 1.A.2.e | 0.20 | 0.19 | -0.01 | -6.98% | here |
| 1.A.2.g vii | 14.39 | 14.62 | 0.23 | 1.58% | here |
| 1.A.2.g viii | 64.41 | 70.35 | 5.94 | 9.23% | here |
| 1.A.3.a i(i) | 5.39 | 5.04 | -0.36 | -6.63% | here |
| 1.A.3.a ii(i) | 1.13 | 1.05 | -0.08 | -6.71% | here |
| 1.A.3.b i | 211.62 | 200.13 | -11.49 | -5.43% | here |
| 1.A.3.b ii | 48.72 | 48.97 | 0.25 | 0.51% | here |
| 1.A.3.b iii | 92.85 | 90.66 | -2.20 | -2.37% | here |
| 1.A.3.b iv | 1.55 | 1.57 | 0.02 | 1.32% | here |
| 1.A.3.c | 8.13 | 8.69 | 0.56 | 6.84% | here |

| | Submission 2022 | Submission 2023 | Difference | | Reasoning |
|----------------------------|-----------------|-----------------|---------------|---------------|--|
| NFR Sector | [kt] | | absolute | relative | see description and reasoning in: |
| NATIONAL TOTAL | 1,136.79 | 1,108.82 | -27.97 | -2.46% | sub-category chapters |
| NFR 1 - Energy | 938.97 | 938.49 | -0.48 | -0.05% | sub-category chapters |
| 1.A.3.d ii | 21.63 | 21.62 | 0.00 | -0.01% | here |
| 1.A.3.e i | 0.87 | 0.87 | 0.00 | 0.00% | 1.A.3.e i - Pipeline Transport] |
| 1.A.4.a i | 19.51 | 22.22 | 2.72 | 13.93% | here |
| 1.A.4.a ii | 7.61 | 7.63 | 0.02 | 0.27% | here |
| 1.A.4.b i | 59.57 | 58.80 | -0.76 | -1.28% | here |
| 1.A.4.b ii | 0.5268 | 0.4194 | -0.11 | -20.39% | here |
| 1.A.4.c i | 7.08 | 7.03 | -0.05 | -0.76% | here |
| 1.A.4.c ii | 27.12 | 27.39 | 0.27 | 1.00% | here |
| 1.A.5.a | 0.218 | 0.220 | 0.002 | 1.06% | here |
| 1.A.5.b | 2.38 | 2.28 | -0.10 | -4.05% | here |
| 1.B.1.b | 0.59 | 0.57 | -0.02 | -3.37% | here |
| NFR 2 - IPPU | 54.47 | 54.92 | 0.45 | 0.82% | sub-category chapters |
| 2.A.1 | 11.72 | 12.95 | 1.23 | 10.54% | here |
| 2.A.3 | 10.69 | 10.49 | -0.20 | -1.88% | here |
| 2.H.1 | 2.68 | 2.09 | -0.59 | -21.91% | here |
| NFR 3 - Agriculture | 108.75 | 110.15 | 1.40 | 1.29% | sub-category chapters |
| 3.B.1.a | 0.506 | 0.502 | -0.004 | -0.75% | here |
| 3.B.1.b | 0.506 | 0.505 | -0.001 | -0.17% | here |
| 3.B.3 | 0.26 | 0.24 | -0.02 | -5.30% | here |
| 3.B.4.g i | 0.019 | 0.018 | -0.001 | -2.66% | here |
| 3.B.4.g ii | 0.0135 | 0.0137 | 0.0001 | 1.06% | here |
| 3.B.4.g iii | 0.0094 | 0.0094 | 0.000008 | 0.09% | here |
| 3.B.4.g iv | 0.00202 | 0.00202 | 0.000002 | 0.09% | here |
| 3.D.a.1 | 53.71 | 52.31 | -1.40 | -2.61% | here |
| 3.D.a.2.a | 36.76 | 37.16 | 0.40 | 1.09% | here |
| 3.D.a.2.b | 0.56 | 0.49 | -0.07 | -12.25% | here |
| 3.D.a.2.c | 11.56 | 14.00 | 2.44 | 21.12% | here |
| 3.D.a.3 | 4.62 | 4.67 | 0.05 | 1.02% | here |
| 3.l | 0.169 | 0.171 | 0.002 | 1.16% | here |
| NFR 5 - Waste | 0.71 | 0.71 | 0.00 | 0.00% | |
| NFR 6 - Other | 0.00 | 0.00 | 0.00 | | |