

## GRI Data Table

The 2017 data indicated in **bold** form part of ERM CVS' assurance engagement. Their [Assurance Statement](#) can be found on the [GRI section](#) of Biogen 2017 Corporate Citizenship Report website.

	UNITS	2014	2015	2016	2017
<b>ABOUT BIOGEN</b>					
Revenue	Million USD	9,703	10,764	11,449	12,274
R&D Spend	Million USD	1,893	2,013	1,973	2,254
No. of Employees	#	7,550	7,350	7,400	7,300
Corporate Equality Index <sup>1</sup>	%	100	100	100	100
CDP Climate Change <sup>1</sup>	Score	81 C	96 C	B	A
CDP Water <sup>1</sup>	Score	N/A	B	B	A
Dow Jones Sustainability Index <sup>1</sup>	Score	80	79	80	83
<b>ENVIRONMENTAL IMPACT</b>					
<b>Climate</b>					
Scope 1 (fossil fuels and refrigerants)	Metric tons (MT) CO <sub>2</sub> e	55,965	60,179	61,970	<b>61,616</b>
Scope 2 Location-based method (electricity and steam)	MTCO <sub>2</sub> e	37,768	38,172	45,239	<b>41,653</b>
Scope 2 Market-based method (electricity and steam)	MTCO <sub>2</sub> e	390	187	156	<b>61</b>
Scope 3 <sup>2</sup>	MTCO <sub>2</sub> e	235,589	262,358	254,791	<b>482,237</b>
Purchased goods and services (category 1) <sup>3,4</sup>	MTCO <sub>2</sub> e	156,100	152,900	191,599	<b>396,055</b>
Capital goods (category 2) <sup>3,4</sup>	MTCO <sub>2</sub> e	19,700	47,700	16,664	<b>35,424</b>
Upstream/downstream energy and water-related activities (category 3)	MTCO <sub>2</sub> e	8,699	9,120	9,321	<b>10,530</b>
Waste generated in operations (category 5) <sup>5</sup>	MTCO <sub>2</sub> e	371	437	637	<b>573</b>
Business travel (category 6)	MTCO <sub>2</sub> e	20,990	21,506	17,542	<b>21,111</b>
Employee commuting (category 7) <sup>3</sup>	MTCO <sub>2</sub> e	17,188	15,947	8,549	<b>8,106</b>
Upstream leased assets (category 8)	MTCO <sub>2</sub> e	5,641	3,612	0	<b>0</b>
End of life treatment, sold products (category 12)	MTCO <sub>2</sub> e	6,900	11,136	10,479	<b>10,438</b>
Total Value Chain (Scopes 1, 2 Market and 3) <sup>3</sup>	MTCO <sub>2</sub> e	291,944	322,724	316,917	<b>543,914</b>
Absolute Value Chain Reduction from 2013 (Target: 35% by 2030) <sup>3</sup>	%	24	15	17	<b>-42</b>
<b>Carbon Neutrality</b>					
Renewable Electricity Certificates Retired <sup>6</sup> (for Biogen operations)	MWh	102,171	114,919	142,989	<b>130,128</b>
Renewable Electricity Certificates Retired <sup>4,6</sup>	MWh	190,455	217,282	227,015	<b>10,054</b>

(for Suppliers operations)					
Carbon Offsets <sup>7</sup>	MTCO2e	291,944	322,724	316,917	<b>69,783</b>
Net Operational Emissions (Scopes 1 & 2)	MTCO2e	0	0	0	<b>0</b>
<b>Energy</b>					
Total Energy	MWh	392,638	427,717	465,007	<b>450,850</b>
Total Energy (non-renewable)	MWh	290,468	312,798	322,018	<b>320,726</b>
Fossil Fuels (gas, oil, diesel, gasoline)	MWh	289,687	312,328	321,374	<b>320,480</b>
District Steam	MWh	285	292	644	<b>239</b>
Electricity (non-renewable)	MWh	496	178	0	<b>7</b>
Electricity (renewable) <sup>6</sup>	MWh	102,171	114,919	142,988	<b>130,124</b>
Renewable Energy (% of Total Electricity)	%	100	100	100	<b>100</b>
Renewable Energy (% of Total Energy)	%	26	27	31	<b>29</b>
Fleet Efficiency (US Only)	g CO2e / mile	368	365	375	<b>397</b>
<b>Water</b>					
Total Net Water Use	Million Cubic meters (m3)	0.82	0.94	1.11	<b>0.98</b>
Reused/Recycled Water <sup>8</sup>	%	13	10	8	<b>8</b>
Water Withdrawal	Million Cubic meters (m3)	0.73	0.86	1.03	<b>1.31</b>
Municipal Supply (potable & grey water)	Million Cubic meters (m3)	0.73	0.86	1.02	<b>0.90</b>
Fresh Surface Water	Million Cubic meters (m3)	0.00	0.00	0.01	<b>0.40</b>
Rainwater	Million Cubic meters (m3)	0.001	0.001	0.001	<b>0.001</b>
Water Discharges	Million Cubic meters (m3)	0.40	0.48	0.60	<b>0.94</b>
Fresh Surface Water	Million Cubic meters (m3)	0.00	0.00	0.00	<b>0.39</b>
Wastewater	Million Cubic meters (m3)	0.40	0.48	0.60	<b>0.54</b>
Biological Oxygen Demand in Wastewater Discharge	mg/L	383	508	472	<b>342</b>
Assessment of Water Withdrawal <sup>9</sup> (Target: 100% by 2019)	% of Major Facilities	33	25	50	<b>50</b>
Major Facilities with Fair Share of Water Withdrawal (Target: 100% by 2030)	% of Major Facilities	33	25	50	<b>50</b>

<b>Waste <sup>5</sup></b>					
Non-hazardous Waste <sup>10</sup>	Metric Tons	3,750	4,975	7,961	<b>7,606</b>
Waste Reused	Metric Tons	N/A	N/A	48	<b>31</b>
Waste Recycled	Metric Tons	884	949	1,123	<b>1,012</b>
Waste Composted	Metric Tons	1,372	1,802	3,543	<b>3,461</b>
Energy Recovery via Anaerobic Digestion	Metric Tons	33	43	57	<b>76</b>
Waste to Energy	Metric Tons	989	1,138	1,195	<b>1,014</b>
Incineration	Metric Tons	464	988	1,929	<b>1,990</b>
Waste to Landfill	Metric Tons	8	55	66	<b>21</b>
Waste to Landfill Diversion (Target: 100 percent each year)	%	100	99	99	<b>100</b>
Recovery & Recycling Rate (Reuse, Compost, Recycle)	%	61	56	60	<b>60</b>
Hazardous and Biohazardous Waste	Metric Tons	172	222	227	<b>211</b>
<b>SOCIAL IMPACT</b>					
<b>Community Engagement</b>					
Total Grants <sup>11</sup>	Million USD	6.2	5.2	4.9	<b>4.5</b>
Matching Gifts Program	Million USD	0.8	1.5	1.3	<b>1.7</b>
Care Deeply Day Volunteer Hours	Hours	10,500	14,000	12,000	<b>11,000</b>
STAR Initiative Investment <sup>12</sup> (Target: \$10M by 2022)	Million USD	N/A	N/A	N/A	<b>N/A</b>
<b>Diversity &amp; Inclusion</b>					
Total Diversity Spend <sup>13</sup>	Million USD	143	196	202	<b>153</b>
Total Diversity Spend of US Spend <sup>13</sup>	%	8	9	10	<b>8</b>
Women in Workforce	%	51.5	50.1	49.2	<b>49.6</b>
Women in Management <sup>14</sup>	%	47.2	47.3	47.7	<b>47.1</b>
Minorities in Management (US Only) <sup>14</sup>	%	24.9	26.4	26.5	<b>26.4</b>
Women on Executive Team	%	17	18	22	<b>25</b>
Women on Board of Directors	%	27	27	27	<b>27</b>
<b>Employee Development</b>					
Employee Satisfaction <sup>15</sup>	%	N/A	89	89	<b>89</b>
Management Effectiveness Training <sup>16</sup> (Target: 100% of managers by 2018)	%	N/A	N/A	31	<b>52</b>

<b>Health &amp; Safety</b>					
Total Injury and Illness Rate (TIIR) <sup>17</sup>	Cases / 200,000 working hours	0.69	0.43	0.39	<b>0.22</b>
Days Away Case Rate (DACR) <sup>17</sup>	Cases / 200,000 working hours	0.28	0.16	0.19	<b>0.05</b>
3-Year Average DACR Industry Rank <sup>18</sup> (Target: Industry Best by 2019)	Rank	4	5	5	<b>5</b>
Contractor DACR <sup>19</sup>	Cases / 200,000 working hours	0.49	0.41	0.42	<b>0.30</b>
Number of Fatalities	#	0	0	0	<b>0</b>
Collisions per Million Miles (US Fleet)	Collisions / million miles	6.2	5.5	4.6	<b>5.6</b>

## Footnotes for 2017 Data Table

N/A = Data was not collected in reporting year.

All prior environmental data was adjusted with the most recent emission factors available, as applicable.

1. Year of the result is based on the ranking publication year, which may use data from other time periods per the publication's methodology.
2. Scope 3 categories 4, 9, 10, 11, 13, 14 and 15 were determined to not be relevant to our value chain or are aggregated into other categories.
3. Biogen adjusted its approach to carbon neutrality in 2017 to align with industry best practice of operational carbon neutrality. Scope 3 emissions will be noticeably higher as they are no longer 100% matched with renewable energy certificates (see Note 4) or carbon offsets with the exception of employee commuting, which was offset entirely. Consequently, Biogen is evaluating its strategy towards achieving its 35% Absolute Reduction by 2030 target.
4. Carbon emissions generated for the goods and services and capital goods we purchase are based on a proprietary Environmentally Extended Input-Output model and actual supplier data, which can estimate the portion derived from electricity usage. Since 2014, Biogen has matched up to 100% of our share of supplier's electricity usage with renewable electricity certificates.
5. Waste generation at affiliate offices, excluding Weston, Massachusetts, is considered de minimis and excluded. However, waste generation is estimated for the purposes of calculating Scope 3 carbon emissions from Waste Generated in Operations – Category 5.
6. Renewable electricity certificates retired include unbundled Green-e certified Renewable Energy Certifications, Guarantees of Origin, Green Power Certificates, Australian RECs, Brazilian I-RECs to match Biogen's electricity usage in the US/Canada, Europe, Japan, Australia and South America, respectively.
7. Carbon offsets purchased and retired in 2017 originate from the following projects: New Bedford Landfill Gas in Massachusetts.
8. Data reflects percentage of reclaimed water on-site, harvested rainwater and municipal grey water compared to total water use.
9. Percent of major sites assessed for water withdrawal using a context-based methodology. Fair, just and proportionate share of locally available renewable supplies is defined as a score of less than 1.0 using the Center for Sustainable Organization's Corporate Water Gauge tool, a context-based water metric.
10. Data includes non-hazardous solid waste and trucked off wastewater from our routine operations only. Waste derived from construction and demolition debris, incinerator ash and other contractor activities is not included.
11. Includes all grants awarded by the Biogen Foundation exclusive of the [Employee?] Matching Gifts Program.
12. The STAR Initiative is a coordinated funding strategy designed to help catalyze the development of local STEM ecosystems in Cambridge, Massachusetts and Somerville, Massachusetts. STAR stands for Science, Teacher support, Access and Readiness and is intended to strengthen and support the educational landscapes in these cities by helping increase access to STEM resources and opportunities for students most underrepresented in STEM college or career pathways.
13. The 2017 diverse supplier spend and related percentage is limited to Tier I direct spend, while 2015 and 2016 includes both Tier I and Tier II direct spend. Excluding Tier II spend, 2017 was similar to 2016.
14. Inclusive of all management levels, consisting of manager+ level employees.
15. In 2014 we were in the middle of revamping our People Survey and did not perform a company-wide survey that year.
16. Defined as People Managers completing at least one course in the manager training curriculum.
17. Includes permanent and contracted employees, excludes contractors (e.g. construction, janitorial, food services). TIIR values prior to 2016 exclude affiliate office employees.
18. Industry composed of 15 leading pharmaceutical company peers.
19. Contractor DACR: Includes construction-related contractors only.