

# 2015 SUSTAINABILITY GOALS UPDATE

## 2Q 2009



### Setting the Standard for Sustainability

Dow people are the world's best problem-solvers focusing on the world's biggest challenges. Our commitment to smart solutions, innovations for tomorrow, responsible operations and partnering for change delivers results that are good for business and good for the world.

### Smart Solutions

Our technologies enable our customers, and their customers, to develop products and services for a more sustainable future.

### Innovations for Tomorrow

We contribute to the sustainability of society and our planet by developing innovative technologies for current and future markets.

### Responsible Operations

Our infrastructure has a positive impact on our company, our communities and ourselves; our operations are a model for others, wherever we operate.

### Partners for Change

We are leaders in advancing all aspects of sustainability, openly collaborating with customers, suppliers, communities, civil society and governments.



## Highlights

### **Dow Announces Plans for Algae-based Biorefinery to Convert CO<sub>2</sub> to Ethanol**

Dow announced that it plans to work with Algenol Biofuels, Inc. to build and operate a pilot-scale algae-based integrated biorefinery that will convert CO<sub>2</sub> into ethanol. The facility is planned to be located at Dow's Freeport, Texas site. Algenol's technology uses CO<sub>2</sub>, salt water, sunlight and non-arable land to produce ethanol. Dow, National Renewable Energy Laboratory (NREL), the Georgia Institute of Technology (Georgia Tech) and Membrane Technology & Research, Inc. are contributing science, expertise and technology to the project. Their combined expertise offers new and innovative technology, with the opportunity for creating a breakthrough process for ethanol production.



In addition to leasing the land for the pilot-scale facility, Dow plans to develop the advanced materials and specialty films for the photobioreactor system. Dow will also provide the technology and expertise related to water treatment solutions and will provide Algenol with access to a CO<sub>2</sub> source for the biorefinery from a nearby Dow manufacturing facility. The CO<sub>2</sub> will be supplied to the algae in the photobioreactors and will serve as the carbon source for the ethanol produced. The result is a CO<sub>2</sub> capture process which converts industrially derived CO<sub>2</sub> into more sustainable fuels and chemicals.

[Read more on dow.com.](#)

### **Dow Enters Next-Generation Battery Joint Venture**

Dow announced in May at its Annual Meeting of Stockholders (pending final funding decisions), that it and its proposed joint venture partners have selected Midland, Michigan as the site of a new battery manufacturing facility to supply the automotive industry and power the next generation of hybrid and electric vehicles. Midland is specified in a federal grant application filed by KD ABG MI, LLC, a proposed joint venture among Dow, Kokam America Inc., Townsend Ventures, LLC and SAIL Venture Partners with the U.S. Department of Energy (DOE) to construct a new \$600 million, 800,000 square foot facility to produce affordable advanced superior lithium polymer battery (SLPB) technology for the hybrid and electric vehicle markets. The DOE grant program is part of President Obama's goal of putting one million new plug-in hybrid vehicles in service by 2015.

[Read more on dow.com.](#)

### **Dow Signs MOU to Develop Global GHG Reduction Projects**

Dow and Gazprom Marketing and Trading Limited announced today they have signed a memorandum of understanding (MOU) to develop and implement greenhouse gas (GHG) reduction projects on a global basis. Through this agreement, both companies will work together to identify projects that could cumulatively reduce millions of tons of carbon dioxide (CO<sub>2</sub>) emissions through the implementation of Dow technologies and other cooperative efforts. Gazprom Marketing and Trading will provide a route-to-market for emissions offsets and utilize its global counterparty base to bring Dow's technologies to market. Successful implementation of these projects will bolster Gazprom Marketing and Trading's carbon portfolio with additional certified offsets and drive significant reductions in global GHG emissions.

The two companies will work together to identify global projects that qualify for Clean Development Mechanism (CDM) or Joint Implementation (JI) status according to the United Nations Framework Convention on Climate Change (UNFCCC) requirements. Dow and Gazprom Marketing and Trading will also collaborate on projects in the evolving U.S. carbon market. The agreement reinforces both companies' commitment to setting the standard for sustainability by providing innovative solutions to the world's energy and climate issues. To find out more about Certified Emissions Reduction project mechanisms, please visit UNFCCC's website.

[Read more on dow.com.](#)

### **Dow Recognized as a Top 10 Sustainability Company in China**

Dow Chemical (China) was recognized as a “Top 10 Energy Conservation and Emissions Reduction Corporation” at the Fourth China Summit on the Development of Circular Economy, part of the 2009 China Beijing International High-tech Industries Week. Dow received the Award amongst 100 leading international and domestic corporations, and ranked first in the chemical industry for its operational eco-efficiency and outstanding contributions to emissions reduction in China and world-wide.

The judging process included expert panel reviews and open online voting through Xinhua Net, one of China’s largest news portals. The judging criteria also included the application of green technology, the commitment to innovation, the efforts to reduce environmental footprint and the relationship with the community and other stakeholders.

In China, Dow has applied stringent sustainability standards to all its plants and locations. Dow China’s core manufacturing base in Zhangjiagang is recognized as “The State Environment-friendly Enterprise” by the Ministry of Environmental Protection due to excellence in safety and cleaner production. The newly established Shanghai Dow Center, Dow’s business and innovation hub in Asia Pacific, was designed and constructed as a “Green Building,” utilizing many of Dow’s cutting edge sustainable technologies and products. It features DOWTHERM™ SR-1 heat transfer fluid in air-conditioning systems and STYROFOAM™ brand insulation in both roof and exterior walls of the center.

[Read more on dow.com.](#)

### **Dow Water Business Earns Governor’s Award for Occupational Safety**

Dow Water & Process Solutions has been awarded the 2008 Minnesota Governor’s Safety Award for Outstanding Achievement in Occupational Safety from the Minnesota Safety Council. Dow Water & Process Solutions is one of 249 employers, out of 522 entrants, who were recognized at the Governor’s Safety Awards luncheon at the Minneapolis Convention Center this May.

Since 1934, the annual Governor’s Safety Awards have spotlighted Minnesota employers with above-average safety records. Participants submit injury information, which is compared with state and national data, as well as the entrant’s past performance. Ongoing safety programs and activities are also considered. Winners are recognized at three levels. Dow Water & Process Solutions received an Outstanding Achievement Award, which recognizes continuing improvement and/or a continuation of an outstanding safety record. Edina Operations safety record spans more than 1.4 million work hours, and the Outstanding Achievement Award recognizes employers who show continuing improvement and/or a continuing outstanding record.

[Read more on dow.com.](#)

### **Dow Captures Solar Power With Advanced Fluid Technology**

While the rapid growth of photovoltaic technology has been capturing headlines along with market share for years, The Dow Chemical Company is also shedding light on a less widely known, but viable means: Concentrating Solar Power systems, or CSP.

CSP technology uses mirrors to reflect and concentrate sunlight onto receivers that collect solar energy and convert it to heat. DOWTHERM™ A heat transfer fluids collect the heat energy and transport it to a power generating station. The transported heat converts water to steam, which in turn drives turbines to make electricity. Dow’s product, called DOWTHERM™ A, has the high temperature stability required to collect, transport and store that solar generated heat.

Dow has supplied, or is in the process of supplying, enough DOWTHERM™ A globally to generate more than 500 megawatts of electricity from the sun – positioning its Performance Fluids Business as the leading supplier of heat transfer fluids in the world for parabolic trough-based solar systems. Solar power producers in the United States, Middle East, Spain, Australia, India and other locations are tapping into Dow’s technology and world-scale production and supply capabilities. Recent projects in Spain will be



using more than 5,000 metric tons of DOWTHERM™ A heat transfer fluids that will eventually generate enough electricity for about 120,000 households. These plants will also prevent the release of about 350,000 tons of carbon dioxide that would have otherwise been released into the atmosphere had traditional fuels been used.

[Read more on dow.com.](#)

### **Dow Scientists Receive 2008 Heroes of Chemistry Award**

Bill Mickols, senior research scientist for Dow Water & Process Solutions, has been selected by the American Chemical Society (ACS) as a co-recipient for the 2009 Heroes of Chemistry Award. Mickols shares this recognition with his former colleague, John Cadotte, who was the founder of FilmTec Corporation. Cadotte is being recognized posthumously.

Mickols' scientific contributions to reverse osmosis for desalination pushed the envelope of water flux and salt rejection to levels once considered impossible. These innovations have delivered a two- to five-time increase in flux and productivity over previous membrane systems, while maintaining similar salt rejection performance. His energy-saving reverse osmosis membranes are helping to provide fresh, clean water around the world, and his products have actually saved lives in regional emergencies, such as Hurricane Katrina.

The foundation technology for these advances is the thin film composite reverse osmosis membrane invented by John Cadotte in the 1970s. Cadotte used interfacial polymerization to generate an ultra thin, pinhole-free, aromatic polyamide membrane layer on a micro-porous support. This layer permeates water, but rejects ionic species and modest-sized neutral molecules. Since water permeability is inversely proportional to the thickness of this layer, it is desirable to produce the thinnest defect-free layer possible. The Heroes of Chemistry program highlights the vital role of industrial chemical scientists and their companies in improving human welfare through successful commercial innovations and products. It presents an ideal opportunity to enhance the public image of the chemical and allied industries.

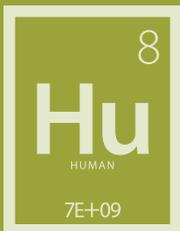
[Read more on dow.com.](#)

### **Dow's Building Envelope Products Receive NAHB Green Approved Mark**

Dow Building Solutions' building envelope products recently received the NAHB Research Center Green Approved mark, making Dow the first to have both its energy saving insulation and air sealing products eligible for meeting mandatory requirements or earning points under the National Green Building Standard. Now, all NAHB "Green Approved" products from Dow are pre-loaded onto the NAHB's online Green Scoring Tool, making it more convenient for builders to calculate points that could contribute to a Bronze, Silver, Gold or Emerald green building certification.

Along with other components and systems used in a home, Dow's products can contribute to earning an additional 30-120 points in the Energy Cost Performance Levels credit category (702.2), depending on the overall percentage of energy efficiency improvements for a particular building. NAHB "Green Approved" products from Dow include all STYROFOAM™ Brand Extruded Polystyrene (XPS) Foam Insulation, the award-winning STYROFOAM SIS™ Brand Structural Insulated Sheathing, Dow polyisocyanurate insulation, STYROFOAM™ Brand Spray Polyurethane Foam Insulation, GREAT STUFF PRO™ Insulating Foam Sealants, ENERFOAM™ Professional Foam Sealants, FROTH-PAK™ Foam Sealant kit, and THERMAX™ Insulation.

[Read more on dow.com.](#)



## Sustainable Chemistry

### Sustainable Chemistry Goal Update

Sustainable chemistry is a “cradle-to-cradle” concept that drives us to use resources more efficiently, minimize our footprint, provide value to our customers and stakeholders, deliver solutions for customer needs and enhance the quality of life of current and future generations. To that end, we recently established the following goal:

By 2015, Dow will double to 10% its percentage of sales of products which have sustainable chemistry advantages.

Dow will publicly report on our progress by:

- Reporting our overall annual assessment of our sustainable chemistry index.
- Reporting our performance on % of sales having sustainable chemistry advantages.
- Presenting and/or publishing life cycle assessments that are validated independently by an external stakeholder, on existing or planned Dow products.
- Providing ongoing updates on promising areas of research and investments and collaborations that spur sustainable chemistry innovation.
- Promoting sustainable chemistry internationally through student prizes and Dow employee awards under The Dow Sustainability Innovation Challenge Award program.

A key component of this goal is the Sustainable Chemistry Index (SCI). The index forms the basis of the goal target: double to 10% the percentage of sales of products which have sustainable chemistry advantages. Sales which have sustainable chemistry advantages are those focused on:

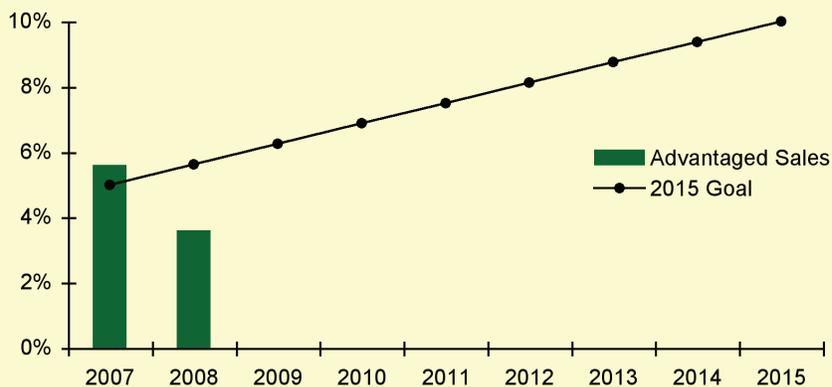
- Solving environmental challenges like climate change and water availability.
- Addressing social needs like affordable housing and improved food production.
- Mitigating issues like chemicals of concern, manufacturing/distribution hazards and product end-of-life issues.

Dow’s Sustainable Chemistry Index will help drive innovation and measure our progress. It will help us use sustainable chemistry to optimize every aspect of sustainability, including environmental, social and economic factors, to deliver smart solutions to our customers.

The SCI was 18.7 in 2007, and dropped to 18.1 in 2008. This decrease in score occurred largely due to a decrease in manufacturing efficiency in 2008. In 2008, many of Dow’s manufacturing facilities were operated at less efficient, low production rates due to the effects of the global economic crisis. On the U.S. Gulf Coast, hurricanes Ike and Gustav also led to unplanned shutdowns and plant idling. These events reduced the production efficiency of many of Dow’s facilities, which is reflected in the lower SCI score for 2008.

The percent of sales with sustainable chemistry advantages has declined from 2007 to 2008. A new business leader Sustainability review is being implemented and will identify and prioritize opportunities to reverse this trend.

## Percent of Company Sales with Sustainable Chemistry Advantages



Every quarter, Dow continues to deliver breakthrough improvements to our existing products, processes and technologies. Sustainable Chemistry optimizes every aspect of Sustainability, and examples of this in action are below:

### Dow Customer Receives FiFi “Technological Breakthrough of the Year” Award

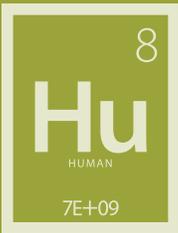
A breakthrough, water-based micro-emulsion technology developed by Dow enabled one of our customers, MANE, to receive the FiFi “Technological Breakthrough of the Year” Award from The Fragrance Foundation. The patent-pending technology licensed to MANE enables perfumers to create alcohol-free formulations with the same concentration of fragrance oils as “classic” alcohol-based perfumes. Typically, alcohol is used to dissolve the fragrance oil and has been preferred for its ability to quickly carry a scent’s “top notes” through the air, creating a sensory perception of “freshness.” With earlier attempts at water-based fragrances, formulators could only create “light” fragrances that were not long-lasting because only a limited amount of fragrance oil could be used. With Dow’s micro-emulsion technology, MANE was able to evenly disperse the fragrance oils in water, and create a fragrance with the performance and sensory characteristics consumers demand without the use of alcohol.

Industry interest in replacing alcohol solvents with water has been driven by the “green” movement and regulations governing the use of VOC’s (volatile organic compounds). Alcohol is a VOC, and while these regulations have not yet reached the fragrance industry, fragrance houses and brands have been investigating alcohol-free formulations. MANE received the “Technological Breakthrough” Award for its work on Nautica Oceans, a new fragrance developed and marketed by Coty, with Coty describing Nautica Oceans as its first “ecologically-friendly fragrance” and “a long-lasting, biodegradable water-based formulation that is kinder to the environment and your skin.”

[Read more on dow.com.](#)

### LOMAX™ Technology Advances the Environmental Attributes of Carpet

Mohawk Industries is launching a major, in-store advertising campaign to promote its use of Dow Flooring’s latex carpet backing manufactured with innovative LOMAX™ Technology. LOMAX Technology uses methane gas collected from landfill to manufacture advanced latex backing. The system relies on renewable energy sources, and reduces emissions. Mohawk was one of the first to use the latex backings manufactured with the environmentally advanced process, and is the largest user of such material in residential carpet manufacturing.



Now, the company is launching a point of sale campaign across thousands of retailers to promote the environmental attributes of its range of SmartStrand® carpets, which are made using latex from LOMAX Technology. Swing tags and brochures carrying information about LOMAX Technology will be attached to the products, enabling consumers to make a more educated choice.

[Read more on dow.com.](#)

### Dow Water Business Launches New Water Scarcity Solution Technologies

Dow Water & Process Solutions (DW&PS) launched two new DOW™ FILMTEC™ elements for brackish water treatment at Singapore’s International Water Week (SIWW). These elements have earned the distinction of being two of the top innovations for 2009, and will be featured in the SIWW Innovation Corner. Dow’s new brackish water reverse osmosis (RO) elements, DOW™ FILMTEC™ BW30HR-440i and BW30XFR-400/34i, allow demineralization and other water treatment systems to operate more consistently and with less cleaning and maintenance, making essential industrial and potable water treatment processes more affordable for power plants, manufacturing operations and municipalities around the world.

[Read more on dow.com.](#)

## Product Safety Leadership

### Dow Publishes 200th Product Safety Assessment at DowProductSafety.com

Dow reached an important milestone in June, publishing its 200th Product Safety Assessment (PSA) – Dow’s voluntary process for characterizing and managing product risk and communicating product information to the public. At the end of second quarter, there were 203 PSAs posted at [www.DowProductSafety.com](#), reflecting the addition of 45 new PSAs during the quarter. We have met our goal of posting 50 new PSAs to the website in 2009, and look forward to posting additional PSAs throughout the remainder of the year. The 2015 Goal is to have publicly available PSAs for all applicable Dow products.



The products from the Rohm and Haas organization will be included in the future as we continue to pursue making a Product Safety Assessment available for all Dow products by 2015.

### Dow Product Safety Assessments Showcased as Product Stewardship Best Practice

Dow’s Product Safety Assessments (PSAs) have been showcased as an industry best practice in global chemicals management and product stewardship during recent meetings in Paris hosted by the Organization for Economic Co-operation and Development (OECD). Feedback from OECD member government representatives was very positive and highlighted the effectiveness of Dow’s PSAs for risk communication to the public.

### **Dow Helps Lead the ICCA Global Product Strategy and Industry Participation at ICCM-2**

Dow is helping to lead the implementation of the International Council of Chemical Associations' (ICCA) Global Product Strategy – a strategy shared by the international chemical industry to enhance global information exchange about chemicals between co-producers, along the value chain, with governments and with the public; to harmonize global procedures of risk assessment; to provide capacity building for developing countries to help them manage their chemical products in a safe and environmentally sound manner; and to advocate for a responsible and balanced combination of regulatory and voluntary chemicals management programs. One example of this was Dow's leadership at the Second Session of the International Conference on Chemicals Management (ICCM-2) in Geneva, Switzerland, in May, where the global chemical industry demonstrated improvements in product stewardship performance. David Kepler and Greg Bond participated in industry panels, gave media interviews and engaged with government leaders and non-governmental organizations about the Global Product Strategy and the many successes and challenges of advancing international chemicals management.

### **Dow's Greg Bond Receives "Distinguished Leadership Award" from American Chemistry Council**

Greg Bond, corporate director of Product Responsibility, was recognized by the American Chemistry Council (ACC) with their annual "Distinguished Leadership Award" for his efforts to establish and promote the International Council of Chemical Association's (ICCA) Global Product Strategy. Bond was a co-recipient of the award, along with BASF's Martin Kayser. For more than two years, Bond and Kayser have worked to improve the product safety performance of the global chemical industry through increased transparency of chemical safety information and strengthened science and risk-based chemicals management legislation and regulation. The award was announced on June 11 at the annual ACC meeting.

## **Breakthroughs to World Challenges**

As many struggle with the current economic challenges, it can be easy to focus on our immediate needs and lose track of the world around us. Our Breakthroughs to World Challenges goal reminds us to think differently.

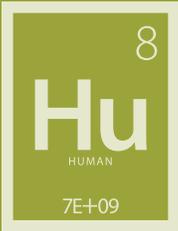
During the second quarter, we made substantial progress toward defining consensus metrics that will enable us to measure "breakthroughs" in our principal areas of focus. Criteria for judging a "breakthrough" include some subjective factors, but objective factors will need to be agreed upon in order to continue to focus our resources toward meeting the challenges.

During the second quarter, we also began implementation of a new process for all business leaders. Dow's CEO and Chief Sustainability Officer together have commissioned a New Business Leader EH&S / Sustainability Review process. In this process, every senior business leader will be working with senior Sustainability leadership to define and accelerate the business unit contributions to Dow's EH&S/ Sustainability commitments, including our 2015 Goals. As we continue Dow's strategic journey, this process will help focus resources in our business units toward accomplishing our Breakthroughs to World Challenges goal.

Below are examples of Dow's commitment to meeting the needs of food, decent housing, healthcare, energy and clean water:

### **Dow AgroSciences and World Wide Wheat Develop and Commercialize Advanced Germplasm and Traits in Wheat**

Wheat is a staple food around the globe, thus making improvements in the way we grow, store, use and eat wheat can only help meet the world's need for food. This is an initiative of the DAS Food Ingredient Supply platform, which targets reducing the risk of chronic diseases, improving the well-being of consumers, or providing basic fortification of diet deficiencies in developing countries. Under this growth platform, DAS explores high value, novel food ingredients to improve health, extend product shelf life, and improve processing functionality.



### **AgroFresh Inc., a subsidiary of Rohm and Haas, is successful in field trials.**

Results from three seasons of northern and southern hemisphere field trials indicate INVINSA™ Crop Stress Protection technology has the potential to protect crop yields from heat and drought stress. The new technology promises to give growers a new tool to stabilize and increase yields of field crops under stress conditions. Drought and heat are all too common an occurrence for farmers around the globe, thus this technology has the potential to help enhance the world's ability to meet a growing need for agricultural products to feed the world. In addition, AgroFresh Inc.'s innovative products and services help the produce industry deliver fruits, vegetables and flowers with just-harvested freshness and high quality. We invite you to explore <http://www.agrofresh.com> to learn more about AgroFresh, and to discover the many benefits our innovative technologies offer the agricultural industry worldwide.

### **Dow Technology Reduces Time and Manufacturing costs for Pharmaceuticals**

By improving the efficiency of the pharmaceutical manufacturing process, The Dow Chemical Company can ultimately help improve the health of the human race – something the Company is strongly committed to through its 2015 Sustainability Goals.

A new technology from Dow Wolff Cellulosics, a specialized form of METHOCEL™, allows pharmaceutical companies to produce tablets in fewer steps – reducing the cost of manufacturing. Using a fully sustainable product base with worldwide acceptance, METHOCEL™ is another example of groundbreaking innovation in the formulation of oral solid dose medications designed to treat diseases and medical conditions.



### **Contributing to Community Success**

The community success goal is adapting to the transitions taking place at Dow, ensuring proper alignment while keeping the fundamentals of the community success goal in tact. Our strategic sites continue to engage their stakeholders through implementing their community success plans while our communities continue to witness long lasting positive impacts pertaining to issues that are important to them. These plans are translating into a complete transformation of our community relations program and the results will be critical when re-measuring our initial sites in the coming year.

Aratu Brazil has set an aggressive goal to complete their workshop and develop their community success plan by the end of August, 2009. Aratu, like all other strategic sites, will continue to engage their communities and initiate actions that foster sustainable impact towards enhanced quality of life issues.

### **Recycling Program (Bahía Blanca, Argentina)**

In May Dow launched a recycling program in Bahía Blanca, Argentina called “La Basura Sirve” (Trash is useful). The program aims to promote the separation and classification of domestic solid wastes for further recycling through local schools. The program is integrated by educative resources and games to motivate children from 3 to 18 years old to start separating paper, plastic and cans at home and be part of a recycling and valorization program. The Company created an alliance between a local NGO specialized in environmental care education, local government and other companies in the area.

### Dow “Chair” (Bahía Blanca, Argentina)

Dow Argentina, Universidad Tecnológica Nacional and Universidad Nacional del Sur in Bahía Blanca, Argentina, launched the “Dow Chair” in order to cooperate to maintain and elevate academic level. The “Dow Chair” is a cooperation program for which the company makes infrastructure, resources and equipment available to improve labs, classes, libraries, and computer and documentation centers. It will also offer several training programs in order to give teachers and teacher assistants an opportunity to get continuing education. Among other goals, the Dow Chair will recognize students and graduates based on merit and academic achievements. Recognition will also be given to those graduates with outstanding performance in other areas, including leadership, community work or research.

### Documentary Wins Social Responsibility Award (Latin America)

A documentary about the Dow-sponsored CSR program “Mangue Limpo” (Clean Mangrove) won the II Social Responsibility Films Competition, sponsored by the Brazilian Association of Higher Education Maintainers (AMBES). The award-winning film was developed by Journalism students of Santa Cecília University (Unisantia), from Santos-SP, Brazil, and broadcasted by TV Santa Cecília, a cable channel available all over Baixada Santista (1.5 million-people region in the south coast of São Paulo state). The documentary showcases challenges in recovering the mangrove in order to minimize the impact of urbanization in the Baixada Santista area, taking Mangue Limpo Program as a model of education and awareness for environmental preservation.



### Hoyt Park Renovation Project (Saginaw, MI)

Employee engagement is a critical piece to Mid-Michigan’s Contributing to Community Success Goal. Dow employees have a long history of giving back to their communities, and this was a perfect opportunity for Dow employees to come together en masse to make a difference in the lives of their neighbors.

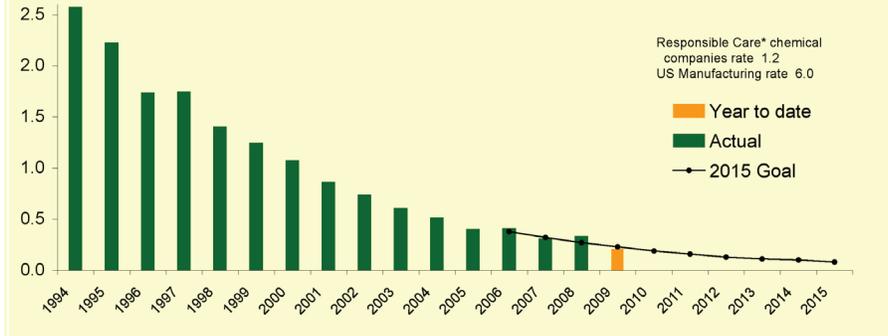
150 of Dow’s men and women came together during the **Hoyt Park Renovation Project** that took place in 2009. “What began as an effort to give Saginaw youth a place to play ball has evolved into a major effort to restore and preserve one of Saginaw’s treasures,” said Saginaw City Councilman Paul Virciglio. “This project will breathe new life into the Celebration Square area and give our residents a park to enjoy for many years to come.” Hoyt Park was developed in the late 1800s

on a parcel of land donated by New York lumber baron Jesse Hoyt. Over the course of 100 years, hundreds of thousands of people have enjoyed the park’s ample space and beauty. But in recent years, the park had fallen into disrepair.

### Local Protection of Human Health and the Environment

Most of the graphics in this section for Local Protection of Human Health and the Environment continue to reflect the results of Dow operations as defined prior to April 1. The Rohm and Haas organization will be integrated into future reporting. Where available, performance information for the newly acquired assets and people are provided at the end of the written description. For Process Safety Incidents, where a new industry definition for the metric has been initiated, the results of both the Dow and the Rohm and Haas operations are combined.

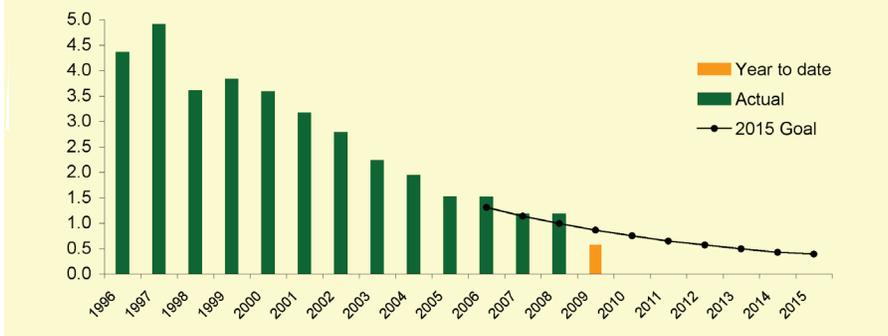
### Injury and Illness Rate



At the end of the second quarter 2009, the Injury and Illness rate was .21 per 200,000 hours of work. This represents a 36 percent improvement compared to our performance for all of 2008. The rate of .21 is 9 percent better than where we strive to be for all of 2009. The 2015 Goal of .08 per 200,000 hours is a 75 percent improvement from 2005.

The Injury and Illness performance of the Rohm and Haas organization through the second quarter was .58 per 200,000 hours worked.

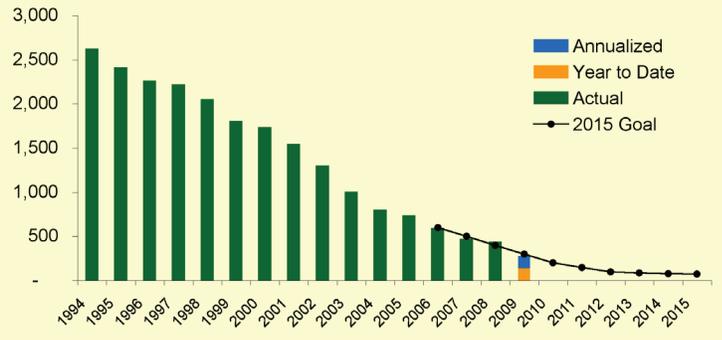
### Injury and Illness Severity Rate



At the end of the second quarter 2009, the Injury and Illness Severity rate was .58 per 200,000 hours of work. This is a 52 percent improvement compared to our performance for all of 2008. The rate of .58 is 33 percent better than where we strive to be for all of 2009. The 2015 Goal of .39 per 200,000 hours is a 75 percent improvement from 2005.

The Injury and Illness Severity rate of the Rohm and Haas organization through the second quarter was 2.65 per 200,000 hours worked.

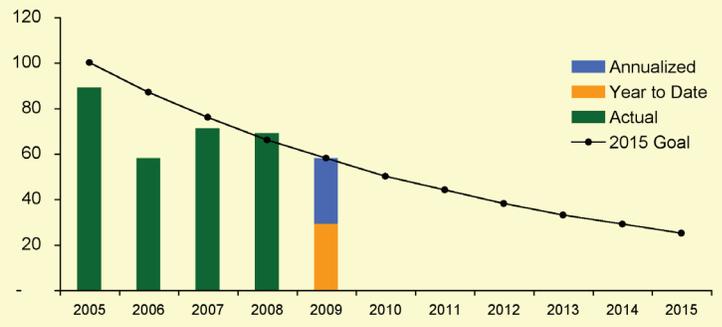
## Loss of Primary Containment Incidents



Through the end of the second quarter 2009, 139 Loss of Primary Containment incidents have occurred. When annualized, our performance is 7% better than where we strive to be for all of 2009. This represents a rate that is 35 percent lower than our rate in the prior year. The 2015 Goal of 75 or fewer incidents is a 90 percent reduction from 2005.

There were 92 Loss of Primary Containment incidents for the Rohm and Haas organization through the second quarter of 2009.

## Process Safety Incidents

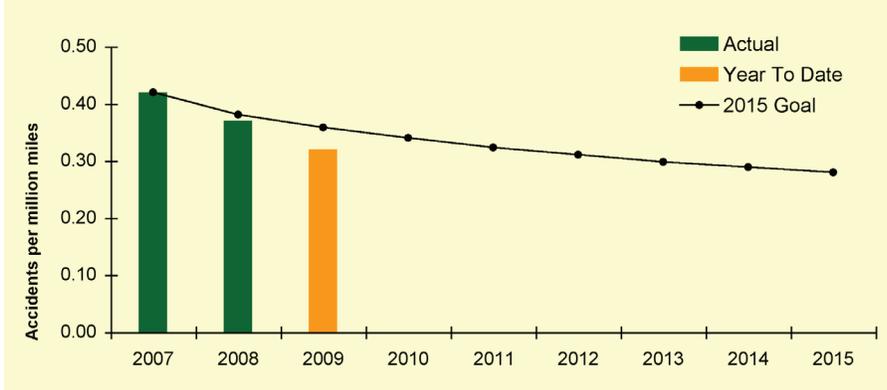


The above graph includes both Dow and Rohm and Haas operations.

Beginning with this report, our Process Safety incidents are classified in terms of the new Center for Chemical Processing Safety and American Chemistry Council Process Safety Incident (PSI) definitions. The new process safety metric is a better indicator of an acute process safety hazard in that it has a better alignment of threshold release amounts of chemicals released to the inherent hazard or likelihood that the incident could cause personal injury.

Through the end of the second quarter we have experienced 29 Process Safety incidents. This represents an improvement of 15 percent compared to our 2008 result. When annualized, this matches our goal of 58 for all of 2009. Most of our incidents are Loss of Primary Containment (LOPC) events that Dow has reduced over the years with our strong LOPC reduction emphasis, Procedure Use and Mechanical Integrity policies. Targeted improvement efforts in these areas are being implemented in facilities with Process Safety and LOPC Incidents.

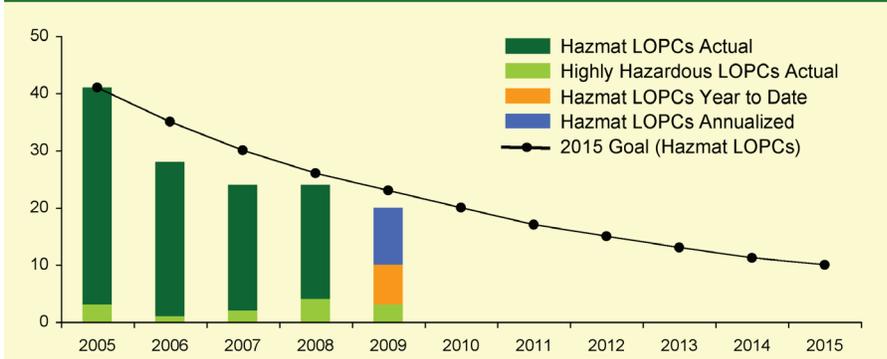
## Severe Motor Vehicle Accident Rate



At the end of the second quarter 2009, the Severe MVA incident rate was .32 accidents per million miles driven. We are tracking better than our 2009 Goal of .36 or less. Our 2015 Goal is to reduce the Severe MVA rate to no more than .28 accidents per million miles driven. This target represents a 33 percent improvement in our performance over the 2007-2015 timeframe.

The Rohm and Haas organization was not tracking Severe Motor Vehicle Accident performance during the first half of 2009.

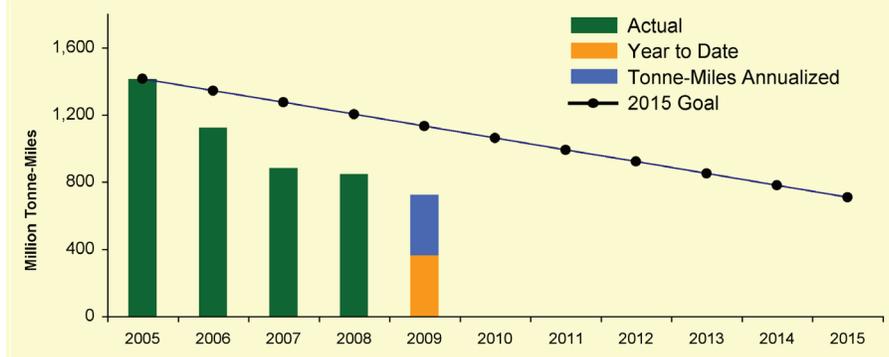
## Hazmat Transportation LOPC Count



Through the first two quarters of 2009, Dow experienced 10 Hazmat Transportation Loss of Primary Containment events. The annualized total of 20 is 13 percent lower than the 2009 target of 23 incidents. There have been 3 Highly Hazardous LOPC events in 2009. Our 2015 Goal is to reduce all Hazmat Transportation incidents to 10 or less per year.

The company is currently analyzing transportation information from the acquired assets of the Rohm and Haas organization and will report the results for transportation goals on a combined basis in the future.

## Highly Hazardous Material Tonne-Miles



Dow believes it is part of our corporate responsibility to reduce the volumes of Highly Hazardous Materials that need to be transported. As such, we have set a 2015 Goal to reduce the number of tonne-miles (a measure of how much we're shipping and how far) by 50 percent from our levels in 2005, which was 1,410 million tonne-miles. We will accomplish this by looking at ways to redesign our supply chain to reduce or eliminate many shipments or the distances they must travel. (A tonne-mile is one metric ton of freight moved 1 mile or 1.6 km.)

By reducing the number of tonne-miles of these materials, we will reduce the chance of in-transit incidents that could impact communities and areas through which our products travel. It is important to recognize that supply chain redesign is a long-term strategic business effort that may not show annual change. Strong progress toward this goal has been made over the last four years.

Through the first two quarters of 2009, there were 360 million tonne-miles of Highly Hazardous Materials shipped via road and rail. The annualized total of 721 is 36 percent lower than the 2009 target of 1,130 million tonne-miles.

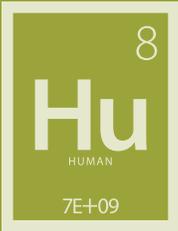
The company is currently analyzing transportation information from the Rohm and Haas organization and will report the results for transportation goals on a combined basis in the future.

## Addressing Climate Change Energy Efficiency and Conservation

### Congressional Testimony

Rich Wells, vice president, Energy, offered expert testimony to the U.S. House of Representatives' Subcommittee on Energy and Environment in April, May and June regarding complementary policies for climate change legislation. Wells also appeared before Senator Barbara Boxer's Environment and Public Works Committee for a Senate briefing as part of a U.S. Climate Action Partnership contingent on climate change policy.

In his House testimonies, Wells recommended that Congress include provisions in its climate change draft bill that would maintain competitiveness among U.S. manufacturers, protect energy feedstocks and minimize fuel switching to natural gas. In June, the House passed the American Clean Energy and Security Act, which contains many of the provisions supported by Dow. The bill now is before the U.S. Senate for deliberation.



### Dow a Founding Member of Global Carbon Capture Storage Institute (GCCSI)

Dow has joined a global cooperative to develop and commercialize carbon capture storage technologies, further signaling Dow's leadership and commitment to drive solutions that address global climate change. In May, Dow became one of the Founding Members of the Global Carbon Capture Storage Institute (GCCSI), an initiative launched by Australian Prime Minister Kevin Rudd. The Institute has already received support from 15 Governments and more than 40 major companies. The Australian Government has committed up to \$100 million annually to the Institute, which has been formed to accelerate the development and deployment of technologies to reduce global carbon dioxide (CO<sub>2</sub>) emissions.

### Bonn Climate Talks, Attended by Dow

In June, Russel Mills, director for Global Energy and Climate Change Policy, attended the Bonn Climate Talks in Germany. Delegates from nearly 200 countries met for the latest round of talks on a new pact to replace the Kyoto Protocol on greenhouse gas reductions, which expires in 2012. The negotiating process continues throughout the year before concluding in Copenhagen, Denmark in December. Bonn is the home of the United Nations Climate Change Secretariat (UNFCCC).

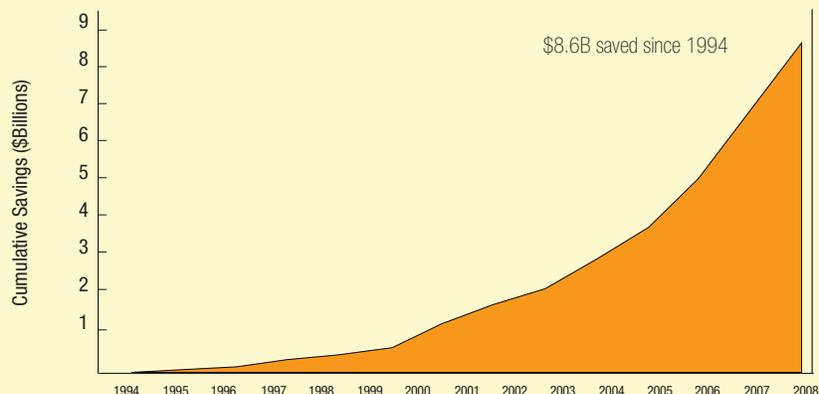
### Update at the Virtual Energy Forum

The Virtual Energy Forum is the world's largest online energy conference. Recently, Rich Wells participated at the conference, giving a presentation titled "Working to Reduce Dow's and the World's Energy & Greenhouse Gas Footprint." During the presentation, Wells touched on Dow's efforts to improve energy efficiency and curb greenhouse gas emissions in its global operations. He also covered areas where Dow products can benefit society by saving energy and reducing CO<sub>2</sub> emissions.

To learn more about Dow's position on energy and climate change, please visit [www.dowenergy.com](http://www.dowenergy.com).

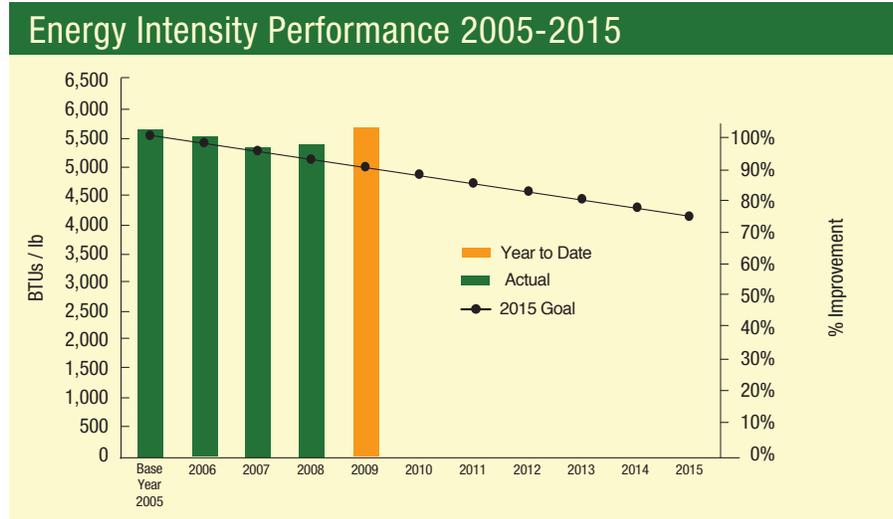
In 1994, Dow set a goal to increase the efficient use of energy by reducing its energy intensity (the amount of energy per pound of product produced) by 20 percent. That goal was exceeded as the energy per pound of product was driven down by 22 percent. That improvement resulted in a cumulative savings of \$4.3 billion over that 10-year goal period. With the increasing cost of energy, savings have continued to accrue rapidly and, through the end of 2008, our savings due to improved energy intensity is now over \$8.6 billion. The energy that has been saved since 1994 is now in excess of 1,600 trillion Btu.

### Energy Efficiency Savings



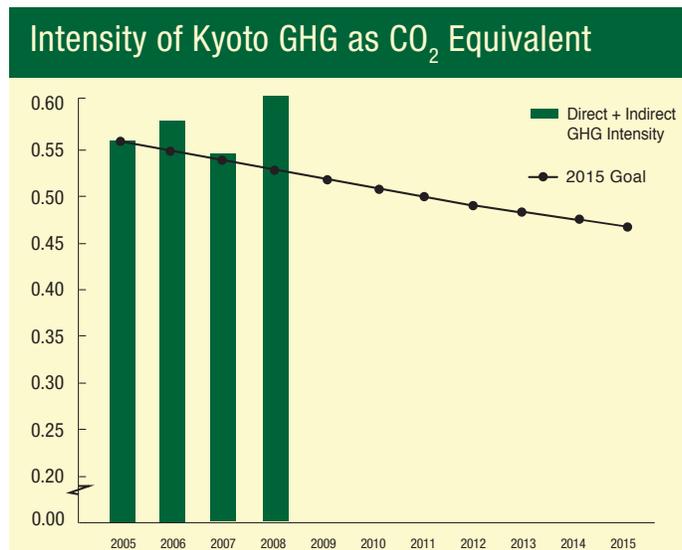
Our corporate target for Energy Intensity for the full year of 2009 is 5,069 Btu/lb or 90 percent of the value in 2005. Compared to the first quarter, our actual performance during the second quarter of 2009 was an improvement of 11 percent. Our year to date performance was at 100.7 percent of 2005, largely due to lower than normal production rates. Beginning in 2009 the Energy Intensity metric is now based on production output which leaves the company fence line rather than all production.

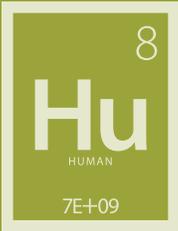
Energy Intensity Performance for Rohm and Haas operations has been integrated into the energy intensity results reported below.



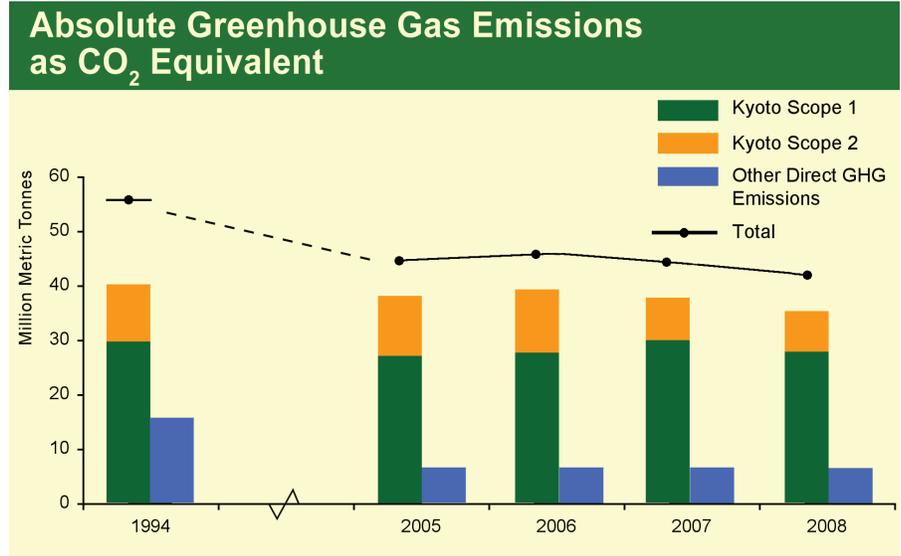
During 2008 Dow's Greenhouse Gas emissions were 0.602 metric tons per metric ton of production. This is about a 7 percent increase in intensity from 2007. The increase is largely due to the impact of operating at low rates in the fourth quarter of 2008. By improving energy efficiency and implementing technology improvements, Dow's goal is to reduce GHG intensity 2.5 percent per year from 2005 to 2015.

Kyoto GHG intensity is the sum of CO<sub>2</sub> equivalent direct and indirect emissions of the "Kyoto" family of greenhouse gases divided by unit of production. Indirect emissions are the consequence of Dow's consumption of energy but are emitted from sources controlled by another company.





In addition to Dow's greenhouse gas intensity reporting on the previous page, this quarter we are including our historic absolute emissions performance. By 2025 we aspire to reduce absolute emissions within the company. The graph below outlines our direct (scope 1) and indirect (scope 2) emissions of Kyoto protocol gases as well as direct emissions of other gases. The other direct emissions are primarily related to foaming agents used in the manufacture of insulating materials. We invite you to watch our emissions performance as our Dow Building Solution's facilities convert to new technology ahead of the Montreal Protocol compliance deadline.



The company is currently analyzing Greenhouse Gas emissions information for the Rohm and Haas organization, and will report the results on a combined basis in the future.

Dow remains committed to continuously improving our performance and to publicly reporting our progress. Please visit [www.dow.com](http://www.dow.com) for the latest Dow sustainability, business and performance news.

