2.D.3.b - Road Paving

Short description

Category Code	Method					AD					EF				
2.D.3.b	T1					AS					CS				
Key Category	**SO_2**	**NO_x**	**NH_3**	**NMVOC**	**CO**	**BC**	**Pb**	**Hg**	**Cd**	**Diox**	**PAH**	**HCB**	**TSP**	**PM_{10}**	**$PM_{2.5}$**
2.D.3.b	-/-	-/-	-	-/-	-	-	-	-	-	-	-	-	-/-	-/-	-/-

T = key source by Trend **L** = key source by Level

Methods	
D	Default
T1	Tier 1 / Simple Methodology *
T2	Tier 2*
T3	Tier 3 / Detailed Methodology *
C	CORINAIR
CS	Country Specific
M	Model

* as described in the EMEP/EEA Emission Inventory Guidebook - 2019, in the group specific chapters.

AD - Data Source for Activity Data	
NS	National Statistics
RS	Regional Statistics
IS	International Statistics
PS	Plant Specific data
As	Associations, business organisations
Q	specific Questionnaires (or surveys)
M	Model / Modelled
C	Confidential

EF - Emission Factors	
D	Default (EMEP Guidebook)
C	Confidential
CS	Country Specific
PS	Plant Specific data
M	Model / Modelled

Currently, the report tables list produced quantities of mixed asphalt products (from stationary installations only) and NMVOC, NOx and SO2 emissions caused of this. Only emissions from asphalt production are reported. Figures relative to emissions released during laying of asphalt have not been examined.

Method

Activity data

The applicable quantity of mixed asphalt products produced (activity rate) has been taken from communications of the Deutscher Asphaltverband (DAV; German asphalt association). In total about 660 asphalt-mixing plants produce most recently 38 Million tonnes of hot-mix for road paving [1)].

Emission factors

Emission factors have been determined country-specifically, pursuant to Tier 2. For determination of emission factors for emissions measurements from over 400 asphalt-mixing plants, made during the period 1989 through 2000, were used. The

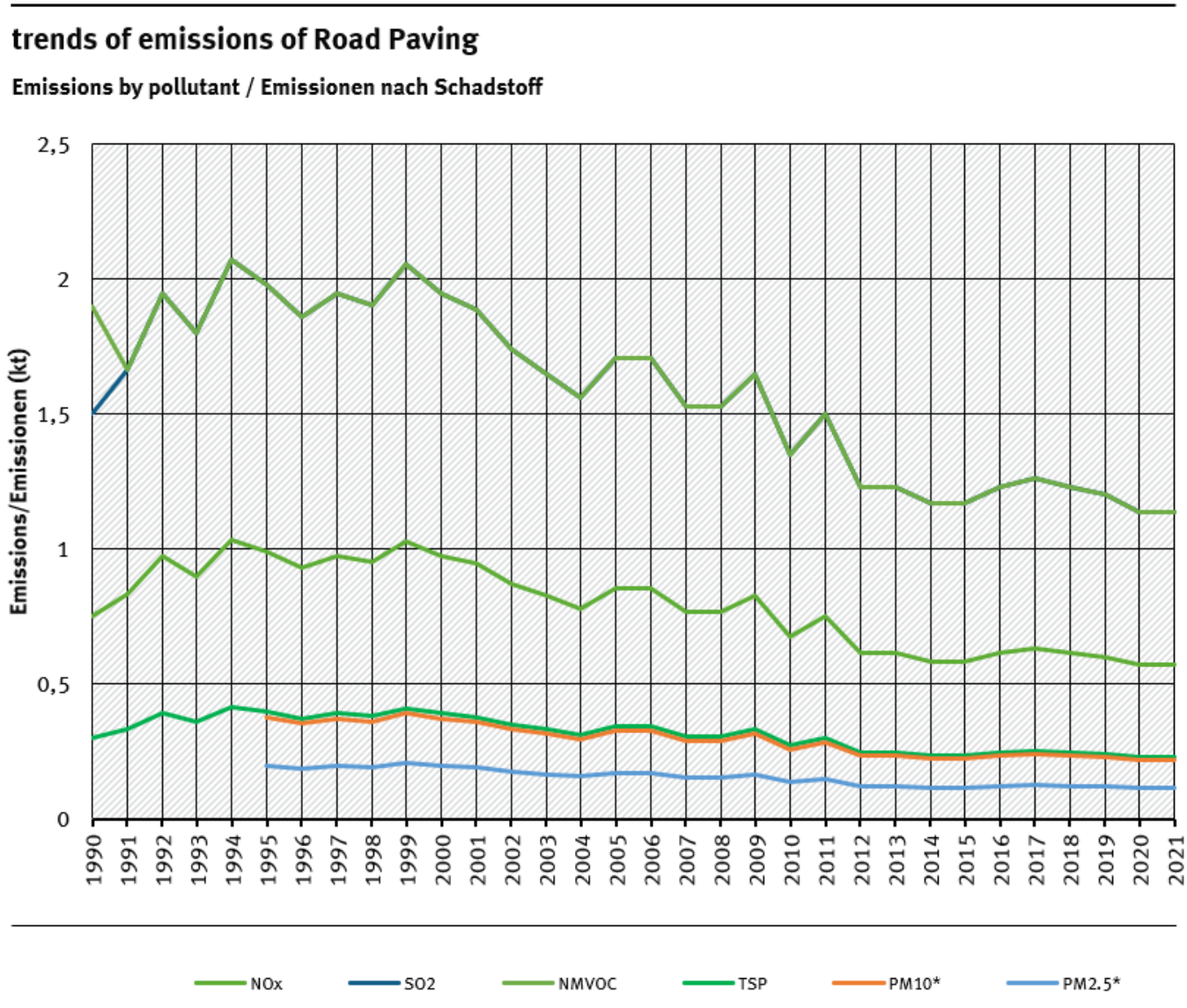
majority of the emissions occur during drying of pertinent mineral substances. Almost all of the NMVOC emissions originate in the organic raw materials used, and they are released primarily in parallel-drum operation, as well as from mixers and loading areas. On average, about 50% of the NOx and SO_x involved come from the mineral substances (proportional process emissions). CO emissions are calculated solely in connection with fuel inputs.

Table 1: Overview of applied emission factors, in kg/t

pollutant	Name of Category	EF value	EF trend
NMVOC	Production of mixed asphalt	0.030	constant
NO_x	Production of mixed asphalt	0.015	constant
SO_x	Production of mixed asphalt	0.030	constant
TSP	Production of mixed asphalt	0.006	constant
PM_{10}	Production of mixed asphalt	0.0057	constant
$PM_{2.5}$	Production of mixed asphalt	0.003	constant

Trends in emissions

All trends in emissions correspond to trends of production amount. No rising trends are to identify.



Emission trends of road paving

Recalculations

With activity data and emission factors remaining unrevised, no recalculations have been carried out compared to last year's submission.

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

Planned improvements

At the moment, no category-specific improvements are planned.

[1)] https://www.asphalt.de/themen/aktuelles/