

Recalculations - Copper (Cu)

With negligibly small changes within NFRs 1 and 2 and re-allocations in sub-categories of 1.A.3.b, the **1990 National Total remains unaltered** compared to last year's submission.

However, the strongest percental change occurs in NFR **1.A.3.b ii with plus 26 %**.

Table 1: Changes in emission estimates for 1990

NFR Sector	Submission 2022	Submission 2023	Difference		Reasoning
	[t]			relative	see description and reasoning in:
NATIONAL TOTAL	619,88	619,88	0,00	0,00%	sub-category chapters
NFR 1 - Energy	538,01	538,01	0,00	0,00%	sub-category chapters
1.A.2.g vii	0,00653	0,00654	0,00001	0,17%	here
1.A.3.b i	0,1656	0,1669	0,0013	0,76%	here
1.A.3.b ii	0,0063	0,0080	0,0016	25,99%	here
1.A.3.b iii	0,0609	0,0580	-0,0030	-4,87%	here
1.A.3.b iv	0,0022	0,0023	0,0001	2,99%	here
1.A.4.a ii	0,001041	0,001040	-0,000001	-0,09%	here
1.A.4.b ii	0,5743	0,5744	0,0001	0,02%	here
1.A.4.c ii	1,1130	1,1129	-0,0001	-0,01%	here
NFR 2 - IPPU	81,81	81,80	0,00	0,00%	sub-category chapters
2.G	36,272	36,268	-0,004	-0,01%	here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	0,07	0,07	0,00	0,00%	
NFR 6 - Other	NA				

The changes in the **National Total** reported for **2020 (+5.13 t and +1 %)** are dominated by a revision in **NFR 1.A.3.c with plus 6.77 t** where annual mileage and, hence, abrasive emissions were revised for 2020.

The significant percental change occurring in NFR 1.A.3.b iii results from a data error that will be corrected with the next annual submission.

Table 2: Changes of emission estimates for 2020

NFR Sector	Submission 2022	Submission 2023	Difference		Reasoning
	[t]			relative	see description and reasoning in:
NATIONAL TOTAL	524,59	529,72	5,13	0,98%	sub-category chapters
NFR 1 - Energy	469,12	474,36	5,24	1,12%	sub-category chapters
1.A.1.a	5,85	5,81	-0,04	-0,67%	here
1.A.1.b	3,84	3,73	-0,10	-2,72%	here
1.A.1.c	0,058	0,054	-0,004	-7,46%	here
1.A.2.g vii	0,0067	0,0069	0,0002	2,41%	here
1.A.2.g viii	0,30	0,37	0,06	21,11%	here
1.A.3.a i(i)	0,0000000991	0,0000000987	-0,0000000004	-0,42%	here
1.A.3.a ii(i)	0,000002560	0,000002561	0,000000001	0,03%	here
1.A.3.b i	0,1414	0,1420	0,0006	0,39%	here
1.A.3.b ii	0,0214	0,0218	0,0005	2,17%	here
1.A.3.b iii	0,0839	0,0286	-0,0553	-65,91%	here
1.A.3.b iv	0,00196	0,00198	0,00002	1,11%	here
1.A.3.b vi	358,94	357,42	-1,52	-0,42%	here
1.A.3.b vii	0,03433	0,03432	-0,00002	-0,05%	here
1.A.3.c	94,17	100,94	<u>6,77</u>	7,19%	here
1.A.3.d ii	0,5810	0,5810	-0,0001	-0,01%	here
1.A.4.a i	1,57	1,61	0,03	2,14%	here
1.A.4.a ii	0,00083	0,00084	0,00001	0,89%	here
1.A.4.b i	2,28	2,24	-0,03	-1,51%	here

	Submission 2022	Submission 2023	Difference		Reasoning
NFR Sector	[t]			relative	see description and reasoning in:
NATIONAL TOTAL	524,59	529,72	5,13	0,98%	sub-category chapters
NFR 1 - Energy	469,12	474,36	5,24	1,12%	sub-category chapters
1.A.4.b ii	0,33	0,26	-0,07	-21,39%	here
1.A.4.c i	0,08384	0,08383	-0,00001	-0,01%	here
1.A.4.c ii	0,80	1,01	0,20	25,47%	here
NFR 2 - IPPU	55,40068	55,29302	-0,10766	-0,19%	sub-category chapters
2.A.3	0,05840	0,05845	0,00005	0,08%	here
2.G	37,87183	37,76412	-0,10771	-0,28%	here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	0,07	0,07	0,00	0,00%	
NFR 6 - Other	NA				
	Submission 2021	Submission 2022	Difference		Reasoning
NFR Sector	[t]			relative	see description and reasoning in:
NATIONAL TOTAL	587,38	591,28	3,91	0,67%	sub-category chapters
NFR 1 - Energy	517,86	517,93	0,07	0,01%	sub-category chapters
1.A.1.a	7,00	7,11	0,11	1,50%	here
1.A.1.b	4,05	3,94	-0,11	-2,74%	here
1.A.1.c	0,058	0,056	0,00	-2,95%	here
1.A.2.g vii	0,00646	0,00647	0,00001	0,08%	here
1.A.2.g viii	0,329	0,326	-0,003	-0,89%	here
1.A.3.a i(i)	0,0000011	0,0000002	-0,0000009	-83,52%	here
1.A.3.a ii(i)	0,000024	0,000004	-0,000020	-83,69%	here
1.A.3.b i	0,1616	0,1618	0,0001	0,08%	here
1.A.3.b ii	0,0220	0,0217	-0,0002	-1,10%	here
1.A.3.b iii	0,0868	0,0867	-0,0001	-0,15%	here
1.A.3.b iv	0,00194	0,00192	-0,00002	-1,10%	here
1.A.3.c	100,89	100,94	0,05	0,05%	here
1.A.3.d ii	0,60	0,65	0,05	9,14%	here
1.A.4.a ii	0,000810	0,000811	0,000001	0,18%	here
1.A.4.b i	2,379	2,380	0,001	0,03%	here
1.A.4.b ii	0,34	0,35	0,01	1,85%	here
1.A.4.c ii	0,656	0,644	-0,012	-1,82%	here
1.A.4.c iii	0,0105	0,0066	-0,0039	-37,07%	here
1.A.5.b	0,012	0,004	-0,008	-68,89%	here
NFR 2 - IPPU	69,45	73,28	3,83	5,52%	sub-category chapters
2.A.3	0,413	0,065	-0,35	-84,30%	here
2.G	52,59	56,77	4,18	7,95%	here
NFR 3 - Agriculture	NA				
NFR 5 - Waste	0,07	0,07	0,00	0,00%	
NFR 6 - Other	NA				