

## Recalculations - Copper (Cu)

The marginally small changes within the **National Total** reported for **1990 (+0.005 t or +0.001 %)** result from a variety of revisions throughout NFRs 1, 2 and 5 - with the strongest percental change occurring in **NFR 1.A.3.a i(i) with minus 62 %**.

Table 1: Changes in emission estimates for 1990

NFR Sector	Submission 2023	Submission 2024	Difference		Reasoning
	[t]			relative	see description and reasoning in:
<b>NATIONAL TOTAL</b>	<b>619.879</b>	<b>619.883</b>	<b>0.005</b>	<b>0.001%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>538.009</b>	<b>538.015</b>	<b>0.006</b>	<b>0.001%</b>	<b>sub-category chapters</b>
1.A.2.g vii	0.007	0.005	-0.002	-28.8%	<a href="#">here</a>
1.A.3.a i(i)	0.000002	0.000001	-0.000001	-62.4%	<a href="#">here</a>
1.A.3.a ii(i)	0.000025	0.000027	0.000002	7.61%	<a href="#">here</a>
1.A.3.c	95.160	95.166	0.006	0.01%	<a href="#">here</a>
1.A.4.a ii	0.0010	0.0009	-0.0001	-12.7%	<a href="#">here</a>
1.A.4.c ii	1.1129	1.1149	0.0020	0.18%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>81.802</b>	<b>81.805</b>	<b>0.003</b>	<b>0.003%</b>	<b>sub-category chapters</b>
2.G	36.268	36.271	0.003	0.01%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>	<b>NA</b>				
<b>NFR 5 - Waste</b>	<b>0.067</b>	<b>0.063</b>	<b>-0.004</b>	<b>-5.88%</b>	<b>sub-category chapters</b>
5.E	0.067	0.063	-0.004	-5.88%	<a href="#">here</a>
<b>NFR 6 - Other</b>	<b>NA</b>				

The changes within the **National Total** reported for **2021 (+7.21 t or +1.37 %)** result from a **variety of revisions throughout NFRs 1, 2 and 5**.

The significant percental change occurring in NFR 1.A.3.b iii (+130 %) results from a correction of erroneous data reported with the previous submission.

Table 2: Changes of emission estimates for 2021

NFR Sector	Submission 2023	Submission 2024	Difference		Reasoning
	[t]			relative	see description and reasoning in:
<b>NATIONAL TOTAL</b>	<b>526.60</b>	<b>533.81</b>	<b>7.21</b>	<b>1.37%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>473.02</b>	<b>479.59</b>	<b>6.57</b>	<b>1.39%</b>	<b>sub-category chapters</b>
1.A.1.a	6.84	6.80	-0.04	-0.58%	<a href="#">here</a>
1.A.1.b	3.85	4.04	0.20	5.11%	<a href="#">here</a>
1.A.1.c	0.049	0.052	0.004	7.73%	<a href="#">here</a>
1.A.2.g vii	0.007	0.005	-0.002	-32.8%	<a href="#">here</a>
1.A.2.g viii	0.35	0.33	-0.02	-4.75%	<a href="#">here</a>
1.A.3.a i(i)	0.00000026	0.00000025	-0.00000001	-5.24%	<a href="#">here</a>
1.A.3.a ii(i)	0.000003302	0.000003305	0.000000002	0.07%	<a href="#">here</a>
1.A.3.b i	0.1435	0.1420	-0.0015	-1.04%	<a href="#">here</a>
1.A.3.b ii	0.02375	0.02331	-0.00045	-1.88%	<a href="#">here</a>
1.A.3.b iii	0.03	0.08	0.05	130%	<a href="#">here</a>
1.A.3.b iv	0.00180	0.00182	0.00002	1.02%	<a href="#">here</a>
1.A.3.b vi	361.03	361.57	0.54	0.15%	<a href="#">here</a>
1.A.3.b vii	0.03464	0.03466	0.00001	0.03%	<a href="#">here</a>
1.A.3.c	94.21	99.62	5.41	5.74%	<a href="#">here</a>
1.A.3.d ii	0.60	0.66	0.06	10.0%	<a href="#">here</a>
1.A.4.a i	1.81	1.85	0.04	2.14%	<a href="#">here</a>
1.A.4.a ii	0.00081	0.00086	0.00005	6.02%	<a href="#">here</a>
1.A.4.b i	2.642427	2.642429	0.000002	0.0001%	<a href="#">here</a>

	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>526.60</b>	<b>533.81</b>	<b>7.21</b>	<b>1.37%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>473.02</b>	<b>479.59</b>	<b>6.57</b>	<b>1.39%</b>	<b>sub-category chapters</b>
1.A.4.b ii	0.25	0.26	0.01	4.60%	<a href="#">here</a>
1.A.4.c i	0.0964	0.0967	0.0003	0.27%	<a href="#">here</a>
1.A.4.c ii	1.04	1.37	0.33	31.6%	<a href="#">here</a>
1.A.5.b	0.00264656	0.00264659	0.00000003	0.001%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>53.52</b>	<b>54.16</b>	<b>0.64178</b>	<b>1.20%</b>	<b>sub-category chapters</b>
2.A.3	0.06452	0.06457	0.00004	0.07%	<a href="#">here</a>
2.G	36.06899	36.71073	0.64173	1.78%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>	<b>NA</b>				
<b>NFR 5 - Waste</b>	<b>0.069</b>	<b>0.065</b>	<b>-0.004</b>	<b>-5.72%</b>	<b>sub-category chapters</b>
5.E	0.069	0.065	-0.004	-5.72%	<a href="#">here</a>
<b>NFR 6 - Other</b>	<b>NA</b>				