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 N			NH₃	PM _{2.5}	PM ₁₀	TSP	BC	со	PB	Cd	Hg	Diox	PAH	HCB
Key Category:	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
T = key source b	oy Tr€	end L = k	ey s	ource	e by Le	evel									
Methods															
	D Default														

T1	Tier 1 / Simple Me	thodology *						
Т2	Tier 2*							
ТЗ	Tier 3 / Detailed M	lethodology *						
С	CORINAIR							
CS	Country Specific	ntry Specific						
М	Model							
* as described in the EMEP/EEA	mission Inventory Gu	idebook - 2019, in the group specific chapters.						
AD - Data Source for Activit	Data							
NS National Statistics								
RS Regional Statistics								
IS International Statistics								
PS Plant Specific data								
As Associations, business orga	sations							
Q specific Questionnaires (or	rveys)							
Model / Modelled								
C Confidential								
EF - Emission Factors								
D Default (EMEP Guidebook)								
C Confidential								
CS Country Specific								
PS Plant Specific data								
Model / Modelled								

Methodology

Activity data

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

Emission factors

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

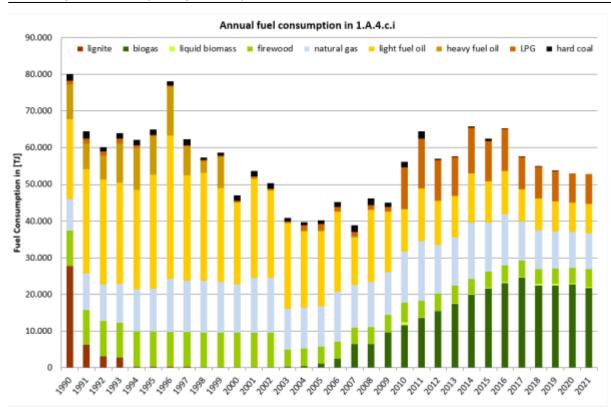
Table 1: Emiss	on facto	rs for	comm	ercial and	d inst	itutio	nal cor	nbustior	<u>n installati</u>	<u>ons</u>
Pollutant	NOx	SOx	CO	NMVOC	TSP	PM ₁₀	PM _{2.5}	PAH	PCDD/F	

Pollutant	NOx	SOx	CO	NMVOC	TSP	PM_{10}	PM _{2.5}	PAH	PCDD/F
Fuel			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.