

2018 Dow Sustainability Report

Executive Summary

How do you transform challenges into opportunities, redefine what's possible and help create a more efficient, sustainable world at the same time? It takes collaboration, science and technology, and a belief that, together, we can work to positively impact the planet. Our 2018 Sustainability Report demonstrates our commitment to collaborate with our value chain partners and other stakeholders to find more sustainable ways to do business. Guided by our 2025 Sustainability Goals, we are innovating to discover new, beneficial solutions in materials science; improving our operational performance in ways that respect people, their safety and our environment; and applying our employees' passions and skills to help build thriving, resilient communities. Here are the 2018 Sustainability Report highlights:



Leading the Blueprint

- Fully launched our Sustainable Watershed Management blueprint at the UN High Level Panel for Water in July 2018. The blueprint shares case studies on the multiple roles Dow has played as a stakeholder in the watersheds where we operate.
- Launched the Unlocking Carbon Reductions blueprint in July 2018 at the UN Global Compact Cities Programme's Local 2030 Day. It is centered on Dow's learnings and experience in successfully developing carbon-saving projects for the Olympic Winter Games Sochi 2014 and Olympic Games Rio 2016 and encompasses the Dow Climate Solutions Framework. This carbon reduction framework is being deployed in the Dow–International Olympic Committee (IOC) Official Carbon Partnership program.



Delivering Breakthrough Innovation

- Six of our R&D 100 Awards were for sustainability-related products.
- Calculated that the greenhouse gas benefits from use of our products exceed the burdens of the Company by a ratio of nearly 5:1 at the end of 2018. (This aggregate value has already been updated to reflect the product portfolio of new Dow, post-spin from DowDuPont.)



Advancing a Circular Economy

- Invested in the World Economic Forum's Global Plastic Partnership and Circulate Capital's \$100 million effort to finance infrastructure companies that prevent ocean waste.
- Worked with governments and other stakeholders in Southeast Asia, the United States and Africa to build durable roads with recycled plastics. Research conducted at Chulalongkorn University in Thailand found that the asphalt-plastic roads are 15-33 percent more durable and led to 6 percent higher skid resistance versus standard asphalt roads.
- Continued to grow our collaboration with H&S Anlagentechnik in Germany to recycle post-consumer mattresses into raw materials needed to make new mattresses and thermal insulation.



Valuing Nature

- More than 25 percent of the way toward the goal of being the first company to achieve \$1 billion in value primarily through avoided costs from projects that are good for business and better for ecosystems.
- Conducted 22 business workshops at Dow sites to help identify future nature projects and educate employees about how to incorporate the value of nature into business decision making.



Safe Materials for a Sustainable Planet

- Signed a memorandum of understanding with the China Ministry of Environmental Protection to develop advanced, risk-based safety assessment approaches for environmental protection.
- Expanded our industry-leading Product Stewardship Academy, which provides hands-on training to customers to ensure products are handled in a safe and sustainable manner. The project was recognized with an American Chemistry Council Responsible Care® 2018 Product Safety Award.
- Introduced Dow's CANVERA™ Polyolefin Dispersions as our first sustainable alternative to the market, based on its performance, a favorable EH&S profile, enhanced life cycle and market acceptance. CANVERA Polyolefin Dispersions offer a waterborne, spray-applied replacement for epoxy can coating systems, removing bisphenol A (BPA), epoxy, and other materials of concern to customers and consumers in food applications.



Engaging for Impact

- More than 2,300 STEM Ambassadors supported approximately 4,500 teachers, enhancing STEM opportunities for more than 200,000 students in and outside the classroom.
- Invested approximately \$1.3 million through the Dow Business Impact Fund in seed funding in seven projects in Thailand, Canada, Jordan, Ethiopia, Brazil and South Africa.
- Donated nearly \$1.5 million in pro bono consulting through innovative leadership development programs in which Dow leaders applied their professional skills to community-based problems. More than 50 Dow leaders from across the world worked virtually and in-country with 12 nongovernmental organizations in India, Rwanda and Senegal.
- More than 500 employees from over 30 countries and diverse job roles gathered in Houston last year to attend EMERGE, our first all-Employee Resource Group (ERG) Conference. The highly interactive event focused on building a culture of inclusion at Dow and elevating the role of ERGs, so they emerge as true business partners and change agents.



World-Leading Operations Performance

- Reduced exposure to higher-risk situations by more than 750,000 hours using a wide range of new technologies for confined space entry, elevated work and industrial cleaning. Dow leads the industry in using technologies such as robotics, unmanned aerial vehicles or non-destructive testing to improve worker safety.
- Reduced our freshwater intake intensity at water-stressed sites by a total of 15 percent from our 2015 baseline. Our 2025 goal is 20 percent.
- Achieved or exceeded the annual targets for each our four key indicators: Unplanned Event Reduction, Total Worker Health™ Index, Environmental Stewardship Index and Transportation Stewardship Index.
- Recorded no severe motor vehicle accidents in 2018. This was after banning cellphone calls while driving for all employees and contractors, and implementing telematics for vehicles on business and at our sites.