

The Role of Business in Society



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For the 14th year, The Dow Chemical Company report follows the Global Reporting Initiative (GRI). This document follows the GRI Standard framework, making information available on a range of Environmental, Social, and Economic topics.

This document also serves as Dow's UN Global Compact Communication on Progress for 2016. Other Company reporting that may be of interest to readers is available on www.dow.com as follows:

- [2016 Dow Annual Report](#) under Investors, Financial Reporting
- [Dow 2016 10-K Form](#) for the fiscal year ended December 31, 2016, under Investors, Financial Reporting, SEC Filings
- [2016 Proxy Statement](#) under Investors, Financial Reporting
- [Code of Business Conduct](#) under Investors, Corporate Governance
- [Dow's Global Citizenship website](#)
- [Dow's Sustainability Reporting Center](#) for sustainability updates and goals progress
- [Dow's 2015 Sustainability Report](#), covering 2015 data as reports are released every year

GR 102-51, GRI 102-52



Dow Attains
An Externally
Verified
Comprehensive
Application
Level

Dow is fully committed to transparency and accountability in achieving its Sustainability Goals. Transparent, in-depth reporting assures that the public, as well as the entire Dow enterprise, is aware of the Company's goals and priorities. This is one of the reasons this report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards Comprehensive option, which means that this report covers all the General Disclosures as well as all the Specific Disclosures identified as material to the Company. **GRI 102-54** We also externally verified our report through an independent assurance process. This report is based on the 2016 corporate data, year-ended December 31, 2016. **GRI 102-50** This report also serves as the Company's annual Communication on Progress (COP) to the United Nations Global Compact.

We value your interest in our report and welcome questions, comments and suggestions. You can contact Erica Ocampo regarding the report or its content:

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Dow Sustainability Reporting

GRI 102-53

REDEFINING the Role of Business in Society

Adapting to our changing world requires an understanding that success as a company is defined by more than the bottom line. It also is about creating value for society. Our stakeholders must extend well beyond the shareholder, to include our people, our communities and the environment. Companies that lead in the future will be those that earn their right to operate by “doing well by doing good.”





As a global science and technology company, we are uniquely positioned to help create the future we want to see through sustainable innovation and collaboration.

With Dow's 2025 Goals, we have committed to "redefine the role of business in society" by valuing nature in all of our decisions and leading the way to a more sustainable society to make a positive difference for all people.

In 2016, the first full year of our 10-year goals, we have already made exciting gains:

- We are advancing a circular economy by piloting new business models to rethink waste. In Omaha, Nebraska, Dow has teamed with municipal and industry partners to demonstrate how non-recycled plastic items such as juice pouches can be collected curbside and turned into a source of energy – diverting up to 36 tons of waste from landfills.
- Working in a six-year partnership with The Nature Conservancy, we have developed tools to recognize how natural ecosystems – such as forests and wetlands – provide value to our business operations. In 2016 alone, we realized \$40 million of value through projects that are not only good for nature, but also good for business. As these tools are adopted by other businesses, our ability to restore and protect nature as economies grow will only get better.
- Through strategic partnerships with like-minded organizations including the Ellen MacArthur Foundation and Ocean Conservancy, we are developing societal blueprints that will help advance the transition to a more sustainable planet and resilient communities – blueprints for low-carbon and livable cities; for clean, low-energy water delivery; and for healthy and safe food value chains.

The purest purpose of private enterprise is to solve problems and make people's lives better. By embedding sustainability into our business strategy and innovation engine, we will not only create a better company but a better world.

Sincerely,

Andrew N. Liveris

Chairman and Chief Executive Officer
The Dow Chemical Company

GRI-102-14

READYING to Meet Our Ambitious 2025 Sustainability Goals

In 2015, we introduced the 2025 Sustainability Goals. In 2016, we built a strong foundation for advancing them. Designed to harness Dow's innovation strengths, global reach and the passion of our employees, these 10-year goals will deliver long-term value for Dow and sustainable, global solutions for our customers and society.



In Year One of the 2025 Sustainability Goals, we took significant action on several fronts:

- **Measuring the Value of Nature for Business:** We introduced a tool designed to help companies estimate the business value from nature on, and adjacent to, their sites. The tool, based on extensive work that we have done with The Nature Conservancy at Dow locations in Texas and Brazil, enables a trained technician to answer questions about an ecosystem and deliver output data that can be integrated into financial models.
- **Driving Circular Economy Thinking:** From collaborating on initiatives to reduce marine debris to innovating technologies to increase the rate of plastic packaging recycling, we have expanded our efforts to help transition to an economy that recycles, reuses and remanufactures goods and resources.
- **Developing Blueprints for Sustainability:** We brought our innovations and expertise to cross-sector collaborations that address issues ranging from climate change in Brazil to sustainable building practices in China.
- **Investing in Communities:** Across the world, thousands of Dow people applied their passion, skills and expertise to positively impact our communities. From inspiring the next-generation of scientists in classrooms in Vietnam to helping get clean drinking water to residents in Flint, Michigan, our employees were engaged in building stronger, more resilient communities.

The 2025 Sustainability Goals were developed in parallel with the United Nations' Sustainable Development Goals (SDGs). As a global material science company, we recognize the role that science and business can play in developing new business models that actively contribute to achieving the SDGs. By entering into new and courageous collaborations with others – industry partners, governments, NGOs and academia – we can magnify the impact of our Goals and develop societal blueprints that will help the transition to a sustainable society.

We achieved a lot over the past year, but are at the beginning of our journey. By leveraging the power of the sciences, we have the opportunity – as well as the responsibility – to both grow our business and meet the needs of future generations. While we have much to do, we are confident in our commitment and ability to deliver.

Sincerely,

Neil C. Hawkins

Chief Sustainability Officer and Corporate Vice President for Environment, Health & Safety
The Dow Chemical Company

2016 COMPANY'S HIGHLIGHTS

DELIVERING ON OUR COMMITMENTS

SEVENTEEN



Consecutive quarters

of year-over-year operating earnings per share growth⁽¹⁾

\$9.8B

Highest operating EBITDA in Company history ^(2,3)

THIRTEEN



Consecutive quarters

of year-over-year volume growth (excluding the impact of acquisitions and divestitures)

Converted Series A Preferred Stock, removing

\$340MM

in annual preferred dividend payments

\$1.84 per share



Highest annual dividend in Company history

MAXIMIZING GROWTH FROM SCIENCE-DRIVEN INNOVATION

MORE THAN 20%

Sales from patent-advantaged products

7

R&D 100 AWARDS

from *R&D Magazine*; **5th** straight year Dow products recognized



INVESTING IN GROWTH

U.S. GULF COAST

Texas cracker

nearly 95%

mechanically complete; on track for mid-2017 startup

Completed ethylene/polyethylene expansions in Louisiana and Texas

SADARA

Construction of all **26 units** complete; mixed feed cracker and two additional polyethylene trains started up

7

Dow Pack Studios

New locations in Singapore and North America bring experts together to collaborate on innovative packaging solutions



CONTRIBUTING SUSTAINABLE SOLUTIONS

\$40MM

Value added to Dow in 2016 through the "Valuing Nature" 2025 Sustainability Goal



\$1.4MM

Amount Dow pledged in 2016

to help fund **43** Habitat for Humanity builds and other projects to serve an estimated **162** families

16th TIME

Named to Dow Jones Sustainability World Index

\$2.8MM

Amount Dow commits toward collaborative efforts to reduce ocean debris



36 TONS

Estimated amount of plastic to be diverted from landfills

during the first phase of the Hefty® Energy Bag program⁽⁴⁾

RECOGNITION AS A TOP EMPLOYER

- Named to Forbes' **"JUST 100: America's Best Corporate Citizens in 2016"**
- Recognized among **10 Best Companies for Leaders** by *Chief Executive magazine*
- Listed as one of *Working Mother's* **100 Best Companies**
- Honored for 12th consecutive year by Human Rights Campaign as one of the **"Best Places to Work"** for lesbian, gay, bisexual and transgender (LGBT) employees

⁽¹⁾ Operating earnings per share is defined as earnings per share excluding the impact of "Certain Items."

⁽²⁾ Operating EBITDA is defined as EBITDA excluding the impact of "Certain Items."

⁽³⁾ EBITDA is defined as earnings (i.e., "Net Income") before interest, income taxes, depreciation and amortization.

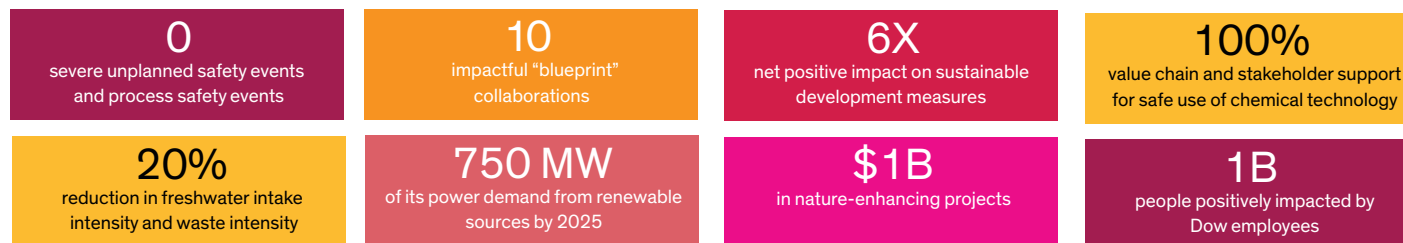
⁽⁴⁾ In collaboration with Reynolds Consumer Products, Recyclebank, First Star Recycling, ConAgra Foods and Systech Environmental Corporation.

2025 SUSTAINABILITY GOALS PROGRESS

In 2015 Dow announced a strategic set of commitments designed to redefine the role of business in society. Dow's 2025 Sustainability Goals use a global lens to magnify the Company's impact around the world, driving unprecedented collaborations to develop societal blueprints that will facilitate the transition to a sustainable planet and society. Through harnessing Dow's innovation strengths, global reach and dedicated employee population, the Company has set bold and aggressive sustainability targets designed to develop breakthrough product innovations, positively impact the lives of 1 billion people, and deliver \$1 billion in cost savings or new cash flow for the Company by valuing nature in business decisions.

"At Dow, by combining the 'Human Element' with our passion for science, we constantly strive to deliver long-term value with sustainable, global solutions," said Andrew N. Liveris, Dow's chairman and chief executive officer. "Our 2025 Sustainability Goals will help redefine the role of business at its intersection with society. They will be our guide as we work to improve the well-being of humanity with solutions that are good for business and good for the world."

Among Our Key Performance Indicators*



*KPIs are not all-inclusive but are an overview.

Dow's 2025 Goals, the Company's third set of sustainability-related Goals since 1995, build upon its previous decade-long commitments. Dow's 2005 Environment, Health & Safety Goals resulted in \$5 billion in safety, waste, water and energy savings after a \$1 billion investment. Dow's 2015 Sustainability Goals provided more sustainable products and solutions addressing global challenges in food, energy, sustainable water supplies and improved personal health.

For more information, visit www.dow.com/sustainability/goals



Dow's seven 2025 Sustainability Goals are as follows:



Goal 1: Leading the Blueprint – Dow leads in developing societal blueprints that integrate public policy solutions, science and technology and value chain innovation to facilitate the transition to a sustainable planet and society. To develop the blueprints, Dow will engage in 100 significant dialogues across the public and private sector and establish 10 new collaborations. The initial blueprints will be published year-end 2017 and will be updated throughout the goal time frame, considering world progress towards sustainability and emerging challenges.



Goal 2: Delivering Breakthrough Innovations – Dow delivers breakthrough sustainable chemistry innovations that advance the well-being of humanity. By 2025, Dow's product portfolio will have a six-fold net positive impact on sustainable development. Dow products will offset three times more carbon dioxide than they emit throughout their life cycle and save three times more energy than they use throughout their life cycle.



Goal 3: Advancing a Circular Economy – By 2025, Dow will work with other industry leaders, non-profit organizations and governments to deliver six major projects that facilitate the world's transition to a circular economy, where waste is designed into new products and services.



Goal 4: Valuing Nature – Dow applies a business decision process that values nature, which will deliver business value and natural capital value through projects that are good for the Company and good for ecosystems. Dow will generate \$1 billion by 2025 in the form of cost savings or new cash flow as measured by net present value, a measure of future cash flows discounted to the present day.



Goal 5: Increasing Confidence in Chemical Technology – Dow increases confidence in the safe use of chemical technology through transparency, dialogue, unprecedented collaboration, research and the Company's actions. By 2025, Dow will work with non-profit, businesses and government partners to develop new, cutting-edge predictive modeling capabilities and integrate them into 100 percent of our new product assessments.



Goal 6: Engaging Employees for Impact – Dow people worldwide directly apply their passion and expertise to advance the well-being of people and the planet. By 2025, Dow employees worldwide will apply their talents to positively impact the lives of 1 billion people. Dow employees will give 600,000 hours to support students and teachers in science, technology, engineering and math (STEM) education. Dow volunteers will complete 700 sustainability projects around the world.



Goal 7: World-Leading Operations Performance – Dow maintains world-leading operations performance in natural resource efficiency, environment, health and safety. By 2025, Dow will reduce its freshwater intake intensity at key water-stressed sites and its waste intensity footprint by 20 percent. It will also obtain 750 megawatts of its power demand from renewable sources and strive to eliminate unplanned safety events.

As part of our Valuing Nature goal, we are pioneering new ways for businesses and communities to recognize the benefits of nature, so they can plan, manage and invest in these resources in smarter, more mutually beneficial ways. In fact, by 2020, all of our capital, real estate and R&D projects will go through a nature screen as part of the regular approval process. The Valuing Nature goal builds on work we have done in a six-year partnership with The Nature Conservancy. In 2016, we released a suite of tools to help decision makers rapidly assess the value of an ecosystem to a business or community. In addition to generating value to Dow, we hope our efforts can serve as a model to other companies.

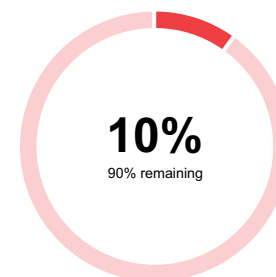
2016 PROGRESS

In 2016, we made significant progress against each of our 2025 Sustainability Goals:



LEADING THE BLUEPRINT

We are on track for having the first societal blueprint by the end of 2017 and, to date, have conducted approximately 100 dialogue sessions. Two courageous collaborations are ready for launch as the first collaborations.



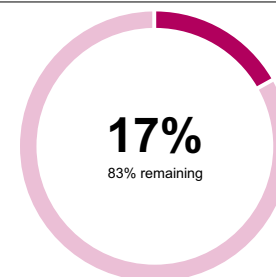
Conducted 100 dialogue sessions

GRI 201: Economic Performance



DELIVERING BREAKTHROUGH INNOVATION

Our progress is represented by the strong and rapid development of business-specific 2025 Sustainability Goals, the development and implementation of the new methodology of the new Sustainable Chemistry Index, and expanding the reach within our portfolio of rigorous quantification of life-cycle benefits.



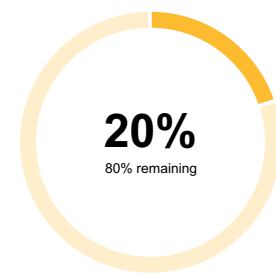
New generation of Sustainable Chemistry Index implemented

GRI 201: Economic Performance
GRI 302: Energy
GRI 303: Water
GRI 305: Emissions



ADVANCING A CIRCULAR ECONOMY

Some of the highlights of our progress in 2016 include our support of the ongoing research with the Ocean Conservancy and the Ellen MacArthur Foundation to help reduce marine debris and advance a circular economy. We committed to spend \$2.8 million over the next two years to drive solutions that address global marine debris and litter. We also launched the Hefty® Energy Bag Omaha Project, a unique program designed to convert previously non-recycled plastics into energy.



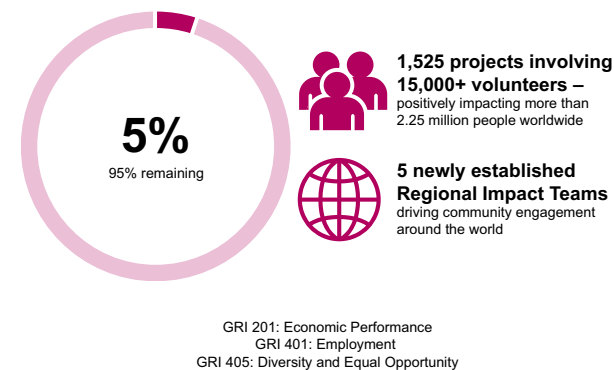
20 projects in progress, including the Hefty® Energy Bag Project, a unique program designed to convert previously non-recycled plastics into energy and continue to support the ongoing research with Ocean Conservancy to reduce marine debris.

GRI 201: Economic Performance



ENGAGING EMPLOYEES FOR IMPACT

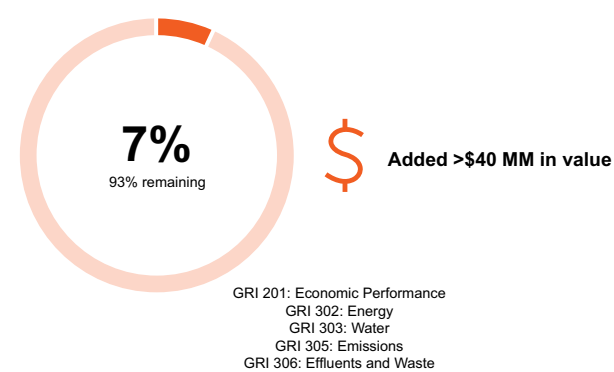
In 2016, we delivered 1,525 projects involving more than 15,000 volunteers, positively impacting more than 2.25 million people worldwide. We also established five Regional Impact Teams to further accelerate our community engagement around the world.



VALUING NATURE

Collaborating with The Nature Conservancy, we have developed a suite of tools – The Nature Screen, ESII Tool and Nature's Future Value (NFV) Scorecard – to help businesses place a value on nature in their decision processes. We've identified more than \$40 million worth of Valuing Nature goal projects, proving that incorporating ecosystem services into our projects demonstrates real and recognizable value for the Company.

Case study: Acidic water with high levels of zinc was seeping from an abandoned mining site in Arkansas. We constructed a sinuous channel lined with limestone, which added alkalinity to the seep water. The alkalinity raised pH and created an environment for lowering metals concentrations via biological processes within the channel. The result is a natural streambed with no operations and maintenance costs, and the mine seep water is treated before it enters the downstream creek.

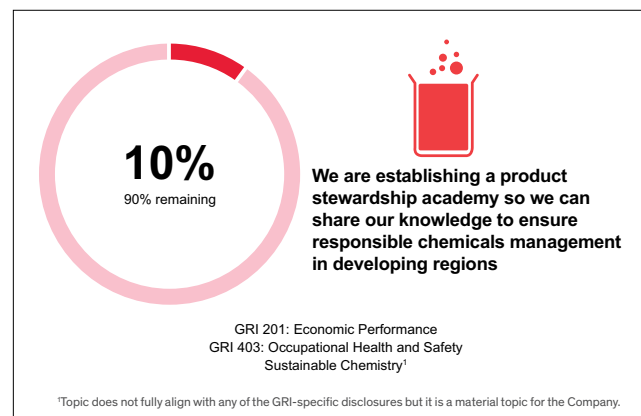




INCREASING CONFIDENCE IN CHEMICAL TECHNOLOGY

Our Increasing Confidence in Chemical Technology goal includes a range of internal and external activities that involve enhancing our strong foundation of product safety while engaging externally with a broad range of stakeholders to build trust and increase confidence. Internally, research efforts have included developing predictive toxicology approaches to further enable safe and sustainable chemistry development. Externally, we are establishing a product stewardship academy so we can share our knowledge to ensure responsible chemicals management in developing regions (e.g., Africa). We also are listening to our stakeholders internally (employees) and externally (customers, governments, NGOs, value chain, academia) to understand what messages and actions resonate with them so we can best tailor our approach and develop partnerships for increasing confidence.

Case study: The Dow Toxicology Cheminformatics Team was selected as one of five LAUNCH: Smarter Chemistry Innovation Challenge Innovators. LAUNCH put forward a call to action for innovators and companies to submit projects to make chemistry smarter by generating data, making data more accessible, analyzing the data or applying data in ways that move chemistry toward predictive design-based discovery.



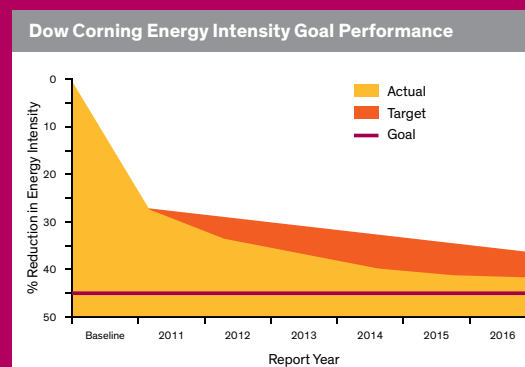
Dow Corning Closes Sustainability Goals

The former Dow Corning Corporation's sustainability goals came to a close in 2016 with the ownership restructure. On June 1, 2016, Dow became 100 percent owner of Dow Corning's silicones business. At the operational level, Dow is integrating Dow Corning's data into its 2025 Sustainability Goals.

Energy Intensity Goal

In 2011, Dow Corning set a goal to reduce energy intensity by 45 percent versus a baseline of the average of 1998-2001 by 2021.

- As of the end of 2016, energy intensity for the Dow Corning sites was reduced by 41 percent and was on track to meet this goal.
- Dow Corning achieved this improvement through execution of a multimillion-dollar energy-efficiency project portfolio. Total savings of \$14 million in annual utility costs was achieved.
- Energy intensity data for the heritage Dow Corning sites have been integrated with Dow's 2025 World-Leading Operations Performance Goal metrics.

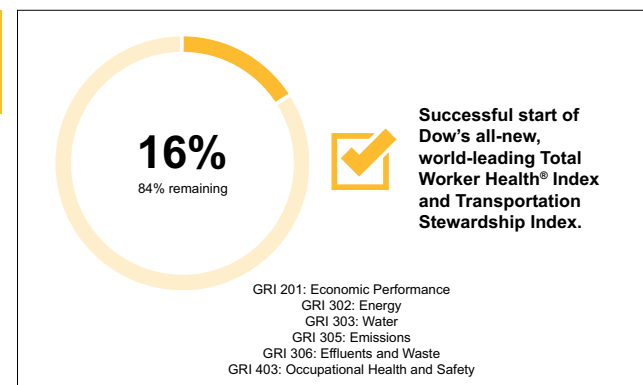




WORLD-LEADING OPERATIONS PERFORMANCE

Our world-leading operations performance is 16 percent toward our 2025 Goal versus a target of 12 percent. Our progress can be attributed to significant advancement on reducing our Injury and Illness rate, improving our Process Safety & Containment, and the successful start of Dow's all-new, world-leading Total Worker Health® Index and Transportation Stewardship Index.

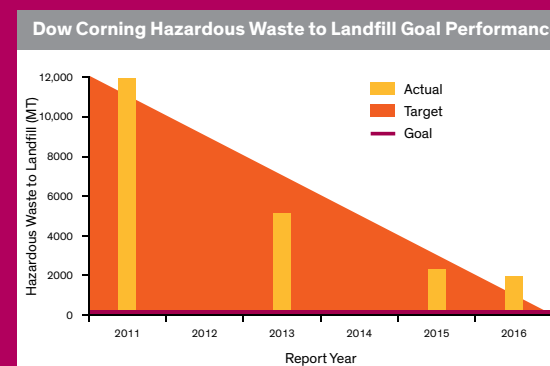
Case study: Continuing to lead the way forward in worker health, Dow has achieved recognition from the Centers for Disease Control and Prevention as an implementation partner in a national Diabetes Prevention Program. More than 5,000 Dow employees and family members have enrolled in this program. Through this effort, more than 1,400 participants have reduced their risk of developing diabetes by 58 percent by meeting weight loss and/or physical activity targets. In 2015, Dow also signed on to the WASH (Water, Sanitation and Hygiene) pledge, initiated by the World Business Council for Sustainable Development. By signing the WASH Pledge, companies commit to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all premises under direct control.



Hazardous Waste to Landfill Elimination Goal

Dow Corning set a goal to eliminate all hazardous waste to landfill (where legally permissible) by 2017.

- This goal was met in 2014.
- In 2015 and 2016, some hazardous waste was landfilled as we continued to face challenges in source reduction, internal recycling and establishment of reliable recycling outlets.
- Hazardous waste data for the heritage Dow Corning sites have been integrated with Dow's 2025 World-Leading Operations Goal metrics.



WHO WE ARE

REALIZING **Ways to Create Shared Value**

Powered by science and a passion for innovation, Dow has been consistently reinventing itself for over a century. To find new paths for growth. To position our businesses to win in the markets of tomorrow. To create what is vital for our customers and the world. Today, we are a company with the toolbox to tackle momentous challenges, and the commitment to pursue game-changing innovation and collaborations.



COMPANY'S PROFILE

The Dow Chemical Company, with global headquarters in Midland, Michigan, is a diversified, worldwide manufacturer and supplier of products used primarily as raw materials in the manufacture of customer products and services. **GRI102-1, GRI102-3**

We are a publicly traded company with the total common stock outstanding at January 31, 2017, of 1,213,311,580 shares and Total Capitalization at December 31, 2016 as below: **GRI 102-5**

- Total Assets: \$79,511 million
- Total Debt: \$21,363 million
- Total Equity: \$27,229 million **GRI 102-7**

Dow combines the power of science and technology to passionately innovate what is essential to human progress. We are driving innovations that extract value from material, polymer, chemical and biological sciences to help address many of the world's most challenging problems, such as the need for fresh food, safer and more sustainable transportation, clean water, energy efficiency, more durable infrastructure, and increasing agricultural productivity. Dow's integrated, market-driven portfolio delivers a broad range of technology-based products and solutions to customers in 175 countries and in high-growth sectors such as packaging, infrastructure, transportation, consumer care, electronics and agriculture.

2016 OVERVIEW

In 2016, Dow had annual sales of \$48 billion and employed approximately 56,000 people worldwide at December 31, 2016, up from approximately 46,500 at December 31, 2015. Headcount increased in 2016 primarily due to the Dow Corning ownership restructure transaction ("DCC Transaction"), which was partially offset by a decline related to the Company's restructuring programs. The Company's more than 7,000 product families are manufactured at 189 sites in 34 countries across the globe. The Company conducts its worldwide operations through global businesses, which are reported in five operating segments: Agricultural Sciences, Consumer Solutions, Infrastructure Solutions, Performance Materials & Chemicals and Performance Plastics. (More information on our operating segments is in the "What We Do" section) **GRI 102-6**.

We also achieved record operating EBITDA and closed the year with the highest operating EBITDA margin in nearly two decades. Not only have we performed on the bottom line, we continue to parallel this performance with the delivery of some truly game-changing projects.

Dow has continued to execute under a myriad of adverse geopolitical and economic headwinds because of the two defining attributes of the enterprise we've created over these last dozen years. Firstly, an aligned and motivated team of 56,000 incredibly dedicated people. Secondly, a portfolio built to perform under all conditions.

Through our people, the values of our Company shine through, giving us all direction and purpose toward achieving value for our stakeholders. Our recent employee survey results show that key metrics have improved to top-quartile performance on items such as "alignment to Company strategy," "I am encouraged to come up with new and better ways of doing things," and "My work group has a climate in which diverse perspectives are valued." This does not happen by accident. We have deliberately refreshed our workforce, hired the next generation, and inspired the current generation of employees on our mission to make the planet a better place for all stakeholders, while outperforming our competition in all financial metrics.



~56,000
employees worldwide



\$1.6 billion
investments in R&D



Manufactured at
**189 sites in
34 countries**



>7,000
product families



Sales in
**175
countries**



Founded in
1897

We have now achieved 17 consecutive quarters of year-over-year operating earnings per share growth and 13 consecutive quarters of volume growth, excluding the impact of acquisitions and divestitures.*

Last year, we restructured and integrated our 73-year-old joint venture, Dow Corning Corporation. This hand-in-glove fit with the Dow we've created during the last decade has overdelivered in terms of synergies, with a run rate of more than \$360 million versus a target of \$120 million by end of 2016, and its seamless integration into the Company culturally and into our portfolio portends to major growth synergies of more than \$100 million in near-term EBITDA. To this end, we've announced an investment in a major R&D center in Midland that will create 200 new jobs at the Dow Corning headquarters site.

Simultaneously, we have begun the startup and return to operations of our Sadara joint venture in Jubail, Saudi Arabia. Four of the 26 units are now up and running, producing quality products for our customers in the Near and Far East. The rest of this game-changing, world-scale facility will be up and running by mid-2017. And on the U.S. Gulf Coast, our new ethylene plant is now nearly 95 percent mechanically complete, with derivative plants well into the construction phase. Our expansion in Louisiana and the startup of one of our polyethylene facilities in Texas show what we can expect from these \$6 billion investments as they take vital U.S.-sourced ethane and propane from shale gas and convert them into vital products for the U.S. and overseas consumer.

In addition, our industry-leading innovation engine is continuing to outperform. It now produces more than 5,000 new products each year and delivered 754 U.S. patent

grants in 2016 – an all-time record for the Company. In 2016, Dow was recognized with seven R&D 100 awards as well as its 10th Presidential Green Chemistry Award, both more than any other company. More than 20 percent of Dow's revenue now comes from patent-advantaged sales.

New Horizons, New Growth

Our seminal portfolio move announced in late 2015 was the merge-and-spin transaction with DuPont. This move will extract enormous value for our owners, and allow both enterprises to drive even further superior performance into the future.

In 2016, we made significant progress on all fronts. We obtained overwhelming shareholder support, made progress with the regulatory clearances needed to close the merger, accelerated preparations for the intended spins, and advanced our readiness plan to ensure we will be fully functional on Day 1 of the anticipated close of the transaction, so that we achieve the cost synergy targets of \$3 billion per annum as a floor.

We expect to complete the intended spins within about 18 months after transaction close, resulting in three focused, industry-leading companies – including the new Dow, the world's leading materials science company. Each new company will be better positioned to reinvest in science and innovation, solve customers' ever-evolving challenges and generate long-term returns for our shareholders.

*Operating earnings per share is defined as earnings per share excluding the impact of "Certain Items."





Commitment to Doing Well and Doing Good

We have as our foundation our values. We know that looking after all stakeholders, doing well and doing good, is now the entry ticket to earn the right to operate. We understand that a diverse and inclusive society is mandatory to enable markets to develop and for all people to improve their quality of life. Our commitment to ethical and responsible standards, to sustainability per our 2025 Goals, to safety, which is in our DNA, to being a citizen in all of our communities, is unwavering. As a reminder of what matters most, we are sobered by the loss of four colleagues in 2016. These friends and colleagues are no longer with us, and serve as a reminder to what matters the most ... our people, and keeping everybody safe. We are proud of our people's response to these tragedies, to ensure they never happen again.

We will continue to build on our momentum and our strengths: a winning strategy of integration and innovation, a winning portfolio and a winning team. We will remain relentlessly focused on our priorities: safely delivering the operating and financial plan; successfully closing the DowDuPont transaction and moving quickly to prep for the intended spins; and capitalizing on our growth investments.

We are at a turning point in Dow's history – a reinvention of this 120-year-young enterprise, strategically positioned to successfully navigate the new horizons ahead. We are committed to doing what every prior generation of Dow leaders has done – to focus on transforming ourselves to lead in a new era of business and technology, in order to remain relevant – and essential – to our customers, our shareholders and to society.

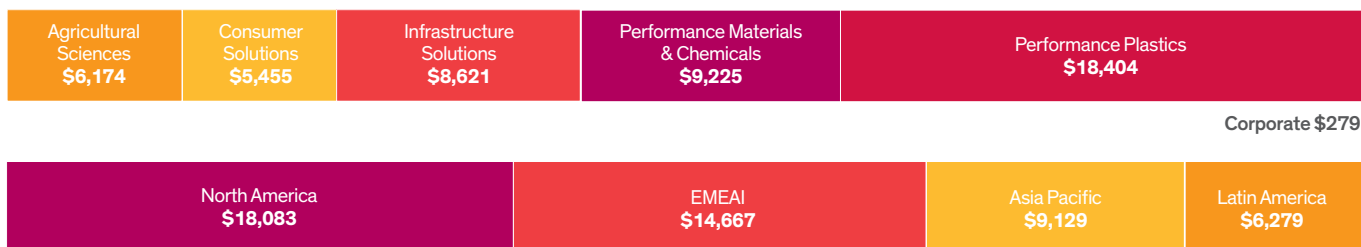


We are committed to advancing a circular economy by finding new solutions to close the resource loops in the markets we serve. For example, through the Hefty® Energy Bag program, we are working with partners in Omaha, NE, to demonstrate how trash can be collected and turned into energy. Previously non-recycled plastics, including chip bags and drink pouches, are now being collected curbside from residents, sorted at a local facility and then converted into energy to make cement. By recovering the embedded energy in plastic to make a new product, we are helping keep plastic waste out of our landfills and extract maximum value from our resources.

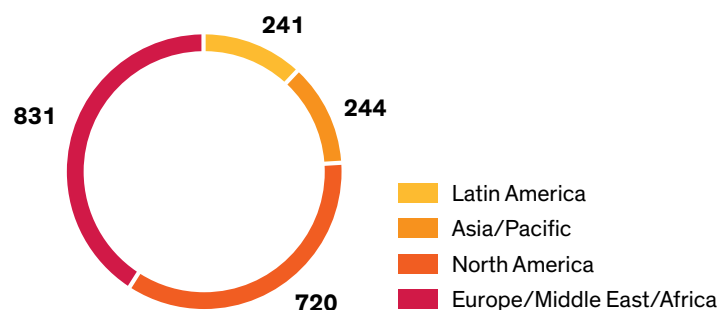


FINANCIAL HIGHLIGHTS

2016 Sales by Operating Segment and Geographic Area Total Sales: \$48,158 MM
(dollars in millions)



Taxes 2016, Dollars in Millions (payments to governments)



Economic value generated, distributed and retained, dollars in millions GRI 201-1	2016	2015
Revenues	\$48,158	\$48,778
Operating costs	\$32,972	\$32,805
Wages/benefits	\$7,427	\$7,692
Payments to providers of capital	\$3,213	\$3,128
Payments to governments	\$2,036	\$2,165
Community investments	\$42	\$41
Economic value retained	\$2,468	\$4,167

Countries of Operation GRI102-4

We operate 189 manufacturing sites in 34 countries. Properties of Dow include facilities that, in the opinion of management, are suitable and adequate for the manufacture and distribution of Dow's products. During 2016, the Company's production facilities and plants operated at 85 percent of capacity.

Our major production sites, including consolidated variable interest entities, are as follows:

Location	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Performance Materials & Chemicals	Performance Plastics
Bahia Blanca, Argentina					•
Candeias, Brazil				•	
Canada:					
Fort Saskatchewan, Alberta					•
Joffre, Alberta					•
Germany:					
Boehlen			•	•	•
Bomlitz		•	•		
Leuna					•
Schkopau		•	•	•	•
Stade	•	•	•	•	•
Terneuzen, The Netherlands		•	•	•	•
Tarragona, Spain			•	•	•
Map Ta Phut, Thailand			•	•	•
United States:					
Carrollton, Kentucky		•	•		
Louisville, Kentucky			•		
Hahnville (St. Charles), Louisiana			•	•	•
Plaquemine, Louisiana		•	•	•	•
Midland, Michigan	•	•	•	•	•
Deer Park, Texas			•	•	
Freeport, Texas	•		•	•	•
Seadrift, Texas		•	•	•	•
Texas City, Texas			•	•	
Wales, United Kingdom		•	•		
Zhangjiagang, China		•	•	•	

Including the major production sites, we have plants and holdings in the following geographic areas:

Asia Pacific:	40 manufacturing locations in 11 countries.
Canada:	6 manufacturing locations in 3 provinces.
Europe, Middle East, Africa and India:	50 manufacturing locations in 17 countries.
Latin America:	33 manufacturing locations in 4 countries.
United States:	60 manufacturing locations in 25 states and 1 U.S. territory.



KEY IMPACTS, RISKS AND OPPORTUNITIES GRI 102-15

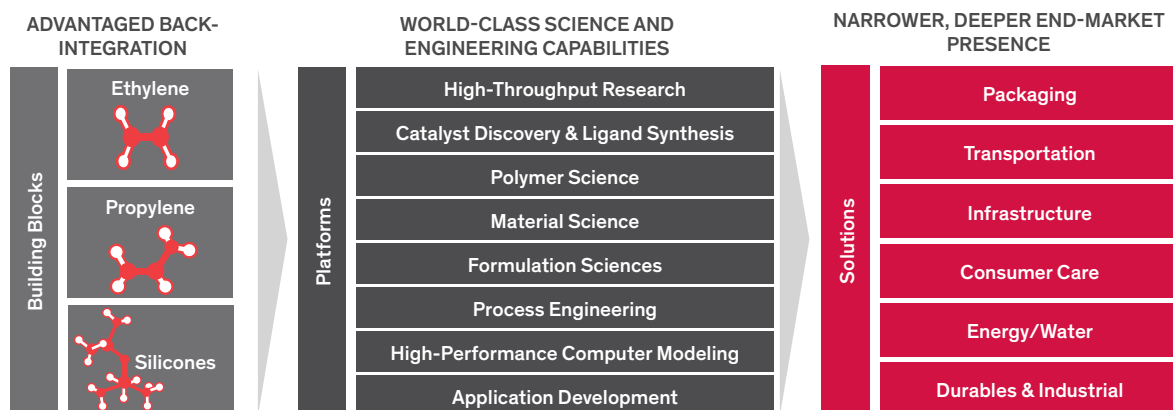
Dow – at 120 years young – is driving an exciting new era of growth for our shareholders. Powered by science and a passion to innovate, we have strategically transformed our Company and reshaped our portfolio. We have invested in integration to strengthen our cost-advantaged positions. Coupling this with our world-class innovation engine enables us to solve our customers' unique challenges and to grow with them.

Today's Dow is more innovative, more focused and more resilient than ever. As we navigate the new horizons ahead, we continue to build on our momentum and our strengths. At the same time, we will be guided by what has always defined our Company: our values and ethics, our people, our deep science-driven capabilities and our commitment to our planet.

We have an Executive Sustainability Team, chartered by Chairman and CEO Andrew Liveris, to work with Dow's business units, functions and geographies. The team is chaired by the chief sustainability officer and composed of several senior executives serving as the Company's governance body for Environment, Health & Safety (EH&S), Public Policy Issues, and Sustainability. This team is linked with the Dow Board of Directors' EH&S and Technology Committee, which has oversight responsibilities for Dow's performance in these critical areas.

Corporate-level identification and management of risk is systematically accomplished using an Enterprise Risk Management approach. Examples include the potential impact of weather-related events, access to credit, effect of foreign currency exchange rate movements, and volatility in purchased feedstock and energy costs. Risk management results are regularly communicated to the chief financial officer with a formal annual review with the Board of Directors and the Audit Committee.

Consumer-Driven Demand in Core End Markets Propels Growth



Our 2025 Sustainability Goals are a vital piece of our strategy to address our key impacts, risks and opportunities.

Industry-leading Innovation Engine: Dow's research and development engine is essential to Company growth and future success. The Company is engaged in a continuous program of basic and applied research to develop new products and processes, to improve and refine existing products and processes, and to develop new applications for existing products. Research and development expenses were \$1,584 million in 2016. At December 31, 2016, the Company employed approximately 7,200 people in various research and development activities.



PRIORITY PATENT APPLICATIONS FILED

Dow filed **932 priority patent applications in 2016**, the seventh consecutive year of filing greater than 900 applications, a new Dow record.

Our industry-leading innovation engine is continuing to outperform. It now produces more than 5,000 new products each year and delivered 754 U.S. patent grants in 2016 – an all-time record for the Company. More than 20 percent of Dow's revenue now comes from patent-advantaged sales.

Global Economic Considerations: The Company operates in a global, competitive environment that gives rise to operating and market-risk exposure. We sell our broad range of products and services in a competitive, global environment, and compete worldwide for sales on the basis of product quality, price, technology and customer service. Increased levels of competition could result in lower prices or lower sales volume, which could have a negative impact on the Company's results of operations.

In 2016, the Company derived 65 percent of its sales and had 37 percent of its property investment outside the United States. Although the Company's international operations may be subject to additional risks, such as changes in currency exchange rates

and geopolitical risks in emerging geographies, the Company does not regard its foreign operations, on the whole, as carrying any greater risk than its operations in the United States.

Health and Safety: Increased concerns regarding the safe use of chemicals in commerce and their potential impact on the environment, as well as perceived impacts of plant biotechnology on health and the environment, have resulted in more restrictive

costs and operating expenses. The Company purchases hydrocarbon raw materials including ethane, propane, butane, naphtha and condensate as feedstocks. The Company also purchases certain monomers, primarily ethylene and propylene, to supplement internal production, as well as other raw materials. The Company purchases natural gas, primarily to generate electricity, and purchases electric power to supplement internal generation.



regulations and could lead to new regulations. Concerns regarding the safe use of chemicals in commerce, their potential impact on health and the environment and the perceived impacts of plant biotechnology on health and the environment reflect a growing trend in societal demands for increasing levels of product safety and environmental protection. These concerns could manifest themselves in stockholder proposals, preferred purchasing, delays or failures in obtaining or retaining regulatory approvals, delayed product launches, lack of market acceptance, continued pressure for more stringent regulatory intervention and litigation. These concerns could also influence public perceptions, the viability or continued sales of certain of the Company's products, the Company's reputation and the cost to comply with regulations. In addition, terrorist attacks and natural disasters have increased concerns about the security and safety of chemical production and distribution. These concerns could have a negative impact on the Company's results of operations. Local, state, federal and foreign governments continue to propose new regulations related to the security of chemical plant locations and the transportation of hazardous chemicals, which could result in higher operating costs.

Raw Materials: Availability of purchased feedstocks and energy, and the volatility of these costs, impact Dow's operating costs and add variability to earnings. Purchased feedstock and energy costs account for a substantial portion of the Company's total production

Dow has a number of investments in the U.S. Gulf Coast to take advantage of increasing supplies of low-cost natural gas and natural gas liquids derived from shale gas, including construction of a new on-purpose propylene production facility, which commenced operations in December 2015; completion of a major maintenance turnaround in December 2016 at an ethylene production facility in Plaquemine, Louisiana, which included expanding the facility's ethylene production capacity by up to 250 KTA and modifications to enable full ethane cracking flexibility; and construction of a new world-scale ethylene production facility in Freeport, Texas, which is expected to start up in mid-2017. As a result of these investments, the Company's exposure to purchased ethylene and propylene is expected to decline, offset by increased exposure to ethane and propane feedstocks.

While the Company expects abundant and cost-advantaged supplies of natural gas liquids (NGLs) in the United States to persist for the foreseeable future, if NGLs were to become significantly less advantaged than crude oil-based feedstocks, it could have a negative impact on the Company's results of operations and future investments. Also, if the Company's key suppliers of feedstocks and energy are unable to provide the raw materials required for production, it could have a negative impact on the Company's results of operations.

Operational Event: A significant operational event could negatively impact the Company's results of operations. As a diversified chemical manufacturing company, the Company's operations, the transportation of products, cyber-attacks, or severe weather conditions and other natural phenomena (such as drought, hurricanes, earthquakes, tsunamis or floods) could result in an unplanned event that could be significant in scale and could negatively impact operations, neighbors or the public at large, which could have a negative impact on the Company's results of operations.

Major hurricanes have caused significant disruption in Dow's operations on the U.S. Gulf Coast, impacting logistics across the region and the supply of certain raw materials. This has had an adverse impact on volume and cost for some of Dow's products. Due to the Company's substantial presence on the U.S. Gulf Coast, similar severe weather conditions or other natural phenomena in the future could negatively impact Dow's results of operations.

CLIMATE CHANGE GRI 201-2

Governance

At Dow, the Executive Sustainability Team is appointed by the Dow Board of Directors to identify material sustainability risks and opportunities, including climate-related issues, and reports to the board every quarter. The Executive Sustainability Team also monitors the progress made on the Company's 2025 Sustainability Goals, which include climate-related ones such as:

- By 2020, we will ensure that our trajectory for absolute emissions from operations and purchased power meet internationally recognized targets for a 2 degrees Celsius maximum global temperature rise.

- Dow will reduce the freshwater intake intensity at key water-stressed sites by 20 percent.
- Dow will obtain 750 MW of its power demand from renewable sources by 2025.
- Though we will grow globally over the next 10 years, Dow's absolute greenhouse gas emissions will not exceed our 2006 baseline.

To help meet our goals, a working group is in charge of analyzing the various climate change scenarios and developing implementation strategies, in conjunction with the Executive Sustainability Team, for the Energy businesses to deploy.

Strategy

Dow's Energy business and Public Affairs and Sustainability functions are tasked with developing and implementing a comprehensive strategy that addresses the potential challenges of energy security and GHG emissions for the Company. The Company continues to elevate its internal focus and external positions to identify and address the root causes of GHG emissions, including the unsustainable use of energy. Dow's energy plan provides the roadmap:

- **Conserve** – aggressively pursue energy efficiency and conservation
- **Optimize** – increase and diversify energy resources
- **Accelerate** – develop cost-effective, clean, renewable and alternative energy sources
- **Transition** – to a sustainable energy future

Through corporate energy-efficiency programs and focused GHG management efforts, the Company has and is continuing to reduce its GHG emissions footprint. The Company's



manufacturing intensity, measured in BTUs per pound of product, has improved by more than 40 percent since 1990. As part of the Company's 2025 Sustainability Goals, Dow will maintain GHG emissions below 2006 levels on an absolute basis for all GHGs.

The risks matrix below is an overview of the identified climate-related risks and opportunities

and their potential financial impact on Dow, over the short, medium and long term.

Currently, our climate-change working group is updating scenario analyses for various dimensions of our footprint, handprint and blueprint, with analysis of effects on feedstocks, energy and products.

Type	Climate-related risks	Horizon	Potential impacts on business						Potential financial impacts				Potential opportunities							
			Inability to do business	Disruption in production capacity and shipment	Fines and reputational damages	Increased operating costs	Early write-off of assets	Reduced demand for products	Revenues	Expenditures	Assets/liabilities	Capital	More efficient production processes	Diversify business activity	Emergence of new technologies	Climate adaptation markets product solutions	Lower-emission and renewable sources of energy	Participating in carbon market	Resource diversification	
Transitional	Policy and legal																			
	Increased pricing of GHG emissions	>				x				x		x	x		x		x	x		
	Enhanced emissions reporting obligations	>								x						x	x			
	Exposure to litigation	>			x	x				x					x			x		
	Technology																			
	Substitution of existing products with lower emission options	>						x	x		x	x			x	x		x		
	Markets																			
	Changing customer behavior	>>					x	x	x					x	x					
	Uncertainty in market signals	>>					x	x	x					x				x		
	Reputation																			
Physical	Shift in consumer preferences	>>	x				x	x	x				x		x		x	x		
	Stigmatization of sector	>	x					x	x		x			x			x	x		
	Acute																			
	Tropical cyclones	>		x		x	x		x	x		x				x				
	Change in precipitation extremes/droughts	>		x					x	x		x				x				
	Chronic																			
	Change in precipitation pattern	>>>	x	x						x		x				x				
	Rising sea level	>>>	x	x			x			x		x				x				
Rising mean temperature	>>>	x	x						x		x				x					

What do Dow scientists, Brazilian ranchers and packaging manufacturers across Latin America have in common with the Olympic Games Rio 2016? They were all part of an unprecedented cross-sector collaboration that helped the Rio 2016 Organizing Committee to balance the footprint of hosting and staging the Games, while also introducing low-carbon technologies and behavioral practices to the region. As a Worldwide Olympic Partner, Dow worked with experts and customers to develop a portfolio of low-carbon projects in the areas of agriculture, industry and infrastructure. By Opening Day, the program had delivered 100,000 tonnes of third-party verified greenhouse gas (GHG) emission reductions and is projected to deliver more than 2 million tonnes of verified GHG reductions by 2026 — leaving a positive legacy long after the Games.



Risk Management

Climate change matters for Dow are likely to be driven by changes in regulations, public policy and physical climate parameters.

Regulatory Matters: Regulatory matters include cap-and-trade schemes; increased greenhouse gas (“GHG”) limits; and taxes on GHG emissions, fuel and energy. The potential implications of these issues are all very similar, including increased cost of purchased energy, additional capital costs for installation or modification of GHG-emitting equipment, and additional direct costs (such as cap-and-trade systems or carbon taxes) associated with GHG emissions, which are primarily related to energy use. It is difficult to estimate the potential impact of these regulatory matters on energy prices.

Reducing Dow’s overall energy usage and GHG emissions through new and unfolding projects will decrease the potential impact of these regulatory matters. Dow also has a dedicated commercial group to handle energy contracts and purchases, including managing emissions trading. The Company has not experienced any material impact related to regulated GHG emissions. The Company continues to evaluate and monitor this area for future developments.

Physical Climate Parameters: Many scientific academies throughout the world have concluded it is very likely that human activities are contributing to global warming. At this point, it is difficult to predict and assess the probability of potential risks related to a global warming trend on Dow specifically. Concerns have been raised that climate change may result in more frequent incidents of severe weather and the potential for rising sea levels. In the past, major hurricanes have caused significant disruption in our operations on the U.S. Gulf Coast, logistics across the region, and the supply of certain raw materials, which had an adverse impact on volume and cost for some of Dow's products. Due to our substantial presence on the U.S. Gulf Coast, similar severe weather in the future could negatively affect our results on operations. Hurricanes Gustav and Ike, which hit the U.S. Gulf Coast in 2008, caused temporary outages for several of the Company's Gulf Coast production facilities, resulting in \$181 million in additional operating expenses. To mitigate risks associated with severe weather, we have engineered the facilities to better withstand these events. Additionally, these sites have specific emergency preparedness plans that detail actions to take in the event of severe weather. Historically, these activities and associated costs are driven by normal operational preparedness. Dow continues to study the long-term implications of changing climate parameters on water availability, plant siting issues, and impacts and opportunities for products.

While we may face risks associated with climate change, opportunities also arise. As highlighted by the Carbon Disclosure Project (CDP), despite having no federal regulatory price on carbon in the U.S., Dow is one of the pioneer companies incorporating a carbon price into its business planning and risk management strategies. The price of carbon is included in the Company's internal calculations used for prioritizing capital projects. In addition, it also offers opportunities to develop solutions for climate adaptation.

Climate Adaptation Market: A large part of our product portfolio helps address global challenges: **Food** availability; **energy** supply; **climate change** and energy efficiency; **water** availability and quality; **nature**, natural capital, ecosystem services, biodiversity; and human **health**.

Dow innovations are already at work improving people's lives around the world – making clothes fresher, foods healthier, water cleaner, medicines more effective and homes more energy-efficient. And that's just the beginning of our growing portfolio of solutions. As part of our 2025 Sustainability Goals, Dow will maintain GHG emissions below 2006 levels on an absolute basis for all GHGs. But the widespread impact of climate change extends well beyond energy production. It creates huge markets for Dow's products and solutions. Through our science and technology capabilities, we are committed to bringing solutions to enable a sustainable energy future by producing products that help others reduce GHG emissions. For example, compared to current best-in class water purification membranes, our "Breakthrough to World Challenges" product, FILMTEC™ ECO Membrane Modules filter out 40 percent more salt from water, while consuming 30 percent less energy than industry standard reverse osmosis elements. In the building and

infrastructure sector, Dow's building insulation materials and air-sealing products can save up to 20 percent on heating and cooling costs and significantly reduce GHG emissions.

The Company's STYROFOAM™ insulation is installed in more than 20 million buildings worldwide, saving greater than \$10 billion in energy costs annually. DOWTHERM™ A heat transfer fluids are used in 35 large, concentrating solar power plants, with a total capacity of more than 700 megawatts. These plants will provide enough electrical generation capacity to meet the needs of more than 1 million homes at a savings of close to 4 million metric tons of carbon dioxide emissions per year.

DOW FILMTEC™ ECO Reverse Osmosis Elements deliver **40% better purification** with **30% less energy** than industry standard reverse osmosis elements, resulting in an ecologic and economic win.

Metrics and Targets

For our Scope 1, 2 and 3 emissions performances as well as our energy mix use and water management, please see "[Our Operations](#)" section. In 2016, we closed our 2015 Sustainability Goals, and we are currently working on developing specific targets to meet our 2025 Sustainability Goals.

Through our energy efficiency programs and focused greenhouse gas (GHG) management efforts, we significantly reduced our GHG emissions footprint. Our manufacturing energy intensity, measured in Btu per pound of product, has improved more than 40 percent between 1990 and 2015. As part of the Company's 2025 Sustainability Goals, Dow will maintain GHG emissions below 2006 levels on an absolute basis for all GHGs.

Worldwide Olympic Partner

- As a Worldwide Olympic Partner and the Official Chemistry Company of the Olympic Games, Dow's partnership has become a platform to inspire and go beyond business as usual.
- We are redefining the role of business by engaging in projects that have a positive impact on society. There are teams of Dow scientists working on low-carbon and energy efficient solutions at the intersection of science and sport.
- Dow is collaborating with experts and customers around the world to drive innovation and lead a blueprint that facilitates the transition to a sustainable planet and society.

At a Glance:

>35 YEARS
OF SUPPORT



Supplier to the
games since 1980



Since 2010



Enabled the
Mitigation of the
Sochi 2014 Carbon
Footprint Before the
Games Began



Created a Legacy
of Low-Carbon,
Energy-Efficient
Technologies in
Latin America

Case Study: Dow and Rio 2016 Delivering an Unprecedented Carbon Legacy in Brazil

The Olympic Games Rio 2016 are making history by leaving a significant legacy of low-carbon technologies in Latin America while set to balance 2 million tonnes of CO₂ equivalents (CO₂e).

As a Worldwide Olympic Partner and the Official Chemistry Company of the Olympic Games, Dow is helping redefine the role of business by engaging in projects that have a positive impact on society. Building on the successful implementation of the "Sustainable Future" program that enabled the mitigation of the direct carbon footprint of the Olympic Winter Games Sochi 2014 Organizing Committee, Dow was selected as the Official Carbon Partner of Rio 2016 and developed a portfolio of projects in the areas of agriculture, industry and infrastructure. These projects delivered 100,000 tonnes of verified GHG emission reductions by the Opening Ceremony and will continue to generate climate benefits throughout the realization period – which goes through 2026.

Leaving a Lasting Impact

As Official Carbon Partner of Rio 2016, Dow committed to delivering third-party-verified GHG emission reductions of 500,000 tonnes CO₂e by 2026 to balance the footprint of hosting and staging of the Games, while also aspiring to generate an additional 1.5 million tonnes of climate benefits to address societal associated emissions, such as spectator travel.

Working with Rio 2016, Dow designed a tailor-made program to address the environmental and technology needs of Brazil and Latin America by introducing low-carbon solutions and practices within key sectors of the economy. Dow's portfolio of projects enabled businesses to enhance productivity and conserve energy by switching from fossil to renewable energy sources, optimizing resources in agriculture and livestock farming and building capacity for more energy-efficient infrastructure, leading to long-term changes in the market.

Months before the Games, Dow collaborated with customers and expert partners to get an understanding of the local market environment and where there were

opportunities to increase awareness and adoption of energy-efficient and low-carbon technologies in the region. Eight projects were selected on the basis of their ability to push for innovation, overcome real or perceived barriers and catalyze long-term change in market practices.

For Generations to Come

In addition to the carbon mitigation goals, Dow and Rio 2016 committed to reach half a million people in Brazil to raise awareness of sustainability and climate change. Dow engaged decision-makers within the construction industry by hosting seminars on energy efficiency and included the farming community in a dialog on more sustainable agriculture practices. In addition, Dow supported Rio 2016's Transforma educational platform to engage over 7 million students.

As the premier corporate partner of Transforma, Dow expanded the platform by adding nine science classes to the curriculum, covering concepts on sustainability, chemistry, physics, and biology through the lens of the Olympic Games. Transforma has been rolled out to all 27 Brazilian states since its implementation in 2013.

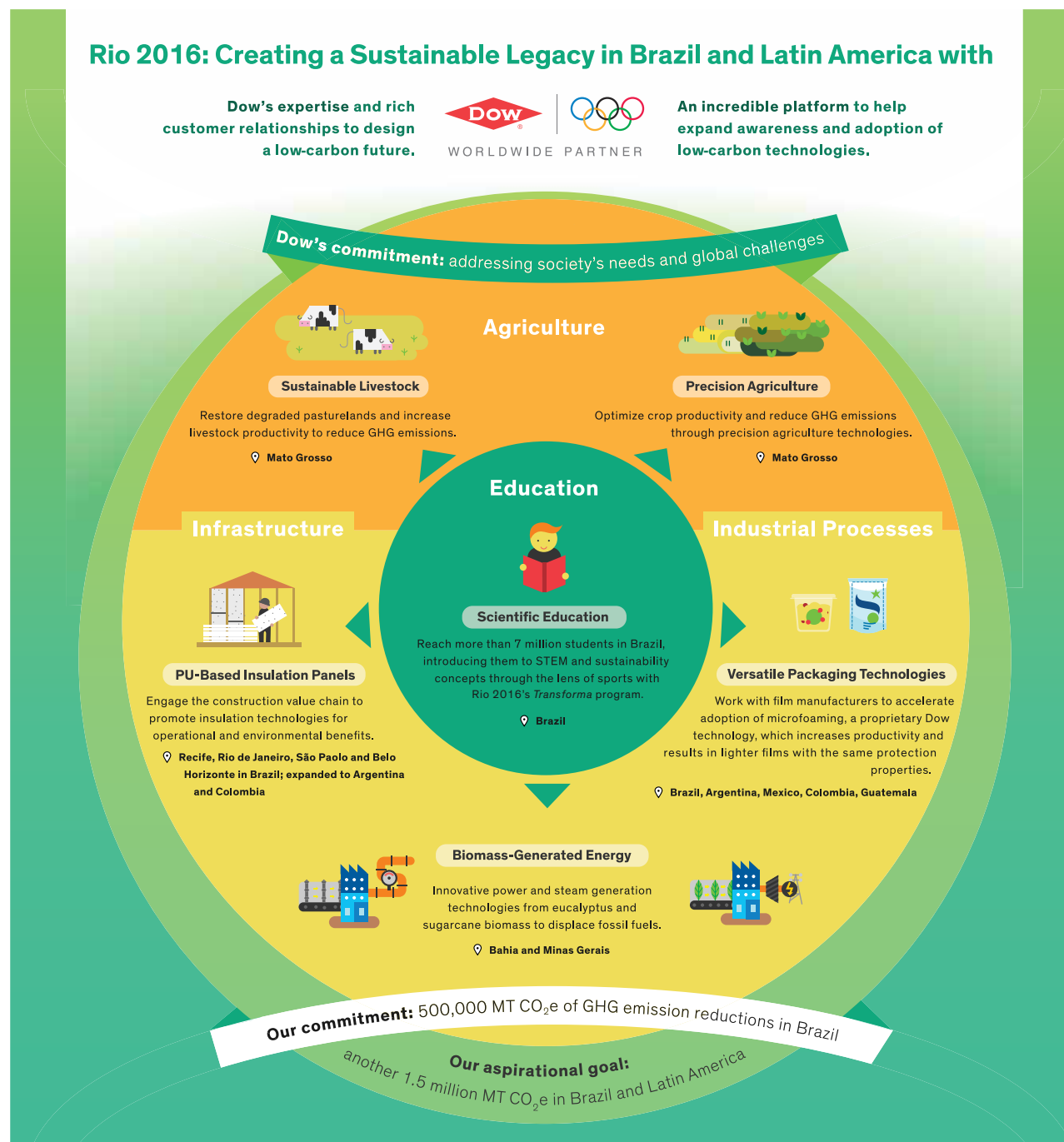
Learn more about Dow's carbon mitigation program for the Olympic Games Rio 2016, at www.dow.com/carbonmitigation.

Rio 2016: Creating a Sustainable Legacy in Brazil and Latin America with

Dow's expertise and rich customer relationships to design a low-carbon future.



An incredible platform to help expand awareness and adoption of low-carbon technologies.



WHY WE DO IT

DELIVERING **Solutions to Global Challenges**

Two decades into our sustainability journey, we understand that science-based solutions can make a powerful, positive difference for all of the world's 7 billion people — not to mention the 2 billion more on their way by 2050. By combining the power of science and technology to passionately innovate what is essential to human progress, we are helping advance solutions for energy, infrastructure, water treatment and food, among other global challenges.



VALUES, PRINCIPLES, STANDARDS AND NORMS OF BEHAVIOR

With more than 95 percent of manufactured products enabled by chemistry, world challenges will ultimately be solved by companies such as Dow, who collaborate with customers, industries, governments, academia and civil society. Our innovation engine is focused on water purification, crop productivity, building efficiency, development and commercialization of carbon mitigation, alternative energy and many more solutions that improve lives while protecting the planet. We are as committed to minimizing our own footprint as we are to delivering technology that helps the rest of society do the same. Our commitment to sustainability is integral to our corporate vision, mission, and values – which continue to drive change that is good for the environment, good for people and good for business.

Taken together, Dow's essential elements of mission, vision, values and strategy describe why the Company exists, who we are, what we intend to do and how we intend to do it. These essential elements provide insight, offer motivation and point the way forward as we seek to grow and achieve our goals.

The Diamond Standard, Dow's Code of Business Conduct ("Code"), summarizes many of the ethical principles and policies created to deter and prevent corrupt activity such as bribery, and to outline appropriate political contributions, as well as to provide Dow's position on equal employment opportunity, and environment, health and safety. All of us at Dow, no matter where we happen to live, are expected to apply these principles in the daily performance of our job responsibilities.

In December 2010, a new Code was approved by Dow's Board of Directors. The Code has been translated into 24 languages. A refreshed Code will be issued in 2017.

More information about ethics and compliance at Dow can be found on our website. Winning in today's volatile, global marketplace requires sound strategy and disciplined execution. Building on our strengths, we continue to accelerate our market-driven approach – going narrower and deeper into strategically aligned end markets, increasing productivity across our integrated value chains and maximizing the value of our investments.

Dow remains committed to applying our science and engineering expertise to create sustainable solutions to some of the world's greatest challenges. We are continuing to reduce our own footprint, deliver ever-increasing value to customers and society through our handprint of products and solutions, and lead in developing a blueprint for a sustainable planet and society. **GRI 102-16**

Dow's policy is to be lawful, highly principled and socially responsible in all of its business activities. Dow expects employees to learn and comply with all Company policies and laws applicable to their job responsibilities, and to adhere to the guiding principles outlined in the Code.

In September 1998, Dow established its Office of Ethics and Compliance (OEC) to reinforce the Company's long-standing commitment to ethical business conduct. The OEC communicates the Company's standards, provides guidance on issues related to ethical conduct and has oversight for mechanisms for action. Staff in this critical area are responsible for administering the Code and promoting practices that maintain an environment in which the Company businesses and workforce are in full compliance with the Code, accepted business

Mission:

To passionately create innovation for our stakeholders at the intersection of chemistry, biology and physics

Vision:

To be the most valuable and respected science company in the world

Corporate Strategy:

Invest in a market-driven portfolio of advantaged and technology-enabled businesses that create value for our shareholders and customers

Values:

- Integrity
- Respect for People
- Protecting Our Planet



practices and internal standards. This includes promoting lawful activity everywhere we do business as well as helping the Organization to manage risk, maintain a positive reputation and avoid lawsuits. As the leader of Dow's Global Ethics & Compliance function, the OEC Director is expected to stay abreast of the Company's business goals and cultural climate as well as facilitate sound and ethical business dealings through education and the establishment of practices that enable the highest possible level of compliance.

Dow's Code sets the ethical standard for Dow and its employees. Dow employees are encouraged and expected to report potential violations of the Code for investigation and action; contingent staff and other third parties are also encouraged to report allegedly inappropriate conduct.

The Dow EthicsLine is a safe, reliable and convenient alternative to reporting ethical concerns in person (by calling or via online form). It is available globally, with multilingual capabilities, 24 hours a day, seven days a week. The Dow EthicsLine is operated by EthicsPoint, a professional vendor located in Lake Oswego, Oregon, USA, that specializes in providing similar services to global companies. No call tracing/tracking of IP addresses or recording devices is ever used, and in some countries, callers may remain anonymous if they choose. In addition to the EthicsLine, employees may choose to report concerns to their supervisors or other leaders, Dow attorneys, Human Resources, Regional Ethics and Compliance Committee members or directly to the OEC. All concerns are evaluated, and all potential code violations are investigated.

Reports and other data of alleged violations of the Code or the law are provided to the Audit Committee of the Dow Board of Directors quarterly. In 2016, 424 matters were reported to the OEC, 343 of which warranted an investigation. All issues that required corrective action were appropriately addressed. **GRI 102-17**

GLOBAL CHALLENGES UN SDGs

Dow's Approach

Footprint	Handprint	Blueprint
World-leading Operations Performance	Product Solutions to World Challenges	Dow's Thought, Leadership and Action

Dow's Solutions to Global Challenges



Food



Energy



Water



Climate Change



Nature










Social Issues

Dow's Aspiration:

- Dow advances the well-being of humanity by helping lead the transition to a sustainable planet and society.
- Dow maximizes economic, environmental and societal value.

United Nation's (UN) Sustainable Development Goals Alignment

We understand that capitalism can make a positive difference for all of the world's 7 billion people. Our ambitious 2025 Sustainability Goals address each of the UN SDGs and will incorporate the value of nature and society into all of our business decisions. Dow's 2025 Sustainability Goals drew from the UN Goals, as they were developed concurrently, and like the UN's goals, ours are not merely business as usual. They will lead us to transform our Company. By working together, at the intersections of business, government and civil society, we can leverage the best of what each of us has to offer – and help create a better world. The table below shows how our goals align to the UN SDGs goals.

							
	Leading the Blueprint	Delivering Breakthrough Innovations	Advancing a Circular Economy	Valuing Nature	Increasing Confidence in Chemical Technology	Engaging Employees for Impact	World-Leading Operations Performance
1		●			●	●	
2		●			●		
3		●		●	●		●
4	●					●	
5	●					●	
6		●					●
7		●					●
8	●					●	
9		●	●				
10	●	●		●		●	
11	●	●			●		
12	●	●			●		
13		●					●
14			●	●			●
15			●	●			●
16	●					●	
17	●						

Our 2025 Sustainability Goals align with all the SDGs; however, there are four in particular to which we are most directly aligned.

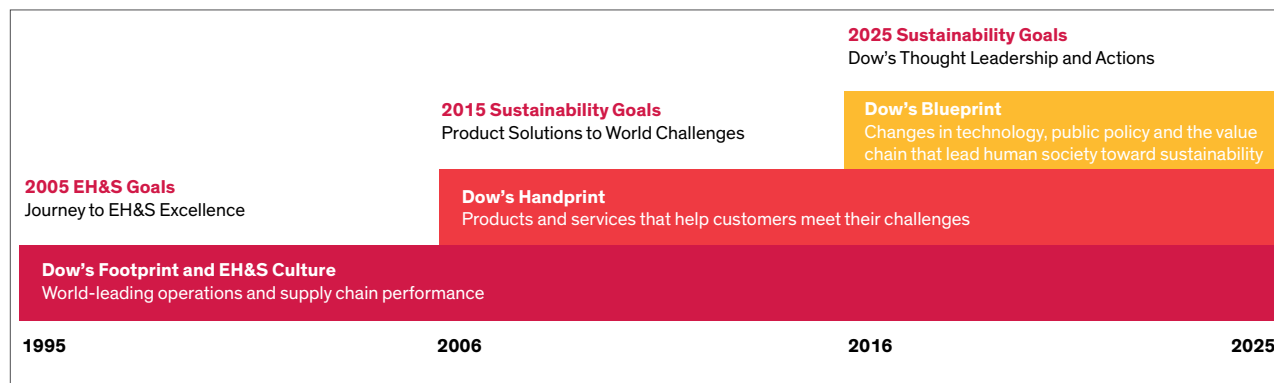


We recognize that we are not alone in supporting the UN SDGs, and we applaud other companies that are helping redefine the role of business in society and advance progress on these goals. We are excited to stand with them, and we invite others to join us in developing a blueprint for global sustainable development. Together, we can work to redefine the role of business in society, help achieve the UN SDGs and drive transformative change. As we collaborate together, we can leverage the best of what each of us has to offer – and help create a better world.

MATERIALITY PROCESS GRI102-46

The reporting principles as defined under the GRI Reporting Standards are used in this report to cover the topics that reflect the organization's significant economic, environmental and social impacts that substantially influence the assessments and decisions of stakeholders.

Defining our material aspects and boundaries is a continuous process and the results are reflected in our established 2025 Sustainability Goals, which evolve beyond our footprint and handprint to also envision the development of societal blueprints and, with it, redefine the role of business in society. 2016 marked the beginning of our 10-year journey toward meeting our 2025 Sustainability Goals.



When defining a new material aspect, we see it as a building step toward expanding our reach while we continue to work on our culture and build on the foundation and successes achieved from previous Sustainability Goals.

The materiality process requires a recurrent evaluation. The steps are captured in the periodic four-step cycle of identification, prioritization, validation and revision.

Identification

A critical element in the development of the 2025 Sustainability Goals was a constant dialogue with a wide range of stakeholders on a wide range of topics that later became the key components of the goals. For our 2015 Sustainability Goals, this process began in 2003, when we developed a first draft of the goals using a “bottom-up” approach with a number of functional experts and resources within the Company. We also sought guidance from a number of external stakeholders, who shared a common view of the overall sustainable development agenda, as well as expertise in the specific areas under consideration for emphasis.

One of the external stakeholders was the Sustainability External Advisory Council (SEAC), who since 1992 has been a key contributor to Dow's outside-in perspective on environment, health and safety and sustainability issues for the Company. The SEAC played a critical role in developing our 2015 Sustainability Goals.

In addition, part of our stakeholder engagement is through our annual Public Policy Issues Prioritization process. Through the Government Affairs, Public Policy, Regulatory Affairs and Issue Management

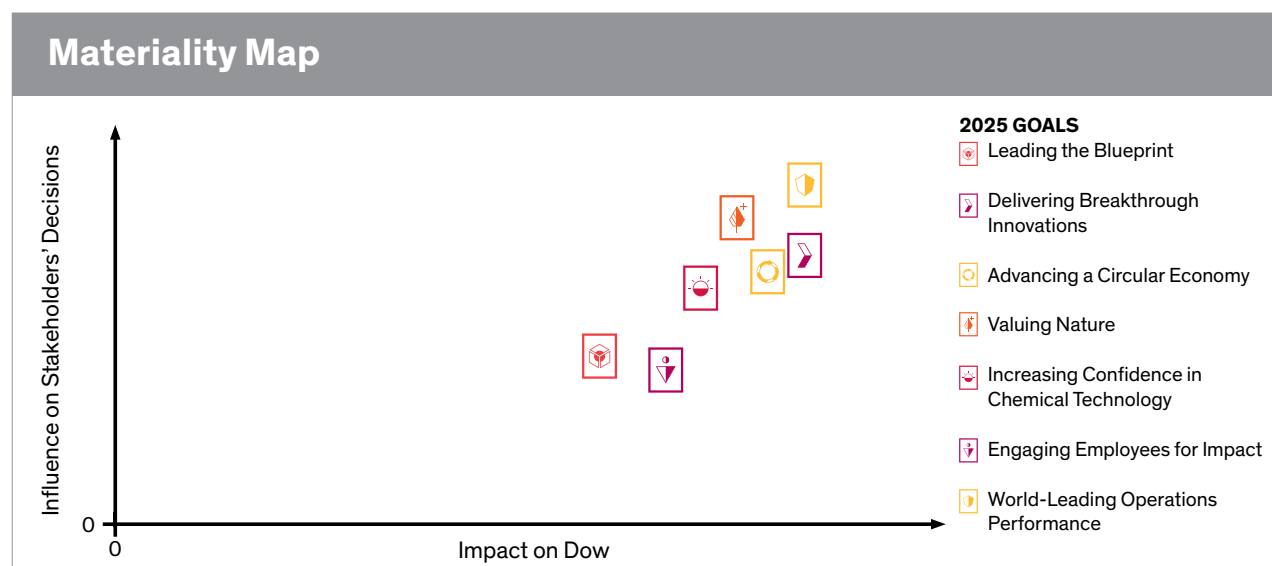
teams, the Dow's Issue and Policy Management Council drives alignment of global issues and policy management strategies, setting priorities and coordinating efforts and resources.

In an increasingly changing world, continuous dialogue with stakeholders is important. The periodic review of our identified materiality aspects enable us to also work on the development of new metrics, which provide the flexibility necessary to adjust to emerging issues and keep our progress relevant. For example, in 2013 as part of building Dow's next-generation approach to sustainability, we conducted an extensive stakeholder and corporate interview process to identify the issues that are the most important to our stakeholders and most relevant for Dow. More than 300 one-on-one and small group interviews were conducted across the globe with stakeholders, including individuals from non-governmental organizations, academia and governments, as well as the environmental and sustainability communities. Key customers, consumer-facing companies and Community Advisory Panels (CAPs) were also interviewed.

More than 500 interviews were conducted to understand and prioritize environmental, social and economic needs in the communities in which Dow has significant operations. Individual conversations were conducted with SEAC members, senior leadership and employees in focus groups. Robust analytics and text mining were applied to analyze the extensive data collected through the interview process and to assess the importance of issues to stakeholders and to the Company, which resulted in validation and prioritization of the topics.

Validation

In 2014, as part of building Dow's next-generation sustainability goals, a series of scenario-based probabilistic analyses was performed to evaluate the direct and indirect value, intangible value and externalities (those borne by society) of Dow's activities. The approach is a natural extension of a method that was originally developed by Dow and several other companies, as well as the American Institute of Chemical Engineers (AIChE). The analyses show that Dow's sustainability activities will bring significant value to Dow from growing top-line and bottom-line value by improving reputation, increasing human capital return and improving resilience. The analyses also show that many external stakeholders will receive mutual benefits from Dow's sustainability activities, such as reducing environmental impacts, increasing ecosystem value and improving life quality.



BROAD CONSULTATION

- Analysis of internal and industry standards, and public policy
- Interviews with specialists
- More than 500 interviews
- Customers, Community Advisory Panels
- SEAC members
- Employee focus groups

THE IMPORTANCE OF CHEMISTRY

*In a rapidly
changing
world...*



In 2030, the world's
population will reach
8.3 billion

NEW DEMANDS ARISE:



WATER RESOURCES

50%

water needs increase
by 2030
Only 2.5% of the
world's water
is fresh water

35%

of the world's
population will live in
water scarce regions
by 2020



ENERGY

30%

is the estimated increase in energy
consumption for the next 15 years. Every new
shirt made, cell phone produced and house
built results in tangible energy spent, which
means more GHG released



FOOD

1 billion

more mouths to feed
by 2025 while today,
30% of the world's
food is wasted

70%

will be the total
increase in food
demand
(2000-2050)

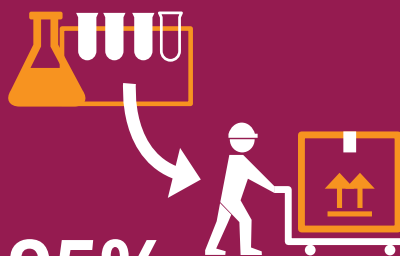


GHG EMISSIONS

40%

is the GHG emissions reduction needed to limit
the average global temperature rise to 2°C and
avoid irreversible changes to ecosystems by 2030

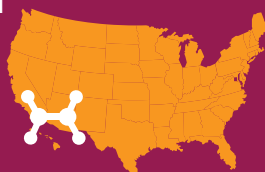
*Collaboration,
Innovation
and science are
the solution*



95%

of the world's
manufactured goods are
created from chemistry

In the U.S., for every one
job created from the
business of
chemistry,



6

jobs are created
in other sectors

WHAT THE CHEMICAL INDUSTRY CAN DO:



Climate Change

- ✓ Provide solutions in transportation and mobility
- ✓ Develop and use renewable and clean energy sources
- ✓ Find smarter ways to use energy
- ✓ Increase emissions control



Food and Agriculture

- ✓ Increase crop yields
- ✓ Offer technologies for healthier diets
- ✓ Develop solutions for pest and weed control in the field



Water

- ✓ Reduce water scarcity with new treatments
- ✓ Develop technologies to improve water availability, water quality, cost and energy efficiency
- ✓ Turn wastewater into a valuable resource through advanced reclamation processes



Waste








- ✓ Provide solutions to prevent and reduce waste
- ✓ Collaborate to improve waste management infrastructure
- ✓ Advance a circular economy
- ✓ Provide technologies to prevent food loss and food waste



Consumer Goods

- ✓ Develop effective biotechnology that help treat the population's evolving needs
- ✓ Increase the safety, durability and service life of products
- ✓ Offer technologies that help support an active lifestyle

List of Material Topics GRI 102-47

Dow's 2025 Sustainability Goals	GRI Material Topics Alignment	Within Dow ²	Outside Dow ²		
			Suppliers	Customers	Broader Society
	GRI 201: Economic Performance	•		•	•
	GRI 201: Economic Performance GRI 302: Energy GRI 303: Water GRI 305: Emissions	•		•	•
	GRI 201: Economic Performance	•	•	•	•
	GRI 201: Economic Performance GRI 302: Energy GRI 303: Water GRI 305: Emissions GRI 306: Effluents and Waste	•			•
	GRI 201: Economic Performance GRI 403: Occupational Health and Safety Sustainable Chemistry ¹	•	•	•	
	GRI 201: Economic Performance GRI 401: Employment GRI 405: Diversity and Equal Opportunity	•			•
	GRI 201: Economic Performance GRI 302: Energy GRI 303: Water GRI 305: Emissions GRI 306: Effluents and Waste GRI 403: Occupational Health and Safety	•		•	•

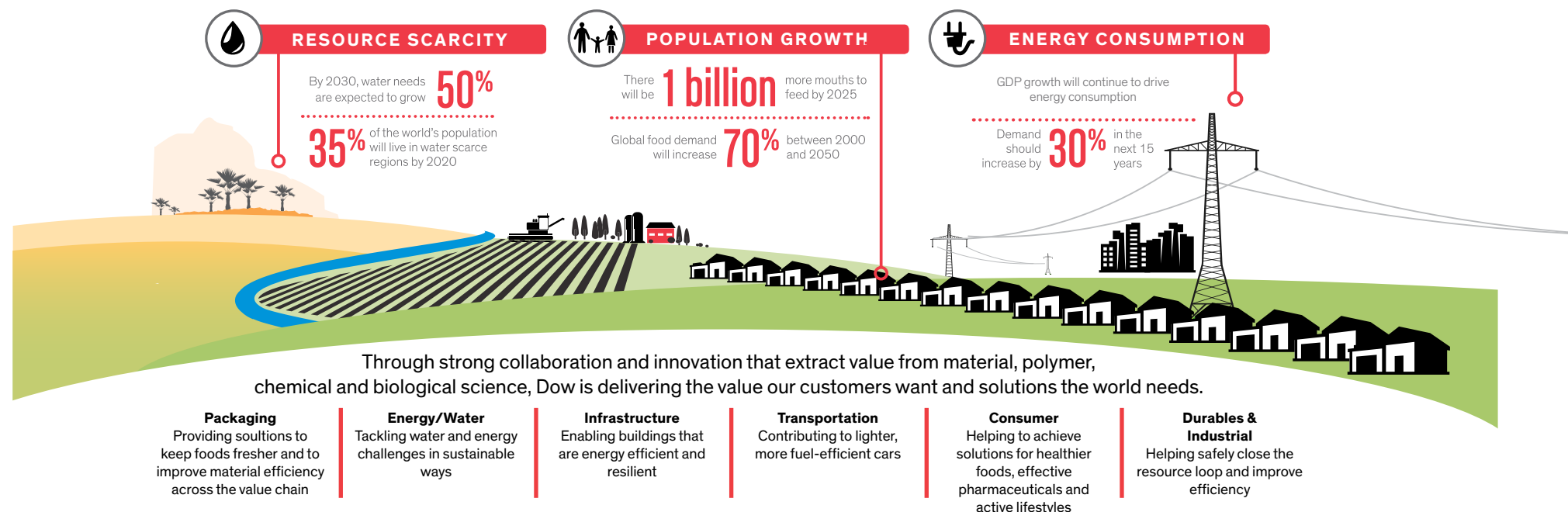
¹Topic does not fully align with any of the GRI-specific disclosures but it is a material topic for the Company.

²Topic boundary as applied to GRI disclosures.



As part of the materiality assessment, we identify where the impacts of material topics could occur within and outside of the Company along the value chain, including our suppliers, our operation and transportation, distribution, our customers and broader society. Impacts of material topics within Dow occur throughout the entire Company. This report covers majority-owned Dow subsidiaries over which the Company exercises control, entities for which the Company has a controlling financial interest or is the primary beneficiary, and operations in leased facilities that are Dow managed, worldwide as of December 31, 2016.

Addressing World Challenges



Maximizing the efficient use of water is critical as populations grow. Dow is helping reduce the strain on limited local freshwater resources through technologies that enable wastewater to be recycled and reused. For example, in Spain, our Dow Tarragona ethylene-cracker cooling tower historically used water from the UNESCO-protected Ebro River Basin. Today, thanks to a public-private collaboration, wastewater is fed from area municipal wastewater treatment plants to a reclamation plant, then to our cooling tower. Various treatment technologies, including DOW FILMTEC™ reverse osmosis elements, are used to address issues such as corrosiveness. Reusing the wastewater frees up more than 200 m³ per hour of water rights for the municipality while contributing to the river basin's preservation.

WHAT WE DO

INNOVATING **What Is Essential to Human Progress**

Our diverse and well-balanced portfolio is strategically positioned to take on the complex realities of today and tomorrow. Across our portfolio, our businesses are aligned to technology-rich, customer-focused end-markets and deliver significant long-term value to customers, shareholders and society. We are a company that seeks to do good while doing well.



Markets Served and Products by Business GRI 102-2, GRI 102-6

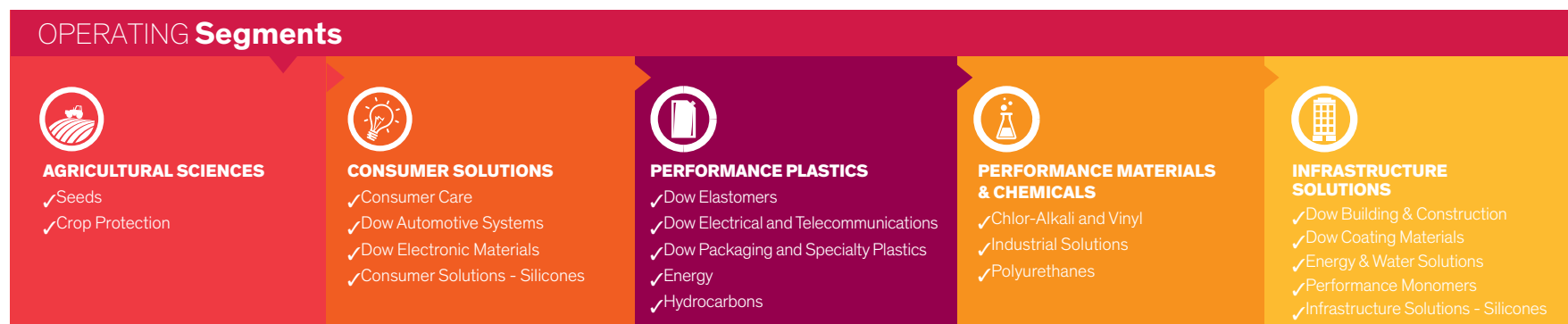
All products and services are marketed primarily through the Company's sales force, although in some instances more emphasis is placed on sales through distributors. No significant portion of any operating segment's sales is dependent upon a single customer.

No single product accounted for more than 5 percent of the Company's consolidated net sales in 2016.

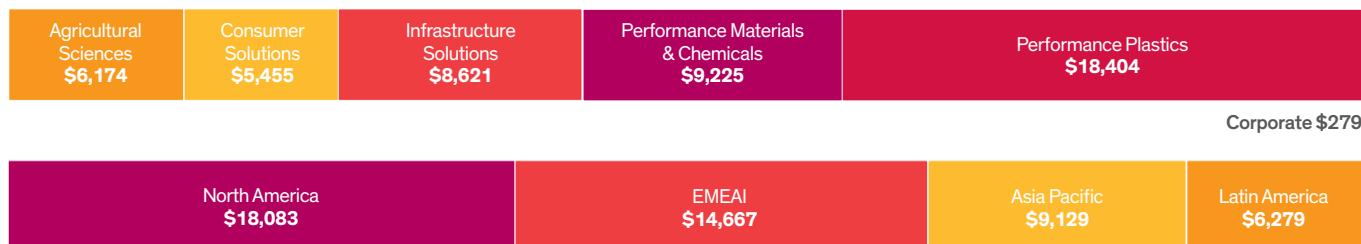
We serve the following industries: automotive; agricultural; appliance; building and construction; chemical processing; electronics; furniture; housewares; oil and gas; packaging; paints, coatings and adhesives; personal care; pharmaceutical; processed foods; pulp and paper; textile and carpet; utilities; and water treatment.

Dow's worldwide operations are managed through global businesses that are reported in five operating segments: Agricultural Sciences, Consumer Solutions, Infrastructure Solutions, Performance Materials & Chemicals and Performance Plastics. This operating structure maximizes Dow's integration benefits and the value from material, polymer, chemical and biological sciences to help address many of the world's most challenging problems – either through molecular and value chain alignment, or through the benefits derived from Dow's enhanced, innovation-driven market focus. Responsible chemistry is paramount to us, and Dow does not knowingly sell any products into markets where they are banned.

We conduct worldwide operations through global businesses, which are reported in five operating segments:



2016 Sales by Operating Segment and Geographic Area Total Sales \$48,158 MM

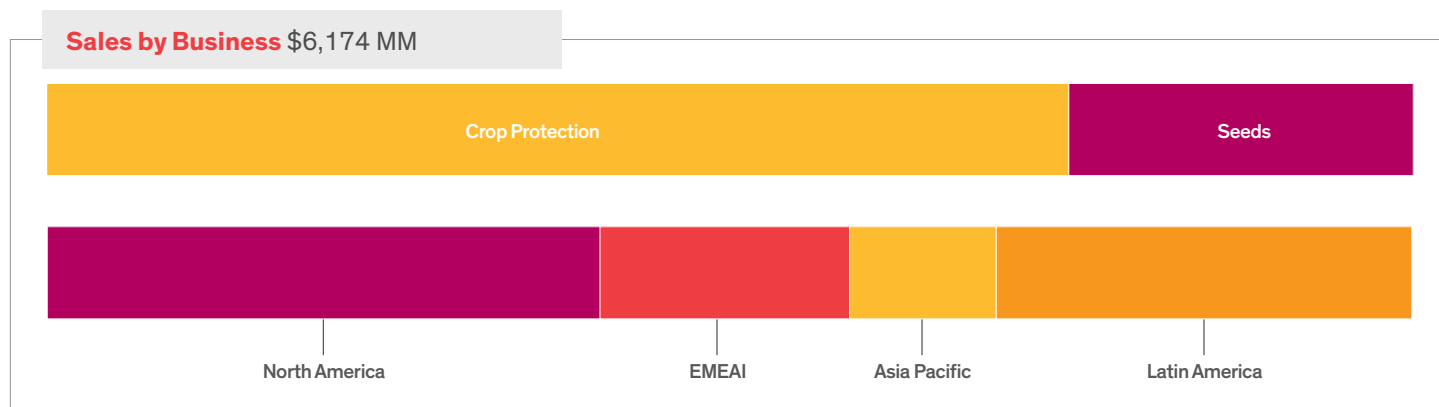


AGRICULTURAL SCIENCES

The Agricultural Sciences segment is a global leader in providing crop protection and seed/plant biotechnology products and technologies, urban pest management solutions and healthy oils. The business invents, develops, manufactures and markets products for use in agricultural, industrial and commercial pest management. The segment has broad global reach with sales in nearly 130 countries and research and development (R&D) and manufacturing facilities located in all geographic areas. Growth

is achieved through the development of innovative new products and technologies, successful segmentation of market offerings with leading brands, diverse channels to market, competitive cost positions, strategic bolt-on acquisitions, and commercial and R&D collaborations. The Company is committed to the development of innovative new crop protection and seed products.

Agricultural Sciences consists of two businesses – Crop Protection and Seeds. Details on Agricultural Sciences' 2016 sales, by business and geographic area, are as follows:



Key Innovations

- ENLIST DUO™ herbicide with COLEX-D™ technology
- ENLIST™ Corn & Cotton
- ARYLEX™ active
- INATREQ™ active
- RINSKOR™ active
- ISOCLAST™ active
- POWERCORE™ Insect Trait Technology
- PROPOUND™ advanced canola meal
- Omega-9 Reduced Saturate Sunflower
- SmartStax® Insect Trait Technology

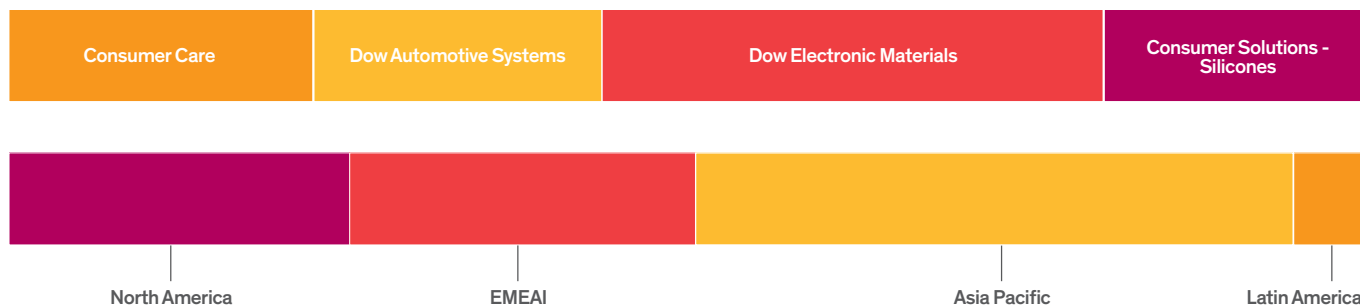
CONSUMER SOLUTIONS

In Consumer Solutions, we work closely with our customers to understand and identify consumer needs in market sectors as diverse as automotive, electronics and entertainment; food and pharmaceuticals; and personal and home care products. The Consumer Solutions segment consists of four global businesses: Consumer Care, Dow Automotive Systems, Dow Electronic Materials and Consumer Solutions – Silicones. These global businesses develop and market customized materials using advanced technology and unique chemistries for specialty applications. Products include semiconductors and organic light-emitting diodes (OLEDs), adhesives and foams used by the transportation industry, cellulose and other polymers for innovative pharmaceutical formulations and food solutions, and silicone solutions used in consumer goods and automotive applications. The segment's commitment to continuous innovation and rapid new product development

enables it to maximize opportunities in emerging geographies and high-growth consumer market segments in nearly 110 countries.

As of June 1, 2016, Dow Corning, previously a 50:50 joint venture with Corning, became a wholly owned subsidiary of Dow. Dow and Corning continue to maintain their historical proportional equity interest in the Hemlock Semiconductor Group (HSC). Beginning in June 2016, the results of Dow Corning, excluding the HSC Group, are fully consolidated into the Company's consolidated statements of income and aligned with the Consumer Solutions and Infrastructure Solutions segments. The results of the HSC Group will continue to be reported as "Equity in earnings of nonconsolidated affiliates" in the Company's consolidated statements of income and aligned with the Consumer Solutions and Infrastructure Solutions segments.

Sales by Business \$5,455 MM

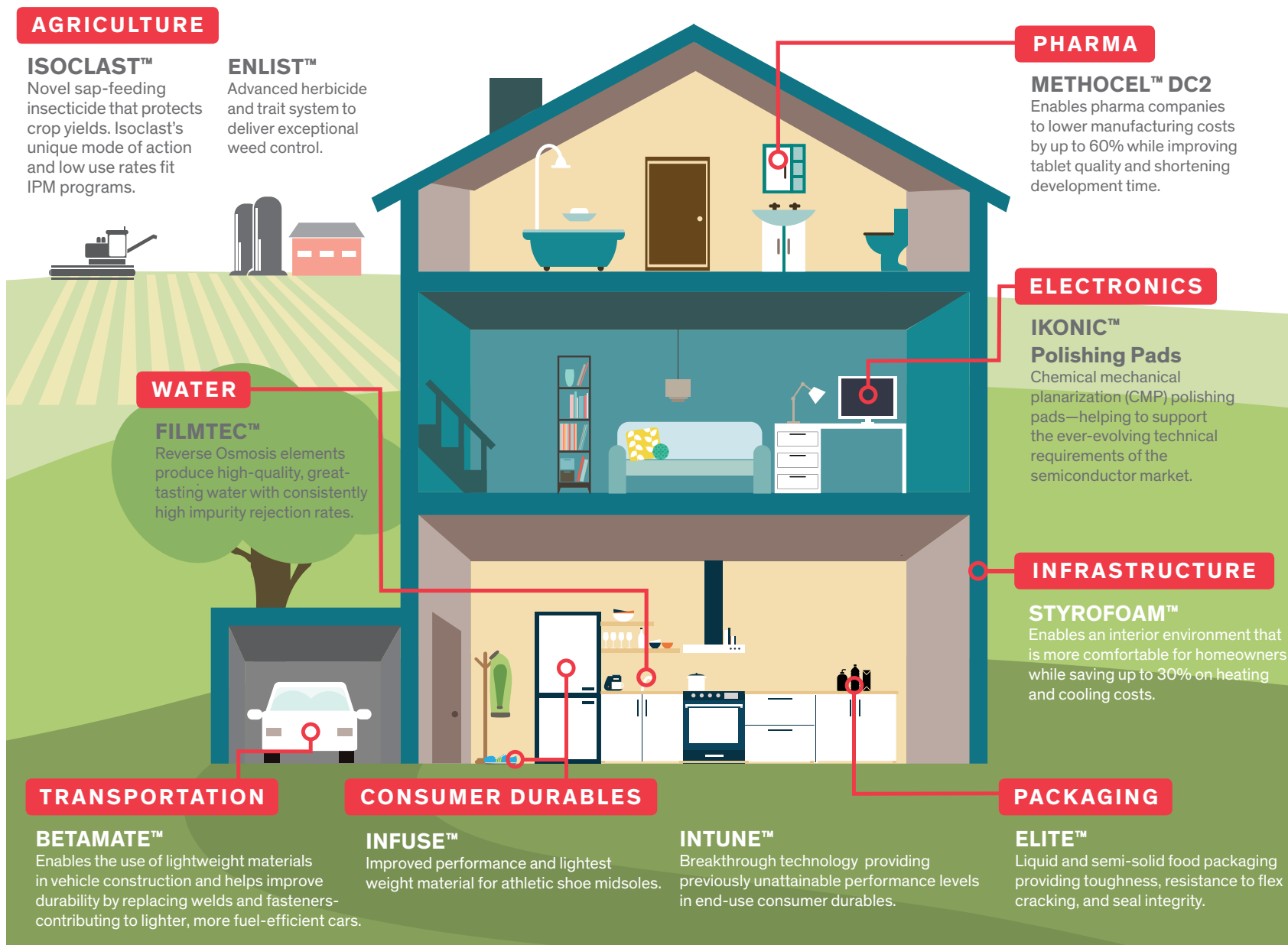


Key Innovations

- | | | |
|--|----------------------|--------------|
| • AFFINISOL™ | • Dow Corning® SilAc | • MICROFILL™ |
| • BETAFOAM™ | • COMPLEASE™ | • SOLDERON™ |
| • BETAFORCE™ | • ECOSMOOTH™ | • SPECFLEX™ |
| • BETAMATE™ | • EPIC™ | • WELLENCE™ |
| • Dow Corning® MG 7-1010, 2107 & 2110 | • IKONIC™ | |
| • Dow Corning® 3901 Liquid Satin Blend | • METHOCEL™ | |
| | • ETHOCEL™ | |

Chemistry in everyday life

The presence of our products and solutions in our daily lives



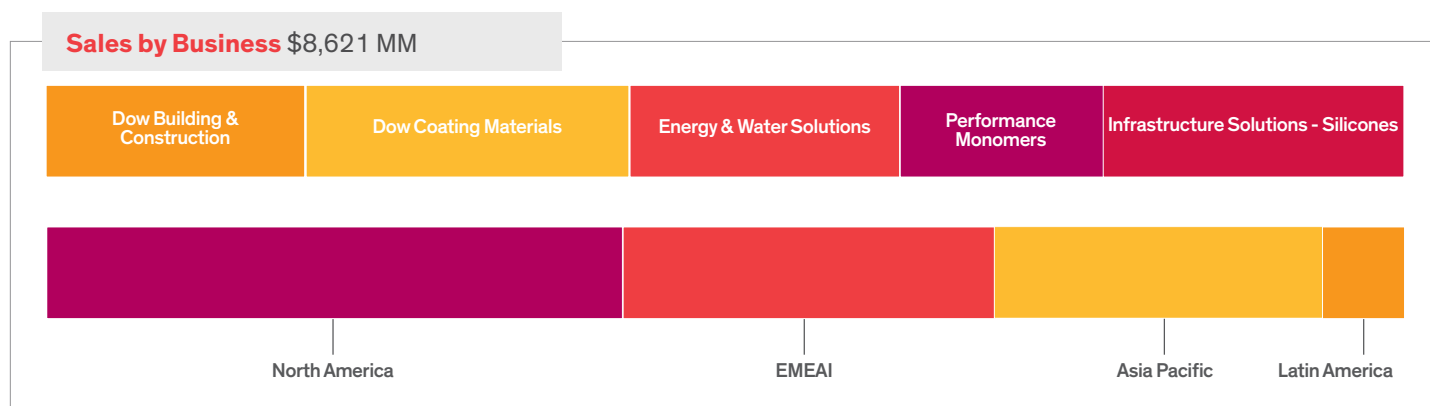
INFRASTRUCTURE SOLUTIONS

In Infrastructure Solutions, we are focused on applying the right business model to maximize returns. We're continuing to strengthen the positioning of Dow Building & Construction and Dow Coating Materials, which both have strong technology and leading brands. In our Energy & Water Solutions business, we have combined our industry-leading water treatment and filtration technologies with solutions for energy-related markets to capitalize on attractive growth trends. Our Performance Monomers business is being run to maximize cash generation and capture integration value. And in Infrastructure Solutions – Silicones, we are ensuring competitive positions, while using market-leading innovations to grow share and capture value in higher growth and higher value markets. The Infrastructure Solutions segment is comprised of an industry-leading portfolio of businesses utilizing advanced technology to deliver products such as architectural and industrial coatings, construction material ingredients, building

insulation and materials, adhesives, microbial protection for the oil and gas industry, telecommunications, light and water technologies. With unmatched R&D capabilities, a broad range of chemistries, extensive geographic reach and strong channels to market, this segment is well positioned to capitalize on market trends. The segment has broad geographic reach with sales in nearly 150 countries and R&D and manufacturing facilities located in key geographic areas.

As of June 1, 2016, Dow Corning, previously a 50:50 joint venture with Corning, became a wholly owned subsidiary of Dow as a result of the DCC Transaction. Dow and Corning continue to maintain their historical proportional equity interest in the HSC Group.

Details on Infrastructure Solutions' 2016 sales, by business and geographic area, are as follows:



Key Innovations

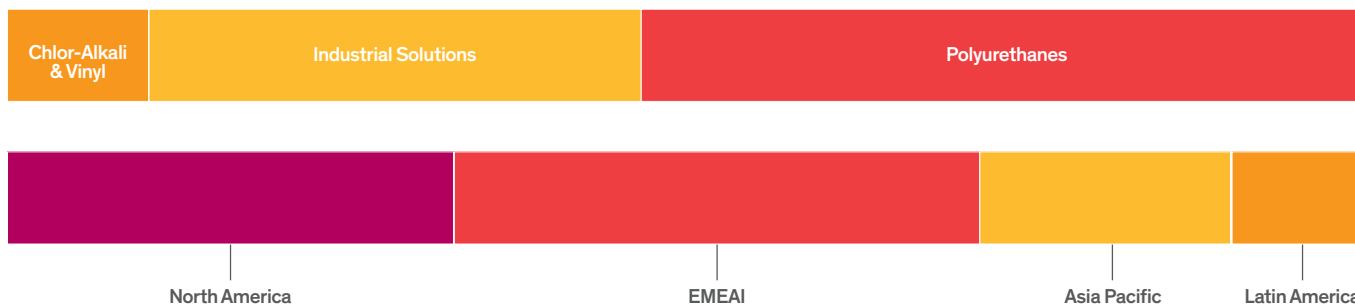
- 2400 SILICONE ASSEMBLY SEALANT
- ACRY SOL™ RM-725
- AQU CAR™
- CRYSTAL CLEAR BONDING
- DIRTSHIELD™
- DOW FILMTEC™
- EVOQUE™
- ECOGROUND™
- FORMASHIELD™
- FASTRACK™
- GREAT STUFF™
- HPI 1000
- LIQUIDARMOR™
- SEAMAXX™
- SILVADUR™
- STYROFOAM™
- TEQUATIC™ PLUS
- THERMAX™
- UCARSOL™
- WALOCCEL™

PERFORMANCE MATERIALS & CHEMICALS

The Performance Materials & Chemicals segment is comprised of three technology-driven, customer-centric global businesses that are advantaged through integration and driven by innovative technology and solutions: Chlor-Alkali and Vinyl, Industrial Solutions and Polyurethanes. Products produced by this segment are back-integrated into feedstocks, supporting a low-cost manufacturing base and consistent, reliable

supply. The Performance Materials & Chemicals segment is positioned for growth through diverse markets and product offerings. The segment has broad geographic reach with sales in nearly 140 countries and manufacturing facilities located in all geographic areas. Performance Materials & Chemicals has a diverse product line that serves customers in a large number of industries including appliance, construction and industrial.

Sales by Business \$9,225 MM



Key Innovations

- UCON™ OSP
- ACCUTRACE™
- DOWANOL™
- PASCAL™
- TERAFORCE™
- VORAPEL™

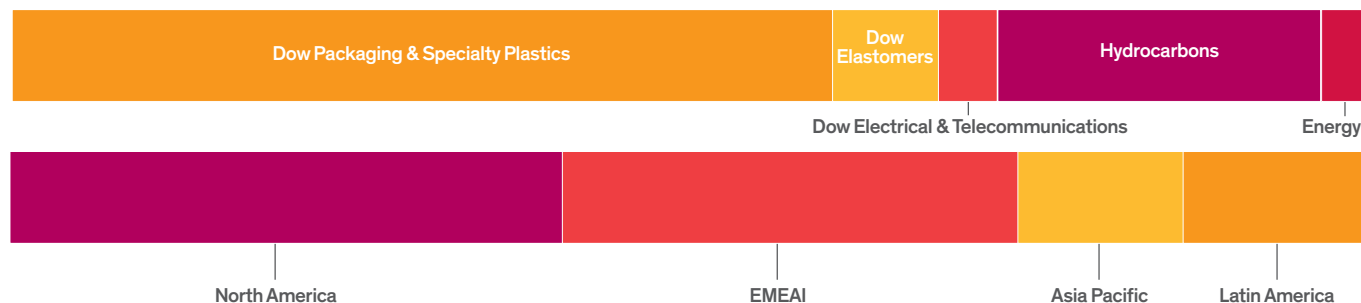


PERFORMANCE PLASTICS

Our leading Performance Plastics franchise is built on a foundation of raw material advantage and also benefits from our innovation investments in our polymers business. Our world class plastics assets convert our low-cost ethylene into a differentiated, specialty product mix for applications in food packaging, footwear, industrial and supply chain packaging, personal hygiene, consumer durables, transmission pipe, transportation, telecommunications and power. Dow Performance Plastics' technologies combined with collaborative engagement along the value chain provides a significant competitive advantage for global customers

in strategic growth markets. The Performance Plastics segment is the world's leading plastics franchise, and is a market-oriented portfolio composed of five global businesses: Dow Elastomers, Dow Electrical and Telecommunications, Dow Packaging and Specialty Plastics, Energy and Hydrocarbons. The segment is advantaged through its low cost position into key feedstocks and broad geographic reach, with sales in approximately 110 countries and manufacturing facilities located in all geographic areas. It also benefits from Dow's R&D expertise to deliver leading-edge technology that provides a competitive benefit to customers in key strategic markets.

Sales by Business \$18,404 MM



Key Innovations

- AGILITY™
- AFFINITY™ GA
- ASPUN™
- DOWLEX™
- ELITE™
- ENGAGE™
- ENLIGHT™
- INFUSE™
- INNATE™
- INTUNE™
- MOR-FREE™
- NORDEL™
- PACXPRT™
- RETAIN™
- SYMBIEX™
- VERSIFY™



Building cities that work – clean, resilient and sustainable – will require not only new technology, but new ways of collaborating across the value chain. By combining both breakthrough chemistry and an innovative business model, Dow's BLUEEDGE™ Polymeric Flame Retardant Technology is enabling thermal insulation materials to continue to meet the increasing demands of global energy-efficiency regulations and sustainable building design. The result of years of research, the non-hazardous polymeric flame retardant provides a fire safety solution for extruded polystyrene and expanded polystyrene foams. The more sustainable additive replaces HBCD, which faces global regulatory pressures. Dow has licensed the technology to three suppliers – a novel business model that makes BLUEEDGE™ Technology available to foam producers globally and has helped make it the next-generation industry standard.

Sustainable Chemistry

New Sustainable Chemistry Index (SCI) Methodology to Align with Our 2025 Sustainability Goals

As part of Dow's 2015 Sustainability goals, we developed and used a Sustainable Chemistry Index (SCI) to capture and publicly describe our journey toward sustainability. The SCI score for a performance center was determined by answers in eight categories of questions, which addressed broadly the ability to address world challenges, improve operational and life cycle impacts, and reduce product-based risks. The scores were rolled up by sales to an aggregate number for the Company. We also reported the percentage of sales that were "highly advantaged" by sustainable chemistry, a metric we felt would show more change year-to-year and be more actionable than the Company aggregate score. The 2015 Sustainability Goal was to have 10 percent of sales "highly advantaged" (starting at 1.7 percent). This goal was achieved in 2013 and far exceeded in 2015, reaching 25 percent.

Although the SCI metric and goal were successful, some shortcomings became apparent during its use. Analysis by performance center was time consuming, and the risk portion was designed to emphasize the riskiest product despite its significance in the product portfolio. Year-to-year changes were hard to see, and broader actions by a

business were not necessarily rewarded.

The 2025 SCI is designed to capture the color and hue of the sustainability actions by Dow businesses, with less overall effort to compile answers. In addition to consideration of product risks, life cycle impacts and addressing world challenges, the SCI will now consider external rewards, business goals and strategy, and value chain engagement. The questions in the 2025 SCI are grouped into four themes: risk, innovation, business rewards and strategy, and value chain. Some questions require quantitative or semi-quantitative answers, and some are opportunities to provide stories in text or examples. These stories could be drawn from – or be the starting point for – information used to promote Dow products and actions or to create external reports.

The results from the first run of the 2025 SCI in 2016 (using data from 2015) led to the creation of scorecards, benchmarks, and lists of strengths, gaps, and opportunities for each business, so that the most effective improvements can be pursued. The results also led to the ability to look at SCI and economic performance for all businesses as a whole, as a portfolio analysis for Dow.

Below are some of the data insights we earned in the 2017 cycle (reviewing 2016 performance):

61% of Sales
are from products that
address world Challenges



43% of R&D Projects
address world challenges



3% Improvement
in emissions and resource
use from 2015



Precautionary Principle or Approach GRI 102-11

We support a precautionary approach as set out in Principle 15 of the Rio Declaration on Environment and Development:

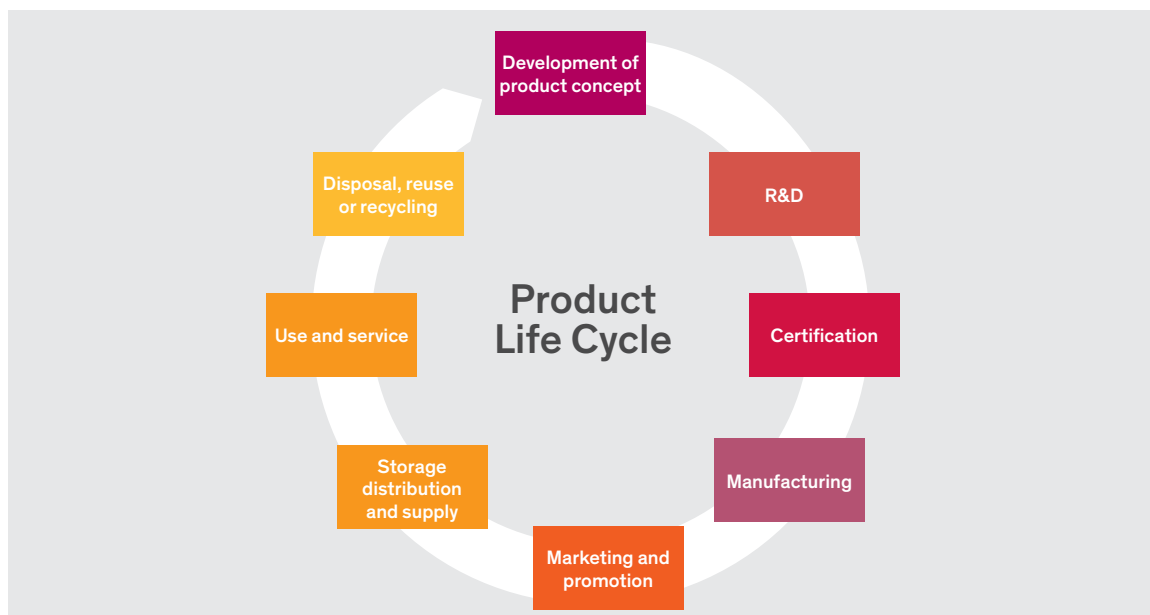
"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

The Rio Declaration was amended at the Johannesburg Summit to include health impacts, in addition to environmental impacts. We believe that approaches should

be risk-based and cost-effective. Additionally, the selected chemicals management approach should be:

- proportional to the objective being pursued;
- provisional;
- the least burdensome option that provides adequate protection from the risk.

As a responsible corporate citizen, Dow continues to use a well-defined process for assessing and managing risks in the face of uncertainty. This process is science-based, ensuring decision-making includes an appropriate evaluation of risk and benefits. It applies to current products as well as those being contemplated for development.



We view the precautionary principle as an application of the principles of risk assessment and risk management. Risk assessment includes hazard identification, characterization, exposure assessment and risk assessment. Risk management encompasses the identification, selection and implementation of alternative actions for addressing risk through the control of identified hazard(s) and/or exposure.

Risk Characterization Process

All products (100 percent) are assessed in an appropriate manner – depending upon EH&S profile, application and exposure potential – for improvement opportunities as part of Dow’s EH&S management approach at each stage of the product life cycle shown above.

The human and environmental risks of all our products are characterized using Dow’s risk characterization process/tool. The tool requires the assessment of hazard and exposure information to identify the risk tier. The risk tier will then determine the depth of the Product Stewardship program, including EH&S information, Business Risk Review requirements and distributor/customer support.

Dow businesses utilize the Business Risk Review process to assess and minimize possible adverse impacts on people, property and the environment as a result of Dow’s business activity, including minimizing EH&S impacts associated with new and existing operations, products, applications and services throughout the products’ life cycle.

Businesses are required to conduct risk reviews when material new information is received, including material changes in product uses, regulations or raw materials, or when triggered, in certain cases, by the passage of time. Improvement opportunities have been identified to clarify and strengthen these triggers. How frequently risk reviews should be repeated is determined by the risk tier for the product/application identified with Dow’s product risk characterization tool. In the process, and through use of supporting processes and tools, health and safety impacts are assessed with respect to new product development, manufacture of product, transportation and distribution, use of product at customer facilities, and recycle, reuse or disposal.

Risk mitigation measures are identified and implemented as a direct result of the Business Risk Review work process. Various product stewardship efforts such as distributor and customer qualifications and industry advocacy work are just a couple examples of involvement in the storage, distribution, supply and use steps of product life. With increasing interest of the value chain in chemical identity and use, working with these stakeholders to support their users and address their questions is a priority. Dow continued to increase its engagement with the value chain in 2016 to provide a better opportunity for us to understand the uses and exposure potential of Dow products. Further, this interaction provides a better opportunity to not only address the needs of our direct customers for health and safety information but also their customers.

Dow accepts the responsibility to be a good steward of the environment on behalf of current and future generations. Dow identifies the management of chemicals to protect human health and the environment as a priority issue. To learn more about our policy on chemicals management and our product stewardship program, visit the Market & Solutions section on www.dow.com.

HOW WE DO IT

INVESTING in Our People and Our Communities

At Dow, we believe that connecting chemistry and innovation can generate new ways to solve challenges and exceed customer expectations. We believe that taking the extra step to be socially responsible does not hold us back but instead sets us apart. We believe in the worth of our people, and in the value of their differing experiences, backgrounds and perspectives. We also believe in the power of difference. Every day, we strive to build a culture that embraces innovation, responsibility and diversity.



PEOPLE

The Human Element at Work: The world's best people, working together to make a difference.

Integrity, Respect for People, and Protecting our Planet are the values that make up the foundation of Dow's culture and guide our engagement with both internal and external stakeholders. We keep sustainability at the forefront of everything we do, from internal work processes, to how we treat people, to the products we create. Through Dow's 2025 Sustainability Goals, we are committed to protecting our planet by utilizing our diverse and talented employees' passion, creativity and expertise through the Engaging Employees for Impact goal. We know that employees thrive when they see that their work is central to the Company and the community.

In alignment with the Company's focus on technology and innovation, Human Resources has continued to incorporate and expand digital platforms in support

of a best-in-class employee experience – beginning with a stronger digital hiring presence. The digital platform also aids in rewarding employees who make an immediate impact and supports continuous development. Dow enables employees to access both Company and personal information through mobile applications and recently upgraded to a cloud-based learning management system, Diamond Learning, to provide real-time learning resources that improve the way employees learn and develop.

Dow drives a performance culture that is supported through continuous feedback, feedforward and development opportunities that maximize each employee's potential. We measure and benchmark culture and employee engagement on an ongoing basis and take action on corporate priority areas for improvement. Dow's efforts and commitment to creating a workplace that fosters innovation, collaboration, inclusion, safety and well-being for all Dow employees are reflected in the multiple countries where Dow has been awarded Top Employer and Great Place to Work achievements.

OUR VALUES

INTEGRITY

We believe our promise is our most vital product—our word is our bond. The relationships that are critical to our success depend entirely on maintaining the highest ethical standards around the world.

RESPECT FOR PEOPLE

We believe in the inherent worth of all people. We, the employees of Dow, are the engine of value creation; our imaginations, determination and dedication are essential to growth.

PROTECTING OUR PLANET

We believe in protecting the world's resources. Dow's sustainability journey involves the world's best problem solvers working on the world's biggest challenges. The decisions we make, the innovations we deliver and the goals we achieve are all driven by our intent to "Set the Standard for Sustainability," making the world safer, cleaner and greener for generations to come.

94% Favorable

People in my work area are protected from health and safety hazards.

Top Quartile (2016 GEOAS)*

**More information can be found in GRI 102-43 and 102-44*

41% Female Professionals & Managers Hired

17% above current employee representation.

98% Favorable

I am held accountable for doing my work in a safe manner.

No External Benchmark (2016 GEOAS)*

Championing Diversity & Inclusion

At Dow, we seek to build a diverse talent pipeline that will grow professionally, nurture leadership in every employee, and challenge each other to be the best. We're an inclusive community highlighted by respect, collaboration, and open and honest communication. In 2016, Dow implemented Project SEARCH, a unique global program that provides transitioning students with moderate developmental disabilities a total workplace immersion. The program allows the interns to experience a seamless combination of classroom instruction, career exploration, soft-skills coaching and relevant job-skills training.

Dow recently repositioned our Employee Resource Groups (ERG), in which 10,338 employees are involved globally, to help cultivate a multicultural competency, develop people, and influence culture. In partnership with the ERG, Dow has developed programs that demonstrate a culture of full inclusion and expand our diversity of thought based on unique experiences, making our company and community a better place. For example, our Sponsor to Success Program has supported career development for 304 employees, whom are female and minority talent, by connecting employees directly with senior leadership sponsors. Also, Dow's Veterans Network and Human Resources offer a unique mentoring program that connects internal Dow mentors with top external talent with the purpose of engaging these individuals and eventually connecting them to open positions within Dow. Mentors focus on helping mentees adjust to the Dow workplace culture and reach his or her full potential within the organization.

22 GLOBAL EMPLOYER AWARDS in 2016



82% Favorable

My job makes good use of my skills and abilities.

Top Quartile (2016 GEOAS)*

31% Minority Professionals & Managers Hired

55% above current employee representation.

81% Favorable

My work group has a climate in which diverse perspectives are valued.

Top Quartile (2016 GEOAS)*



Employee Indicators GRI 102-8

Workforce Representation	EU		LA		NA		PA		Global	
	F	M	F	M	F	M	F	M	F	M
Administrative	94%	6%	67%	33%	93%	7%	96%	4%	89%	11%
Technical Employees	17%	83%	8%	92%	15%	85%	17%	83%	15%	85%
Professionals & Managers	32%	68%	39%	61%	34%	66%	37%	63%	35%	65%
Global Leaders & Executives	10%	90%	17%	83%	19%	81%	0%	100%	16%	84%
Total	25%	75%	26%	74%	27%	73%	31%	69%	27%	73%

Workforce Representation	EU		LA		NA		PA		Global	
	F	M	F	M	F	M	F	M	F	M
Full Time	3072	10331	1399	4020	6839	18410	2790	6224	14100	38985
Part Time	500	118	2	0	129	12	7	2	638	132
Total	3572	10449	1401	4020	6968	18422	2797	6226	14738	39117

Workforce Representation	EU		LA		NA		PA		Global	
	F	M	F	M	F	M	F	M	F	M
Permanent	3572	10449	1401	4020	6968	18422	2797	6226	14738	39117
Temporary	216	486	189	250	394	664	21	16	820	1416
Total	3788	10935	1590	4270	7362	19086	2818	6242	15558	40533

Diversity Indicators	Administrative	Technical Employees	Professionals & Managers	Global Leaders & Executives	Global
Minority*	15%	22%	20%	22%	21%
Non-Minority*	85%	78%	80%	78%	79%

*United States Only

Diversity Indicators	Administrative	Technical Employees	Professionals & Managers	Global Leaders & Executives	Global
Under 30	14%	13%	13%	0%	13%
Between 30-50	57%	55%	62%	34%	58%
Over 50	29%	32%	25%	66%	29%

*The workforce data are gathered through a centralized database containing all employee information. The employee data are updated by Human Resources and managers when employee information changes occur. The data represent the global employee population as of December 31, 2016, and include all permanent, full-time and part-time employees. Temporary employees, contractors and manual additions are excluded unless stated otherwise.

New Employee Hires and Employee Turnover GRI 401-1

Job Family	EU		LA		NA		PA		Global	
	F	M	F	M	F	M	F	M	F	M
Administrative	80%	20%	64%	36%	68%	32%	100%	0%	76%	24%
Technical Employees	22%	78%	23%	77%	15%	85%	24%	76%	18%	82%
Professionals & Managers	46%	54%	46%	54%	34%	66%	45%	55%	41%	59%
Global Total	36%	64%	37%	63%	25%	75%	40%	60%	31%	69%
Total Count	193	343	114	195	291	895	177	267	775	1700

Diversity Indicators	Administrative	Technical Employees	Professionals & Managers	Global
Minority*	28%	34%	31%	33%
Non-Minority*	72%	66%	69%	67%
Under 30	46%	58%	50%	54%
Between 30-50	47%	40%	46%	43%
Over 50	7%	2%	4%	3%

*United States Only

Employee Turnover	EMEI	LA	NA	PA	Global
Voluntary Attrition					
Female	4.4%	4.8%	4.4%	3.5%	4.3%
Male	3.5%	3.0%	3.8%	3.5%	3.6%
Total	3.8%	3.5%	4.0%	3.5%	3.9%
0-1 Years of Service	6.4%	3.8%	5.6%	6.5%	5.7%
2-3	6.2%	4.8%	6.1%	6.3%	5.9%
4-5	3.2%	4.2%	5.3%	4.8%	4.6%
6-10	2.3%	3.2%	3.1%	2.0%	2.6%
11-15	1.0%	1.4%	2.3%	1.4%	1.7%
16+	4.2%	2.8%	3.4%	2.5%	3.5%

Voluntary Attrition by Age Group		Involuntary Attrition by Gender		Involuntary Attrition by Region	EMEI	LA	NA	PA	Global
Under 30	6.2%	Female	4.2%	Total	3.4%	6.3%	4.6%	3.3%	4.2%
30-50	2.8%	Male	4.2%						
Above 50	5.1%	Total	4.2%						

*Involuntary attrition includes the impact of divestitures

Proportion of Senior Management Hired from the Local Community

Employee Group	Total 2016 Hires	From Within Country
China	184	99%
Korea	44	98%
India	90	100%
Global	2170	87%

The organization does grant preference to local candidates when hiring in significant locations of operation, in order for our workforce to reflect the places where we do business. In 2016, we hired 2,170 people around the world, excluding acquisitions, rehires and returns from leave. Eighty-seven percent of hires were local (employee hired in their country of citizenship). Areas with a significant growth emphasis accomplished a very high percentage of hires from within the respective country: China (99 percent hired have a Chinese citizenship), Korea (98 percent) and India (100 percent). Dow's continued focus on internal career development opportunities and a building diverse talent pipeline has allowed the Company to effectively develop current employees to fill senior management positions. Therefore, Dow did not hire candidates externally for senior management positions in 2016.

Employee Benefits GRI 401-2

Regular full-time and less-than-full-time employees are provided a wide variety of benefits while only temporary employees are not eligible to receive these benefits. Dow's benefit plans are designed to build on the social security benefits provided in each country and social security systems and, as a result, vary by country. In all significant Dow locations, we offer the following benefits to employees:

- Pension plans – either defined benefit or defined contribution plans
- Medical plans – often including prescription drug coverage and dental
- Life insurance
- Disability protection
- Accident insurance
- Paid vacation, holiday and leave programs
- Business travel accident
- Stock purchase plan

Parental Leave GRI 401-3

Return-from-leave Rates	No. of Employees	Female	Male
Total number of employees entitled to parental leave	53,659	27%	73%
Total number of employees that took parental leave	163	60%	40%
Total number of employees returned to work (as of Dec 31, 2016)	98	36%	64%
Total number still with Dow as of Q1 2017 (of those that returned)	117	45%	55%

In 2016, Dow enhanced the Global Parental Leave Policy to provide greater flexibility and work-life balance for mothers and fathers. Parents have a minimum 12 weeks of paid leave for the mother and two weeks of paid leave for the non-birthing parent, which can be taken during the 12 months following the birth of a child.

Diversity and Equal Opportunity GRI 405-1, GRI 405-2

The Board is comprised of 13 individuals with diverse experience and credentials, selected for their acumen and ability to challenge and add value to management. Board members bring a depth of experience across a wide variety of industries. Each director has held significant leadership positions, providing the Company with unique insights and fresh perspectives.

More information on Dow's corporate governance, including Dow's corporate governance guidelines, Board Committee charters and Code of Business Conduct, is available online at www.dow.com.

Gender and Age Composition of Board of Directors

Board of Directors	
Female	15%
Male	85%
Under 30	0%
30-50	0%
Over 50	100%

For other employee categories, please refer to disclosure 102-8. To learn more about our Board, see disclosure 102-22, Composition of the Highest Governance Body and its Committees.



Compensation Equity

Global pay equity studies have been conducted at Dow over the last 20 years in order to assess fair treatment and ensure our pay practices are being implemented appropriately. These studies are updated bi-annually. The most recent analysis was conducted during 2016, following global pay planning activities.

The impact of gender on pay decisions is examined globally, and the impact of ethnicity is examined in the United States. Dow's three components of compensation are analyzed (base pay, performance award and long-term incentives). The studies examine any impact to pay differences that cannot be explained by legitimate factors (e.g., performance ratings, job level, education, years of service, time since promotion, age and/or geography).

The 2016 pay equity study found no significant difference in base pay, performance award or long-term incentives between genders or between U.S. minorities and non-minorities. Pay differences were attributable to the legitimate factors listed above and not to gender or ethnicity. These results demonstrate that pay equity existed across Dow after 2016 increases and that global pay-planning guidelines are being applied appropriately across Dow.

As a continued commitment to pay equity, Dow signed the White House Equal Pay Pledge in June 2016. Beginning in 2017, Dow will move to conducting annual pay equity analyses and expand the scope to include promotions, hiring and other activities.

CORPORATE CITIZENSHIP

Enhancing Communities and Engaging Employees for Impact

Dow Global Citizenship works at the intersection of innovation, sustainability and citizenship to identify, understand and address society's most pressing challenges. We collaborate with our communities, nonprofit organizations, local governments, corporations and educational entities to bring forward ways to create sustainable communities around the world. As we engage with our communities for greatest impact, our focus is on three strategic commitments and six priorities:

Workforce Solutions

Building the Workforce of Tomorrow

Classroom to career and educator empowerment

Community Solutions

Enabling Sustainable Communities

Physical, mental and environmental health

Business Solutions

Innovating for Local & Global Solutions

Food production, reduction of food waste, water access and reuse, energy efficiency and affordable housing



GLOBAL EMPLOYEE IMPACT IN 2016

Dow Corps Signature Programs

We believe that what one entity can do well, many can do even better. This broad, philanthropic approach guides our decision-making as we engage with multiple organizations to identify sustainable solutions for our global community.

Dow takes the lead in bringing to life novel programs that changes lives. The following examples demonstrate the passion our employees apply to the needs of our communities.

STEM Education

One of Dow's goals is to build the workforce of tomorrow by empowering teachers, motivating student achievement, developing careers, and collaborating with communities to transform STEM education into a driver for innovation, manufacturing and economic prosperity. Signature programs lead our STEM efforts. Test tubes and lab coats generate interest and excitement when you have an army of more than 2,200 passionate Dow volunteers sharing their love of science in our schools.

Dow's **STEM Ambassador** program is helping to create a workforce fluent in STEM by deploying employees who share their talent and expertise with minds eager to take in all that science has to offer. STEM Ambassadors use career discussions, hands-on activities and project-based learning to give students and teachers new perspectives they may not get otherwise. Plus, STEM Ambassadors are helping to fill a critical gap in the talent shortage pipeline and making sure manufacturing jobs of the future are filled with our brightest young minds.

More than just working in the classroom, Ambassadors are active volunteers in all things STEM. Their involvement includes participation as mentors and coaches in **FIRST® Robotics**. In 2014, Dow announced a \$1 million commitment with FIRST® (For Inspiration and Recognition of Science and Technology), becoming one of the organization's strategic partners.

Leadership in Action

Leadership in Action (LIA) is an innovative leadership development program where employees work on projects with nongovernmental organizations (NGOs) in emerging nations. Participants apply their own skills and expertise to community-based problems by working virtually for several months and in-country for one week. The result is exceptional training for the employees, resolution of long-term issues for the NGOs and business penetration into new markets for Dow.

Habitat for Humanity

Dow was Habitat's first national corporate partner in 1983 and the collaboration is leaving a legacy of providing affordable, energy-efficient homes for low-income families in communities around the globe.

Dow's commitment to Habitat for Humanity spans 35 years and includes financial, product and volunteer contributions through a global partnership with a shared vision of a world where everyone has a decent place to live. This year, more than 2,000 Dow employees are anticipated to volunteer building homes alongside future homeowners on 42 build projects in 19 countries around the world. Dow Building Solutions gift-in-kind product donations such as STYROFOAM™ Brand XPS Insulation, GREAT STUFF and GREAT STUFF™ PRO™ Insulating Foam Sealants, and WEATHERMATE™ Housewrap are used on home builds throughout the United States and Canada to help build strength, stability and self-reliance through shelter. These products were provided to 3,179 homes last year, offering energy efficiency and comfort to Habitat homeowners.

Dow's total contribution to Habitat has exceeded \$22 million in funding and \$60 million in gift-in-kind product donations. Dow's partnership with Habitat aligns with many of Dow's 2025 Sustainability Goals and engages employees for impact, promotes energy efficiency, and protects human health and the environment.

2016 Global Footprint



2,107
Volunteers



11,031
Volunteer
Hours



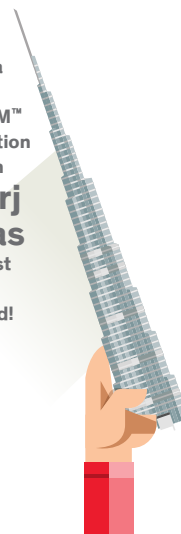
3,179
Homes
Benefited from
Dow Product
Donations



5,500
miles
Donated enough
GREAT STUFF PRO™
to Travel Beyond the
Great Wall of China

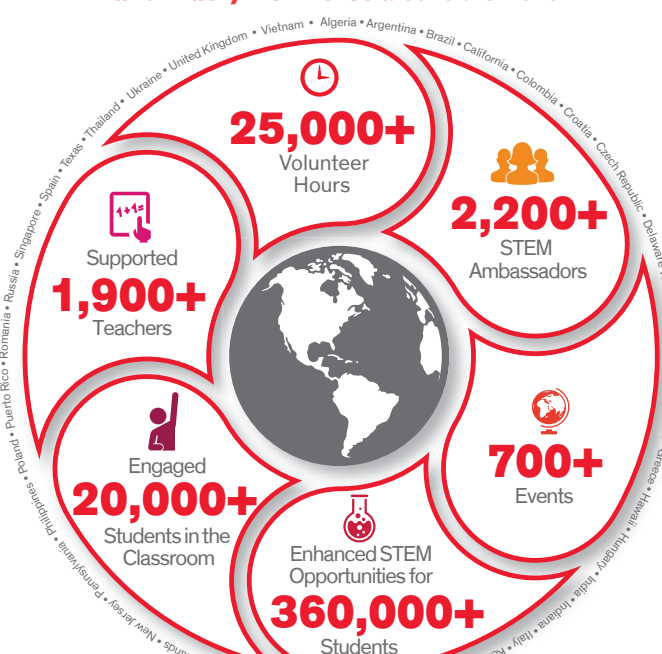


Donated a
Stack of
STYROFOAM™
Brand Insulation
Taller than
**5.6 Burj
Khalifas**
– the Tallest
Building
in the World!



2016 Dow STEM Ambassadors

Building the **STEM (Science, Technology, Engineering and Math) Workforce** around the world.



Dow Business Impact Fund

Dow has developed a unique way to unlock business value while driving social impact. It is the newly launched Business Impact Fund, which designates corporate contributions toward new, business-aligned global citizenship initiatives.

The fund engages Dow businesses by creating opportunities to solve social problems using our own technology and expertise. Priority areas are access to clean drinking water and food packaging to prevent food waste.

Funded project examples include:

- **Fluoride removal in Kenya's Rift Valley**, addressing the urgent need to alleviate a condition caused by excess fluoride in drinking water, which affects 20 million Kenyans.
- **Cleaning drinking water in Thailand**, helping rural schools that lack proper water filtration systems. Working with the Thai Red Cross, Dow is providing water filtration systems using Dow's technology to 50 schools.
- **Feeding more through packaging**, partnering with the Montgomery Country Food Bank in Houston, Texas, to create a produce rescue center. Dow packaging will be used to extend produce shelf life and increase the available supply of nutritious food.
- **PacXpert for disaster relief**, where Dow's technology for collapsible, portable pouches is used to provide water during disaster relief and humanitarian aid missions, or is included in emergency-preparedness planning.



Manufacturing Jobs Initiative

On December 9, 2016, then the U.S. President-elect announced the creation of what is now the Manufacturing Jobs Initiative in Grand Rapids, Michigan, and named Dow Chairman and Chief Executive Officer Andrew Liveris as the Initiative leader. The group is working with leaders from across the country to make U.S. manufacturing more competitive, and its work is a major step in helping the U.S. reclaim its role as the world's manufacturing leader.

Dow's leadership of the initiative is a strong example of its Global Citizenship commitment of *Building the Workforce of Tomorrow*, as well as the 2025 Sustainability Goal of *Leading the Blueprint*, where public policy and business solutions come together to drive positive social impact.



Thousands of lives changed

2016 DOW GLOBAL CITIZENSHIP PROGRESS

Global Investments in Our Communities

\$41.8MM

Total Corporate and Foundation contributions in 2016

1,472

Number of Impact Grants delivered worldwide in 2016

\$259.9MM

Total contributions since 2011

\$5.3MM

Product and equipment donations in 2016

\$1.3MM

Value of skills-based volunteerism in 2016

DowCorps Engagement Around the World

1,525

Projects in 2016

15,000+

Volunteers in 2016

115,000

Volunteer Hours in 2016

2.25 MM

People Impacted in 2016

Signature Programs

2,200+

Dow STEM Ambassadors

supported **1,900+** teachers

and engaged in STEM opportunities reaching **360,000+** students

Partnering with

Habitat for Humanity,

3,179 homes benefited from Dow products, with

733 families served and we celebrated our

50,000th build in 2016

Transported

1,230+

cancer patients and caregivers in Dow aircraft at no charge through Corporate Angel Network

Leadership In Action

since 2013, **159** participants logged

32,000+ volunteer hours on

29 projects in 4 countries

152 new **FIRST®** Robotics teams added since 2015,

and have **145+** employee volunteers



EMPLOYEE HEALTH AND SAFETY

GRI 403-1, GRI 403-2

At Dow, protecting people and the environment is part of everything we do and every decision we make. Worker safety has always been a core value of Dow. Now entering our third decade of industry-leading sustainability commitments, 2016 marks the beginning of the newest cycle of the Company's 10-year goals. Personal safety incident reduction goals have been a part of our sustainability goals since inception, and are represented in our 2025 Sustainability Goals under World-Leading Operations. Looking ahead, we are taking on our most significant challenge, working to eliminate the most severe incidents (incidents that result in fatality or life-altering injuries).

Dow has integrated our approach to managing worker safety into our Operating Discipline Management System, which broadly applies to all Dow work groups and locations. Within that management system, Dow has created a series of standards that lay the foundational expectations of hazard assessments and risk mitigation. All safety standards apply regardless of geography or operating unit. It is important to note, that when discussing both our safety goals and performance at Dow, we concern ourselves not only with the safety of our processes and employees, but with all workers who perform business on Dow property or on Dow's behalf, regardless of what company employs them.

Dow's robust safety management system is maintained through a continuous improvement cycle, with regular effectiveness checks. Every workgroup within Dow must establish site and unit-specific procedures that assure full implementation of all requirements within our standards. Standard effectiveness is evaluated through required work group self-assessments and periodic audits from an independent group within the Company. Finally, for each standard, there is a multifunctional support team that analyzes audit data and employee feedback from across the Company to adjust requirements if needed.

Comprehensive System - Health Protection

Toxicology	Characterizing health hazards
Industrial Hygiene	Assessing and controlling exposure
Safety	Identifying and mitigating health and safety hazards
Health Services	Evaluating health of employees with potential exposures
Epidemiology	Evaluating health outcomes of employee populations



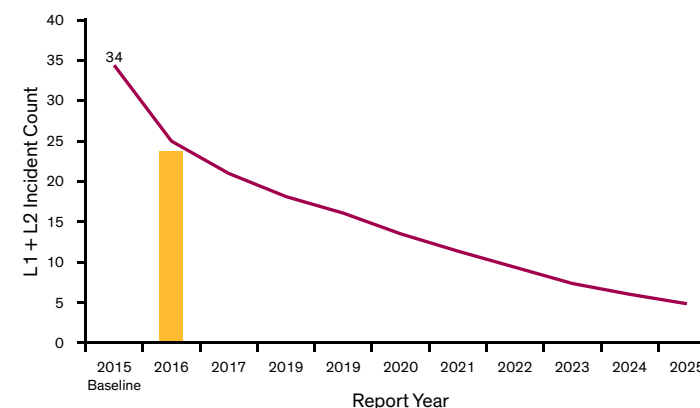
With the goal of having every worker go home safely at the end of each day, all of our workers have the opportunity to participate in site or workgroup specific Environmental, Health, and Safety teams and this opportunity for involvement is built in as a requirement of our management system. Additionally, our largest manufacturing locations extend this opportunity to contract employees through joint Dow-contractor site safety steering teams.

Employee Safety

For 2016, Dow reshaped its incident reporting and measurement system. Our new system defines incident from Levels 1-5, with Level 1 being the most severe. Our new measurement system allows for the collection of low-level incident and near-miss information (Levels 4 and 5) in a consistent way globally and elevates incidents with actual or potential severe impact (Levels 1-3). At Dow, facilities and teams that have a strong culture around reporting near-miss events have proven to have better safety performance compared to those who do not. Near-miss reporting is a key factor in improved safety performance and supports companywide learning from near-miss events. Taken together, the increased focus on potential impact and better management of our near-miss information will enable us to identify and eliminate risks before they result in actual serious injury.

Our 2025 Injury and Illness goal is to reduce the most severe incidents by 85 percent versus our 2015 baseline.

Severe Injury Illness 2025 Goal Curve



In 2016, our safety performance plateaued relative to previous years, with a slight increase in overall recordable injury rate due primarily to the integration of our new Silicones operating unit. Last year also saw the unfortunate loss of four colleagues (three Dow employees and one contractor). In response to these events, the Company has taken the following actions:

- Top leadership assessments at Dow facilities globally in 2016
- Reintroduction of enterprise-wide mandatory personal performance goals tied to activities supportive of our safety management system
- Weekly time commitment dedicated to safety for all employees
- Increased visibility and focus on near misses and leading indicators via our new measurement system

We continue to maintain the more traditional lost time and incident rate data, based on U.S. OSHA's classification criteria to facilitate external reporting and inter-company benchmarking.

The following information from the U.S. Bureau of Labor Statistics provides context for Injury and Illness performance (for U.S. operations):

Injury/Illness Rate (Incidents /200,000 hours)	2016	2015
Dow Employees and Contractors, Global	0.19	0.16
U.S. Chemical Manufacturing*	2.3	
All U.S. Manufacturing*	4.0	

*2015 most recent data

2016 Safety Metrics by Region – Employees and Contractors

	Area	Recordable Injury Rate	Lost Workday Case Rate (DAWC & Fatality)	Lost day Rate (LDR)	Fatality Count	Occupational Disease Rate
Employee and contractors	ASIA PACIFIC	0.17	0.08	0.72	0	0.007
	EUROPE/MIDDLE EAST/AFRICA/INDIA	0.09	0.05	1.02	2	0.000
	LATIN AMERICA	0.35	0.16	1.91	1	0.000
	NORTH AMERICA	0.20	0.06	0.67	1	0.007
	All Regions	0.19	0.07	0.93	4	0.005
Employee only	ASIA PACIFIC	0.19	0.08	0.83	0	0.000
	EUROPE/MIDDLE EAST/AFRICA/INDIA	0.08	0.03	0.73	2	0.000
	LATIN AMERICA	0.38	0.16	2.37	1	0.000
	NORTH AMERICA	0.20	0.06	0.81	0	0.014
	All Regions	0.20	0.07	1.02	3	0.006
Contractors only	ASIA PACIFIC	0.13	0.08		0	0.021
	EUROPE/MIDDLE EAST/AFRICA/INDIA	0.11	0.09		0	0.000
	LATIN AMERICA	0.31	0.16		0	0.000
	NORTH AMERICA	0.19	0.05		1	0.000
	All Regions	0.18	0.08		1	0.002

1) Recordable injury rate includes fatalities but do not include first aid visits.

2) Recordable Injury rate includes Dow employees and contractors performing work at Dow locations.

3) Due to a change in data collection tool and privacy concerns, incident rate by gender is not available for 2016.

4) In our days lost calculation, we begin counting the day after the incident and count every calendar day toward total days lost.

Employee Health Protection

Dow controls occupational health risks in our workers' environments. Comprehensive workplace risk assessments are completed to evaluate hazards in the chemical manufacturing, office, and field settings. Workers are provided detailed education and training along with specific procedures for safe operation. General health prevention programs to reduce overall health risk are provided. Risk control measures in the workplace are implemented and emergency planning is coordinated with external medical and public health experts. Detailed exposure controls are implemented as global standards. All workers are provided baseline and periodic medical screening, testing, evaluation, and health counseling to identify and control health problems. Clinical treatment is available, which includes specialized protocols for Dow's workplace.

As a global organization, we have employees that work in areas with high-risk occupational hazards and are monitored medically and tracked through our health records systems. Such high-risk groups include hearing conservation, confined space entry, and other potential exposures, such as benzene, butadiene, post-asbestos, silica or other identified hazard based upon current medical literature or industrial hygiene review. Their risk is minimized by providing them with the appropriate preventive measures. Finally, health results are carefully monitored for trends, including summaries of health trends and directed health epidemiology studies. Thus, our system is focused on both health protection and health promotion. The focus in health protection is detailed.

In our system, health protection hinges upon:

- **Recognizing hazards:** We rely on toxicologists, industrial hygienists and physicians to apply their expertise and knowledge of the scientific literature.
- **Reducing risks:** Often we develop our own industrial hygiene guides (IHGs), which drive the introduction or refinement of engineering controls as well as the appropriate selection of personal protective equipment.
- **Screening for illness:** We uphold the same rigorous standards wherever we operate, even in countries where regulatory requirements are less stringent than in the United States.
- **Confirming the effectiveness of our system:** We use both medical surveillance to assess patterns of recognized occupational illnesses and by using epidemiology to perform population health surveillance for serious illnesses such as cancer.

In addition, Dow is committed to enhancing our employees' overall health for many reasons. For example, we know that healthy people are less likely to suffer injuries and illnesses. With early recognition of the importance of health promotion in mitigating occupational injury and illness, Dow started a comprehensive wellness program more than two decades ago. Community health risks are examined and opportunities for community health partnership are initiated. Workers in each area and travelers to the region are given specific advice about endemic health problems, such as communicable disease issues, vaccinations, air quality and social conflicts. Education and prevention programs are implemented, including medication prophylaxis, vaccination and medical treatment. Pandemic- and crisis-management planning for emerging risks are implemented when necessary. In some cases, direct support for the community is also provided (e.g., hurricane damage, tsunami, radiation, HIV/AIDS).

Dow offers medical benefits that cover a range of preventive, diagnostic and treatment services. Programs vary by country and other criteria. Dow Health Services makes the following available in the area of Occupational Health and Health Promotion:

- **Employee clinical treatment services** are available on-site at approximately 83 Dow clinics globally.
- **Periodic employee health assessments** screen for a variety of diseases (including heart, lung, liver, kidney, blood, etc.). Specific counseling and follow-up are provided to assist in reducing any identified risks. Review of medical surveillance testing results for specific Dow workgroups has shown an improved health-risk profile continuously since the 2004 baseline, including a 19 percent reduction in high-risk people and a 22 percent increase in low-risk people.
- **Health promotion programs** are offered to all employees, and often retirees and employees' dependent family members. These programs include education on important health risks such as tobacco use, inactivity, obesity and stress. Employees are taught to assess their risks and understand interventions they can pursue to reduce them.
- **Employee Assistance Programs** are offered globally. These provide assistance for employees and families for issues such as general stress, anxiety, financial and family relations.

In 2015, Dow started a Total Worker Health (TWH) initiative (in alignment with NIOSH Total Worker Health concept). This initiative is part of the Company's 2025 Sustainability Goals and is comprised of three main elements: Healthy Culture, Healthy Workplace

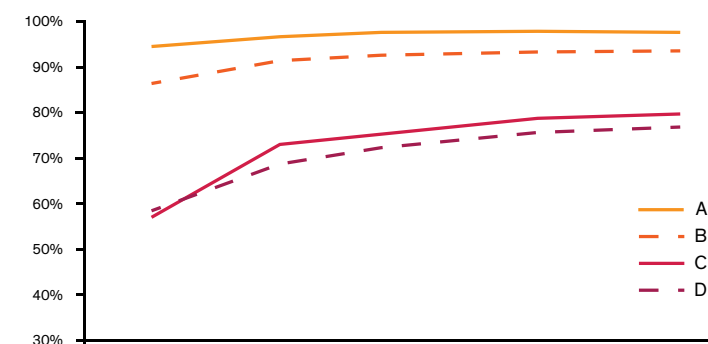


and Healthy People. The program aims to integrate traditional health protection and promotion programs into one single package. Challenging targets are set for each component.

Dow's health program is recognized internationally and is regularly invited to present as a benchmark model program or to provide scientific information to assist regulators and experts in evaluating risks. Some examples include: International Neurotoxicology Association, International Commission on Occupational Health, American Cancer Society, Workplace Health Initiatives, the Institute of Medicine, U.S. Environmental Protection Agency, California Office of Environmental Health Hazard Assessment, Dutch Health Council, Center for Disease Control, OSHA, NIOSH, and the Health Enhancement Research Organization. Dow efforts were recognized through several awards, including Excellence in Business Action on Health (Global Business Coalition - Africa), SESI Quality in the Workplace Award (São Paulo, Brazil), Asia Pacific Business Services Paragon Award (Japan), Bureau of Health Department's, Badge of Accredited Healthy Workplace (Taiwan), and the Alzheimer's Association's Mission Mover Award (United States).

In summary, integrated approaches to both protect health and optimize health are linked at Dow. Employees also respond with their perspective on how the Company is approaching health in our annual employee opinion survey. The results indicated high confidence in Dow's approach. **GRI 403-3**

Majority of Dow Employees Report that Dow Encourages Safe and Healthy Behaviors



A. I am held accountable for doing my work in a manner that is safe

B. People in my work area are protected from health and safety hazards

C. Dow provides a supportive work environment that encourages me to practice healthy behaviors

D. Dow has a sincere interest in my health and well-being

Of the 27 percent of employees covered by either formal collective bargaining agreement or works council, 51 percent of the agreements cover health and safety topics. *Regardless of formal trade union agreements, all employees are covered by Dow's health and safety processes and programs that meet and in most cases exceed country regulations. Health and safety are the highest priority for Dow.* **GRI 403-4**

Our Operations

Raw Materials

We operate in an integrated manufacturing environment. Basic raw materials are processed through many stages to produce a number of products that are sold as finished goods at various points in those processes. The major raw material stream that feeds the production of Dow's finished goods is hydrocarbon-based raw materials. We purchase ethane, propane, butane, naphtha and condensate as feedstocks. These raw materials are used in the production of both saleable products and energy. We also purchase certain monomers, primarily ethylene and propylene, to supplement internal production. We purchase natural gas, primarily to generate electricity, and purchase electric power to supplement internal generation. We also produce a portion of our electricity needs in Louisiana and Texas; Alberta, Canada; and Germany. Expenditures for hydrocarbon feedstocks and energy accounted for 24 percent of Dow's production costs and operating expenses for the year ended December 31, 2016. We purchase these raw materials on both short- and long-term contracts. We had adequate supplies of raw materials during 2016, and we expect to continue to have adequate supplies of raw materials in 2017. Significant raw materials, by operating segment, are listed to the right:

Raw Material	Agricultural Sciences	Consumer Solutions	Infrastructure Solutions	Performance Materials & Chemicals	Performance Plastics
Acetone			x	x	
Ammonia			x	x	x
Aniline ¹				x	
Benzene				x	x
Butane					x
Butene				x	x
Butyl Acrylate ¹		x	x		x
Carbon Black		x			x
Carbon Monoxide				x	
Caustic Soda ¹	x	x	x	x	
Chlorine ¹	x	x	x	x	
Condensate					x
Electric Power				x	x
Ethane					x
Ethanol	x	x	x	x	
Ethylene ¹			x	x	x
Formaldehyde		x	x	x	
Hexene					x
Hydrogen Peroxide ²				x	
Isopropanol		x		x	
Methanol	x	x	x	x	x
Naphtha					x
Natural Gas					x
Nitrogen				x	x
Octene ¹					x
Polystyrene			x		x
Propane		x	x		x
Propylene ¹		x	x	x	x
Pygas					x
Silica		x	x		
Silicon Meta ¹		x	x		
Styrene			x	x	
Wood Pulp		x	x		

¹Produced by the Company and procured from external sources for internal consumption.

²Primarily produced and procured by a consolidated variable interest entity.

Sustainable Supply Chain GRI 102-9

Integrated Supply Chain Sustainability Overview

With customers, suppliers and operations across the globe, supply chain sustainability is critical to our success, and core to Dow and the customer experience.

We're proud of our commitment to environmentally friendly and socially responsible operations, and our accomplishments in transportation safety and security. They have helped us to achieve business success while protecting people and the planet.



To continue developing our sustainability accomplishments throughout our organization, we have included sustainability as one of our four key tenets of our Integrated Supply Chain strategy, which is launching in 2017. With this strategy, we're enabling Dow's success by putting the customer experience at the core of our supply chain operations. This strategy highlights our commitment to embedding sustainability across our end-to-end value chains, and includes plans for innovations in green transportation, transportation safety, end-to-end transparency and advocacy. We are also building upon our deep-rooted relationships with our logistics service providers, suppliers and strategic customers to proactively identify opportunities for collaborative sustainability projects.



Throughout 2016, we continued to drive the organization to a higher standard of supply chain sustainability. Our Integrated Supply Chain Sustainability strategy is built on the following pillars:

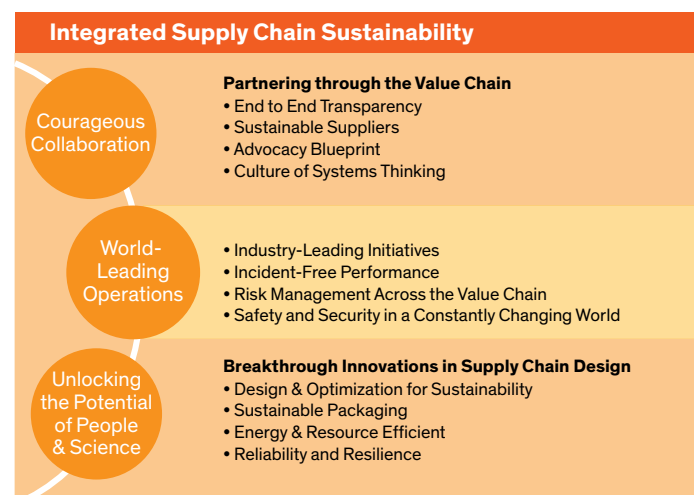
1. Partnering Through the Value Chain

Our supply chain success depends on partnerships with all of our stakeholders, from suppliers and logistics service

providers to customers. By collaborating across our value chains, including participating in third-party platforms such as EcoVadis and Ecodesk and engaging in partnerships with suppliers and customers, we can drive sustainable business practices while improving supply chain capability and transparency.

Case Study: Dow Collaborates with Procter & Gamble to Reduce Environment Footprint in Supply Chain

Recently, Dow collaborated with P&G to reduce the environmental impact from the transport of a Dow-supplied raw material for a laundry care product. The solution involved shipping the raw material by rail car instead of using road freight. Switching a portion of the shipments from road freight to rail cars for this raw material reduced our transportation CO₂ emissions by more than 1,400MT annually and cut diesel fuel use by more than 180,000 gallons per year, significantly decreasing our environmental footprint. The emissions savings from this project alone equate to taking several hundred passenger vehicles off the road or powering more than 130 U.S. homes for a full year. This project has provided a springboard for collaborations with various customers and carriers to further optimize our supply chains and reduce CO₂ emissions.



2. World-Leading Transportation Stewardship and Performance

Transportation stewardship is a new concept Dow has designed to drive the industry to new levels of safety performance. We believe it is critical to have strategic alignment and collaboration with our logistics service providers and other chemical producers and shippers to achieve safe and secure transportation of materials throughout chemical supply chains across the globe.

Case Study: Safe Supply Chains in India

We are investing resources into improving safety and sustainability in regions where Dow's business footprint is growing. In 2016, we achieved our goal to improve safety standards in our warehousing and transportation operations in India. Committed to accomplishing this, our India Logistics team led various projects and initiatives over the past two years to enhance our work processes and standards for logistics service providers (LSP). Our requirements now include LSP assessments and compliance with Safety and Quality Assessment System (SQAS) audits, and we've developed robust tracking tools to ensure any gaps are addressed and all follow-up actions are completed. We've also defined new cargo securement standards for all packed transportation and have added additional checkpoints, including customer visits and trainings on safe loading and unloading procedures. To help our providers meet these standards, we've created training curricula, including defensive driving and emergency handling for LSPs, and safety, handling and administration tools for warehouses and their staff. With all of these actions, we've raised the standard for our supply chain partners in India, and have increased safety levels significantly.

3. Breakthrough Innovations in Supply Chain Design

We've embedded sustainability elements into supply chain design and optimization processes and technologies. This includes reducing our carbon footprint, improving energy efficiency, optimizing costs and working with safe, sustainable and socially responsible suppliers and logistics providers.

Case Study: University Partnership for Green Transportation

Dow partnered with the University of Michigan's Tauber Institute for Global Operations to develop a green transportation strategy for our global supply chain. We worked with a team of master's degree candidates to conduct a comprehensive analysis that was broken into three phases: establishing the current state of our global transportation footprint; benchmarking and defining goals for Dow based on industry trends and leading research; and finally, using that knowledge base to develop a green transportation strategy. The collaboration resulted in an actionable strategy for Dow, consisting of internal activities to actively manage and reduce our impact, as well as external engagement to drive and promote sustainable logistics. We've already launched carrier sustainability award programs in some regions, and we are expanding our partnerships, both public and private, to promote sustainable logistics. This strategy sets the framework for us to achieve fuel economy improvements and proactively influence emissions reductions across the transportation sector.

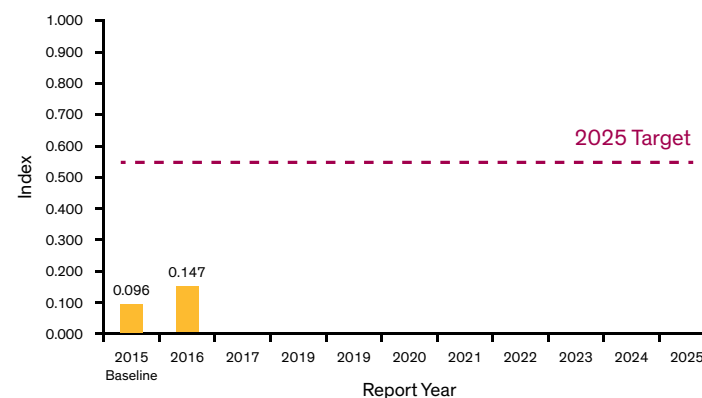
Transportation Stewardship: A Holistic Approach

Dow is committed to expanding on our transportation safety accomplishments to reduce risk to people and the environment. As part of our 2025 Sustainability Goal around World-Leading Operations Performance, we launched Transportation Stewardship – an extensive, holistic program focused on driving the industry toward a new standard of transportation safety and security.

To track our progress, we've created a Transportation Stewardship Index that looks at leading indicators and is comprised of metrics in three categories: 1) incident-free performance; 2) leading-edge programs; and 3) transportation risk across the value chain. By 2025, Dow has committed to achieving a 50 percent improvement in the Transportation Stewardship Index, and eliminating severe transportation incidents that impact the communities through which our products, raw materials and intermediates flow. 2016 was our first year using the index, and we were successful in moving towards our 2025 Goals.

2025 Transportation Stewardship Index

2025 Goal: Reach or exceed 50% improvement in Index (from 2015 baseline)



To achieve our 2025 Goal of eliminating severe transportation incidents, we've changed the way that we manage incidents to take a more holistic view of Dow's transportation impact. Our

new incident matrix includes three categories of incidents, and allows us to weight the impacts (human, environmental and community) and severities of any incidents caused by Dow products. Our robust incident management programs enabled us to achieve our goal of zero serious transportation incidents in 2016.

Risk Reduction Across the Value Chain

Achieving our Transportation Stewardship goals will require us to take a broader approach to managing transportation risk. To accomplish our 2025 Transportation Stewardship goals, we're mitigating risk by looking at a variety of factors, including HHM tonne-mile reduction, modal and route changes, new technology and enhanced packaging and securement. We've expanded our risk approximation and mitigation processes beyond Toxic Inhalation Hazardous (TIH) materials to include a broader scope of materials, and are currently evaluating opportunities within the heritage Dow Corning business units to minimize further minimize the potential for transportation incidents. We have robust Distribution Risk Management programs in place that include detailed risk reviews, and are continuously using these systems to review our vulnerabilities. Following our acquisition of the Dow Corning silicones business in 2016, we've integrated this new portfolio into our transportation-incident emergency response, and transportation-incident management processes to ensure the highest safety and sustainability standards across our growing supply chain. These programs allow us to identify our highest transportation risk areas and target them effectively.



Culture Change

Repositioning the industry's approach to transportation safety and risk management requires a seismic culture shift, both internally and externally. To help us achieve this transformation, we created and launched our Transportation Stewardship Change Management and Communication Strategy this year. Not only have we been actively engaging internal stakeholders and developing training material, but we've expanded our focus to develop external outreach.

With our new approach to managing transportation risk, we're focused on sharing our experiences and best practices externally to help drive the transportation industry towards a safer, more sustainable future. For example, an exciting way that we're spreading best practices is through our engagement with the International Council of Chemical Association's work to expand Responsible Care® into Kenya. Dow is

acting as a sponsor and is providing training and mentorship for companies that will participate in Responsible Care® in Kenya.

TRANSCAER

Dow has been an active participant on the National TRANSCAER Task Group, a voluntary national outreach effort, since its creation. For more than 14 years, we've had a representative serving on the TRANSCAER Executive Committee, as well as personnel serving as regional or state coordinators and/or on state TRANSCAER teams/committees.

TRANSCAER Training in 2016



Every year, Dow continues to provide training, at no cost, to educate and assist communities near major transportation routes about hazardous materials. This training is focused on enhancing outreach to communities for improved education and emergency preparedness. We continue to be recognized for our accomplishments, as we've received the TRANSCAER National Achievement Award for the past eight consecutive years.

Sustainable Packaging

The Packaging Sustainability Council continues to focus on implementing key projects as well as developing future capabilities to meet our objectives for each of the global packaging strategy areas:

- Seek innovative technology
- Design for sustainability
- Drive sustainable behavior
- Share the sustainability story

As we continue to work towards a circular economy, we're broadening our impact by partnering with stakeholders across the value chain. We're continuously working with collection and recycling companies to extend the life cycle of our drums and bulk containers. With these types of services institutionalized at major U.S. sites, more than 73,000 containers were collected in 2016. Roughly 2 million pounds of steel and 1 million pounds of plastic were reused or recycled because of this collection service. This equates to an environmental savings of 2 million pounds of CO₂ equivalents and more than 6 million pounds of fresh water usage.

Case Study: NexDRUM Packaging Solution

One of several sustainable options that Dow is pursuing for shipping drums is Greif's NexDRUM. NexDRUM's design results in higher performance with 15 percent less material than the standard blow-molded plastic drum. NexDRUM is recyclable, allows

for better space utilization and results in less residuals due to optimized drainability. NexDRUM is currently saving more than 489,000 pounds of CO₂ emissions annually. We expect this number to increase as we implement similar packaging innovations across more Dow sites.

Suppliers

We work with a variety of suppliers ranging from raw material, logistic service providers (LSPs) and labor service providers to capital equipment and MRO and corporate service providers.

A significant change to our organization in 2016 was the acquisition of the Dow Corning silicones business. This acquisition increased our spend within the Silicones business, primarily in North America and Asia Pacific. **GRI 102-10** Dow has approximately 40,000 suppliers in our supply chain, and with the recent Dow Corning integration, an additional 13,000 suppliers have been added to our supply base. In terms of the geographic spread of our suppliers, Dow has suppliers in approximately 122 countries, and Dow Corning suppliers are represented in approximately 25 countries.

We have procurement centers around the world to establish effective relationships with global and local suppliers of goods and services. As we are an industry which is capital intensive, our larger plants are low in labor intensity and we work with our suppliers to pursue the principles of sustainability through Responsible Care®. As a result, this provides us with a stable supply of raw materials.



READYING
the Workforce of Tomorrow

Supplier Diversity

We are committed to supplier diversity as an element of our procurement strategy. To track our supplier diversity, we align with government-defined classifications that include small businesses and businesses registered as owned by women, minority and service-disabled veterans. Supplier diversity currently represents approximately 12 percent of our spend in the United States.

Supplier Code of Conduct

At Dow, we continue to engage new vendors globally and communicate Dow's expectations that all suppliers are compliant with regulations and Dow's own values, through the Dow Code of Business Conduct. In 2016, our Supplier Code of Conduct was refreshed and included updates to five current provisions (Conflict Minerals; Protect Health & Safety; Accurate Accounting and Business Records; Money Laundering and Insider Trading; and Product Information) and we added two new provisions to the code – Protect Communities During Transportation and International Trade. To achieve this refresh, we completed a full analysis of our current standards and industry best practices to ensure that we're holding our suppliers to the highest standards regarding Human Rights and Environmental Health & Safety. Our Code of Business Conduct for Suppliers is required in all new and existing supplier engagements. The requirements of the Code of Conduct are built into supplier contracts so as to ensure they are contractually enforceable. We reserve the right to audit supplier compliance at any time. In the case where we identify less than adequate supplier practices, we reserve the right to discontinue business with the supplier.

Annually we've identified compliance issues in less than 0.1 percent of our supplier base, resulting in the immediate cessation of business.

External Manufacturing

External manufacturing (EM) occurs when third-party suppliers use Dow's intellectual property to produce products or raw materials for Dow. We spend approximately \$1 billion annually on external manufacturing at 550 suppliers globally. This includes approximately 90 new EM suppliers as a result of the Dow Corning integration. The risks associated with using external manufacturers are managed through a number of integrated programs. These include process risk screening, a supplier selection process in which an initial on-site EH&S assessment is conducted, and regular subsequent EH&S audits. Examples of criteria assessed in these audits are compliance with applicable environmental permits, waste management, incident history and safe work practices. EM contract agreements also specify that the manufacturer comply with Dow's Code of Business Conduct and the Fundamental EH&S Expectations for External Manufacturers.

Logistics Service Providers

Leveraging our approach to our suppliers and external manufacturing (EM) suppliers, we also set high standards for our logistics service providers (LSPs) by having in place an extensive risk-based program in order to qualify providers and established periodic follow-up assessments. These assessments include reviewing health and safety practices; labor practices; environmental compliance and security and are conducted via work processes and external initiatives such as the Safety & Quality Assessment System (SQAS); Chemical Distribution Institute (CDI); Responsible Care® and Anti-Corruption



Dow is invested in supporting STEM (science, technology, engineering and math) education to drive the innovation needed to solve the challenges humanity is facing. Since 2014, Dow has mobilized employee volunteers, known as STEM Ambassadors, to support teachers and inspire students. In 2016, more than 2,200 Dow STEM Ambassadors logged more than 25,000 STEM-related volunteer hours, supporting more than 1,900 teachers and enhanced STEM opportunities for more than 360,000 students. In addition, we have launched a U.S. Apprenticeship Program that offers a pathway to manufacturing careers through both formal education and on-the-job training. Since 2015, the program has grown to just under 100 apprentices across four states and is being marketed particularly to military veterans and displaced workers.

Due Diligence (ACDD). We also operate a detailed Distribution Risk Review process to ensure risks are adequately mitigated.

We are committed to driving sustainable behavior throughout our entire value chain and set clear expectations to our suppliers including external manufacturing (EM) and LSPs to adhere to our commitment of environmental and socially responsible operations. Similar to our approach with our suppliers, if an EM or LSP is found to be in breach of our expectations, Dow will cease current and future business opportunities with the supplier.

Through our collaborative partnerships with our upstream and downstream stakeholders, we are able to implement sustainable business practices across our entire value chain.

ENVIRONMENTAL PERFORMANCE INDICATORS

At Dow, protecting people and the environment is part of everything we do and every decision we make. Each employee has a responsibility in ensuring that our products and operations meet applicable government or Dow standards, whichever is more stringent.

Our goal is to eliminate all injuries, prevent adverse environmental and health impacts, reduce waste and emissions and promote resource conservation at every stage of the life cycle of our products.

We use an environmental tracking system that collects and reports data by facility, site and business for all Dow.

We also use a multilayered review process that provides a discipline to maintain the quality of data captured and a change management process is used to document historical data corrections. Our 2025 Sustainability Goals are at the center of our management approach as they contain the key performance indicators with related performance goals that the Company aims to meet. The goals were carefully crafted understanding the areas where we have the most footprint and handprint impacts, as well as looking for ways to develop footprints to lead the industry with solutions that protect people and planet. Dow has 189 manufacturing sites in 34 countries and we continuously improve our processes to optimize our use of water, energy, generation of waste and effluents and generation of GHG emissions.

Our sustainability goals are our North Star to improve our performance. In addition to our long-term goals, which we report our progress externally, we also have internal metrics to track year-over-year progress.

The Environment, Health, Safety and Technology Committee of the Board of Directors (the “Committee”) assists the Board of Directors in fulfilling its oversight responsibilities by assessing the effectiveness of programs and initiatives that support the

Metric	2015	2016
Energy Intensity (Btus per Lb. of Production)	4,540	4,490
Wastewater Intensity (Lbs. of Wastewater per Lb. of Production)	3.2	3.2
Wastewater (Millions of Metric Tons)	138	141
Waste Intensity (Lbs. of Waste per Lb. of Production)	0.038	0.037
Waste (Millions of Metric Tons)	1.63	1.64
Chemical Emissions (Metric Tons)	17,300	16,960
Priority Compounds (Metric Tons)	268	252
Volatile Organic Compounds (Metric Tons)	9,190	9,000
NOx Compounds (Metric Tons)	18,010	18,470
SOx Compounds (Metric Tons)	2,480	2,690
Water Intake (Millions of Cubic Meters)	3,150	3,060
Kyoto GHGs as CO ₂ e (Millions of Metric Tons)	25.2	25.5
Non-Kyoto GHGs as CO ₂ e (Millions of Metric Tons)	0.05	0.09
Total Direct GHGs as CO ₂ e (Millions of Metric Tons)	25.2	25.6
Indirect Greenhouse Gas Emissions as CO ₂ e (Millions of Metric Tons)	9.7	9.8
Kyoto & Non-Kyoto GHGs as CO ₂ e Intensity (Lbs. of CO ₂ e per Lb. of Production)	0.752	0.751
Kyoto GHGs as CO ₂ e Intensity (Lbs. of CO ₂ e per Lb. of Production)	0.751	0.749
Ozone Depleting Emissions - Corporate Totals as CFC-11e (Metric Tons)	7	7

Environment, Health and Safety (EH&S) and sustainability, innovation and technology policies and programs of the Company and by advising the Board on matters impacting corporate social responsibility and Dow's public reputation.

Learn about our [2025 Sustainability Goals](#) for more information on how we manage environmental key performance indicators.

GHG Emissions

Energy and GHG emissions are directly linked, since the production of energy is a major source of emissions.

We produce a lot of the energy required for our operations but we also purchase part of it.

We use The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard for guiding the reporting of greenhouse gas emissions.

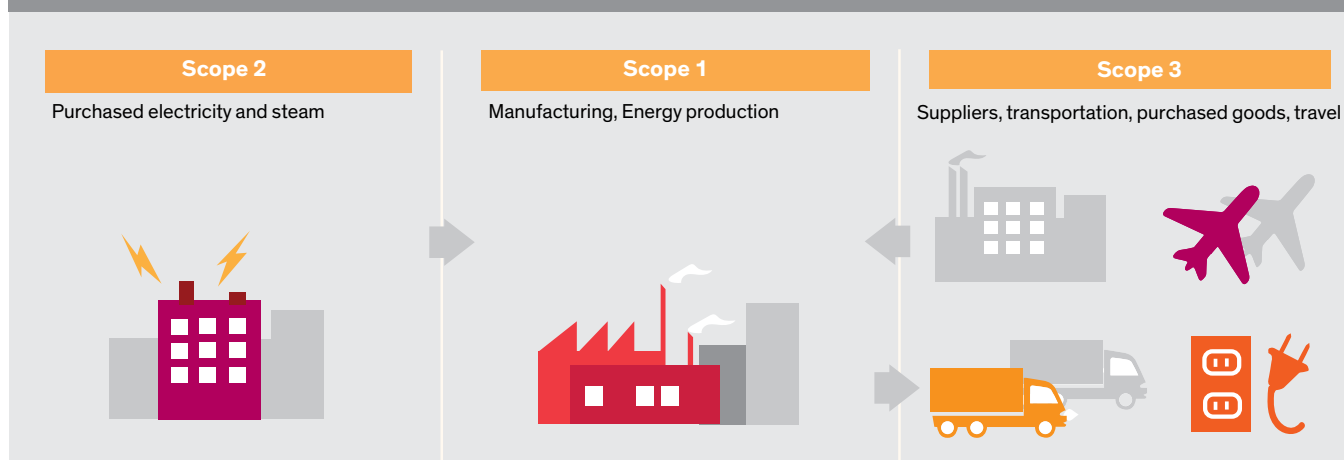
Note: Dow's historic data take into account any divestitures, mergers, and acquisitions and may change to reflect those activities. Our intensity metrics are calculated as a ratio to global production.

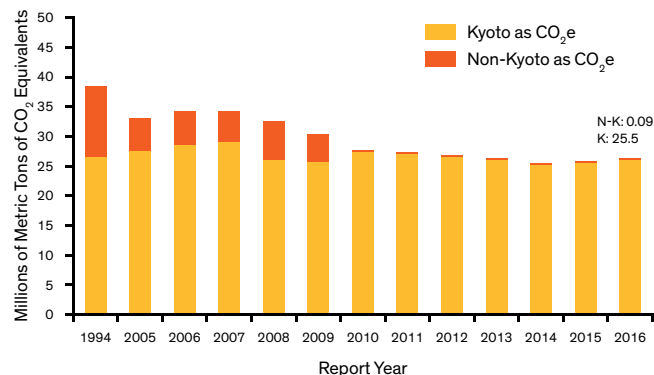
The Kyoto Protocol covers emissions of main greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆); and nitrogen trifluoride (NF₃).

Our direct greenhouse gas (GHG) emissions are from sources controlled by Dow and include Kyoto and non-Kyoto GHGs using IPCC Fifth Assessment Report (AR5).



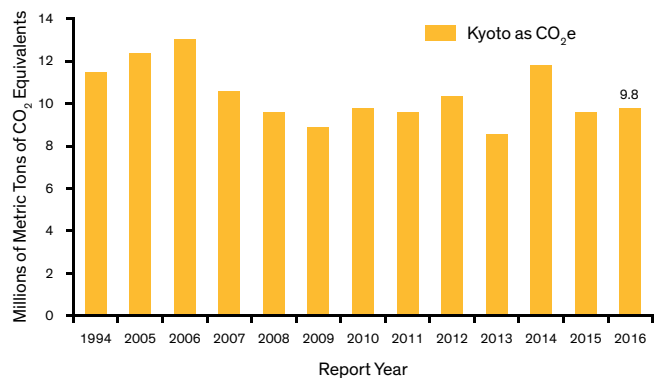
Total Greenhouse Gas Emissions



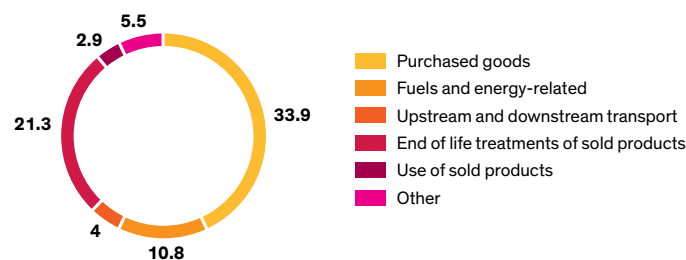
Direct Greenhouse Gas Emissions as CO₂ Equivalent (Scope 1)

Scope 1: Our direct greenhouse gas (GHG) emissions expressed as carbon dioxide equivalent (CO₂e) emissions have decreased 21 percent since 2005. **GRI 305-1, GRI 305-5**

Indirect GHG emissions are the consequence of Dow's consumption of energy, but are emitted from purchased power sources.

Indirect Greenhouse Gas Emissions as CO₂ Equivalent (Scope 2)

Scope 2: Our indirect GHG emission have remained relatively flat compared to 2015. **GRI 305-2, GRI 305-5**

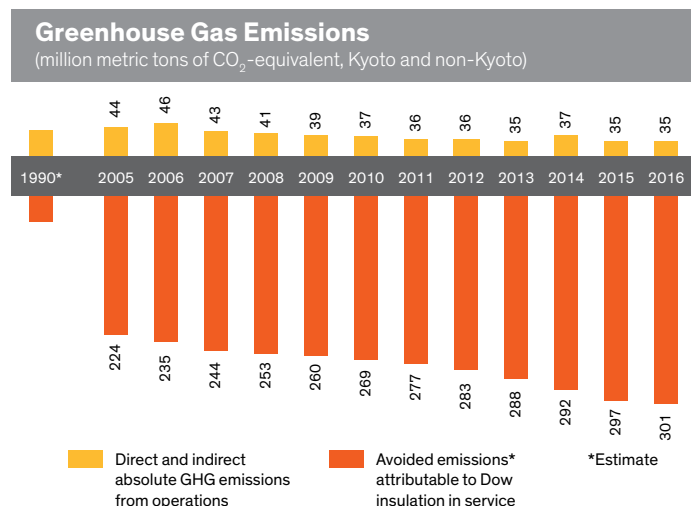
Scope 3 GHG Emissions (in million metric tons CO₂e)

Other indirect (**Scope 3**) GHG emissions occur from sources not owned or controlled by Dow. We have assessed all Scope 3 categories according to the GHG Protocol Corporate Accounting and Reporting Standard provided by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The results are summarized in the Scope 3 chart. Most (67 percent) of the reported values are based on purchasing expense data, which then were converted to GHG emissions (including all greenhouse gases) using an Economic Input Output (EIO) method, specifically the eio.lca.net tool from Carnegie Mellon Green Design Institute and the 2002 producer cost models. 2016 dollars were adjusted to a 2002 dollar basis using the Consumer Price Index from the U.S. Bureau of Labor Statistics. Thirty-one percent of the emissions were estimated by engineering mass-balance calculations combined with emissions factors for mass-based operations from ecoinvent v2.2. The remaining 2 percent were taken from other published sources (such as GRI reports). We do know of significant Scope 3 biogenic CO₂ emissions. This is our best estimate of Scope 3 GHG emissions, although it is reasonably possible that the actual Scope 3 GHG emissions with respect to each category could vary significantly. Dow's [CDP](#) climate change response for 2016, when published, will have additional information. **GRI 305-3**

GHG Emissions Intensity

In the last decade, we have significantly reduced our non-Kyoto emissions, making our GHG emissions intensity metric with and without non-Kyoto emissions almost the same. GHG intensity is the sum of CO₂ equivalent direct and indirect GHG emissions divided by unit of production. In 2016, total GHG emissions intensity calculated as carbon dioxide equivalent (CO₂e) emissions of both Kyoto and non-Kyoto gases per production was 0.751 metric tons, which is a reduction of 9 percent since 2005 and for Kyoto GHG only intensity was flat when compared to 2015. **GRI 305-4**

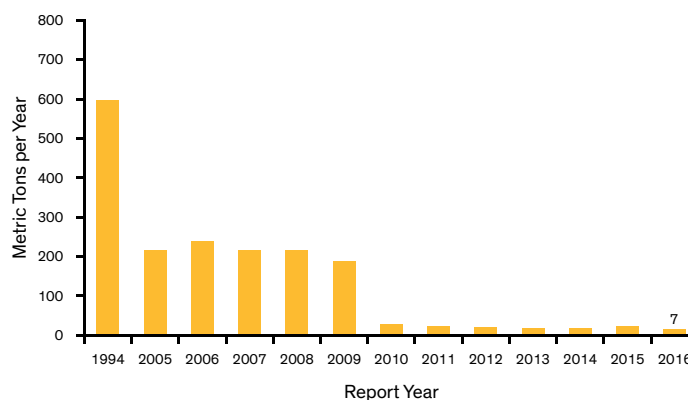
Avoided emissions resulting from the use of Dow products are important contributions to reduce the overall footprint of human activities. A Life Cycle Assessment has documented that emissions saved by Dow insulation products are about seven times greater than total Company direct and indirect Kyoto and non-Kyoto GHG emissions. This calculation was made by quantifying the GHG emissions at all stages of the life cycle of the Dow insulation product and comparing these with the GHG emissions savings from the use of the insulation products in buildings and pipe systems. The estimated GHG avoided emissions for 2016 from the use of Dow's insulation products is 301 million metric tons CO₂e. From 2005 through 2016, the avoided emissions have steadily increased from 224 million metric tons CO₂e per year.



Ozone Depleting Substances

Ozone-depleting emissions include substances with an ozone depletion potential greater than zero that can deplete the stratospheric ozone layers. The emissions factors are based on the Montreal Protocol. Ozone-depleting emissions have been reduced 97 percent since 2005. **GRI 305-6**

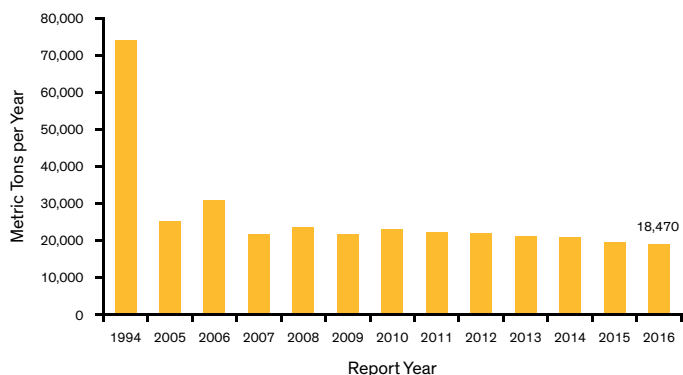
Ozone Depleting Emissions — as CFC-11 Equivalents



NO_x, SO_x, and other significant air emissions **GRI 305-7**

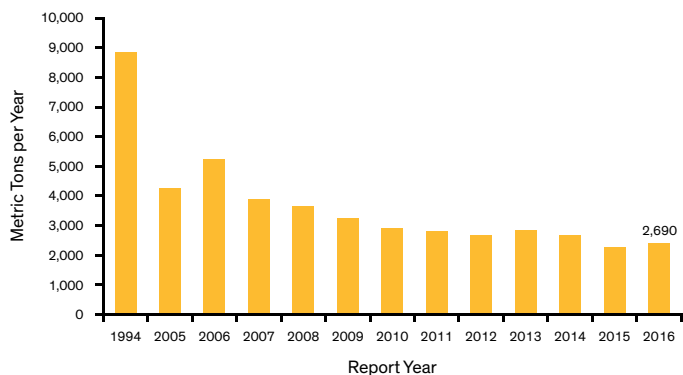
The NO_x (nitrogen oxides) total was reduced 26 percent since 2005 and up slightly (3 percent) from last year. Dow utilizes the AP-42, Compilation of Air Pollutant Emission Factors in addition to o-line measurement systems, performance testing and industry standardized factors to determine emission rates.

Nitrogen Oxide Emissions (NO_x)

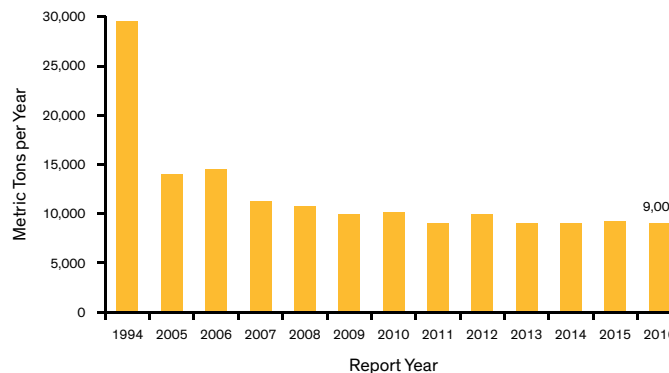


The SO_x (sulfur oxides) total was reduced 36 percent since 2005.

Sulfur Oxide Emissions (SO_x)

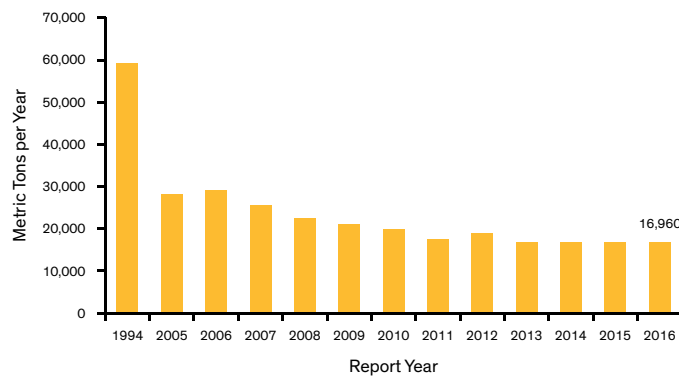


Volatile Organic Compounds (VOCs)



Volatile Organic Compounds are organic chemicals with high vapor pressures that react photochemically with the atmosphere. The Volatile Organic Compounds total is down by 36 percent when compared to 2005 and down 2 percent from 2015.

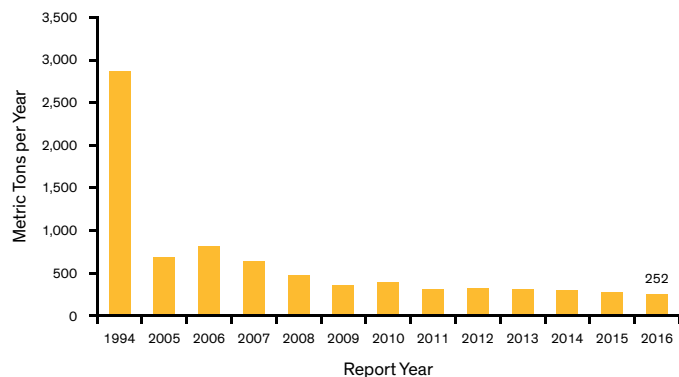
Chemical Emissions to Air and Water



Chemical Emissions are any release or discharge to the air or water of any pollutant from a facility. Chemical Emissions exclude items such as NO_x, SO_x, CO, CO₂, particulates, methane, hydrogen, nitrogen, oxygen, water, aluminum and certain salts. The Chemical Emissions total is down by 36 percent when compared to 2005.

Priority Compounds are a category of chemicals defined by Dow. Priority Compounds are comprised of chemicals with persistent bioaccumulative and toxic hazards, as well as chemicals with carcinogenic, mutagenic and reproductive hazards. The Priority Compounds total is down by 6 percent when compared to 2015.

Emissions of Priority Compounds to Air and Water



Energy Consumption

Our major sites rely on combined heat and power (CHP) plants, also called cogeneration, which convert waste heat into steam to produce electricity. CHP is considered the most efficient way to produce steam and power since it typically uses 20 to 40 percent less fuel than conventional power generation while also reducing GHGs. However, it takes energy to produce energy. To ensure transparency and comparability, whether we buy or produce the energy, we report our complete use as primary energy. This is an important distinction because when talking of primary energy, that means we are also including the energy required for the conversion of primary sources of energy such as natural gas into the forms that are useful to the final user such as electricity or steam. According to U.S. Energy Information Administration, primary energy is in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, coal can be converted to synthetic gas, which can be converted to electricity; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. Primary energy accounting is consistent with U.S. Department of Energy methodology.

In 2016, our direct energy consumption was 474 million gigajoules (GJ) and our indirect energy consumption was 164 million GJ for a total of energy consumption (direct + indirect) of 638 million GJ. Direct energy consumed is the energy used to produce pounds of product, which is reflected mostly on our fuel gas such as natural gas and off gas from feedstock as well as some of our purchased steam and electricity. Aggregating indirect energy by source is a challenge for us since we have diverse global operations that engage in the purchase and the sale of energy. We account as indirect energy as the portion of the energy purchased (steam and electricity) to support our labs, offices and administrative facilities.

Approximately 9 percent of purchased electricity is from renewable sources. The remaining is assumed to be from fossil fuels, though an analysis of the primary source of the generators of that electricity has not been completed.

Energy Consumption Within the Organization

GRI 302-1

Renewable Sources

We continue to focus on managing our footprint and providing solutions to reduce GHG emissions and save energy. We met our goal to use 400 megawatts of clean power by 2025 with capacity for nearly 698 megawatts (MW) that are either low carbon or from renewable sources. We want to continue momentum, so we increased the goal to 750 MW by 2025.

Dow uses energy in the form of fuel, steam and electricity. While wind, hydro and solar can supply energy in the form of electricity, biomass can supply also energy in the form of steam.

Dow Energy Initiatives

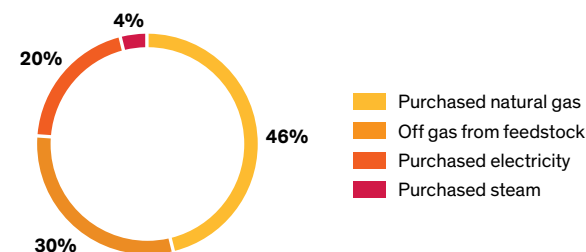
Fuel Source	Capacity (MW)	Consumption (GJ)
Wind	353	981,000
Hydro	81	2,554,000
Biomass	261	119,950
Landfill Gas	3	47,900
Solar	0.6	4,900
Total	698	3,708,000

*United States Only

Dow's total fuel consumption within the organization from nonrenewable sources in 2016 was equal to 513,300,000 GJ.

Source	Million GJ
Purchased Natural Gas	309
Off Gas from Feedstock	204
Fuel Oil	479
Electricity Consumption	251
Power Sold	39
Steam Consumption	86
Steam Sold	25
Total Energy Consumption	638

2016 Energy Consumption Source Breakdown



Energy Consumption Outside of the Organization

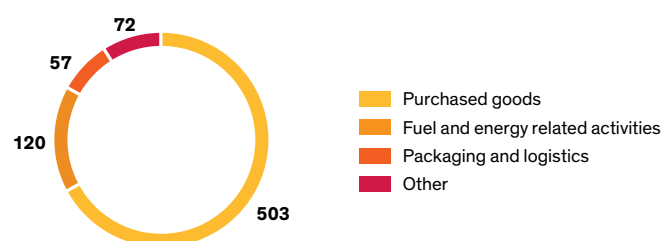
GRI 302-2

Energy consumption outside of the Company occurs throughout the upstream and downstream activities associated with our operation. The results are summarized in the figure below.

Purchasing expense data were converted to energy consumption using an Economic Input Output (EIO) method, specifically the eiolca.net tool from Carnegie Mellon Green Design Institute and the 2002 producer cost models. 2016 dollars were adjusted to a 2002 dollar basis using the Consumer Price Index from the U.S. Bureau of Labor Statistics. This is almost completely upstream activity, though some of the transport energy is for delivery of our products to customers. This is our best estimate of the energy consumption outside of the Company, although it is reasonably possible that the actual energy consumption outside of Dow with respect to each category could vary significantly.

Dow has an ownership position in many joint ventures that are separately held corporations and are operated by the joint venture, not by Dow. Dow considers the energy consumption from joint ventures separately from scope of this report.

Energy Consumption Outside of Dow (in million gigajoules)



In 2016, our energy intensity was 4488 Btu/lb (10.44 GJ/MTon). This represents total energy, power, steam, compressed air, cooling water pumps and other equipment used by manufacturing facilities. Energy, in MMBtu, based on Dow's internal methodology for determining the energy equivalent for reported consumption of all utilities. Energy credit (negative value) is added to total energy consumption based on individual steam and power generation better than 10,000 Ken Nelson heat rate.

The ratio uses energy consumption within the organization. **GRI 302-3**

Reduction of Energy Consumption GRI 302-4

The Dow Chemical Company does not track all energy efficiency improvements throughout the Company. Many improvements come as an ancillary benefit of other capital projects. For example, if a pump fails and is replaced, rather than replacing it with the same pump and driver, a higher-efficiency pump and driver may be chosen. Insulation is upgraded, replaced and repaired regularly.

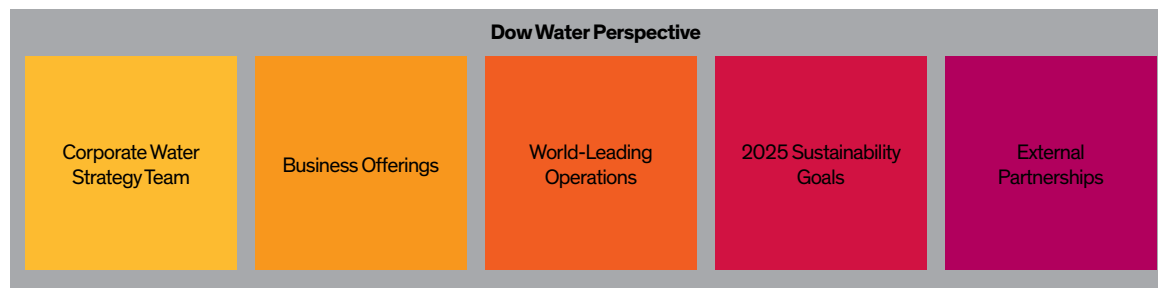
The following are examples of improvement projects and their energy savings from 2016:

- LAO Steam Turbine Control Optimization: 334,700 MMBtu/yr
- LAO Power 3 ECOMAX: 175,596 MMBtu/yr
- Dow Corning Corporation Midland Boiler Condensate Recovery: 11,200 MMBtu/yr
- Freeport Compressed Air Leak Repair and Optimization: 184,250 MMBtu/yr
- North American Lighting Efficiency Upgrade: 100,000 MMBtu/yr

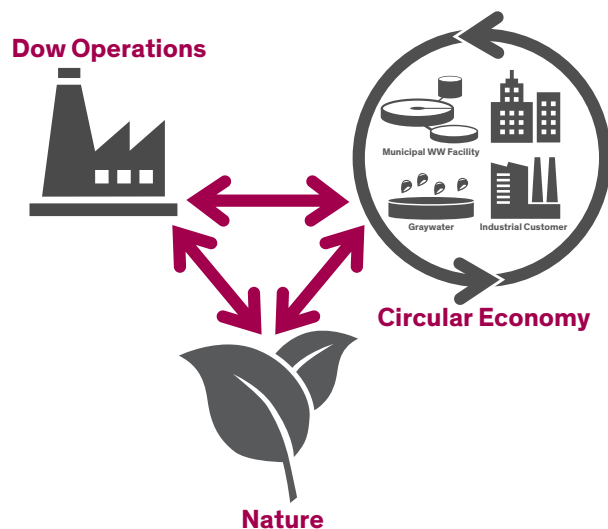
The 2016 energy reduction achieved in the examples above equals 806,000 MMBtu/yr. The types of fuels saved are limited to fuel consumption and electricity. Since the projects reported above are discrete projects, the basis used for calculating savings was year-over-year, subtracting the year after the project was completed from the year before the project was completed. The energy used before the project and the energy used after the project was measured and the efficiency gain was calculated directly.

Sustainable Water Management

Water is a critical resource for society and gaps in supply and quality are becoming increasingly visible during times of episodic variation. Dow has a broad perspective on water; from business offerings that enable water treatment for millions of people globally, to operations that have been working to improve the efficiency of water use for decades, to external partnerships that are working to improve water quality and availability around the globe. These perspectives help drive the water-based goals within Dow's 2025 Sustainability Goals and oversight by Dow's Corporate Water Strategy Team.



This section focuses primarily on the water footprint of our global operations. It also highlights examples of where we leverage solutions from our own portfolio of business offerings and partner with others to improve sustainable water management.



The approach to sustainable use of water is reflected in our 2025 Sustainability Goals, with three goals directly connected to water. As part of these goals, Dow Operations will reduce freshwater intake intensity 20 percent at key water-stressed sites. For the Advancing a Circular Economy Goal, Dow will continue advancing safe water recycling by partnering to deliver three major projects globally that implement advanced solutions, including projects at Dow manufacturing sites. For Dow's Valuing Nature goal, Dow will deliver value through projects that are good for business AND ecosystems. It's

plausible that projects involving water can impact all three goals. For example, increases in recycle/reuse/reclamation of water in operations can reduce freshwater intake leaving more freshwater for use by nature

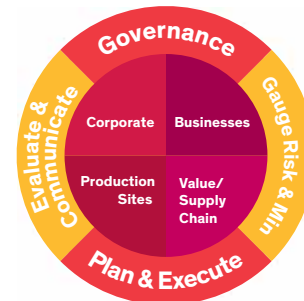
and other users. The freshwater definition used for the goal includes those sources that are "in competition" with other users; purchased, ground, and surface water.

Driving water stewardship is one of the focus areas of Dow's Corporate Water Strategy Team (CWST). This team, with representation from businesses, functions, and operations, focuses on defining and enabling the long-term water strategy, advising, and educating on water issues. This includes understanding how best practices

of efficient water use can be leveraged across Dow, reducing water stress and implementing a governance structure that will complement continuous improvement in water use. Recently, the team updated the description of the water stewardship program and is rolling it out across the Company to encourage further engagement and improved water-use efficiency. The CWST connects best practices and technology advances with operations needs and demands of the surrounding environment to describe the path that will reduce water stress. The team has examined the relative water stress across manufacturing sites globally with the help of the World Resources Institute (WRI). Input from this and subsequent analyses led to the identification of six key water-stressed sites.

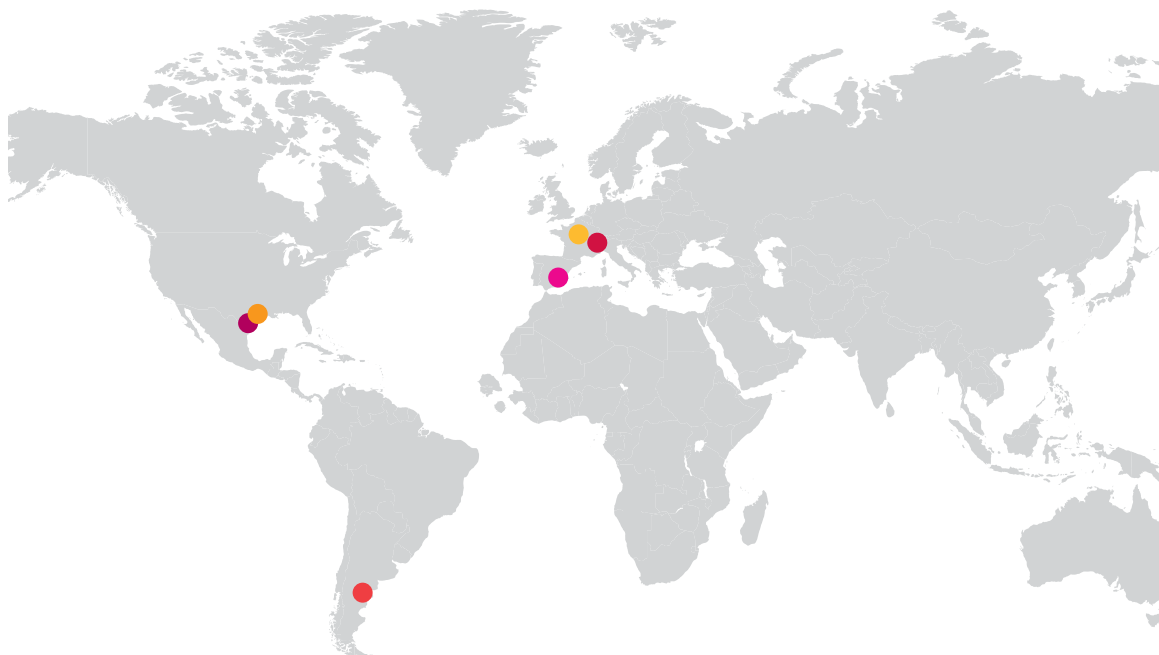
These sites were listed in prior sustainability reports. The CWST is working with Dow Operations and businesses to reduce water risk at these sites via a combination of projects, partnerships on recycle/reuse and technology deployment.

Key water-stressed sites are designed based on a number of factors, and it is not exclusive of their location in a water-stressed watershed. Additional factors include water quality, competitive forces, local experience at the site and long-term projections.



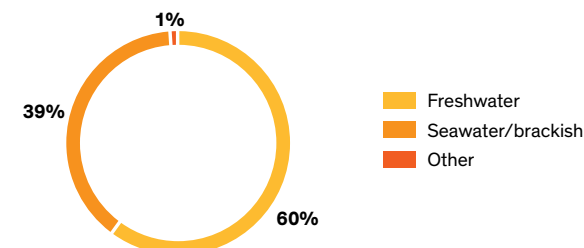
Water Use Across Dow Facilities

Water is used for a variety of purposes in Dow production facilities across the globe. The way that water is used varies by location. In locations where sea/brackish water is readily available, such as at production facilities at the coast, it is used for cooling. This accounts for the high proportion of seawater/brackish water use in some locations. The freshwater use is a combination of water drawn from the environment (surface, groundwater and purchased) while the “other” categories include indirect sources such as rainwater recovery.



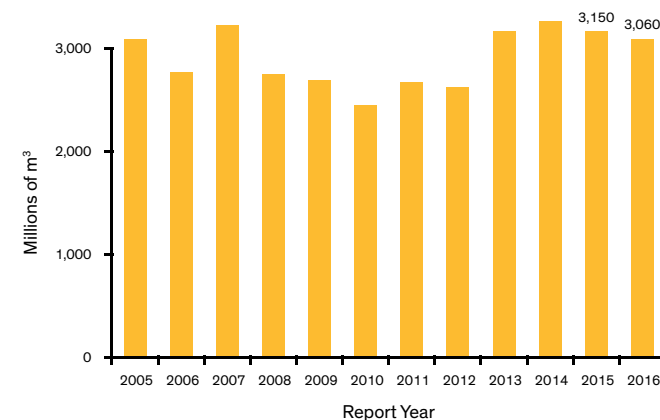
Dow Location	Source
Seadrift, Texas	Guadalupe River
Bahia Blanca, Argentina	Purchased freshwater
Terneuzen, The Netherlands	Rivers Rhine and Meuse
Tarragona, Spain	Purchased freshwater supply, source is Ebro River diversion
Dow Central Germany	River Saale (Schkopau site), River Weisse Elster and Lake Witznitz (Bohlen site)
Freeport, Texas	Brazos River

Dow Global Water Intake

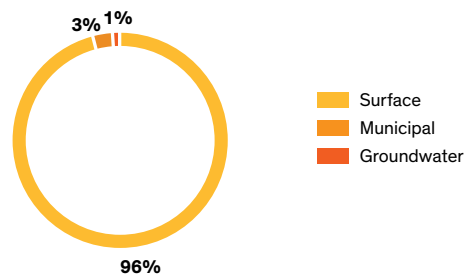


The freshwater is withdrawn from multiple sources, with the surface category including water from rivers, lakes and oceans. Rainwater is recovered in multiple locations and reused for firewater and other purposes, but its volume compared to other intakes is small. The majority of the freshwater intake is used for cooling, and a large portion of it is evaporated in cooling towers – returning the water to the environment. This includes the water intake from heritage Dow Corning facilities.

Water Intake



Freshwater Intake



to decrease its long-term dependence on Biesbosch water by increasing the volume of recycled water use (as described in the Stewardship in Action section below).

The Dow Tarragona site withdraws water for cooling and other operations needs from the Ebro River in Spain. The site takes less than 0.04 percent of the annual flow of the river. Further downstream at the coast the delta is part of Terres de l'Ebre, Catalonia, a UNESCO designated biosphere and also a Ramsar site (#593). The delta and associated wetlands support numerous species of water birds and other wildlife. The Dow Tarragona site has sought to diminish its intake from the Ebro River, with projects that include water recycling. The site reclaims 6.9 million m³/year of municipal water from two nearby cities and purifies it at the Camp de Tarragona Advanced Water Reclamation Plant. The reused water is used to make-up cooling tower water, freeing up this water for other uses. This partnership project is further described below.

GRI 303-2

These examples of diminishing the potential for impact on natural areas by recycling a portion of the water used by a Dow site is part of a broader emphasis on reducing water stress and improving resilience in water-stressed areas. At the key water-stressed sites, recycling and reuse have been emphasized to reduce the water footprint, and the freshwater recycle and reuse rate is about 20 percent. Across the key water-stressed sites, the volume of recycled and reused water is about 50 million m³/year. This is the vast majority of recycle/reuse from a global perspective. **GRI 303-3**

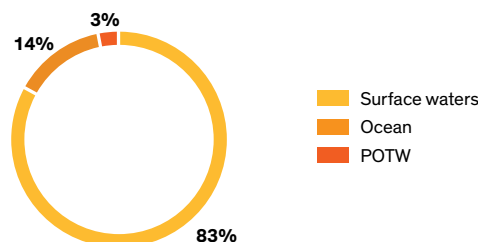
Only a small proportion of the water intake ends up in products (e.g., consumption). In 2010, an assessment of water use at Dow sites with the highest freshwater intake showed more than 85 percent of the source water was returned to its source at equal or better quality than at withdrawal.

The total volume of water intake globally is around 3000 million m³/yr. As noted above Dow's 2025 water goal is based on a freshwater intake intensity metric for the key water-stressed sites. The Freeport site experienced high rainfall in 2015. Rainfall and river overflow additions to the freshwater intake created unacceptable uncertainty in the 2015 intake number so the 2014 number was used as the 2015 baseline number. In 2015, the freshwater intake intensity for the key water-stressed sites was 11.8 and there was a slight improvement in 2016 to 11.4.

GRI 303-1

There are two sites that withdraw river water near sensitive wetlands areas listed in the Ramsar wetlands database. The Terneuzen site in The Netherlands withdraws fresh river water for cooling from the Biesbosch area, near the confluence of the Rhine and Meuse rivers, which is also the location of a Ramsar wetland (#197). The site withdraws less than 0.006 percent of the combined flow from the Rhine and Meuse rivers, which empty into the Biesbosch wetlands. Rich in biodiversity, Die Biesbosch is one of the largest national parks in The Netherlands and an area of extensive freshwater wetlands. The Dow Terneuzen site is working

Wastewater Discharge Destination



Effluents and Waste

Wastewater

Once the water has been used in Dow facilities, it is typically treated at a wastewater treatment plant and discharged. The total volume of wastewater discharged in 2016 across all sites was 130 MM m³/year (300 billion lbs). This does not include the discharges associated with once-through cooling or brackish/salt water (also used for cooling), which is included in the water intake figure. The majority of the discharge is to surface water and the ocean. At a few sites, Dow site wastewater goes to a third party for treatment before discharge (typically to surface water).

Wastewater intensity is the ratio of pounds of wastewater per pound of production. The ratio in 2016 was similar to previous years at around three pounds of wastewater discharged per pound of product.

There is substantial diversity in water sources, quality, uses and discharge across Dow's global facilities. However, a relatively small number of production sites account for more than 80 percent of Dow's wastewater discharge. Water-quality metrics are not available in the GEI system presently, so the water-quality metrics were evaluated via direct contact with site personnel at these major discharge facilities. These seven facilities as of the time of the 2015 baseline setting for the 2025 Sustainability Goals, are listed below. As part of our Dow 2025 Sustainability Goals, we aim to reduce the freshwater intake intensity at key water-stressed sites by 20 percent. Given the focus of this goal, the key water-stressed sites are included in the water quality metrics reporting below. With the addition of these key water-stressed sites, the data reported accounts for more than 85 percent of Dow wastewater discharge.

Major Wastewater Discharge Site	Key Water-Stressed Sites
Plaquemine, LA	Terneuzen, The Netherlands
Stade, Germany	Boehlen, Germany
Freeport, TX	Freeport, TX
Aratu, Brazil	Tarragona, Spain
Midland, MI	Bahia Blanca, Argentina
Deer Park, TX	Seadrift, TX
Texas City, TX	

There are multiple metrics to evaluate wastewater discharge quality, and these vary at Dow sites based on the local permit requirements. For the purposes of GRI reporting, total suspended solids (TSS) and biochemical oxygen demand (BOD) results were collected from these sites, as they are the most common metrics. The TSS discharge concentration across the 13 sites in 2016 was 0.005 percent and the BOD concentration was 0.004 percent.

GRI 306-1

Downstream of the Dow sites, there can also be sensitive natural areas. One site discharges into a Ramsar wetlands area. Terneuzen discharges wastewater into the Westerschelde and Saeftinge,

which is assigned as a Natura 2000 area (Ramsar #748). This large natural area covers the entire estuary of the River Scheldt, stretching 60 kilometers from the border with Belgium to the North Sea. It is a saltwater/brackish area with multiple wetlands and mudflats on its banks that support migratory fish, birds and other wildlife. Additional information on the habitat can be found at the Ramsar website. The Terneuzen site nature permit takes into account wastewater discharges to the river and estuary. **GRI 306-5**

Water Stewardship in Action

Terneuzen

At the Dow Terneuzen site, Dow collaborated with the municipal water board and a local water company to implement an innovative wastewater recycling program that uses every liter of water three times, instead of just once. The site takes some 3.6 million m³/year of treated municipal wastewater, further purifies it, and uses it for steam and cooling. As a result, the plant has reduced the energy use associated with water treatment by 95 percent – the equivalent of reducing its carbon dioxide emissions by 60,000 tonnes each year. This collaborative project has been advancing in successive stages for over a decade and was one of the case studies in the European Union's E4 Water Project.

Tarragona

At the Camp de Tarragona facility in Spain, Dow and several partners take up to 6.9 million m³/year of permeate water from two local wastewater treatment plants and, using Dow reverse osmosis technology, prepares it for use in our cooling towers. This water supplies up to 40 percent of Dow's needs at one facility, and additional piping is being installed to expand recycled water use to another nearby Dow facility. This has increased the number of cycles on the water from four to seven and decreased the freshwater intake from the Ebro River, relieving stress in a water-stressed region and leaving supply for other uses and nature. Dow and partners Veolia, AITASA and ACA (Water Catalan Agency) were recognized in 2016 with the Environmental Leader's Project of the year award.

Freeport

Dow has leveraged this partnership approach in water reuse projects in Freeport, Texas, its largest production facility globally, where it takes City of Lake Jackson wastewater and reuses it to produce steam. Dow's efforts to bring employees, community and government stakeholders together to collaborate on more holistic approaches to water management were recognized with a 2013 Texas Environmental Excellence Award from the Texas Commission on Environmental Quality (TCEQ). Dow Texas Operations in Freeport received the award for a series of water conservation/improved utilization projects implemented in 2012 that are expected to save up to 9,900 gallons per minute (20 million m³/year) of water. The reduction represented a 10 percent reduction in water use at the site.

Dow's Freeport Texas Operations is also the site of an ambitious pilot Dow initiated with The Nature Conservancy to assess the value of freshwater to business. The program analyzed nature-based solutions

such as watershed management that could bring about substantial benefits and interest multi-stakeholder investments. The analysis has already impacted the Freeport site's long-term water management plan and the holistic approach with partners across the watershed.

Dow Water & Process Solutions (DW&PS) is the business unit of Dow that provides sustainable liquid purification and separation solutions, and it has been a vocal proponent of the circular economy model that emphasizes the need to safely reduce, reuse and reclaim the world's limited water resources, sustained by advances in science and technology. Technology advances from DW&PS have been implemented at Dow sites as well as externally.

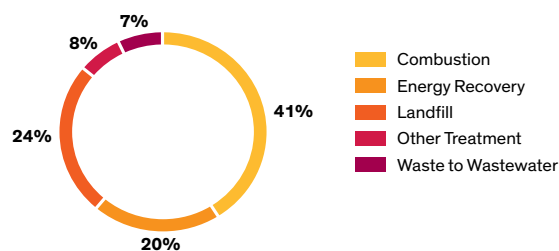
Dow was recently awarded the U.S. Water Alliance's U.S. Water Prize for leadership in developing new water management strategies, offering innovative products and technologies, and entering into effective collaboration models that make these solutions more attainable.



Waste

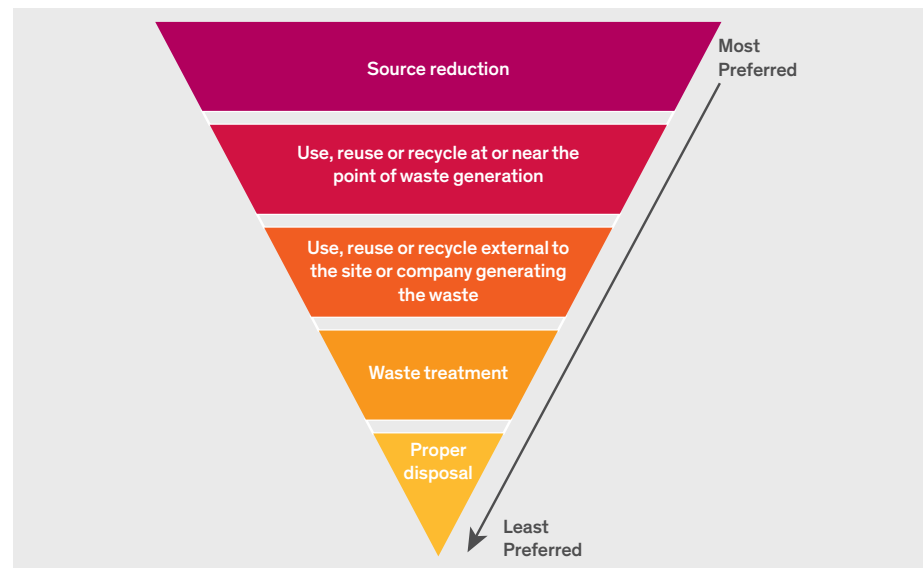
The total treated waste in 2016 was 1.6 million metric tons, a majority of which was thermally treated. The pie chart below illustrates waste treatment by category. Approximately 60 percent (0.98 million MT) of the waste is classified as nonhazardous and 40 percent (0.66 million MT) as hazardous as defined regionally. Wastes are materials that receive treatment (e.g., materials sent to landfills, vents sent to flares, materials sent to incinerators) and exclude demolition, remediation and certain salts. Waste was up 1 percent over 2015 totals, and waste intensity has decreased by 2 percent since 2015. **GRI 306-2**

Waste Treatment by Category



Waste Management

We have successfully completed our second set of long-term corporate Sustainability Goals, in which waste reduction, reuse and recycling have been a priority for the Company. We encourage waste minimization, broadly defined to include current efforts to reduce waste generation in our manufacturing units and also pollution prevention advancements at the R&D stage to avoid waste creation in the future. Our strategy is defined by a Waste Minimization Hierarchy, which fundamentally includes:



Every year, we recognize hundreds of individuals through the Waste Reduction Always Pays (WRAP) award program for their waste reduction achievements. Encouraging a culture of raw material efficiency and rewarding individuals for positive behaviors are keys to a successful waste reduction goal. Projects that address one of the top three categories of the Waste Hierarchy can be nominated for a WRAP award. The WRAP program has recognized individual projects since 1986, with a total projected value greater than half a billion dollars since 1995.

Process Safety Containment Event (PSCE) GRI 306-3

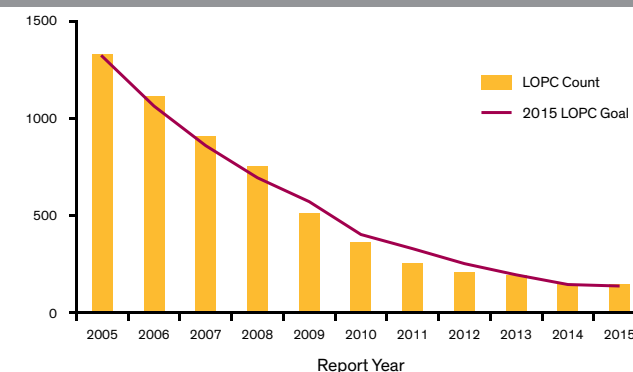
In the previous 10-year sustainability goal cycle (2005-2015), we measured the impact of releases in two ways: through our Process Safety Incident (PSI) and our Loss of Primary Containment (LOPC) metrics. PSI was aligned to an industry metric designed to measure the potential external impact of a release, in addition to the process interruption and damage that might have occurred with the event. In our goal cycle ending in 2015, we had reduced our PSIs by 83 percent. Our LOPC metric was an industry-leading, all-inclusive measure of unpermitted releases, including releases that were contained (in dikes, bunds, etc.) with little impact on people or the environment. At the end of our previous goal cycle, the Company achieved an 88 percent reduction in these events.

Beginning in 2016, we began using a new metric, Process Safety Containment Event (PSCE), in place of our previous PSI and LOPC metrics. There are two primary reasons for this. First, PSI and LOPC events at their root involve the loss of containment of a chemical, so PSCE reporting maximizes our efforts to reduce both of these types of events by addressing common causes. Second, we want to align to an industry standard or best practice that will enable us to better benchmark our performance.

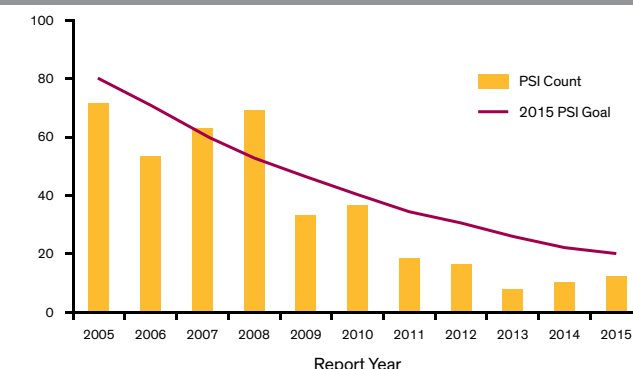
Our PSCE metric is derived from a new industry best practice, API RP-754. As an industry leader in sustainability performance, Dow has been heavily involved in the development of this metric. We believe that aligning to this measure will help us achieve an even higher level of performance related to the containment and control of the materials we handle and produce.

Similar to the approach we are now taking with Injury and Illness measurement, our new PSCE metric focuses on both incidents that have the greatest impact, as well as incidents with the greatest potential for significant impact, including process damage, interruption or possible impact on our surrounding communities. The Company has defined Levels 1-4, with Level 1 incidents having the highest actual or potential impact. By 2025, the Company's goal is to reduce the number of Level 1 and Level 2 events combined by more than 80 percent from our 2015 baseline of 125. Positively, 2016 represented a breakthrough year for Dow in this regard, as we saw a single-year reduction of 53 percent, or 59 PSCE events. These 59 events together resulted in releases of 290 metric tons of material. These releases resulted in very minimal impact to any of our stakeholders. Impacts may have included small-scale shelter-in-place for vapor releases, while liquid spills are generally captured in some form of secondary containment and recovered or properly disposed of.

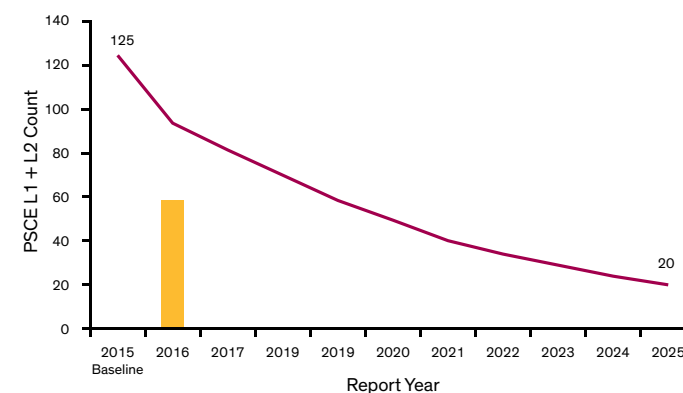
2005-2015: Loss of Primary Containment Incidents



2005-2015: Process Safety Incident Performance



Process Safety Containment Event 2025 Goal Curve



AWARDS AND RECOGNITION

EARNING **Respect from Our Stakeholders**

Dow consistently receives recognition from customers, industry trade groups, non-governmental organizations, government regulatory agencies and the news media for the Company's best practices and performance in sustainability and environmental, health and safety. The following awards are a sampling of the recognition earned by Dow in 2016.





U.S. Water Prize by the U.S. Water Alliance for its work in promoting and enabling more sustainable use and management of water by companies across the water value chain

#1 **CNN EXPANSIÓN**

Top Company to Work for in Mexico
by Top Companies y Expansión/CNN magazine

Society of Chemical Industry (SCI) awards Dow scientist the **14th annual SCI Gordon E. Moore Medal** for breakthrough innovation in the reverse osmosis (RO) membrane chemistry platform; **SCI** also awards Dow employee the **2016 SCI Perkin Medal** for contributions in the development of chemicals that enable microlithography for the fabrication of microelectronic circuits



Dow receives **Sustainability Awards** from **Business Intelligence Group** for two breakthrough innovations; awards acknowledge technologies that reduce landfill waste and provide a sustainable alternative to keep canned foods and beverages fresh



6 executives and leaders from Dow named to the **2016 OUTstanding Leading LGBT & Ally Executives** and **LGBT + Future Leaders** lists, published by the *Financial Times*



Dow named to *Forbes* inaugural **“Just 100”** list of America's best corporate citizens

Dow Chemical named the **ICIS Company of the Year**, based on financial metrics, by weekly global publication *ICIS Chemical Business*



Working Mother magazine named Dow to the **2016 Working Mother 100 Best Companies** list, marking the



12th time Dow has received this prestigious recognition

7 Dow technologies win at **R&D 100 Awards** across the coatings, automotive, packaging and agricultural markets



Dow named by *Chief Executive* magazine to its **Best Companies for Leaders** list for

Chief Executive

5th consecutive year – recognized as one of the top 10 for 4th consecutive year

50 **Best Companies to Work for in America** by Business Insider

BUSINESS INSIDER



Dow honored for the 12th consecutive year as **“Best Place to Work”** for LGBT employees

3 innovative Dow technologies short-listed for **2016 iChemE global awards**



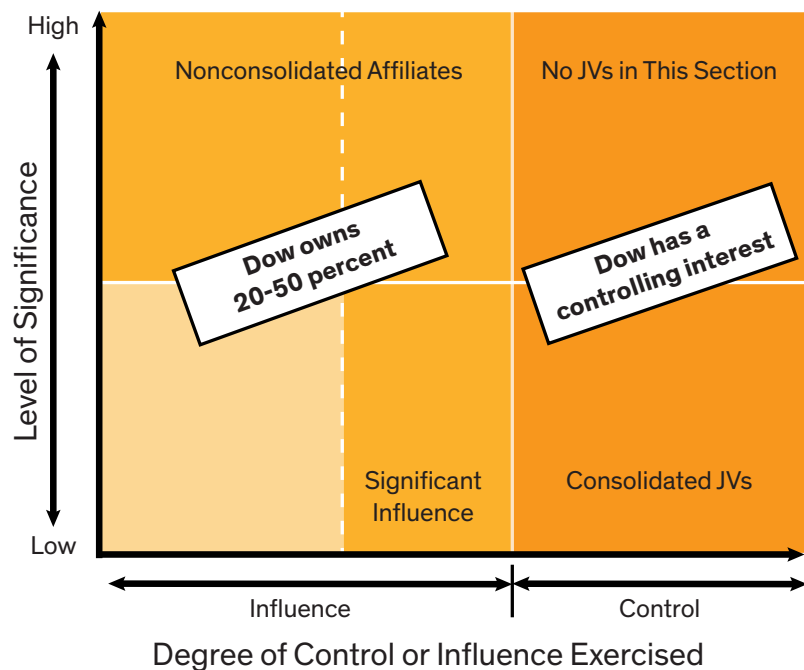
ADDITIONAL MATERIAL COVERING REMAINING DISCLOSURES

IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES

102-45 Entities Included in the Consolidated Financial Statements

Subsidiaries of the Company, for which the effective ownership by Dow is 50 percent or more, are listed in the Dow 2016 10-K in Exhibit 21. Exhibit 21 also includes nonconsolidated affiliates owned 50 percent by the Company.

As part of the materiality assessment, we identify where the impacts of material topics could occur within and outside of the Company along the value chain, including our suppliers, our operation and transportation, distribution, our customers and broader society. Impacts of material topics within Dow occur throughout the entire Company. This report covers majority-owned Dow subsidiaries over which the Company exercises control, entities for which the Company has a controlling financial interest or is the primary beneficiary, and operations in leased facilities that are Dow managed, worldwide as of December 31, 2016. Entities for which the Company has a controlling financial interest or is the primary beneficiary ("consolidated JVs") are represented in the lower right-hand part of the following diagram. Nonconsolidated affiliates are not included in the sustainability metrics of this report. This is consistent with the financial



reporting treatment of accounting for nonconsolidated affiliates (20-50) percent owned companies, joint ventures, and partnerships) on an equity basis. These affiliates are represented in the upper left corner of the following diagram, reflecting their significance and the fact that management control resides within the affiliate.

Background on the use of this matrix to guide the scope of inclusion can be found in the GRI Boundary and Technical protocols.

Dow's earnings from nonconsolidated affiliates totaled \$442 million in 2016, down from \$674 million in 2015. In 2016, equity earnings decreased as higher earnings from The SCG-Dow Group, Map Ta Phut Olefins Company Limited and the HSC Group were more than offset by higher equity losses from Sadara Chemical Company related to start-up expenses, and lower equity earnings from the Kuwait joint ventures as a result of lower monoethylene glycol prices and a reduction in the ownership of MEGlobal (now part of EQUATE Petrochemicals Company K.S.C. (EQUATE)). Equity earnings also declined as a result of the ownership restructure of Dow Corning Corporation.

Principal Nonconsolidated Affiliates

Dow had an ownership interest in 59 nonconsolidated affiliates at December 31, 2016 (55 at December 31, 2015). The Company's principal nonconsolidated affiliates and ownership interest (direct and indirect) at December 31, 2016, 2015 and 2014 were as follows:

Principal Nonconsolidated Affiliates at December 31	Ownership Interest		
	2016	2015	2014
Dow Corning Corporation ⁽¹⁾	N/A	50%	50%
EQUATE Petrochemical Company K.S.C.	42.5%	42.5%	42.5%
The HSC Group: ⁽²⁾			
DC HSC Holdings LLC	50%	N/A	N/A
Hemlock Semiconductor L.L.C.	50.1%	N/A	N/A
The Kuwait Olefins Company K.S.C. ("TKOC")	42.5%	42.5%	42.5%
The Kuwait Styrene Company K.S.C. ("TKSC")	42.5%	42.5%	42.5%
Map Ta Phut Olefins Company Limited ⁽³⁾	32.77%	32.77%	32.77%
MEGlobal ⁽⁴⁾	N/A	N/A	50%
Sadara Chemical Company	35%	35%	35%
The SCG-Dow Group:			
Siam Polyethylene Company Limited	50%	50%	50%
Siam Polystyrene Company Limited	50%	50%	50%
Siam Styrene Monomer Co., Ltd.	50%	50%	50%
Siam Synthetic Latex Company Limited	50%	50%	50%
Univation Technologies, LLC ⁽⁵⁾	N/A	N/A	50%

(1) On June 1, 2016, Dow became the 100 percent owner of Dow Corning.

(2) The HSC Group was previously part of the Dow Corning equity method investment and was added as principal nonconsolidated affiliates in the fourth quarter of 2016.

(3) The Company's effective ownership of Map Ta Phut Olefins Company Limited is 32.77 percent, of which the Company directly owns 20.27 percent and indirectly owns 12.5 percent through its equity interest in Siam Polyethylene Company Limited and Siam Synthetic Latex Company Limited.

(4) On December 23, 2015, the Company sold its 50 percent ownership interest in MEGlobal to EQUATE. MEGlobal is treated as a separate principal nonconsolidated affiliate through the date of divestiture.

(5) On May 5, 2015, Univation, previously a 50:50 joint venture between Dow and ExxonMobil, became a wholly owned subsidiary of Dow.

Partner selection is critical, and Dow will work only with companies that have compatible business strategies, are financially strong, and share the same perspective on business ethics and EH&S principles. Stakeholders may be assured that joint ventures are:

- Created for strategic reasons
- Designed to accomplish a long-term relationship with the partner
- Given appropriate management attention related to values, culture and operating standards

Further information on Dow's principal nonconsolidated affiliates is disclosed in Part II, Item 8, Financial Statements and Supplementary Data and Note 9 – Nonconsolidated Affiliates and Related Company Transactions in the Dow 2016 10-K.



CORPORATE GOVERNANCE

102-23 Chair of the Highest Governance Body

Andrew N. Liveris has served as the chairman, chief executive officer and president of the Company since 2006. The Board has determined that the Company and its stockholders are currently best served by having one person serve as chairman and CEO as it allows for a bridge between the Board and management and provides critical leadership for carrying out the Company's strategic initiatives and confronting its challenges. Mr. Liveris' service as chairman facilitates the Board decision-making process because Mr. Liveris has first-hand knowledge of the Company's operations and the major issues facing the Company, and he chairs the Board meetings where the Board discusses strategic and business issues. Mr. Liveris is the only member of executive management who is also a Director.

Board of Directors

Dow's Board of Directors is intimately involved in the strategy and operations of the Company – conducting thorough reviews and asking difficult questions. Dow exemplifies good governance with a lead director; directors with solid, diverse experience and credentials; corporate governance guidelines; and Code and financial ethics. A substantial majority of Dow's Board members are independent directors.

Corporate Officers

Corporate Officers facilitate the strong connection between the Company and its Board of Directors, collectively enabling the highest standards for governance.

Office of the Chairman and CEO

Accountable for maximizing shareholder value, Dow's Office of the Chairman and CEO (OCC) sets strategic direction, defines priorities, establishes corporate policy, and manages governance and enterprise-level decisions for the Company.

Executive Leadership Council

Dow's Executive Leadership Council team drives an operationally excellent culture focused on executing against the Company's strategic priorities.

Board Committees

The Board Committees, which are listed below, are described in the Company's Bylaws available at www.dowgovernance.com. Also available is a Board Committee membership chart that provides an overview of members and Committee roles.

- Audit Committee
- Governance Committee
- Compensation and Leadership Development Committee
- Environment, Health, Safety and Technology Committee

The Environment, Health, Safety and Technology Committee of the Board of Directors (the "Committee") assists the Board of Directors in fulfilling its oversight responsibilities by assessing the effectiveness of programs and initiatives that support the Environment, Health and Safety (EH&S) and sustainability, innovation, and technology policies and programs of the Company and by advising the Board on matters impacting corporate social responsibility and Dow's public reputation. More information on Dow's corporate governance, including Dow's corporate governance guidelines, Board Committee charters and Code of Business Conduct, is available online at www.dowgovernance.com.

The Executive Sustainability Team

The Executive Sustainability Team is accountable to the CEO and serves as Dow's management governance body for the Company for Sustainability, Environment, Health & Safety Policy.

- Assures adherence to the corporate EH&S Policy and revise and approve when deemed necessary.
- Decision-making for EH&S issues and strategic direction that need corporate management level approval (e.g., corporate elevated product and process risk management reviews, compliance plan performance).
- Ensures continued progress is made toward achieving Dow's Sustainability goals.
- Provides strategic direction and oversight to Dow's Corporate Reputation to ensure the respect of our stakeholders.
- Provides oversight on behalf of the Executive Committee for the following corporate management committees: Corporate Reputation Team, Crisis Management Team, Public Issue Strategy Board, Remediation Strategy Board, and Corporate Contribution Committee.

2016 members of the Executive Sustainability Team were:

Neil Hawkins (Chair): Corporate Vice President, Chief Sustainability Officer, Environment, Health & Safety

Jim Fitterling: President and Chief Operating Officer

Joe Harlan: Vice Chairman and Chief Commercial Officer

Peter Holicki: Senior Vice President, Operations, Manufacturing & Engineering, Environment, Health & Safety Operations, and Emergency Services & Security

Duncan Stuart: Deputy General Counsel, Corporate Transactions & Asset Centric Businesses Legal

Diego Donoso: Business President, Packaging and Specialty Plastics

Neil Carr: Business President, Dow Coating Materials, Performance Monomers & Plastics Additives

102-19 Delegating Authority

Dow employs a delegation of authority structure from senior executives throughout the Company through a chain of command. Generally, this occurs from Vice Presidents to Directors, to Leaders and then to Specialists. The Executive Sustainability Team directs and delegates authority to act to Dow's Business Units, Functions and Process Governance teams in addition to the aforementioned chain of command.

102-20 Executive-level Responsibility for Economic, Environmental and Social Topics

Neil Hawkins, corporate vice president and chief sustainability officer, is responsible for Environment, Health and Safety (EH&S) and leading the company's commitment to Set the Standard for Sustainability. Hawkins reports directly to Jim Fitterling, president and chief operating officer.

102-21 Consulting Stakeholders on Economic, Environmental and Social Topics

Stockholders and other interested parties may communicate directly with the full Board, the Lead Director, the nonmanagement Directors as a group, or with specified individual Directors by any of several methods. These methods of communication include mail addressed to The Dow Chemical Company, 2030 Dow Center, Midland, MI 48674, and the "Contact Us" feature of Dow's corporate governance website at www.DowGovernance.com. The Lead Director and other non-management Directors may also be contacted by email addressed to LeadDirector@Dow.com. Please specify the intended recipient(s) of your letter or electronic message.

The Dow Proxy Statement describes the requirements for submitting a proposal to be considered for inclusion in the Company's proxy material for a future annual meeting.

Employees are invited to give voice to their views at the HuB. This electronic venue creates an employee dialogue about far-reaching topics related to Dow. CEO Andrew Liveris extends the following invitation to employees: "Please join me in a conversation about Dow. The topics will be far-ranging. The focus: how today impacts tomorrow. We are looking for a dynamic, candid and constructive discussion. Feel free to disagree – with me or with others posting to the blog. I do ask that your disagreement is respectful, adds value and moves the discussion forward. Each person visiting this site has a distinct view of our Company and of our world. Your vantage point brings real value, so give voice to your views. Help us engage in a conversation that is not only about our future but helps us shape our future."

Employees also provide input and direction through a Global Employee Opinion & Action Survey (GEOAS).

The Dow EthicsLine is a safe, reliable and convenient avenue to report ethical concerns. Please see more about Dow EthicsLine on GRI 102-17.

102-25 Conflicts of Interest

All Directors, officers and employees of Dow are expected to be familiar with the Company's Code, and to apply it in the daily performance of their Dow responsibilities. The Code of Business Conduct is intended to focus employees, officers and Directors on our corporate values of integrity and respect for people, help them recognize and make informed decisions on ethical issues, assist in creating a culture of the highest ethical and business standards, and provide mechanisms to report unethical conduct. The full text of Dow's Code is available at www.DowGovernance.com.

The Governance Committee has responsibility for reviewing issues involving Director independence and related person transactions using information obtained from Directors' responses to a questionnaire asking about their relationships with the Company, and those of their immediate family members and primary business or charitable affiliations and other potential conflicts of interest, as well as certain data collected by the Company related to transactions, relationships or arrangements between the Company on the one hand and a Director, officer or immediate family member on the other. The process for on-boarding new Directors also includes a defined orientation process that includes guidance on how to fulfill their duties as a member of the Dow Board of Directors.

Dow's Directors and employees (including officers) are required to complete an annual ethics and compliance certification, which includes questions concerning potential conflicts of interests. All responses are reviewed by the Office of Ethics & Compliance, and action is taken to appropriately mitigate risk where an actual or apparent conflict exists. As a U.S. based public company, other public company board memberships, supplier/purchaser relationships and related party disclosures are disclosed in the Company's relevant SEC filings including the annual proxy statement and the Forms 10-K and 10-Q as appropriate.

102-26 Role of Highest Governance Body in Setting Purpose, Values and Strategy

Andrew N. Liveris, chairman and chief executive officer of The Dow Chemical Company, and senior executives periodically review and update Dow's essential elements of mission,

vision, values, and strategy. These essential elements provide insight, offer motivation, and point the way forward as the Company seeks to grow and achieve our goals. The Company's mission, vision, values, and strategy are reviewed during the Company's Strategy Week, which is held twice a year, and any modifications are proposed to the Board of Directors for consideration. The Board of Directors reviews and approves the proposed mission, vision, values, and strategy on a semi-annual basis.

102-28 Evaluating the highest governance body's performance

Each of the four Board Committees conducts an annual review of its charter and performance. In addition to this self-assessment, each Committee makes regular reports to the Board of Directors. The Compensation and Leadership Development Committee and the other non-employee Directors conduct an annual review of the performance of the Chief Executive Officer. The Committees undertake numerous risk oversight activities related to their charter responsibilities. For example, the Compensation and Leadership Development Committee regularly reviews any potential risks associated with the Company's compensation policies and practices. As another, the Environment, Health, Safety and Technology Committee regularly reviews the Company's operational risks including those risks associated with process and product safety, public policy, and reputation risks. The responsibilities of each Committee are stated in the Bylaws and in their respective Committee charters, which are available at www.DowGovernance.com.

102-30 Effectiveness of Risk Management Processes

The Board of Directors is responsible for overseeing the overall risk management process for the Company. Risk management is considered a strategic activity within the Company and responsibility for managing risk rests with executive management while the Committees of the Board and the Board as a whole participate in the oversight of the process. Specifically, the Board has responsibility for overseeing the strategic planning process and reviewing and monitoring management's execution of the corporate and business plan, and each Board Committee is responsible for oversight of specific risk areas relevant to the Committee charters.

The Committees undertake numerous risk oversight activities related to their charter responsibilities. For example, the Compensation and Leadership Development Committee regularly reviews any potential risks associated with the Company's compensation policies and practices. As another example, the Environment, Health, Safety and Technology Committee regularly reviews the Company's operational risks including those risks associated with process and product safety, public policy, and reputation risks.

102-31 Review of Economic, Environmental and Social Topics and 102-33 Communicating Critical Concerns

The oversight responsibility of the Board and Committees is enabled by an enterprise risk management model and process implemented by management that is designed to identify, assess, manage and mitigate risks. The Audit Committee is responsible for overseeing that management implements and follows this risk management process and for coordinating the outcome of reviews by the other Committees in their respective risk areas. In addition, the enterprise risk management model and process are reviewed with the Board of Directors annually, and the Board recognizes that risk management and oversight comprise a dynamic and continuous process.

The strategic plan and critical issues and opportunities are presented to the Board each year by the CEO and senior management. Throughout the year, management reviews any critical issues and actual results compared to plan with the Board and relevant Committees. Members of executive management are also available to discuss the Company's strategy, plans, results and issues with the Committees and the Board, and regularly attend such meetings to provide periodic briefings and access. In addition, the Audit Committee regularly meets in executive sessions and holds separate executive sessions with the lead client service partner of the independent registered public accounting firm, internal auditor, general counsel and other management as appropriate.

There were seven Board meetings and 24 Board Committee meetings in 2016. All of the Directors attended more than 75 percent of the sum of the total number of Board meetings and the total number of meetings of the Board Committees on which the Director served during the past year. The Directors are encouraged to attend all Annual Meetings of Stockholders, and in 2016 12 of the 13 Directors then serving attended, with the exception of Mr. Milchovich, who was unable to attend due to a conflict with the annual meeting of Nucor Corporation (the entity for which he served as Lead Director).

102-34 Nature and Total Number of Critical Concerns

The Business Risk Review (BRR) Work Process exists to help Dow employees identify, evaluate and manage EH&S risks, including risks associated with possible failure of a product to perform as intended (i.e., product efficacy). Fundamental to the entire BRR Work Process is the recognition by someone in the organization that there is an activity or opportunity that potentially poses a risk to people or the environment and that is a candidate for a risk evaluation.

The Executive Sustainability Team has established a set of criteria for elevating selected activities and opportunities and their attendant EH&S and product efficacy risks for review. These criteria are not to be interpreted as defining what the Corporation considers to be acceptable or unacceptable levels of risk, but rather they are intended to define those activities or opportunities that carry levels of risk which the Sustainability Team wants to review and approve or reject. They are intended to be “evergreen” and subject to modification and refinement based on experience with their use.

Corporate-level identification and management of risk is enabled by an enterprise risk management model and process implemented by management that is designed to identify, assess, manage and mitigate risks. The Audit Committee is responsible for overseeing that management implements and follows the enterprise risk management process and for coordinating the outcome of reviews by the other Committees in their respective risk areas. In addition, the enterprise risk management model and process are reviewed with the Board of Directors annually and the Board recognizes that risk management and oversight comprise a dynamic and continuous process.

Twelve principal risks were disclosed in the Dow 2016 10-K. See the Dow 2015 10-K, PART I, Item 1A for a more complete discussion of Risk Factors.

102-35 Remuneration Policies

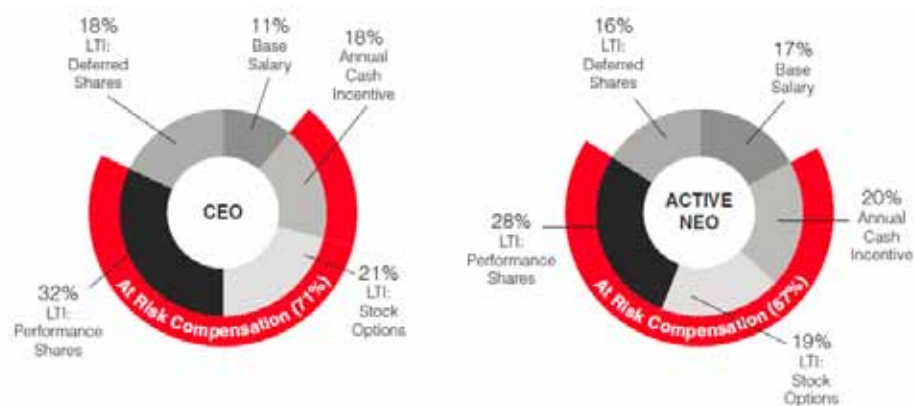
Objectives of Dow’s Executive Compensation Program

The objectives of Dow’s compensation program, set by the Compensation and Leadership Development Committee of the Board of Directors, are to align executives’ compensation with Dow’s short-term and long-term financial and operational performance and to provide the compensation framework to attract, retain and motivate key executives who are critical to achieving Dow’s vision, strategy and our longer-term success. The primary objectives of Dow’s executive compensation program are as follows:

- Support the achievement of Dow’s vision and strategy
- Motivate and reward executives when they deliver desired business results and stockholder value
- Attract and retain the most talented executives to succeed in today’s competitive marketplace
- Create an ownership alignment with stockholders

Pay at Risk

The mix of the total direct compensation elements for the CEO and other NEOs (named executive officers) are shown below. The charts outline the size, in percentage terms, of each element of targeted direct compensation at the date of grant. The red section of the charts reflects the incentive or at-risk performance-based components of compensation (e.g., 71 percent of the CEO’s compensation is at-risk performance based).



Performance Criteria

Consistent with our pay-for-performance philosophy, a significant portion of executive compensation consists of variable performance-based annual and long-term incentives. These incentive programs include a balanced set of metrics that include return on capital, total shareholder return, net income, management operating cash flow, and an individual performance multiplier ranging from 0-125% of the annual incentive award. Environment, Health, and Safety are thoroughly embedded in the leadership expectations of Dow executives, and executives are held accountable for environment, health, and safety objectives through the individual performance process, which therefore significantly impacts the annual cash incentive.

Executive Compensation Recovery (Clawback) Policy

The Company has adopted an Executive Compensation Recovery Policy for executive officers that is set forth in the Company’s Corporate Governance Guidelines. Under this policy, the Company may recover incentive income that was based on achievement of

quantitative performance targets if an executive officer engaged in grossly negligent conduct or intentional misconduct resulting in a financial restatement or in any increase in his or her incentive income. Incentive income includes income related to the annual Performance Award and LTI awards. The Company may also recover any awards made to an executive during the prior three years should the executive engage in activity that competes with, or is otherwise harmful to the Company or its affiliated companies.

Sign-on Bonuses or Recruitment Incentive Payments

Dow's Compensation Committee rarely uses sign-on bonuses or recruitment incentive payments during the recruitment of senior executives. If needed, such sign-on bonuses or recruitment incentive payments may be delivered in the form of either retention shares or cash in order to attract and retain the most talented executives to succeed in today's competitive marketplace.

Potential Payments Upon Termination or Change-in-Control

Dow follows local pay practices for severance payments excluding those impacted by legacy change-in-control agreements. While such legacy agreements remain in existence, Dow's Compensation Committee prohibits new or amended change-in-control agreements and no new agreements have been executed since 2007. To find details about Dow's change-in-control agreements, see the [2017 Proxy Statement](#) on pages 47 through 49.

102-36 Process for Determining Remuneration

Compensation is a key component of Dow's Employee Value Proposition (EVP). Dow has a variety of compensation programs to incentivize and reward employees' contributions. There are two main components of compensation that all Dow employees receive: base pay and an annual variable program called the Performance Award. These components are reviewed for each employee annually through Dow's Global Pay Planning (GPP) cycle.

During the GPP cycle, annual base pay increase guidelines and Performance Award payout guidelines are created for each employee by Dow's global compensation department. Supervisors make compensation decisions for their employees using these guidelines and assessing the employee's overall contribution and goal completion, including performance on sustainability goals. All compensation decisions

are reviewed by second-level leaders and, ultimately, functional leadership for equity and consistency.

The Compensation and Leadership Development Committee is a subset of Dow's Board of Directors. The Committee, which is comprised of independent directors, is responsible for the approval of the overall design of Dow's annual Performance Award and Long-Term Incentive programs, and the metrics and goals that determine payout amounts.

The Committee has retained an external compensation consultant, who reports directly to the Committee. The consultant advises the Committee on trends and issues in executive compensation, and provides advice and recommendations in relation to proposed compensation and the design of our compensation programs.

The compensation consultants that Dow employs have multiple safeguards and procedures in place to maintain the independence of the consultants in their compensation consulting practice. These safeguards include a rigidly enforced code of conduct, a policy against investing in client organizations and separation between their compensation consulting and other business units from a leadership, performance measurement, and compensation perspective.

102-37 Stakeholders' Involvement in Remuneration

The Company has provided stockholders a "say-on-pay" advisory vote on its executive compensation programs since 2011. At the Company's 2016 Annual Meeting of Stockholders, more than 87 percent of the votes cast by our stockholders approved our say-on-pay proposal. We believe the continued support reflects the implementation of feedback from our stockholders in regards to the changes to our long-term incentive award mix, share usage, and additional disclosures on our plan metrics and peer groups. Following the Company's 2016 Annual Meeting of Stockholders, the Compensation and Leadership Development Committee ([see GRI 102-36](#)) carefully evaluated the results of the 2016 say-on-pay vote at subsequent meetings.

Throughout the year, the Company continued our extensive outreach to stockholders, engaging with investors who collectively held over 70 percent of our outstanding shares. Through this outreach, we updated investors on a range of topics that covered the pending merger with DuPont, our overall business strategy, a pulse of current

business conditions, corporate governance practices and compensation program, and learned about the perspectives and any concerns of each investor. Stockholders reaffirmed our current compensation program structure and the changes we made in recent years to our compensation program continue to be well received. The Board and management team carefully consider the feedback from these meetings, as well as stockholder support for our most recent say-on-pay proposal, when reviewing the business, corporate governance and executive compensation profiles.

Stakeholder Engagement **GRI 102-40, GRI 102-42, GRI 102-43**

Stakeholder Groups	Mechanism for Engagement	Typical Frequency	Key Topics of Interest
Advocacy and Advisory Groups. e.g. SEAC	Meetings, email communications.	Monthly	Progress on #Dow2025, advice on how to address sustainability issues. Site's production performance and employment trends; environmental impacts, community health impacts and needs, etc.
Communities e.g. CAPS, United Way, Habitat for Humanity, KAB	Meetings, social media	Monthly	Site's financials, shipments and employment trends; environmental impacts, community health impacts and needs, etc.
Customers/Retailers, e.g. GC3, UL-E, The Sustainability Consortium	Events, meetings, emails, surveys, social media	Daily	Market trends, technology needs, opportunities, requirements
Employees	Surveys, emails, GEOAS, Employee Resource Groups, sustainability network	Daily	Company's strategy, #Dow2025 progress, engagement
Investment Professionals	Calls, emails, media, meetings	Daily	Market trends, company's financial performance, risk management
Industry and Trade Associations/ Consortiums see GRI 102-13	Meetings, emails, conferences	Monthly	Key industry issues, opportunities, collaborations and partnership opportunities
Academia	Panels, meetings, research projects, internships, social media, awards	Monthly	Research, #Dow2025 progress, opportunities, workforce development
Shareholders	Meetings, mail, media	Monthly	Company's financial performance, risk management
NGOs and Think Tanks e.g. TNC, OC	Visits, meetings, emails, calls, social media	Monthly	Industry issues, opportunities, collaboration and partnership opportunities.
Regulators	Meetings, emails, calls	Monthly	Company's environmental and social impacts
Suppliers	Calls, emails, surveys	Daily	value chain insights, limitations, opportunities

Stakeholder analysis helps identify and evaluate stakeholders that can and do impact or influence the Company's strategy and reputation. The intentional effort is to identify stakeholders who can drive, block or shape the discourse around sustainability. In addition, those who are affected may then influence how this discourse ultimately impacts Dow. Through keeping up with current perspectives, more successful issues management and government affairs efforts are accomplished helping to avoid negative impacts for the Company's businesses.

List of stakeholder groups

Stakeholder engagement takes place in a variety of other ways throughout the year. The fundamental principles of Dow's on-going sustainability stakeholder engagement strategy focus on three areas: (1) information sharing and disclosure; (2) participating in active dialogue; and (3) collaborating on issues of mutual interest. The overall purpose of engagement is to advance the most appropriate business objectives while building Dow's reputation.

Some examples of intentional and purposeful listening to stakeholders occur through the following:

Advisory Groups

The Sustainability External Advisory Council (SEAC) has represented a wide variety of external stakeholders since its initial meeting in 1992. Thought leaders are selected to represent external points of view in ongoing semi-annual meetings. Members bring their knowledge, experience and understanding to discuss issues of concern to Dow.

Communities

Community Advisory Panels (CAPs) - Dow has been an industry leader in establishing and using CAPs in the communities where we have operations. With sites in 34 countries, Dow has a daily presence in small towns and cities around the world as a neighbor, community leader, employer and manufacturer. Understanding the needs of the communities where Dow has locations, and responding in a constructive and appropriate way, is part of our role as a member of the community and one to which we are deeply committed. At Dow we believe our decision-making processes are improved when we involve the community.

Dow's CAPs represent a broad cross-section of local interests, including healthcare,

education, civic engagement, law enforcement and local business. Dow CAPs operate in more than 38 of our global manufacturing communities and offer valuable insight into local operations.

Employees

Dow has a long history of tracking and planning actions against measures of company culture. Dow's global survey program has existed since 1995 and utilizes an annual survey called the Global Employee Opinion and Action Survey (GEOAS). The GEOAS is designed to measure employee satisfaction, commitment, and engagement via questions about the job, development, leadership, work environment, communications, and more.

The GEOAS survey is currently implemented by a third-party vendor, CEB, with whom Dow has partnered since the beginning of the GEOAS in the 1990s. GEOAS results are key inputs into the Corporate and HR strategy and provide the primary metric of performance results.

The intent of the survey program is to provide a tracking mechanism, which enables the Company to focus on priority actions that will increase engagement in the workforce and ultimately improve corporate performance. External research shows that higher scores on engagement lead to more positive organizational outcomes (e.g., performance, productivity, and retention). Organizations with highly engaged employees achieve greater total shareholder return (TSR).

The 79 percent global response rate achieved on the survey demonstrates the value employees place on providing their feedback to Dow. Based on 2015 GEOAS data, in 2016 Dow focused on driving improvements in three priority areas: career planning and development, appreciation and recognition, and work-related stress. During 2016, Dow leadership placed significant emphasis on action in these areas.

An additional component of the GEOAS focused specifically on Leadership Effectiveness. The Leadership Effectiveness Survey (LES) gives employees the opportunity to provide input specific to their leaders. The LES results are used for development and performance discussion input. Dow focuses on leadership effectiveness to positively impact leader behavior/manager effectiveness - a critical driver of engagement scores. The summary data is also taken to evolve our programs in support of people leader capability through our leadership development curriculum.

In 2016, we added another mechanism for ongoing employee feedback called PulseCheck Surveys. PulseCheck Surveys are short, customizable employee surveys designed to obtain a quick assessment of employee opinions. PulseChecks provide more frequent data than the annual GEOAS, and can be particularly useful for understanding short-term trends and measuring specific topics that may be relevant at a given point in time. We use information from PulseChecks to provide more frequent reports to leadership on employee engagement as well as specific topics of interest. We also expect to use insights from PulseCheck surveys to make changes and upgrades to our annual GEOAS.

Consortiums

Dow is a member of The Sustainability Consortium, an independent organization of diverse global participants working to design and implement credible, transparent and scalable science-based measurement and reporting systems accessible for all producers and users of consumer products. Through The Consortium, Dow works collaboratively with its customers and the value chain to develop approaches to providing more sustainable solutions for the whole supply chain and ultimately, the end consumer. Dow leverages its science and technology expertise in sustainable chemistry and global network while working alongside The Consortium's various private and public sector partners.

Academia

In alignment with Dow's 2015 Sustainability Goals, the Sustainability Innovation Student Challenge Award (SISCA) program was launched in 2009. To promote forward thinking in social and environmental responsibility, SISCA acknowledges the energy, commitment and enthusiasm of the students and their university professors, sponsors and facilitators who support their sustainability innovations and efforts in continued excellence.

NGO

2016 marked the sixth year of the six-year collaboration between Dow and The Nature Conservancy to value ecosystem services in business decision-making. Dow and The Dow Chemical Company Foundation have collectively committed \$10 million to the collaboration over the duration of that term. As the collaboration moved into its final two years, the focus shifted from research to broad application across Dow and beyond. The collaboration is seeking to demonstrate how a company like Dow can incorporate the value of nature into business decisions across many sites and in different contexts. We will build upon the knowledge, tools and capacity that the

collaboration has established over the last four years. By integrating this work with the next generation of sustainability at Dow, we envision that this process will be part of a lasting transformation in Dow's approach to nature and provide a road map for others to follow.

Potential Job Candidates

Candidates are increasingly behaving like consumers when choosing an employer. As a result, companies are adjusting how they source and engage with talent through the use of digital hiring strategies. Through collaboration between Dow Human Resources and Public Affairs, we have made significant progress toward meeting the Company's hiring needs through the innovative use of multi-channel digital and social media.

Enabling Dow's success begins with ensuring that we have a robust talent pipeline to meet current and future business needs and fuel Dow's growth. Digital hiring offers Dow the ability to target and attract qualified talent to fill strategic roles anywhere around the globe, faster and at lower cost than via traditional recruiting methods.

Dow has participated in external benchmarking studies that rank the digital recruiting performance of premier companies. The benchmarking studies evaluated Dow's overall online talent communications across digital and social channels, our use of social media to connect with prospective employees (e.g., LinkedIn, Facebook, Twitter, YouTube, Glassdoor), our desktop career website, our mobile careers website and our online application process. Dow has been ranked more favorably than premier companies, including our competitors, for talent and also ranked higher than leading global technology companies.

The engagements described were not undertaken specifically as part of the report preparation process but as part of our ongoing engagement process. To learn more about how Dow reaches out to community stakeholders, please visit the Corporate Citizenship website.

Employee Resource Groups

Eight employee resource groups (ERGs) – each with a senior executive sponsor – bring together people with a common interest to share experiences, find mentors, seek professional development, and gain access to senior leadership.

- African American Network
- Asian Diversity Network
- Disability Employee Network

- Gays, Lesbians & Allies at Dow
- Hispanic Latin Network
- Middle East Intercultural Network
- Women's Innovation Network
- Veteran's Network

The ERGs serve as an internal resource to help cultivate a multicultural competency within Dow, partner with businesses/functions to develop people and influence culture; engage employees for impact on sustainability goals; and work collaboratively to maximize local and national D&I partnerships.

They also serve as critical links to career development resources and opportunities, as well as networking connections through an inclusive community highlighted by respect, collaboration, and open and honest communication.

The networks at Dow also offer mentoring and networking opportunities and provide access to professional development. All employees are eligible to join any of the networks as early in their career as they choose.

102-41 Collective Bargaining Agreements

Approximately 27 percent of Dow's workforce was covered by either formal collective bargaining agreements or works councils in 2016.

102-44 Key Topics and Concerns Raised

The SEAC (Sustainability External Advisory Council) provides for open and structured dialogue between Dow's senior leaders and independent external thought leaders on issues of critical importance to society and to the Company. The SEAC challenges the way the Company thinks, helping to frame important challenges and opportunities in a creative, solutions-oriented way. Examples of topics addressed include:

- Dialogue about progress and impact, and creative input on Dow's 2025 Sustainability Goals
- Review of business unit strategies, particularly related to sustainability issues
- Review of current sustainability issues
- Dialogue on doing business in new emerging regions, including growth projects

The selection of members for the SEAC focuses on the potential to challenge conventional thinking and press the case for adopting proactive and effective positions

on important issues. A similar effort, Dow Community Advisory Panels (CAPs), is used locally at many of Dow's manufacturing and R&D sites. These panels are made up of selected Dow and community leaders for the purposes of engaging in ongoing and open communication regarding Dow's operations, safety programs, environmental conditions, community interactions and many other aspects of the Company and plant that might be of interest to the community.

Feedback from CAPs enables Dow to be responsive in addressing a community's quality of life needs, especially in areas where the Company can have the greatest impact. Dow continually refreshes its CAPs to maximize value for both Dow and the community. Many Dow CAPs regularly reinvigorate their processes. To find new ways to expand their reach, CAP members also engage other community residents by inviting them to Dow-hosted events. This results in greater feedback by residents and more awareness building about Dow within the community.

Dow also measures its impact as a corporate citizen and identifies concerns through periodic community assessment surveys at select sites. These surveys generate feedback related to quality of life issues, identifies Dow's "rightful role" in a community and also provides direct recommendations on identified opportunities where Dow can have a positive impact. We address these and many more issues through our local site Community Success Plans.

Attracting and retaining world-class talent is the key to maintaining Dow's competitive advantage. We constantly strive to maintain a culture where each employee is valued, respected and encouraged to grow in his or her career. In order to continue accelerating Dow's transformation, we must empower one another to act as agents for positive change within our Company. This is why we are committed to regularly conducting the Global Employee Opinion and Action Survey (GEOAS).

Employee feedback from the 2016 GEOAS encouraged us to continue to focus on improving overall career development, appreciation and recognition, and work-related stress. We continue to maintain emphasis on employee appreciation and career planning, and our Health Services team has carefully examined the data to pinpoint the root causes of work-related stress and develop interventions to eliminate or reduce it. Since 2013, we have measured improvements in each of the focus areas, recording a 4 percent point increase in favorable results for career development, appreciation and recognition, and work-related stress.

In addition to the critical metric of employee engagement, the 2016 GEOAS was again paired with a leadership effectiveness survey (LES). The LES allowed employees to

provide confidential feedback on their supervisors and the areas where they can develop to better lead and engage. Employees are encouraged to think about recent interactions with their leaders, call attention to their strengths, and provide candid, constructive feedback on specific opportunities for development. The Leadership Development Guide and Leadership Effectiveness Feedback Report provide leaders with insight into where they are in their journey toward superior leadership. Together, they offer ideas on the areas to focus on as they work to build relationships and enhance their interactions with individuals on their team to motivate, engage and lead them to success. Dow connects leaders with specific development resources as part of the LES feedback process.

An issue of increasing concern to stakeholders is reform of the 40-year-old Toxic Substances Control Act (TSCA), the law that governs production, import and use of chemicals in the United States. Insight about the significance of the issues and the gaps that exist between industry and other stakeholder positions has made this a topic in which constructive conversation was needed. The understanding gained from dialogue over the past several years has been a valuable backdrop as TSCA reform legislation became law in 2016.

Dow provides information about historical issues and challenges such as Agent Orange, asbestos, Bhopal and dioxin on Dow.com. Recent plans that address the resolution of the dioxin issue in Midland, Michigan, are available at the Dioxin Resolution Website.

Independent Assurance Statement to The Dow Chemical Company GRI 102-56

ERM Certification and Verification Services (ERM CVS) was engaged by The Dow Chemical Company (Dow) to provide limited assurance in relation to The Dow Chemical Company 2016 Sustainability Report (the Report), as set out below.

	Engagement summary
Scope of our assurance engagement	Whether Dow has prepared the report in accordance with the Global Reporting Initiative (GRI) Standards Comprehensive option
Reporting criteria	Global Reporting Initiative (GRI) Standards (2016)
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	The Dow Chemical Company is responsible for preparing the Report and for the collection and presentation of the information within it. ERM CVS's responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.

Our conclusions

Based on our activities, as described below, nothing has come to our attention to indicate that Dow has not prepared the report in accordance with the Global Reporting Initiative (GRI) Standards Comprehensive option

Our assurance activities

A multi-disciplinary team of sustainability and assurance specialists performed the following assurance procedures

- A visit to the head office of Dow in Midland, Michigan, to:
 - Interview management representatives in order to understand Dow's sustainability strategy, policies and management systems for the relevant disclosures;
 - Review internal reporting guidelines, including reporting databases as well as the associated conversion factors used;

- Review the completeness of data reported by all the sites and the effectiveness of the internal review (QA/QC processes), including the consolidation process;
- Review performance during the reporting period against the 2016 sustainability goals;
- Review the materiality determination process including the results of stakeholder engagement;
- Review a sample of qualitative and quantitative evidence supporting the reported information
- Checking consistency of financial data and other information with Dow's 10-K report;
- Confirming the consistency of the reported information with our understanding of Dow's business, operations, sustainability strategy and prior reporting.
- Visits to three production sites (Michigan Operations, USA; Fort Saskatchewan, Canada and Schkopau, Germany) to verify environmental and safety source data for 2016 and to understand local community engagement, human resources and procurement activities
- Reviewing external media reporting relating to Dow to identify relevant sustainability issues in the reporting period.
- Checking the presentation of the information relevant to the scope of our work in the Report to ensure consistency with our findings.

The limitations of our engagement

The reliability of the assured data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context. Our independent assurance statement provides no assurance on statements in the report regarding future performance or on whether Dow will achieve its stated goals.

Observations

We have provided Dow with a separate management report with detailed (non-material) findings and recommendations. Without affecting the conclusions presented above, we have the following observation:

- We have noted where Topic Specific disclosures have been omitted due to Information currently being unavailable. Reporting on progress against stated timelines for providing this information will be expected in next year's report.



Jennifer Iansen-Rogers
Head of Corporate Assurance Services
22 May 2017



ERM Certification and Verification Services, London
www.ermcvs.com; email: post@ermcvs.com

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the ERM staff that have undertaken this engagement have provided no consultancy related services to Dow in any respect.

102-49 Changes in Reporting

There are not significant changes from previous reporting periods in the list of material topics and topic boundaries. However, due to the transition from GRI guidelines to GRI standards, we are more focused on reporting on our material topics as aligned with our 2025 sustainability goals.

102-12 External Initiatives

Responsible Care® Management System
 United Nations Global Compact (UNGC)
 UNGC Caring for Climate signatory
 The Olympic Games as:
 The Olympic Partner programme as the “Official Chemistry Company of the Olympic Games”
 Official Carbon Partner of Rio 2016
 International Coastal Cleanup (ICC)
 Trash Free Seas Alliance (TFSA)
 Keep America Beautiful (KAB)
 Ellen MacArthur Foundation (EMF)
 Global Reporting Initiative (GRI)
 Biotechnology Principles
 GMO Answers
 Field to Market®
 International Code of Conduct
 Plan Biotechnology Code of Conduct
 The Compact
 Dow U.S. Apprenticeship Program

UN Guiding Principles on Business and Human Rights

Carbon Disclosure Project

102-13 Membership of associations

Acumen
 Association of Businesses Advocating Tariff Equity (ABATE)
 Alliance for Competitive Taxation
 American Institute for Packaging and the Environment (AMERIPEN)
 American Center for Life Cycle Assessment (ACLCA)
 American Chemistry Council (ACC)
 Biotechnology Industry Organization (BIO)
 Business for Social Responsibility (BSR)
 Center for Climate Change and Energy Solutions (C2ES)
 Center for Chemical Process Safety (CCPS)
 European Chemistry Industry Council (CEFIC)
 Chlorine Institute
 Corporate Eco Forum
 CropLife America
 China Petroleum and Chemical Industry Federation (CPCIF)
 Dow Sustainability Fellows Program at the University of Michigan
 Environmental Defense Fund
 FEICA

Global Silicones Council (GSC)

Global Water Challenge

Green Chemistry and Commerce Council (GC3)

Halogenated Solvents Industry Association

International Council on Chemical Associations (ICCA)

International Olympic Committee

Louisiana Chemical Alliance

Michigan Chamber of Commerce

Michigan Manufacturers Association

National Association of Manufacturers

North American Insulation Manufacturers Association

Ocean Conservancy

Paulson Institute

Plastics Europe

Personal Care Products Council (PCPC)

Product Sustainability Roundtable

Responsible Industry for Sound Environment

Retailers Leadership Council (GC3)

Smart Cities Council

Solar Energy Industry Association

Sustainable Brands

Sustainable Packaging Coalition

Texas Chemical Council

The B Team

The Dow Centre for Sustainable Engineering Innovation at the University of Queensland

The Energy Materials Industrial Research Initiative (EMIRI)

The Michigan Chemistry Council

The Nature Conservancy

The Sustainability Consortium

United Nations Global Compact

US Chamber of Commerce

World Business Council for Sustainable Development (WBCSD)

World Chlorine Council (WCC)

World Economic Forum (WEF)

World Environment Center (WEC)

World Resources Institute Corporate Consultative Group

201-4 Financial assistance received from government

Funding Program	Program Title	Government Support (\$MM) *
Australian National	Next generation high sensitivity polymeric Extreme Ultraviolet (EUV) resists Photolithography polymers	0.4
Belgium National	Fuels and Chemicals by fast pyrolysis of biomass	2.2
Dutch National	Catalysis for Sustainable Chemicals from Biomass	24.1
Dutch National	Lower olefins from Synthesis Gas using supported iron catalysts coping with the challenges of selectivity and stability	1.1
Dutch National	Energy-efficient valorization of components from process water streams	0.9
Dutch National	Water Nexus	7.5
Dutch National	Low Cost Storage of Heat	0.3
Dutch National	DEBottlenecking Of Chromatographic Separations	0.9
Dutch National	Integrale Mobiele PRoceswater-OnderzoeksVoorziening voor een Economische Delta	0.6
Dutch National	Compact Conversion and Storage of Thermal Energy	2.4
Dutch National	Energy-efficient Combined Heat And Mass Process	1.0
Dutch National	Matching processes with electrification technologies	0.05
Dutch National	Opschaling PCM warmteopslagtechnologie	0.6
Dutch National	Electrically driven ThermoAcoustic high temperature STEam producing heat pump	0.6
European Commission	The Electric Vehicle revOLUTION enabled by advanced materials highly hybridized into lightweight components for easy integration and dismantling providing a reduced life cycle cost logic	11.6
European Commission	Innovation Demonstration for a Competitive and Innovative European Water Reuse Sector	8.1
European Commission	Building Active Steel Skin	0.9
European Commission	Economically and Ecologically Efficient Water Management in the European Chemical Industry	15.0
European Commission	Sustainable multifunctional coating resins for scavenging applications	0.6
European Commission	Innovative tools, methods and indicators for optimizing the resource efficiency in process industry	5.2
European Commission	Disruptive technology to dramatically improve Energy Efficiency of Household Appliances	2.6
European Commission	Integrated Process Control based on Distributed In-Situ Material and Energy Feedstock Rankings	8.0
European Commission	Compact RETrofit Advanced Thermal Energy storage	0.6
European Commission	Integrated Model guided process optimization of steam cracking furnaces	7.6
European Commission	European Materials Modelling Council	4.3
European Commission	Demonstration of an innovative and versatile recycling scheme for increasing the water efficiency in the petrochemical industry	1.8
European Commission	Innovative Solutions in the Process Industry for next generation Resource Efficient Water management	6.8
European Commission	Sustainable Production of Industrial Recovered Energy using energy dissipative and storage technologies	4.2
UK National	Circular Economy for Flexible Packaging	0.6
US-BOR	New or Improved Polyamide Membranes and Associated Processes and Technologies	1.7
US-DOD	Digital Manufacturing & Design Innovation Institute (DMDII)	70.0
US-DOE	US China Clean Energy Research Center (CERC)	12.5

Funding Program	Program Title	Government Support (\$MM) *
US-DOE	Body in White Joining of Aluminum to advanced high strength steel at prototype scale	1.5
US-DOE	Institute for Advanced Composites Manufacturing Innovation (IACMI)	70.0
US-DOE	Integrated Computation Materials Engineering (ICME) Development of Carbon Fiber Composites for Lightweight Vehicles	6.0
US-DOE	Advancing PV Material Performance using Nanoscale Opto-Electrical Characterization	0.1
US-DOE	Ambient pressure XPS for in situ studies of heterogeneous catalysts	0.1
US-DOE	Imaging Model Ziegler Natta Catalysts with Single-Atom Sensitivity	0.1
US-DOE	Modeling the Effect of Film Morphology on the Performance of an OLED Device	0.04
US-DOE	3D Structure and Organization in Polymeric and Organic Thin Films	0.1
US-DOE	Additive Manufacturing of Polyurethane Materials	0.04
US-DOE	Bio-Syngas fermentation for C6-C14 alcohol production as a pathway to fuels	2.0
US-NSF	Improved Association-based Models for Separations in the Bioeconomy	0.4
US-NSF	Selective C-H Borylation of Arenes and Heterocycles	0.4

* The dollar figure listed is the value of the direct government support for the total program. Several programs have multiple participants receiving assistance. These programs were active in 2016; however, many are multiyear.

GRI CONTENT INDEX

We prepared this report in accordance with the Global Reporting Initiative (GRI) Standards Comprehensive option. This Index of Content serves as a navigation tool for the GRI standards. **GRI 102-55**

GRI Standard/Disclosure		Page number(s)/Location	Omission
1. Organizational profile			
102-1	Name of the organization	15	
102-2	Activities, brands, products, and services	39	
102-3	Location of headquarters	15	
102-4	Location of operations	19	
102-5	Ownership and legal form	15	
102-6	Markets served	15, 39	
102-7	Scale of the organization	15	
102-8	Information on employees and other workers	52	
102-9	Supply chain	65	
102-10	Significant changes to the organization and its supply chain	65, 68	
102-11	Precautionary Principle or approach	46	
102-12	External initiatives	100	
102-13	Membership of associations	100	
2. Strategy			
102-14	Statement from senior decision-maker	5	
102-15	Key impacts, risks, and opportunities	20	
3. Ethics and integrity			
102-16	Values, principles, standards, and norms of behavior	29	
102-17	Mechanisms for advice and concerns about ethics	29, 30	
4. Governance			
102-18	Governance structure	http://www.dow.com/en-us/investor-relations/corporate-governance Our Corporate Governance Guidelines were adopted to establish a common set of expectations and good governance practices to assist the Board and its Committees in performing their duties. More information about Corporate Governance at Dow can be found here: Financial Reporting, Certifications, Certificate of Incorporation, Bylaws, Proxy Statements.	
102-19	Delegating authority	90	

GRI Standard/Disclosure		Page number(s)/Location	Omission
4. Governance			
102-20	Executive-level responsibility for economic, environmental and social topics	90	
102-21	Consulting stakeholders on economic, environmental, and social topics	90	
102-22	Composition of the highest governance body and its committees	2016 Annual Report pg.5 http://www.dow.com/-/media/dow/business-units/dow-us/pdf/the-dow-chemical-2016-annual-report.ashx?la=en-us and http://www.dow.com/en-us/investor-relations/corporate-governance/leadership/board-of-directors	
102-23	Chair of the highest governance body	88	
102-24	Nominating and selecting the highest governance body	Director Qualification Standards and Selection of New Director Candidates http://www.dow.com/en-us/investor-relations/corporate-governance/corporate-governance-guidelines#Qualification	
102-25	Conflicts of interest	90	
102-26	Role of highest governance body in setting purpose, values, and strategy	90	
102-27	Collective knowledge of highest governance body	http://www.dow.com/en-us/investor-relations/corporate-governance/board-committees/environment-health-safety-and-technology-committee	
102-28	Evaluating the highest governance body's performance	91	
102-29	Identifying and managing economic, environmental, and social impacts	Check the board committees responsibilities at http://www.dow.com/en-us/investor-relations/corporate-governance/board-committees	
102-30	Effectiveness of risk management processes	91	
102-31	Review of economic, environmental, and social topics	91	
102-32	Highest governance body's role in sustainability reporting	Neil C. Hawkins, Corporate Vice President, Chief Sustainability Officer, Environment, Health & Safety.	
102-33	Communicating critical concerns	91	
102-34	Nature and total number of critical concerns	91	
102-35	Remuneration policies	92	
102-36	Process for determining remuneration	93	
102-37	Stakeholders' involvement in remuneration	93	
102-38	Annual total compensation ratio		Confidentiality constraints. In the interest of confidentiality and competitiveness, Dow does not report ratios based on individual compensation, or make pay decisions based on these ratios
102-39	Percentage increase in annual total compensation ratio		Confidentiality constraints. In the interest of confidentiality and competitiveness, Dow does not report ratios based on individual compensation, or make pay decisions based on these ratios

GRI Standard/Disclosure		Page number(s)/Location	Omission
5. Stakeholder engagement			
102-40	List of stakeholder groups	95	
102-41	Collective bargaining agreements	97	
102-42	Identifying and selecting stakeholders	95	
102-43	Approach to stakeholder engagement	95	
102-44	Key topics and concerns raised	97	
6. Reporting practice			
102-45	Entities included in the consolidated financial statements	86	
102-46	Defining report content and topic Boundaries	32	
102-47	List of material topics	36	
102-48	Restatements of information		Not applicable. None for 2016
102-49	Changes in reporting	100	
102-50	Reporting period	3	
102-51	Date of most recent report	3	
102-52	Reporting cycle	3	
102-53	Contact point for questions regarding the report	3	
102-54	Claims of reporting in accordance with the GRI Standards	3	
102-55	GRI content index	105	
102-56	External assurance	98	
201: Economic Performance			
Management Approach			15, 16, 17
201-1	Direct economic value generated and distributed	18	
201-2	Financial implications and other risks and opportunities due to climate change	22	
201-3	Defined benefit plan obligations and other retirement plans	Pension and Other Postretirement Benefits can be found at: http://www.dow.com/-/media/dow/business-units/dow-us/pdf/the-dow-chemical-2016-annual-report.ashx?la=en-us pg 59-61 2016-10K and Note 18 pg. 125 - 128 2016-10K	
201-4	Financial assistance received from government	101	Confidentiality constraints. We disclosed grants information, however tax related information for this disclosure is confidential in many instances as we have agreements with governments that in many instances include a non-disclosure provisions.

GRI Standard/Disclosure		Page number(s)/Location	Omission
302: Energy			
Management Approach			70, 71, 76
302-1	Energy consumption within the organization	76	
302-2	Energy consumption outside of the organization	77	
302-3	Energy intensity	77	
302-4	Reduction of energy consumption	77	
302-5	Reductions in energy requirements of products and services		Not applicable. We don't sell many products that require energy to use (like appliances, cars, computers).
303: Water			
Management Approach			70, 71, 78
303-1	Water withdrawal by source	80	
303-2	Water sources significantly affected by withdrawal of water	80	
303-3	Water recycled and reused	80	
305: Emissions			
Management Approach			70, 71
305-1	Direct (Scope 1) GHG emissions	72	
305-2	Energy indirect (Scope 2) GHG emissions	72	
305-3	Other indirect (Scope 3) GHG emissions	72	
305-4	GHG emissions intensity	73	
305-5	Reduction of GHG emissions	72	
305-6	Emissions of ozone-depleting substances (ODS)	73	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	74	
306: Effluents and Waste			
Management Approach			70, 71
306-1	Water discharge by quality and destination	81	
306-2	Waste by type and disposal method	82	Information unavailable. Disposal type by type. We will review the data process to include the data by 2019.
306-3	Significant spills	83	

GRI Standard/Disclosure		Page number(s)/Location	Omission
306-4	Transport of hazardous waste		Information unavailable. We will be reviewing ways to address this disclosure on a yearly basis as we define the need to capture this information
306-5	Water bodies affected by water discharges and/or runoff	81	
401: Employment			
Management Approach			49, 50
401-1	New employee hires and employee turnover	53	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	54	
401-3	Parental leave	54	
403: Occupational Health and Safety			
Management Approach			60, 61, 62, 63
403-1	Workers representation in formal joint management-worker health and safety committees	60	Information unavailable. Due to a change in data collection tool and privacy concerns, incident rate by gender is not available for 2016. We will review the need to capture information per gender on a yearly basis to then define a timeframe.
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	60	Information unavailable. Due to the lack of global data available within a standard and reliable source, the absentee rate will not be reported. Dow is taking steps to evaluate and implement a data collection platform in the next 3 years to permit the company to more accurately report data on employee absentee rate.
403-3	Workers with high incidence or high risk of diseases related to their occupation	62	
403-4	Health and safety topics covered in formal agreements with trade unions	63	
405: Diversity and Equal Opportunity			
Management Approach			49, 50
405-1	Diversity of governance bodies and employees	54	Information unavailable. Minority data not tracked in other regions outside the US. We will review the need to capture information by minority outside the U.S. on a yearly basis.
405-2	Ratio of basic salary and remuneration of women to men	54	Information unavailable. To compare salary and remuneration of women to men, we ran a pay equity study for our professional workforce which is a multi-attribute study (years of service, education, performance, etc). We did not find a pay equity issues for this section of our workforce (~50%). Dow believes this is a comprehensive approach. In future studies (2018) we will work on a process to have our complete employee population represented.

