

## 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]		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	0,00653	0,00654	0,00001	0,17%	<a href="#">here</a>
1.A.3.b i	0,1656	0,1669	0,0013	0,76%	<a href="#">here</a>
1.A.3.b ii	0,0063	0,0080	0,0016	25,99%	<a href="#">here</a>
1.A.3.b iii	0,0609	0,0580	-0,0030	-4,87%	<a href="#">here</a>
1.A.3.b iv	0,0022	0,0023	0,0001	2,99%	<a href="#">here</a>
1.A.4.a ii	0,001041	0,001040	-0,000001	-0,09%	<a href="#">here</a>
1.A.4.b ii	0,5743	0,5744	0,0001	0,02%	<a href="#">here</a>
1.A.4.c ii	1,1130	1,1129	-0,0001	-0,01%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>81,81</b>	<b>81,80</b>	<b>0,00</b>	<b>0,00%</b>	sub-category chapters
2.G	36,272	36,268	-0,004	-0,01%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>	<b>NA</b>				
<b>NFR 5 - Waste</b>	<b>0,07</b>	<b>0,07</b>	<b>0,00</b>	<b>0,00%</b>	
<b>NFR 6 - Other</b>	<b>NA</b>				

The changes in the **National Total** reported for **2020 (+1.34 t and +2 %)** are dominated by a revision in **NFR 1.A.3.c with plus 1.5 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 2021	Submission 2022	Difference		Reasoning
	[t]		absolute	relative	
<b>NATIONAL TOTAL</b>	<b>587,38</b>	<b>591,28</b>	<b>3,91</b>	<b>0,67%</b>	see description and reasoning in: sub-category chapters
<b>NFR 1 - Energy</b>	<b>517,86</b>	<b>517,93</b>	<b>0,07</b>	<b>0,01%</b>	sub-category chapters
1.A.1.a	7,00	7,11	0,11	1,50%	<a href="#">here</a>
1.A.1.b	4,05	3,94	-0,11	-2,74%	<a href="#">here</a>
1.A.1.c	0,058	0,056	0,00	-2,95%	<a href="#">here</a>
1.A.2.g vii	0,00646	0,00647	0,00001	0,08%	<a href="#">here</a>
1.A.2.g viii	0,329	0,326	-0,003	-0,89%	<a href="#">here</a>
1.A.3.a i(i)	0,0000011	0,0000002	-0,0000009	-83,52%	<a href="#">here</a>
1.A.3.a ii(i)	0,000024	0,000004	-0,000020	-83,69%	<a href="#">here</a>
1.A.3.b i	0,1616	0,1618	0,0001	0,08%	<a href="#">here</a>
1.A.3.b ii	0,0220	0,0217	-0,0002	-1,10%	<a href="#">here</a>
1.A.3.b iii	0,0868	0,0867	-0,0001	-0,15%	<a href="#">here</a>
1.A.3.b iv	0,00194	0,00192	-0,00002	-1,10%	<a href="#">here</a>
1.A.3.c	100,89	100,94	0,05	0,05%	<a href="#">here</a>
1.A.3.d ii	0,60	0,65	0,05	9,14%	<a href="#">here</a>
1.A.4.a ii	0,000810	0,000811	0,000001	0,18%	<a href="#">here</a>
1.A.4.b i	2,379	2,380	0,001	0,03%	<a href="#">here</a>
1.A.4.b ii	0,34	0,35	0,01	1,85%	<a href="#">here</a>
1.A.4.c ii	0,656	0,644	-0,012	-1,82%	<a href="#">here</a>
1.A.4.c iii	0,0105	0,0066	-0,0039	-37,07%	<a href="#">here</a>

	Submission 2021	Submission 2022	Difference		Reasoning
<b>NFR Sector</b>	<b>[t]</b>			<b>relative</b>	<b>see description and reasoning in:</b>
<b>NATIONAL TOTAL</b>	<b>587,38</b>	<b>591,28</b>	<b>3,91</b>	<b>0,67%</b>	<b>sub-category chapters</b>
<b>NFR 1 - Energy</b>	<b>517,86</b>	<b>517,93</b>	<b>0,07</b>	<b>0,01%</b>	<b>sub-category chapters</b>
1.A.5.b	0,012	0,004	-0,008	-68,89%	<a href="#">here</a>
<b>NFR 2 - IPPU</b>	<b>69,45</b>	<b>73,28</b>	<b>3,83</b>	<b>5,52%</b>	<b>sub-category chapters</b>
2.A.3	0,413	0,065	-0,35	-84,30%	<a href="#">here</a>
2.G	52,59	56,77	4,18	7,95%	<a href="#">here</a>
<b>NFR 3 - Agriculture</b>	<b>NA</b>				
<b>NFR 5 - Waste</b>	<b>0,07</b>	<b>0,07</b>	<b>0,00</b>	<b>0,00%</b>	
<b>NFR 6 - Other</b>	<b>NA</b>				