2015 Sustainability Goals

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Eleventh Time on Dow Jones Sustainability World Index

Launched in 1999, the Dow Jones Sustainability Indexes are the first global indexes tracking the financial performance of the leading sustainability-driven companies worldwide. The Index’s annual review is based on a thorough analysis of corporate economic, environmental and social performance, assessing issues such as corporate governance, risk management, branding, climate change mitigation, supply chain standards and labor practices.

These indexes serve as benchmarks for investors who integrate sustainability considerations into their portfolios, and provide an effective engagement platform for companies who want to adopt sustainable best practices. Today, The World Index comprises more than 300 companies that represent the top 10% of the leading sustainability companies out of the biggest 2500 companies in the Dow Jones Global Total Stock Market Index.

In September, The Dow Jones Sustainability World Index announced its 2011 ratings – and The Dow Chemical Company as one of the top performers in the global chemical industry. It’s the eleventh time, and the sixth consecutive year, that Dow has received this recognition.

In addition to improving its 2010 rating, Dow achieved the highest score in the sector for corporate governance. The Company’s overall score was 87 percent — 30 percentage points higher than the average for the industry group. Dow was one of only 10 chemical companies to be recognized in the World Index.

Corporate sustainability leaders can achieve long-term shareholder value by gearing their strategies and management to harness the market’s potential for sustainability products and services, while at the same time reducing and avoiding sustainability costs and risks.

Dow believes that sustainability performance as a business value has a positive effect on the societies and economies of both the developed and developing world.

According to the Dow Jones Sustainability Index website, leading sustainability companies can display high levels of competence in addressing global and industry challenges in a variety of areas:

- Integrating long-term economic, environmental and social aspects in their business strategies while maintaining global competitiveness and brand reputation.
- Meeting shareholders’ demands for sound financial returns, long-term economic growth, open communication and transparent financial accounting.
- Fostering loyalty by investing in customer relationship management and product and service innovation that focuses on technologies and systems, which use financial, natural and social resources in an efficient, effective and economic manner over the long-term.
- Setting the highest standards of corporate governance and stakeholder engagement, including corporate codes of conduct and public reporting.
- Managing human resources to maintain workforce capabilities and employee satisfaction through best-in-class organizational learning and knowledge management practices and remuneration and benefit programs.

For more information on the Dow Jones Sustainability World Index, visit www.sustainability-indexes.com.

“The Dow Jones Sustainability World Index is a highly regarded benchmark of sustainability performance and progressive business strategy. Their recognition is especially significant given the growing need for transparency and collaboration to drive lasting change.”

-Neil Hawkins, Dow Vice President of Sustainability and EH&S
Innovations for Tomorrow
We contribute to the sustainability of society and our planet by developing innovative technologies for current and future markets.

Danforth Center Licenses Technology from Dow AgroSciences to Improve Staple Crop
The Donald Danforth Plant Science Center entered into a non-exclusive sublicense agreement with Dow AgroSciences to access gene expression technology held by Dow AgroSciences. The technology will improve the Danforth Center’s research capability to develop cassava that can better withstand virus diseases and improve the productivity of farmers in Africa. Under the agreement, the Danforth Center will be able to use a promoter that permits disease resistance genes to be introduced and function in the cassava plant thereby blocking viral replication. Danforth Center scientists are working with African partners to improve, evaluate, and eventually deploy cassava varieties that will greatly reduce disease losses and enhance food security.

Investing in Water Technology in Saudi Arabia
Dow plans to invest in a best-in-class manufacturing facility for DOW FILMTEC™ reverse osmosis (RO) elements in the Kingdom of Saudi Arabia. The proposed facility would deliver local supply of cutting-edge technologies for water desalination and water re-use for potable, non-potable and industrial water serving Saudi Arabia, the surrounding Middle East and North Africa region and emerging markets worldwide. Additionally, these water membrane technologies will deliver cost savings through reduced energy usage and superior operational efficiencies for customers in desalination, industrial, municipal, commercial and residential sectors.

Challenging Students to Develop the Next Generation of Near-Zero Houses
As part of the Company’s commitment to bringing innovative solutions to some of the world’s biggest challenges, Dow launched the Dow Solar Design to Zero Competition, an international challenge open to architecture, design and engineering students and professionals. The competition challenges students to develop innovative projects incorporating active and passive solar technologies, among other sustainable construction-related solutions, to design near-zero energy multi-family dwellings.
Read more about this on dow.com. (http://www.businesswire.com/news/dow/20110816005538/en)

Dow Automotive Systems Awarded Grant from United Soybean Board
Within an unprecedented nine-month timeframe, and through a grant from the United Soybean Board, Dow Automotive Systems developed a soy-oil containing acoustical foam formulation with significant renewable content. Developed under the trade name BETAFOAM™ Renue, the new formulation is now in trials with a major North American OEM and commercialization is expected by December 2011. Similar to traditional BETAFOAM acoustical foams, BETAFOAM Renue can be injected into vehicle cavities to reduce air and road noise. The foam replaces baffles traditionally used in these areas and its low density reduces overall vehicle weight.
Read more about this on dow.com. (http://www.businesswire.com/news/dow/20111004005261/en)

New Polypropylene Catalyst Technology
Dow has launched Consista C601 polypropylene catalyst, which is the first sixth-generation Ziegler Natta catalyst. The non-phthalate based catalyst system offers broad applicability and advantaged capability to produce high-performance polymers. The product enables customers to offer polypropylene for goods that are lighter, cleaner, and clearer, using maximum machine speeds. Read more about this on dow.com. (http://www.dow.com/news/business/2011/20111004q.htm)

Partnership to Develop More Sustainable Tire Rubber
Dow and Lehigh Technologies, manufacturer of sustainable, micronized rubber powders, will collaborate to develop more sustainable materials for the tire industry. Under this partnership, the two companies will combine proprietary technologies to create modified rubber particles, a program that will combine Dow’s expertise in polymer chemistry with Lehigh’s strength in sustainable rubber compound development and testing.
Partners for Change

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

**Department of Energy Awards $12.8 million to Dow Solar**

Dow Solar was awarded a $12.8 million grant from the U.S. Department of Energy. This award was part of Energy Secretary Steven Chu’s announcement of $1.45 billion in funding for projects to help shape the next generation of solar energy technologies and ensure that the U.S. remains a leader in this global market. In total, this is a $22.4 million, three-year program focused on dramatically reducing the cost of BIPV solar products.


**WRI Launches Aqueduct Alliance with Dow**

The World Resources Institute recently launched its Aqueduct Alliance to measure, map, and report on global water risk. The alliance is comprised of leading water experts from the private and public sectors, including Dow as a “Sector Sponsor.” The initiative, which also includes NGOs and academia, will provide unprecedented levels of water risk information that will allow governments and businesses to better anticipate and respond to disruptions, expenses, and other detrimental impacts related to the world’s water challenges.


**Dow Joins The Sustainability Consortium**

Through a collaborative process, The Sustainability Consortium drives scientific research and development of standards and tools that help companies better understand and address the environmental, social, and economic implications of their products, which can lead to significant competitive advantage. The Sustainability Consortium has a broad base of support, including P&G, Wal-Mart, Coca Cola and is jointly managed by Arizona State University and the University of Arkansas.

**Sponsorship of International Chemistry Olympiad**

Dow announced that it is the sole sponsor of the International Chemistry Olympiad (IChO). The event is hosted by the American Chemical Society, and provides high school chemistry students the opportunity to compete at the highest levels and establish networks that go beyond cultures and borders. Approximately 70 nations will send a team of four chemistry students and two mentors to the event for 10 days of examinations, lectures, and cultural excursions. Hosted at the University of Maryland, College Park, the competition will cover analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, physical chemistry and spectroscopy.

**Sustainable Livestock Initiative**

Through the Sustainable Livestock Initiative, Dow AgroSciences is working to find a solution to meet the need for more efficient and sustainable livestock production in Brazil. One goal of the Sustainable Livestock Initiative is to help recover 15 million hectares of degraded pasture land by doubling the productivity per hectare. Dow AgroSciences’ range and pasture herbicide technology helps increase livestock yield per hectare by eliminating weeds and promoting more nutritious grazing grasses. This will allow some pasture land to be converted to crop use, thereby increasing whole-farm yield while using the same amount of land. More efficient livestock production can also help reduce deforestation.

**Technology and Funds Donated for Housing Elderly Victims of Japanese Earthquake**

In honor of the reopening of the Dow Water & Process Solutions plant in Soma, Japan, which was damaged in the Great East Japan Earthquake in March 2011, Dow announced it will donate apartment housing for elderly residents to support the rebuilding of Soma City, one of the major regions affected by tragedy. Andrew N. Liveris, Dow's Chairman and Chief Executive Officer, was joined by the Mayor of Soma City, Hidekiyo Tachiya, to announce Dow's donation, which is part of an ongoing commitment to the region announced in the immediate aftermath of the earthquake and subsequent tsunami.

RESNET and Dow Building Solutions Team Up to Improve Home Energy Performance

Dow Building Solutions announced a Memorandum of Understanding (MOU) with Residential Energy Services Network (RESNET) to promote improved home energy performance in the U.S. The two companies will encourage building industry professionals to become trained and certified as RESNET EnergySmart Contractors or Builders. RESNET is an independent, non-profit organization that was founded to help homeowners reduce the cost of their utility bills by making their homes more energy efficient. Dow Building Solutions and RESNET will connect qualified EnergySmart insulation contractors and certified energy auditors at a local level to share information and best practices. Read more about this on dow.com. (http://www.dow.com/news/business/2011/20110818b.htm)

TEDGlobal Debate on Water, Energy and the Future of Life

Dow continued its celebration of the International Year of Chemistry by joining some of the world’s most inspiring thinkers at TEDGlobal, the conference dedicated to “Ideas Worth Spreading.” As a global partner for the International Year of Chemistry, this event was one of a series of activities Dow is undertaking throughout 2011 to showcase the potential of chemistry to address world challenges through education, innovation and international collaboration.

Dow Partners with National Science Teachers Association

The National Science Teachers Association, the largest professional organization in the world promoting excellence and innovation in science teaching and learning, has announced a $3 million grant from Dow to promote professional development of new science teachers. The New Science Teacher Academy will blend consistent online professional development activities with face-to-face experiences. The grant was made by The Dow Chemical Company Foundation to support the participation of 480 early-career science teachers from Louisiana, Michigan, Pennsylvania, and Texas over a three-year period. Read more about this on dow.com. (http://www.dow.com/news/corporate/2011/20110822b.htm)

MOU Signed for Sustainable Environment Management Training Program in Thailand

Dow has recently signed a Memorandum of Understanding on the collaboration of “The Sustainable Environment Management and Pollution Prevention Training Program” under the “Eco Industry: Action by Dow Chemical” campaign. With the support of Dow and partners, including Thai-U.S. Creative Partnership, this program aims to provide free training courses on cleaner production for academics and all personnel relevant to environment, health, and safety including various manufacturers for more than 2,000 people by the end of 2012.

Fellow Addresses Soil Sustainability Opportunities

Through an international professional development program established by the Gender and Diversity Program of the Consultative Group on International Agricultural Research (CGIAR), Dow AgroSciences’ R&D is hosting Dr. Stella Asuming-Brempong under a nine-month fellowship program developed in partnership with CropLife International. As part of the AWARD program (African Women in Agricultural Research and Development), Dr. Asuming-Brempong is working on sustainably building up soil nitrogen and phosphorus in an upland rice-based cropping system through the use of leguminous crop and phosphate solubilising microorganisms. While at Dow AgroSciences, she is focused on development activities that support her research program and will work in three R&D work groups – DNA analysis, DNA sequencing, and Micro Arrays – to gain knowledge of technologies that can impact her area of study.
Smart Solutions for Today

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

Joint Venture to Manufacture Electrolytes for Lithium-Ion Batteries

Dow and Japanese chemical maker Ube Industries, Ltd. have announced an agreement to form a joint venture to manufacture and market formulated electrolytes for lithium-ion batteries in energy storage applications. The 50-50 joint venture, named Advanced Electrolyte Technologies LLC, is expected to be finalized later this year, pending regulatory approval. The joint venture supports the growth strategy of Dow's Energy Materials business by adding formulated electrolytes to an integrated product portfolio that addresses the rapidly expanding energy storage industry.

Read more about this on dow.com. (http://www.businesswire.com/news/dow/20110706005655/en)

Improving Energy Efficiency of Household Refrigerators by up to 10 Percent

Dow Polyurethanes, in cooperation with Cannon SpA, officially launched PASCAL™ Technology, at the Shanghai Summit 2011. PASCAL™, a new polyurethane foam insulation technology that improves energy efficiency of refrigerators and freezers by up to 10%, was first featured in household refrigerators and freezers by Haier and is now commercially available to appliance manufacturers. Read more about this on dow.com. (http://www.businesswire.com/news/dow/20110908006520/en)

Water Blown Solutions for Commercial Appliances

As the next step in its multi-generational innovation plan, Dow has introduced new, advanced solutions that increase the environmental sustainability of final products used for controlled temperature delivery, storage and display of foods and other perishable goods. These new solutions deliver Dow customers increased ease and effectiveness in their manufacturing process, while helping them stay ahead of the most stringent international norms, regulations and market trends for the accelerated global phase-out of hydrochlorofluorocarbons (HCFCs) beyond the Montreal Protocol. The new Dow Water Blown Generation 2 solution is characterized by greatly improved performance, in line with HFC low-level technology; it has Zero ozone depletion potential, low global warming potential, is non-flammable and can be easily implemented with minimal capital investment. Read more about this on dow.com.  (http://www.dow.com/news/business/2011/20111004j.htm)

Providing Drinkable Water in Zanzibar

Dow, in partnership with Mörk Bau construction, the Institute for Applied Research at Karlsruhe University in Germany and Pamoja Zanzibar, a local non-governmental organization, recently launched the "Drinking Water for Zanzibar" project. The initiative aims to provide the citizens of Pemba, one of the two Zanzibar islands situated off the east African coast of Tanzania, with clean water. Few local residents can afford drinking water, since one liter costs approximately 18 euro cents, while the average daily income per capita is below one euro. Dow’s contribution to the project is diverse and ranges from providing financial assistance and required technology, to specialized expertise and training.
Nitrogen Stabilization Takes on a New Form to Optimize Corn Yield Potential

Instinct® nitrogen stabilizer joins N-Serve® nitrogen stabilizer in the Dow AgroSciences nitrogen management portfolio as the only other nitrogen stabilizer for Urea Ammonium Nitrate (UAN) and manure registered with the U.S. Environmental Protection Agency. Using Instinct can optimize corn yield potential by protecting nitrogen at the plant root zone. Using a nitrogen stabilizer can also contribute to responsible stewardship of the environment by reducing leaching of nitrates into groundwater and loss of nitrogen oxide into the atmosphere as a greenhouse gas.

Statue of Liberty Now Protected from Termites with Award-Winning Technology

The Statue of Liberty, an icon of American history and pride, is now protected from termites by Dow AgroSciences’ SENTRY® Termite Colony Elimination System with new ALWAYS ACTIVE™ technology — the only termite product to be awarded the Presidential Green Chemistry Challenge Award by the U.S. Environmental Protection Agency (EPA). This award is one of the federal government’s top environmental honors and recognizes technical innovation that incorporates environmentally responsible chemistry into its design, manufacture and use.

Joint Venture to Produce New Chlorocarbon

Dow and Occidental Chemical Corporation have announced their intent to form a joint venture to manufacture and market a new chlorocarbon solution that is a building block for advanced refrigerants, initially for use in automobile air conditioning systems. The new chlorocarbon, known as HCC-1230xa, is designed to enable the efficient production of a next generation refrigerant, HFO-1234yf, which has lower global warming and zero ozone depletion potential. This will provide the global market with a high-quality supply of the chlorocarbons necessary to meet the growing demand for next-generation refrigerants with reduced environmental impact.

Dow Expands Production of ENLIGHT™ Polyolefin Encapsulant Films Used in Solar Panels

Dow announced it is adding capacity for its ENLIGHT™ Polyolefin Encapsulant Films. Two new manufacturing plants — one in Map Ta Phut, Thailand, and one in Schkopau, Germany, will be built in 2012. Together, these sites will more than triple the Company’s capacity for making specialty films used in photovoltaic modules, and will significantly expand the Company’s ability to supply encapsulant films worldwide. Dow introduced the technology for ENLIGHT™ Films in August 2010. These innovative polyolefin films have demonstrated that they can help improve the reliability and performance of finished photovoltaic modules, possibly leading to a longer service life. These encapsulant films also allow fast processing speeds, which may help module manufacturers lower their conversion costs. ENLIGHT™ Polyolefin Encapsulant Films also have been listed as “Recognized Components” by Underwriters Laboratories
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.

Sustainability Leadership Recognized by China’s Economic Observer

The Economic Observer, one of the most influential economic-focused Chinese newspapers, recognized Dow as one of “China’s Top Sustainable Enterprises 2011.” This annual award identifies companies with the most outstanding and sustainable track records in business operations, products and solutions development, and corporate social responsibility, designating them as role models for the society. Dow is the only chemical company this year to receive this award alongside 11 other domestic and multinational corporations.

TRANSCAER® National Achievement Award

As a result of the Company’s commitment to safety and security, Dow has earned the 2010 TRANSCAER® National Achievement Award for extraordinary support of the TRANSCAER (Transportation Community Awareness and Emergency Response) principles. The Dow TRANSCAER team garnered the recognition for their commitment to helping communities prepare for and respond to possible hazardous materials transportation incident. The team also received this recognition in 2008 and 2009.

International Coastal Cleanup

For 25 years, Dow has supported the Ocean Conservancy’s International Coastal Cleanup (ICC), which focuses on eliminating pollution in our oceans and waterways. The ICC has become the world’s largest grassroots volunteer effort to clean up marine debris, a pervasive pollution problem. Dow was part of ICC 2011 by sponsoring events through donations and volunteerism in Texas, Brazil, Argentina, Mexico, Colombia, Singapore and Thailand, among other locations. Dow’s Performance Plastics Division, in collaboration with its key customer – the Glad Products Company – provides all of the bags for the cleanup in North America. In addition, Dow Brazil donated 10,000 plastic bags to Ocean Conservancy efforts in Brazil, to be used across the country.

“Advanced” Level Reporting Status with UN Global Compact Achieved

Dow’s corporate citizenship efforts have achieved “Advanced” Level Reporting status by the United Nations Global Compact. The Advanced level aims to create a higher standard for corporate citizenship and sustainability performance and disclosure. Companies have an opportunity to identify themselves as GC Advanced by demonstrating that they have adopted and report on a range of governance and management processes. Dow is one of 76 companies worldwide, just two of which are in the chemical sector, to achieve Advanced reporting status.

Best Chemical Company to Work For in Brazil

For the fifteenth straight year, Dow Brazil earned a place in Brazil’s list of “Best Companies to Work For.” Additionally, Dow was further differentiated as the “Best Chemical Company to Work For.” Only two other companies have been listed all 15 years in the guide published by Brazil’s top career and business magazines, Você S/A and Exame. The “Best Companies to Work For” Guide is published annually. It evaluates the best practices regarding people management, career development and professional recognition.

Stade Site Awarded German Responsible Care Prize

The Dow Stade site’s safety campaign HALT – Halt, Attention, Looking for solutions, Talk about it – has received the German Responsible Care Award from the German Chemical Industry Association. The HALT project is directed at all employees, and systematically helps recognize, question and eliminate unsafe conditions in the workplace.
Goal Updates

Sustainable Chemistry

The percentage of sales from products with Highly Advantaged sustainable chemistry performance increased from 3.4% in 2009 to 4.3% in 2010. The increase was achieved due to a focus by some businesses on products with environmental and social advantages. A significant number of opportunities have been identified towards enabling additional product sales to be included in the Highly Advantaged category. Engagement is ongoing to further integrate these sustainability opportunities into the business strategies.

The Sustainable Chemistry Index (SCI) increased slightly to 21.4 for 2010. The aggregate scores of sales with environmental and social benefits increased from 2009, but this increase was partially offset by a decline in manufacturing efficiency score. This decline occurred due to several non-routine operations. Business unit leaders include a review of their SCI performance as part of business strategy review.

Addressing Climate Change, Energy Efficiency and Conservation

Energy Efficiency Savings

At the end of Q3 2011, Dow’s energy efficiency efforts have resulted in a savings of $9.8 billion since 1994. This is equal to all the residential electricity needs of California for more than 20 months.
By 2025, Dow aspires to reduce absolute emissions within the Company. The chart shown demonstrates that it has begun to do just that – total absolute emissions have been reduced through the period from 2007 to 2010. Dow’s absolute GHG emissions in 2010 were 38.2 million metric tons. This is 5% less than the GHG emissions in 2009.

The greenhouse gas information shown includes the emissions of the operations acquired from the Rohm and Haas Company in 2009.

Between 1990 and 2005, the Energy Intensity (Btu/lb) of global operations was improved by 38%. By 2015, Dow has a goal to achieve an additional 25% improvement. The average Energy Intensity of year 2005, adjusted for mergers and acquisitions, is the basis for calculating performance against this target. Dow’s goal for Energy Intensity for the full year of 2011 is 3,522 Btu/lb, or 85% of the value in 2005. Dow’s actual performance through Q3 2011 was 3,987 Btu/lb, which is 96% of the 2005 baseline.

Dow’s greenhouse gas (GHG) emissions intensity during 2010 was 0.658 metric tons per metric ton of production. This is about a 5% increase in intensity from 2005. By improving energy efficiency and implementing technology improvements, Dow’s goal is to reduce GHG intensity 2.5% per year from 2005 to 2015.

Kyoto GHG intensity is the sum of CO₂-equivalent direct and indirect emissions of the Kyoto family of greenhouse gases divided by production. Indirect emissions are the consequence of Dow’s consumption of energy, but are emitted from sources controlled by another company.

Dow Named to Global 500 CDLI and S&P 500 CDLI
Dow has been named to the Global 500 Climate Disclosure Leaders Index (CDLI) and to the S&P 500 CDLI. This is the first year Dow has been included in the Global 500 CDLI. More than 3,000 organizations now participate in the Carbon Disclosure Project. The information submitted includes energy data, discussions on governance, as well as Climate Change risks and opportunities for the Company. The data is made available for use by a wide audience including institutional investors, corporations, policymakers, public sector organizations, government bodies, academics and the public.
Product Safety Leadership

At the end of the third quarter, 346 Product Safety Assessments (PSAs) had been posted at www.dowproductsafety.com. PSAs published to date cover 75% of Company sales. The Company continues its plan to make the 2011 goal of posting more than 100 new PSAs by the end of the year.

PSAs are written for the lay public and cover topics such as basic hazards, exposure potential and risk management measures. They complement other product safety, handling and stewardship documents, which are part of the product responsibility “package.” Dow offers to strengthen relationships with communities and customers. This holistic approach enables Dow customers and the communities in which Dow does business to stay informed about the Company’s products and the plants that produce them. Dow is dedicated to providing the public with accurate information and building trust as it uses technology to develop better products.

Breakthroughs to World Challenges

Nature Helps Point to a New Class of Insecticide

Nature quietly takes care of business. Think of the way water evaporates, cools, forms into droplets and returns as rain. Another natural cycle is the way a forest fire creates heat that will pop open the seeds of pinecones. While only a fraction of the seeds germinate, a new forest is triggered by the high temperature of the forest fire. A couple of decades later, the black and barren acres support vigorous new growth.

The development of Spinosad, based upon a naturally occurring bacterium, is creating ways to put nature to work protecting crops. Currently the insecticide Spinosad is used to control many chewing insect pests in cotton, trees, fruits, vegetables, turf and ornamentals in applications around the world. This nature-derived product controls pests such as thrips, sawflies, fire ants, many species of Lepidoptera, and leaf miners.

Spinosad is derived through the fermentation of a naturally occurring organism. In 1982, it was discovered accidentally in soil near an abandoned rum distillery on a Caribbean Island by a scientist on vacation. One beach area was essentially free of sand fleas, but the cause was not obvious. Several soil samples were returned to the laboratory to determine the presence of biological activity. The fermentation products from these samples were shown to have insecticidal activity.

Today, Dow AgroSciences sells a family of pest control products using the active ingredient derived from a soil dwelling bacterium found in nature called Saccharopolyspora spinosa. Whether in nurseries, greenhouses, or lawn care applications, these products provide many benefits:

- Effective at low-use rates
- Works consistently and quickly, and is effective for a long period after application
- Works on many types of insects, but has less impact on certain predatory beneficial insects
- Strongest against some of the pests that are traditionally hardest to kill or very prone to resistance
- Requires no special handling or use restrictions
Learning to optimally produce and use this natural pesticide has led to another opportunity – helping address a world health challenge. Dow is partnering with Clarke, a global environmental products and services company that specializes in developing and delivering environmentally responsible disease prevention and habitat management solutions. Dow AgroSciences and Clarke are working together to create the first naturally derived active ingredient for a mosquito larvicide. This technology has the potential to contribute to reducing Malaria, a disease responsible for 250 million cases of fever and approximately one million deaths annually. The majority of cases occur in children under five. Despite mosquito control efforts and the increased availability of treatment, those areas at greatest risk continue to experience the greatest incidents of malaria.

The World Health Organization (WHO) has recently approved Spinosad for use in certain mosquito larvicide products.

Contributing to Community Success

Dow’s Community Relations program goes beyond relationship building to include working directly with our communities to proactively assess, develop and implement individual community success plans. These plans include innovative solutions that meet local needs with the ultimate goal of enhancing quality of life. An example of these solutions is the Corporate Volunteer Managers (CVM) program initiated at Dow’s Michigan Operations. Dow funds the volunteer manager positions through grants to the local Midland, Saginaw and Bay City United Way agencies.

The CVM program was designed to encourage and link employees to volunteer opportunities that align with Dow’s Community Success priorities. Since the CVM program started in 2010, Dow’s Michigan Operations has seen dramatic increases in employee participation and employee tracked hours. The result – positive progress toward Dow’s 2015 Contributing to Community Success Goal. In 2011, 1,231 (tracked) employees volunteered 13,597 (tracked) hours. Michigan Operations is proving that the CVM program is engaging Dow employees and making the community a better place to live.

Positive Role in Making the Community a Better Place to Live

Innovative solutions, such as the CVM program and other exceptional efforts around Dow, have helped catapult Company “favorability” ratings to unprecedented levels. This chart shows the impact of Dow’s efforts over the last four years.

Community Success – Reaching Out

After the acquisition of Rohm and Haas, Dow took on a different look with the addition of hundreds of new sites around the world. As a result, the Contributing to Community Success Goal was redefined. The overall structure of the goal remains the same; however, a new method was designed to ensure full inclusion. In early October, site leaders came together from Dow’s “Philly Hub” (Philadelphia, Spring House, Newark (DE), Pennsauken (NJ) and Bristol (PA)), and became the first hub to launch the newly developed Community Success Toolkit. The toolkit was developed to help define appropriate actions to implement the Community Success Goal locally.

The synergies became clear – although there may be common similarities between Delaware Valley sites, each community still has its own issues. The Hub will be conducting a formal survey of the greater community to decipher what issues are important to the region as a whole (and what do residents feel Dow’s rightful role is) and what issues need to be addressed in the smaller communities. Results of the survey will feed into the development of community success plans for the greater region and at each site. The roadmap has been set and the Delaware Valley is well on its way towards improving Community Success.
Local Protection of Human Health and the Environment

During the first 10-year goal period, the Company reduced the rate of injury and illnesses per 200,000 hours of work time by more than 80%. During the 2005 to 2015 timeframe, the goal is to achieve a similar reduction in the rate at which people are hurt. Dow workers are now 17 times less likely to experience injury or illness than the U.S. manufacturing rate reported for 2008.

At the end of Q3 2011, the Injury and Illness rate was 0.32 per 200,000 hours of work. This is the same as our performance for all of 2010. The 2015 Goal of 0.12 per 200,000 hours is a 75% improvement from 2005.

At the end of Q3 2011, the Injury and Illness Severity rate was 1.17 per 200,000 hours of work. This is 15% better than our performance for all of 2010. The 2015 Goal of 0.67 per 200,000 hours is a 70% improvement from 2005.

At the end of Q3 2011, 196 Loss of Primary Containment incidents have occurred. This translates into an annual rate that is 27% better than all of 2010. A total of 261 for the year would represent a performance that would be 22% better than our target for 2011. The 2015 Goal of 130 or fewer incidents is a 90% reduction from 2005.
At the end of Q3 2011, Dow had experienced 15 Hazmat Transportation Loss of Primary Containment events. At this rate we will improve our performance by 37% compared to the previous year and by 21% compared to our target for 2011. Our 2015 Goal to reduce all Hazmat Transportation incidents to 14 or less is a 75% improvement from 2005.

Q3 2011 marked another excellent quarter in Process Safety Performance. We have experienced 12 events year-to-date, and when annualized, this implies a 2011 total of 16 incidents. This would beat our target for the year by more than 50%, and represents an accomplishment that is better than our target for 2015, the end of our 10-year goal period.

At the end of Q3 2011, the Severe MVA incident rate was 0.20 accidents per million miles driven. This represents a rate that is 9% better than the rate in the prior year. The rate of 0.20 is 38% better than our goal for 2011, and is better than our target for 2015, the end of our ten year goal period. Severe MVA was not measured in the heritage Rohm and Haas Company. The 2007-2009 values represent the heritage Dow population.

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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% from our levels in 2005, which was 1,400 million tonne-miles. We will accomplish this by redesign of our supply chain to reduce or eliminate 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.

The rate of shipment of Highly Hazardous Materials has increased in 2011, but is projected to remain below our 2015 Goal line for the year. On an annualized basis we would anticipate 925 million tonne-miles of Highly Hazardous Materials shipped via road and rail this year, which would be 7% below our goal line.

**Start-Up of Chlor-Alkali Facility at California Site**

Dow and K2 Pure Solutions have launched the successful start-up of a new chlor-alkali plant at Dow’s Pittsburg, California site. The new state-of-the-art manufacturing facility will produce bleach to serve municipal water treatment facilities that provide clean water to Northern California communities. In addition, the new plant will supply Dow’s Pittsburg operations with chlorine for the manufacture of crop protection products and other materials that contribute to more efficient food production. This new facility also contributes to Dow’s Hazardous Material Tonne-Miles risk reduction goal.

Dow remains committed to continuously improving its performance and publicly reporting its progress. Please visit www.dow.com for the latest Dow sustainability, business and performance news, and to share your comments or submit questions.

Science for a Sustainable World

We only have one planet, with limited resources. So everything we do and how we do it matters.

Dow is committed to minimizing our own footprint and to delivering solutions that help our customers and the rest of society do the same. The world needs solutions for big challenges like energy, climate change, water, food, housing and health. And Dow has some of the world’s best scientists and engineers dedicated to solving world challenges through innovation. When we do that, it’s not just good for the planet, it’s good for business.