

# 2020 Summary of Environmental Data



Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Combustion On-site (Direct) (d)	1,000 GJ	2,151	1,790	1,828	1,744	1,828	1,660	2,090	1,766	1,543	1,812
Natural Gas	1,000 GJ	1,848	1,390	1,400	1,322	1,371	1,207	1,100	1,017	1,009	1,037
Diesel	1,000 GJ	303	390	416	411	448	443	988	748	533	773
Propane	1,000 GJ	-	10	11	11	10	9.3	2.6	1.2	1.2	1.3
Total Purchased Energy (Indirect) (e)	1,000 GJ	2,190	2,059	1,990	1,962	1,983	1,876	1,619	1,518	1,551	1,474
Fossil Fuel	1,000 GJ	1,541	1,545	1,435	1,418	1,419	1,314	1,039	937	894	798
Hydro	1,000 GJ	287	191	210	200	217	123	131	129	133	146
Nuclear	1,000 GJ	240	195	185	185	178	148	141	132	96	103
Nonspecified Renewables	1,000 GJ	106	114	152	144	156	277	299	301	347	420
Nonspecified	1,000 GJ	16	13	8.3	14	13	13	8.3	19	81	7.1
Total Energy from Utilities	1,000 GJ	4,341	3,849	3,817	3,706	3,812	3,535	3,709	3,284	3,094	3,286
Total Energy Normalized to Net Sales	1,000 GJ/\$B net sales	303	231	210	192	182	161	170	146	139	136

# 2020 Summary of Environmental Data



Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Carbon Combustion On-site (Scope 1) (f)	1,000 MT CO <sub>2</sub> Eq	126	98	101	96	103	94	125	104	89	107
Natural Gas	1,000 MT CO <sub>2</sub> Eq	104	70	71	67	71	62	56	51	51	53
Diesel	1,000 MT CO <sub>2</sub> Eq	22	27	29	29	32	31	68	52	37	54
Propane	1,000 MT CO <sub>2</sub> Eq	-	1	0.7	0.7	1.0	0.6	0.2	0.1	0.1	0.1
Total Carbon Purchased Energy (Scope 2) (g)	1,000 MT CO <sub>2</sub> Eq	290	287	263	258	266	198	154	160	160	136
Electricity	1,000 MT CO <sub>2</sub> Eq	284	283	259	254	263	195	150	156	160	136
Steam	1,000 MT CO <sub>2</sub> Eq	6.0	3.7	3.8	3.9	3.0	3.0	3.5	4.2	0.6	0.1
Total Carbon from Utilities	1,000 MT CO <sub>2</sub> Eq	416	385	363	354	369	291	278	263	249	243
Total Carbon from Utilities Normalized to Net Sales	1,000 MT CO <sub>2</sub> Eq/\$B net sales	29.1	23.1	20	18	18	13	13	12	11	10
Total Carbon from Utilities Normalized to Total Energy	MTCO <sub>2</sub> Eq/GJ	0.095	0.100	0.095	0.10	0.097	0.082	0.075	0.085	0.080	0.074
Confirmed Results of Carbon Reduction Projects (b,c)	1,000 MT CO <sub>2</sub> Eq	-	84	8	10	13.5	20.2	34	42	49	5.9

# 2020 Summary of Environmental Data

## Other Carbon (h.i.)

Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Carbon Sales Fleet (Scope 1)	1,000 MT CO <sub>2</sub> Eq	13	15	16	13	13	16	32	44	40	27
Carbon Sales Fleet Emissions Avoided (Scope 1)	1,000 MT CO <sub>2</sub> Eq	-	4.0	0.9	1.7	2.3	2.0	3.0	3.2	3.7	4.3
Carbon Executive Air Fleet (Scope 1)	1,000 MT CO <sub>2</sub> Eq	4.8	6.3	5.4	4.8	6.0	5.6	5.0	4.3	4.4	1.4
Carbon From Fugitive Emissions (Scope 1)	1,000 MT CO <sub>2</sub> Eq	-	-	4.2	5.5	4.0	1.6	2.1	8.6	3.1	3.7
Carbon from Purchased Goods and Services (Scope 3: Category 1)	-	-	-	-	-	-	-	-	2,414	2,324	2,316
Carbon from Capital Goods (Scope 3: Category 2)	-	-	-	-	-	-	-	-	263	258	210
Carbon from Fuel- and Energy-related activities (Scope 3: Category 3)	-	-	-	-	-	-	-	-	29	53	45
Carbon from Upstream transportation & distribution (Scope 3: Category 4)	1,000 MT CO <sub>2</sub> Eq	-	25	27	25	29	24	40	33	23	21
Carbon from Waste generated in operations (Scope 3: Category 5)	1,000 MT CO <sub>2</sub> Eq	-	-	-	-	-	-	1.6	1.4	3.5	7.6
Carbon from Business Travel (Scope 3: Category 6)	1,000 MT CO <sub>2</sub> Eq	-	65	67	65	74	78	85	59	56	13
Carbon from Employee Commuting (Scope 3: Category 7)	1,000 MT CO <sub>2</sub> Eq	-	-	-	-	-	-	60	56	56	14

# 2020 Summary of Environmental Data



Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Water Withdrawal (k,c)	1,000 CM	3,286	2,720	2,725	2,487	2,520	2,351	2,320	2,093	2146	2,355
Municipal	1,000 CM	3,249	2,707	2,712	2,482	2,453	2,341	2,293	2,080	2129	2,337
Other - (Reservoir) Trucked In	1,000 CM	8	0	0	0	0	0	0	0	0	-
Ground	1,000 CM	29	13	13	5	68	10	27	13	17	18
Total Water Withdrawal Normalized to Net Sales	1,000 CM/\$B net sales	230	163	150	129	120	107	106	93	97	97
Water Fate (k)	1,000 CM	-	2,720	2,739	2,487	2,512	2,335	2,319	2,093	2,146	2,355
Consumed Into Products	1,000 CM	-	21	21	28	71	28	28	31	31	28
Lost to Evaporation	1,000 CM	-	713	684	657	736	603	610	562	546	542
Discharged to Treatment	1,000 CM	-	1,662	1,758	1,551	1,449	1,495	1,490	1,328	1,379	1,621
Discharged Directly to Environment	1,000 CM	-	324	276	250	256	210	191	172	191	162
Recycled	1,000 CM	-	535	655	525	759	642	608	572	548	567
Percentage of Water Recycled per Total Water Withdrawal	%	-	20	24	21	30	28	26	27	26	24%
Confirmed Results of Water Reduction Projects (b)	1,000 CM	-	686	19	36	142	203	266	278	291	4.5

# 2020 Summary of Environmental Data



Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Recycling Rate (l)	%	34.9	52.8	51.3	50.4	52.1	54	49	49	48	52%
Total Routine Waste	MT	10,146	9,018	8,780	8,929	10,054	10,330	9,856	9,642	9,818	9,841
Hazardous Waste	MT	1,343	1,180	1,157	1,113	1,455	1,815	2,179	1,984	2,179	2,144
Recycled	MT	251	245	105	84	190	286	281	281	230	367
Incinerated for Energy Recovery	MT	375	347	402	387	447	683	901	795	988	797
Incinerated Not for Energy Recovery	MT	523	422	468	473	683	726	860	738	855	885
Landfilled	MT	118	126	147	132	102	94	115	89	78	66
Treated (m)	MT	76	40	36	38	33	27	22	81	28	28
Nonhazardous Waste	MT	8,803	7,838	7,623	7,816	8,599	8,515	7,677	7,658	7,640	7,697
Composted	MT	260	583	532	628	947	814	761	728	745	775
Reused	MT	32	44	274	178	153	159	129	176	249	216
Recycled	MT	2,999	3,890	3,583	3,610	3,945	4,258	3,620	3,441	3,522	3,792
Incinerated for Energy Recovery	MT	432	576	604	605	700	762	601	603	594	731
Incinerated Not for Energy Recovery	MT	194	79	48	88	259	188	162	202	183	74
Landfilled	MT	4,885	2,662	2,530	2,661	2,543	2,273	2,367	2,462	2,302	2,072
Treated (m)	MT	-	4	52	47	52	61	38	46	45	37
Total Routine Waste Normalized to Net Sales	MT/\$B net sales	709	542	483	462	480	472	452	428	442	406
Total Nonroutine Waste (n)	MT	31,415	16,902	8,452	3,722	2,253	4,529	4,852	7,509	3,128	7,966
Confirmed Results of Routine Waste Reduction Projects (b)	MT	-	1,094	320	441	688	850	1,038	1,297	1,574	181

# 2020 Summary of Environmental Data

## Fleet

Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Sales Fleet Fuel Efficiency (o)	MPG	19	23	25	26	27	26	28	29	29	30
Sales Fleet Fuel Use Avoided	1,000 GAL	-	427	104	289	498	704	1,031	1,472	1,869	1,869
Sales Fleet Fuel Use	1,000 GAL	1,498	1,739	1,738	1,381	1,414	1,750	3,415	4,695	4,227	2,831

## Compliance <sup>(a)</sup>

Type	Unit	2007	2012	2013	2014	2015	2016	2017	2018	2019	2020
Environmental Notices of Violation (NOVs) (p)	# NOV	8	2	2	6	0	1	1	3	1	1

# 2020 Summary of Environmental Data

## General

- (a) Amgen data includes specific measurements for energy, water and waste obtained from our operations, representing 88 percent of Amgen's worldwide facility space based on total square feet. Included facilities are in Thousand Oaks, California, U.S.; West Greenwich, Rhode Island, U.S.; Louisville, Kentucky, U.S.; South San Francisco, California, U.S.; Cambridge and Woburn, Massachusetts, U.S.; Juncos, Puerto Rico; Burnaby, Canada; Breda, Netherlands; Dun Laoghaire, Ireland; Uxbridge and Cambridge, United Kingdom; São Paulo, Brazil; Yenibosna and Sekerpinar, Turkey; and Tuas, Singapore. Energy and carbon data for the remaining 12 percent of facility space is estimated based on building energy intensity factors and country specific emission factors. This includes leased buildings where we have operational control over building infrastructure, including utilities.
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- (b) Measurement and verification of conservation and reduction projects for energy and carbon, water and waste are based on adaptation of the International Performance Measurement and Verification Protocol (IPMVP). Project measurements are conducted using reasonable means, including direct measurements and scientific estimations as appropriate. Values for conservation and reduction projects represent year-over-year, cumulative and continuing avoidance based on a 2007 baseline for Amgen's 2012 Environmental Sustainability Program (years 2008-2012); a 2012 baseline for Amgen's 2020 Environmental Sustainability Program (years 2013-2019); and a 2019 baseline for Amgen's 2027 Environmental Sustainability Program (years 2020-2027). NOTE: 2020 Environmental Sustainability Program's conservation targets were achieved ahead of schedule and the program was closed in 2019. During program close-out, additional projects were identified and incorporated into calendar year 2019 reductions.
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- (c) Non-material changes to 2007–2019 data may have occurred due to refinements in calculations. All changes have been confirmed through a documented change control process.

# 2020 Summary of Environmental Data

## Energy

- (d) Direct onsite energy use results from the operation of equipment that is owned or controlled by Amgen. For facilities identified in note (a), data on the use of natural gas, propane and diesel in boilers, furnaces and HVAC is recorded from utility bills or purchase records. Data on the use of diesel in emergency generators is recorded from purchase records or meter readings and, in some cases, estimated from run-hours. Utility bills recorded in units of volume are converted to energy. Energy from emergency generators recorded as run-hours is estimated using the manufacturer's specified fuel-feed rate for each generator. For Amgen facilities where measurements are not obtained or available, usage is estimated from energy intensity factors based on building square footage.
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- (e) Indirect onsite energy use results from purchased energy in the forms of electricity and steam. For facilities identified in note (a), data on the use of electricity and steam are recorded from utility bills. For Amgen facilities where measurements are not obtained or available, usage is estimated from energy intensity factors based on building square footage.

# 2020 Summary of Environmental Data

## Carbon

(f)

Scope 1 carbon emissions result from direct energy sources defined in note (d). Additional Scope 1 Carbon emissions from sales fleet; executive air fleet; fugitive emissions from chillers, coolers and HVAC; carbon dioxide used for neutralization; and carbon dioxide resulting from cell respiration in manufacturing processes and biological wastewater treatment are found in the Other Carbon category in this data summary.

Carbon emissions from natural gas sources are calculated using the U.S. EPA's Center for Corporate Climate Leadership Emission Factors for Greenhouse Gas Inventories (26 March 2020) for all U.S. sites and locations not specifically listed below; the 2018 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions for Amgen's facility in Burnaby, Canada; the Ireland Country Specific Net Calorific Values and CO2 Emissions Factors for use in the Annual Installation Emissions Report- September 2020 for Amgen's facility in Dun Laoghaire, Ireland; The Netherlands: list of fuels and standard CO2 emission factors version of 15 Apr 2020 for Amgen's facility in Breda, Netherlands; and the U.K. Defra's Greenhouse gas reporting: conversion factors 2020 for Amgen's facilities in Uxbridge and Cambridge, United Kingdom. Carbon emissions data from propane and diesel fuel sources are calculated using U.S. EPA's Center for Corporate Climate Leadership Emission Factors for Greenhouse Gas Inventories (26 March 2020). Carbon data from direct energy sources prior to 2011 were calculated using emission factors from the Greenhouse Gas Protocol Cross-Sector Tools-Stationary Combustion-V.1.0 (July 2009).

(g)

Scope 2 carbon market-based emissions result from indirect energy sources defined in note (e). Carbon emissions from purchased electricity are calculated using supplier specific emission factors for Amgen's facilities in Thousand Oaks and San Francisco, California; Woburn and Cambridge, Massachusetts; West Greenwich, Rhode Island; Dun Laoghaire, Ireland; and Cambridge and Uxbridge United Kingdom. Carbon emissions from purchased electricity carbon emissions are calculated from U.S. EPA eGRID Summary Tables 2019 for Amgen's facility in Louisville, Kentucky and Juncos, Puerto Rico. Carbon emissions from purchased electricity for Amgen's facility in British Columbia, Canada are calculated using regional emission factors. Carbon emissions from purchased electricity for Amgen's Netherlands facility and Singapore facility are covered by a renewable energy certificates. Carbon emissions from Amgen's remaining locations (including Brazil and Turkey) are calculated using emission factors from the International Energy Agency's CO2 emissions from fuel combustion 2020. Carbon data from purchased steam is calculated using an emission factor provided by the supplier for Amgen's facility in Cambridge, Massachusetts. Carbon data from indirect energy sources prior to 2011 were calculated using emission factors from U.S. EPA eGRID2007 Version 1.1 for U.S. facilities.

# 2020 Summary of Environmental Data

## Other Carbon

- (h) The Other Carbon category contains additional Scope 1 and Scope 3 carbon emissions. Carbon emissions from our executive air fleet and sales fleet are calculated using emission factors from the U.S. EPA's Center for Corporate Climate Leadership Emission Factors for Greenhouse Gas Inventories (26 March 2020). U.S. sales fleet fuel usage and mileage data are collected at the pump for Amgen leased vehicles. Beginning in 2017, sales fleet incorporated international fleets, and in 2018 estimates were included for additional international locations and field workers operating long-term rental vehicles. Fugitive emissions from process equipment (e.g., refrigerant from refrigeration and HVAC equipment) are calculated using emission factors from the Intergovernmental Panel on Climate Change. Processes are in place to maintain chillers, coolers and HVAC equipment to prevent unintended emissions. Beginning in 2019 fugitive emissions include carbon emissions from purchased carbon dioxide and from on-site cell respiration in manufacturing and wastewater treatment operations.
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- (i) Scope 3 carbon emissions are a consequence of the activities of the company but occur from sources not owned or controlled by the company. Scope 3 carbon emissions that are currently tracked include emissions from Amgen's purchased goods and services, capital goods, fuel-related activities, upstream material transportation, waste generated in operations, commercial business travel (air and rail), and staff commuting. Carbon emissions for Scope 3 Purchased Goods and Services and from Scope 3 Capital Goods are calculated using spend data and the Greenhouse Gas Protocols Scope 3 Evaluator tool. Carbon emissions from Scope 3 Fuel- and Energy-related Activities are calculated using the U.K. Defra's Greenhouse gas reporting: conversion factors 2020. Carbon emissions from Scope 3 Upstream Transportation and Distribution have been provided by Amgen's transportation carriers using their own specific methods or calculated using carrier data. Carbon emissions from Scope 3 Waste Generated in Operations is calculated using the U.K. Defra's Greenhouse gas reporting: conversion factors 2020. Carbon emissions from Scope 3 Business Travel are calculated by Amgen's travel provider for air travel and internal information for hotel stays and rental car miles. Carbon emissions Scope 3 Employee Commuting are calculated using the Global Fuel Economy Initiative's International Comparison of Light-Duty Vehicle Fuel Economy 2005-2015.
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- (j) Carbon emissions from commercial business travel was not tracked in 2007 or 2008. Carbon emissions from material transportation was not tracked from 2007 to 2011. The accuracy of carbon emissions tracking from fugitive refrigerant emissions improved in 2013 and will now be reported going forward. Carbon emissions from staff commuting and waste disposal was not tracked prior to 2017. Carbon emissions from purchased goods and services, capital goods, and fuel-related activities were not tracked prior to 2018.

# 2020 Summary of Environmental Data

## Water

- (k) Non-material discrepancy between values for total water fate and total water withdrawal is due to rounding and compilation of individual facility totals.

## Waste

- (l) The recycle rate is the total routine recycled, composted and reused weight divided by the total weight of routine waste.
- (m) 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.
- (n) Nonroutine waste constitutes waste generated outside the normal operations of our facilities and consists mainly of construction and demolition waste.

## Fleet

- (o) Emissions and fuel use avoided are the result of improvements in fleet efficiency from years 2007 through 2012 based on a 2007 baseline and years 2013+ based on a 2012 baseline.

## Compliance

- (p) Environmental notices of violation (NOVs) reported that resulted from agency inspections.

## INDEPENDENT LIMITED ASSURANCE STATEMENT



**To: The Stakeholders of Amgen**

### Introduction and objectives of work

Apex Companies, LLC (Apex) has been engaged by Amgen to provide limited assurance of selected environmental and safety data. This assurance statement applies to the Subject Matter included within the scope of work described below.

This information and its presentation in Amgen's Environmental, Social & Governance 2020 Report ('the ESG 2020 Report') are the sole responsibility of the management of Amgen. Apex was not involved in the drafting of the ESG 2020 Report. Our sole responsibility was to provide independent assurance on the accuracy of the Subject Matter.

### Scope of work

The scope of our work was limited to assurance over the following environmental and safety data included within the ESG 2020 Report for the period of calendar year 2020 (the 'Subject Matter'):

- Energy Use (Total, Direct and Indirect)
- Greenhouse Gas (GHG) Emissions (Scope 1, Scope 2 location-based and market-based, Scope 3, Upstream Categories 1 – 7)
- Water Withdrawal and Fate
- Waste Quantities and Disposition
- Recordable Case Rate (Amgen Staff and Contractors)
- Days Away Case Rate (Amgen Staff and Contractors)
- Lost-Time Injury Frequency Rate (Amgen Staff and Contractors)
- Fatalities (Amgen Staff and Contractors)
- Environmental Notices of Violation

Data and information supporting the Subject Matter were in some cases estimated rather than historical in nature.

Our assurance does not extend to any other information included in the ESG 2020 Report.

### Reporting Boundaries

The following are the boundaries used by Amgen for reporting sustainability data:

- Operational Control
- Energy, GHG emissions, Recordable Case Rate, Days Away Case Rate and Environmental Notices of Violation: Amgen facilities located worldwide
- Water and Waste Metrics: Seventeen manufacturing, research and development, and distribution facilities where data are collected, representing approximately 88 percent of Amgen's building square footage. The remaining facilities are primarily administrative offices.

### Reporting Criteria

The Subject Matter needs to be read and understood together with the description of the Subject Matter reporting criteria in the ESG 2020 Report. The reporting criteria for greenhouse gas emissions was the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

## Limitations and Exclusions

Excluded from the scope of our work is any verification of information relating to:

- Text or other written statements associated with the ESG 2020 Report and amgen.com
- Activities outside the defined verification period of Calendar Year 2020

This limited assurance engagement relies on a risk based selected sample of sustainability data and the associated limitations that this entails. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

## Responsibilities

This preparation and presentation of the Subject Matter in the ESG 2020 Report are the sole responsibility of the management of Amgen.

Apex was not involved in the drafting of the ESG 2020 Report or of the Reporting Criteria. Our responsibilities were to:

- obtain limited assurance about whether the Subject Matter has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to Amgen management.

## Assessment Standards

We performed our work in accordance with Apex's standard procedures and guidelines for external Assurance of Sustainability Reports and International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board. Greenhouse Gas Emissions were verified in accordance with and ISO Standard 14064-3 Second edition 2019-04 Greenhouse Gases - Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements. A materiality threshold of  $\pm 5$ -percent was set for the assurance process.

## Summary of Work Performed

As part of our independent verification, our work included:

1. Assessing the appropriateness of the Reporting Criteria for the Subject Matter;
2. Conducting interviews with relevant personnel at Amgen regarding data collection and reporting systems;
3. Reviewing the data collection and consolidation processes used to compile Subject Matter, including assessing assumptions made, and the data scope and reporting boundaries;
4. Reviewing documentary evidence provided by Amgen;
5. Agreeing a selection of the Subject Matter to the corresponding source documentation both remotely and during interviews with individuals responsible for reporting data at facilities located in San Francisco, California and Thousand Oaks, California;
6. Reviewing Amgen's systems for quantitative data aggregation and analysis; and
7. Assessing the disclosure and presentation of the Subject Matter to ensure consistency with assured information.

## Conclusion

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the Subject Matter has not been properly prepared, in all material respects, in accordance with the Reporting Criteria; and
- It is our opinion that Amgen has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of this assurance.

A summary of data within the scope of assurance for 2020 is attached.

## Statement of Independence, Integrity and Competence

Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

No member of the assurance team has a business relationship with Amgen, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the verification of greenhouse gas emissions data.



Lisa S. Barnes, Lead Verifier  
Apex Companies, LLC  
Lakewood, Colorado



John A. Rohde, Technical Reviewer  
Apex Companies, LLC  
Lakewood, Colorado

April 13, 2021

Summary of 2020 Data Subject to Assurance

Metric Type	Units <sup>(1)</sup>	2020 <sup>(2)</sup>
Total Combustion On-site (Direct)	1,000 GJ	1,812
Natural Gas	1,000 GJ	1,037
Diesel	1,000 GJ	773
Propane	1,000 GJ	1.3
Total Purchased Energy (Indirect)	1,000 GJ	1,474
Fossil Fuel	1,000 GJ	798
Hydro	1,000 GJ	146
Nuclear	1,000 GJ	103
Renewables	1,000 GJ	420
Non-specified	1,000 GJ	7.1
Onsite Renewable Generation	1,000 GJ	0.2
Total Energy	1,000 GJ	3,286
Total Carbon Combustion On-site (Scope 1 GHG emissions)	1,000 MT CO2Eq	107
Natural Gas	1,000 MT CO2Eq	53
Diesel	1,000 MT CO2Eq	54
Propane	1,000 MT CO2Eq	0.1
Total Carbon Purchased Energy (Scope 2 GHG emissions - market based)		
Electricity	1,000 MT CO2Eq	136
Steam	1,000 MT CO2Eq	0.1
Total Carbon Purchased Energy (Scope 2 GHG emissions - location based)		
Electricity	1,000 MT CO2Eq	133
Steam	1,000 MT CO2Eq	5.9
Total Carbon from Energy	1,000 MT CO2Eq	243
Total Carbon Normalized to Total Energy	MTCO2Eq/GJ	0.084
Carbon Sales Fleet (Scope 1)	1,000 MT CO2Eq	27
Carbon Executive Air Fleet (Scope 1)	1,000 MT CO2Eq	1.4
Carbon from Fugitive Refrigerant Emissions (Scope 1)	1,000 MT CO2Eq	1.8
Carbon from Cell Respiration and Purchased Carbon Dioxide Emissions (Scope 1)	1,000 MT CO2Eq	2.0
Carbon (Scope 3 GHG emissions): Upstream		
Purchased Goods and Services (Category 1)	1,000 MT CO2Eq	2,316
Capital Goods (Category 2)	1,000 MT CO2Eq	210
Fuel- and Energy-Related Activities (Category 3)	1,000 MT CO2Eq	45
Upstream Transportation & Distribution (Category 4)	1,000 MT CO2Eq	21
Waste Generated in Operations (Category 5)	1,000 MT CO2Eq	7.6
Business Travel (Category 6)	1,000 MT CO2Eq	13
Staff Commuting (Category 7)	1,000 MT CO2Eq	14
Total Water Withdrawal	1,000 CM	2,355
Municipal	1,000 CM	2,337
Other - (Reservoir) Trucked In	1,000 CM	-
Ground	1,000 CM	18

Metric Type	Units <sup>(1)</sup>	2020 <sup>(2)</sup>
Water Fate	1,000 CM	2,355
Consumed into Products	1,000 CM	28
Lost to Evaporation	1,000 CM	542
Discharged to Treatment	1,000 CM	1,621
Discharged Directly to Environment	1,000 CM	162
Recycled	1,000 CM	567
Percentage of Water Recycled per Total Water Withdrawal	%	24%
Waste Recycling Rate (includes routine waste recycled, reused and composted)	%	52%
Total Routine Waste	MT	9,841
Routine Hazardous Waste	MT	2,144
Recycled	MT	367
Incinerated for Energy Recovery	MT	797
Incinerated Not for Energy Recovery	MT	885
Landfilled	MT	66
Treated	MT	28
Routine Nonhazardous Waste	MT	7,697
Composted	MT	775
Reused	MT	216
Recycled	MT	3,792
Incinerated for Energy Recovery	MT	731
Incinerated Not for Energy Recovery	MT	74
Landfilled	MT	2,072
Treated	MT	37
Total Nonroutine Waste	MT	7,966
Injury and Illness Rate – Beyond First Aid (Amgen Staff <sup>(3)</sup> )	Incidents per 100 Workers	0.30
Lost Day Case rate (Amgen Staff <sup>(3)</sup> )	Incidents per 100 Workers	0.07
Lost-Time Injury Frequency Rate (Amgen Staff <sup>(3)</sup> )	Lost Day Cases per 1,000,000 hours	0.33
Fatalities (Amgen Staff <sup>(3)</sup> )	Number	1
Injury and Illness Rate – Beyond First Aid (Contractors)	Incidents per 100 contractors	0.40
Lost Day Case rate (Contractors)	Incidents per 100 contractors	0.17
Lost-Time Injury Frequency Rate (Contractors)	Lost Day Cases per 1,000,000 hours	0.86
Fatalities (Contractors)	Number	0
Environmental Notices of Violation (NOVs)	Number	1

(1) Unit abbreviations:

GJ= gigajoules  
MT CO<sub>2</sub>Eq = metric tons of carbon dioxide equivalents  
CM = cubic meters  
MT = metric tons

(2) Numbers in this table have been rounded

(3) Amgen staff includes Amgen employees and contingent workers that are directly supervised by Amgen