1.A.4.c.i - Agriculture/Forestry/Fishing: Stationary



Short description

In source category 1.A.4.c.i - Agriculture/Forestry/Fishing: Stationary emissions from smaller combustion plants in agricultural facilities and greenhouses are reported.

Category Code	Method				AD				EF						
1.A.4.c.i	T2, T3				NS				CS, D						
	NO _x	NMVOC	SO ₂	NH ₃	PM _{2.5}	PM ₁₀	TSP	вс	СО	РΒ	Cd	Hg	Diox	PAH	нсв
Key Category:	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-

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

Methods		
D	Default	

AD - Data Source for Activity Data						
* as described in the EMEP/EEA Emission Inventory Guidebook - 2019, in the group specific chapters.						
М	Model					
CS	Country Specific					
С	CORINAIR					
Т3	Tier 3 / Detailed Methodology *					
T2	Tier 2*					
T1	Tier 1 / Simple Methodology *					

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ΑD	AD - Data Source for Activity Data							
NS	National Statistics							
RS	Regional Statistics							
IS	International Statistics							
PS	Plant Specific data							
As	Associations, business orga	anisation						
Q	specific Questionnaires (or	surveys						
М	Model / Modelled							
С	Confidential							
EF	- Emission Factors							

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

Methodology

Activity data

For further information on activity data please refer to the superordinate chapter on small stationary combustion.

Emission factors

For further information on the emission factors applied please refer to the superordinate chapter on small stationary combustion.

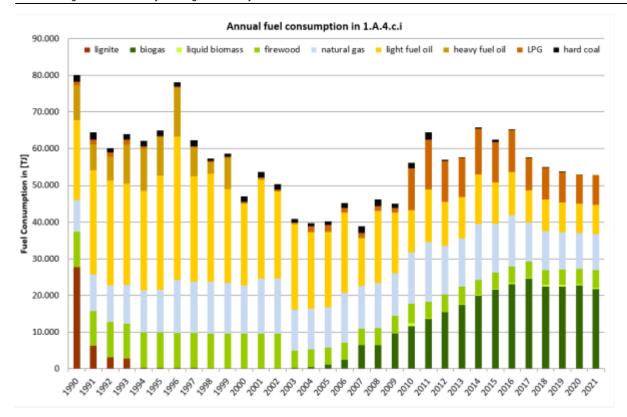
Table 1: Emission factors for commercial and institutional combustion installations

	NO _x	SO _x	СО	NMVOC	TSP	PM ₁₀	PM _{2.5}	PAH	PCDD/F
			Fuel	[kg/TJ]					
Hard Coal	76.2	331.7	2,709	48.4	18.5	17.6	15.7	19,215	16.3
Residual Wood	79.2	6.5	2,285	122.1	84.2	81.6	76.9	144,957	355.3
Light Fuel Oil	43.7	3.3	11.9	2.6	1.0	1.0	1.0	20.10	2.7
Natural Gas	27.2	0.1	11.1	0.36	0.03	0.03	0.03	3.08	1.6

TSP and PM emission factors are to a large extend based on measurements without condensed compounds, according to CEN-TS 15883, annex I.

Trend Discussion for Key Sources

The following charts give an overview and assistance for explaining dominant emission trends of selected pollutants.



Annual fluctuations of all fuel types in source category 1.A.4 depend on heat demand subject to winter temperatures. Between 1990 and 2014 the fuel use changed considerably from coal & lignite to natural gas. The consumption of light heating oil decreased as well. As the activity data for light heating oil is based on the sold amount, it fluctuates due to fuel prices and changing storage amounts.

Recalculations

Recalculations were necessary for the time series from 2003 to 2019 due to the change of the activity data source.

Furthermore, compared to submission 2021, PAH emissions have been recalculated for all small combustion sources due to a revision of emission factors applied.



For pollutant-specific information on recalculated emission estimates for Base Year and 2020, please see the recalculation tables following chapter 8.1 - Recalculations.

Planned improvements

There is a running project on new emission factors for small combustion plants using updated data from the chimney sweepers and new measurement data.