

## Recalculations - Copper (Cu)

With no reportable changes within the **National Total** reported for **1990**, the only notable percental changes occur for NFRs **1.A.2.g vii with -2.10 %**, **1.A.4.a ii with -2.16 %** and **1.A.4.c ii with plus 0.01 %** with mutually canceling absolute changes.

Table 1: Changes in emission estimates for 1990

| NFR Sector                 | Submission 2024 | Submission 2025 | Difference  |              | Reasoning   |
|----------------------------|-----------------|-----------------|-------------|--------------|---|
|                            | [t]             |                 | absolute    | relative     |   |
| <b>NATIONAL TOTAL</b>      | <b>619.88</b>   | <b>619.88</b>   | <b>0.00</b> | <b>0.00%</b> | see description and reasoning in: sub-category chapters |
| <b>NFR 1 - Energy</b>      | <b>538.01</b>   | <b>538.01</b>   | <b>0.00</b> | <b>0.00%</b> | sub-category chapters                                   |
| 1.A.2.g vii                | 0.00466         | 0.00456         | -0.00010    | -2.10%       | <a href="#">here</a>                                    |
| 1.A.4.a ii                 | 0.00091         | 0.00089         | -0.00002    | -2.16%       | <a href="#">here</a>                                    |
| 1.A.4.c ii                 | 1.11495         | 1.11506         | 0.00012     | 0.01%        | <a href="#">here</a>                                    |
| <b>NFR 2 - IPPU</b>        | <b>81.81</b>    | <b>81.81</b>    | <b>0.00</b> | <b>0.00%</b> | sub-category chapters                                   |
| <b>NFR 3 - Agriculture</b> | <b>NA</b>       |                 |             |              |   |
| <b>NFR 5 - Waste</b>       | <b>0.06</b>     | <b>0.06</b>     | <b>0.00</b> | <b>0.00%</b> | sub-category chapters                                   |
| <b>NFR 6 - Other</b>       | <b>NA</b>       |                 |             |              |   |

The changes within the **National Total** reported for **2022 (+4.3 t or +.77 %)** are dominated by a revision in NFR sub-category **1.A.3.c with +3.76 t** together with a variety of revisions throughout NFRs 1, 2 and 5.

However, the most significant percental change occurs in **NFR 1.A.1.b with plus 18.6 %**.

Table 2: Changes of emission estimates for 2022

| NFR Sector                 | Submission 2023 | Submission 2024 | Difference     |               | Reasoning   |
|----------------------------|-----------------|-----------------|----------------|---------------|---|
|                            | [t]             |                 | absolute       | relative      |   |
| <b>NATIONAL TOTAL</b>      | <b>560.30</b>   | <b>564.60</b>   | <b>4.30</b>    | <b>0.77%</b>  | see description and reasoning in: sub-category chapters |
| <b>NFR 1 - Energy</b>      | <b>491.53</b>   | <b>495.99</b>   | <b>4.47</b>    | <b>0.91%</b>  | sub-category chapters                                   |
| 1.A.1.a                    | 7.37            | 7.34            | -0.03          | -0.45%        | <a href="#">here</a>                                    |
| 1.A.1.b                    | 4.37            | 5.19            | 0.81           | 18.58%        | <a href="#">here</a>                                    |
| 1.A.1.c                    | 0.048           | 0.052           | 0.004          | 9.09%         | <a href="#">here</a>                                    |
| 1.A.2.g vii                | 0.0040          | 0.0038          | -0.0002        | -5.56%        | <a href="#">here</a>                                    |
| 1.A.2.g viii               | 0.30            | 0.31            | 0.01           | 1.74%         | <a href="#">here</a>                                    |
| 1.A.3.b i                  | 0.1485          | 0.1486          | 0.0001         | 0.08%         | <a href="#">here</a>                                    |
| 1.A.3.b ii                 | 0.0242          | 0.0238          | -0.0004        | -1.73%        | <a href="#">here</a>                                    |
| 1.A.3.b iii                | 0.076           | 0.077           | 0.001          | 0.90%         | <a href="#">here</a>                                    |
| 1.A.3.b iv                 | 0.0020          | 0.0019          | -0.0001        | -2.57%        | <a href="#">here</a>                                    |
| 1.A.3.c                    | 103.66          | 107.42          | 3.76           | 3.63%         | <a href="#">here</a>                                    |
| 1.A.3.d ii                 | 0.56            | 0.54            | -0.02          | -3.87%        | <a href="#">here</a>                                    |
| 1.A.4.a i                  | 1.82            | 1.75            | -0.07          | -3.70%        | <a href="#">here</a>                                    |
| 1.A.4.a ii                 | 0.00075         | 0.00063         | -0.00012       | -16.10%       | <a href="#">here</a>                                    |
| 1.A.4.b i                  | 2.69            | 2.87            | 0.18           | 6.58%         | <a href="#">here</a>                                    |
| 1.A.4.b ii                 | 0.26            | 0.23            | -0.03          | -10.35%       | <a href="#">here</a>                                    |
| 1.A.4.c i                  | 0.086           | 0.085           | -0.001         | -1.35%        | <a href="#">here</a>                                    |
| 1.A.4.c ii                 | 1.34            | 1.20            | -0.14          | -10.61%       | <a href="#">here</a>                                    |
| 1.A.5.b                    | 0.00292         | 0.00296         | 0.00003        | 1.18%         | <a href="#">here</a>                                    |
| <b>NFR 2 - IPPU</b>        | <b>68.7118</b>  | <b>68.5308</b>  | <b>-0.1809</b> | <b>-0.26%</b> | sub-category chapters                                   |
| 2.A.3                      | 0.0646          | 0.0654          | 0.0008         | 1.24%         | <a href="#">here</a>                                    |
| 2.G                        | 51.7133         | 51.5316         | -0.1817        | -0.35%        | <a href="#">here</a>                                    |
| <b>NFR 3 - Agriculture</b> | <b>NA</b>       |                 |                |               |   |
| <b>NFR 5 - Waste</b>       | <b>0.07</b>     | <b>0.08</b>     | <b>0.01</b>    | <b>13.82%</b> | sub-category chapters                                   |

|                       | Submission 2023 | Submission 2024 | Difference  |                 | Reasoning                                |
|-----------------------|-----------------|-----------------|-------------|-----------------|--|
| <b>NFR Sector</b>     | <b>[t]</b>      |                 |             | <b>relative</b> | <b>see description and reasoning in:</b> |
| <b>NATIONAL TOTAL</b> | <b>560.30</b>   | <b>564.60</b>   | <b>4.30</b> | <b>0.77%</b>    | <b>sub-category chapters</b>             |
| <b>NFR 1 - Energy</b> | <b>491.53</b>   | <b>495.99</b>   | <b>4.47</b> | <b>0.91%</b>    | <b>sub-category chapters</b>             |
| 5.E                   | 0.07            | 0.08            | 0.01        | 13.82%          | <a href="#">here</a>                     |
| <b>NFR 6 - Other</b>  | <b>NA</b>       |                 |             |                 |  |