

Greenhouse gas (GHG) emission data for 2011/12

The Table below shows Severn Trent Water Ltd's total GHG emissions in tonnes carbon dioxide equivalent (tCO₂e) for the period 1 April 2011 to 31 March 2012. We have also presented the renewable energy generation and emission benefits for the regulated business for the year. 2011/12 was the fifth year that our financial regulator, Ofwat, asked us to report on our GHG emissions. This year we were only required to report our net greenhouse gas emissions to Ofwat as a regulatory KPI. However we continue to publish our emissions annually broken down in line with the Defra Guidance.

This year our gross GHG emissions reduced by 6%. The primary reasons for the change are a reduction in grid electricity emissions (due partly to improved metering, partly to reduced consumption and partly to reduced grid emissions intensity) and lower wastewater process emissions attributed to the dry weather which has reduced the volume of wastewater and sludge we dealt with this year. The amount of renewable electricity we generated increased this year by 4.4 GWh to 195.3 GWh.

Our net emissions also decreased by 6% since last year to 521.7 ktCO₂e. This compares against our Business Plan forecast for net emissions of 564.8 ktCO₂e per year by 2014-15.

Operational GHG emissions per MI of treated water have decreased this year from 0.385 t per MI in 2010/11 to 0.382 t per MI in 2011/12. Operational GHG emissions per ML of sewage treated (measured by the flow reaching full treatment) have also decreased this year from 0.285 t per MI in 2010/11 to 0.240 t per MI in 2011/12.

Operational Greenhouse Gas Emissions*	Tonnes CO ₂ e
Scope 1 Emissions (Direct Emissions)	
Direct emissions from burning of fossil fuels (including natural gas CHP generated onsite)	13,088
Process and fugitive emissions	126,703
Transport: Company owned or leased vehicles	13,418
Scope 2 Emissions (Indirect Emissions - Purchased Electricity)	
Total grid electricity used by company (including CHP electricity purchased)	386,530
Scope 3 Emissions (Indirect Emissions – Other)	
Business travel on public transport and private vehicles used for company business	1,363
Outsourced activities (if not included in Scope 1 or 2) Energy and other	4,395
Total Annual Gross Operational Emissions	545,496
Exported Renewable Energy (generated on site and exported)	(23,768)
Total Annual Operational Emissions (net of export)	521,728
Self Supplied Renewable Energy (generated and used on site)	(78,695)
Total Annual Operational Emissions (net of self supplied and exported)	443,032

Annual operational GHG intensity ratio values	t CO ₂ /MI
Operational GHG emissions per MI of treated water	0.382
Operational GHG emissions per MI of sewage treated (Flow to full treatment)	0.240
Operational GHG emissions per MI of sewage treated (Water distribution input)	0.442

Renewable energy generated	GWh	Displaced t CO ₂
Self Supplied	150.0	(78,695)
Exported	45.3	(23,768)

Previous years data are available from our website: (<http://www.stwater.co.uk/category/198>)

*Figures derived from the *Carbon accounting in the UK Water Industry: methodology for estimating operational emission, Version 6.1.* (April 2012)