

## Greenhouse gas (GHG) emission data for 2012/13

The Table below shows Severn Trent Water Ltd's total GHG emissions in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) for the period 1 April 2012 to 31 March 2013. This is the eleventh year we have reported our GHG emissions performance. Each year, we report on our emissions as a regulatory KPI in our [regulatory performance report](#). Here we break down our emissions in more detail as set out in Defra Guidance. We have also presented the renewable energy generation and emission benefits for the regulated business for the year.

This year our gross GHG emissions reduced by 0.3%. The primary reason for the reduction was a decrease in our process emissions, attributed to the exceptionally wet weather this year which has reduced the sludge content reaching our digesters compared to average conditions. This had two effects. It reduced the process emissions at our works by 7.8 ktCO<sub>2</sub>e but it also led to a reduction in renewable energy generated from Sludge, which was 3 GWh lower than in 2011/12.

Our total grid electricity consumption was 14.5 GWh higher than 2011/12 (equivalent to an increase of 9.3 ktCO<sub>2</sub>e) due to increased consumption required to pump wastewater. Electricity consumption in Water Services, however, was 31 GWh lower than last year, partly due to energy efficiency work. Given our current performance we expect to outperform our net GHG emissions business plan target of 564.8 ktCO<sub>2</sub>e per year by 2014-15.

Operational GHG emissions per MI of treated water reduced from 0.38 t per MI in 2011/12 to 0.37 t per MI in 2012/13. GHG emissions per MI of sewage treated (measured by the flow reaching full treatment) were markedly lower than last year at 0.20 t per MI in 2012/13, compared to 0.24 t per MI in 2011/12, demonstrating the impact of the heavy rainfall in 2012.

Operational Greenhouse Gas Emissions*	Tonnes CO <sub>2</sub> e
<b>Scope 1 Emissions (Direct Emissions)</b>	
Direct emissions from burning of fossil fuels	13,661
Process and fugitive emissions	118,876
Transport: Company owned or leased vehicles	13,971
<b>Scope 2 Emissions (Indirect Emissions - Purchased Electricity)</b>	
Total grid electricity used by company (including CHP electricity purchased)	392,719
<b>Scope 3 Emissions (Indirect Emissions – Other)</b>	
Business travel on public transport and private vehicles used for company business	1,297
Outsourced activities (if not included in Scope 1 or 2) Energy and other	3,705
<b>Total Annual Gross Operational Emissions</b>	<b>544,230</b>
Exported Renewable Energy (generated on site and exported)	(23,812)
<b>Total Annual Operational Emissions (net of export)</b>	<b>520,418</b>

Annual operational GHG intensity ratio values*	t CO <sub>2</sub> /unit
Operational GHG emissions per MI of treated water	0.371
Operational GHG emissions per MI of sewage treated (Flow to full treatment)	0.205
Operational GHG emissions per person supplied with treated water	0.031
Operational GHG emissions per person supplied with sewage services	0.027

Renewable energy generated	GWh	Displaced t CO <sub>2</sub>
Self Supplied	146.6	(76,270)
Exported	45.8	(23,812)

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

\*Figures are derived from the *Carbon accounting in the UK Water Industry: methodology for estimating operational emission, Version 7. (March 2013)*. From 2013/14, we will report in line with the new [Defra Emissions factors](#) released in June 2013. This will entail restating previous years' emissions to account for the restatement of factors.