1.A.3.b vii - Road Transport: Automobile Road Abrasion

Short description

In sub-category *1.A.3.b vii - Road Transport: Automobile Road Abrasion* emissions from road abrasion in Road Transport are reported. Therefore, this sub-category is an important source for a) particle emissions and b) emissions of heavy metals, POPs etc. included in these particles.

Category Code	**Method**					**AD**					**EF**				
1.A.3.b.vii	T1, T3					NS, M					CS				
	NO_x	**NMVOC**	**SO_2**	**NH_3**	**$PM_{2.5}$**	**PM_{10}**	**TSP**	**BC**	**CO**	**Pb**	**Cd**	**Hg**	**Diox**	**PAH**	**HCB**
Key Category:	-	-	-	-	L/-	L/-	L/-	-	-	-/-	-/-	-	-	-	-

Methodology

Activity data

Abrasive emissions from tyre and brake wear are estimated based on vehicle-type specific mileage data. For detailed mileage data, please see superordinate chapter on abrasive emissions from road vehicles.

Emission factors

Table 1: Emission factors applied

		PCs	**LDVs**	**HDVs**	**Buses**	**Mopeds**	**Motorcycles**
BC	[mg/km]	NA	NA	NA	NA	NA	NA
$PM_{2.5}$		4,05	4,05	20,5	20,5	1,62	1,62
PM_{10}		7,50	7,50	38,0	34,2	3,00	3,00
TSP		15,0	15,0	76,0	76,0	6,00	6,00
Pb	[µg/km]	0,00006	0,00006	0,00031	0,00006	0,00002	0,00002
Hg		NA	NA	NA	NA	NA	NA
Cd		0,000003	0,000003	0,000016	0,000003	0,000001	0,000001
As		0,00004	0,00004	0,00020	0,00004	0,00002	0,00002
Cr		0,00108	0,00108	0,00547	0,00108	0,00043	0,00043
Cu		0,00004	0,00004	0,00019	0,00004	0,00001	0,00001
Ni		0,00057	0,00057	0,00289	0,00057	0,00023	0,00023
Se		NA	NA	NA	NA	NA	NA
Zn		0,00129	0,00129	0,00654	0,00129	0,00052	0,00052

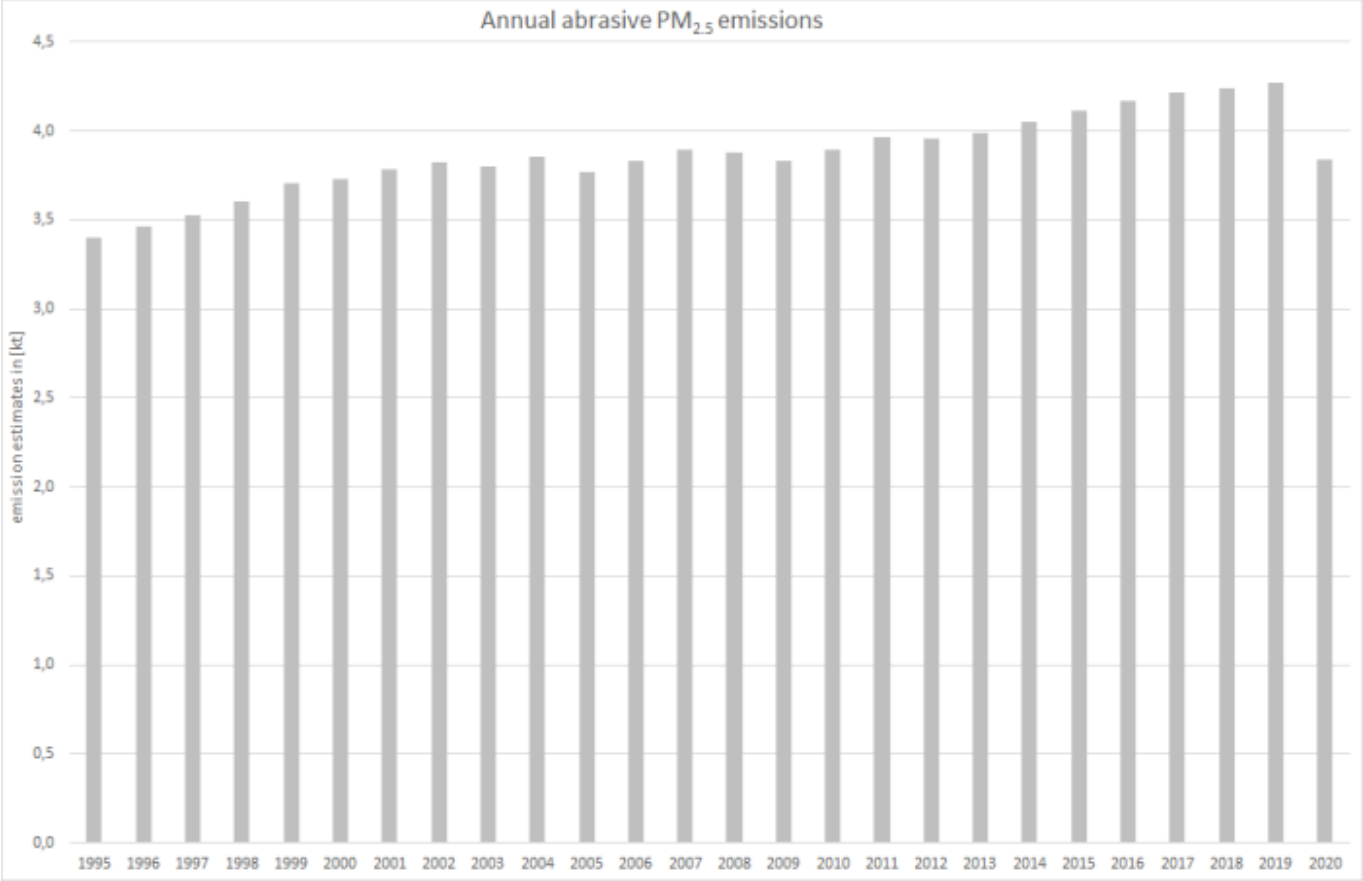
Discussion of emission trends

Table 2: Outcome of Key Category Analysis

for:	**TSP**	**PM_{10}**	**$PM_{2.5}$**
by:	Level	Level	Level

Emissions from road abrasion are directly linked to driven mileage. Thus, the overall trend of emissions from road abrasion is similar to the trend for total driven mileage.

All reported emissons from tyre and brake wear are connected directly to the mileage driven by the road vehicles covered.



Recalculations

With both **activity data** and **emission factors** unrevised, emission estimates remain unaltered compared to last year's submission.

For more information on recalculated emission estimates for Base Year and 2019, please see the pollutant-specific recalculation tables following chapter 8.1 - Recalculations.

Planned improvements

Besides a routine revision of the underlying model, no specific improvements are planned.