




# 2014 Sustainability Report

## Executive Summary



## 2014 Progress

2020 Goals		Progress
	Achieve 30 percent of sales from sustainable products by 2020.	27 percent of sales from sustainable products in 2014, increasing from 21 percent in 2013
	Reduce spills and releases 10 percent per year.	80% decrease in significant spills and releases rate since 2012
	Reduce energy intensity 1.5 percent per year.	15% decrease in energy intensity since 2012
	Reduce greenhouse gas emission intensity 1.5 percent per year.	12% decrease in GHG emissions since 2012
	Reduce hazardous waste to landfill by 20 percent by 2020.	No change
	Reduce non-hazardous waste to landfill by 10 percent by 2020.	No change
	Reduce PPG illness and injury rate by 5 percent per year.	17 percent decrease since 2012; five percent decrease in injury and illness rate since 2013
	Implement wellness programs at 100 percent of PPG facilities globally.	More than 85 percent of PPG manufacturing facilities implemented wellness programs by the end of 2014, a 10 percent increase over 2013.
	Implement community engagement framework globally.	52 percent of PPG sites reported implementation of community engagement framework, increasing from 48 percent in 2013.
		\$5.7 million in charitable contributions in 2014.

PPG plans to revisit its 2020 goals prior to the publication of its next report to determine if any adjustments are required due to changes in its business since 2012 and achievements to date across its sustainability goals.





# Sustainability at PPG

## Sustainability Vision

To be the world's leading coatings company with a focus on sustainability to ensure the success and lasting presence of our company for the benefit of our customers, our employees, our shareholders, our neighbors and our suppliers. We will act in a way that helps to ensure the longevity and resilience of our environment, our economies and our society.

## Sustainability Values

- Demonstrate operational and environment, health and safety excellence, minimizing our environmental impact.
- Partner with employees and their families to improve their health and well-being.
- Create an engaging and inclusive workplace.
- Conduct business and operations in an ethical and compliant manner.
- Deliver innovative and sustainable products and services to our customers.
- Enhance value-creating relationships with suppliers and customers.
- Deliver positive change to society and to the communities where we operate.
- Deliver a superior return on investment to our shareholders.

## SUSTAINABLE PRODUCTS

In 2014, 27 percent of PPG product sales came from coatings and materials that addressed our customers' most pressing challenges, such as reduced energy consumption. PPG is integral in helping our customers create more sustainable products - from products that contribute to lighter, more fuel-efficient vehicles to paint systems that assist our customers in conserving water and reducing waste production during their manufacturing processes.

As an example, PPG helped One Angel Square in North Manchester, United Kingdom earn the title "most eco-friendly building in the world," as designated by BREEAM, the most established method globally for assessing the sustainability of buildings. PPG's paints and architectural coatings appear throughout the building and include ten thousand liters of paint from Johnstone's Ecological Solutions range. The addition of PPG's virtually zero\* VOC (volatile organic compounds) coatings and our water-based coatings helped contribute to the BREEAM score.

### Sustainable Product Development

#### Energy Savings

**Advanced aerospace transparencies and coatings:** Gulfstream selected OPTICOR™ advanced transparency material from PPG's aerospace group for its business jet windshields, side cockpit windows and passenger-cabin window assemblies. The passenger-cabin and side cockpit windows are designed to meet higher cabin pressure with less deflection, providing aerodynamic benefits and weight savings that will contribute to a quieter, smoother flight and better fuel efficiency. Heated glass windshields feature SURFACE SEAL® water-repellent coating by PPG as their primary rain-removal system, which will enable Gulfstream to certify the aircraft without windshield wipers and reduce related drag and weight.

**Automotive refinishing breakthroughs:** To advance the 2014 Air Quality Improvement Initiative in Shenzhen, China, PPG specialists held a seminar to share trends on the latest equipment and processes for reducing emissions and saving energy in the automotive refinishing process. As a leader in waterborne coatings technology and an advocate for sustainable solutions, PPG has been committed to promoting waterborne coatings to automotive manufacturers and the aftermarket since the 1980s. The wider adoption of these systems in applications has been shown to significantly reduce VOC emissions during the automotive refinishing process.

**PPG glass with sustainability accolades:** Singapore's Sandcrawler building opened in 2014 to feature a high performance glass curtain wall of PPG's Solarban 72 STARPHIRE® glass. Architects specified the triple-silver-coated, low-emissivity glass for its exceptional transparency and outstanding solar control performance, enabling it to maximize daylighting and reduce air-conditioning use, thereby lowering overall energy consumption. Due in part to its energy-efficient glass façade, the office tower has received Gold Plus Green Mark certification from the Building and Construction Authority of Singapore.

#### Environmentally Preferable Formulations

**Marine coatings advances:** New PPG antifouling marine coating solutions help customers stay ahead of environmental regulations while improving vessels' functionality and reducing environmental impact. SIGMAGLIDE® 1290 has a biocide-free formulation that produces immediate smoothness and high activity fouling release for ongoing fuel savings. With a copper-free formulation, SIGMA NEXEON® starts and stays smooth to achieve excellent antifouling and fuel savings.

**Green architectural coatings product:** Evolve, a PPG Architectural premium paint brand from Prominent Paints, received the 2014 award for Most Innovative Product from South African home improvement retailer and building materials supplier Massbuild. Introduced in 2012, Evolve is manufactured from 70 percent organic raw materials and represents a new generation of environmentally preferable interior paint.



**Long-lasting primer and gloss lacquer system:** SIGMA S2U™ Allure primer and gloss lacquer system earned a 2014 PPG Customer Sustainability Solution award for its 10-year guarantee. R&D teams in the EMEA region advanced through three developments of the formulation to maintain drying properties while improving application and durability. Sigma S2U Allure underwent an extensive screening of resin combinations until teams perfected the new Dual Guard System resin, which has a lifespan of 10 years.

## Corrosion and Asset Protection

**Innovative automotive electrocoat primer:** In 2014, teams from PPG's global automotive electrocoat technical group and vehicle manufacturer Daimler reached an important milestone when PPG's ENVIRO-PRIME® EPIC automotive electrocoat primer successfully completed the first of several proving trials. To help meet industry sustainability targets, Enviro-Prime EPIC electrocoat catalyzes without using metals. It also works well with thin-film pretreatments, consistently coats both steel and non-steel vehicle components, and features high throwpower capability that minimizes paint use while maximizing corrosion protection.

**Protection for industrial and infrastructure assets:** Periodic blasting and repainting of municipal water tanks and towers requires a huge investment of time, material and money. To improve the long-term performance of interior and exterior water tank coatings, PPG invented a new formulation for protecting industrial and infrastructure assets. PSX® ONE is the next generation in long-lasting siloxane coatings that feature superior protection and color retention in a single component product.

**Enabling renewable energy:** Wind farms are a vital source of renewable energy, but they present extreme challenges for structural materials and protective coatings. To enable the production of longer wind turbine blades that can capture more energy, PPG offers INNOFIBER® XM fiber glass composition with higher tensile modulus. To protect blades against the ravages of wind and weather, next-generation AUE series blade coatings combine proven durability and UV-resistance with application efficiency. And, to extend the life of costly structural assets, PPG's SIGMASHIELD® 880 coating offers enhanced abrasion and corrosion resistance, saving time, material and labor.

## Architectural Paint and Decorative Coatings Lead-Use Restriction Compliance

PPG does not use lead as an ingredient in architectural paint or decorative coatings anywhere in the world. Trace amounts, which could be naturally occurring from elements such as copper and zinc, conform to the most stringent standard for consumer products. Specifically, these products comply with the permissible lead concentration of no more than 90 parts per million outlined in the United States Consumer Product Safety Improvement Act of 2008. PPG produces non-consumer coatings for industrial/professional use only, which are formulated with intentionally-added lead and comprise less than 1% of the total amount of coatings and specialty materials products sold by PPG. Such products comply with the applicable legal standards in countries in which the coatings are marketed. Moreover, the small amount of non-consumer coatings products sold by PPG that contain lead as an intentionally added ingredient are produced by PPG to satisfy customer specifications and preferences for such product formulations.

## PPG sustainable glass products shine through Green Building Councils in five Latin American countries

In 2014, PPG joined green building councils in Chile, Colombia, Ecuador, Mexico and Peru. All five councils are members of the World Green Building Council (WorldGBC), the largest international organization influencing the green building marketplace. PPG has been a member of the U.S. Green Building Council for 10 years and is now the first glass manufacturer to join the Green Building Council of Peru. In 2008, PPG became the first U.S. float glass manufacturer to have its products recognized by the CRADLE TO CRADLE CERTIFIED(CM) (C2C) Program, and today the company offers more C2C-certified architectural glasses than does any other float glass manufacturer.

*BREEAM is a trademark of BRE (the Building Research Establishment Ltd.) and is used with permission.*





# Minimizing Our Environmental Impact

PPG continually introduces processes and solutions that make our business more efficient, and assist our facilities in conserving water and reducing energy consumption and waste production.

One example of our efforts in 2014 were projects completed at PPG's resin plant in Zhangjiagang, China. Employees at the facility earned PPG's Sustainability Award in the Environmental category for their efforts in waste reduction and energy savings. In 2014, the facility reduced waste by 20 percent by analyzing waste streams from each operation step and introducing more efficient processes. The facility was also successful in driving a 20 percent decrease in energy intensity with a variety of projects such as installing variable frequency drives to automatically adjust power requirements of motors, fans and water pumps; using interlock controls for automatic start/stop of dust collection; and installing energy-efficient LEDs and separating lighting loop controls for on-demand use. In addition, teams adopted steam- and water-saving measures, including re-use of condensed water to heat process tanks and filtering used water to supply cooling towers.

As part of managing PPG facilities to the established environmental goals and the company's sustainability standards, PPG employs its environmental management system at all facilities. By the end of 2014, 41 PPG facilities received ISO 14001: 2004 certification. Additionally, PPG's Valencia, Spain plant received ISO 50001 certification, which recognizes the facility's efforts to integrate energy management practices. Since 2012, PPG's Valencia facility has worked to develop processes and procedures in order to receive the certification, allowing the plant to reduce energy consumption and the emissions of greenhouse gases as well as save costs.

Efforts such as these allowed PPG to continue to make progress across our sustainability goals in 2014:

Goal	2012 Baseline	2014	Progress vs. Baseline
Reduce spills and releases rate 10 percent per year.	0.20	.04	↓ 80 percent
Reduce hazardous waste to landfill by 20 percent by 2020 using 2012 as a baseline.	0.06 <sup>1</sup>	.06	No change
Reduce non-hazardous waste to landfill by 10 percent by 2020 using 2012 as a baseline.	3.29	3.30	No change
Reduce energy intensity 1.5 percent per year.	6.75	5.67	↓ 15 percent
Reduce greenhouse gas emission intensity 1.5 percent per year.	0.52	0.46	↓ 12 percent

<sup>1</sup> In 2014, the 2012 baseline data was updated to account for data from PPG's Alberton, South Africa plant that was not previously included.

# People

At PPG, the success of the company is tied to its people and well-being. Creating a healthful and fulfilling workplace for PPG employees around the world is central to our business. PPG understands that by fostering inclusiveness, welcoming diverse perspectives and seeking to empower people, the company becomes more innovative, productive and competitive

**“Our goal is for everyone to go home safe each and every day.”**

**JANE VALENTA Vice President of Environment, Health and Safety**



Our commitment to employees begins with focused dedication to workplace safety. That's why, in 2014, PPG developed Safety 365, a safety awareness and communications initiative that empowers employees to be safe and speak up if they see something that may be hazardous. The program heightens awareness and attention among employees to PPG's ongoing commitment to fostering and maintaining a culture of safety at home and at work.

The multi-faceted safety awareness campaign includes:

- A video message from the company's leadership
- A dedicated web site
- Daily safety tips

PPG uses programs such as this to engage with employees, ensure safety is at the forefront and continue to make progress toward established goals that help fulfill its commitment to its employees. The company successfully met its goal for reducing its injury and illness rate by 5 percent versus the 2013 rate. In addition, the company saw an increase to 80 percent of its manufacturing sites that have implemented a wellness program.



## SAFETY

### Fostering Employee Health and Safety

Fostering a safe and healthy workplace for PPG employees is a company priority. Our injury reduction and wellness goals cascade throughout the company as each business unit is expected to improve. To ensure compliance with health and safety guidelines and to enhance workplace wellness, PPG provides activities, training and seminars on health and safety.

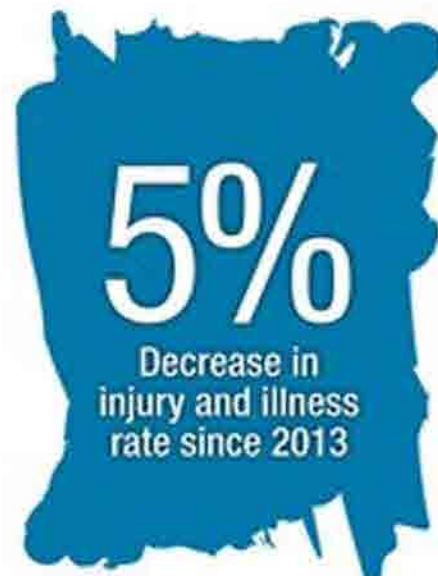
In 2014, the company achieved a 5 percent decrease in its injury and illness rate compared to 2013. The company experienced no employee fatalities in 2014.

### Education on Health and Safety

PPG trains employees on health and safety issues to maintain high levels of awareness, engagement and compliance. Through PPG's ongoing education, training and risk-control programs, the company provides employees with the tools to identify and manage issues involving employee health, wellness, safety and emergency response.

In 2014, PPG developed Safety 365, multi-year safety awareness and communications initiative that launched in 2015 and empowers employees to be safe and speak up if they see something that may be hazardous. The program heightens awareness and attention among employees to PPG's ongoing commitment to fostering and maintaining a culture of safety at home and at work.

In addition, the PPG Global Driver Safety program was launched in 2014. It defines the minimum driver safety program requirements for each PPG region or business. In the Americas, the launch of the revised requirements included a new, multi-year training course for employees who drive company vehicles. By the end of 2014, over 2,400 PPG employees participated in the training, providing an additional level of safety in employees' day-to-day jobs. Each participant had the option to use the training to help a family member become a safer driver, as well.



### Health and Safety Day at PPG in France

PPG's distribution facility, Le Comptoir Seigneurie Gauthier in Vitry, France, served as a pilot for a workshop series aimed at promoting wellness initiatives for field personnel. About 40 employees and customers took part in workshops on workplace safety, chemical hazards, road safety and first aid. The program is the result of a partnership agreement between PPG and CAPEB (Confederation of Crafts and Small Building Companies).



## Thailand coatings plant scores zero workplace accidents

Thailand's Department of Labor Protection and Welfare, Ministry of Labor presented PPG's coatings manufacturing facility in Bangplee, Thailand, with a Zero Accident Award. Considered a benchmark for environment, health and safety programs, Zero Accident Awards honor organizations demonstrating excellence in prevention of workplace accidents. The award recognized the plant's achievement of no occupational accidents causing workday loss, from January 2012 through July 2014.

The Bangplee facility attributes its success to two factors: involving all employees in creating a safe environment and investing in the equipment and engineering necessary to maintain a high level of safety. Also credited as instrumental in promoting a culture of safety are the plant's "near-miss" accidents reporting system, safety coaching program and recognition of employees for effective safety practices.

## Zhangjiagang plant awarded for fire-safety management

The Fire Fighting Committee of Suzhou honored PPG's resin production plant in Zhangjiagang, China, with its Excellent Enterprise Award for perfect fire-safety management in 2013. To achieve that level of success, the plant implemented new fire-safety management procedures and carried out several fire-safety drills at scale. Drills involved incident response, evacuation, emergency response and practice using fire-fighting equipment.

The plant achieved their 2014 goal of zero accidents resulting from fires or explosions. The facility is strengthening cooperation with the local fire-safety department, improving fire-safety management, conducting timely investigation of fire hazards and enhancing employees' safety awareness.

## Fork lift safety improvements at Cieszyn, Poland facility

At manufacturing facilities such as ours, a variety of issues can pose safety concerns, making continuous improvement a necessary part of running an organization with safety at its core 365 days a year. In PPG's Cieszyn, Poland facility, after a risk assessment, the team installed new features in the facility and implemented new protocols to limit safety risks associated with fork lifts. These actions included: a week-long awareness event about safety protocols and potential risks associated with fork lifts; speed limit radars to hold operators accountable for safe speeds; high-visibility clothes to make pedestrians at the facility more noticeable to fork lift operators; and new layouts in production areas. As a result of these changes, fewer incidents occurred and safer actions were observed. In 2015, more initiatives will take place to continue to improve safety at the facility.



## DIVERSITY AND INCLUSION

PPG has a global portfolio of businesses and product lines with presence in more than 70 countries and more than 46,000 employees of wide-ranging nationalities, cultures, languages, religions, ethnicities, lifestyles and professional and educational backgrounds. In 2014, PPG's diverse workforce continued to bring unique perspectives enabling the company to meet challenges quickly and creatively providing a real competitive advantage. About 35 percent of PPG's total global workforce was covered by collective bargaining agreements at that time.

### Diversity Training

In 2014, PPG continued efforts to raise awareness on the value of a diverse and inclusive workplace through online training. An online Diversity & Inclusion training module was launched in the United States in November 2014 with over 3,000 employees completing the module by year end. PPG plans to implement this training globally over time.

### Workforce Development

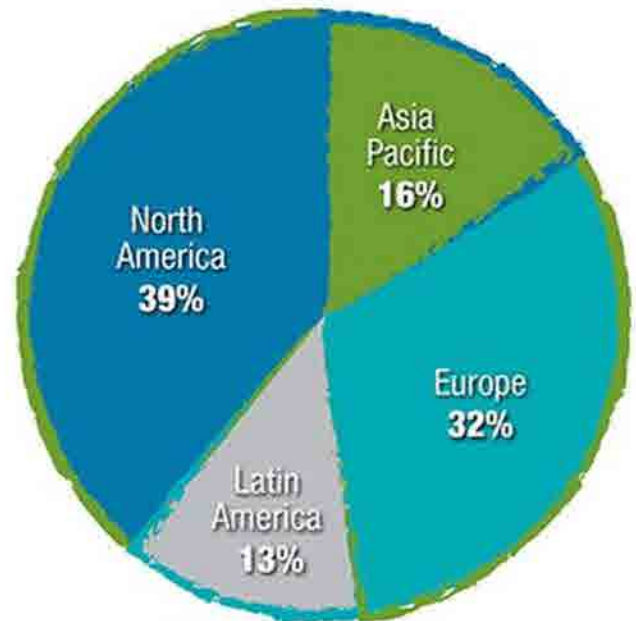
PPG is focused on developing the STEM (science, technology, engineering and mathematics) workforce of the future through partnerships with local schools, universities and community organizations to generate interest in the sciences and provide guidance to students on personal development and careers. Some examples include:

- In 2014, PPG's Women's Leadership Council collaborated with diversity teams at PPG facilities in Korea to award \$25,000 in scholarships to Pusan National University in Busan, South Korea. The program aims to diversify and enhance PPG's research talent pool while promoting partnerships with local communities. The company awards students based on academic excellence and demonstration of high potential as candidates for future employment with PPG.
- The PPG EMEA region collaborated with the European Coatings Association to create the first European Paint Engineering Master program. PPG is sponsoring two female students through this program.
- PPG Midwest Women's Leadership Council hosted an event in 2014 for middle school-aged Girl Scouts at PPG's Oak Creek, Wis., coatings manufacturing plant to generate excitement in STEM. Designed to encourage curiosity about future careers for women in STEM fields, the event included activities on learning what color is, how it works, and ways color can reflect individual personalities and emotions.
- The Carnegie STEM Girls "Tour Your Future" program visited PPG's Monroeville, PA site. Tour Your Future is a career exploration program that connects girls ages 11-16 with Pittsburgh, PA area institutions providing them an opportunity to meet female professionals in these organizations. The program shows girls that they can find a place in science by introducing them to diverse STEM careers.

### Supplier Diversity

PPG also believes that the company and its communities benefit from providing equal opportunities for diversity business enterprises to compete for PPG business. Read more information about our Supplier Diversity program in the report or on PPG's Diversity Supplier page.

**PPG EMPLOYEES BY REGION**  
**46,100** employees as of year-end 2014





# GOVERNANCE

## SUSTAINABILITY GOVERNANCE

In 2010, PPG's Board of Directors approved the establishment of the Sustainability Committee. This committee's work is reviewed by the board's Technology and Environment Committee. The Sustainability Committee establishes policies, programs and procedures, including metrics, to help the company better understand and address sustainability in its business practices in order to remain a leader in the business segments in which it participates.

The Sustainability Committee is comprised of two co-chairs and nine other members; most members are PPG officer-level employees. The company defines sustainability broadly to encompass environmental, social and economic performance measures. To that end, the concepts of sustainability that the committee addresses—and that were approved by PPG's Board of Directors—include:

- Providing employees with a safe, healthy and fulfilling workplace
- Partnering with employees and their families to improve their health and well-being
- Delivering a superior return on investment to shareholders
- Minimizing the impact of the company's operations on the environment
- Furnishing goods and services that meet the needs of customers and society
- Being a good corporate citizen in each nation and community in which the company operates

PPG's Sustainability Committee maintains five standing subcommittees, each chaired by and comprised of PPG employees. Their missions are as follows:

### Environment, Health & Safety

PPG will market, distribute and manufacture products in a responsible manner that protects employees, neighbors, customers and the environment. To meet this objective, the PPG Environment, Health and Safety (EHS) management system is integrated into each of PPG's businesses. PPG's policy incorporates elements of RESPONSIBLE CARE® and COATINGS CARE®, global voluntary initiatives by which companies work together to improve environment, health and safety within the industry; and it emphasizes the company's commitment to continuous improvement, sustainability and protecting shareholders' interests.

### Natural Resources & Climate Change

PPG will continue its efforts to conserve natural resources. This includes defining and driving efficient energy and greenhouse gas (GHG) emissions management, reducing the company's carbon footprint, and continuing to seek ways to utilize alternative resources, such as renewable energy and recycled water.

### Product Innovation & Marketing

PPG will continue to enhance its product offerings to provide its customers with solutions to their most serious sustainability issues. An objective of many of PPG's businesses is to develop and market breakthrough, leading-edge products that benefit the environment and conserve energy.

## Community Engagement & Social Performance

Following the principles of Responsible Care and Coatings Care, PPG will continue to develop and maintain processes to ensure that the company's presence enhances the communities in which it operates. It will work to build two-way communications with key community constituents, governmental agencies and appropriate nongovernmental organizations (NGOs). PPG will strive to enhance its corporate citizenship and maintain philanthropic efforts in its communities.

## Sustainability Communications and Advocacy

PPG will develop and implement plans to communicate with key stakeholders its positions and efforts regarding sustainability. The company will strive to enhance its reputation among opinion leaders, business partners, the financial community and residents of communities where PPG has operations by positioning itself as a leader and innovator in matters related to sustainability.

In addition, PPG will continue to develop sustainability reporting and transparency initiatives on a global basis. PPG will work with other interested parties to develop fair and effective global policies regarding energy security, climate change and sustainability. The company will work to understand the sustainability drivers in the key regions in which it operates and will develop strategic partnerships with industry, government and NGOs that share PPG's vision. In addition, PPG will work to proactively influence legislation and regulation.

## CORPORATE GOVERNANCE

Information about Board of Directors, Corporate Governance Guidelines, committee structure and our management structure can be found on our Corporate Governance page.

Annual incentive compensation of the company's executives and senior managers is partially (30 percent) based on personal goals that tie to overall corporate business goals, with the remainder based on company and business financial performance. PPG does not require that its executives have personal goals linked to social or environmental performance, although some executives, by virtue of their responsibilities, may have goals related to those issues.

PPG's Directors receive an annual retainer, half of which is paid in cash on a quarterly basis and half of which is paid on the date of each annual meeting of shareholders in restricted stock units that vest on the day prior to the subsequent annual meeting of shareholders.

PPG actively works with the following industry associations by maintaining board and other leadership positions:

- Chemistry Council
- American Coatings Association
- Ethics & Compliance Officers Association
- European Council of the Paint, Printing Ink and Artists' Colours Industry
- Fédération des industries des peintures, encres, couleurs, colles et adhesives (FIPEC)
- National Association of Manufacturers





## Community Engagement in Action

In 2014, employees at PPG's Shared Service Center in Brno, Czech Republic brought renewal to their community, through the power of color. PPG employees partnered with a local firm to coordinate activities with businesses and government officials in Brno for 'Colour Your City' day. More than 200 employees participated in the event. They spent the day passing out flowers, painting walls, planting flowers in the city and sending packages to children in orphanages, all culminating in a flash mob as a grand finale.

Through a variety of efforts such as 'Colour Your City,' PPG seeks to enhance the quality of life wherever the company has a presence in the world by means of grantmaking and community involvement. PPG supports projects such as 'Colour Your City' that reflect the interests and values of the company and its employees. The company assesses its impact on communities, as well as the needs PPG can help meet. In addition, PPG encourages employees' volunteerism, including executives' involvement with nonprofit organizations, with the goal of implementing community engagement requirements globally. In 2014, PPG's global charitable contributions totaled \$5.7 million.



Read the full report at [sustainability.ppg.com](http://sustainability.ppg.com).

We encourage you to provide feedback on this report and our sustainability performance via email, a short online survey or a letter.

**Email:** [mediarelations@ppg.com](mailto:mediarelations@ppg.com)  
Subject: 2014 PPG Sustainability Report and Performance Feedback

**Letter:** PPG, Corporate Communications, One PPG Place, Pittsburgh, PA 15272, USA

