

Greenhouse gas (GHG) emission data to 2008/09

We have been publicly reporting our GHG emissions since 2002/03, however, in 2008 the UK water industry introduced a new carbon accounting methodology* for calculating operational emissions. From 2007/08 our regulator, OFWAT, has required us, and all other water companies, to report annually on our GHG emissions. We used the industry method* in 2007/08 and 2008/09 to calculate emissions.

Total carbon dioxide (CO₂) equivalent emissions (tonnes CO₂e) for Severn Trent Water's Regulated Business

GHG Source	Tonnes CO ₂ equivalent	
	2007/08	2008/09
Drinking water treatment and pumping	251,683	253,027
Sewage treatment and pumping	187,108	203,405
Sludge recycling and disposal	276,073	230,233
Administration	25,300	12,337
Transport	17,059	18,573
Total Emissions	757,223	717,575

GHG emissions per Mega litre (MI) of water handled	Tonnes CO ₂ equivalent/MI	
	2007/08	2008/09
Drinking Water - emissions per MI (from treatment and pumping)	0.365	0.374
Sewage Treatment - emissions per MI (from and pumping and sludge treatment, recycling and disposal)	0.822	0.810

* Figures derived from the *Carbon accounting in the UK Water Industry: methodology for estimating operational emissions* (Report Ref 08/CL/01/5)

Below are previous years' figures. These cannot be used as a direct comparison with 2007/08 and 2008/09 data due to the change in methodology. However, they do provide a rough guide to past trends.

Total carbon dioxide (CO₂) emissions (tonnes of CO₂)

Source	2002/03	2003/04	2004/05	2005/06
Petrol Used	2,764	2,522	2,143	1,832
Diesel Used	14,827	13,632	12,023	14,028
Air and Travel (estimated allowance)	79	50	99	43
Heating Oil / Kerosene	7,845	11,584	8,285	12,759
Natural Gas	11,872	16,055	14,870	13,141
Electricity Purchase	363,565	381,238	365,776	363,857
Sub Total	400,952	425,081	403,196	405,660
Credit for exported renewable energy	-11,644	-9,179	-15,377	-19,870
Total of Energy	389,308	415,902	387,819	385,790
Carried forward and rounded	389,300	415,900	387,800	385,800
Estimated vented methane emissions	47,800	41,300	37,500	35,000
Total	437,100	457,200	425,300	420,800

The following emission streams should be included to determine an overall equivalent CO₂ emission value for all the Company's activities:

Source	2002/03	2003/04	2004/05	2005/06
Carried forward	437,100	457,200	425,300	420,800
CO ₂ from Grafham Carbons	600	600	2,300	2,162
CO ₂ from sewage treatment	89,100	95,400	87,200	90,000
CO ₂ in sludge biogas	67,400	58,200	52,800	49,000
CO ₂ from methane combustion	119,000	102,800	93,200	86,500
CO ₂ from sludge incineration	23,400	20,900	22,100	15,900
TOTAL	736,600	735,100	682,900	664,362
Yearly % change	+4.2%	-0.2%	-7.1%	-2.8