

	2010	2013	2014	2015*	2015**
<b>Energy million GJ</b>					
Total energy	18.38	17.59	16.55	16.27	0.98
Natural gas	8.67	8.96	8.26	8.18	0.43
Coal	0.78	0.49	0.38	0.32	0.00
Steam / hot Water	0.15	0.11	0.11	0.11	0.10
Electricity	7.99	7.09	6.75	6.67	0.43
Other fuels	0.79	0.52	0.49	0.44	0.01
Energy from biomass	n/a	0.41	0.56	0.56	0.00
Energy from solar photovoltaic (PV) cells	n/a	n/a	0.01	0.01	0.00
Energy from wind	n/a	n/a	0.05	0.08	0.00
Electricity from biogas	n/a	n/a	0.00	0.01	0.00
<b>Scope 1 and 2 Emissions thousand tonnes CO<sub>2</sub>e</b>					
Total Scope 1 & 2 emissions	1,974	1,829	1,596	1,565	85
Total Scope 1 emissions	1,011	1,041	851	862	23
On-site fuel use	570	538	490	477	23
Sales force vehicles	165	177	131	136	
Inhaler propellant losses (emissions)	214	254	169	222	
Waste treatment related releases (emissions)	17	24	22	14	
Refrigerant gas losses (equip >1kg refrigerant)	11	12	12	12	
Direct CO <sub>2</sub> releases from production	30	35	0	1	
Other releases (emissions)	4	0	0	0	
Total Scope 2 emissions	962	788	745	703	62
Electricity	951	780	738	696	48
Steam / hot water	12	8	7	7	14
Fermentation / biogenic releases	n/a	n/a	27	50	
<b>Scope 3 Emissions thousand tonnes CO<sub>2</sub>e</b>					
Total Scope 3 emissions	4,912	5,595	5,734	5,600	
Emissions from use of propellant based inhalers by patients	4,647	5,302	5,411	5,262	
Product logistics	169	202	229	236	
Business travel by air	96	90	94	102	
<b>Ozone Depleting Substances kg CFC 11 equivalent</b>					
ODS contained in equipment	7,794	3,275	3,079	3,072	
ODS releases from equipment	214	88	83	83	
<b>Water Use million m<sup>3</sup></b>					
Water usage	18.7	15.7	15.2	14.0	1.0
Municipal	11.7	10.2	10.2	9.7	1.0
Ground water	6.8	5.2	4.7	4.0	0.0
Surface water	n/a	0.1	0.1	0.1	0.0
Tankers	n/a	0.2	0.3	0.2	0.0
Other sources	0.2	0.0	0.0	0.0	0.0
Recycled sources	0.5	0.3	0.2	0.2	0.0

	2010	2013	2014	2015*	2015**
<b>Industrial Water Discharge million m<sup>3</sup></b>					
Total wastewater discharged	10.2	9.3	11.6	10.3	0.6
Municipal sewer	5.5	5.7	6.9	6.0	0.4
Surface water	4.4	3.1	4.0	3.4	0.2
Recycling	0.4	0.2	0.2	0.1	0.0
Other	0.0	0.2	0.5	0.8	0.0
<b>Waste Generated thousand tonnes</b>					
Total waste generated	178	166	158	134	5
Total beneficial use waste	126	118	118	101	2
Total beneficial use hazardous waste	21	16	17	16	0
Total beneficial use non-hazardous waste	106	102	101	85	2
Total non-beneficial use waste	52	47	40	33	3
Total non-beneficial use hazardous waste	32	34	28	21	1
Total non-beneficial use non-hazardous waste	20	14	13	12	1
<b>Waste to Landfill thousand tonnes</b>					
Total waste landfill	17.2	10.7	9.5	6.9	0.5

## Footnotes

2015\* The like-for-like GSK site data for comparison with previous years back to 2010

2015\*\* The data for the sites acquired as part of the exchange with Novartis covering the period March to November 2015

- 1 December 2015 values include estimated data when actual data were not available in time for publication
- 2 As a result of the transaction with Novartis and the new Joint Venture, eight sites joined GSK in March 2015. Their data has been excluded so we can properly demonstrate the impact of our carbon, water and waste programmes since 2010. The partial year data from these former Novartis sites are listed in a separate column
- 3 Environmental data is not collected for small commercial offices and warehouses based on materiality. The published data covers approximately 96% of our impacts
- 4 Carbon emissions are calculated as CO<sub>2</sub> equivalent according to the Greenhouse Gas Protocol
- 5 Carbon emission factors for electricity and steam are taken from the *International Energy Agency Statistics - CO<sub>2</sub> from Fuel Combustion 2014 edition*. Carbon emission factors for combustion of natural gas, coal and other fuels are taken from the GHG Protocol – GHG emissions from stationary combustion 3.1 March 2008
- 6 Energy and climate change impact for Sales force travel, business travel and transport by air, land and sea are calculated *based on distance travelled, not directly on fuel use*. In 2015 we added in-country distribution and the impact of sending packages by courier to our logistics emissions
- 7 We are estimating the impact of releases of refrigerant in ancillary equipment based on inventory data from 2014
- 8 From 2014 we separated out biogenic carbon emissions e.g. from fermentation processes in line with guidance from the GHG protocol
- 9 Recycled water is not included in total water use data
- 10 Beneficial use waste is defined as waste disposed with some environmental benefit i.e. recycling, re-use, or incineration with energy recovery. Non-beneficial use waste is defined as waste disposed by either incineration with no energy recovery, or sent to landfill