

INDEPENDENT ASSURANCE STATEMENT

Introduction and objectives of work

Bureau Veritas North America, Inc. (BVNA) has been engaged by Amgen to conduct an independent assurance of selected environmental and safety data.

This Assurance Statement applies to the related information included within the scope of work described below.

The data presented in Amgen's 2016 Responsibility Highlights Report (the Report) and in the Environment and Safety and Wellness sections on amgen.com is the sole responsibility of the management of Amgen. BVNA was not involved in the drafting of content for the Report or for amgen.com. Our sole responsibility was to provide independent verification of the accuracy of selected information included in the Report and on amgen.com.

Scope of work

Amgen requested BVNA to verify the accuracy of the following data summarized in Amgen's Report for the Calendar Year 2016 reporting period:

- Energy Use (Total, Direct and Indirect)
- Greenhouse Gas Emissions (Direct Scope 1 and Indirect Scope 2 location-based)
- Water Withdrawal and Fate
- Waste Quantities and Disposition
- Recordable Case Rate
- Days Away Case Rate
- Environmental Notices of Violation

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

- Text or other written statements associated with Amgen's 2016 Responsibility Highlights Report and amgen.com
- Activities outside the defined verification period of Calendar Year 2016

Methodology

As part of its independent verification, BVNA undertook the following activities:

- Interviews with relevant personnel of Amgen regarding data collection and reporting systems;
- 2. Review of Amgen's data and information systems and methodology for collection, aggregation, analysis and internal audit of information used to determine the environmental and safety data;
- 3. Review of documentary evidence produced by Amgen;
- 4. Audit of Amgen's data traced back to the source during site visits to facilities located in Dublin, Ireland and San Francisco, California; and
- 5. Review of the centralized data, methods for consolidation of site data and site data available in the centralized data management system during a visit to Amgen's headquarters location in Thousand Oaks, California.



Our assurance work was conducted in accordance with Bureau Veritas procedures based on the International Standard on Assurance Engagements (ISAE) 3000 and ISO Standard 14064-3 Greenhouse Gases - Part 3: Specification with Guidance for the Validation and Verification of Greenhouse Gas Assertions. In accordance with our internal procedures for limited assurance, we use these as our reference standards.

The work was planned and carried out to provide data verification to a limited assurance level and we believe it provides an appropriate basis for our conclusions.

Our conclusions

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

- Nothing has come to our attention to indicate that the reviewed information within the scope of our verification is not materially correct.
- Nothing has come to our attention to indicate that the reviewed information is not a fair representation of the actual environmental and safety data for calendar year 2016.
- 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 2016 is attached.

Statement of independence, impartiality and competence

BVNA is part of The Bureau Veritas Group, an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with almost 180 years of history in providing independent assurance services, and an annual 2016 revenue of 4.55 Billion Euros.

No member of the verification 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.

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

Attestation:

Lisa S. Barnes, Lead Verifier

Practice Line Leader

Sustainability and Climate Change Services

Bureau Veritas North America, Inc.

Join S. Barnes

Denver, Colorado

April 14, 2017

John Rohde, Project Reviewer

Senior Project Manager

Sustainability and Climate Change Services

Bureau Veritas North America, Inc.

Summary of 2016 Data Subject to Assurance

Metric Type	Units ⁽¹⁾	2016 ⁽²⁾
Total Combustion On-site (Direct)	1,000 GJ	1,660
Natural Gas	1,000 GJ	1,207
Diesel	1,000 GJ	443
Propane	1,000 GJ	9
Total Purchased Energy (Indirect)	1,000 GJ	1,876
Fossil Fuel	1,000 GJ	1,314
Nuclear	1,000 GJ	148
Renewables	1,000 GJ	400
Nonspecified	1,000 GJ	13
Total Energy	1,000 GJ	3,535
Total Carbon Combustion On-site (Scope 1 GHG emissions)	1,000 MT CO2Eq	94
Natural Gas	1,000 MT CO2Eq	62
Diesel	1,000 MT CO2Eq	31
Propane	1,000 MT CO2Eq	1
Total Carbon Purchased Energy (Scope 2 GHG emissions – location based)	1,000 MT CO2Eq	198
Electricity	1,000 MT CO2Eq	195
Steam	1,000 MT CO2Eq	3
Total Carbon From Energy	1,000 MT CO2Eq	291
Total Carbon Normalized to Total Energy	MTCO2Eq/GJ	0.082
Carbon U.S. Sales Fleet (Scope 1)	1,000 MT CO2Eq	16
Carbon Executive Air Fleet (Scope 1)	1,000 MT CO2Eq	6
Carbon From Fugitive Refrigerant Emissions (Scope 1)	MT CO2Eq	1,637
Total Water Withdrawal	1,000 CM	2,351
Municipal	1,000 CM	2,341
Other - (Reservoir) Trucked In	1,000 CM	-
Ground	1,000 CM	10
Water Fate	1,000 CM	2,335
Consumed Into Products	1,000 CM	28
Lost to Evaporation	1,000 CM	603
Discharged to Treatment	1,000 CM	1,495
Discharged Directly to Environment	1,000 CM	210
Recycled	1,000 CM	642
Percentage of Water Recycled per Total Water Withdrawal	%	28%
Waste Recycling Rate (includes routine waste recycled, reused, composted and treated)	%	54%
Total Routine Waste	MT	10,330
Routine Hazardous Waste	MT	
Recycled	MT	1,815 286
Incinerated for Energy Recovery	MT	
incinerated for Energy Recovery	IVII	683

Metric Type	Units ⁽¹⁾	2016 ⁽²⁾
Incinerated Not for Energy Recovery	MT	726
Landfilled	MT	94
Treated	MT	27
Routine Nonhazardous Waste	MT	8,515
Composted	MT	814
Reused	MT	159
Recycled	MT	4,258
Incinerated for Energy Recovery	MT	762
Incinerated Not for Energy Recovery	MT	188
Landfilled	MT	2,273
Treated	MT	61
Total Nonroutine Waste	MT	4,529
U.S. Sales Fleet Fuel Efficiency	MPG	26.1
U.S. Sales Fleet Fuel Use	1,000 GL	1,750
Injury and Illness Rate	Recordable Cases per 100 Employees	0.43
Lost Day Case rate	Lost Day Cases per 100 Employees	0.14
Environmental Notices of Violation	number	1
(1) Unit abbreviations: GJ= gigajoules MT CO2Eq = metric tons of carbon dioxide equivalents CM = cubic meters MT = metric tons MPG = miles per gallon GL = gallons (2) Numbers in this table have been rounded		

Amgen