

2.G(b) - Other Product use: Tobacco

Short description

In this sub-category of 2.G(b) - Other product use: Tobacco Germany reports NO_x, NH₃, NMVOC, TSP, PM₁₀, PM_{2.5}, Cd, Co, Cu, Ni, Zn, Benzo(a)pyrene (B[a]P), Benzo(b)fluoranthene (B[b]F), Benzo(k)fluoranthene (B[k]F), Indeno(1,2,3-cd)pyrene (I[1,2,3-c,d]P), PAH 1-4 and PCDD/F emissions from the smoking of cigarettes and cigars.

NFR-Code	Name of Category	Method	AD	EF
2.G(b)	Other Product use: Tobacco	T2	NS	CS/D

Method

Activity data: Statistical data from the tax registration of sold tobacco¹⁾, cigarettes and cigars are used as **activity data**.

Emission factors: For the **emission factors**, a study was made and published in October 2016 "Entwicklung von Methoden zur Berechnung von Emissionen von Luftschadstoffen aus der Verwendung von Holzkohle, Tabak, Feuerwerk und Kerzen sowie aus dem Entfachen von Brauchtumsfeuern" from Nicola Toenges-Schuller et al., AVISO GmbH, for the Umweltbundesamt Germany. Based on this study, most of the EFs are an average value from different studys.

Table 1: Applied emission factors

	= Value	= Unit	= Data source
< NO _x	> 1.8	< kg/t tobacco	< EMEP/EEA 2013
< NMVOC	> 9.56	< kg/t tobacco	< average value
< NH ₃	> 5.33	< kg/t tobacco	< average value
< CO	> 112.51	< kg/t tobacco	< average value
< TSP/PM ₁₀ /PM _{2.5}	> 18.85	< kg/t tobacco	< average value
< BC	> 0.074	< kg/t tobacco	< average value
< Cd	> 0.0054	< kg/t tobacco	< EMEP/EEA 2013
< Cu	> 5.4	< g/t tobacco	< EMEP/EEA 2013
< Ni	> 2.7	< g/t tobacco	< EMEP/EEA 2013
< Zn	> 2.16	< g/t tobacco	< average value
< PCDD/F	> 0.1	< µg/t tobacco	< EMEP/EEA 2013
< B[a]P	> 0.21	< g/t tobacco	< average value
< B[b]F	> 0.26	< g/t tobacco	< average value
< B[k]F	> 0.26	< g/t tobacco	< average value
< I[1,2,3-c,d]P	> 0.42	< g/t tobacco	< average value

Recalculations

So far for the activity data the production, import and export of cigarettes, cigars and tobacco products was used for the calculation. But because of double counting of tobacco amounts the activity data were overestimated. As new data source for the activity data the



Planned improvements

No planned improvements.

[bibliography](#) : 1 : EMEP/EEA air pollutant emission inventory guidebook 2016, Copenhagen, 2016.
[bibliography](#)

¹⁾ Destatis, Besteuerung von Tabakwaren 73411, SBA FS 14 R 9.1.1 Absatz von Tabakwaren