



Miguel ARIAS CAÑETE Member of the European Commission

> Brussels, **30.09.16** Ares(2016)s3517055

Dear Ms Gjerskov,

Thank you for your letter of 13 June 2016 (ref. 16-000478-4) in which the Committee enquires about official data as publicly available via the UNFCCC and European Environmental Agency (EEA) websites, notably the amount of greenhouse gas (GHG) emissions per unit for selected agricultural product and the distribution of these emissions over each inhabitant.

As the Committee states, the information reported by each Member State in accordance with the reporting guidelines of the UNFCCC is included in the annual national inventory reports submitted to the UNFCCC. Based on the latest data (2016 submission, data for 2014), Table 1 in the Annex indicates the first set of items you requested (for Denmark, the EU-28 as well as selected four other Member States).

In accordance with the relevant reporting guidelines (<u>Decision 24/CP.19</u>, using the methodologies provided by the 2006 IPCC guidelines on the preparation of GHG inventories<sup>1</sup>), the relevant information on emissions is provided at disaggregated level in common reporting format (CRF) tables. Data on methane emissions from enteric fermentation and methane and nitrous oxide emissions from manure management is provided by Member States, reported disaggregated at the level of subcategories (cattle, swine, sheep, other).

In Table 2 (Annex) you will find a compilation of per capita emissions from enteric fermentation (cattle and swine) and manure management (cattle and swine), in  ${\rm CO_2}$  eq. per capita, calculated and published by the EEA. The GHG emissions data is taken from the latest submission (2016 submission, data for 2014) by Member States on their GHG inventories under the Monitoring Mechanism Regulation, and the population data for 2014 is taken from the Eurostat database.

I hope you will find this information useful and wish the Committee success in their research work about the linkage between the agricultural sector and greenhouse gas emission reduction.

Yours sincerely,

Parliament of/Denmark
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<sup>&</sup>lt;sup>1</sup> Inventory data for the agriculture sector is reported in accordance with Volume 4 of the IPCC guidelines Agriculture, Forestry and Other Land Use, available at <a href="http://www.ipcc-nggip.iges.or.ip/public/2006gl/vol4.html">http://www.ipcc-nggip.iges.or.ip/public/2006gl/vol4.html</a>

## ANNEX

Table 1: Emission factors per animal.

		Enteric fermentation	Manure management	Manure management
		kg CH4/head/year	kg CH4/head/year	kg N20/head/year
DK	Dairy cows	154,62	30,37	1,03
	Non-dairy cows	37,66	12,82	0,35
	Pigs	1,12	4,36	0,07
FR	Dairy cows	122,18	23,3	0,15
	Non-dairy cows	50,77	2,5	0,09
	Pigs	0,79	4,74	0
DE	Dairy cows	135,54	20,59	0,78
	Non-dairy cows	43,34	6,93	0,4
	Pigs	1,13	4,03	0,08
SE	Dairy cows	134,39	8,82	0,77
	Non-dairy cows	54,62	3,71	0,26
	Pigs	1,5	1,29	0,07
PL	Dairy cows	119,86	11,64	0,58
	Non-dairy cows		2,16	0,24
	Pigs	1,5	1,99	0,08
EU28	Dairy cows	160,03	26,141	0,72
	Non-dairy cows	56,66	6,39	0,25
	Pigs	1,21	5,75	0,05

Source: CRF tables submitted by selected Member States to the UNFCCC.

## Link

http://unfccc.int/national reports/annex i ghg inventories/national inventories\_submissions/it ems/9492.php

- For Enteric fermentation (CH4): Table3.As1;
- For Manure management (CH4): Table3.B(a)s1;
- For Manure management (N20): Table3.8(b).

Table 2: Per capita emissions from enteric fermentation and manure management (cattle and swine) in the EU-28 Member States in 2014 (in tons of CO2 equivalent/capita)

Member State	Emissions per capita - 2014 - in tons of CO <sub>2</sub> equivalent/capita (for GHG inventory categories 3.I.A.1, 3.I.A.3, 3.I.B.1 and 3.I.B.3)
Austria	0.55
Belgium	0.55
Bulgaria	0.23
Croatia	0.24
Cyprus	0.34
Czech Republic	0.41
Denmark	1.10
Estonia	0.49
EU28	0.42
Finland	0.45
France	0.57
Germany	0.41
Greece	0.17
Hungary	0.25
Iceland	0.43
Ireland	2.44
Italy	0.24
Latvia	0.49
Lithuania	0.64
Luxembourg	0.89
Malta	0.10
The Netherlands	0.71
Poland	0.38
Portugal	0.38
Romania	0.30
Slovakia	0.23
Slovenia	0.55
Spain	0.35
Sweden	0.33
United Kingdom	0.36

Source: EEA data viewer, extracted on 2 August 2016

Link: http://www.eea.europa.eu/data-and-maps/data/data-vi

## <u>viewer</u>

Data on greenhouse gas emissions and removals, reported by Member States under the EU Greenhouse Gas Monitoring Mechanism. This data set reflects the GHG inventory data for 2016 as reported under the United Nations Framework Convention for Climate Change in 2016.

Data is presented in t  $CO_{2eq}$ /capita for inventory categories 3.A.1. Enteric fermentation-Cattle; 3.A.3. Enteric fermentation – Swine; 3.B.1. Manure management- Cattle; 3.B.3. Manure management- Swine