



## GSK Responsible Business Supplement 2015 - 2017

Our Planet: Detailed Data

	2010	2015	2016	2017	Assured by DNV GL (2017 data)
<b>Energy million GJ</b>					
<b>Total Energy</b>	<b>18.24</b>	<b>16.27</b>	<b>16.41</b>	<b>16.11</b>	✓
<i>Natural Gas</i>	8.67	8.18	8.43	8.07	
<i>Coal</i>	0.78	0.32	0.29	0.25	
<i>Electricity</i>	7.85	6.50	6.41	6.40	
<i>Steam/Hot Water/Compressed Air/Chilled water</i>	0.15	0.20	0.26	0.28	
<i>Other Fuels</i>	0.79	0.45	0.38	0.37	
<i>Energy from biomass</i>		0.57	0.56	0.65	
<i>Energy from solar photovoltaic (PV) cells</i>		0.01	0.01	0.01	
<i>Energy from wind</i>		0.08	0.06	0.06	
<i>Electricity from biogas</i>		0.01	0.01	0.02	
<b>Scope 1 and 2 Emissions thousand tonnes CO<sub>2</sub>e</b>					
<b>Total Scope 1 &amp; 2 Emissions</b>	<b>1,974</b>	<b>1,615</b>	<b>1,589</b>	<b>1,558</b>	✓
<b>Total Scope 1 Emissions</b>	<b>1,011</b>	<b>885</b>	<b>889</b>	<b>865</b>	✓
<i>On-site fuel use</i>	570	499	483	461	
<i>Sales force vehicles</i>	165	135	150	147	
<i>Inhaler Propellant Losses (Emissions)</i>	214	224	228	223	
<i>Waste Treatment Related Releases (Emissions)</i>	17	10	16	19	
<i>Refrigerant Gas Losses (Equip &gt;1kg refrigerant)</i>	11	12	12	14	
<i>Direct CO<sub>2</sub>e Releases from Production<sup>3</sup></i>	30	1	-	-	
<i>Other Releases (Emissions)<sup>3</sup></i>	4	0	-	-	
<b>Total Scope 2 Emissions</b>	<b>962</b>	<b>730</b>	<b>700</b>	<b>694</b>	✓
<i>Electricity</i>	951	722	689	682	
<i>Steam/Hot Water/Compressed Air/Chilled water</i>	12	9	11	12	
<i>Fermentation / Biogenic releases</i>	n/a	50	51	43	
<b>Complete Scope 3 Emissions thousand tonnes CO<sub>2</sub>e</b>					
1. Purchased goods and services	9,399	10,423	9,412		
2. Capital goods	386	400	351		
3. Fuel and energy related activities	361	328	294		
4. Transportation and distribution (upstream)	84	91	82		
5. Waste generated in operations	51	29	25		
6. Business travel	206	200	219		
7. Employee commuting	217	173	197		
8. Leased assets (upstream)	6	1	1		
9. Transportation and distribution (downstream)	406	805	676		
10. Processing of sold products	-	-			
11. Use of sold products	5,481	6,115	6,524		
<i>Emissions from use of propellant based inhalers by patients</i>	4,647	5,132	5,447	5,530	✓
12. End of life	124	105	100		
13. Leased assets (downstream)	-	-			
14. Franchises	-	-			
15. Investments	53	19	15		
<b>Ozone Depleting Substances kg CFC 11 equivalent</b>					
ODS contained in equipment	7,794	3,079	3,079	1934	
ODS releases from equipment	214	83	83	53	

	2010	2015	2016	2017	Assured by DNV GL (2017 data)
<b>Water Use and Discharge</b>					
<b>Water Use Million m<sup>3</sup></b>					
<b>Water Usage</b>	<b>18.7</b>	<b>14.9</b>	<b>14.4</b>	<b>14.6</b>	✓
<i>Municipal</i>	11.7	10.6	9.9	10.2	
<i>Ground Water</i>	6.8	4.1	4.2	4.2	
<i>Surface Water</i>		0.0	0.0	0.0	
<i>Tankers</i>		0.2	0.2	0.2	
<i>Other Sources</i>	0.2	0.0	0.0	0.0	
<i>Recycled Sources</i>	0.5	0.2	0.3	0.1	
<b>Water Discharge Million m<sup>3</sup></b>					
<b>Total Wastewater Discharged</b>	<b>10.2</b>	<b>11.1</b>	<b>11.3</b>	<b>11.4</b>	✓
<i>Municipal Sewer</i>	5.5	6.5	6.5	6.2	
<i>Surface Water</i>	4.4	3.6	3.6	3.8	
<i>Land</i>	0.0	0.2	0.0	0.7	
<i>Other</i>	0.0	0.8	1.0	0.5	
<i>Recycling</i>	0.4	0.1	0.1	0.01	
<i>Recharged to Aquifer from Rainwater</i>	-	-	-	0.1	
<i>Recharged to Aquifer from Treated Effluent</i>	-	-	-	0.2	
<b>Waste</b>					
<b>Waste Generated thousand tonnes</b>					
<b>Total Waste Generated</b>	<b>178</b>	<b>142</b>	<b>137</b>	<b>137</b>	✓
<i>Total Beneficial Use Waste</i>	126	104	99	98	
<i>Total Beneficial Use Hazardous Waste</i>	21	17	19.4	19	
<i>Total Beneficial Use Non-Hazardous Waste</i>	106	88	79	79	
<i>Total Non-Beneficial Use Waste</i>	52	38	37	39	
<i>Total Non-Beneficial Use Hazardous Waste</i>	32	23	25	28	
<i>Total Non-Beneficial Use Non-Hazardous Waste</i>	20	14	12	11	
<b>Waste to Landfill thousand tonnes</b>					
<b>Total Waste Landfill</b>	<b>17.2</b>	<b>8.1</b>	<b>6.4</b>	<b>4.9</b>	✓

## Environmental Key Performance Indicators: Definitions and Methodology

KPI	Definition	Comment
<b>Reporting Boundary</b>	<p>The published environmental data covers facilities owned or leased by GSK and its joint venture partners over which GSK has full operational control, except for small commercial offices and distribution centres, who are not required to report environmental impacts unless one of the following criteria are met:</p> <ul style="list-style-type: none"> <li>• total energy usage &gt;4750 MWh per annum</li> <li>• total water in is &gt; 10,000 m<sup>3</sup> per annum</li> <li>• total waste generated &gt;250 tonnes per annum</li> </ul> <p>This ensures that GSK is reporting &gt; 95% of its environmental impacts.</p>	<p>GSK publish environmental data i.e. energy, GHG emissions scopes 1 and 2, water and waste data aligned with the calendar year. However, December 2017 values include estimates when actual data were not available in time for publication. Data for the calendar year 2016 has been restated to correct for December estimates during that reporting period.</p> <p>Our baseline year for environmental targets is 2010.</p>
<b>Energy</b>	This includes all purchased energy such as grid electricity, natural gas, coal, diesel and other fuels and renewably generated energy such as from solar, wind or biomass.	Energy data is based on invoice data from utility companies and meter readings.
<b>Water</b>	This includes all water supplied to GSK. Captured rainwater and recycled water are measured and reported but not included in the 'total water used' calculation.	Water data is based on invoice data from suppliers and meter readings at our sites.
<b>Waste water</b>	<p>This includes all waste water sent to a municipal sewer, discharged to surface water after treatment on site, waste water used for irrigation, waste water used to recharge aquifers in accordance with local regulations.</p> <p>Liquid waste such as waste solvents that contain water are reported separately as wastes.</p>	Waste water data is based on invoice data from utility companies, meter readings, or a calculation based on water use in the absence of a meter.
<b>Carbon emissions</b>	<p>GSK Scope 1 emissions cover emissions from the direct combustion of fuels on our sites to generate heat and electricity; emissions from our sales fleet vehicles; fugitive losses of propellant during the manufacturing of inhalers and losses from refrigerants used in ancillary equipment.</p> <p>GSK Scope 2 emissions include any purchased electricity, steam, compressed air and chilled water.</p> <p>GSK report all 15 Scope 3 categories as detailed in the Greenhouse Gas protocol. Scope 3 data were prepared by GSK and quality assured by the Carbon Trust.</p>	<p>Carbon emissions are calculated as CO<sub>2</sub> equivalent per the GHG Protocol Corporate Accounting and Reporting Standard.</p> <p>Carbon emission factors for electricity and steam are taken from the International Energy Agency Statistics - CO<sub>2</sub> from Fuel Combustion 2016 edition. Carbon emission factors for combustion of natural gas, diesel, coal and other fuels are taken from the UK Government emission conversion factors for greenhouse gas company reporting 2016 edition.</p> <p>GSK reports market-based Scope 2 emissions for facilities when there is evidence from the utility provider.</p> <p>Carbon emissions for sales force travel and business travel by air and are calculated based on distance travelled, not directly on fuel use.</p> <p>Carbon emissions from refrigerant losses are based on the quantities of refrigerant used to top up equipment.</p> <p>Biogenic emissions are reported separately but not included in the Scope 1 &amp; 2 total emissions.</p>

<b>Waste</b>	<p>'Waste generated' is the operational waste that leaves GSK boundaries.</p> <p>'Beneficial use' waste is defined as waste sent for recycling, re-use, or incineration with energy recovery.</p> <p>'Non-beneficial use' waste is defined as waste disposed by either incineration with no energy recovery, or sent to landfill.</p>	Waste data is based on invoices and waste transfer note data.
<b>Ozone depleting substances contained in equipment</b>	We report the ozone depleting potential for the total amount of ozone depleting substances contained in ancillary equipment as kg CFC-11 equivalents.	<p>The total amount of ozone depleting substances is based on site inventory data multiplied by the ozone depleting potential factors from the Intergovernmental Panel on Climate Change.</p> <p>We estimate the impact of fugitive losses for these refrigerants.</p>
<b>GSK reportable incident (see Our People section in the 2017 Responsible Business Supplement)</b>	<p>A GSK reportable injury or illness meets the following criteria:</p> <ol style="list-style-type: none"> <li>1. The affected individual is either a GSK employee or a complementary worker under direct GSK daily supervision; <i>and</i></li> <li>2. The incident is work related; <i>and</i></li> <li>3. The outcome has involved at least one of the following: <ul style="list-style-type: none"> <li>• A fatality;</li> <li>• Loss of consciousness;</li> <li>• Medical treatment beyond first aid;</li> <li>• A significant occupational injury or occupational illness diagnosed by a physician or other licensed health care professional;</li> <li>• Restricted days / change of job duties / days away from work;</li> </ul> <i>and</i> </li> <li>4. Must be a new case</li> </ol>	To be consistent in our global reporting, a GSK reportable injury or illness meets these listed criteria. These criteria are different from national regulatory reporting requirements which vary across the world.