



STYRON™

Sustainability and Corporate
Social Responsibility Report

JUNE 2011

Sustainability Commitment Statement

Styron is a preferred partner for sustainable solutions in Plastics, Latex and Rubber.

We listen to our customers' sustainability needs in order to help them to continuously improve the sustainability performance and the success of their value chain. We put our entrepreneurial nature, strong heritage, laser focus and flexibility to work to provide the markets we serve with tangible and sustainable next-generation solutions.

The people of Styron are committed to improving Styron's economic, environmental and social performance through:

- Innovating and developing new and improved products and processes that enhance our customers' sustainability;
- Promoting the responsible use of our materials through product stewardship;
- Operating responsibly with respect to the environment, health and safety, and efficient use of resources;
- Adhering to the principles of Responsible Care®;
- Being a good neighbor in the communities where we operate;
- Monitoring, measuring, reporting and improving Styron's performance continuously.

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CEO Message



As Styron completes its first year of operation as a newly formed company, I want to thank each of Styron's customers, employees and suppliers for a year of dedicated work and remarkable accomplishments.

We are proud to have achieved an excellent safety and environmental record in our first year. Safety and environmental performance will continue to be a major priority as we go forward. As we celebrate our first anniversary, I am especially pleased to announce the release of Styron's first Sustainability and Corporate Social Responsibility (CSR) Report.

This Report recognizes the dedicated efforts of Styron's world-class people and how our operations and products can contribute to sustainability – for Styron, our customers, our employees, the communities in which we operate and society as a whole. Sustainability will be an integral part of Styron's business strategy in the future.

As expressed in [Styron's Sustainability Commitment](#), Styron is committed to:

- Innovating and developing new and improved products and processes;
- Promoting the responsible use of our materials;
- Operating responsibly;
- Adhering to the principles of Responsible Care®;
- Being a good neighbor; and
- Monitoring, measuring, reporting and improving performance.

Operating responsibly, as well as delivering outstanding environmental health and safety performance, are critical business priorities at Styron, so we have designed and implemented two new recognition programs to encourage and motivate safe and responsible behavior among all employees globally. These awards can be very motivational and a real point of pride among the teams and groups that receive them.

In addition, we have initiated a comprehensive Ethics and Compliance program and launched a number of innovative new products that help our customers achieve their sustainability goals.

Looking to the future, as the number of years we have been in business increases, Styron's CSR reports will become more data-based. I look forward to sharing further successes and contributions to sustainability in the years to come.

Let me close by simply saying 'Thank You' to all who have helped to build Styron as an independent company and who have helped Styron to embark so effectively on our sustainability journey.

Chris Pappas
President and CEO, Styron

Sustainability and Styron

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

United Nations' [Brundtland Commission](#), 1987

Styron* agrees with a consensus of environmental experts that sustainability includes three key elements – economic, environmental and social.

Styron's commitment to each element of sustainability, and Styron's successes as described in this Report, are enabled by a focus on Styron's Core Values, which reflect an underlying quality-driven mindset and emphasis on realizing its vision:

Our vision is to be a world leader in materials that our customers need today and tomorrow. We will deliver extraordinary value for our stakeholders. We will become a remarkable company to work for, buy from and invest in.

Core Values

Responsible Care®

As a Responsible Care® company, the health and safety of our employees and the protection of our communities are our highest priorities. We strive for meeting or exceeding the highest standards of environmental and safety performance.

Respect and Integrity

We treat each other, our customers and our stakeholders with respect and dignity.

We conduct all business activities with the highest ethical standards and are fully committed to comply with the law everywhere we operate.

Accountability and Value Creation

We believe that speed and agility combine with good decision-making to create value. We feel ownership and take accountability for our company's success.

Innovation

We believe that innovation through our technology and the creativity of our people powers our success and the success of our customers.

Commitment to Customers

By collaborating with our customers, we deliver value through our technology, innovation and solutions.



Environmental Health and Safety Policy*

At Styron, we conduct our business of providing innovative solutions and superior materials with integrity and care for our colleagues, communities, customers and the environment. Health, safety and protection of the environment are Core Values which are a part of everything we do.

We are committed to the continuous and measurable improvement of our environmental, health and safety performance. We are committed to minimizing any potentially harmful impacts of our products throughout all stages of their life cycles by promoting the responsible use of our materials throughout the value chain.

Our goals include eliminating workplace injuries and illnesses, preventing adverse environmental impacts, reducing and preventing waste and emissions and promoting resource conservation at every stage of the life cycle of our products.

We are fully committed to compliance with Environmental Health and Safety (EH&S) laws and regulations and with internal EH&S policies and standards that support our Core Values.

In further support of our commitment, we have implemented the following Responsible Care® principles:

- To lead our companies in ethical ways that increasingly benefit society, the economy and the environment.
- To design and develop products that can be manufactured, transported, used and disposed of or recycled safely.

- To work with customers, carriers, suppliers, distributors and contractors to foster the safe and secure use, transport and disposal of chemicals, and provide hazard and risk information that can be accessed and applied in their operations and products.
- To design and operate our facilities in a safe, secure and environmentally sound manner.
- To instill a culture throughout all levels of our organization to continually identify, reduce and manage process safety risks.
- To promote pollution prevention, minimization of waste and conservation of energy and other critical resources at every stage of the life cycle of our products.
- To cooperate with governments at all levels and organizations in the development of effective and efficient safety, health, environmental and security laws, regulations and standards.
- To support education and research on the health, safety, environmental effects and security of our products and processes.
- To communicate product, service and process risks to our stakeholders and listen to and consider their perspectives.
- To make continual progress towards our goal of no accidents, injuries or harm to human health and the environment from our products and operations and openly report our health, safety, environmental and security performance.
- To seek continual improvement in our integrated Responsible Care® Management System to address environmental, health, safety and security performance.
- To promote Responsible Care® by encouraging and assisting others to adhere to these Guiding Principles.

Styron will devote adequate resources, training, standards and procedures to satisfy this policy. Every employee and contractor is responsible for compliance with these principles and this policy. We will audit and continually improve our performance, and the Executive Leadership Team and the EH&S Committee of the Board of Directors will monitor our commitments and progress.

Responsible Care®

Styron is proud to participate in the chemical industry's Responsible Care® initiative. In November 2010, Styron officially endorsed Responsible Care® and pledged to operate the company according to its Guiding Principles globally.

Responsible Care® is a voluntary initiative of the global chemical industry to safely handle our products from inception in the research laboratory, through manufacture and distribution, to ultimate reuse, recycle and disposal, and to involve the public in our decision-making processes. Developed in Canada in 1987, Responsible Care® has quickly spread to 53 countries. While Responsible Care® goes above and beyond what is legally required in most countries, we hold ourselves accountable by making Responsible Care® a "condition of membership" in industry associations.

Styron uses the Responsible Care® [management system framework](#) and will report the results of its first formal review of its efforts to implement Responsible Care®, which is expected to occur in 2013.



Ethics and Compliance

Ethics and Compliance Policy

It is the policy of Styron to be lawful, high-principled and socially responsible in all of its business practices. We expect our employees to learn and comply with all corporate policies and laws applicable to their job responsibilities and outlined in the Styron Code of Business Conduct and supporting policies.

Scope

All Styron employees, officers and directors must share Styron's commitment to ethical business conduct. The Styron Ethics and Compliance program and standards apply to all employees in all regions.

Administration

Styron's activities related to Ethics and Compliance are overseen by the Deputy General Counsel and Chief Compliance Officer, who also chairs Styron's Ethics and Compliance Committee. This Committee, which reports to the Audit Committee of Styron's Board of Directors and is responsible for the oversight and management of the Ethics and Compliance program, is comprised of nine senior Styron executives representing diverse functions and geographies.¹

In that role, the Ethics and Compliance Committee reviews, and when necessary modifies or updates, the Code of Business Conduct and its supporting policies on an ongoing basis. The Committee also oversees the responses to any ethics or compliance reports or questions, conducts or monitors any investigatory activity, and assists in communicating the ethics and compliance program to Styron's employees and the public.

Reporting Approach

Most Styron employees embrace the company's high ethical standards. Occasionally, however, individuals may act in a way that reflects poorly on Styron and its people.

Styron encourages employees who know or suspect that a legal or ethical violation has occurred or is taking place to speak up and report the situation.

Styron has zero tolerance for any reprisal or retaliation against a person who reports a known or suspected violation of any such obligation in good faith. Styron will take disciplinary action, up to and including termination of employment, against any employee involved in threatened, attempted or actual retaliation.

Employee Training and Communication

Styron provides periodic updates on its compliance efforts using various internal communications tools, such as news stories and Intranet content. In addition, an employee presentation has been developed for leaders to use in their work groups to outline the Styron Ethics and Compliance program.

Styron is also currently in the process of developing a web-based Ethics and Compliance training module, and expects to launch this resource mid-year in 2011.

Code of Business Conduct

Styron's Code of Business Conduct is the foundation for the company's Ethics and Compliance program. The Code provides a framework to make the right choices. It directs us how to be lawful, highly principled and socially responsible in all of our business practices in every region where we operate. Translations will be made available as they are completed.

The Code summarizes many of the ethical principles and policies Styron has adopted to deal with issues such as environmental health and safety, competition laws, bribery, and equal employment opportunity.





Quality

Quality Policy

Quality performance is a commitment to excellence by each Styron employee. It is achieved by teamwork and a process of continuous improvement. Styron is dedicated to being the leader in providing quality products and services that meet or exceed the expectations of our customers.

Quality Management Approach

Styron has adopted a philosophy that focuses on delivering superior quality by first managing the manufacturing process to produce products to specific targets; this, in turn, assures that product specifications are met or exceeded. To accomplish this, Styron utilizes a modified Total Quality Management approach in order to assure and improve the quality of the company's products and services, thereby increasing customer satisfaction.

Styron's quality mind-set is based on the idea that all parts of the company have a responsibility for and contribute to the quality of Styron's products and services. In fact, the strategies and performance metrics for Styron's businesses include quality goals, and cross-functional teams involving people with many different responsibilities (including business, research and development, purchasing, supply chain, manufacturing, etc.) are responsible for accomplishing these goals.

By establishing a Quality Management System, including the use of Six Sigma™ tools, Styron leverages the engagement of executive leadership, line management and the many functions represented in the workforce, as well as suppliers and customers, in order to meet and exceed customer expectations.

Quality in Action

Styron uses business performance standards in implementing its quality strategy so that its products and services consistently meet established specifications and contractual obligations, as well as comply with regulations.

These standards emphasize:

- Delivery to customers within the agreed time (On Time);
- Delivery to customers with the appropriate equipment, clean and serviceable conditions and accompanied by all expected, accurate paperwork (In Full);
- Delivering the right product meeting all agreed product quality and performance requirements (In Quality);

- Performing a proper analysis on all customer feedback to define corrective and preventive measures to minimize reoccurrence; and
- Measuring performance against defined criteria and goals.

Styron's management system integrates the key elements of several external standards into its best practices, including [ISO-9001](#) (standard quality management system), [ISO/TS-16949](#) (automotive production), [ISO-14001](#) (environmental health and safety) and [CGMP](#) (Current Good Manufacturing Practices) for direct and indirect food-contact and medical products.

Overall Goal

Styron will maintain a laser-like focus on meeting its customers' needs every day and will reliably provide quality products and services in order to earn and maintain their business.

Suppliers

As a Responsible Care® company, Styron recognizes the importance of selecting suppliers based upon their commitment to sustainability, Responsible Care®, codes of conduct and regulatory compliance.

Styron continually updates its vendor selection criteria for raw materials and logistics suppliers to include these components. Styron is committed to purchasing from Responsible Care® companies whenever possible.

Product Life Cycle and Product Safety

Introduction

In addition to offering world class products that provide many performance benefits in the marketplace, Styron is committed to:

- Understanding the impacts of our products throughout their life cycle by helping to develop Eco-Profiles, also known as Life Cycle Analyses (LCAs);
- Providing straightforward communication about our products and operations; and
- Continuously improving our health, safety and environmental performance.

Eco-Profiles and Life Cycle Analyses

In order to determine the potential environmental impacts associated with various plastics materials, it is important to collect and analyze data from multiple sources so that an accurate eco-profile of each material can be created. Styron contributed to the creation of eco-profiles for plastic products both in Europe and North America to help the downstream industries make well-informed product decisions.

Beginning in 1990, the Association of Plastics Manufacturers in Europe (now PlasticsEurope) pioneered the first [eco-profiles](#) for virtually all types of plastics materials, and the Styron businesses² played a key role in collecting and contributing cradle-to-gate data for its polystyrene and polycarbonate resins. Using Life Cycle Analysis, the PlasticsEurope team gathered data from various companies and consolidated that data into average Life Cycle Inventories. Energy and raw materials used, water consumption, emissions and waste are just some of the variables analyzed to create each eco-profile. These eco-profiles are currently being refreshed, and, with assistance from Styron, an updated [eco-profile for polycarbonate](#) resins was released in 2011.

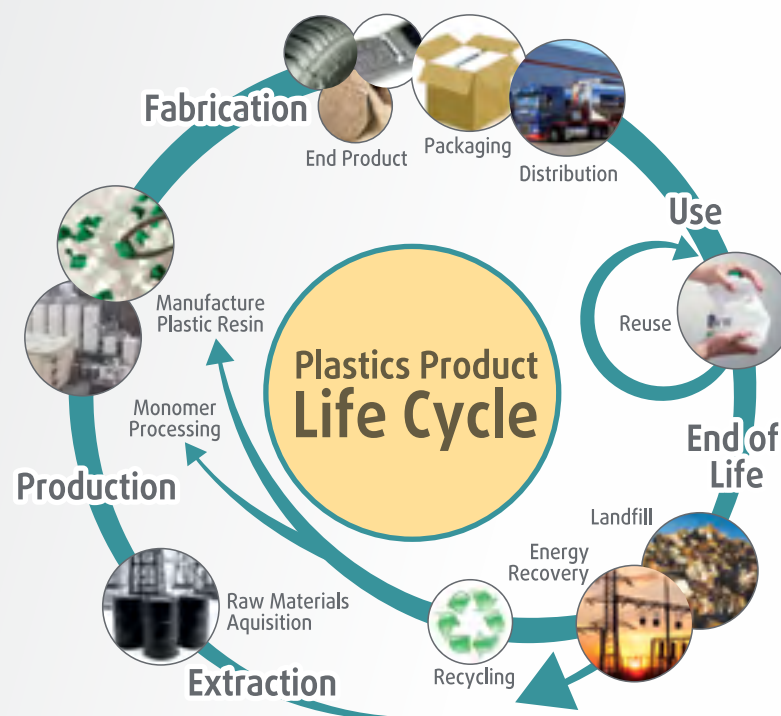
In 1999, Styron supported the creation of eco-profiles of the production of latex polymer dispersions in association with the European Polymer Dispersion and Latex Association (a sector group of the European Chemical Industry Council, or Cefic). This work included eco-profile information on the main precursors used in the production of latex dispersions. An updated eco-profile is expected to be released in 2012.

More recently, Styron was instrumental in the establishment of cradle-to-gate life cycle inventories of plastic resins and polyurethane precursors for [The Plastics Division of the American Chemistry Council](#). Styron's past and present contributions to eco-profiles demonstrate the company's rich heritage of environmental and product stewardship and its commitment to advancing the sustainability of its products and processes.

LCAs for individual resins and full LCAs for select products may be found on the American Chemistry Council's web site. To view eco-profiles on various plastics products from the European database, visit www.plasticseurope.org.

Product Safety Assessment

As part of its commitment to straightforward and clear communication about its products, Styron supports the efforts of the International Council of Chemical Associations to make chemical safety summaries for [BPA](#), [Butadiene](#), [Ethylbenzene](#), and [Styrene](#) readily available to the public in consumer-friendly language. In addition, [Safety Data Sheets](#) for Styron's products are available on www.styron.com or from Styron's Customer Information Group.





Product Safety Process

Through its comprehensive approach, Styron evaluates the safety of its products and strives to manage them in a safe and sustainable manner so that any potential adverse impacts on society or our environment are minimized.

The foundation of Styron's product safety activities is identifying and understanding the potential hazards, exposures and risks that may be associated with the products Styron purchases, produces and brings to market.

This understanding is based on:

- Gathering existing scientific information about the potential hazards of our products;
- Determining likely levels of exposure by considering factors such as product composition, manufacturing practices, applications, etc.;
- Evaluating risks (Risk = Hazard x Exposure) to human health and the environment;
- Taking steps to manage and/or reduce risks appropriately;
- Revisiting the product safety process periodically to review best practices and to identify any information gaps that may exist; and
- Developing new information should gaps be identified.



Product Safety Program

Once this foundation is established, Styron integrates the information and product safety practices into a wide range of activities as elements of Styron's product safety program.

These elements include:

- Community outreach and awareness;
- Distribution and logistics;
- EH&S training;
- Emergency preparedness and response;
- Employee health and safety;
- Engineering and design for environment, health and safety;
- Industrial hygiene;
- Occupational safety;
- Operating design and management;
- Product stewardship;
- Security; and
- Third party services.

Results and Summary

Styron is committed to delivering superior health, safety and environmental performance; Styron's product safety program is dedicated to making sure that its products are made, stored, transported, used, disposed of and recycled sustainably and in a way that demonstrates world class practices of safety, environmental stewardship and regard for people. This commitment is embodied in Styron's EH&S Policy (pages 5-6).

In addition, Styron encourages its suppliers and customers to join its efforts to collaborate, innovate and elevate industrial practices and expectations so that chemical products are managed safely throughout their life cycle.

Since Styron was formed in June 2010, Styron has been gathering product safety performance data; these results are reported in the Figures provided in the Performance Section of this Report (pages 30-34).

As more time passes, Styron will be able to demonstrate longer term performance in future Corporate Social Responsibility Reports.

PULSE™ engineering resins, a completely recyclable material, helped the automotive blow molded seatback achieve a weight reduction of approximately 25 percent compared to conventional steel constructions. [Read more on page 22.](#)



Regulatory Compliance

Consistent with Styron's EH&S Policy, Styron supports the development of laws, regulations, procedures and operating practices that are science-based and safeguard workers, plant communities, customers and the environment.

To facilitate this commitment, Styron has implemented a comprehensive approach for monitoring and complying with relevant industry standards and government regulations globally.

This approach includes the use of internal expertise, third party consultants, regulatory databases and industry associations to:

- Develop and adhere to internal standards that ensure Styron's products can be produced and sold globally while also complying with local requirements;
- Monitor and document compliance to existing regulations and industry standards;
- Implement compliance approaches for newly-enacted regulations; and
- Identify emerging regulations and industry trends.

As stated in Styron's EH&S Policy, "Health, safety and protection of the environment are Core Values which are a part of everything we do." The company's focus on this Core Value, which includes regulatory compliance, provides assurance that its products can be used safely in intended applications across the world, including sensitive end uses such as food-contact and medical applications.

During the past year, Styron has dedicated significant resources to European regulations that came into force late in 2010, REACH.

REACH

REACH (Registration, Evaluation and Authorization of Chemicals) is the single regulatory system for chemicals management in the European Union (EU). REACH requires that EU manufacturers and importers of substances to the EU (starting with quantities of one metric ton per year) disclose information on the properties of their substances, including the risk to humans and the environment associated with use. Information on appropriate risk reduction measures must also be provided.

Styron is pleased to report that, as of November 2010, it has successfully met the REACH requirement for registration of high volume and high hazard substances it manufactures in or imports into Europe. In addition, Styron remains engaged in addressing the registration requirements for lower volume substances in the coming years (2013 and 2018).

As a result, Styron's polymers and monomers can be produced, imported and sold in the EU with full REACH compliance, and our customers won't experience any business disruption because of a delay in REACH compliance.

Styron fully supports the objectives of REACH and the responsibility the legislation places on all members of the value chain to manage the safe use of chemicals. We believe it represents a significant opportunity for chemical manufacturers, their suppliers and customers to work together to protect the environment and preserve the future of the chemicals industry in Europe. As other nations consider similar regulations devoted to chemicals management, Styron will support these efforts and implement appropriate compliance solutions.

Next Steps

In line with REACH and other regulations, Styron will now focus on updating the relevant European Safety Data Sheets with REACH registration numbers and – where required – with annexes on use and exposure scenarios.

With further implementation milestones through 2018 and a review of the REACH regulation in 2012, Styron will remain actively involved in several work groups of Cefic and the national trade associations.

This is the first step in REACH implementation, and preparations to meet the next registration deadline of 2013 are already underway.

For further information:

- [REACH and the chemicals industry in Europe](#)
- [REACH "Candidate List of Substances of Very High Concern"](#)
- [REACH "Classification labeling and packaging of substances and mixtures"](#)
- REACH and individual Styron products – [Styron Customer Information](#)

Sustainability in Action

As a preferred partner for sustainable solutions in Plastics, Latex and Rubber products, Styron listens to its customers' sustainability needs and strives to deliver innovative products and technologies that help Styron and its customers improve their economic, environmental and social performance.

Product successes and case studies:

- Changing the Game for Packaging
- The Continuing Evolution of Polystyrene
- Styron Responds to Marketplace by Replacing Flame Retardant
- Driving Sustainability Forward with Plastics for Automotive
- Improving Fuel Efficiency Where the Rubber Meets the Road
- Lighting the Way to Improved Energy Efficiency
- Smarter Way to Reduce Energy Consumption

Operations successes and case studies:

- The Power of Garbage – Alternative Energy and Reduced Emissions Through LOMAX™ Technology
- Styron Reduces Energy Use at Indonesia Polystyrene Plant by 41 percent
- Styron Reduces Water Effluent by 90 percent at Allyn's Point Latex Plant

Changing the Game for Packaging

CO₂RE™ is a patented plastic foaming technology that is available to license from Styron globally. This technology provides an opportunity for the dairy packaging and food service industries to improve their sustainability in the following ways:

- **Reduced Material Consumption in Packaging**
The technology allows converters to produce polystyrene sheet with a foamed core layer using physical blowing agents. Styron internal tests using [CO₂RE™ foaming technology](#) illustrate significant total density reductions of up to 20 percent with the potential to reduce density even further.



LOMAX™ Technology uses methane gas collected from a nearby landfill as the primary energy source to manufacture Styron's latex for carpet backing, reducing the product's carbon footprint by 25 percent. [Read more on page 26.](#)

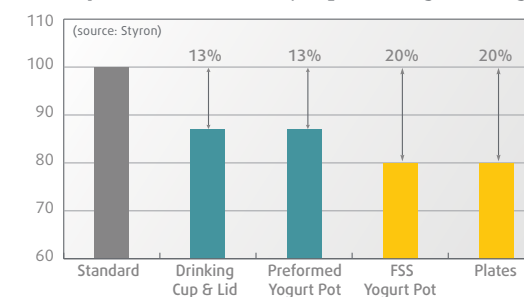
Improved Economic Performance Across the Value Chain

By reducing the density of the polystyrene used in packaging, CO₂RE™ foaming technology also delivers reductions in energy usage during packaging production. Additionally, in the parts of the world where weight-based packaging disposal taxes have been implemented, brand owners are able to reduce the amount of waste disposal taxes incurred by their packaging.

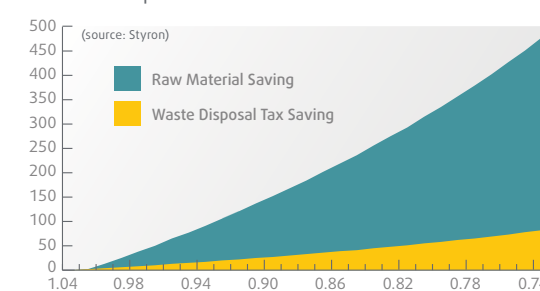
Improved Carbon Footprint

As a direct result of raw material and energy savings, CO₂RE™ foaming technology enables a significant reduction in the carbon footprint of rigid polystyrene packaging applications, with potential reductions of between 10 and 20 percent.

Density reductions enabled by CO₂RE foaming technology



Savings in raw material use and waste disposal tax use achieved for dairy polystyrene packaging – based on French and Spanish taxation





The Continuing Evolution of Polystyrene

When it comes to storing and protecting food, polystyrene (PS) has offered exceptional performance and low cost for many years. But polystyrene's benefits are often overlooked. Materials such as [STYRON™ polystyrene resins](#) offer excellent processability and a low heat capacity, which reduces the amount of energy required in production; PS also possesses a good strength-to-weight ratio, which allows for downgauging opportunities.

For the last 25 years, High Impact Polystyrene (HIPS) has been the material of choice for refrigerator liners. Early generations of HIPS liners required very thick sheet and therefore increased amounts of raw material. The thicker sheet also required substantial amounts of energy during production and shaping. Thanks to ongoing innovations in resin technology, today's polystyrene, such as [STYRON A-TECH™ 1175 advanced polystyrene resin](#), requires up to 10 percent less material, and delivers the same, if not better, liner strength and stiffness than earlier PS resins.

This also translates to as much as a 10 percent energy reduction in the manufacture and thermoforming of the sheet.³

Polystyrene is also common in yogurt cups, helping to keep food fresh by controlling air transmission and maintaining package integrity and top load resistance to prevent product damage and waste. PS innovations in yogurt cups have also led to reductions in material and weight of up to 10 percent. And, when compared to non-plastic packaging materials, a yogurt cup made from polystyrene weighs about 15 times less⁴ – reducing waste and improving transportation efficiencies.

Styron's polystyrene resins also have recycling capabilities. Through industry associations like PlasticsEurope, Styron helps advocate for the channels to recycle where it's not already being done, such as in Germany. And, Styron's research and development department continues to push new downgauging boundaries.

Styron Responds to Marketplace by Replacing Flame Retardant

Consumer products that contain flame retardants deliver an important public safety benefit.⁵ In fact, studies have shown that the use of flame

retardants in consumer products saves hundreds of lives each year and allows up to fifteen times more time for people to escape when a fire occurs.⁶

For many years, Styron has offered several ignition resistant grades of [STYRON™ Polystyrene Resin \(IR-PS\)](#) that contained the flame retardant known as decabromodiphenyl ether (DecaBDE). IR-PS offers exceptional performance and low cost in electronics applications, such as housings for televisions and other electronic appliances where there is the potential for the product to overheat.

As a part of Styron's ongoing commitment to EH&S, Styron continually monitors the environmental, product safety, regulatory and marketplace trends associated with Styron's products and the additives used in them, including DecaBDE. As a part of this monitoring, it became apparent that there were several marketplace concerns about the potential environmental impact of DecaBDE.

In response, Styron began an intensive research effort to identify alternative flame retardants that could be used in polystyrene resins even though the company was confident that the scientific data supported the safe use of DecaBDE as a flame-retardant additive.

CO₂RE™ is a patented plastic foaming technology that provides an opportunity for the dairy packaging and food service industries to reduce material consumption by up to 20 percent. [Read more on page 17.](#)



As a result of that effort, STYRON IR-PS resins previously containing DecaBDE have been replaced globally with IR-PS resins that no longer use DecaBDE.

Styron is pleased that the company has been able to recognize and respond to the marketplace concerns regarding DecaBDE by identifying and introducing a replacement technology that delivers high quality IR-PS products that meet the needs of the electronics marketplace.

Driving Sustainability Forward with Plastics for Automotive

When it comes to improving fuel efficiency and reducing emissions, auto manufacturers have made tremendous strides in alternative powertrain technology, such as hybrid and electric. In addition, plastics play a key role in the quest for a more sustainable automobile.

Accounting for roughly 50 percent of a typical vehicle's volume and approximately 10 percent of total vehicle weight,⁷ plastics are an important ingredient in the manufacture of today's automobiles, offering a range of performance properties, flexible design opportunities and light weight. Styron is a leading provider of plastics-enabled solutions for interior and exterior applications that address increased energy efficiency, improved safety and health, reduced exhaust emissions and enhanced vehicle quality and appeal.

Today's polystyrene, such as STYRON A-TECH™ 1175 advanced polystyrene resin, requires up to 10 percent less material, and delivers the same, if not better, strength and stiffness in refrigerator liners than earlier PS resins.

Read more on page 19.

Styron products such as [MAGNUM™ ABS resins](#), [PULSE™ engineering resins](#), [INSPIRE™ performance polymers](#) and [VELVEX™ reinforced elastomers](#) are commonly used in the production of various automotive parts – from instrument panels and consoles to trim components and body panels.

As a leading supplier to premium manufacturers, Styron places high focus on working to improve the fuel efficiency of automobiles. A Styron technical team, in close cooperation with Audi, developed an innovative blow molded seatback using PULSE engineering resins. The seatback concept passed the most severe European luggage retention crash test and received the 2006 Society of Plastics Engineers Innovation Award in the safety category. PULSE resins, a completely recyclable material, also helped the seatback achieve a weight reduction of approximately 25 percent compared to conventional steel constructions – an important statistic when you consider that for every 10 percent reduction in total vehicle weight, fuel economy improves by 5 to 7 percent.⁸ And, for every kilogram* of vehicle weight reduction, there is a potential to reduce carbon dioxide emissions by close to 20 kilograms over the vehicle's operating life. Multiply that by the more than 600 million vehicles globally, and the benefits can add up.⁹

In addition to their light weight, plastics offer other cost-effective and safety-related benefits for automotive applications. They can be designed to achieve energy absorption during a crash; offer chemical, corrosion and heat resistance; and act as thermal and electrical conductors and insulators. Plastics also give engineers and designers flexibility to create attractive and functional features – all important considerations for auto makers, as consumers demand the ultimate combination of safety, quality appearance and efficiency.

Improving Fuel Efficiency Where the Rubber Meets the Road

In the next decades, the pressure for carbon dioxide (CO₂) reductions will keep growing, especially as the world populations grow rapidly. It is estimated that the annual world CO₂ emissions level should be at approximately 20 gigatons to help support long term sustainable growth. In 2009, that number stood at 28 gigatons, meaning that world carbon productivity needs to improve by about 10 times in the coming decades.¹⁰ With as much as 23 percent of total CO₂ emissions coming from road transportation,¹¹ the fuel efficiency of cars and trucks will be critical to reaching this goal.

In addition to drivetrain improvements, advancements in low rolling resistance tires (LRRTs) will significantly contribute to improving fuel efficiency and reducing CO₂ emissions. Tires can account for 20 to 30 percent of total fuel consumption.¹² And, there is an estimated 10 percent difference in fuel consumption between the worst-performing tires and tires with the latest in material and manufacturing technologies. For each automobile equipped with LRRTs, that can translate to a reduction in CO₂ emissions of 4 g/km, improved fuel efficiency of 0.2 l/100km, and reduction of fuel consumption up to 3 percent or 23 to 46 l/yr.¹³ In the United States alone, LRRTs help reduce CO₂ emissions by 12-24 million metric tons/year.¹⁴

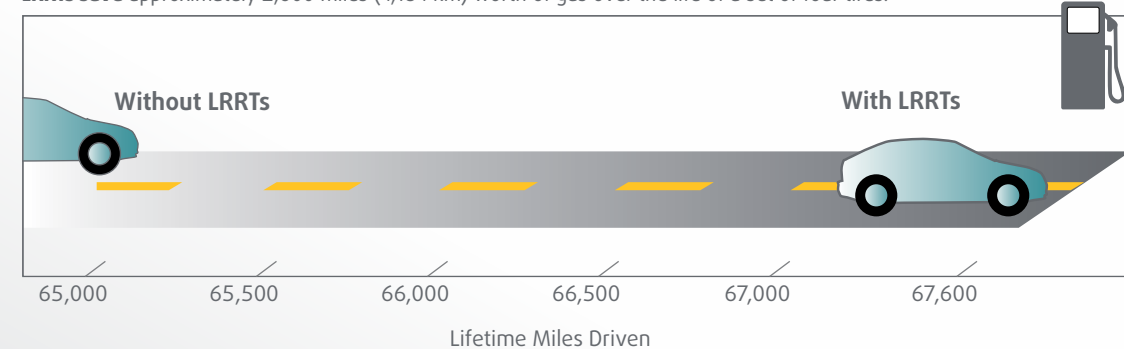
Styron has leveraged its strong understanding of Solution Styrene Butadiene Rubber (S-SBR) to develop the latest generation [Sprintan™ S-SBR 4602](#). This functionalized SSB, along with other tire construction improvements, helps achieve an optimum performance balance of improved wet grip, high abrasion resistance, low road noise,



light weight and low rolling resistance. A leading tire manufacturer is currently using Sprintan™ S-SBR 4602 to achieve higher tread wear mileage, lower rolling resistance and improved fuel economy. In essence, this greater fuel efficiency means drivers use less energy to travel the same distance; this performance feature alone can save approximately 2,600 miles (4,184 km) worth of gas over the life of a set of four tires.¹⁵

Regulation of CO₂ emissions reduction in the transportation industry (including the tire industry) will not only become more global, but also more stringent. Styron, through its Synthetic Rubber products, will continue to provide innovative solutions that seriously address this very important and far-reaching trend in the transportation industry – all to support global sustainable growth and help reduce our transportation footprint.

LRRTs save approximately 2,600 miles (4,184 km) worth of gas over the life of a set of four tires.



Lighting the Way to Improved Energy Efficiency

Lighting currently represents about 17.5 percent of all global electricity consumption. The U.S. alone accounts for approximately 20 percent of this amount, at an annual cost of over \$40 billion.¹⁶ As energy efficiency becomes increasingly important for controlling costs, improving energy independence and reducing environmental impacts, governments are instituting programs to encourage better lighting choices among homeowners and builders. Currently, many consumer households are shifting from heat-generating incandescent bulbs to compact fluorescent bulbs (CFLs). Some governments are even mandating the shift to more efficient lighting. Styron offers the products to help enable these more energy efficient bulbs to perform safely and effectively, while giving manufactures design freedom.

To put the environmental and cost savings in real terms:¹⁷

- A CFL bulb uses about 75 percent less energy than an incandescent bulb, lasts about 10 times longer and can save a consumer more than \$40 over its lifetime.

- If every home replaced just one light with a CFL, we would save enough energy to light more than 3 million homes for one year. That's about \$600 million in annual energy costs and nine billion pounds of greenhouse gas emissions per year, equivalent to the emissions of about 800,000 cars.

[CALIBRE™ polycarbonate resins](#) are used in the production of luminaires, which are the fixtures that direct and control the distribution of light. CALIBRE™ resins are chosen not only for their high clarity, heat resistance and protective properties, but also because of their high flow attributes during processing, helping enable manufacturers to design aesthetically pleasing light fixtures.

But CFLs are just the first generation of energy efficient bulbs. LED (solid-state) lighting is quickly emerging as the next new technology in efficient lighting. It is estimated that residential LED lighting uses at least 75 percent less energy and lasts at least 15 times longer than incandescent lighting.¹⁸ CALIBRE™ polycarbonate resins offer high transparency for LED display lighting or can be suitably modified for exceptional opalescence when required for light diffusion – again, making Styron products integral to the performance of more sustainable choices in lighting.

NOTE: Data assumes use of ENERGY STAR approved bulbs.

Newly installed water treatment equipment at Styron's Allyn's Point, Connecticut, plant has reduced water discharge by 90 percent and is saving roughly \$100,000 in energy costs annually. [Read more on page 27.](#)

Smarter Way to Reduce Energy Consumption

One of the most important advancements in helping consumers contribute to reductions in energy consumption and CO₂ emissions is smart meter technology, and Styron products play an integral role in the production and performance of smart meter applications. In contrast to traditional gas and electric meters, smart meters are able to transmit and receive data to and from the energy supplier and provide a digital display of total power consumption, approximate cost and CO₂ emissions – motivating consumers to cut usage wherever possible. It is estimated that the average consumer could save 2 to 3 percent in energy use each year thanks to smart meter technology.¹⁹ Multiply that by hundreds of millions of households, and the impact can be significant.

More than 250 million smart meters will be installed worldwide by 2015, representing a penetration rate of 18 percent of all electrical meters by that time (up from 46 million in 2008).²⁰

This is being driven by a goal of reaching 55 percent penetration of all electric meters in North America by 2015 and a 20/20/20 goal in Europe to achieve a 20 percent reduction in greenhouse gas emissions, a 20 percent increase in renewable energy and a 20 percent reduction in energy consumption, all by 2020. This Directive in Europe also includes a goal to replace 80 percent of electric meters with smart meters by 2020.

Styron products are used in various application areas of the smart meter and are critical to overall performance. [EMERGE™ 8701HH](#) advanced resin, a glass-reinforced polycarbonate, modified with innovative flame retardant technology, is used to make the meter terminal blocks. These blocks come in direct contact with live wires and can reach temperatures of 960°C, making flammability a key concern. EMERGE PC 8701HH meets the [IEC 62052-11](#) material requirements for smart meter applications and those especially requiring a high heat distortion such as the terminal block. Moreover, the resin provides good aesthetics and excellent mechanical properties, making it very suitable for other meter applications such as the meter casings.

For each automobile equipped with Low Rolling Resistance Tires made with Solution Styrene Butadiene Rubber (S-SBR), such as Sprintan™ S-SBR 4602, there is a potential to reduce CO₂ emissions by 4 g/km and fuel consumption by up to 3 percent or 23 to 46 l/yr. [Read more on page 22.](#)



The Power of Garbage – Alternative Energy and Reduced Emissions Through LOMAX™ Technology

Styron's latex plant in Dalton, Georgia, USA, runs almost entirely on alternative energy and significantly reduces CO₂ and greenhouse gas emissions, thanks to [LOMAX™ Technology](#). Named for its focus on delivering materials with Lower environmental impact with MAXimum performance, LOMAX Technology uses methane gas collected from a nearby landfill as the primary energy source to manufacture Styron's latex for carpet backing, reducing the product's carbon footprint by 25 percent.²¹

The methane gas (approximately 117 billion BTUs worth per year) is piped to a Landfill Gas Energy Recovery facility and then to the Styron plant, where the energy is used to power the plant's boiler, substantially reducing the need for natural gas. The resulting power runs over 80 percent of the plant's steam boiler and represents over half of the overall energy used to manufacture latex at the facility.

And, because the methane is being harnessed for energy instead of being released into the atmosphere, the use of LOMAX Technology has reduced emissions at the plant by more than 37 million pounds in CO₂ equivalents since 2008. That's comparable to eliminating the use of over 1,895,000 gallons of gasoline or removing over 3,100 cars from the road.

Another issue that faces utility smart meters is fraud. Therefore, the exterior housing or casing must be made of tough, tamper-resistant materials such as [CALIBRE™ polycarbonate resins](#) or [EMERGE™ advanced resins](#). These materials are also available as transparent materials used to make the clear windows that provide consumers with the vital data they need to make good energy use decisions and are chosen for their combination of extreme toughness, exceptional clarity and flame resistance.

Smart meters represent an important step in improving how valuable resources can be used more wisely. The future outlook on smart meter technology is very positive, with European and North American government initiatives driving adoption forward. And high performance Styron products will be there every step of the way, helping to ensure safe, long lasting operation of this important and sustainable application.

Styron Reduces Energy Use at Indonesia Polystyrene Plant by 41 percent

Styron's polystyrene plant in Merak, Indonesia, manufactures polystyrene resins for customers across the Asia-Pacific region. In 2005, a complete assessment of the polystyrene production train at the Merak plant revealed energy consumption rates of more than 1,000 BTUs per pound of resin produced, the highest of any Styron polystyrene train globally.

Driven by rising energy costs and a desire to make operations of the Merak plant more sustainable, a team was assembled to develop and drive a plan to reduce energy consumption. At the early stages, it was believed that making a significant reduction would be too cost prohibitive due to the capital expenses required to upgrade the facility.

Through benchmark studies and deep drill analysis of every single unit in the plant requiring energy to operate, a team led by Ridona Buchari identified the largest opportunities and then worked to find energy reduction solutions, such as:

- Eliminating simultaneous heating and cooling in certain process areas;
- Increasing raw material conversion by optimizing reaction profiles;
- Improving efficiency of process heaters;
- Replacing oversized electrical motors;

- Installing variable speed drives on some electrical equipment;
- Removing recirculation streams by implementing once-through systems;
- Reducing agitation on several units; and
- Eliminating double transfer of raw materials and product.

By 2009, energy consumption of the polystyrene train was reduced by 41 percent, saving approximately \$1 million in energy costs and reducing CO₂ emissions by more than 9 billion tons. And most of the improvements were done with little or no capital investment.

The Styron team in Merak, and other Styron sites, continue to find opportunities to make further improvements, and other Styron plants are learning from what they were able to accomplish. According to Luciano Blazina, Styrenics Technology Center Energy Focal Point, "These innovations by Styron people are a shining example that becoming more sustainable does not necessarily require large investments of time or money. In some cases, finding a viable, sustainable solution means looking at the problem in a slightly different way."

Styron Reduces Water Effluent by 90 percent at Allyn's Point Latex Plant

Styron's latex manufacturing plant at Allyn's Point, Connecticut, USA, is a leading supplier of emulsions to the paper industry. In February 2010, a team led by Jim LaBrake guided the installation of new boiler water treatment equipment to significantly reduce the plant's water discharge.

Ted Kietzman, Allyn's Point site leader, initiated the project to improve how the water effluent stream was being handled, and to include the improvements in the water discharge permit. Prior to this sustainability project, the boiler operation generated approximately two million gallons of water discharge per year. The purification equipment has since reduced water discharge by 90 percent and is saving roughly \$100,000 in energy costs annually.

The new equipment reduces water discharge by purifying the boiler feed water to such a high level that a majority of the blow-down steam is eliminated. Less fuel is burned during the purification process, which leads to a more efficient manufacturing process. As a result of the significant reduction in energy consumption at the site, the project received a federal grant to subsidize the capital cost of installing the equipment.

The improvements made at Allyn's Point demonstrate Styron's commitment to operating responsibly with respect to the environment, health and safety, using resources more efficiently and adhering to the principles of Responsible Care®. According to Kietzman, "This project is a great example of sustainability in action at Styron. We operate to a tighter environmental permit, we have less water effluent and less carbon emissions and we operate more cost effectively – everyone wins!"





Through operational and process efficiency improvements, energy consumption of Styron's polystyrene train in Merak, Indonesia, was reduced by 41 percent, saving approximately \$1 million in energy costs and reducing CO₂ emissions by more than 9 billion tons. [Read more on page 27.](#)

Performance

Since Styron's formation in June 2010, the company has made great strides in each of the key areas of sustainability – economic, environmental and social performance. A summary of Styron's performance through the second half of 2010 follows.

Financial Performance

- As a privately held company, Styron does not publicly report detailed financial data. In 2009, revenue was approximately \$3.5 billion. In 2010, revenue was approximately \$5 billion. In addition, the company has been delivering strong cash flow and has been meeting/exceeding its financial targets.
- The number of employees increased from approximately 1,900 employees during 2009 to 2,100 employees at the end of 2010.

Environmental Performance

From the first day of the company's formation, leaders across Styron emphasized that EH&S performance was one of the top priorities in the company. Company leadership is highly engaged in EH&S activities, setting the right tone, maintaining high expectations and recognizing positive EH&S results. For example, each meeting of the Styron Leadership Team begins with a report on Responsible Care® performance. Senior leadership is actively involved in the reporting of and investigation of every reportable safety incident, as well as giving recognition awards for those work groups with excellent EH&S records.

- Styron executive leadership sets stretch targets each year for improving EH&S/Responsible Care® performance around three key metrics: Safety Incidents (injuries and illnesses), incidents of Loss of Primary Containment (spills and leaks) and Process Safety Incidents (including fires and explosions).



- These annual EH&S targets, along with financial targets, are established in January and are measured throughout the year and reported in quarterly updates to employees, as well as on Styron's Intranet. At year end, the results are used to calculate each employee's variable pay or bonus. This ensures that EH&S performance is directly tied to every employee's personal compensation.

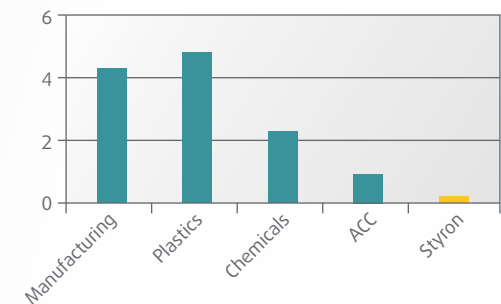
The following Figures report three measures of Styron's EH&S performance.

Recordable Injuries 2007-2010

Consistent with [guidelines](#) published by the U.S. Occupational Safety and Health Administration (OSHA), Figure 1 summarizes the recordable injuries per 200,000 hours worked that have occurred at Styron facilities, compared to other manufacturers. Unlike many others in the chemical industry, Styron includes contract employees in its reporting for recordable injuries. Such injuries include all injuries to workers (unless the injury is clearly not work-related), incidents in which a worker requires medical treatment, is restricted by a doctor from certain duties (*i.e.*, lifting objects) or misses work under doctor's orders.

While the ultimate goal is to have no on-the-job injuries, Styron is pleased that the injury rate for its employees and contractors has declined each year over the past three years. See Figures 2 and 3.

Figure 1: Injury Rate Comparisons



- Rate = injuries per 200,000 hours, about the same as percent of people hurt in a year
 - Injury rate defined by U.S. OSHA rules
 - Industry data for first 3 bars is Bureau of Labor Statistics for 2009 (U.S. only)
 - Data for ACC member companies U.S. only

Figure 2: Styron Injury Count

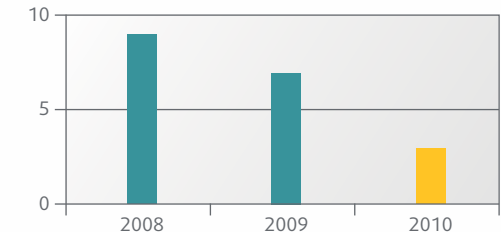
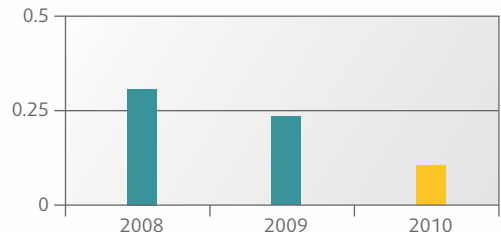


Figure 3: Styron Injury Rate



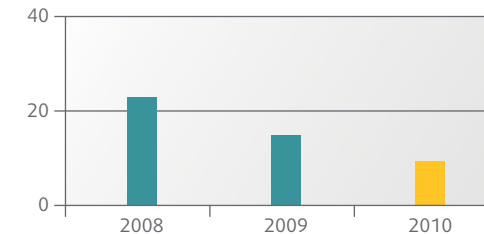
Loss of Primary Containment (LOPC)

LOPC refers to spills of chemicals or plastic pellets (excluding water and air). Such events are classified according to their severity as follows:

- LOPC Category 2 – Spills greater than 1,000 pounds (excluding plastic pellets) or a smaller spill that causes injury, affects the community or is reported in the news media.
- LOPC Category 3 – Spills greater than 100 pounds or exceeding 1,000 pounds for plastic pellets.

Figure 4 summarizes Styron's LOPC incidents.

Figure 4: Styron LOPC Count



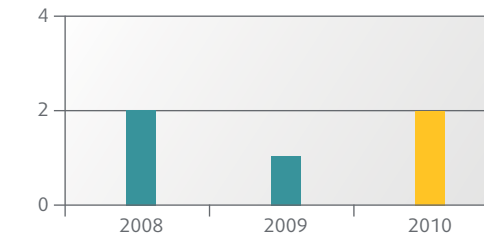
Process Safety Incident (PSI)

An incident is considered to be a PSI if it consists of one or more of the following:

- An explosion or fire with over \$25,000 in damage.
- A large acute chemical release of a flammable or toxic chemical.
- A small chemical release causing serious injury.

Figure 5 reports Styron's PSIs.

Figure 5: Styron PSI Count



A compact fluorescent (CFL) bulb uses about 75 percent less energy than an incandescent bulb, lasts about 10 times longer and can save a consumer more than \$40 over its lifetime. See how CALIBRE™ polycarbonate resins are helping improve the performance of CFL luminaires. [Read more on page 24.](#)



Styron takes employee safety, PSIs and LOPC incidents very seriously. In fact, for every LOPC and safety incident, Styron conducts a thorough Root Cause Analysis, takes corrective action when needed and shares learnings globally to improve performance.

This approach is reflected in how Styron outperforms the industry in these areas, and is further enhanced by the fact that Styron includes contract workers in its calculations, which is not always the case across the chemical industry.

ISO 14001

ISO 14001 is a generic, voluntary framework designed by the International Organization for Standardization to assist in developing individualized environmental management systems; it is based on the idea of continual improvement and embraces the following approach:

- **Plan** – Establish the objectives and processes required.
- **Do** – Implement the process.
- **Check** – Measure and monitor the processes and report results.
- **Act** – Take action to improve performance based on results.



Styron has developed and implemented an ISO 14001 compliant environmental management system, which was evaluated and certified by independent auditors when Styron was part of The Dow Chemical Company. The Styron plants and facilities that are currently ISO 14001 certified include:

Plant	Location
Auburn Hills Plastics R&D	Auburn Hills, Michigan, USA
Boehlen Styrene	Boehlen, Germany
Guarujá Latex	Guarujá, Brazil
Hamina Latex	Hamina, Finland
Limão Plastics	Limão, Brazil
Livorno Latex	Livorno, Italy
Norrköping Latex	Norrköping, Sweden
Rheinmuenster Latex	Rheinmuenster, Germany
Schkopau Plastics	Schkopau, Germany
Stade Plastics	Stade, Germany
Terneuzen Latex and Plastics	Terneuzen, The Netherlands
Tessenderlo Polystyrene	Tessenderlo, Belgium

Rewarding Success

In February 2011, Styron further reinforced its commitment to operating sustainably through the introduction of two recognition awards:

The President's Award for EH&S/Responsible Care®

Based on criteria established by Styron's EH&S/Responsible Care® Council, this award is reserved for very significant, exceptional and sustained achievement by a site, plant, business or group. The award, which will be presented for the first time in 2011, is presented only infrequently to highlight its significance, and is awarded by Styron's Executive Leadership Team.

The Triple Zero Award ("the 000")

Any manufacturing site, plant, or large R&D group that has no recordable injuries, LOPCs or PSIs in a calendar year is eligible for this award. The incident classification definitions for this award are the same as the definitions used in Styron's Performance Award metrics, which were described earlier on page 30 of the Environmental Performance section of this Report. The following sites earned Styron's first annual 000 Award:

- Allyn's Point Latex, Connecticut, USA
- Altona Latex, Australia
- Boehlen Styrene, Germany
- Dalton Latex, Georgia, USA
- Guarujá Latex, Brazil
- Hamina Latex, Finland
- Hsinchu Compounds and Blends, Taiwan
- Limão, Brazil
- Livorno, Italy
- Merak Latex, Indonesia
- Merak PS, Indonesia
- Norrköping Latex, Sweden
- Plastics Michigan, Midland, Michigan, USA
- Schkopau EPS, Germany
- Schkopau PS, Germany
- Stade PC Compounds and Blends, Germany
- Terneuzen Compounds and Blends, The Netherlands
- Terneuzen Latex, The Netherlands
- Terneuzen Styrene, The Netherlands
- Ulsan Latex, Korea



Social Performance

As a preferred partner for sustainable solutions, Styron is contributing to the quality of life and safety of its employees and to improving the communities within which it operates. As a part of this focus, Styron encourages its employees to make meaningful differences within their communities through volunteering locally in whatever way they desire.

Several recent examples are highlighted on the following pages:

- Styron Supports Youth Drug Prevention Program in Hong Kong
- Allyn's Point Site Supports Community Success
- Styron LLC Receives International Habitat Conservation Award
- High Employee Satisfaction a Key Factor in Styron's Successes

Styron Supports Youth Drug Prevention Program in Hong Kong

Styron, which operates a plastics manufacturing plant located on Tsing Yi Island in Hong Kong, recognized a local community need and then helped to meet it through a recent donation. In November 2010, Styron contributed HK \$150,000 (~ US \$19,000) to support a local charity that works with local at-risk youth, the Kwai Tsing Safe Community and Healthy City Association.

This association operates QK Blog, a community-based Adolescent Health Center serving the neighborhood near the Tsing Yi plant. QK Blog provides a user-friendly, non-stigmatizing environment for at-risk young people through its "Health Assessment Programme."

Secondary schools located in the community bring students to QK Blog for a comprehensive health checkup, and on-site social workers also talk to them personally about their social, school and family lives. After identifying students who are challenged by physical health, substance abuse, family or social problems, the on-site doctors and social workers at QK Blog follow up and invite the students to return. For serious cases, individuals may be referred to an appropriate intervention and/or treatment program.

QK Blog's efforts have been well-received by schools and the community because they do not negatively label students, schools or certain segments of the community. By providing this assistance, Styron has helped improve the quality of life on Tsing Yi Island, thus demonstrating its commitment to supporting the communities where it operates.

It is estimated that the average consumer could save 2 to 3 percent in energy use each year thanks to smart meter technology. Multiply that by hundreds of millions of households, and the impact can be significant. See how EMERGE™ advanced resins and CALIBRE™ polycarbonate resins are contributing to the performance of smart meter units. [Read more on page 25.](#)





Allyn's Point Site Supports Community Success

Styron's Allyn's Point latex manufacturing plant, located in Gales Ferry, Connecticut, USA, is a leading producer of emulsions used in the paper industry and is a strong example of how industry can help enhance the community where it is located. This site only has 32 employees, yet despite its small size, has a very positive impact on the communities that surround it.

For example, for the past 20 years, the Allyn's Point site has encouraged local input to how it operates by sponsoring a Community Advisory Panel (CAP). The CAP consists of about 20 people who represent a cross-section of the local community. Membership includes local political leaders, business people, students, retirees, clergy, educators and average citizens.

Following a CAP meeting in 2011, CAP member and local school superintendent, Dr. Michael Graner, said, "The honesty and credibility is quite remarkable. I always feel like I'm getting the whole story, the straight story. And these are not easy conversations to have. I'll be honest, if this were the school board, I'd be squirming."²²

Ted Kietzman, Styron's site leader for Allyn's Point, said, "The CAP has a significant yet subtle influence on Styron's operations and support of the community. For example, when a CAP member wanted to promote recycling water bottles in the local schools, we provided funds for recycling bins. We learn a lot by translating what we do into everyday language for the CAP and get immediate feedback. Working with the CAP is a win-win situation and it keeps our viewpoint broader and more externally connected."

In addition to the CAP, the Allyn's Point site is contributing to local success through a number of initiatives, including:

- **Contributing to charities, such as the United Way** – In 2011, Styron and its local employees donated over \$15,000 to the United Way; 94 percent of the site's employees participated.

In addition, Styron donated approximately \$10,000 worth of used site and office equipment to local charities following the closure of one of its buildings.

- **Engaging in educational outreach** – During the past year, several site employees donated their time and spoke at local schools and colleges about why students should consider careers in science and engineering, how chemicals like latex benefit society and how to improve the environment.
- **Hosting training for local emergency responders** – In 2010, the site hosted a two-day training session for emergency response personnel to help them better prepare to handle emergencies involving chemicals. Participants included state and local firefighters and police, Connecticut Department of Environmental Protection representatives and industry experts.
- **Improving the capabilities of the local fire department** – The site recently made a donation to the Gales Ferry Fire Department so it could purchase a thermal imaging device to help firefighters see through smoke more clearly.
- **Sponsoring an annual Household Hazardous Waste Collection day** – In November 2010, Styron helped over 400 local residents dispose of items ranging from oil-based paints to pool chemicals to pesticides to mercury-containing thermometers.

- **Supporting local groups for senior citizens and for the disabled** – Styron donates the use of a meeting place, the Allyn House, to ARC (a group that assists the disabled) on a regular basis and sponsors an annual luncheon at the Ledyard Senior Center.

These are just some examples of how Styron's 32 Allyn's Point employees are contributing to the success and sustainability of their community.

Styron LLC Receives International Habitat Conservation Award

Employees at Styron LLC's Dalton, Georgia, USA, site received international recognition for their contributions to wildlife habitat conservation at the Wildlife Habitat Council's (WHC)²³ 22nd Annual Symposium, The Business of Biodiversity. Styron LLC demonstrates its commitment to environmental stewardship and increasing native biodiversity by achieving Wildlife at WorkSM recertification at the Dalton, Georgia, site.

"The Wildlife Habitat Council believes that collaboration among all stakeholder groups is critical to addressing the complex issues facing the sustainability of the planet," said Robert Johnson, WHC President. "WHC members take a leading role in connecting community stakeholders through wildlife habitat enhancement, community outreach and conservation education. Congratulations to Styron LLC for their commitment to a healthy natural world and connected communities."

"The Wildlife Habitat in Dalton is another example of Styron's commitment to the environment and sustainability. I am so proud of the efforts the employees on site have made to support the Wildlife at Work program and certification," said Melissa Kirkland, Dalton site Responsible Care[®] Leader.



The Dalton, Georgia, site is located in the southeastern part of Whitfield County. The site, which is about 70 miles north of Atlanta, is involved in the manufacturing of latex for carpet backing and STYROFOAM™ insulation. The property on site and the Latex manufacturing facility are owned and operated by Styron LLC. The STYROFOAM™ manufacturing facility that produces STYROFOAM™ is operated by The Dow Chemical Company and is a tenant on site. The property consists of 420 acres, one-quarter of which is developed for industry. The remaining 300 acres are characterized by fields, brush lands, pines and hardwood forests. Currently there are approximately 52 employees on site and roughly 10 percent of the site employees are involved in one or more of the site's ongoing wildlife activities.

The Dalton site's wildlife program began in 1989, with the formation of an employee team called the "Critter Club." The initial focus of the team was on managing the site for white-tailed deer, waterfowl, turkey and songbirds. Programs currently implemented and maintained at the site include a bluebird nesting program, field management efforts and planting and maintaining wildlife food and cover plots.



The nest box monitoring program, which was initiated in 1990, currently includes 21 songbird nest boxes, one American kestrel box and four wood duck boxes. The nest box program has been very successful, with boxes being utilized by tree swallows, bluebirds, chickadees and an occasional tufted titmouse. 159 fledglings were recorded in one year. The boxes are cleaned and maintained on a regular basis, and employees submit monitoring records to the Cornell Lab of Ornithology's Birdhouse Network.

The field management program focuses on maintaining habitat for deer, turkey, songbirds, rodents and raptors. These areas are mowed each summer and ten-foot fire breaks are maintained throughout the year. The wildlife team intends to convert the fields into native grasslands in the near future. Earlier reforestation efforts provide additional food and cover resources in the fields. To restore native species, the team planted native trees throughout the habitat area. In order to provide additional opportunities for food and cover, employees placed brush piles and mineral blocks in the fields.

The Dalton, Georgia, site was one of 281 sites recognized at the 2010 Symposium for creating a Wildlife at Work program. In addition, 56 Corporate Lands for LearningSM programs reach thousands of learners from schools and scout groups to master gardeners and university researchers. Since 1990, WHC has certified 640 Wildlife at Work and 128 CLL programs worldwide. The certification program recognizes outstanding wildlife habitat management and environmental education efforts at corporate sites, and offers third-party validation of the benefits of such programs. Certification requirements are strict and require that sites apply for periodic renewal.

High Employee Satisfaction a Key Factor in Styron's Success

Since Styron was formed in 2010, the company's employees have demonstrated unusually high levels of commitment to and satisfaction with Styron as an employer. This illustrates the value Styron's leadership places on treating its people with respect and is demonstrated by the following:

- Styron has a voluntary attrition rate (percent of employees quitting) that is below 1 percent, which is far below the industry average.
- Qualitative feedback from employees around the world, as well as comments from a 2010 global Styron employee opinion survey, indicates a high level of motivation and alignment in the organization.
- Results of this survey demonstrate a high degree of job satisfaction and reinforce Styron's outstanding business practices.
 - 85.2 percent said they would be likely to recommend Styron as a place to work to a relative or friend.

Grouping:	How likely would you be to recommend your organization as a place to work to a friend or relative?
Scoring 0-4	8.5%
Scoring 5	6.3%
Scoring 6-10	85.2%

Where 0 = not at all, 10=very highly

References

- ¹ In June 2011, the membership of Styron's Ethics and Compliance Committee included:
Thomas (Tom) J. Hearity, Chief Compliance Officer
Marilyn Horner, Senior Vice President, Human Resources
Catherine Maxey, Vice President, Public Affairs and Business Intelligence
Matthew Pagac, Ernst & Young, representing Internal Audit
James Ni, Sales Director, Emulsion Polymers – Asia Pacific
Chatchai L.polcharoenchai, Global Commercial Director, Feedstocks
Steve Lin, Sales Director, Plastics – Asia Pacific
Murat Orhon, Sales Director, Plastics – Europe/IMEA
Max Yoshioka, Sales Director, Emulsion Polymers – Latin America
- ² During this time, Styron was wholly owned by The Dow Chemical Company.
- ³ Throne, James L., *Thermoforming Handbook*,
Hanse Publishers, 1987, Munich/New York, p. 65.
- ⁴ PlasticsEurope, *Environmental Product Declaration of the European Plastics Manufacturers, Polystyrene, General Purpose (GPPS) and High Impact (HIPS)*, November 2008.
- ⁵ Birnbaum, Linda S. and Daniele F. Staskal, *Brominated Flame Retardants: Cause for Concern?*, Environmental Health Perspectives, v. 112, no. 1, p. 11, January 2004.
- ⁶ *Flame retardants & fire safety*, Bromine Science and Environmental Forum, accessed February 20, 2011.
- ⁷ ICIS Chemical Business, *Plastic grows in auto manufacturing*, June 2, 2010.
- ⁸ Fisher, M., et al., *Enhancing Future Automotive Safety With Plastics*, National Highway Traffic Safety Administration, Technology Integration Report, Paper Number 17-0451, p. 2, November 10, 2008.
- ⁹ Ibid.
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- ²³ The Wildlife Habitat Council (WHC) is a nonprofit, non-lobbying organization dedicated to increasing the quality and amount of wildlife habitat on corporate, private and public lands. WHC devotes its resources to building partnerships with corporations and conservation groups to create solutions that balance the demands of economic growth with the requirements of a healthy, biodiverse and sustainable environment. WHC-assisted wildlife habitat and conservation education programs are found in 43 states, the District of Columbia and nine other countries. To learn more, visit www.wildlifehc.org.

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