

Recalculations - Carbon monoxide (CO)

The significant changes in the **National Total** reported for **1990 (-125 kt or -1 %)** are dominated by a revision in NFR **1.A.2.f** (-159 kt) together with re-allocated estimates for NFR **2.A.2** (IE -> 15.4 kt). Furthermore, emissions from NFR **2.B.6** have been estimated for the first time (NE -> 19.5 kt).

Additional smaller changes occur throughout NFRs 1 and 2.

Table 1: Changes in emission estimates for 1990

| NFR Sector | Submission 2022 | Submission 2023 | Difference | | Reasoning |
|----------------------------|------------------|------------------|---------------|--------------|--|
| | [kt] | | absolute | relative | |
| NATIONAL TOTAL | 13.046,02 | 13.319,09 | 273,07 | 2,09% | see description and reasoning in: sub-category chapters |
| NFR 1 - Energy | 11.772,32 | 12.045,28 | 272,96 | 2,32% | sub-category chapters |
| 1.A.2.g vii | 82,70 | 82,82 | 0,12 | 0,15% | here |
| 1.A.2.g viii | 65,70 | 65,70 | 0,00 | 0,00% | here |
| 1.A.3.a i(i) | 3,64 | 3,42 | -0,22 | -5,96% | here |
| 1.A.3.a ii(i) | 6,31 | 6,18 | -0,13 | -2,07% | here |
| 1.A.3.b i | 6.647 | 6.915 | 268 | 4,03% | here |
| 1.A.3.b ii | 315,30 | 328,37 | 13,07 | 4,15% | here |
| 1.A.3.b iii | 135,46 | 128,59 | -6,87 | -5,07% | here |
| 1.A.3.b iv | 226,62 | 225,59 | -1,03 | -0,46% | here |
| 1.A.4.a ii | 7,04 | 7,03 | -0,01 | -0,16% | here |
| 1.A.4.b ii | 54,00 | 54,02 | 0,02 | 0,04% | here |
| 1.A.4.c ii | 100,83 | 100,78 | -0,05 | -0,05% | here |
| NFR 2 - IPPU | 1.248,66 | 1.248,77 | 0,11 | 0,01% | sub-category chapters |
| 2.H.1 | NE | 0,11 | 0,11 | | here |
| 2.H.2 | NA | NA | #WERT! | #WERT! | here |
| 2.H.3 | NA | NA | #WERT! | #WERT! | here |
| 2.I | IE | IE | #WERT! | #WERT! | here |
| 2.J | NE | NO | #WERT! | #WERT! | here |
| 2.K | NA | NA | #WERT! | #WERT! | here |
| NFR 3 - Agriculture | | NA | | | |
| NFR 5 - Waste | 25,04 | 25,04 | 0,00 | 0,00% | |
| NFR 6 - Other | | NA | | | |

The remarkable changes in the **National Total** reported for **2019 (-132 kt | -4.60 %)** result mainly from a revision within **NFR 1.A.2.f (-141 kt)** together with other more or less significant revisions in NFRs 1, 2, 3 and 5.

Table 2: Changes in emission estimates for 2019

| NFR Sector | Submission 2021 | Submission 2022 | Difference | | Reasoning |
|-----------------------|-----------------|-----------------|----------------|---------------|--|
| | [kt] | | absolute | relative | |
| NATIONAL TOTAL | 2.882,74 | 2.750,27 | -132,47 | -4,60% | see description and reasoning in: sub-category chapters |
| NFR 1 - Energy | 2.061,08 | 1.894,50 | -166,59 | -8,08% | sub-category chapters |
| 1.A.1.a | 94,47 | 91,42 | -3,05 | -3,23% | here |
| 1.A.1.b | 2,15 | 2,14 | -0,01 | -0,43% | here |
| 1.A.1.c | 10,74 | 12,92 | 2,18 | 20,27% | here |
| 1.A.2.a | 32,14 | 29,16 | -2,98 | -9,27% | here |
| 1.A.2.b | 0,150 | 0,146 | -0,005 | -3,15% | here |
| 1.A.2.e | 0,081 | 0,077 | -0,005 | -5,62% | here |
| 1.A.2.f | 142,36 | 1,42 | -140,93 | -99,00% | here |
| 1.A.2.g vii | 126,74 | 124,61 | -2,13 | -1,68% | here |
| 1.A.2.g viii | 17,93 | 17,77 | -0,15 | -0,85% | here |
| 1.A.3.a i(i) | 6,56 | 6,26 | -0,30 | -4,53% | here |
| 1.A.3.a ii(i) | 6,23 | 2,91 | -3,33 | -53,37% | here |
| 1.A.3.b i | 796,91 | 778,21 | -18,70 | -2,35% | here |

| | Submission 2021 | Submission 2022 | Difference | | Reasoning |
|----------------------------|-----------------|-----------------|----------------|-----------------|--|
| NFR Sector | [kt] | | | relative | see description and reasoning in: |
| NATIONAL TOTAL | 2.882,74 | 2.750,27 | -132,47 | -4,60% | sub-category chapters |
| NFR 1 - Energy | 2.061,08 | 1.894,50 | -166,59 | -8,08% | sub-category chapters |
| 1.A.3.b ii | 38,16 | 38,03 | -0,14 | -0,36% | here |
| 1.A.3.b iii | 38,78 | 38,89 | 0,10 | 0,27% | here |
| 1.A.3.b iv | 71,40 | 70,62 | -0,78 | -1,10% | here |
| 1.A.3.c | 1,06 | 1,17 | 0,11 | 10,48% | here |
| 1.A.3.d ii | 3,60 | 3,81 | 0,21 | 5,75% | here |
| 1.A.4.a i | 46,73 | 47,70 | 0,98 | 2,09% | here |
| 1.A.4.a ii | 2,375 | 2,372 | -0,003 | -0,12% | here |
| 1.A.4.b i | 424,49 | 427,59 | 3,10 | 0,73% | here |
| 1.A.4.b ii | 113,39 | 111,87 | -1,51 | -1,33% | here |
| 1.A.4.c i | 14,03 | 15,05 | 1,02 | 7,30% | here |
| 1.A.4.c ii | 52,76 | 52,24 | -0,52 | -0,99% | here |
| 1.A.4.c iii | 0,05 | 0,03 | -0,02 | -33,19% | here |
| 1.A.5.a | 0,78 | 1,09 | 0,31 | 39,74% | here |
| 1.A.5.b | 11,49 | 11,44 | -0,05 | -0,46% | here |
| 1.B.1.b | 4,71 | 4,73 | 0,02 | 0,33% | here |
| 1.B.2.a iv | 0,3537 | 0,3538 | 0,0001 | 0,01% | |
| 1.B.2.c | 0,12009 | 0,12011 | 0,00002 | 0,01% | |
| NFR 2 - IPPU | 803,293 | 837,145 | 33,85 | 4,21% | sub-category chapters |
| 2.A.2 | IE | 11,76 | 11,76 | | here |
| 2.A.3 | IE | 0,87 | 0,87 | | here |
| 2.B.1 | NA | 0,29 | 0,29 | | here |
| 2.B.6 | NE | 20,93 | 20,93 | | here |
| NFR 3 - Agriculture | NA | | | | |
| NFR 5 - Waste | 18,36 | 18,62 | 0,26 | 1,44% | sub-category chapters |
| 5.C.2 | 18,27 | 18,53 | 0,26 | 1,44% | here |
| NFR 6 - Other | 19,55 | 19,55 | 0,00 | 0,00% | |