

Greenhouse gas (GHG) emission data for 2013-14

The table below shows Severn Trent Water Ltd's total GHG emissions in tonnes of carbon dioxide equivalent (tCO₂e) for the period 1 April 2013 to 31 March 2014. This is the twelfth year we have reported our GHG emissions performance. Each year, we report on Severn Trent Water emissions as a regulatory KPI in our [regulatory performance report](#). We also report our direct emissions from Severn Trent plc in our [Annual Report and Accounts](#), in line with the new mandatory reporting requirement. Here we break down our emissions for Severn Trent Water in more detail, as set out in the Defra Guidance.

Our GHG emissions for Severn Trent Water in 2013-14 were 1% higher than in 2012-13. This was primarily due to an increase in process emissions from sludge treatment and a decrease in the amount of renewable electricity generated compared to 2012-13. However our total use of electricity from the national grid reduced by 4 GWh compared to 2012-13, resulting in a reduction of 2.7 ktCO₂e compared to 2012-13.

Operational Greenhouse Gas Emissions*	Tonnes CO ₂ e
Scope 1 Emissions (Direct Emissions)	
Direct emissions from burning of fossil fuels	12,290
Process and fugitive emissions	134,506
Transport: Company owned or leased vehicles	14,453
Scope 2 Emissions (Indirect Emissions - Purchased Electricity)	
Total grid electricity used by company (including CHP electricity purchased)	333,721
Scope 3 Emissions (Indirect Emissions – Other)	
Business travel on public transport and private vehicles used for company business	1,456
Outsourced sludge transportation	4,583
Total grid electricity used by company (including CHP electricity purchased) – Transmission and Distribution	28,534
Total Annual Gross Operational Emissions	529,543
Exported Renewable Energy (generated on site and exported)	(18,638)
Total Annual Operational Emissions (net of export)	510,905

Annual operational GHG intensity ratio values*	t CO ₂ /unit
Operational GHG emissions per Ml of treated water	0.336
Operational GHG emissions per Ml of sewage treated (Flow to full treatment)	0.231

Renewable energy generated by Severn Trent Water	GWh	Displaced t CO ₂
Self Supplied	143.2	(69,247)
Exported	41.8	(18,638)

*Figures are derived from the Carbon accounting in the UK Water Industry: methodology for estimating operational emission, Version 8.1. (March 2014). Previous years' data are available from our website: (<http://www.stwater.co.uk/category/198>)

Note; in line with Defra's guidance accompanying the revised emissions factors released in June 2013, we have recalculated our greenhouse gas emissions for the previous four years. This has been done to account for Defra's restatement in historic electricity grid emissions factors, which aligns the grid factor with annual generation, rather than using a 5-year rolling average factor as for previous years. As specified in [Defra guidance](#) released in April 2014, we have applied the factors applicable to the greatest amount of data, for example we have used the 2009 factor to recalculate the 2009-10 financial year emissions. For 2013-14, the latest available factor, that for 2013, was used. Our restated performance on this basis is shown in the table below:

	2009-10	2010-11	2011-12	2012-13	2013-14
Severn Trent Water Net operational emissions	560,244	541,199	500,009	505,059	510,905
t CO₂e (restated)					