

## Amgen 2013 Environmental Sustainability Highlights



## Leadership Message



Robert A. Bradway

Amgen ensures we live up to our commitment to environmental sustainability by establishing a multi-year plan with clear metrics to track our progress. Through our first environmental sustainability plan, we realized more than \$24 million in cost savings and exceeded targets for conservation, even as our operations grew. In 2013, we embarked on a new environmental sustainability plan with more ambitious conservation targets. These include aspirations to reduce facility carbon emissions by 10 percent and disposed waste by 35 percent from a 2012 baseline. This plan aims to thoroughly integrate principles of environmental sustainability into the development of our medicines from early research to the market. In 2013, we were also recognized externally for our results. Ranked among the best performers in biotechnology, Amgen was listed on the 2013 Dow Jones Sustainability North America Index (DJSI).

Amgen is widely recognized as a leader in biologics manufacturing and we continue to advance our capabilities in this area. We broke ground in 2013 in Singapore on a facility that will help transform manufacturing processes at Amgen. We expect the facility will enable us to be faster, more flexible, and more efficient in reaching patients, while also reducing the environmental impact of the manufacturing of our

products. When up and running, this facility will join existing efforts in both biologic and synthetic molecule research and development to make us more agile and environmentally responsible as a company.

Beyond the specific actions we've taken as a company, our staff continue to demonstrate their passion for the environment through innovative thinking on the job and volunteer work in the community. We support staff safety with a pervasive focus on creating a safe work environment, and we promote staff wellness with a range of programs that encourage physical and mental health.

Taking a path to be a more environmentally sustainable company has been a revealing and productive journey. Thank you for following our progress through our environmental sustainability reporting. We value your input and invite you to share your thoughts through the feedback link of the report website.

A handwritten signature in black ink that reads "Robert A. Bradway". The signature is fluid and cursive, with a large, stylized "B" and "W".

Robert A. Bradway  
Chairman and Chief Executive Officer

This brochure, a supplement to Amgen's 2013 Environmental Sustainability Report found at [environment.amgen.com](http://environment.amgen.com), highlights how the company is successfully implementing an environmental sustainability plan and delivering results. In 2013, we began work on our 2020 plan and targets for our next level of environmental sustainability performance.

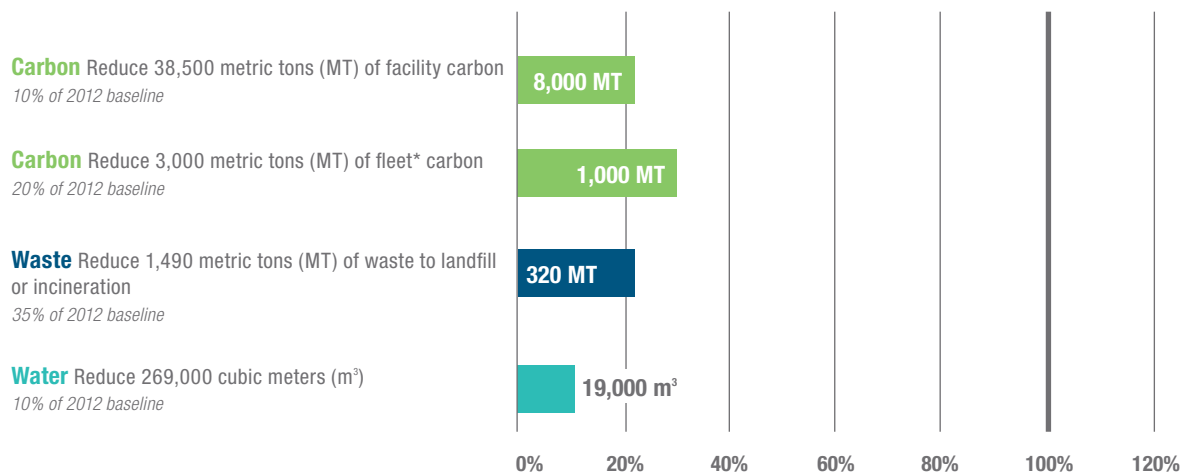
## Our Targets



We achieved all of our 2012 environmental targets—energy, carbon dioxide, water, waste recycling, waste reduction, and the fuel efficiency of our US sales fleet—saving more than \$24 million in operating costs and strengthening our business in the process. From this foundation, we have set new goals for 2020 in the areas of facility carbon emissions, fleet carbon emissions, disposed waste reduction, and water use. The overall aim of our 2020 targets is to protect the environment, improve efficiency, and increase shareholder value.

### 2020 Target

### Progress Through 2013



\*Currently showing progress for US sales fleet. Baseline is being established for sales fleet outside the US, which will be integrated into target.

*In 2013, we embarked on our 2020 plan for environmental sustainability. We continue to integrate environmental sustainability practices throughout our company's operations—from research and manufacturing practices to the design and construction of facilities.*

## Sustainability in Action



*Above: New facilities, along with improved practices and processes for research and manufacturing are making a significant difference for energy use and carbon emissions at Amgen.*

### **2020 Plan Drives Sustainable Practices Throughout the Value Chain**

Amgen has a new 2020 plan for environmental sustainability focused on driving sustainable practices in the areas of research, development, and manufacturing; transportation and distribution; commercial operations; sourcing; and products and packaging. By integrating sustainability practices during the design process, we are achieving further efficiencies in our business while continuing to reduce our impact on the environment. Our success depends on the creativity and resourcefulness of our staff who demonstrate their commitment to the environment both at work and in their communities.

### **Technology Tames Energy Drain**

Heating, ventilation, and air conditioning systems are Amgen's most significant energy users, contributing more than 50 percent of the company's total energy/carbon-related emissions. Engineers at our corporate headquarters in Thousand Oaks, California, upgraded the old chilled water/air conditioning system and installed a new automation system with real-time control, resulting in a 40 percent increase in energy efficiency for the site. With this change alone, Amgen is saving more than 28,000 gigajoules of energy and keeping 2,197 metric tons of carbon out of the environment. The local utility company, Southern California Edison, rewarded Amgen with a \$1.3 million incentive for this innovation.

### **Reducing Waste Can Be Dirty Work**

Digging through the trash is not a typical task at Amgen, but in 2013, staff at some of our largest sites pulled on gloves, poured out the contents of trash and recycling bins, and documented what they found. They used evidence from these trash audits to discover new ways to improve recycling rates and reduce waste, such as by reducing the use of disposable mop heads. Some findings pointed to the need for clearer signage or better systems to encourage staff to use the composting and recycling bins appropriately.

### **Reducing the Environmental Footprint of Research and Manufacturing**

New facilities, along with improved practices and processes for research and manufacturing, are making a significant difference for energy use and carbon emissions at Amgen. Our drug product manufacturing building in Puerto Rico earned Leadership in Energy and Environmental Design certification for conservation benefits. Other facilities for filling medicines into delivery devices and vials are being built to similar green specifications. A facility under construction in Singapore for biologics manufacturing will have a one-third smaller footprint compared with traditional facilities.

Amgen continues to build on green practices for both biologic and synthetic molecule research and manufacturing. These practices improve our ability to speed medicines to patients while reducing our environmental impact.

*Amgen makes an impact in the communities in which we operate through direct volunteer work by staff members and through financial support from the Amgen Foundation. We are a good neighbor in the communities where we work and live.*



*Left: We removed nearly four metric tons of trash during the 2013 International Coastal Cleanup.*

*Middle and right: Amgen staff demonstrate a commitment to the environment at work and in their communities.*

### **Volunteering for the Environment**

Amgen has had longstanding participation in environmental volunteering activities that grows larger each year. 2013 was the company's sixth year to engage in the world's largest volunteer event to protect waterways and ocean health—the International Coastal Cleanup. Colleagues from sites in Puerto Rico, Washington, British Columbia, California (San Francisco and Thousand Oaks), and Rhode Island removed nearly four metric tons of debris from beaches and inland waterways. In a similar science-based environmental volunteering activity, an Amgen engineer earned a 2013 Amgen Excellence in Volunteering Award (and a donation from Amgen Foundation to the nonprofit Reef Check) for his efforts to survey reef sites and collect data on marine life while scuba diving along the coast of Southern California for Reef Check.

Over the past four years, staff members from Thousand Oaks, California, have made numerous treks to Anacapa Island in California's Channel Islands to remove non-native, invasive ice plants and restore the area with native plants that support the island's ecosystem. The National Parks Service recognized Amgen staff in a public ceremony for volunteer efforts in 2013 on Anacapa.

### **The Amgen Foundation Supports the Environment**

The Amgen Foundation supported a special initiative in conjunction with the National Fish and Wildlife Foundation's Five Star and Urban Waters Restoration Grant program in 2013. The initiative combined volunteering opportunities for staff that support community-based wetland, riparian and coastal habitat restoration projects in areas near many of Amgen's North American sites with funding focused on water conservation and protection. The Foundation also made grants to the EarthCorps Stewardship Volunteers and the Washington Trails Association Youth Trail Stewardship programs.

See the Amgen Foundation area under Corporate Giving at [www.amgen.com](http://www.amgen.com) for more information on the wide variety of nonprofits the Foundation supports in communities across the United States, Puerto Rico, and Europe.

# Performance



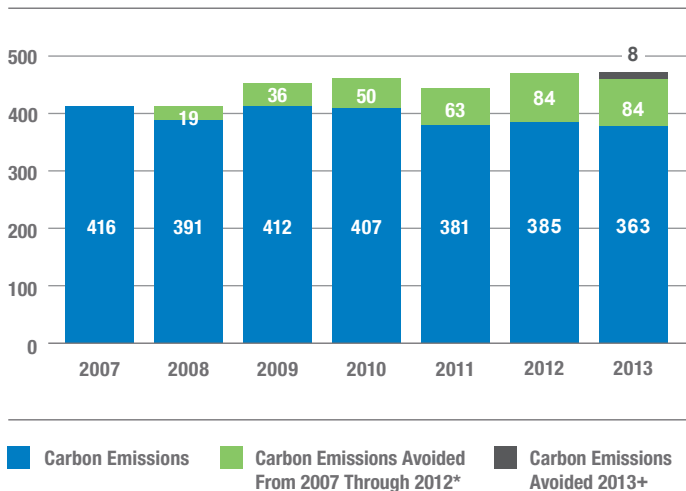
## Conserving Resources

Conserving energy allows us to retain more financial resources for our core business while reducing carbon emissions. Our strategy has been to complete utilities projects that provide substantial returns for both energy savings and carbon reduction across our network of facilities around the world. In recent years, as we approach new construction projects, we have been building sustainable practices and technology into office and manufacturing facilities from the ground up. Energy conservation and carbon reduction projects have saved our company more than \$20 million in cost savings and reduced carbon emissions by 92,000 metric tons since 2007.

We set a new carbon-reduction target related to our sales fleet for 2020. We continue to expand the range of fuel-efficient vehicle choices available for mobile staff—rotating vehicles that are less fuel efficient out of the fleet for more efficient options.

## Carbon

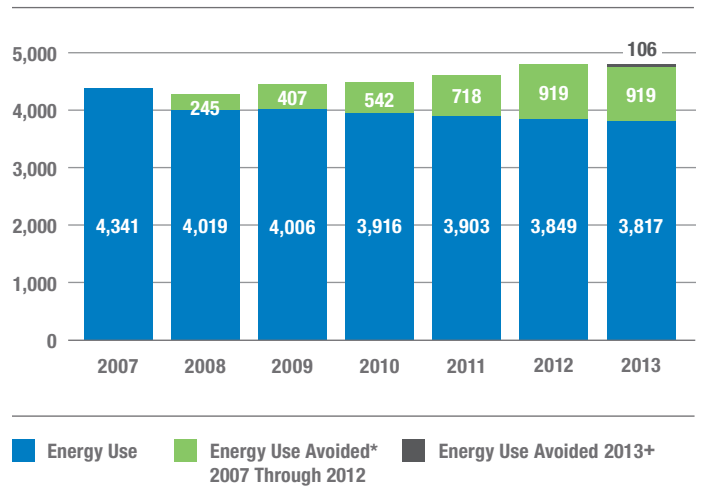
2007–2013 Carbon Emissions and Carbon Emissions Avoided\* Through Conservation Efforts (1,000 MT)



\*Value represents year-over-year, cumulative, and continuing avoidance.

## Energy

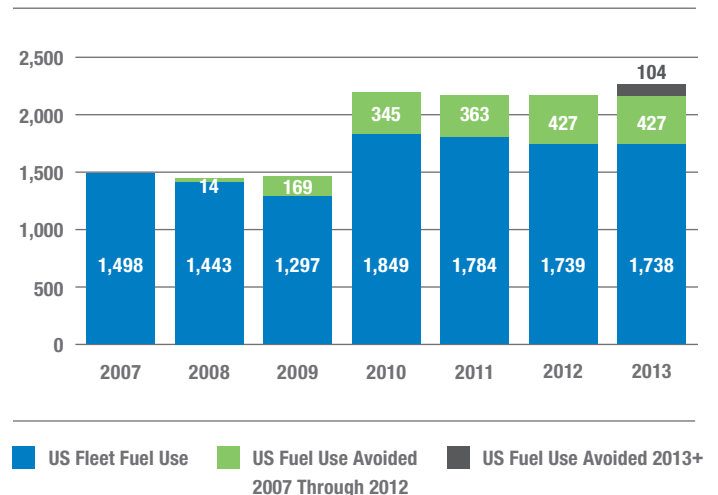
2007–2013 Energy Use and Energy Use Avoided\* Through Conservation Efforts (1,000 GJ)



\*Value represents year-over-year, cumulative, and continuing avoidance.

## Fuel Efficiency

2007–2013 US Fleet Fuel Use and Fuel Use Avoided Through Conservation (per 1,000 Gal)\*

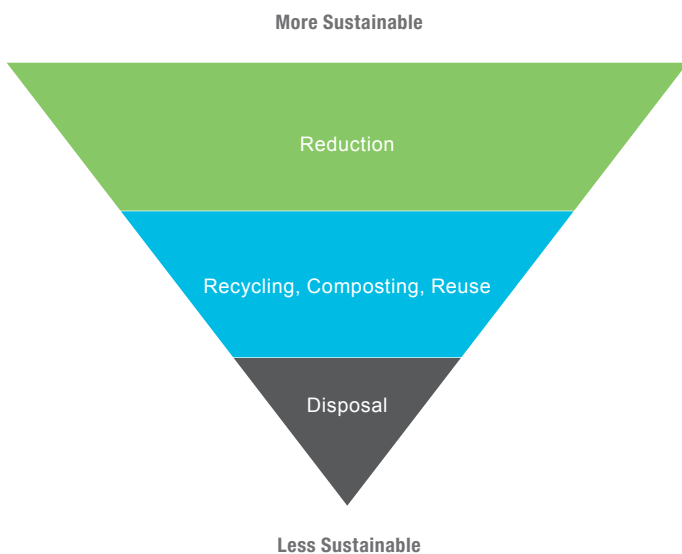


\*Chart represents annual avoidance.

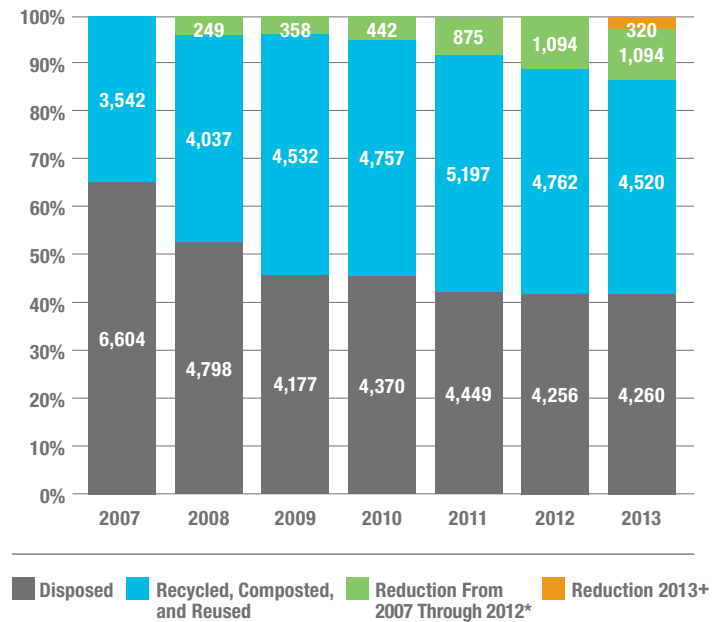


## Waste

### The Waste Hierarchy as a Model for Our Waste-Reduction Goals

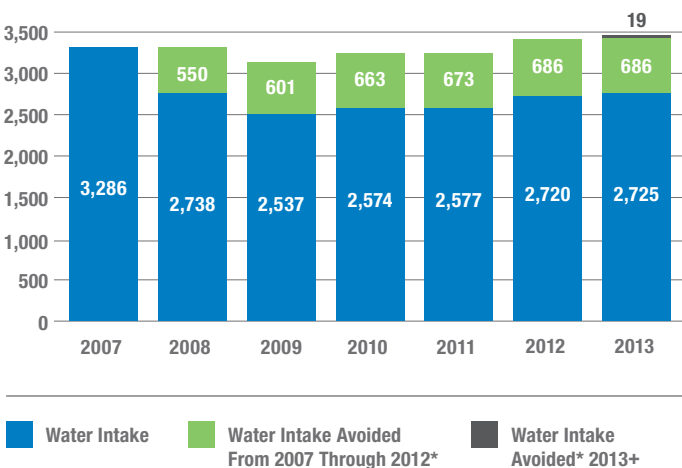


### 2007—2013 Routine Waste Categorized by Waste Hierarchy



## Water

### 2007—2013 Water Intake and Intake Avoided\* Through Conservation Efforts (1,000 m³)



\*Value represents year-over-year, cumulative, and continuing avoidance.

## Reducing Waste, Saving Water

Amgen's recycling rate has gone from 35 percent in 2007 to 51 percent in 2013, with a slight decrease in the past two years. To improve both our recycling program and waste reduction efforts we conducted waste audits at our largest sites in 2013. We're using data from these audits to shape future initiatives for recycling and waste reduction.

Amgen conserves water primarily with a wastewater treatment plant in Puerto Rico, which has enabled an average of 74 percent of the treated wastewater to be recycled on-site each year, and with low-water landscaping and smart-irrigation controls at a variety of facilities. In 2013, we developed water maps for each of our sites, following the flow of water through the site to its exit point. These studies help us understand our most significant water users and identify new opportunities for reclamation and reuse of water.

Amgen reports in alignment with the Global Reporting Initiative (GRI) G3.1 guidelines. The GRI guidelines offer a useful framework to help companies standardize their sustainability reporting. We are reporting on our 2013 performance at a self-declared application level C+.

The scope of the environmental data in our report includes 15 manufacturing, research and development, and distribution facilities in North America and Europe. These facilities represent approximately 94 percent of our operations, based on the square footage of our facilities. The remaining square footage primarily includes administrative offices.

Our 2013 environmental data for this report have undergone limited assurance by Bureau Veritas.

In 2013, Amgen acquired Onyx Pharmaceuticals. No data will be included for this facility in this report, as we are still working through the integration process.

The index summarizes Amgen's disclosures in relation to the GRI G3.1 indicators.

## Strategy and Analysis

Number	Disclosure	Reported	Response
1.1	Statement from CEO	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Leadership Message</i> )

## Organizational Profile

Number	Disclosure	Reported	Response
2.1	Name of organization	●	Amgen
2.2	Primary brands, products, and/or services	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Product websites</i> )
2.3	Operational structure	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Amgen Fact Sheet</i> )
2.4	Location of headquarters	●	Thousand Oaks, CA
2.5	Countries of operation	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Amgen Fact Sheet</i> )
2.6	Nature of ownership	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Amgen Fact Sheet</i> )
2.7	Markets served	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Amgen Fact Sheet</i> )
2.8	Scale of the reporting organization	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Amgen Fact Sheet</i> )
2.9	Significant changes during the reporting period	●	Amgen acquired one company in 2013: Onyx Pharmaceuticals.
2.10	Awards	●	<i>Awards and Recognition</i>

## Report Parameters

Number	Disclosure	Reported	Response
3.1	Reporting period	●	January 1, 2013, to December 31, 2013
3.2	Date of most recent report	●	May 2013
3.3	Reporting cycle	●	Annual
3.4	Contact point	●	<a href="mailto:esfeedback@amgen.com">esfeedback@amgen.com</a>
3.5	Process for defining report content	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Amgen's Environmental Sustainability Plan</i> ) <a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Stakeholder Engagement</i> )
3.6	Boundary of the report	●	Amgen facilities within the scope of this report are as follows: <b>United States:</b> Thousand Oaks, California; Cambridge, Massachusetts; Woburn, Massachusetts; Greenwich, Rhode Island; Louisville, Kentucky; South San Francisco, California; Boulder and Longmont, Colorado; Juncos, Puerto Rico; Seattle and Bothell, Washington; Field Sales US Fleet <b>Canada:</b> Burnaby, British Columbia <b>Europe:</b> Breda, Netherlands; Uxbridge, Abingdon, and Cambridge, United Kingdom; Dun Laoghaire, Ireland



**Report Parameters** (continued)

Number	Disclosure	Reported	Response
3.7	Limitations on the scope and boundary of the report	●	Items that are out of scope for this report include global sales and administrative offices with minimal environmental impact; outsourced activities, such as contract manufacturers; Onyx Pharmaceuticals, which was acquired in 2013; companies acquired in 2012, including Micromet, KAI Pharmaceuticals, deCODE genetics, and Mustafa Nevzat Pharmaceuticals; and Amgen's facility in São Paulo, Brazil, acquired in 2011.
3.8	Basis for reporting	●	The in-scope facilities listed in indicator 3.6 represent our 15 manufacturing, research and development, and distribution facilities in North America, Europe, and Puerto Rico. These facilities represent 94 percent of our operations, based on the square footage of our facilities. The remaining square footage primarily includes administrative offices. We do not include environmental data from outsourced activities in this report.
3.9	Data measurement techniques and bases of calculations and assumptions	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Summary of Data Notes</i> )
3.10	Explanation of the effect of any restatements	●	No restatements
3.11	Significant changes from previous reporting periods	●	In 2013, Amgen acquired one company: Onyx Pharmaceuticals. For the 2013 report, data from this company will not be included.
3.12	GRI content index table	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>GRI Index</i> )

**Governance, Commitments, and Engagement**

Number	Disclosure	Reported	Response
4.1	Governance structure including committees	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Governance</i> ) <a href="http://www.amgen.com">www.amgen.com</a> ( <i>Corporate Governance</i> )
4.2	Indicate whether the chair of the highest governance body is also an executive officer	●	Robert Bradway is both CEO and Chairman of the Board. For more information on Amgen's Board, <i>see amgen.com (Corporate Governance)</i>
4.3	Unitary board structure	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Corporate Governance</i> )
4.4	Mechanisms for shareholders and employees to provide recommendations/direction to highest governance board	●	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>Corporate Governance</i> )
4.14	List of stakeholder groups engaged by the organization	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Stakeholder Engagement</i> )
4.15	Basis for identification and selection of stakeholders with whom to engage	●	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Stakeholder Engagement</i> )

**Economic Performance Indicators**

Number	Disclosure	Reported	Response
EC1	Economic Performance: Direct economic value generated and distributed	◐	<a href="http://environment.amgen.com">environment.amgen.com</a> ( <i>Summary of Data and Data Notes</i> ) <a href="http://www.amgen.com">www.amgen.com</a> ( <i>2013 Annual Report and Financial Summary</i> )
EC2	Economic Performance: Financial implications and other risks and opportunities due to climate change	●	We're actively working to conserve energy and reduce greenhouse gas emissions that result from our operations. We have also considered potential risks to our business associated with climate change such as extreme weather events and increasing regulation. Financial impact is considered as part of our risk management processes. Having plans in place to mitigate these risks increases the overall sustainability of the business.
EC9	Indirect Economic Impacts: Understanding and describing significant indirect economic impacts, including the extent of impacts	◐	<a href="http://www.amgen.com">www.amgen.com</a> ( <i>AmgenAssist</i> )

## Environmental Performance Indicators

Number	Disclosure	Reported	Response
EN3	Energy: Direct energy consumption by primary energy source	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Energy Performance) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN4	Energy: Indirect energy consumption by primary source	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Energy Performance) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN5	Energy: Energy saved due to conservation and efficiency improvements	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Energy Approach) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data) <a href="http://environment.amgen.com">environment.amgen.com</a> (Targets)
EN7	Energy: Initiatives to reduce indirect energy consumption and reductions achieved	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Energy and Carbon Approach) <a href="http://environment.amgen.com">environment.amgen.com</a> (Targets)
EN8	Water: Total water withdrawal by source	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Water Approach) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN10	Water: Percentage and total volume of water recycled and reused	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Water Approach) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN16	Emissions, Effluents and Waste: Total direct and indirect greenhouse gas emissions by weight	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Carbon Performance) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN17	Other relevant indirect greenhouse gas emissions by weight	◐	<a href="http://environment.amgen.com">environment.amgen.com</a> (Carbon Approach)
EN18	Emissions, Effluents and Waste: Initiatives to reduce greenhouse gas emissions and reductions achieved	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Energy and Carbon Performance) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data) <a href="http://environment.amgen.com">environment.amgen.com</a> (Targets)
EN22	Emissions, Effluents and Waste: Total weight of waste by type and disposal method	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)
EN23	Emissions, Effluents and Waste: Total number and volume of significant spills	●	There were no significant spills in 2013.
EN27	Products and Services: Percentage of products sold and their packaging materials that are reclaimed by category	◐	<a href="http://environment.amgen.com">environment.amgen.com</a> (Products and Packaging)
EN28	Compliance: Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	●	In 2013, Amgen received two environmental notices of violation as a result of agency inspections. There were no fines associated with these notices of violation.
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	◐	<a href="http://environment.amgen.com">environment.amgen.com</a> (Carbon Approach) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)

## Labor Practices and Decent Work Performance Indicators

Number	Disclosure	Reported	Response
LA7	Occupational Health and Safety: Health and safety rates	◐	<a href="http://environment.amgen.com">environment.amgen.com</a> (Safe Workplace)
LA8	Occupational Health and Safety: Programs in place to assist workforce, families and communities regarding serious diseases	●	<a href="http://environment.amgen.com">environment.amgen.com</a> (Staff Wellness)

## Society Performance Indicators

Number	Disclosure	Reported	Response
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions	●	<a href="http://www.amgen.com">www.amgen.com</a> (Corporate Governance) <a href="http://environment.amgen.com">environment.amgen.com</a> (Summary of Data)

## Product Responsibility Performance Indicators

Number	Disclosure	Reported	Response
PR1	Customer Health and Safety: Life cycle stages in which health and safety impacts of products are assessed for improvement, and percentage of products subject to such procedures	◐	<a href="http://www.amgen.com">www.amgen.com</a> (Medicine Safety)

## Energy (a)

Type	Unit	2007	2010	2011	2012	2013
Total Combustion On-site (Direct) (d)	1,000 GJ	2,151	1,905	1,897	1,790	1,828
Natural Gas	1,000 GJ	1,848	1,522	1,462	1,390	1,400
Diesel	1,000 GJ	303	372	425	390	416
Propane	1,000 GJ	-	11	10	10	11
Total Purchased Energy (Indirect) (e)	1,000 GJ	2,190	2,011	2,006	2,059	1,990
Fossil Fuel	1,000 GJ	1,541	1,452	1,497	1,545	1,435
Hydro	1,000 GJ	287	252	196	191	210
Nuclear	1,000 GJ	240	200	194	195	185
Nonspecified Renewables	1,000 GJ	106	94	107	114	152
Nonspecified	1,000 GJ	16	14	13	13	8
Total Energy	1,000 GJ	4,341	3,916	3,903	3,849	3,817
Total Energy Normalized to Net Sales	1,000 GJ/\$B net sales	303	267	255	231	210
Confirmed Results of Energy Reduction Projects (b,c)	1,000 GJ	-	542	718	919	106

## Carbon (a)

Type	Unit	2007	2010	2011	2012	2013
Total Carbon Combustion On-site (Scope 1) (f)	1,000 MT CO <sub>2</sub> Eq	126	114	104	98	101
Natural Gas	1,000 MT CO <sub>2</sub> Eq	104	86	74	70	71
Diesel	1,000 MT CO <sub>2</sub> Eq	22	27	30	27	29
Propane	1,000 MT CO <sub>2</sub> Eq	-	0.68	0.60	0.63	1
Total Carbon Purchased Energy (Scope 2) (g)	1,000 MT CO <sub>2</sub> Eq	290	294	277	287	263
Electricity	1,000 MT CO <sub>2</sub> Eq	284	289	273	283	259
Steam	1,000 MT CO <sub>2</sub> Eq	6	5	4	4	4
Total Carbon From Energy	1,000 MT CO <sub>2</sub> Eq	416	407	381	385	363
Total Carbon Normalized to Net Sales	1,000 MT CO <sub>2</sub> Eq/ \$B net sales	29.1	27.8	24.9	23.1	20
Total Carbon Normalized to Total Energy	MTCO <sub>2</sub> Eq/GJ	0.095	0.104	0.098	0.100	0.095
Confirmed Results of CO <sub>2</sub> Reduction Projects (b,c)	1,000 MT CO <sub>2</sub>	0	49	63	83	8

## Other Carbon (h)

Type	Unit	2007	2010	2011	2012	2013
Carbon US Sales Fleet (Scope 1)	1,000 MT CO <sub>2</sub> Eq	13	16	16	15	16
Carbon US Sales Fleet Emissions Avoided (Scope 1)	1,000 MT CO <sub>2</sub> Eq	0	3	3	4	1
Carbon Executive Air Fleet (Scope 1)	1,000 MT CO <sub>2</sub> Eq	5	7	7	6	5
Carbon From Fugitive Refrigerant Emissions (Scope 1)	MT CO <sub>2</sub> Eq	-	-	-	-	4,231
Carbon Business Travel - Commercial (Scope 3) (i,j)	1,000 MT CO <sub>2</sub> Eq	-	36	50	65	67
Carbon from Amgen Materials Transportation (Scope 3) (i,j)	1,000 MT CO <sub>2</sub> Eq	-	-	-	25	27

## Water (a)

Type	Unit	2007	2010	2011	2012	2013
Total Water Withdrawal (k,c)	1,000 CM	3,286	2,574	2,577	2,720	2,725
Municipal	1,000 CM	3,249	2,561	2,560	2,707	2,712
Other - (Reservoir) Trucked In	1,000 CM	8	-	-	-	-
Ground	1,000 CM	29	14	17	13	13
Total Water Withdrawal Normalized to Net Sales	1,000 CM/\$B net sales	230	176	169	163	150
Water Fate	1,000 CM	-	2,576	2,584	2,720	2,739
Consumed Into Products	1,000 CM	-	20	20	21	21
Lost to Evaporation	1,000 CM	-	736	633	713	684
Discharged to Treatment	1,000 CM	-	1,554	1,663	1,662	1,758
Discharged Directly to Environment	1,000 CM	-	267	267	324	276
Recycled	1,000 CM	-	453	533	535	655
Percentage of Water Recycled per Total Water Withdrawal	%	-	18	21	20	24.0
Confirmed Results of Water Reduction Projects (b)	1,000 CM	-	663	673	690	19

**Waste (a, c)**

Type	Unit	2007	2010	2011	2012	2013
Diversion from Landfill Rate (l)	%	38	58	59	59	-
Recycling Rate (l)	%	34.9	52.1	53.9	52.8	51.3
Total Routine Waste	MT	10,146	9,127	9,645	9,018	8,780
Hazardous Waste	MT	1,343	1,154	1,116	1,180	1,157
Recycled	MT	251	209	235	245	105
Incinerated for Energy Recovery	MT	375	254	284	347	402
Incinerated Not for Energy Recovery	MT	523	524	424	422	468
Landfilled	MT	118	161	153	126	147
Treated (m)	MT	76	6	20	40	36
Nonhazardous Waste	MT	8,803	7,972	8,529	7,838	7,623
Composted	MT	260	524	485	583	532
Reused	MT	32	57	60	44	274
Recycled	MT	2,999	3,967	4,418	3,890	3,583
Incinerated for Energy Recovery	MT	432	426	397	576	604
Incinerated Not for Energy Recovery	MT	194	131	176	79	48
Landfilled	MT	4,885	2,867	2,985	2,662	2,530
Treated (m)	MT	-	-	8	3.8	52
Total Routine Waste Normalized to Net Sales	MT/\$B net sales	709	623	631	542	483
Total Nonroutine Waste (n)	MT	31,415	23,645	12,458	16,902	8,452
Confirmed Results of Routine Waste Reduction Projects (b)	MT	-	442	875	1,094	320

**Fleet**

Type	Unit	2007	2010	2011	2012	2013
US Sales Fleet Fuel Efficiency (o)	MPG-US	18.7	22.2	22.6	23.3	25
US Sales Fleet Fuel Use Avoided	1,000 GL	-	345	363	427	104
US Sales Fleet Fuel Use	1,000 GL	1,498	1,849	1,784	1,739	1,738

**Business Profile**

Type	Unit	2007	2010	2011	2012	2013
Net Sales	\$B	14.311	14.660	15.295	16.639	18.192
"Adjusted" Net Income (q)	\$B	4.804	5.024	4.858	5.119	5.814
"Adjusted" R&D Investment (q)	\$B	3.064	2.773	3.116	3.296	3.929
Corporate Political Contributions (US) (p)	\$Mil	0.584	1.144	0.704	0.532	0.449
Staff	# FTE	17,500	17,400	17,800	17,900	20,000

**Health and Safety**

Type	Unit	2007	2010	2011	2012	2013
Absenteeism (r)	Percent days away	2.4	2.0	2.1	1.9	1.8
Injury and Illness Rate (Beyond First Aid) (s,c)	Number of injuries and illnesses per 100 staff members	0.81	0.57	0.68	0.56	0.55
Lost Day Case Rate (t)	Injuries with days away from work per 100 staff members	0.25	0.18	0.18	0.16	0.09
Severity Rate (u,c)	Number of days away from work per 100 staff members	8.20	6	5.45	6.26	2.13
Fatalities	# Fatalities	0	0	0	0	0
Contractor Injury and Illness Rate (Beyond First Aid) (v)	Incidents per 100 contractors	0.53	1.27	1.27	1.62	0.89
Contractor Lost Day Case Rate (v)	Incidents per 100 contractors	0.07	0.61	0.61	0.75	0.25
Contractor Fatalities	# Fatalities	0	0	0	0	0

**Compliance (a)**

Type	Unit	2007	2010	2011	2012	2013
Environmental Notices of Violation (NOVs) (w)	# NOV	8	3	2	2	2

**General**

(a)	Amgen has included data from 15 facilities covering energy and carbon, water, and waste. The facilities represent approximately 94 percent of Amgen's worldwide facility space based on total square feet. Included facilities are in Thousand Oaks, California, US; Greenwich, Rhode Island, US; Boulder and Longmont, Colorado, US; Seattle and Bothell, Washington, US; Juncos, Puerto Rico, US; Louisville, Kentucky, US; South San Francisco, California, US; Cambridge and Woburn, Massachusetts, US; Burnaby, Canada; Breda, Netherlands; Dun Laoghaire, Ireland; and Uxbridge, Abingdon, and Cambridge, United Kingdom. This includes leased buildings where we have operational control over building infrastructure, including utilities. In 2011, Amgen divested of its Fremont, California, facility and acquired facilities in Dun Laoghaire, Woburn, and São Paulo. In 2012, Amgen acquired four companies: Micromet, KAI Pharmaceuticals, deCODE genetics, and Mustafa Nevzat Pharmaceuticals. In 2013 Amgen acquired Onyx Pharmaceuticals. In our 2013 report, data beginning in May 2011 through the end of 2013 will be included from our Dun Laoghaire facility, which we purchased in May 2011. Data will be included from our Woburn and Abingdon facilities beginning in March 2011 through the end of 2013. No data will be included for our São Paulo facility or for Micromet, KAI Pharmaceuticals, deCODE genetics, Mustafa Nevzat Pharmaceuticals, or Onyx Pharmaceuticals in this report, as we are still working through the integration process for these facilities.
(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), Concepts and Options for Determining Energy and Water Savings Volume 1, EVO 10000-1.2007, April 2007. Project measurements are conducted using reasonable means, including direct measurements and scientific estimations as appropriate.
(c)	Small changes to 2007–13 data may have occurred due to refinements in calculations. All changes have been confirmed through a documented change control process.

**Energy**

(d)	Direct energy use results from the operation of equipment that is owned or controlled by Amgen at the facilities listed in note (a). Data on the use of natural gas, propane, and diesel in boilers, furnaces, and HVAC are recorded from utility bills or purchase records. Data on the use of diesel in emergency generators are 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 by using the Global Reporting Initiative Version 3.0, EN3 table, to convert volumes of primary sources (natural gas, diesel), or from specific fuel analysis data (diesel used in Juncos, Puerto Rico), and the US Energy Information Administration/Annual Energy Review Table A1 (propane). Energy from emergency generators recorded as run-hours is estimated using the manufacturer's specified fuel-feed rate for each generator.
(e)	Indirect energy use results from purchased energy in the forms of electricity and steam at the Amgen facilities listed in note (a). Data on the use of electricity and steam are recorded from utility bills. Utility bills for purchased steam that are recorded in units of mass (i.e., 'lb steam') are converted to energy by using the latent heat of evaporation from the saturated steam tables, then dividing by the efficiency of the supplier's steam generator.

**Carbon**

(f)	Scope 1 carbon emissions result from direct energy sources defined in note (d). Additional Scope 1 Carbon emissions from our US sales fleet, executive air fleet, and fugitive emissions from chillers, coolers, and HVAC are found in the Other Carbon category in this data summary. Carbon data from natural gas sources are calculated using regional specific emission factors from US EPA Rule Part 98A Table C-3 (US weighted average) for all US sites; from the Ireland UFGCC for Amgen's facility in Dun Laoghaire, Ireland; from U.K. Defra/DECC's 110819 Guidelines for Amgen's facilities in the United Kingdom (Uxbridge, Abingdon, and Cambridge); from the NL Agency standard CO2 emission factors for Amgen's facility in the Netherlands (Breda); and from the Methodology for Reporting 2013 /Ministry of Environment Victoria, BC, 2013, for Amgen's facility in Burnaby, Canada. Carbon emissions data from propane and diesel fuel sources (except Amgen's facility in Juncos, Puerto Rico) are calculated using the Greenhouse Gas Protocol Cross-Sector Tools-Stationary Combustion-V.1.0 (August 2012). Carbon from diesel use in Amgen's Juncos, Puerto Rico, facility are calculated using specific fuel analysis information and from US EPA Rule Part 98A Table C-1. 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 (Jul 2009). Scope 1 emissions that are not included in this data summary include process-related emissions from cell respiration (carbon as a by-product) and pH adjustments (CO2 injection). Analysis of these sources in 2013 showed that cell respiration and emissions from pH adjustments are negligible (less than 0.1 percent of our total carbon emissions).
(g)	Scope 2 carbon emissions result from indirect energy sources defined in note (e). Carbon data from purchased electricity are calculated using emission factors from US EPA eGRID 9th Edition Version 1 (2010 data: eGRID subregion annual carbon output emission rate) for all US locations except Amgen's facility in Puerto Rico which has been determined using EPA GHG Report YE 2012 for Power Suppliers in Puerto Rico; from the Greenhouse Gas Division, Environment Canada (2006 data)-V.1.0 (April 2009) for Amgen's facility in Burnaby, Canada; and from specific utility annual providers' reports for Amgen facilities in the United Kingdom (Uxbridge, Abingdon, and Cambridge), the Netherlands (Breda), and Dun Laoghaire, Ireland. Carbon data from purchased steam are calculated using the Emission Factor for Natural Gas as identified in US EPA Rule Part 98A Table C-3 (US weighted average) for Amgen's facility in Cambridge, Massachusetts. Carbon data from indirect energy sources prior to 2011 were calculated using emission factors from US EPA eGRID2007 Version 1.1 for US facilities.

**Other Carbon**

(h)	The Other Carbon category contains additional Scope 1 and Scope 3 carbon emissions that are tracked. Carbon emissions from our executive air fleet are calculated using emission factors from the Greenhouse Gas Protocol Cross-Sector Tools-Transport-Fuel-Use (August 2012). Carbon emissions from our US sales fleet are calculated using emission factors from the GHG Protocol Emission Factors for Petrol passenger cars (volume) (GHG Protocol) = 8.81 kg/gal. Fuel use and mileage data are collected at the pump for each vehicle. Carbon emissions from our commercial business travel are calculated by Amgen's travel provider using the Defra tool. Carbon emissions from Amgen's material transportation have been provided by the carrier using its own specific methods. Fugitive emissions from process equipment (e.g., refrigerant from refrigeration and HVAC equipment) are calculated using emission factors from the Greenhouse Gas Protocol Cross-Sector Tools-Transport-Fuel-Use (August 2012). Processes are in place to maintain chillers, coolers, and HVAC equipment to prevent unintended emissions.
(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 commercial business travel (air and rail) and material transportation.
(j)	Commercial business travel was not tracked in 2007 or 2008. Material transportation was not tracked from 2007 to 2011. The accuracy of carbon emissions tracking from chillers, coolers, and HVAC improved in 2013 and will now be reported going forward.

**Water**

(k)	Slight discrepancy between values for total water fate and total water withdrawal is due to rounding and compilation of individual facility totals.
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**Waste**

(l)	Recycling rate is the proportion of waste that is recycled, composted, and reused compared with the total volume of routine, nonhazardous and hazardous waste generated. Diversion from landfill is the proportion of waste that is incinerated (both for energy recovery and not), landfilled, and treated compared with the total routine, nonhazardous waste generated.
(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)	Measurement equivalents: 23.0 MPG-US = 27.6 MPG-Imperial = 10.2 L/100KM = 9.78 KM/L
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## Business Profile

(p) Corporate political contributions represent Amgen Inc.'s US aggregate contributions among those states where these are permissible. Corporate political contributions to certain candidates for state and local elected offices are permissible in accordance with applicable laws and Amgen policy. Outside the US, the rules governing corporate contributions to political parties and/or organizations vary by country. Amgen complies with all applicable laws and regulations in countries in which it has or intends to have a corporate presence or does business. Amgen adheres to a corporate policy that requires internal legal review before any contribution is made. Amgen considers making such contributions, where they are legally permissible, if the funds will be used to support education and engagement on science, technology, and innovation issues. Additional information may be found in the Corporate Governance section at [www.amgen.com](http://www.amgen.com).

**Amgen Inc.****Reconciliation of GAAP Net Income to “Adjusted” Net Income (Unaudited) (\$ in billions)**

Results for the years ended December 31,	2007	2010	2011	2012	2013
<b>GAAP net income</b>	\$3.078	\$4.627	\$3.683	\$4.345	<b>\$5.081</b>
<b>Adjustments to GAAP net income:</b>					
Acquisition-related expenses (a)	0.402	0.364	0.342	0.470	<b>1.008</b>
Restructuring and cost savings initiatives	0.739	0.118	0.162	0.347	<b>0.071</b>
Stock option expense	0.181	0.124	0.085	0.059	<b>0.034</b>
Expense/(benefit) related to various legal proceedings	0.034	(0.001)	0.786	0.064	<b>0.014</b>
Non-cash interest expense associated with our convertible notes	0.219	0.266	0.143	0.140	<b>0.012</b>
Write-off of acquired in-process R&D	0.590	-	-	-	-
Write-off of inventory (b)	0.090	-	-	-	-
Other	0.054	-	-	-	-
	2.309	0.871	1.518	1.080	<b>1.139</b>
Tax effect of the above adjustments (c)	(0.491)	(0.318)	(0.331)	(0.329)	<b>(0.376)</b>
Other tax adjustments (d)	(0.092)	(0.156)	(0.012)	0.023	<b>(0.030)</b>
<b>“Adjusted” net income</b>	<b>\$4.804</b>	<b>\$5.024</b>	<b>\$4.858</b>	<b>\$5.119</b>	<b>\$5.814</b>

**Reconciliation of GAAP R&D Expense to “Adjusted” R&D (Unaudited) (\$ in billions)**

Results for the years ended December 31,	2007	2010	2011	2012	2013
<b>GAAP R&amp;D expense</b>	\$3.266	\$2.894	\$3.167	\$3.380	<b>\$4.083</b>
<b>Adjustments to GAAP R&amp;D expense:</b>					
Acquisition-related expenses (a)	(0.100)	(0.070)	(0.028)	(0.050)	<b>(0.142)</b>
Stock option expense	(0.083)	(0.051)	(0.035)	(0.022)	<b>(0.012)</b>
Restructuring and cost savings initiatives	(0.019)	-	(0.012)	(0.012)	-
<b>“Adjusted” R&amp;D expense</b>	<b>\$3.064</b>	<b>\$2.773</b>	<b>\$3.116</b>	<b>\$3.296</b>	<b>\$3.929</b>

**Notes**

- (a) The expenses related primarily to non-cash amortization of intangible assets acquired in business combinations.
- (b) The adjustment related primarily to changing regulatory and reimbursement environments.
- (c) The tax effect of the adjustments between our GAAP and Adjusted results takes into account the tax treatment and related tax rate(s) that apply to each adjustment in the applicable tax jurisdiction(s). Generally, this results in a tax impact at the U.S. marginal tax rate for certain adjustments, including the majority of amortization of intangible assets and non-cash interest expense associated with our convertible notes, whereas the tax impact of other adjustments, including the various legal proceedings and stock option expense, depends on whether the amounts are deductible in the tax jurisdictions where the expenses are incurred or the asset is located and the applicable tax rate(s) in those jurisdictions.
- (d) The adjustments related to resolving certain non-routine transfer-pricing and acquisition-related issues with tax authorities as well as the impact related to certain prior period items excluded from adjusted earnings.

**Health and Safety**

(r)	Absentee rate is based on US staff members, including full-time, part-time, management, and nonmanagement. Hours recorded for family medical leave are divided by hours staff members were expected to work to calculate the absenteeism rate (percent).
(s)	Injury and illness rate is calculated based on the number of reported Amgen staff member injuries and illnesses beyond first aid. The rate is based on the number of injuries and illnesses per 100 Amgen staff members. Data as of March 2014.
(t)	Lost day case rate is the number of injury and illness cases involving days away from work per 100 Amgen staff members. Data as of March 2014.
(u)	Severity rate is the actual number of days away from work due to injury or illness per 100 Amgen staff members. Data as of March 2014.
(v)	In 2009, we expanded our data tracking to include all contractors that work at our facilities. Previously the 2007 and 2008 data only included contractors working on large capital construction projects.

**Compliance**

(w)	Environmental notices of violation (NOVs) reported that resulted from agency inspections.
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## 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 data included in Amgen's 2013 Environmental Sustainability Report.

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

The data presented in Amgen's 2013 Environmental Sustainability Report is the sole responsibility of the management of Amgen. BVNA was not involved in the drafting of the Report. Our sole responsibility was to provide independent verification of the accuracy of selected information included in the Report.

### Scope of work

Amgen requested BVNA to verify the accuracy of the following environmental health and safety data summarized in Amgen's Environmental Sustainability Report for the Calendar Year 2013 reporting period:

- Energy Use (Total, Direct and Indirect)
- Greenhouse Gas Emissions (Direct Scope 1 and Indirect Scope 2)
- Water Withdrawal and Fate
- Waste Quantities and Disposition
- Injury and Illness Rate (Number of injuries and illnesses per 100 staff members)
- Lost Day Rate (Number of injuries with days away from work per 100 staff members)
- Severity Rate (Number of days away from work per 100 staff members)
- Number of Environmental Violations

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

- Text or other written statements associated with Amgen's 2013 Environmental Sustainability Report
- Activities outside the defined verification period of Calendar Year 2013

### Methodology

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

1. 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 data;
3. Review of documentary evidence produced by Amgen;
4. Audit of Amgen's data traced back to the source for research and development facilities located in Seattle, Washington and Bothell, Washington during a site visit to the Seattle site; 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 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.





Amgen

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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 findings

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 health and safety data for calendar year 2013.
- It is our opinion that Amgen has established appropriate systems for the collection, aggregation and analysis of quantitative data, including energy use, direct and indirect GHG emissions, water withdrawal and fate, waste quantities and disposition, injury and illness rate, lost day rate, severity rate and number of environmental violations.

### 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 2013 revenue of 3.9 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  
 Technical Director, Climate Change Services  
 Bureau Veritas North America, Inc.  
 Denver, Colorado

Trevor Donaghu, Project Reviewer  
 Senior Project Manager  
 Bureau Veritas North America, Inc.  
 San Ramon, California

March 27, 2014



“Taking a path to be a more environmentally sustainable company has been a revealing and productive journey. We’ve proven that sustainable operations are a wise investment, improving efficiency and creating value.”

— Robert A. Bradway, Chairman and CEO, Amgen

To view Amgen's full 2013 Environmental Sustainability Report, see [environment.amgen.com](http://environment.amgen.com). We welcome your feedback at [esfeedback@amgen.com](mailto:esfeedback@amgen.com).

### **Forward-Looking Statements**

This report contains forward-looking statements that are based on Amgen's current expectations and beliefs and are subject to a number of risks, uncertainties, and assumptions that could cause actual results to differ materially from those described. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including those related to: environmental sustainability program design; expected environmental sustainability goals, targets, plans, focus areas, savings or progress towards any of the same; current and future R&D, manufacturing, commercialization, infrastructure or other workplace-related processes, improvements or practices. Forward-looking statements involve significant risks and uncertainties, including those more fully described in the Risk Factors found in the most recent Annual Report on Form 10-K and any subsequent periodic reports on Form 10-Q and Form 8-K filed by Amgen with the U.S. Securities and Exchange Commission. No forward-looking statement can be guaranteed and actual results may differ materially from those we project. Except where otherwise indicated, Amgen is providing this information as of April 15, 2014, and does not undertake any obligation to update any forward-looking statements contained in this report as a result of new information, future events, or otherwise.



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# Dow Jones Sustainability Indices

In Collaboration with RobecoSAM 


**AMGEN**<sup>®</sup>

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