C0. Introduction

C0.1
Give a general description and introduction to your organization.

Amgen discovers, develops, manufactures, and delivers innovative human therapeutics. A biotechnology pioneer since 1980, Amgen was one of the first companies to realize the new science's promise by bringing safe, effective medicines from lab to manufacturing plant to patient. Amgen therapeutics have changed the practice of medicine, helping people around the world in the fight against serious illnesses. With a deep and broad pipeline of potential new medicines, Amgen remains committed to advancing science to dramatically improve people's lives. For more information, visit www.amgen.com and follow us on www.twitter.com/amgen.

This response contains forward-looking statements that are based on the current expectations and beliefs of Amgen. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission reports filed by Amgen, including our most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Unless otherwise noted, Amgen is providing this information as of June 2018 and does not undertake any obligation to update any forward-looking statements contained in this response as a result of new information, future events or otherwise.

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A number of questions in this response require us to select from a list of several multiple-choice responses. In each such case, the multiple-choice response we have selected is qualified in its entirety by the more detailed narrative explanation we have provided.
(C0.2) State the start and end date of the year for which you are reporting data.

<table>
<thead>
<tr>
<th>Row</th>
<th>Start date</th>
<th>End date</th>
<th>Indicate if you are providing emissions data for past reporting years</th>
<th>Select the number of past reporting years you will be providing emissions data for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1, 2017</td>
<td>December 31, 2017</td>
<td>No</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>2</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>3</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>4</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.
- Brazil
- Canada
- Ireland
- Netherlands
- Puerto Rico
- Singapore
- Turkey
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
- USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.
- Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
- Yes

C1.1a
(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Position of individual(s)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board/Executive board</td>
<td>The Corporate Responsibility and Compliance Committee of Amgen's Board of Directors oversees Amgen's activities in the area of compliance and receives briefings on the company's environmental sustainability plan and activities. CEO staff has overall responsibility for review of company activities related to climate change. Amgen's Sustainability Council, consisting of leaders from the major functions within the company, sets the strategy for environmental sustainability, which includes climate change, and is responsible for establishing Amgen's conservation targets and monitoring progress. An Operations Leadership Team governs the council and reports to the CEO staff twice yearly on environmental matters, including any updates on status regarding climate change.</td>
</tr>
</tbody>
</table>

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

<table>
<thead>
<tr>
<th>Frequency with which climate-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which climate-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled – some meetings</td>
<td>Reviewing and guiding strategy</td>
<td>The Corporate Responsibility and Compliance Committee of the Board of Directors conducts an annual review of the company's sustainability progress, plans and initiatives. This includes review of the progress towards meeting carbon emission reduction goals, as well as broader sustainability strategy, which includes the company's approach to climate change.</td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding major plans of action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</td>
<td></td>
</tr>
</tbody>
</table>

C1.2

(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on climate-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other committee, please specify (Compliance Committee) The Compliance Committee consists of executive level staff.</td>
<td>Assessing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>Corporate responsibility committee The Sustainability Council includes representation by leaders from a wide cross section of company functions and provides guidance on the implementation of our environmental sustainability plan as well as areas of social responsibility.</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>As important matters arise</td>
</tr>
<tr>
<td>Other, please specify (Senior Vice President, Quality)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>As important matters arise</td>
</tr>
</tbody>
</table>

C1.2a
(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

Compliance Committee: This committee is composed of direct reports to the CEO. It receives an annual update on climate-related matters including carbon targets, year in review and ongoing progress on the 2020 Environmental Sustainability Plan and other matters. Decisions are made on policy changes and program enhancements as needed.

Sustainability Council: Includes representation by leaders from a wide cross section of company functions and provides guidance on the implementation of our environmental sustainability plan as well as areas of social responsibility.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?
Yes

C1.3a
(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?
Business unit manager

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Amgen has set a 2020 target to reduce facility carbon emissions by 10% based on a 2012 baseline. Progress towards meeting our 2020 carbon emissions reduction target is tied to annual performance reviews and compensation for business unit managers who have this as part of their annual performance reviews and compensation.

Who is entitled to benefit from these incentives?
All employees

Types of incentives
Monetary reward

Activity incentivized
Efficiency project

Comment
Amgen annually selects Operations in Excellence award recipients, which can include teams or individuals. Over the past 12 years, this program has recognized projects representing exceptional efforts which resulted in a robust process to deliver tangible, recurring and sustainable benefits. This includes efforts to increase efficiency and reduce energy and carbon emissions.

Who is entitled to benefit from these incentives?
All employees

Types of incentives
Recognition (non-monetary)

Activity incentivized
Other, please specify (Environmentally responsible behavior)

Comment
Amgen annually recognizes Global Environmental Champions who demonstrate exceptional efforts in sustainability and environmental stewardship, and can include successful energy and carbon conservation initiatives. Recipients are nominated by peers and awards, both monetary and recognition, are given to teams and individuals.

C2. Risks and opportunities

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

<table>
<thead>
<tr>
<th>From (years)</th>
<th>To (years)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Medium-term</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Long-term</td>
<td>12</td>
<td>18</td>
</tr>
</tbody>
</table>
(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

<table>
<thead>
<tr>
<th>Frequency of monitoring</th>
<th>How far into the future are risks considered?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>&gt;6 years</td>
<td>Generally, climate-related risks have been considered in Amgen's annual business risk assessment process. Beginning in 2018 climate-related risks are being reviewed annually as a separate risk assessment process associated with the overall business risk process.</td>
</tr>
</tbody>
</table>

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Environmental risks, including those potential risks from climate change, are considered at a functional level within Environment, Health, Safety, and Sustainability (EHSS). Various functions, including EHSS, make up a larger risk community within Amgen that elevates high level risks to the Amgen Enterprise Risk Management (ERM) process. Enterprise level risks are compared cross-functionally and organized into an executive level profile for reporting purposes.

(C2.2c)
(C2.2c) Which of the following risk types are considered in your organization’s climate-related risk assessments?

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Relevance &amp; Inclusion</th>
<th>Please Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current regulation</td>
<td>Relevant, always included</td>
<td>We track all relevant existing greenhouse gas regulations to ensure we have strategies to meet operational and regulatory needs. Amgen's facilities in California require increased reporting and inspection of equipment containing ozone depleting substances in accordance with AB32.</td>
</tr>
<tr>
<td>Emerging regulation</td>
<td>Relevant, always included</td>
<td>New and proposed regulations regarding carbon emissions are monitored on a company-wide basis. Assessments are made for proposed regulations that could impact the company and/or specific facilities.</td>
</tr>
<tr>
<td>Technology</td>
<td>Relevant, always included</td>
<td>Technology can impact the efficiency of our business.</td>
</tr>
<tr>
<td>Legal</td>
<td>Relevant, always included</td>
<td>Legal evaluations are related to existing and emerging laws and regulations.</td>
</tr>
<tr>
<td>Market</td>
<td>Not relevant, explanation provided</td>
<td>Not applicable to our business.</td>
</tr>
<tr>
<td>Reputation</td>
<td>Relevant, always included</td>
<td>Our reputation can influence staff attraction and retention.</td>
</tr>
<tr>
<td>Acute physical</td>
<td>Relevant, always included</td>
<td>Extreme weather events could affect our manufacturing sites, potentially causing reduction/disruption in production capacity.</td>
</tr>
<tr>
<td>Chronic physical</td>
<td>Relevant, always included</td>
<td>Water is a necessary resource to our manufacturing process and other operations. Climate change could have an effect on the availability of potable water. We have been focused on identifying local water issues and conditions at our facilities. Based on the results of this, we have set a water reduction target for 2020. We continue to make progress in this area. Contributing to water conservation, our facility in Juncos, Puerto Rico currently reuses approximately 74% of the treated wastewater it generates, sending this water back to work to cool equipment.</td>
</tr>
<tr>
<td>Upstream</td>
<td>Relevant, sometimes included</td>
<td>We have a process in place to survey suppliers regarding engagement with environmental sustainability performance.</td>
</tr>
<tr>
<td>Downstream</td>
<td>Relevant, sometimes included</td>
<td>We track scope 3 emissions from product transport and incorporate environmental sustainability concepts into our manufacturing processes. Our next-generation biomanufacturing plant in Singapore has a modular, flexible design that fits in a smaller footprint that a conventional plant. It has shown a reduction in energy use and carbon emissions compared to a traditional facility.</td>
</tr>
</tbody>
</table>

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

The nature of our risk management activities depends very much on the specific risks, their potential financial and operational impact, their probability, and the expected time-horizon. Typically those climate risk management activities are part of a broader risk management process. The climate risk management activities could range from facility hardening to alternative siting analyses to redundancy in key operations.

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes
(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

**Identifier**
Risk 1

**Where in the value chain does the risk driver occur?**
Direct operations

**Risk type**
Physical risk

**Primary climate-related risk driver**
Acute: Increased severity of extreme weather events such as cyclones and floods

**Type of financial impact driver**
Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company-specific description**
Extreme weather events could affect our manufacturing sites, potentially causing reduction/disruption in production capacity. Material risks, including any related to climate, are discussed in our 10-K, which can be found at: http://investors.amgen.com/phoenix.zhtml?c=61656&p=irol-reportsAnnual.

**Time horizon**
Current

**Likelihood**
About as likely as not

**Magnitude of impact**
Low

**Potential financial impact**

**Explanation of financial impact**

**Management method**

**Cost of management**

**Comment**

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C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes
(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

**Identifier**
Opp1

**Where in the value chain does the opportunity occur?**
Direct operations

**Opportunity type**
Resource efficiency

**Primary climate-related opportunity driver**
Move to more efficient buildings

**Type of financial impact driver**
Reduced operating costs (e.g., through efficiency gains and cost reductions)

**Company-specific description**
Climate-related opportunities identified are considered confidential and proprietary.

**Time horizon**
Current

**Likelihood**
Virtually certain

**Magnitude of impact**
Medium-low

**Potential financial impact**
28000000

**Explanation of financial impact**
Since 2007, energy and carbon reduction projects and initiatives have resulted in saving $28 million in operating costs annually.

**Strategy to realize opportunity**
Amgen has a comprehensive carbon reduction strategy that focuses on: 1. Eliminating energy use, 2. Increasing energy efficiency of products, processes, facilities, and transport, 3. Increasing the proportion of renewable and alternative energy used. Our carbon reduction progress is managed through a formal project measurement and verification process and is tracked through deliberate efforts—without influence from growth or contraction in our business. For example, we do not count the closure of a facility or building or a downturn in our business toward the progress of our conservation targets. We have created a portfolio of projects and initiatives that we specifically execute, counting results of validated projects and initiatives only. One example of an energy reduction project includes implementing a data analytics program (SaIF) that assesses existing automation and monitoring systems and delivers a prioritized list of opportunities for improvements at targeted U.S. and international manufacturing and research facilities. The opportunities we identified in 2017 resulted in savings of 67,800 GJ. Since implementation in 2015, SaIF has resulted in savings of 106,200 GJ and approximately $1,300,000.

**Cost to realize opportunity**

**Comment**
(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products and services</td>
<td>We have not identified any risks or opportunities</td>
</tr>
<tr>
<td>Supply chain and/or value chain</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Adaptation and mitigation activities</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Investment in R&amp;D</td>
<td>We have not identified any risks or opportunities</td>
</tr>
<tr>
<td>Operations</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>Please select</td>
</tr>
</tbody>
</table>

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>Not impacted</td>
</tr>
<tr>
<td>Operating costs</td>
<td>Impacted</td>
</tr>
<tr>
<td>Capital expenditures / capital allocation</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Acquisitions and divestments</td>
<td>Not impacted</td>
</tr>
<tr>
<td>Access to capital</td>
<td>Not impacted</td>
</tr>
<tr>
<td>Assets</td>
<td>Not impacted</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Other</td>
<td>Please select</td>
</tr>
</tbody>
</table>

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?
Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?
No, and we do not anticipate doing so in the next two years

C3.1c
Amgen has set company-wide targets for the reduction of carbon and we annually communicate our progress to external stakeholders. By the end of 2017, we had achieved 90 percent of our 2020 target to reduce 10% facility carbon based on a 2012 baseline. We've made significant progress toward a 2020 target to reduce 20% of fleet carbon based on a 2012 baseline and are on track to maintain these reductions through the end of 2020.

In 2017, the U.S. Food and Drug Administration licensed Amgen’s pioneering next-generation biomanufacturing plant in Singapore for commercial production of biologic drug substance. The plant’s modular, flexible design fits in a smaller footprint than a conventional plant and boasts more environmentally friendly technology. Compared with the manufacture of the same amount of product in a traditional facility, the plant has so far demonstrated annualized reductions of approximately 268,000 gigajoules of energy, 8,800 metric tons of carbon emissions and 82,000 cubic meters of water. This plant supports the consistent supply of safe and effective medicines to patients who need them.

We currently do not use climate-related scenario analysis, but may explore doing so in the future. At this time we do not believe that the potential impacts to the company warrant a full-blown scenario analysis - however, it should be noted that in many business strategy decisions, potential climate-related impacts are considered, along with the probabilities of specific climate-related events. So, even though full-blown scenario analysis is not conducted, the potential for climate-related impacts are integrated into business strategy.
Base year emissions covered by target (metric tons CO2e)
385000

Target year
2020

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

% achieved (emissions)
90

Target status
Underway

Please explain
We have set a target to reduce carbon emissions from our facilities. This includes on-site combustion (scope 1) and purchased energy (scope 2).

Target reference number
Abs 2

Scope
Scope 2 (location-based)

% emissions in Scope
90

% reduction from base year
20

Base year
2012

Start year
2013

Base year emissions covered by target (metric tons CO2e)
15000

Target year
2020

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

% achieved (emissions)
100

Target status
Underway

Please explain
We have set a target to reduce carbon emissions from our fleet vehicles. Prior to 2017, this included our U.S. fleet vehicles. Beginning in 2017 we began including both U.S. and the majority of our ex-U.S. fleet vehicles, representing approximately 90 percent of our global fleet based on miles driven.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1a/b.

C4.3
(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number of projects</th>
<th>Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under investigation</td>
<td>6</td>
<td>1500</td>
</tr>
<tr>
<td>To be implemented*</td>
<td>1</td>
<td>467</td>
</tr>
<tr>
<td>Implementation commenced*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Implemented*</td>
<td>18</td>
<td>14263</td>
</tr>
<tr>
<td>Not to be implemented</td>
<td>2</td>
<td>1000</td>
</tr>
</tbody>
</table>

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Description of activity</th>
<th>Estimated annual CO2e savings (metric tonnes CO2e)</th>
<th>Scope</th>
<th>Voluntary/Mandatory</th>
<th>Annual monetary savings (unit currency – as specified in CC0.4)</th>
<th>Investment required (unit currency – as specified in CC0.4)</th>
<th>Payback period</th>
<th>Estimated lifetime of the initiative</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency: Processes</td>
<td>Process optimization</td>
<td>14263</td>
<td>Scope 1</td>
<td>Voluntary</td>
<td>4835280</td>
<td></td>
<td>4 - 10 years</td>
<td>16-20 years</td>
<td>Amgen completed 18 emission reduction projects in 2017 for an annual savings of approximately $4.8M. NOTE: investment cost is a combination of capitol and project costs. For a project with the primary benefit of sustainability, the payback period target is less than 5 years.</td>
</tr>
</tbody>
</table>

C4.3c

CDP
### (C4.3c) What methods do you use to drive investment in emissions reduction activities?

<table>
<thead>
<tr>
<th>Method</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated budget for energy efficiency</td>
<td>Amgen has continued its energy and carbon dioxide emissions reduction capital program in 2017, similar to our programs in 2008 through 2016. This program funded improvements on selected facilities in the following categories: building HVAC equipment and distribution efficiency improvements; air change reductions in laboratories and manufacturing areas; and utility plant optimization projects. A particular focus of the 2016/2017 program is the investment in cutting edge fault diagnostics in the areas of most significant energy use. This software system ensures equipment operates at optimal efficiency at all times. In addition to the energy and carbon dioxide emissions reduction capital program, Amgen continues to implement other projects, programs and initiatives which contribute to our environmental sustainability targets. Examples of these include site level initiatives, operational improvement efforts, and staff awareness programs.</td>
</tr>
<tr>
<td>Employee engagement</td>
<td>Many Amgen sites have environmental sustainability teams that encourage awareness and action in the areas of energy efficiency and reduction. Annual Earth Day and Energy Fairs help to make staff aware of actions they can take at home and at work for energy conservation and GHG reductions. Staff that are involved in projects and initiatives that reduce energy and GHG emissions can be recognized through internal recognition programs such as the Excellence in Operations awards and the Global Environmental Champion contest.</td>
</tr>
</tbody>
</table>

### C4.5

**Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

No

### C5. Emissions methodology

### C5.1
(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2012

Base year end
December 31 2012

Base year emissions (metric tons CO2e)
119968

Comment

Scope 2 (location-based)

Base year start
January 1 2012

Base year end
December 31 2012

Base year emissions (metric tons CO2e)
286679

Comment

Scope 2 (market-based)

Base year start
January 1 2012

Base year end
December 31 2012

Base year emissions (metric tons CO2e)

Comment
We do not have Scope 2 market-based emissions calculated for our 2012 baseline year. This is not expected to vary greatly from our 2012 baseline Scope 2 location-based emissions.

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.


C6. Emissions data

C6.1
(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Row 1

**Gross global Scope 1 emissions (metric tons CO2e)**
163362

**End-year of reporting period**
<Not Applicable>

**Comment**
- Direct emissions from facility heating via natural gas are quantified by compiling natural gas bills issued to each inventoried facility and applying regional specific emission factors for natural gas combustion as published by the U.S. EPA.
- Direct emissions from facility heating via diesel fuel (USPR only) are quantified by compiling diesel purchase records and applying the emission factor for diesel combustion as published by the U.S. EPA.
- Direct emissions from facility heating via propane (USPR only) are quantified by compiling propane bills and applying the GHG Protocol emission factor for propane combustion.
- Direct emissions from owned or leased mobile sources are calculated based on fuel purchase records tracked under Amgen's corporate fleet program and based on jet fuel purchases for Amgen's corporate jets. Emissions from short-term rental vehicles used by Amgen's Sales are calculated based on reported miles driven and the average fuel efficiency for the fleet during the reporting period.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

**Scope 2, location-based**
We are reporting a Scope 2, location-based figure

**Scope 2, market-based**
We are reporting a Scope 2, market-based figure

**Comment**

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Row 1

**Scope 2, location-based**
153734

**Scope 2, market-based (if applicable)**
139035

**End-year of reporting period**
<Not Applicable>

**Comment**
The following methods are used to quantify GHG emissions from the best available sources:
- Indirect emissions are quantified by compiling electric bills issued to inventoried facilities and applying the emission factors associated with the electric grid sub-region defined by the U.S. EPA eGRID for U.S. sites, the grid province defined by the GHG Division Environment Canada for sites in Canada, and according to specific information published for other non-US sites.
- Indirect emissions from purchased steam (US-MA only) are quantified by compiling Steam bills and applying a supplier specific emission factor.
- Indirect emissions from staff business travel are calculated by our service provider.

C6.4
(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Process related emissions from cell respiration and pH adjustment during production are not included.

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why the source is excluded
Based on a 2012 analysis, emissions from cell respiration and from pH adjustments were found to be negligible (less than 0.1 percent of total CO2 emissions).

Source
Facility owned vehicles

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why the source is excluded
Analysis of these sources showed they are less than 1 percent of the total carbon emissions when compared with other sources, such as energy use.

(C6.5) Account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology
Not yet calculated

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Capital goods

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Upstream transportation and distribution

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1570

Emissions calculation methodology
DEFRA Version 2017 and EcoInvent CCaLC Database were used to calculate these emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
Business travel

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
85000

**Emissions calculation methodology**
As described by our contracted travel management company, the methodology for CO2 calculation uses the 2011 DEFRA metrics (previous calculations were using the 2005 DEFRA metrics). The method uses the airport locations; the emissions are based upon the actual distance flown. The following factors are taken into account: 1. The total distance is calculated using the two specified airport locations; 2. The distance is multiplied by 1.09 to allow for takeoff, circling and non-direct routes; 3. The class of flight chosen determines the emission factor to use for that distance (economy/premium economy/business/first). For shorter flights class is not applicable; 4. The total emissions of carbon dioxide equivalent (CO2e), (which includes carbon dioxide, methane (CH4) and nitrous oxide (N2O), converted to carbon dioxide equivalents and summed) per passenger kilometer (these are the Air Passenger Transport Conversion Factors, provided by DEFRA).

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
100

**Explanation**

Employee commuting

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
59600

**Emissions calculation methodology**
Carbon emissions from employee commuting are calculated using emission factors from the Global Fuel Economy Initiative (GFEI) and multiplying by staff days-worked and the distance driven (national daily averages).

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
0

**Explanation**

Upstream leased assets

**Evaluation status**
Not evaluated

**Metric tonnes CO2e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

Downstream transportation and distribution

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
40000

**Emissions calculation methodology**
Scope 3 emissions from transportation of materials have been provided by our transporters based on their proprietary methods.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
100

**Explanation**
Processing of sold products

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Use of sold products

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

End of life treatment of sold products

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Downstream leased assets

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology
Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Not applicable.
Investments

**Evaluation status**
Not evaluated

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**

**Other (upstream)**

**Evaluation status**
Not evaluated

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**

**Other (downstream)**

**Evaluation status**
Not evaluated

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**

C6.7

*(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?*

*No*

C6.10
(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Integrity figure
0.0000139

Metric numerator (Gross global combined Scope 1 and 2 emissions)
302395

Metric denominator
unit total revenue

Metric denominator: Unit total
21795000000

Scope 2 figure used
Market-based

% change from previous year
3

Direction of change
Decreased

Reason for change
Increase in green power purchases and process improvements

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

<table>
<thead>
<tr>
<th>Greenhouse gas</th>
<th>Scope 1 emissions (metric tons of CO2e)</th>
<th>GWP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>160692</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>CH4</td>
<td>157</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>N2O</td>
<td>402</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>HFCs</td>
<td>1776</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>Other, please specify (HCFC)</td>
<td>332</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
</tbody>
</table>

C7.2
(C7.2) Break down your total gross global Scope 1 emissions by country/region.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>71134</td>
</tr>
<tr>
<td>Includes emissions from the US Sales fleet and refrigerant losses</td>
<td></td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>68026</td>
</tr>
<tr>
<td>Netherlands</td>
<td>383</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>149</td>
</tr>
<tr>
<td>Ireland</td>
<td>3164</td>
</tr>
<tr>
<td>Turkey</td>
<td>5407</td>
</tr>
<tr>
<td>Brazil</td>
<td>304</td>
</tr>
<tr>
<td>Canada</td>
<td>569</td>
</tr>
<tr>
<td>Singapore</td>
<td>1079</td>
</tr>
<tr>
<td>Other, please specify (International Air Space)</td>
<td>4993</td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
</tr>
<tr>
<td>Emissions from international sales fleet</td>
<td>8152</td>
</tr>
</tbody>
</table>

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

By activity

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Greenwich, Rhode Island</td>
<td>18247</td>
<td>41.657301</td>
<td>-71.569281</td>
</tr>
<tr>
<td>Cambridge, Massachusetts</td>
<td>1.7</td>
<td>42.366826</td>
<td>-71.089727</td>
</tr>
<tr>
<td>Longmont, Colorado</td>
<td>3175</td>
<td>40.155087</td>
<td>-105.157784</td>
</tr>
<tr>
<td>Thousand Oaks, California</td>
<td>22126</td>
<td>34.191608</td>
<td>-118.920062</td>
</tr>
<tr>
<td>Bothell, Washington</td>
<td>31</td>
<td>47.801835</td>
<td>-122.201695</td>
</tr>
<tr>
<td>Louisville, Kentucky</td>
<td>80</td>
<td>38.20956</td>
<td>-85.533516</td>
</tr>
<tr>
<td>San Francisco, California</td>
<td>3118</td>
<td>37.663442</td>
<td>-122.392067</td>
</tr>
<tr>
<td>Juncos, Puerto Rico</td>
<td>68026</td>
<td>18.23702</td>
<td>-65.905113</td>
</tr>
<tr>
<td>Woburn, Massachusetts</td>
<td>782</td>
<td>42.50878</td>
<td>-71.13269</td>
</tr>
<tr>
<td>Dun Laoghaire, Ireland</td>
<td>3164</td>
<td>53.271119</td>
<td>-6.149951</td>
</tr>
<tr>
<td>Breda, Netherlands</td>
<td>383</td>
<td>51.58607</td>
<td>4.827929</td>
</tr>
<tr>
<td>Cambridge, United Kingdom</td>
<td>46</td>
<td>52.235541</td>
<td>0.142873</td>
</tr>
<tr>
<td>Uxbridge, United Kingdom</td>
<td>104</td>
<td>51.555846</td>
<td>-0.480252</td>
</tr>
<tr>
<td>Abingdon, United Kingdom</td>
<td>0</td>
<td>51.622879</td>
<td>-1.296952</td>
</tr>
<tr>
<td>Burnaby, British Columbia</td>
<td>569</td>
<td>49.255059</td>
<td>-122.931961</td>
</tr>
<tr>
<td>Sao Paulo, Brazil</td>
<td>304</td>
<td>-23.618546</td>
<td>-46.774746</td>
</tr>
<tr>
<td>Yenibosna, Turkey</td>
<td>4469</td>
<td>41.004486</td>
<td>28.821531</td>
</tr>
<tr>
<td>Sekerpinar, Turkey</td>
<td>938</td>
<td>40.853176</td>
<td>29.371495</td>
</tr>
<tr>
<td>Singapore, Singapore</td>
<td>1079</td>
<td>1.285921</td>
<td>103.626587</td>
</tr>
<tr>
<td>International air space</td>
<td>4993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Fleet - International (excludes U.S.)</td>
<td>8152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Fleet - U.S., only</td>
<td>23574</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas used in boilers and furnaces</td>
<td>56145</td>
</tr>
<tr>
<td>Diesel used in boilers and generators</td>
<td>68234</td>
</tr>
<tr>
<td>Propane used in boilers</td>
<td>155</td>
</tr>
<tr>
<td>Jet fuel used for executive travel</td>
<td>4993</td>
</tr>
<tr>
<td>Gasoline used by US Sales Fleet vehicles</td>
<td>19794</td>
</tr>
<tr>
<td>Diesel used by US Sales Fleet</td>
<td>11932</td>
</tr>
<tr>
<td>Fugitive (refrigerant loss)</td>
<td>2109</td>
</tr>
</tbody>
</table>

### C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 2, location-based (metric tons CO2e)</th>
<th>Scope 2, market-based (metric tons CO2e)</th>
<th>Purchased and consumed electricity, heat, steam or cooling (MWh)</th>
<th>Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>71263</td>
<td>69828</td>
<td>271516</td>
<td>7405</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>52616</td>
<td>52616</td>
<td>102631</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3086</td>
<td>0</td>
<td>6310</td>
<td>6310</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>932</td>
<td>447</td>
<td>2665</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>32</td>
<td>27</td>
<td>2469</td>
<td>0</td>
</tr>
<tr>
<td>Ireland</td>
<td>10109</td>
<td>0</td>
<td>24152</td>
<td>24152</td>
</tr>
<tr>
<td>Singapore</td>
<td>5096</td>
<td>5096</td>
<td>11714</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
<td>894</td>
<td>894</td>
<td>5687</td>
<td>0</td>
</tr>
<tr>
<td>Turkey</td>
<td>9997</td>
<td>9997</td>
<td>22658</td>
<td>0</td>
</tr>
</tbody>
</table>

### C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

- By facility
- By activity

### C7.6b
## C7.6b Break down your total gross global Scope 2 emissions by business facility.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Scope 2 location-based emissions (metric tons CO2e)</th>
<th>Scope 2, market-based emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge, Massachusetts</td>
<td>7519</td>
<td>8062</td>
</tr>
<tr>
<td>Woburn, Massachusetts</td>
<td>1062</td>
<td>1062</td>
</tr>
<tr>
<td>Thousand Oaks, California</td>
<td>33058</td>
<td>33058</td>
</tr>
<tr>
<td>San Francisco, California</td>
<td>3560</td>
<td>1585</td>
</tr>
<tr>
<td>Longmont, Colorado</td>
<td>7724</td>
<td>7724</td>
</tr>
<tr>
<td>Bothell, Washington</td>
<td>685</td>
<td>685</td>
</tr>
<tr>
<td>West Greenwich, Rhode Island</td>
<td>14328</td>
<td>14328</td>
</tr>
<tr>
<td>Louisville, Kentucky</td>
<td>3327</td>
<td>3327</td>
</tr>
<tr>
<td>Dun Laoghaire, Ireland</td>
<td>10109</td>
<td>0</td>
</tr>
<tr>
<td>Breda, Netherlands</td>
<td>3086</td>
<td>0</td>
</tr>
<tr>
<td>Cambridge, United Kingdom</td>
<td>329</td>
<td>168</td>
</tr>
<tr>
<td>Uxbridge, United Kingdom</td>
<td>572</td>
<td>302</td>
</tr>
<tr>
<td>Abingdon, United Kingdom</td>
<td>31</td>
<td>7</td>
</tr>
<tr>
<td>Juncos, Puerto Rico</td>
<td>52616</td>
<td>52616</td>
</tr>
<tr>
<td>Burnaby, British Columbia</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Sao Paulo, Brazil</td>
<td>894</td>
<td>894</td>
</tr>
<tr>
<td>Yenibosna, Turkey</td>
<td>9008</td>
<td>9008</td>
</tr>
<tr>
<td>Sekerpinar, Turkey</td>
<td>989</td>
<td>989</td>
</tr>
<tr>
<td>Singapore, Singapore</td>
<td>5096</td>
<td>5096</td>
</tr>
</tbody>
</table>

## C7.6c

## C7.6c Break down your total gross global Scope 2 emissions by business activity.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 2, location-based emissions (metric tons CO2e)</th>
<th>Scope 2, market-based emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity used for lighting and power</td>
<td>150563</td>
<td>134930</td>
</tr>
<tr>
<td>Purchased steam used for heating and cooling</td>
<td>3464</td>
<td>4007</td>
</tr>
</tbody>
</table>

## C7.9

## C7.9 How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

## C7.9a
(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

<table>
<thead>
<tr>
<th>Change in emissions (metric tons CO2e)</th>
<th>Direction of change</th>
<th>Emissions value (percentage)</th>
<th>Please explain calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in renewable energy consumption 10109</td>
<td>Decreased</td>
<td>3.2</td>
<td>Agreement with Electric Ireland for 100% Green power</td>
</tr>
<tr>
<td>Other emissions reduction activities 0</td>
<td>Please select</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Divestment 11792</td>
<td>Decreased</td>
<td>3.8</td>
<td>Decreased emissions from facilities that are being sold</td>
</tr>
<tr>
<td>Acquisitions 0</td>
<td>No change</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mergers 0</td>
<td>No change</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Change in output 1067</td>
<td>Decreased</td>
<td>0.3</td>
<td>Reduced output at an international manufacturing site</td>
</tr>
<tr>
<td>Change in methodology 7147</td>
<td>Decreased</td>
<td>2.3</td>
<td>Updated EFs from eGRID and IEA</td>
</tr>
<tr>
<td>Change in boundary 8153</td>
<td>Increased</td>
<td>2.6</td>
<td>Inclusion of international fleet emissions</td>
</tr>
<tr>
<td>Change in physical operating conditions 11812</td>
<td>Increased</td>
<td></td>
<td>Increased emissions from use of onsite generators following hurricane Maria</td>
</tr>
</tbody>
</table>

Unidentified <Not Applicable>

Other <Not Applicable>

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

<table>
<thead>
<tr>
<th>Indicate whether your organization undertakes this energy-related activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstocks)</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
</tr>
<tr>
<td>Generation of electricity, heat, steam, or cooling</td>
</tr>
</tbody>
</table>

C8.2a
(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

<table>
<thead>
<tr>
<th>Consumption of fuel (excluding feedstock)</th>
<th>Heating value</th>
<th>MWh from renewable sources</th>
<th>MWh from non-renewable sources</th>
<th>Total MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHV (higher heating value)</td>
<td>0</td>
<td>580953</td>
<td>580953</td>
<td></td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>&lt;Not Applicable&gt;</td>
<td>137888</td>
<td>289599</td>
<td>427487</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>22314</td>
<td>22314</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of self-generated non-fuel renewable energy</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>&lt;Not Applicable&gt;</td>
<td>137888</td>
<td>892867</td>
<td>1030755</td>
</tr>
</tbody>
</table>

C8.2b

(C8.2b) Select the applications of your organization’s consumption of fuel.

<table>
<thead>
<tr>
<th>Consumption of fuel for the generation of electricity</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel for the generation of steam</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of cooling</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for co-generation or tri-generation</td>
<td>No</td>
</tr>
</tbody>
</table>

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

**Fuels (excluding feedstocks)**
- Diesel

**Heating value**
- HHV (higher heating value)

**Total fuel MWh consumed by the organization**
- 274474

**MWh fuel consumed for the self-generation of electricity**
- 161474

**MWh fuel consumed for self-generation of heat**
- 0

**MWh fuel consumed for self-generation of steam**
- 113000

**MWh fuel consumed for self-generation of cooling**
- <Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**
- <Not Applicable>

**Fuels (excluding feedstocks)**
- Propane Liquid

**Heating value**
HHV (higher heating value)

Total fuel MWh consumed by the organization
720

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
684

MWh fuel consumed for self-generation of steam
36

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
305758

MWh fuel consumed for the self-generation of electricity
8

MWh fuel consumed for self-generation of heat
11178

MWh fuel consumed for self-generation of steam
294572

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

C8.2d
List the average emission factors of the fuels reported in C8.2c.

**Diesel**
- **Emission factor**: 10.21
- **Unit**: kg CO₂ per gallon
- **Emission factor source**: Center for Corporate Climate Leadership - Emission Factors for Greenhouse Gas Inventories (19 November 2015, v2)

**Natural Gas**
- **Emission factor**: 53.06
- **Unit**: kg CO₂ per million Btu
- **Emission factor source**: Center for Corporate Climate Leadership - Emission Factors for Greenhouse Gas Inventories (19 November 2015, v2)

**Propane Liquid**
- **Emission factor**: 5.72
- **Unit**: kg CO₂ per gallon
- **Emission factor source**: Center for Corporate Climate Leadership - Emission Factors for Greenhouse Gas Inventories (19 November 2015, v2)

C8.2f

Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

**Basis for applying a low-carbon emission factor**
- Energy attribute certificates, Renewable Energy Certificates (RECs)

**Low-carbon technology type**
- Hydropower

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**
- 6310

**Emission factor (in units of metric tons CO₂e per MWh)**
- 0

**Comment**
- REC for Amgen, Breda

**Basis for applying a low-carbon emission factor**
- Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

**Low-carbon technology type**
- Solar PV
- Wind
- Hydropower
MWh consumed associated with low-carbon electricity, heat, steam or cooling
7405
Emission factor (in units of metric tons CO2e per MWh)
0
Comment
Amgen's San Francisco facility entered into an agreement with Peninsula Clean Energy to receive 50% of our electricity from renewables

Basis for applying a low-carbon emission factor
Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

Low-carbon technology type
Wind
Hydropower

MWh consumed associated with low-carbon electricity, heat, steam or cooling
24152
Emission factor (in units of metric tons CO2e per MWh)
0
Comment
Amgen's Dun Laoghaire facility purchases 100% Green power from Electric Ireland

Basis for applying a low-carbon emission factor
Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

Low-carbon technology type
Other low-carbon technology, please specify (Not specified by supplier)

MWh consumed associated with low-carbon electricity, heat, steam or cooling
2019
Emission factor (in units of metric tons CO2e per MWh)
219
Comment
Electricity provided by EON Energy to Amgen's Cambridge, UK and Uxbridge, UK facilities during Q1-Q4 2017 has an associated emission factor of 219 kgCO2/MWh

Basis for applying a low-carbon emission factor
Grid mix of renewable electricity

Low-carbon technology type
Solar PV
Wind
Hydropower
Nuclear
Biomass (including biogas)

MWh consumed associated with low-carbon electricity, heat, steam or cooling
114998
Emission factor (in units of metric tons CO2e per MWh)
0
Comment
Information on low-carbon electricity sources from the grid were derived from the following sources: eGRID tables for US locations, SmartestEnergy (electricity supplier) for Cambridge, UK and Uxbridge, UK, the Canadian National Inventory Report for Amgen's British Columbia's facility, and the Oxford Institute for Energy Studies "Sustainable Energy in Brazil" (August 2014) for Amgen's facility in Brazil
C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Verification/assurance status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 2 (location-based or market-based)</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 3</td>
<td>No third-party verification or assurance</td>
</tr>
</tbody>
</table>

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

- **Scope**
  - Scope 1

- **Verification or assurance cycle in place**
  - Annual process

- **Status in the current reporting year**
  - Complete

- **Type of verification or assurance**
  - Limited assurance

- **Attach the statement**
  - Amgen Env Data Assurance Statement 2017.pdf

- **Page/section reference**
  - Details of Assessment: p. 1-2 Data: p. 3-4

- **Relevant standard**
  - ISAE3000

- **Proportion of reported emissions verified (%)**
  - 80

- **Scope**
  - Scope 2 location-based

- **Verification or assurance cycle in place**
  - Annual process

- **Status in the current reporting year**
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Amgen Env Data Assurance Statement 2017.pdf

Page/ section reference
Details of Assessment: p. 1-2 Data: p. 3-4

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
BV MBE CDP Verification Statement Amgen 2017 FINAL.pdf

Page/ section reference
Page 1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

---

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, we do not verify any other climate-related information reported in our CDP disclosure

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C11. Carbon pricing

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C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

---

C11.2
(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
1

% total procurement spend (direct and indirect)
44

% Scope 3 emissions as reported in C6.5
7

Rationale for the coverage of your engagement
Amgen’s extensive global network of suppliers is not only vital to our ability to provide high-quality medicines reliably and efficiently, it also represents an opportunity to extend our ability to positively impact the communities and environments in which we operate. Recognizing the importance of our relationships with suppliers to achieve our mission, we have developed a Supplier Sustainability Program that is designed to ensure that our suppliers not only address quality, cost and reliability requirements, but also a wide range of sustainability and Corporate Social Responsibility considerations, in such areas as business ethics, labor and human rights, and environmental impacts. In 2017, Amgen implemented the first phase of its Supplier Sustainability Assessment to evaluate the performance of our key suppliers against the requirements of our Supplier Code of Conduct. This includes that suppliers shall operate in an environmentally responsible and efficient manner to minimize adverse impacts on the environment. Suppliers are encouraged to conserve natural resources, to engage in reuse and recycling programs, and where possible, to avoid the use of hazardous materials. The first phase of this Assessment focused on those suppliers that are most important to Amgen's business because of the nature and/or volume of products or services they provide.

Impact of engagement, including measures of success
The Supplier Performance Assessment, conducted by an independent third party, provides the basis for increased understanding of suppliers’ performance across a wide range of issues, including management of carbon emissions, while ensuring that suppliers are aware of our performance expectations. Results of the Assessment facilitate a dialogue with suppliers about areas where performance improvement should be focused. Through 2017, 59 suppliers have been evaluated (a 28 percent increase from 2016). The long-term goal is to improve the sustainability performance of our strategic suppliers, including management of carbon and green house gas emissions.

Comment

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

No

C12.3g

(C12.3g) Why do you not engage with policy makers on climate-related issues?

Climate related issues are currently not topics we have chosen to engage on with policy makers.
(C12.4) Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

**Publication**
In voluntary sustainability report

**Status**
Complete

**Attach the document**
amgen-2017-responsibility-highlights-report.pdf

**Content elements**
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

---

**Publication**
In voluntary communications

**Status**
Complete

**Attach the document**

**Content elements**
Emissions figures

---

**C14. Signoff**

**C-FI**

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization’s response. Please note that this field is optional and is not scored.

**C14.1**

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director, Environment, Health, Safety and Sustainability</td>
<td>Environmental, health and safety manager</td>
</tr>
</tbody>
</table>

**Submit your response**

In which language are you submitting your response?
English
**Please confirm how your response should be handled by CDP**

<table>
<thead>
<tr>
<th>I am submitting my response</th>
<th>Public or Non-Public Submission</th>
<th>I am submitting to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Investors</td>
</tr>
</tbody>
</table>

**Please confirm below**

I have read and accept the applicable Terms