

## Recalculations - Carbon monoxide (CO)

The significant changes in the **National Total reported for 1990 (-545 kt | -4 %)** are dominated by increased emission estimates from **NFRs 1.A.3.a ii(i), 1.A.3.b i and ii**. Additional smaller changes occur throughout NFR 1.

The most significant relative change occurs for **NFR 1.A.3.a ii(i) with minus 83 %**.

Table 1: Changes in emission estimates for 1990

|                            | Submission 2020  | Submission 2021  | Difference     |               | Reasoning                         |
|----------------------------|------------------|------------------|----------------|---------------|-----------------------------------|
| NFR Sector                 | [kt]             |                  |                | relative      | see description and reasoning in: |
| <b>NATIONAL TOTAL</b>      | <b>13.716,30</b> | <b>13.171,06</b> | <b>-545,24</b> | <b>-3,98%</b> | <b>sub-category chapters</b>      |
| <b>NFR 1 - Energy</b>      | <b>12.452,62</b> | <b>11.934,21</b> | <b>-518,41</b> | <b>-4,16%</b> | <b>sub-category chapters</b>      |
| 1.A.2.g vii                | 82,27            | 82,70            | 0,43           | 0,52%         | <a href="#">here</a>              |
| 1.A.3.a i(i)               | 3,08             | 3,81             | 0,73           | 23,74%        | <a href="#">here</a>              |
| 1.A.3.a ii(i)              | 52,32            | 8,47             | -43,85         | -83,81%       | <a href="#">here</a>              |
| 1.A.3.b i                  | 7.065,11         | 6.646,96         | -418,15        | -5,92%        | <a href="#">here</a>              |
| 1.A.3.b ii                 | 356,13           | 315,30           | -40,83         | -11,46%       | <a href="#">here</a>              |
| 1.A.3.b iii                | 130,05           | 135,43           | 5,38           | 4,14%         | <a href="#">here</a>              |
| 1.A.3.b iv                 | 241,56           | 226,62           | -14,94         | -6,18%        | <a href="#">here</a>              |
| 1.A.4.a ii                 | 6,98             | 7,04             | 0,06           | 0,89%         | <a href="#">here</a>              |
| 1.A.4.b ii                 | 64,43            | 56,25            | -8,18          | -12,70%       | <a href="#">here</a>              |
| 1.A.4.c ii                 | 99,90            | 100,83           | 0,93           | 0,93%         | <a href="#">here</a>              |
| <b>NFR 2 - IPPU</b>        | <b>1.238,64</b>  | <b>1.211,81</b>  | <b>-26,83</b>  | <b>-2,17%</b> | <b>sub-category chapters</b>      |
| 2.G                        | 46,05            | 19,23            | -26,83         | -58,25%       | <a href="#">here</a>              |
| <b>NFR 3 - Agriculture</b> | <b>NA</b>        |                  |                |               |                                   |
| <b>NFR 5 - Waste</b>       | <b>25,04</b>     | <b>25,04</b>     | <b>0,00</b>    | <b>0,00%</b>  |                                   |
| <b>NFR 6 - Other</b>       | <b>NA</b>        |                  |                |               |                                   |

Changes in the **National Total reported for 2018 (+20 kt | +0.68 %)** result from several revised estimates within **NFR 1 (+33 kt | +3.6 %)** together with a revision in **NFR 2.G (-13.3 kt or minus 50 %)**.

Table 2: Changes in emission estimates for 2018

|                       | Submission 2020 | Submission 2021 | Difference   |              | Reasoning                         |
|-----------------------|-----------------|-----------------|--------------|--------------|-----------------------------------|
| NFR Sector            | [kt]            |                 |              | relative     | see description and reasoning in: |
| <b>NATIONAL TOTAL</b> | <b>2.937,91</b> | <b>2.957,80</b> | <b>19,89</b> | <b>0,68%</b> | <b>sub-category chapters</b>      |
| <b>NFR 1 - Energy</b> | <b>2.082,15</b> | <b>2.115,39</b> | <b>33,24</b> | <b>1,60%</b> | <b>sub-category chapters</b>      |
| 1.A.1.a               | 103,95          | 104,81          | 0,86         | 0,82%        | <a href="#">here</a>              |
| 1.A.1.b               | 1,79            | 2,11            | 0,32         | 18,07%       | <a href="#">here</a>              |
| 1.A.1.c               | 11,89           | 12,11           | 0,23         | 1,90%        | <a href="#">here</a>              |
| 1.A.2.a               | 32,89           | 32,99           | 0,10         | 0,30%        | <a href="#">here</a>              |
| 1.A.2.b               | 0,147           | 0,151           | 0,004        | 2,58%        | <a href="#">here</a>              |
| 1.A.2.e               | 0,079           | 0,082           | 0,003        | 4,38%        | <a href="#">here</a>              |
| 1.A.2.f               | 155,98          | 142,33          | -13,65       | -8,75%       | <a href="#">here</a>              |
| 1.A.2.g vii           | 137,74          | 133,04          | -4,70        | -3,41%       | <a href="#">here</a>              |
| 1.A.2.g viii          | 18,77           | 18,09           | -0,68        | -3,60%       | <a href="#">here</a>              |
| 1.A.3.a i(i)          | 6,34            | 6,80            | 0,46         | 7,28%        | <a href="#">here</a>              |
| 1.A.3.a ii(i)         | 10,14           | 6,50            | -3,64        | -35,91%      | <a href="#">here</a>              |
| 1.A.3.b i             | 779,41          | 803,54          | 24,13        | 3,10%        | <a href="#">here</a>              |
| 1.A.3.b ii            | 42,20           | 37,26           | -4,94        | -11,70%      | <a href="#">here</a>              |
| 1.A.3.b iii           | 45,67           | 44,45           | -1,22        | -2,68%       | <a href="#">here</a>              |
| 1.A.3.b iv            | 71,98           | 73,28           | 1,31         | 1,82%        | <a href="#">here</a>              |
| 1.A.3.c               | 1,21            | 1,05            | -0,16        | -12,86%      | <a href="#">here</a>              |
| 1.A.3.d ii            | 3,47            | 4,01            | 0,54         | 15,63%       | <a href="#">here</a>              |
| 1.A.3.e i             | 0,26            | 0,26            | 0,01         | 2,11%        | <a href="#">here</a>              |

|                            | Submission 2020 | Submission 2021 | Difference    |               | Reasoning                         |
|----------------------------|-----------------|-----------------|---------------|---------------|-----------------------------------|
| NFR Sector                 | [kt]            |                 |               | relative      | see description and reasoning in: |
| <b>NATIONAL TOTAL</b>      | <b>2.937,91</b> | <b>2.957,80</b> | <b>19,89</b>  | <b>0,68%</b>  | <b>sub-category chapters</b>      |
| <b>NFR 1 - Energy</b>      | <b>2.082,15</b> | <b>2.115,39</b> | <b>33,24</b>  | <b>1,60%</b>  | <b>sub-category chapters</b>      |
| 1.A.4.a i                  | 49,23           | 44,17           | -5,06         | -10,28%       | <a href="#">here</a>              |
| 1.A.4.a ii                 | 2,89            | 2,41            | -0,48         | -16,55%       | <a href="#">here</a>              |
| 1.A.4.b i                  | 411,76          | 447,92          | 36,16         | 8,78%         | <a href="#">here</a>              |
| 1.A.4.b ii                 | 112,03          | 114,19          | 2,16          | 1,93%         | <a href="#">here</a>              |
| 1.A.4.c i                  | 13,93           | 13,84           | -0,09         | -0,67%        | <a href="#">here</a>              |
| 1.A.4.c ii                 | 51,58           | 53,14           | 1,56          | 3,02%         | <a href="#">here</a>              |
| 1.A.4.c iii                | 0,22051         | 0,22647         | 0,01          | 2,70%         | <a href="#">here</a>              |
| 1.A.5.a                    | 0,98            | 1,00            | 0,02          | 1,53%         | <a href="#">here</a>              |
| <b>NFR 2 - IPPU</b>        | <b>836,206</b>  | <b>822,861</b>  | <b>-13,35</b> | <b>-1,60%</b> | <b>sub-category chapters</b>      |
| 2.G                        | 26,81           | 13,47           | -13,34        | -49,76%       | <a href="#">here</a>              |
| <b>NFR 3 - Agriculture</b> | <b>NA</b>       |                 |               |               |                                   |
| <b>NFR 5 - Waste</b>       | <b>19,55</b>    | <b>19,55</b>    | <b>0,00</b>   | <b>0,00%</b>  |                                   |
| <b>NFR 6 - Other</b>       | <b>NA</b>       |                 |               |               |                                   |