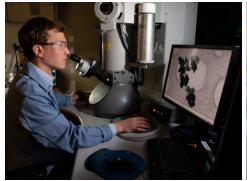
Innovation at PPG



PPG maintains a long-standing tradition of developing **leading-edge technologies**, **achieving the highest quality standards and exceeding customers' requirements**.

Through leadership in innovation, we help customers in industrial, transportation, consumer products, and construction markets and aftermarkets enhance **more surfaces in more ways than any other company**.







\$456_{MM}

Invested in research and development in 2019

33%

Sales from sustainably advantaged products and processes in 2019, a 19% increase since 2014 \$464_{MM}

Average investment annually over the last three years in research and development, representing more than 3% of net sales from continuing operations

30+

R&D® 100 Awards, which honor the 100 most innovative technologies and services

40%

Target for total sales from products and processes that have improved sustainability by 2025

3,500+

Technical employees at more than 100 global locations



Innovation at PPG



Key innovations and awards



Top in R&D

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



Chemistry heroes

A team of our automotive OEM coatings scientists received the American Chemical Society 2019 Heroes of Chemistry Award for the discovery and development of the B1:B2® Compact Paint System. The system eliminates the primer layer when painting a vehicle, reducing energy consumption.



Showing our metal

The Metal Construction Association honored us with three of its 2018 Chairman's Awards – the top honor for Overall Excellence as well as awards in the Commercial/Industrial and Education (Colleges and Universities) categories. PPG was the only coatings manufacturer recognized with awards.

Patents 135⁺year history 9,000+global patents **70** global patents granted in 2019

To learn more, visit ppg.com.

