

5.C.2 - Open Burning of Waste

Category Code	Method					AD					EF				
5.C.2	CS					Q					D, CS				
Key Category	SO ₂	NO _x	NH ₃	NM VOC	CO	BC	Pb	Hg	Cd	Diox	PAH	HCB	TSP	PM ₁₀	PM _{2.5}
5.C.2	-/-	-/-	-	-/-	-/-	-/-	-/-	-	-/-	-/-	-/-	-	-/-	L/-	L/-

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

Within NFR sub-category 5.C.2 - Open Burning of Waste, the German emissions inventory provides emissions from registered bonfires and other wooden materials burnt outdoors. Emissions from bonfires are key source for PM_{2.5} and PM₁₀, but in principle of minor priority.

Emissions from open burning of wood and green waste for traditional purposes, so-called bonfires such as Easter fires, are reported model-based. In addition to biogenic carbon dioxide, emissions of NO_x, SO₂, CO, NMVOC, particulate matter (PM_{2.5}, PM₁₀ and TSP) and Polycyclic Aromatic Hydrocarbons (PAHs) are covered so far.

Method

For developing of a estimation frame a survey regarding the number of such bonfires was carried out by an expert work (Wagner & Steinmetzer, 2018) [1]. As the result, questionnaires from municipalities and statistical projections for Germany for the year 2016 were checked. The project has shown a declining trend since 1990. On the basis of expert judgement, a further reduction of emissions in the future is expected.

Activity data

Activity data for this category are based on data from a step by step calculation: After the evaluation of the questionnaires an extrapolation of the volume and the number of bonfires was made for Germany. The median values of clusters of city-sizes were used for the calculation, resulting in the following values ¹⁾:

¹⁾ Wagner & Steinmetzer, 2018: Jörg Wagner, Sonja Steinmetzer, INTECUS GmbH Abfallwirtschaft und umweltintegratives Management: Erhebung der Größen und Zusammensetzung von Brauchtums- und Lagerfeuern durch kommunale Befragungen; URL: https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2018-02-19_texte_11-2018_lager-brauchtumsfeuer.pdf; UBA-Texte 11/2018