

## Environmental Sustainability Data

As a science-based company, Amgen has a long-standing objective to conduct environmentally responsible operations and we regularly set targets to challenge ourselves to deliver further improvements. We continue to invest in sustainable operations to reach our 2027 environmental targets. (a)

Energy								
Type	Unit	2007	2012	2019	2020	2021	2022	2023
<b>Total Combustion On-site (Direct) (b)</b>	<b>1,000 GJ</b>	<b>2,151</b>	<b>1,790</b>	<b>1,543</b>	<b>1,812</b>	<b>1,671</b>	<b>1,574</b>	<b>1,775</b>
Natural Gas	1,000 GJ	1,848	1,390	1,009	1,037	1,060	960	889
Diesel	1,000 GJ	303	390	533	773	609	613	885
Propane	1,000 GJ	0	10	1.2	1.3	1.4	1.4	1.7
<b>Total Purchased Energy for On-site Use (Indirect market-based) (c)</b>	<b>1,000 GJ</b>	<b>2,190</b>	<b>2,058</b>	<b>1,551</b>	<b>1,474</b>	<b>1,522</b>	<b>1,501</b>	<b>1,226</b>
Fossil Fuel	1,000 GJ	1,557	1,558	975	805	383	382	135
Nuclear	1,000 GJ	240	195	96	103	7	7	0
Renewables	1,000 GJ	393	305	480	566	1,131	1,112	1,091
<b>On-site Renewable Generation (d)</b>	<b>1,000 GJ</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>
Total Energy from Utilities	1,000 GJ	4,341	3,849	3,094	3,286	3,193	3,075	3,001
<b>Total Energy Normalized to Net Sales</b>	<b>1,000 GJ/\$B net sales</b>	<b>303</b>	<b>231</b>	<b>139</b>	<b>136</b>	<b>131</b>	<b>117</b>	<b>106</b>

Carbon								
Type	Unit	2007	2012	2019	2020	2021	2022	2023
<b>Carbon (Scope 1) (e)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>144</b>	<b>120</b>	<b>136</b>	<b>139</b>	<b>133</b>	<b>130</b>	<b>153</b>
Natural Gas Combustion On-site	1,000 MT CO <sub>2</sub> Eq	104	70	51	53	54	49	47
Diesel Combustion On-site	1,000 MT CO <sub>2</sub> Eq	22	27	37	54	43	43	62
Propane Combustion On-site	1,000 MT CO <sub>2</sub> Eq	0	1	0	0	0	0	0
Sales Fleet	1,000 MT CO <sub>2</sub> Eq	13	15	40	27	30	29	30
Executive Air Travel	1,000 MT CO <sub>2</sub> Eq	5	6	4	1	2	4	5
Fugitive Emissions (f)	1,000 MT CO <sub>2</sub> Eq	0	0	3	4	4	3	9
Other Carbon - Offsets	1,000 MT CO <sub>2</sub> Eq	0	0	0	0	-17	0	0
<b>Carbon - Scope 2 (Market-based) (g)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>290</b>	<b>287</b>	<b>160</b>	<b>136</b>	<b>58</b>	<b>35</b>	<b>12</b>
Purchased Electricity	1,000 MT CO <sub>2</sub> Eq	284	283	160	136	58	34	10
Purchased Steam	1,000 MT CO <sub>2</sub> Eq	6	4	1	0	0	0	0
Fleet Electrification	1,000 MT CO <sub>2</sub> Eq	0	0	0	0	0	1	1
<b>Carbon - Scope 2 (Location-based) (h)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>290</b>	<b>287</b>	<b>174</b>	<b>139</b>	<b>156</b>	<b>153</b>	<b>118</b>
Purchased Electricity	1,000 MT CO <sub>2</sub> Eq	284	283	168	133	150	147	117
Purchased Steam	1,000 MT CO <sub>2</sub> Eq	6	4	6	6	6	6	0
Fleet Electrification	1,000 MT CO <sub>2</sub> Eq	0	0	0	0	0	1	1
<b>Total Carbon from Utilities - Scope 1 (Utilities) and Scope 2 (Market-based)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>416</b>	<b>385</b>	<b>249</b>	<b>243</b>	<b>155</b>	<b>127</b>	<b>120</b>
<b>Total Carbon from Utilities Normalized to Net Sales</b>	<b>1,000 MT CO<sub>2</sub>Eq/\$B net</b>	<b>29</b>	<b>23</b>	<b>13</b>	<b>11</b>	<b>8</b>	<b>5</b>	<b>4</b>
<b>Total Carbon from Utilities Normalized to Total Energy from Utilities</b>	<b>MT CO<sub>2</sub>Eq/GJ</b>	<b>0.10</b>	<b>0.10</b>	<b>0.07</b>	<b>0.07</b>	<b>0.05</b>	<b>0.04</b>	<b>0.04</b>
<b>Confirmed Results of Carbon Reduction Projects (i)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>0</b>	<b>84</b>	<b>49</b>	<b>6</b>	<b>129</b>	<b>131</b>	<b>159</b>
<b>Carbon - Scope 3 Upstream (j)</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>	<b>0</b>	<b>0</b>	<b>2,773</b>	<b>2,627</b>	<b>3,064</b>	<b>2,868</b>	<b>1,057</b>
Purchased Goods and Services (Category 1)	1,000 MT CO <sub>2</sub> Eq	0	0	2,324	2,316	2,570	1,760	633
Capital Goods (Category 2)	1,000 MT CO <sub>2</sub> Eq	0	0	258	210	348	909	203
Fuel- and Energy-Related Activities (Category 3)	1,000 MT CO <sub>2</sub> Eq	0	0	53	45	44	77	65
Upstream Transportation & Distribution (Category 4)	1,000 MT CO <sub>2</sub> Eq	0	25	23	21	59	55	66
Waste Generated in Operations (Category 5)	1,000 MT CO <sub>2</sub> Eq	0	0	4	8	6	2	2
Business Travel (Category 6)	1,000 MT CO <sub>2</sub> Eq	0	65	56	13	4	31	53
Employee Commuting (Category 7)	1,000 MT CO <sub>2</sub> Eq	0	0	56	14	33	34	35
Upstream Leased Assets (Category 8)	1,000 MT CO <sub>2</sub> Eq	Emissions from upstream leased assets are included in Amgen's Scope 1 and 2 Emissions accounting						
<b>Carbon - Scope 3 Downstream</b>	<b>1,000 MT CO<sub>2</sub>Eq</b>					<b>448</b>	<b>318</b>	<b>327</b>
Downstream Transportation and Distribution (Category 9)	1,000 MT CO <sub>2</sub> Eq					446	317	316
End of Life Treatment of Sold Products (Category 12)	1,000 MT CO <sub>2</sub> Eq					2.1	0.8	0.9

Water								
Type	Unit	2007	2012	2019	2020	2021	2022	2023
<b>Total Water Withdrawal</b>	<b>1,000 CM</b>	<b>3,286</b>	<b>2,720</b>	<b>2,146</b>	<b>2,355</b>	<b>2,238</b>	<b>2,042</b>	<b>2,089</b>
Municipal	1,000 CM	3,249	2,707	2,129	2,337	2,233	2,025	2,080
Other - (Reservoir) Trucked In	1,000 CM	8	0	0	0	0	0	0
Ground	1,000 CM	29	13	17	18	5	17	9
<b>Total Water Withdrawal Normalized to Net Sales</b>	<b>1,000 CM/\$B net sales</b>	<b>260</b>	<b>163</b>	<b>97</b>	<b>97</b>	<b>92</b>	<b>78</b>	<b>74</b>
Water Fate	1,000 CM	0	2,720	2,146	2,355	2,238	2,042	2,085
Consumed Into Products	1,000 CM	0	21	31	28	28	28	28
Lost to Evaporation	1,000 CM	0	713	546	542	576	543	509
Discharged to Treatment	1,000 CM	0	1,662	1,379	1,621	1,450	1,323	1,370
Discharged Directly to Environment	1,000 CM	0	324	191	162	184	148	178
Recycled	1,000 CM	0	535	548	567	557	513	609
<b>Percentage of Water Recycled per Total Water Withdrawal</b>	<b>%</b>	<b>0</b>	<b>20</b>	<b>26</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>29</b>
<b>Confirmed Results of Water Reduction Projects (i)</b>	<b>1,000 CM</b>	<b>0</b>	<b>686</b>	<b>26</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>290</b>

Waste								
Type	Unit	2007	2012	2019	2020	2021	2022	2023
<b>Recycling Rate (k)</b>	<b>%</b>	<b>35</b>	<b>53</b>	<b>48</b>	<b>52</b>	<b>51</b>	<b>54</b>	<b>53</b>
<b>Total Routine Waste</b>	<b>MT</b>	<b>10,145</b>	<b>9,018</b>	<b>9,818</b>	<b>9,841</b>	<b>10,289</b>	<b>10,066</b>	<b>10,019</b>
<b>Hazardous Waste</b>	<b>MT</b>	<b>1,343</b>	<b>1,180</b>	<b>2,179</b>	<b>2,144</b>	<b>2,230</b>	<b>2,010</b>	<b>1,716</b>
Recycled	MT	251	245	230	367	346	489	173
Incinerated for Energy Recovery	MT	375	347	988	797	1,102	947	1,066
Incinerated Not for Energy Recovery	MT	523	422	855	885	674	347	298
Landfilled	MT	118	126	78	66	74	172	140
Treated (l)	MT	76	40	28	28	35	55	40
<b>Nonhazardous Waste</b>	<b>MT</b>	<b>8,802</b>	<b>7,838</b>	<b>7,640</b>	<b>7,697</b>	<b>8,059</b>	<b>8,056</b>	<b>8,304</b>
Composted	MT	260	583	745	775	636	528	465
Reused	MT	32	44	249	216	117	111	123
Recycled	MT	2,999	3,890	3,522	3,792	4,104	4,279	4,537
Incinerated for Energy Recovery	MT	432	576	594	731	1,162	1,176	1,674
Incinerated Not for Energy Recovery	MT	194	79	183	74	171	95	102
Landfilled	MT	4,885	2,662	2,302	2,072	1,813	1,841	1,398
Treated (l)	MT	0	4	45	37	56	26	5
<b>Total Routine Waste Normalized to Net Sales</b>	<b>MT</b>	<b>709</b>	<b>542</b>	<b>442</b>	<b>406</b>	<b>423</b>	<b>383</b>	<b>356</b>
<b>Total Nonroutine Waste (m)</b>	<b>MT</b>	<b>31,415</b>	<b>16,902</b>	<b>3,128</b>	<b>7,966</b>	<b>64,969</b>	<b>2,613</b>	<b>3,852</b>
<b>Waste Disposed</b>	<b>MT</b>	<b>5,796</b>	<b>3,334</b>	<b>3,490</b>	<b>3,163</b>	<b>2,823</b>	<b>2,536</b>	<b>1,982</b>
<b>Confirmed Results of Routine Waste Reduction Projects (i)</b>	<b>MT</b>	<b>0</b>	<b>1,094</b>	<b>1,574</b>	<b>181</b>	<b>884</b>	<b>1,029</b>	<b>1,416</b>

Compliance								
Type	Unit	2007	2012	2019	2020	2021	2022	2023
Environmental Notices of Violation (NOVs)	# NOV	8	2	1	1	3	4	3

## Data Notes

(a) Reported columns in the Summary of Data table represent the following information:

- 2007 – Base year of Amgen's 1st Sustainability Plan (2008-2012) and of our overall sustainability efforts
- 2012 – Base year of Amgen's 2nd Sustainability Plan (2013-2019)
- 2019 – Base year of Amgen's 3rd and current Sustainability Plan (2020-2027)

(b) Direct onsite energy use results from the operation of equipment that is owned or controlled by Amgen.

(c) Indirect onsite energy use results from purchased energy in the forms of electricity and steam. For Amgen facilities where measurements are not obtained or available, usage is estimated from energy intensity factors based on building square footage.

(d) In 2023, Amgen's Singapore facility installed solar photovoltaic (PV) panels. Our new Ohio and North Carolina facilities have also installed PVs.

(e) Scope 1 carbon emissions result from direct energy sources defined in note (b), sales fleet, executive air travel, and fugitive emissions. Refer to Amgen's latest CDP report for more information.

(f) Fugitive emissions include refrigerants and cell respiration from our production processes.

(g) Scope 2 carbon market-based emissions (MBE) are a result of Amgen's procurement decisions on sourcing of indirect energy defined in note (c).

(h) Scope 2 carbon location-based emissions (LBE) are calculated using local or regional emission factors for purchased electricity and steam and do not account for procurement decisions.

(i) Project measurements are conducted using reasonable means, including direct measurements and scientific estimations as appropriate.

(j) Scope 3 carbon emissions include upstream and downstream activities (Scope 3 Category 1-15). Refer to Amgen's latest CDP report for more information.

(k) The recycle rate is the total routine recycled, composted and reused weight divided by the total weight of routine waste.

(l) Treatment means the physical, thermal, chemical or biological processes that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery.

(m) Nonroutine waste constitutes waste generated outside the normal operations of our facilities and consists mainly of one-time construction and demolition waste.