## **Appendix 2.1 - Reporting of PM emissions**

Documentation entries of the Central System Emissions database for the condensable fraction of PM<sub>2.5</sub>.



NFR categories with no reported activity or PM<sub>2.5</sub> emissions are excluded here.

The condensable fraction of particulate matter ( $PM_{2.5}$ ) is documented for all activities in the emissions database. A documentation entry has been created for each time series, indicating the following options for condensable particulate matter:

- Yes (measured/determined), the condensable fraction of PM<sub>2.5</sub> was measured and is included in the emission values
- No, the condensable fraction has not been determined and is not included in the emission values
- NA (no condensable PM<sub>2.5</sub> is generated in the process)
- Unknown, the condensable fraction for PM<sub>2.5</sub> is unknown and could be zero

Below is an excerpt from the database, showing the aforementioned documentation entries by source category.

NFR Source Category			Yes	Not Applicable	No		Number
		no documentation available	(measured/determined)	(no condensable PM <sub>2.5</sub> are generated in the process)	potentially possible)	Unknown	of document entries
NFR 1	Energy	•					
1.A.1.a	Public electricity and heat production	-	-	-	147	-	147
1.A.1.b	Petroleum refining	-	-	-	31	-	31
1.A.1.c	Manufacture of solid fuels and other energy industries	-	-	-	49	-	49
1.A.2.a	Stationary combustion in manufacturing industries and construction: Iron and steel	-	-	-	22	-	22
1.A.2.b	Stationary combustion in manufacturing industries and construction: Non-ferrous metals	-	-	-	-	-	-
1.A.2.c	Stationary combustion in manufacturing industries and construction: Chemicals	-	-	-	-	-	-
1.A.2.d	Stationary combustion in manufacturing industries and construction: Pulp, Paper and Print	-	-	-	-	-	-
1.A.2.e	Stationary combustion in manufacturing industries and construction: Food processing, beverages and tobacco	-	-	-	-	-	-
1.A.2.f	Stationary combustion in manufacturing industries and construction: Non-metallic minerals	-	-	-	-	-	-
1.A.2.g vii	Mobile combustion in manufacturing industries and construction (please specify in the IIR)	-	4	-	-	-	4

1.A.2.g viii	Stationary combustion in manufacturing industries and construction: Other (please specify in the IIR)	-	-	-	102	-	102
1.A.3.a	Domestic Aviation	-	-	-	-	4	4
	Road Transport	_	487	18	-	-	505
	Railways	_	11	-	1	-	12
	Domestic Navigation	-	5	-	1	-	6
	Other Transportation	-	-	-	3	-	3
	Commercial/Institutional:						
i	Stationary	-	-	-	28	-	28
ii	Commercial/Institutional: Mobile	-	3	-	-	-	3
1.A.4.b i	Residential: Stationary	-	-	-	14	-	14
1.A.4.b ii	Residential: Household and gardening (mobile)	-	-	-	4	4	8
1.A.4.c i	Agriculture/Forestry/Fishing: Stationary	-	-	-	15	-	15
1.A.4.c ii	Agriculture/Forestry/Fishing: Off-road vehicles and other machinery	-	6	-	-	-	6
1.A.4.c iii	Agriculture/Forestry/Fishing: National fishing	-	-	-	-	3	3
1.A.5.a	Other stationary (including military)	-	-	-	10	-	10
1.A.5.b	Other, Mobile (including military, land based and recreational boats)	-	-	-	9	-	9
1.B.1.a	Fugitive emission from solid fuels: Coal mining and handling	-	-	1	-	-	1
1.B.1.b	Fugitive emission from solid fuels: Solid fuel transformation	-	-	6	2	-	8
1.B.2.c	Venting and flaring (oil, gas, combined oil and gas)	-	-	-	1	-	1
1.D.1.a	Civil Aviation (international)	-	-	-	-	4	4
1.D.1.b	Maritime Navigation (international)	-	-	-	-	2	2
11.B	Forest Fires	-	-	-	-	1	1
NFR 2	- IPPU		<u> </u>	!	ļ	ļ	
2.A.1	Cement production	-	-	-	1	-	1
2.A.2	Lime production	-	-	-	-	2	2
2.A.3	Glass production	-	6	-	-	-	6
	Ceramics	-	-	-	-	15	15
2.A.5.a	Quarrying and mining of minerals other than coal	-	-	4	-	-	4
2.A.5.b	Construction and demolition	-	-	5	-	-	5
2.B.5	Carbide production	-	-	-	-	1	1
2.B.8	Petrochemical and Carbon Black Production	-	-	-	-	1	1
2.B.10	Other	-	-	-	-	1	1
2.C.1	Iron and steel production	-	-	-	-	7	7
2.C.2	Ferroalloys production	-	-	-	-	1	1
	By-Product Emissions	-	-	-	-	2	2
2.C.4	Magnesium production	-	-	-	-	-	-
2.C.5	Lead production	-	-	-	-	2	2
2.C.6	Zinc production	-	-	-	-	2	2
2.C.7	Other		-	-	-	3	3
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2.D.3.b	Road paving with asphalt	-	-	-	-	1	1
2.G.1	Electric Equipment	-	-	-	-	-	-
2.G.2	SF <sub>6</sub> and PFCs from Other Product Use	-	-	-	-	-	-
2.G.3	N <sub>2</sub> O from Product Uses	-	-	-	-	-	-
2.G.4	Other	-	3	-	-	1	4
2.H.1	Pulp and paper industry	-	-	-	2	-	2
2.H.2	Food and beverages industry	-	-	-	-	2	2
2.1	Wood processing	-	-	1	-	-	1
2.L	Other production, consumption, storage, transportation or handling of bulk products (please specify in the IIR)	-	-	1	-	89	90
NFR 3	- Agriculture						
3.B	Manure Management	-	-	20	-	-	20
3.D	Agricultural Soils	-	-	1	-	-	1
NFR 5	- Waste						
5.A	Biological treatment of waste - Solid waste disposal on land	-	-	1	-	-	1
5.C	Waste Incineration	-	-	-	1	1	2
5.E	Other waste (please specify in the IIR)	-	-	-	-	6	6
NFR 11 - Other							
11.B	Forest Fires	-	-	-	-	1	1
SUM		-	525	58	443	155	1.181