

Climate change data

We have been publicly reporting on our GHG emissions since 2002/03, however, in 2008 the UK water industry introduced a new carbon accounting methodology for operational emissions. Our regulator, OFWAT, requires us, and all other water companies, to use this methodology in our June Return submissions. We will now be using this method in the future.

Total Carbon Dioxide (CO₂) Equivalent Emissions (tonnes CO₂) for Severn Trent Water's Regulated Business

GHG Source	2007/08 (tonnes of CO ₂ equivalents)*
Drinking water treatment and pumping	251,683
Sewage treatment and pumping	187,108
Sludge recycling and disposal	276,073
Administration	25,300
Transport	17,059
Total Emissions	757,223

GHG Emissions per Mega litre (MI) of Water Handled	2007/08 (tonnes of CO ₂ equivalents)*
Drinking Water - emissions per MI (from treatment and pumping)	0.365
Sewage Treatment - emissions per MI (from and pumping and sludge treatment, recycling and disposal)	0.822

* 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, however, these cannot be used as a direct comparison with 2007/08 as the new methodology uses a different GHG emissions factor for grid electricity and includes additional sources of emissions. However, they do provide a rough guide to past trends.

Total Carbon Dioxide (CO₂) Emissions (tonnes as 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