

# Recalculations - Ammonia

The small changes within the **National Total** reported for **1990 (-3.1 kt | -0.43 %)** result almost entirely from revisions in NFRs **2.B.10.a** (-3.14 kt), **3.B.3** (+4.69 kt) and **3.D.a.2.a** (+1.54 kt) together with less significant changes throughout NFRs 1 and 2.

However, the most significant percental change occurs for **NFR 1.A.3.d ii with minus 54 %**.

Table 1: Changes in emission estimates for 1990

|                            | Submission 2021 | Submission 2022 | Difference   |                | Reasoning                         |
|----------------------------|-----------------|-----------------|--------------|----------------|-----------------------------------|
| NFR Code                   | [kt]            |                 |              | relative       | see description and reasoning in: |
| <b>NATIONAL TOTAL</b>      | <b>715,09</b>   | <b>718,16</b>   | <b>3,07</b>  | <b>0,43%</b>   | <b>sub-category chapters</b>      |
| <b>NFR 1 - Energy</b>      | <b>15,53</b>    | <b>15,54</b>    | <b>0,01</b>  | <b>0,03%</b>   | <b>sub-category chapters</b>      |
| 1.A.3.b iii                | 0,08            | 0,08            | 0,00         | 0,03%          | <a href="#">here</a>              |
| 1.A.3.c                    | 0,02            | 0,03            | 0,01         | 38,23%         | <a href="#">here</a>              |
| 1.A.3.d ii                 | 0,01            | 0,01            | 0,00         | -24,12%        | <a href="#">here</a>              |
| 1.A.4.b ii                 | 0,000162        | 0,000160        | -0,000003    | -1,71%         | <a href="#">here</a>              |
| 1.A.4.c iii                | 0,0002          | 0,0001          | -0,0001      | -54,03%        | <a href="#">here</a>              |
| 1.A.5.b                    | 0,3000          | 0,2999          | -0,0001      | -0,05%         | <a href="#">here</a>              |
| <b>NFR 2 - IPPU</b>        | <b>17,81</b>    | <b>14,68</b>    | <b>-3,14</b> | <b>-17,60%</b> | <b>sub-category chapters</b>      |
| 2.B.10.a                   | 9,57            | 6,44            | -3,14        | -32,76%        | <a href="#">here</a>              |
| <b>NFR 3 - Agriculture</b> | <b>681,58</b>   | <b>687,79</b>   | <b>6,20</b>  | <b>0,91%</b>   | <b>sub-category chapters</b>      |
| 3.B.1.b                    | 91,39           | 91,43           | 0,03         | 0,04%          | <a href="#">here</a>              |
| 3.B.3                      | 117,12          | 121,81          | 4,69         | 4,00%          | <a href="#">here</a>              |
| 3.B.4.g i                  | 11,45           | 11,31           | -0,14        | -1,19%         | <a href="#">here</a>              |
| 3.B.4.g iii                | 3,96            | 3,99            | 0,02         | 0,61%          | <a href="#">here</a>              |
| 3.B.4.g iv                 | 2,48            | 2,47            | -0,01        | -0,50%         | <a href="#">here</a>              |
| 3.D.a.2.a                  | 273,67          | 275,21          | 1,54         | 0,56%          | <a href="#">here</a>              |
| 3.D.a.3                    | 22,16           | 22,23           | 0,07         | 0,30%          | <a href="#">here</a>              |
| <b>NFR 5 - Waste</b>       | <b>0,16</b>     | <b>0,16</b>     | <b>0,00</b>  | <b>0,00%</b>   |                                   |
| <b>NFR 6 - Other</b>       | <b>NA</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

|                       | Submission 2021 | Submission 2022 | Difference    |               | Reasoning                         |
|-----------------------|-----------------|-----------------|---------------|---------------|-----------------------------------|
| NFR Sector            | [kt]            |                 |               | relative      | see description and reasoning in: |
| <b>NATIONAL TOTAL</b> | <b>586,69</b>   | <b>575,00</b>   | <b>-11,69</b> | <b>-1,99%</b> | <b>sub-category chapters</b>      |
| <b>NFR 1 - Energy</b> | <b>13,84</b>    | <b>13,74</b>    | <b>-0,10</b>  | <b>-0,71%</b> | <b>sub-category chapters</b>      |
| 1.A.1.a               | 0,65            | 0,66            | 0,01          | 1,27%         | <a href="#">here</a>              |
| 1.A.1.b               | 0,592           | 0,590           | -0,002        | -0,40%        | <a href="#">here</a>              |
| 1.A.1.c               | 0,024           | 0,026           | 0,002         | 9,75%         | <a href="#">here</a>              |
| 1.A.2.a               | 0,10            | 0,11            | 0,01          | 5,50%         | <a href="#">here</a>              |
| 1.A.2.b               | 0,0072          | 0,0066          | -0,001        | -8,48%        | <a href="#">here</a>              |
| 1.A.2.e               | 0,0016          | 0,0019          | 0,0002        | 14,03%        | <a href="#">here</a>              |
| 1.A.2.f               | 0,0216          | 0,0221          | 0,0005        | 2,30%         | <a href="#">here</a>              |
| 1.A.2.g vii           | 0,00804         | 0,00805         | 0,00001       | 0,11%         | <a href="#">here</a>              |
| 1.A.2.g viii          | 0,318           | 0,375           | 0,06          | 17,85%        | <a href="#">here</a>              |
| 1.A.3.a i(i)          | 0,131           | 0,132           | 0,001         | 1,10%         | <a href="#">here</a>              |
| 1.A.3.a ii(i)         | 0,0334          | 0,0337          | 0,0002        | 0,69%         | <a href="#">here</a>              |
| 1.A.3.b i             | 8,918           | 8,834           | -0,08         | -0,95%        | <a href="#">here</a>              |
| 1.A.3.b ii            | 0,181           | 0,180           | -0,001        | -0,63%        | <a href="#">here</a>              |

|                      |           |          |          |         |                       |
|----------------------|-----------|----------|----------|---------|-----------------------|
| 1.A.3.b iii          | 0,745     | 0,749    | 0,004    | 0,58%   | <a href="#">here</a>  |
| 1.A.3.b iv           | 0,0217    | 0,0215   | -0,0002  | -1,10%  | <a href="#">here</a>  |
| 1.A.3.c              | 0,007     | 0,008    | 0,001    | 11,53%  | <a href="#">here</a>  |
| 1.A.3.d ii           | 0,0064    | 0,0058   | -0,0006  | -9,00%  | <a href="#">here</a>  |
| 1.A.4.a i            | 0,510     | 0,390    | -0,12    | -23,54% | <a href="#">here</a>  |
| 1.A.4.a ii           | 0,001872  | 0,001873 | 0,000002 | 0,10%   | <a href="#">here</a>  |
| 1.A.4.b i            | 1,479     | 1,504    | 0,03     | 1,71%   | <a href="#">here</a>  |
| 1.A.4.b ii           | 0,00037   | 0,00040  | 0,00002  | 6,08%   | <a href="#">here</a>  |
| 1.A.4.c i            | 0,046     | 0,051    | 0,005    | 9,90%   | <a href="#">here</a>  |
| 1.A.4.c ii           | 0,00948   | 0,00949  | 0,00001  | 0,14%   | <a href="#">here</a>  |
| 1.A.4.c iii          | 0,00016   | 0,00010  | -0,00006 | -36,87% | <a href="#">here</a>  |
| 1.A.5.a              | 0,0037    | 0,0038   | 0,0001   | 1,82%   | <a href="#">here</a>  |
| 1.A.5.b              | 0,0258    | 0,0257   | -0,0001  | -0,50%  | <a href="#">here</a>  |
| 1.B.1.b              | 0,0019    | 0,0021   | 0,0003   | 13,30%  | <a href="#">here</a>  |
| NFR 2 - IPPU         | 11,502    | 9,423    | -2,08    | -18,07% | sub-category chapters |
| 2.A.3                | 0,70      | 1,17     | 0,47     | 67,99%  | <a href="#">here</a>  |
| 2.A.6                | 0,05199   | 0,05201  | 0,00002  | 0,04%   | <a href="#">here</a>  |
| 2.B.10.a             | 7,88      | 5,32     | -2,55    | -32,41% | <a href="#">here</a>  |
| NFR 3 - Agriculture  | 557,85    | 548,29   | -9,56    | -1,71%  | sub-category chapters |
| 3.B.1.a              | 50,40     | 58,88    | 8,47     | 16,81%  | <a href="#">here</a>  |
| 3.B.1.b              | 64,47     | 71,69    | 7,21     | 11,19%  | <a href="#">here</a>  |
| 3.B.3                | 88,50     | 85,01    | -3,49    | -3,94%  | <a href="#">here</a>  |
| 3.B.4.d              | 0,239     | 0,245    | 0,006    | 2,35%   | <a href="#">here</a>  |
| 3.B.4.e              | 5,78      | 6,16     | 0,39     | 6,67%   | <a href="#">here</a>  |
| 3.B.4.g i            | 7,93      | 8,01     | 0,08     | 0,95%   | <a href="#">here</a>  |
| 3.B.4.g ii           | 12,33     | 8,55     | -3,78    | -30,66% | <a href="#">here</a>  |
| 3.B.4.g iii          | 10,62     | 9,83     | -0,78    | -7,39%  | <a href="#">here</a>  |
| 3.B.4.g iv           | 1,55      | 1,56     | 0,01     | 0,81%   | <a href="#">here</a>  |
| 3.D.a.1              | 68,09     | 65,63    | -2,46    | -3,61%  | <a href="#">here</a>  |
| 3.D.a.2.a            | 174,11    | 162,64   | -11,47   | -6,59%  | <a href="#">here</a>  |
| 3.D.a.2.b            | 1,73      | 1,90     | 0,18     | 10,17%  | <a href="#">here</a>  |
| 3.D.a.2.c            | 54,63     | 50,98    | -3,64    | -6,67%  | <a href="#">here</a>  |
| 3.D.a.3              | 12,78     | 12,56    | -0,21    | -1,68%  | <a href="#">here</a>  |
| 3.I                  | 3,20      | 3,14     | -0,06    | -1,86%  | <a href="#">here</a>  |
| NFR 5 - Waste        | 3,49      | 3,54     | 0,05     | 1,37%   | sub-category chapters |
| 5.B.1                | 1,95      | 1,96     | 0,01     | 0,64%   | <a href="#">here</a>  |
| 5.B.2                | 1,54      | 1,58     | 0,04     | 2,29%   | <a href="#">here</a>  |
| <b>NFR 6 - Other</b> | <b>NA</b> |          |          |         |                       |