2.H.2 - Food & Beverages Industry

Category Code	Method					AD					EF				
2.H.2	T1					NS					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.H.2	-	-	-	-/-	-	-	-	-	-	-	-	-	-/-	-/-	-/-

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

Methods	
D	Default
RA	Reference Approach
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/CORINAIR Emission Inventory Guidebook - 2007, 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, surveys

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

Emissions occurring in this sector in Germany derive from the following production processes which are analogous to the IPCC category (Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, Reference Manual (Volume 3)):

Alcoholic beverages

- Wine
- Beer
- Spirits

Bread and other foods

- Meat, fish and poultry
- Sugar
- Margarine as well as hard and hardened fats
- Cake, cookies and breakfast cereals
- Bread
- Animal feedstuffs
- Coffee roasting

Following pollutants are reported:

- volatile organic compounds (NMVOC),
- particulate matter (PM2.5, PM10 and TSP).

Pursuant to the 1993 Classification of Economic Activities (WZ 93), the food and beverage industry is divided into nine groups and a total of 33 classes. Governmental statistical evaluations are oriented to this classification. The German food

industry includes an especially large number of small and medium-sized enterprises (SMEs); nearly 80 percent of its companies have fewer than 100 employees, and only 3 per cent have more than 500 employees (BpB, 2002, p.51).

Energy related emissions from the sugar industry are reported under category 1.A.2.e.

Methodology

Activity data

xx

Emission factors

Table 1: Overview of applied emission factors

Pollutant	Name of Category	EF	Unit	Trend
NO_x	clinker burning	0.5	kg/t	falling
SO_2	clinker burning	0.25	kg/t	falling
NMVOC	clinker burning	0.046	kg/t	constant
NH_3	clinker burning	0.044	kg/t	falling
Hg	clinker burning	0.022	g/t	falling
Pb	clinker burning	0.016	g/t	falling
Cd	clinker burning	0.004	g/t	falling
PCB	clinker burning	28.0	µg/t	constant
PCDD	clinker burning	0.040	µg/t	constant
B(a)P	clinker burning	1.0	mg/t	constant
PAH	clinker burning	240	mg/t	constant
TSP	*clinker grinding*	*0.046*	*kg/t*	*falling*
PM_{10}	*clinker grinding*	*0.041*	*kg/t*	*falling*
$PM_{2.5}$	*clinker grinding*	*0.037*	*kg/t*	*falling*

Trends in emissions

Emissions of the food and drink industry are reported, in summary form, in the inventory in of the sectoral report for industrial processes. Emissions in detail for the resp. products are presented following Pictures . All trends in emissions correspond to trends of emission factors in table above. No rising trends are to identify.

Invalid Link
Emission trends in NFR 2.H.2

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 2018, please see the pollutant specific recalculation tables following chapter 8.1 - Recalculations.

Planned improvements

For purposes of updating the EF project has started in 2020, but results are planned not before 2021 [1)].

[1)] ReFoPlan FKZ – xx: „yy“