

## 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 **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]		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.a	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.b	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.c	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.d	IE	IE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.e	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
1.A.2.f	IE	IE	#WERT!	#WERT!	<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.a i(i)	0,00000026	0,00000026	0,00	0,00%	<a href="#">here</a>
1.A.3.a ii(i)	0,000003682	0,000003682	0,00	0,00%	<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.b v	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.A.3.b vi	368,72	368,72	0,00	0,00%	<a href="#">here</a>
1.A.3.b vii	0,03520	0,03520	0,00	0,00%	<a href="#">here</a>
1.A.3.c	103,66	107,42	3,76	3,63%	<a href="#">here</a>
1.A.3.d i(ii)	IE	IE	#WERT!	#WERT!	
<b>1.A.3.d ii</b>	<b>0,56</b>	<b>0,54</b>	<b>-0,02</b>	<b>-3,87%</b>	<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>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>
1.A.3.e i	NA	NA	#WERT!	#WERT!	<a href="#">1.A.3.e i - Pipeline Transport ]</a>
1.A.3.e ii	NA	NA	#WERT!	#WERT!	<a href="#">1.A.3.e ii - Other Transport: Other ]</a>
<b>1.A.4.a i</b>	<b>1,82</b>				<a href="#">here</a>
<b>1.A.4.a ii</b>	<b>0,00075</b>	<b>0,00063</b>	<b>-0,00012</b>	<b>-16,10%</b>	<a href="#">here</a>
1.A.4.b i	2,69	2,87	0,18	6,58%	<a href="#">here</a>
<b>1.A.4.b ii</b>	<b>0,26</b>				<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.4.c iii	0,0045183	0,0045183	0,00	0,00%	<a href="#">here</a>
1.A.5.a	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
1.A.5.b	0,00292	0,00296	0,00003	1,18%	<a href="#">here</a>
1.B.1.a	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.B.1.b	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.B.1.c	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
1.B.2.a i	NA	NA	#WERT!	#WERT!	
1.B.2.a iv	NA	NA	#WERT!	#WERT!	
1.B.2.a v	NA	NA	#WERT!	#WERT!	
1.B.2.b	NA	NA	#WERT!	#WERT!	
1.B.2.c	NA	NA	#WERT!	#WERT!	
1.B.2.d	NA	NA	#WERT!	#WERT!	
NFR 2 - IPPU	68,7118	68,5308	-0,1809	-0,26%	sub-category chapters
2.A.1	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
2.A.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.A.3	0,0646	0,0654	0,0008	1,24%	<a href="#">here</a>
2.A.5.a	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.A.5.b	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.A.5.c	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.A.6	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.1	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.3	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.5	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.6	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.7	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.10.a	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.B.10.b	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.C.1	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
2.C.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.C.3	0,0039770	0,0039770	0,00	0,00%	<a href="#">here</a>
2.C.4	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.C.5	0,0061246	0,0061246	0,00	0,00%	<a href="#">here</a>
2.C.6	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.C.7.a	16,9238081	16,9238081	0,00	0,00%	<a href="#">here</a>
2.C.7.b	NO	NO	#WERT!	#WERT!	<a href="#">here</a>
2.C.7.c	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.C.7.d	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.a	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.b	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.c	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.d	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.e	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.f	NA	NA	#WERT!	#WERT!	<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>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>
2.D.3.g	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.h	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.D.3.i	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.G	51,7133	51,5316	-0,1817	-0,35%	<a href="#">here</a>
2.H.1	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.H.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.H.3	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.I	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.J	NO	NO	#WERT!	#WERT!	<a href="#">here</a>
2.K	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
2.L	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
NFR 3 - Agriculture	0,0000000	0,0000000	0,00	#DIV/0!	sub-category chapters
NFR 5 - Waste	0,07	0,08	0,01	13,82%	sub-category chapters
5.A	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
5.B.1	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
5.B.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
5.C.1.a	NO	NO	#WERT!	#WERT!	
5.C.1.b i	NO	NO	#WERT!	#WERT!	
5.C.1.b ii	NO	NO	#WERT!	#WERT!	
5.C.1.b iii	NO	NO	#WERT!	#WERT!	
5.C.1.b iv	NO	NO	#WERT!	#WERT!	
5.C.1.b v	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
5.C.1.b vi	NA	NA	#WERT!	#WERT!	
5.C.2	NE	NE	#WERT!	#WERT!	<a href="#">here</a>
5.D.1	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
5.D.2	NA	NA	#WERT!	#WERT!	<a href="#">here</a>
5.D.3	NO	NO	#WERT!	#WERT!	
5.E	0,07	0,08	0,01	13,82%	<a href="#">here</a>
NFR 6 - Other	0,0000000	0,0000000	0,00	#DIV/0!	