

# 2019 Sustainability Report Executive Summary



We protect and beautify the world  $\ensuremath{^{\mbox{\tiny M}}}$ 



Michael H. McGarry Chairman and Chief Executive Officer

## To our valued stakeholders,

I hope this message finds you and your loved ones safe and healthy. At the center of our company's purpose is a commitment to "protect and beautify the world." As we publish our 2019 Sustainability Report, the word "protect" is taking on an even greater significance as we are focused on protecting our people, customers, communities, and all of our stakeholders during the COVID-19 pandemic.

Like you, we are hopeful that, sooner rather than later, the worst will be behind us and we can begin to collectively focus on a brighter future. As this pandemic continues to evolve, we will remain proactive, implement additional actions to support our people and customers, and continue to keep all of our stakeholders informed.

Protecting and beautifying the world, and our culture of continuous improvement, continue to be the backbone of PPG's sustainability promise. Whether it is increasing the efficiency of our operations or our customers' operations, our improvement efforts naturally extend to many areas that affect our sustainability performance.

In 2019, PPG continued to enhance our sustainable operations globally, achieving:

- 33% of sales from sustainably advantaged products and processes;
- 25% waste disposal intensity reduction from the 2017 baseline;
- 32% improvement in spills and releases from 2017 baseline;
- 33% of manufacturing and R&D locations with zero landfilled process waste; and
- A record number of COLORFUL COMMUNITIES® projects around the world.

Today, more than ever, we feel that the challenges we face in our current business environment, including the global impact of COVID-19, can make us stronger. PPG has industry-leading technologies, excellent people, and most importantly, we've consistently demonstrated agility and nimbleness in uncertain situations throughout our more than 135 years. We remain resilient, and will continue to navigate these uncharted waters together as One PPG.

To learn more about PPG's sustainability progress in many areas including environment, governance, people and community, I encourage you to review our 2019 Sustainability Report.

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Michael H. McGarry Chairman and Chief Executive Officer







# **2019 Sustainability Progress**







**32**% improvement in spills and releases rate\*









*Communities* program through 2019









**⁰/₀** 

reduction in greenhouse gas emissions intensity\*



3% reduction in water intensity\*



reduction in energy intensity\*

\* from the 2017 baseline

# <image>

# Delivering lasting value

## Vision

We are committed to delivering lasting value for stakeholders and customers by operating with integrity, working safely, respecting the contributions of our people, preserving the environment and supporting the communities where we operate.

## Values

- Operate safe, healthful workplaces that value diversity, promote teamwork and reward performance.
- 2. Conduct business and operations in an ethical and compliant manner.
- 3. Minimize the impact of our operations on the environment.
- 4. Deliver inventive products and solutions that help our customers maximize the performance of their assets, minimize environmental impact and preserve and protect the environment.
- 5. Partner with suppliers and customers to create value.
- 6. Deliver positive change in the communities where we operate.

# **2019 HIGHLIGHT**

Our PPG POWERCRON® 160 an ionic epoxy electrocoat (e-coat) technology earned a prestigious 2019 R&D® 100 Award in the Mechanical/Materials category. A significant technical advance in e-coat technology, the coating cures at lower temperatures than conventional anionic e-coats, reducing energy use and related carbon emissions.



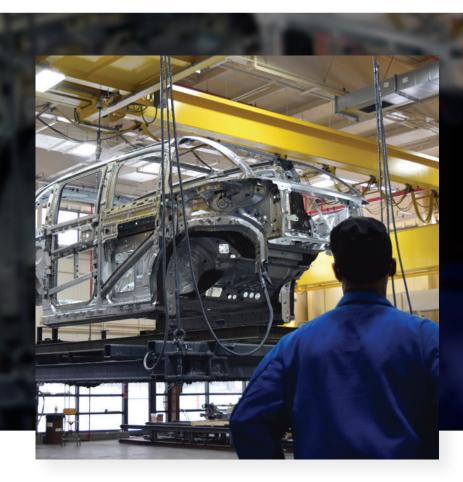
#### **Sustainability at PPG**

Our sustainability approach is grounded in our vision of delivering lasting value for stakeholders and customers by operating with integrity, working safely, respecting the contributions of our people, preserving the environment and supporting the communities where we operate.

We have a formal structure to ensure continuous improvement in the sustainability of our global operations. Our Sustainability Committee establishes our sustainability goals as well as policies, programs and procedures to address sustainability in our business practices. The committee's members, who are appointed by our Executive Committee, provide leadership support and visibility. Most are officers of the company.

Our sustainability values form the framework of our approach to sustainability. Driving our performance are measurable sustainability goals that address our biggest challenges and opportunities. We hold our locations and businesses accountable for achieving these goals, and we are transparent in our progress against each on a global level.

Goal	2019 Progress
40% of sales from products and processes that have improved sustainability over products being replaced by 2025.	33%
25% reduction in total waste disposal intensity by 2025 from a 2017 baseline.	25% reduction from baseline
Achieve zero landfill status from process waste at $35\%$ of PPG manufacturing and research and development locations by 2025.	33% of locations achieved zero landfill status
Reduce energy consumption intensity by $15\%$ by 2025 from a 2017 baseline.	Nearly 1% reduction from baseline
Increase renewable energy to 25% of total electricity usage exclusive of greenhouse gas (GHG) reductions by 2025.	18%
Reduce GHG emissions intensity by 15% measured in total tons discharged by 2025 from a 2017 baseline.	4% reduction from baseline
On our path to eliminating spills, ensure that we achieve at least a $65\%$ improvement in our spills and releases rate by 2025 from a 2017 baseline.	32% improvement from baseline
20% reduction in water intensity by 2025 from a 2017 baseline.	3% reduction from baseline
Zero injuries. On our path to zero injuries, ensure that we achieve an improvement of at least $5\%$ per year in our injury and illness rate.	Rate of 0.30 was 15% above the 2018 rate
Active wellness programs at 100% of PPG facilities globally by 2025.	70% of our locations with $50~or$ more employees had a wellness program in 2019
Implement the community engagement framework globally by 2025.	65% of our facilities met the framework requirements in 2019
Invest at least \$10 million by 2025 through the <i>Colorful Communities</i> initiative.	\$5.75 million invested through 2019
Eliminate lead from remaining non-consumer coatings formulations by 2020.	At the end of 2019, we eliminated lead from the production of the small quantity of non-consumer coatings formulations that remained in our portfolio.



# Reducing our environmental impact

## Sustainably advantaged products

Our products and processes help make our customers – and the world – more sustainable.

Our coatings, materials and technologies reduce corrosion, extending the life of our customers' products. We also help our customers reduce energy usage and emissions, protect their employees and minimize waste and water consumption through the use of our products.

In 2019, 33% (\$5 billion) of our total sales were derived from sustainably advantaged products and processes. Our goal is 40% by 2025.

A key aspect of our product development process is selecting sustainable and safe materials to manufacture a product. We actively seek to avoid using chemicals of concern in new products, and we have been successful in removing these substances from many existing products through reformulation. We also have eliminated lead as an ingredient in manufacturing any of our industrial and consumer products worldwide.

# 2019 HIGHLIGHT



PPG SIGMAGLIDE<sup>™</sup> Foil is an eco-friendly, 100% biocide-free fouling release foil that helps ships reduce drag by up to 10% in comparison to antifouling technologies. Less drag improves a vessel's fuel efficiency and reduces greenhouse gas emissions. The foil also has zero volatile organic compound (VOC) emissions.

#### Waste

The more efficient we are in using materials to make our products, the less waste we produce, the fewer resources we consume and the more money we save. That is why we first work toward absolute material utilization throughout our manufacturing processes followed by eliminating, minimizing, reusing and recycling the waste materials we do produce.

#### 2019 HIGHLIGHT



An advanced dispersion system installed in 2019 at our Architectural Coatings plant in Villawood, Australia, scrapes residual paint product from the interior surfaces of pipework by pushing a projectile through the piping. The system reclaimed more than 360 metric tons of product in 2019, diverting it from the waste stream and saving \$513,000 in product and disposal costs.

Total Waste Disposal Intensity			
	Intensity (Metric tons per 100 metric tons of production)	Disposed (Thousand metric tons)	
2015	4.50	212.19	
2016	4.16	209.54	
2017	3.35	138.33	
2018	3.22	134.30	
2019	2.51	98.40	

Total waste disposed includes landfilled, incinerated and treated waste. Excludes waste associated with a 2017 furnace rebuild at our Lake Charles, Louisiana, plant. Data changes from prior reporting reflect adjustments for acquired and divested locations from the 2017 baseline onward.

#### **Spills and releases**

Our facilities have strong management practices in place to prevent spills and releases, and our corporate spill-elimination standard requires the establishment of a spill-elimination program at each facility. The program consists of an assessment of a facility's spill elimination performance; improvement plans based on prioritized assessment of risk; corrective action plan with defined dates; and completion of planned action.

Our goal is at least a 65% improvement in our spills and releases rate by 2025 from a 2017 baseline. Our 2019 rate of 1.25 spills and releases per 1,000 employees was 32.1% lower than the baseline.

Our top three causes of spills are the movement of containers, transfer of liquids from one tank to another and equipment failure. To close these gaps, we conduct employee training, have stringent requirements for forklifts and their corporate auditing, and require each location to have an active preventative maintenance program in place. In addition, our Walk the Line initiative requires operators to walk the production line prior to transferring a liquid from one point to another. Each location also must conduct a self-assessment of its spill elimination program annually.



Spills and Releases Rate Total spills and releases per 1,000 employees		
2015	1.66	
2016	1.48	
2017	1.84	
2018	1.32	
2019	1.25	



#### Water

We feel it is our responsibility to optimize water use not only in water-stressed regions of the world but in all of our facilities through conservation and reuse. Much of the water we use is for equipment cleaning rather than products, and we are improving our processes to require less cleaning while maintaining our high quality standards. We continue to evaluate additional opportunities to reuse wash water in our processes and products.

Our goal is a 20% reduction in water intensity by 2025 from a 2017 baseline. In 2019, our intensity was 4.5 cubic meters per metric ton of production, which was 2.8% lower than 2017. Globally, we withdrew 17.5 million cubic meters of water during the year, which is a 2.7% reduction compared to prior year.

#### **2019 HIGHLIGHT**



In Tianjin, China, our Industrial Coatings plant is now using recycled, high-quality water from the final step in the cleaning process to replace deionized water previously used to clean equipment between batches. The change has reduced water consumption by 349,658 gallons (1,324 cubic meters) and wastewater by 227,293 gallons (860 cubic meters) annually.

Water Intensity Cubic meters per metric ton of production		
2015	4.23	
2016	3.85	
2017	4.59	
2018	4.33	
2019	4.46	

Data changes from prior reporting reflect adjustments for acquired and divested locations from the 2017 baseline onward.



#### Energy

Most of our manufacturing processes are not energy-intensive, but we are committed to reducing our energy consumption to minimize our GHG emissions, reduce costs and create more efficient facilities. In 2019, we drafted new energy management requirements for all locations globally that will be implemented in 2020.

We have two long-term energy goals:

- Reduce energy consumption intensity by 15% by 2025 from a 2017 baseline.
- Increase renewable energy to 25% of total electricity usage exclusive of GHG reductions by 2025.

Our energy intensity was 3.2 gigajoules per metric ton of production in 2019 – a negligible increase over prior year and a 0.6% decrease from the 2017 baseline. We consumed 12.6 million gigajoules of energy during the year, of which 4.7% came from renewable sources. For electricity usage, renewable sources comprised 18.2%.

Energy Intensity Gigajoules per metric ton of production			
	Total	Direct	Indirect
2015	5.51	3.78	1.73
2016	4.59	3.07	1.52
2017	3.22	1.89	1.33
2018	3.19	1.90	1.29
2019	3.20	1.88	1.32

Energy intensity includes all types of energy consumed within the organization related to manufacturing and research and development. Data changes from prior reporting reflect updated data and adjustments for acquired, divested and closed locations from the 2017 baseline onward.

#### 2019 HIGHLIGHT



All four spray booths at our industrial and automotive OEM coatings application center in Weingarten, Germany, were connected to one ventilation system, which supplied temperatureand humidity-controlled air. After a software modification in 2019, only booths in operation are now supplied with air. Having each booth's ventilation independent of the others is projected to save around 125,000 kilowatt hours of energy annually.

#### **Emissions**

The composition of our air emissions is unique to each PPG facility due to the varying products produced and manufacturing processes used. For all emissions, we are focused on reduction through improved operating practices, product reformulations and, where necessary, emissions control equipment.

Our goal is to reduce our GHG emissions intensity by 15% measured in total tons discharged by 2025 from a 2017 baseline. We achieved a 4.3% reduction through 2019.

We emitted 870,000 metric tons of direct (Scope 1) and indirect (Scope 2) GHGs in 2019, which is a 7.4% reduction from prior year. We also achieved reductions in all of our other key emissions during 2019.

#### **2019 HIGHLIGHT**



Installation of new pollutioncontrol systems at two of our locations in Suzhou, China, are clearing the air of VOC emissions. Our Packaging Coatings facility eliminated 1.6 metric tons of VOC emissions in 2019, while our Aerospace Service Center reduced its annual VOC emissions by 0.8 metric tons.

Greenhouse Gas Emissions Intensity Metric tons of emissions per metric ton of production			
	Total	Direct (Scope 1)	Indirect (Scope 2)
2015	0.43	0.22	0.21
2016	0.37	0.18	0.19
2017	0.23	0.09	0.14
2018	0.22	0.10	0.13
2019	0.22	0.10	0.13

Total intensity data includes direct and indirect emissions. We report greenhouse gas as carbon dioxide equivalents for carbon dioxide, methane and nitrous oxide. Data changes from prior reporting reflect updated data and adjustments for acquired and divested locations from the 2017 baseline onward. Total may not equal the sum of direct and indirect due to rounding.

#### **Transport safety**

Each day, our products are transported by land, sea and air around the world. The combination of internal experts, mandatory practices and effective processes helps ensure they arrive at their destination safely.

Globally, about 85% of our transportation is by truck. While we have a small fleet of company-owned trucks and vans for local delivery from our stores, the vast majority of our shipments are handled by third parties.

Before engaging the services of a third-party transport provider or renewing an existing contract, we assess the company's safety record, financial security and other factors. We do not contract with any company that does not meet our requirements.





# Creating inclusive and safe workplaces

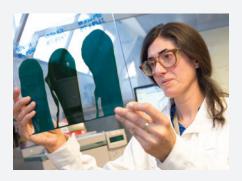
#### **Diversity and inclusion**

One of our greatest strengths is the One of PPG's greatest strengths is the diversity of our people, who represent wide-ranging nationalities, cultures, languages, religions, ethnicities, lifestyles, and professional and educational backgrounds. Their unique perspectives enable us to meet challenges quickly, creatively and effectively, providing a significant competitive advantage in today's global economy.

Our business and functional leaders set goals related to diversity and monitor progress on a regular basis. This is supported by specific actions around the world to ensure there is diverse representation on candidate slates. In 2019, approximately 30% of our professional hires were female.

Female Repr Percent	resentation				
	Total Workforce	Management Positions	Junior Management	Top Management	Management Positions in Revenue- generating Functions
2015	23.8	20.7	23.1	16.2	13.5
2016	24.4	22.0	24.1	17.8	14.8
2017	24.7	22.9	24.9	18.8	15.3
2018	25.3	23.5	24.9	20.3	16.4
2019	30.9	25.0	26.0	19.1	18.2

In early 2019, we were named one of the Best Employers for Diversity by FORBES® magazine, which ranked the top U.S. companies that demonstrate a dedication to diversity and inclusion in the workplace.



#### Health and safety

A key PPG value is to ensure our employees and contractors return home safely each day.

To ensure progress against our goal of zero injuries, we strive to achieve an improvement of at least 5% per year in our injury and illness rate. While we had zero fatalities in 2019, our injury and illness rate of 0.30 was 15.4% above prior year due to increased slip, trip, fall and ergonomic incidents as well as an increase in injuries in our field services group.

In 2019, we developed a focused prevention strategy that requires each location to create a slip, trip and fall prevention focus team, which is expected to identify and track sitespecific actions targeting a favorable impact. As part of this strategy, we also launched the global Heads Up campaign to eliminate distracted walking, especially walking while using a mobile device.

## Global Health and Safety Performance

Employees and Supervised Workers						
	Fatalities		Injury and	Total Recordable	Lost	Occupational
	Number	Rate	Illness Rate	Incident Rate	Workday Rate	Disease Rate
2015	0	0	0.31	1.41	0.91	N/A
2016	0	0	0.31	1.47	0.98	0.07
2017	0	0	0.29	1.26	0.90	0.05
2018	1	0.0019	0.26	1.25	0.85	0.09
2019	0	0	0.30	1.29	0.47	0.15

A new data management system enabled a more comprehensive collection of occupational disease data beginning in 2016.

### 2019 HIGHLIGHT



Nearly a fourth of employees at our Coating Services plant in Huber Heights, Ohio, manually handled 50-pound (23-kilogram) wheel hubs during their daily shift prior to the development of a lift-assist device. Pneumatically powered, the device can lift multiple products and is operated with a simple push of a button. The initiative earned the 15th annual PPG ERGO CUP® recognition.

#### **Wellness**

Our vision is to create a global culture of health, where our people and their families become responsible for their individual well-being through informed, active participation in health and wellness activities.

Supporting this vision is our goal to have active wellness programs at 100% of our facilities globally by 2025. In 2019, 70% of our locations with 50 or more employees had a wellness program.

Our approach to wellness is based on our Four Wellness Absolutes – nutrition, exercise, health screenings and mindfulness/stress management – that research identified as key to our people's overall well-being. Every wellness program and tool we offer addresses one or more of these absolutes to help our people benefit from lifestyle improvements.

#### **2019 HIGHLIGHT**



Our location in San Juan del Rio, Mexico, offers onsite nutrition counseling, weight- and cholesterol-control programs, a relaxation room, yoga classes, various fitness clubs, a cancer prevention program, healthy dining options, a mental health program, a vaccination program, wellnessoriented workshops and more. In 2019, the location received the National Chemical Industry Association award in the wellness program category.



# Bringing color and brightness to communities

Our aim is to bring color and brightness to communities around the world. PPG and the PPG Foundation collaborate with our colleagues, community partners and other stakeholders to advance this vision.

We focus on how we can do the most good – combining the unique talents of employees, the power of our products and financial contributions from PPG and the PPG Foundation to reach our global communities. We funnel the combined strength of these resources into three priority areas that deliver on our vision:

- Education;
- Employee engagement; and
- Community sustainability.

Our global giving totaled more than \$11.8 million in 2019.



#### **2019 HIGHLIGHT**



Employees at our Automotive Coatings sites in Camarma and Valladolid, Spain, participated in the STEM Talent Girl program during 2019. Through a \$19,800 PPG community engagement grant, girls between the ages of 14 and 17 were given access for nine months to STEM Talent Girl masterclasses, job shadowing sessions with mentors from various fields, STEM workshops and events, and visits to companies to introduce them to engineering and manufacturing as part of the program's STEM for Her activities.

#### **Education**

Knowing the important role that occupations in science, technology, engineering and math (STEM) play in driving economies and innovation, we support programming that helps young people develop these essential skills to pursue brighter futures.

In several of our key markets across the U.S. and Europe, Middle East and Asia, we support innovation programming in science centers. We also help ensure that students already pursuing higher learning in STEM-related fields have the support they need to reach their career dreams.

#### **Employee engagement**

We encourage our employees to volunteer and make contributions to help better their communities. To support these efforts, PPG and the PPG Foundation offer ideas, opportunities and often financial support to bolster employee community service.

Each region offers tailored opportunities for employees to volunteer with our nonprofit partners on hands-on to skill-based activities. From painting alongside colleagues during a Colorful Communities project to teaching young kids STEM subjects at an afterschool program, these efforts amplify our grants and deepen our impact.

#### 2019 HIGHLIGHT



In Querétaro, Mexico, the playground and minds of more than 500 schoolchildren were transformed in June 2019 through our first dual STEM and *Colorful Communities* project.

#### **Community sustainability**

We aim to develop more sustainable communities by revitalizing the spaces where we live to create happier, healthier and thriving communities. Our grantmaking meets essential needs in our local communities through support of disaster relief efforts and local food banks.

The centerpiece of our efforts is our *Colorful Communities* program, which launched in May 2015 with a \$10 million commitment over 10 years. Through this global initiative, our committed employee volunteers use PPG paint products to help transform neighborhoods.

#### Colorful Communities 2015-2019 Highlights



**JUZ** projects completed in 41 countries



6.50мм+

students, seniors, teachers, patients and community members impacted



in PPG funding





Read the full report at **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 Subject: 2019 PPG Sustainability Report and Performance Feedback
Survey:	surveymonkey.com/r/PPGSustainability2019
Letter:	PPG, Corporate Communications, One PPG Place, Pittsburgh, PA 15272, USA

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