

DATASET DESCRIPTION

Reported emissions of methane (CH4) from sector agriculture in kt/year

Version: v1

Publication date: 2023

Cite data set as: Reported emissions of methane (CH4) from sector agriculture in kt/year, Version v1

Dataset-ID: urn:x-wmo:md:de.dwd.cdc::rgn_deu_p1y_ch4_e_r_1002

Dataset-URL: https://opendata.dwd.de/climate_environment/CDC/regional_averages_DE/annual/CH4/emissions/reported

/agriculture

ABSTRACT

The size and the spatial variability of the reported methane emissions from the agricultural sector are presented for the federal states and the districts of Germany. The figure given is the sum of all emissions in the agriculture sector for the whole year. The agricultural sector is defined as the sum of the GNFR (Gridded Nomenclature For Reporting) sectors (Agricultural_Livestock, Agricultural_Other, Off_Road). Future improvements can be expected from future developments and refinements of the methods.

POINT OF CONTACT

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DATASET DESCRIPTION

Parameter CH4
Unit(s) kt/year

Statistical processing annual sum

Temporal coverage 2018-01-01 -- 2018-12-31

Spatial coverage Germany

Projection WGS 84 (EPSG:4326)

Format description Totals for the individual federal states and districts of Germany

The sector agriculture is the sum of: Agricultural_Livestock + Agricultural_Other + Off_Road (GNFR Sectors)

application schema

csv dialect description

| delimiter | line terminator | header | quote char |
|-----------|-----------------|--------|------------|
| ; | \\r\\n | true | \" |

csv content description

| column name | description | uom | type | format |
|-------------------------|--|-----|----------|--|
| OBSERVED_PROPERTY_ID | identifier of the methane emission | | NUMBER | |
| OBSERVED_PROPERTY_CODE | abbreviation of the methane emission | | VARCHAR2 | |
| OBSERVED_PROPERTY_NAME | name of the methane emission | | VARCHAR2 | |
| OBSERVING_FACILITY_CODE | NUTS Code of the spatial entity | | VARCHAR2 | |
| OBSERVING_FACILITY_NAME | name of the spatial entity | | VARCHAR2 | |
| PHENOMEN_TIME | temporal coverage of the measurements | | VARCHAR2 | duration/ending datetime (ISO- 8601 datetime intervals) |
| REFERENCE_TIME | Alias datetime assigned to the measurement | | DATE | yyyy-MM-dd |
| VALUE | value | | NUMBER | |
| UOM | unit of measure | | VARCHAR2 | |
| NUTS_LEVEL | Hierarchy level of the NUTS unit | | NUMBER | |
| SECTOR_ID | SECTOR_ID | | NUMBER | |

DATA ORIGIN

Emissions from the European Union's Horizon 2020 project "Prototype System for a Copernicus CO2 Service" (CoCO2) used and in the project "High resolution greenhouse gas emissions from Copernicus services for states, counties and cities Germany" (HoTC) processed by DWD and FU Berlin.

Source: Copernicus/TNO HoTC project (DWD, FU Berlin)

VALIDATION AND UNCERTAINTY ESTIMATE

For consistency, the emission figures are given with one decimal place, i.e. rounded to the nearest 100 t.

UNCERTAINTIES

The best estimate at the time the dataset was created is given. Uncertainty may exceed reported accuracy.

CONSIDERATIONS FOR APPLICATIONS

This research data is similar, but not identical to the official UBA data.

The annual change due to emission reductions must be derived from the data, which were created using the same method over all years under consideration.

ADDITIONAL INFORMATION

The Federal Environment Agency (UBA) is responsible for compiling Germany's greenhouse gas inventories, e.g. for the national inventory report (NIR) for reporting under the United Nations Framework Convention on Climate Change and for the Paris Agreement. The internationally defined guidelines are observed. The UBA data can be obtained via https://www.umweltbundesamt.de/.

LITERATURE

D2.2 Prior Emission Data set (PED) 2021

EMEP/EEA air pollutant emission inventory guidebook - 2013 7. Spatial mapping of emissions

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REVISION HISTORY

This document is maintained by Deutscher Wetterdienst, Referat Emissionsverifikation Treibhausgase (KU22), last edited at 2023-07-24.