

**WRITTEN QUESTION TO THE MINISTER FOR PLANNING AND ENVIRONMENT
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ANSWER TO BE TABLED ON TUESDAY 15th MARCH 2011**

Question

Given that Jersey has been a signatory since the 7th March 2007 of the Kyoto Protocol which sets binding targets to reducing greenhouse gas (GHG) emissions amounting to an average of five per cent against 1990 levels over the five-year period 2008-2012, what did Jersey report to the UK as its annual emissions of the following six categories of greenhouse gases since 2007?

- Carbon dioxide (CO₂);
- Methane (CH₄);
- Nitrous oxide (N₂O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulphur hexafluoride (SF₆)

Answer

The Island has reported its emissions information to the agency (AEA1) that collates the UK's information where the historical and current data was aggregated into the total UK carbon emissions. Because until 2009, the data Jersey provided was not available separately, the Statistics Unit made provisional carbon estimates based on the carbon emitted from imported energy and published these annually in the Jersey Energy Trends Report.

However, in late 2009 Jersey's emissions data was disaggregated and made available to the Island. The data is very similar to the provisional estimates made by the Statistics Unit but is more comprehensive and categorised in source and sink categories according to the International Panel on Climate Changes Guidelines for National Greenhouse Gas Inventories.

The data set as provided to us by AEA up to and including 2009 is as follows with the Units expressed in Mt CO₂ equivalents:

¹ <http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html> (Source AEA Technology on behalf of the Department for Energy and Climate Change)

Greenhouse Gas	IPCC Sector	Sector name	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Carbon Dioxide	1A1a	Power Stations	0.2920	0.2797	0.2163	0.2417	0.2350	0.1283	0.0978	0.0833	0.0331	0.0493	0.0313	0.0369
	1A2f	Industrial Combustion	0.0397	0.0452	0.0634	0.0602	0.0439	0.0515	0.0491	0.0496	0.0494	0.0510	0.0483	0.0491
	1A3a	Aviation	0.0393	0.0389	0.0384	0.0410	0.0424	0.0485	0.0493	0.0486	0.0486	0.0492	0.0483	0.0485
	1A3b	Road transport	0.1307	0.1280	0.1240	0.1281	0.1167	0.1268	0.1279	0.1264	0.1264	0.1251	0.1221	0.1204
	1A4a	Commercial	0.0618	0.0690	0.0761	0.0949	0.0614	0.0625	0.1314	0.1139	0.0637	0.0790	0.0575	0.0602
	1A4b	Domestic	0.0993	0.1049	0.1136	0.1343	0.1032	0.1035	0.1066	0.1027	0.0985	0.0994	0.0980	0.0982
	5G	Land use, land use change and forestry	-0.0039	-0.0028	-0.0008	-0.0006	-0.0011	-0.0028	-0.0046	-0.0006	-0.0006	-0.0023	-0.0006	-0.0003
Carbon Dioxide Total			0.6587	0.6628	0.6311	0.6997	0.6015	0.5182	0.5574	0.5239	0.4167	0.4486	0.4037	0.4130
Methane	1A1a	Power Stations	0.0007	0.0007	0.0006	0.0007	0.0007	0.0006	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005
	1A2f	Industrial Combustion	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1A3a	Aviation	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	1A3b	Road transport	0.0010	0.0009	0.0008	0.0008	0.0006	0.0006	0.0005	0.0005	0.0004	0.0004	0.0004	0.0003
	1A4a	Commercial	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0004	0.0003	0.0002	0.0002	0.0002	0.0002
	1A4b	Domestic	0.0014	0.0014	0.0012	0.0012	0.0010	0.0010	0.0010	0.0008	0.0008	0.0008	0.0008	0.0007
	4A1	Enteric fermentation - cattle	0.0123	0.0123	0.0123	0.0123	0.0123	0.0126	0.0123	0.0107	0.0107	0.0097	0.0092	0.0089
	4A3	Enteric fermentation - sheep	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
	4A4	Enteric fermentation - goats	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4A6	Enteric fermentation - horses	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002
	4A8	Enteric fermentation - pigs	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4B1	Wastes - cattle	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0037	0.0037	0.0033	0.0032	0.0029
	4B3	Wastes - sheep	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4B4	Wastes - goats	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4B6	Wastes - horses	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4B8	Wastes - pigs	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	4B9	Wastes - poultry	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
6B2	Waste water treatment	0.0011	0.0011	0.0011	0.0012	0.0011	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	
Methane Total			0.0211	0.0211	0.0209	0.0209	0.0204	0.0207	0.0203	0.0179	0.0164	0.0158	0.0152	0.0161
Nitrous Oxide	1A1a	Power Stations	0.0015	0.0015	0.0014	0.0015	0.0015	0.0012	0.0011	0.0011	0.0010	0.0010	0.0009	0.0009
	1A2f	Industrial Combustion	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	1A3a	Aviation	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	1A3b	Road transport	0.0022	0.0019	0.0018	0.0018	0.0016	0.0018	0.0016	0.0015	0.0014	0.0013	0.0012	0.0011
	1A4a	Commercial	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0004	0.0004	0.0002	0.0003	0.0003	0.0002
	1A4b	Domestic	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
	4B14	Agriculture	0.0047	0.0047	0.0048	0.0047	0.0047	0.0048	0.0048	0.0048	0.0042	0.0036	0.0035	0.0034
	6B2	Waste water treatment	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nitrous Oxide Total			0.0095	0.0093	0.0091	0.0093	0.0089	0.0090	0.0088	0.0081	0.0071	0.0069	0.0065	0.0067
HFCs Total			0.0034	0.0051	0.0068	0.0090	0.0102	0.0120	0.0137	0.0157	0.0169	0.0177	0.0184	0.0187
PFCs Total			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SF6 Total			0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0003	0.0005	0.0003
Grand Total			0.6928	0.6983	0.6679	0.7390	0.6411	0.5600	0.6004	0.5658	0.4573	0.4893	0.4443	0.4548

Greenhouse Gas	IPCC Sector	Sector name	2007	2008	2009
Carbon Dioxide	1A1a	Power Stations	0.0797	0.0382	0.0374
	1A2f	Industrial Combustion	0.0459	0.0468	0.0468
	1A3a	Aviation	0.0491	0.0505	0.0423
	1A3b	Road transport	0.1186	0.1214	0.1210
	1A4a	Commercial	0.0976	0.0533	0.0533
	1A4b	Domestic	0.1016	0.0984	0.0984
	5G	Land use, land use change and forestry	0.0002	0.0002	0.0002
Carbon Dioxide Total			0.4928	0.4088	0.3994
Methane	1A1a	Power Stations	0.0005	0.0004	0.0004
	1A2f	Industrial Combustion	0.0000	0.0000	0.0000
	1A3a	Aviation	0.0001	0.0001	0.0000
	1A3b	Road transport	0.0003	0.0003	0.0002
	1A4a	Commercial	0.0003	0.0001	0.0001
	1A4b	Domestic	0.0006	0.0006	0.0006
	4A1	Enteric fermentation - cattle	0.0098	0.0085	0.0084
	4A3	Enteric fermentation - sheep	0.0001	0.0001	0.0001
	4A4	Enteric fermentation - goats	0.0000	0.0000	0.0000
	4A6	Enteric fermentation - horses	0.0002	0.0003	0.0003
	4A8	Enteric fermentation - pigs	0.0000	0.0000	0.0000
	4B1	Wastes - cattle	0.0033	0.0028	0.0028
	4B3	Wastes - sheep	0.0000	0.0000	0.0000
	4B4	Wastes - goats	0.0000	0.0000	0.0000
	4B6	Wastes - horses	0.0000	0.0000	0.0000
	4B8	Wastes - pigs	0.0002	0.0001	0.0001
	4B9	Wastes - poultry	0.0001	0.0001	0.0001
	6B2	Waste water treatment	0.0012	0.0012	0.0012
	Methane Total			0.0166	0.0146
Nitrous Oxide	1A1a	Power Stations	0.0010	0.0009	0.0009
	1A2f	Industrial Combustion	0.0001	0.0001	0.0001
	1A3a	Aviation	0.0005	0.0005	0.0004
	1A3b	Road transport	0.0010	0.0010	0.0009
	1A4a	Commercial	0.0003	0.0002	0.0002
	1A4b	Domestic	0.0002	0.0002	0.0002
	4B14	Agriculture	0.0038	0.0033	0.0032
	6B2	Waste water treatment	0.0000	0.0000	0.0000
Nitrous Oxide Total			0.0070	0.0062	0.0060
HFCs Total			0.0190	0.0191	0.0187
PFCs Total			0.0000	0.0000	0.0000
SF6 Total			0.0002	0.0001	0.0001