DuPont furthers its mission to achieve sustainable growth and energy efficiency through its Bold Energy Plan, helping reduce energy costs by $96 million at its largest energy-consuming plant.

GOAL
The mission of DuPont is to achieve sustainable growth, which the company defines as “increasing shareholder and societal value while decreasing the footprint of our operations along the value chains in which we operate.” The company considers energy use — on which it spends over $1.1 billion annually — to be part of its global operations footprint and has set measurable goals to reduce that footprint over time.

SOLUTION
The commitment to continuously improve energy efficiency is an extraordinary challenge. For DuPont, difficulties include the broad dispersion of energy use within its plants, the invisibility of defects in its energy systems, and the need for additional expertise to find and fix those defects. The company’s ongoing efforts in sustainable growth, and management’s recognition of the importance of achieving both efficiency and profitability goals led to the inauguration of the Bold Energy Plan in 2008, a refinement of existing sustainability policies that called for all plants to accelerate improvement in energy efficiency.

The Bold Energy Plan focuses on implementing energy efficiency projects to generate savings and is aligned with the corporate 2020 energy goal to reduce non-renewable energy use by 10% per price-adjusted dollar of revenue by 2020, as compared to a 2010 baseline. The program offers each DuPont location the following advantages:

- Senior leadership commitment and oversight
- Dedicated site leadership for plant efficiency programs
- Site Energy Champions to work on and encourage the achievement of energy goals
- Capital for improvements
- Local plant improvement objectives
- Tracking of site performance against targets
- Peer networking
- Leveraging knowledge such as energy websites, best practices and e-training modules
OWNER-OPERATOR EXPERIENCE IN ACTION AT SABINE RIVER WORKS

Under the Bold Energy Plan, the energy efficiency achievements of the DuPont Sabine River Works in Texas have set an example for the entire company. It is the largest energy-consuming DuPont plant and makes high performance ethylene copolymers used for packaging, automotive components, construction materials and many everyday items.

The challenge at Sabine, which consumes 15% of the energy used by DuPont, was to reduce the site’s energy use in a manner that was consistent with DuPont’s long-term energy goals. This task was made more difficult because site resources are limited and have to compete with other programs whose value is more visible.

However, in 2008, the plant saved more than $25 million in energy costs, $12 million in 2009, 17 million in 2010, and 15.7 million YTD 2011. In addition, the site’s energy productivity (in BTU per pound of product) improved by 40% comparing 2009 to 2007.

The plant achieved major savings by improving the reliability of steam supply to a key process area, which in turn reduced wasteful forced outages. Further, plant made improvements to key process equipment, including a large steam turbine; corrected metering problems with purchased energy; and made repairs and improvements to steam traps.

Results

Under the Bold Energy Plan, DuPont saved $179 million during 2008 to YTD 2011, which equaled 15% of energy costs. The work being done to generate these significant reductions includes 1,171 projects that require little or no out-of-pocket spending and 182 funded capital projects with a blended rate of return of 67%.

As to its effect on the environment, the DuPont Bold Energy Plan was responsible for reducing greenhouse gas emissions by about 900,000 metric tons in 2010. To date, the company’s overall energy use is down 5% since 1990, despite a 40% growth in production. This improvement in energy efficiency has enabled DuPont to avoid $6 billion in energy costs over this time span.

“Sabine River Works develops site yearly energy savings goals that exceed corporate goals. Over the last three years, SRW’s energy savings have tripled the corporate goal. Over half the site’s projects are based on Six Sigma methodology.”
Paul Jagen, Sabine River Works Site Energy Champion, Energy Champion for Performance Polymers and Packaging & Industrial Polymers Strategic Business Units, and Six Sigma Black Belt

DuPont Energy Efficiency Best Practices Now Available Through Consulting Offerings and Online Training

The energy savings at Sabine River Works is only one example of DuPont’s owner-operator success in improving energy efficiency and profitability. The top 100 energy-using DuPont sites are involved in the Bold Energy Plan, and all are backed by the determination and commitment of company leadership to achieve sustainable, energy-efficient growth.

DuPont is also committed to sharing its owner-operator experience and best practices to help other facilities around the world improve their energy efficiency and profitability. As one
of 13 DuPont businesses, DuPont Sustainable Solutions (DSS) brings customers the benefits of an integrated global services and technology delivery enterprise. DSS applies DuPont’s real-world experience, history of innovation, problem-solving success, and strong brands to help organizations transform their workplaces and work cultures to create safer, more efficient and more environmentally sustainable workplaces. The DuPont™ Energy Efficiency Series, which includes 16 online training courses, is now available through Training Solutions. This series has been designed to include many of the industrial energy management principles and best practices that have been instrumental to the success of Sabine River Works and the Bold Energy Plan as a whole. Find out today how your company can benefit.

“"The payoff for our energy efficiency work has been significant. Since 1990, DuPont’s energy use has declined almost 5% while production has grown over 40%. This improvement has enabled us to avoid over $6 billion in energy purchases."" William F. Bailey, Principal Consultant, DuPont Engineering, and leader of the DuPont Energy Center of Competency

GLOBAL RECOGNITION OF DU PONT SUCCESS IN DRIVING SUSTAINABLE GROWTH & ENERGY EFFICIENCY

• DuPont receives 2011 Energy Efficiency Award from the American Chemistry Council (ACC)  
• President Obama praises DuPont for its Energy Efficiency Program  
• DuPont receives 14 “Responsible Care Energy Efficiency Awards” from American Chemistry Council since 2007  
• DuPont Recognized as 2006 “Best in Class” on Climate Change  
• DuPont Receives 2006 National Safety Council’s Green Cross Safety Medal  
• Ceres 2006 Report Ranks DuPont #1 in U.S., #2 Globally on Climate Change  
• DuPont on Fast Company’s 2006 “Fast 50” Annual List  
• WIRED Magazine Names DuPont to the “WIRED 40” in 2006  
• DuPont Tops BusinessWeek’s 2005 Ranking of ‘The Top Green Companies’  
• DuPont on ’Scientific American 50’ List of Technology Leaders in 2005

DuPont Sustainable Solutions is one of 13 DuPont businesses. Bringing customers the benefits of an integrated global services and technology delivery enterprise, it applies DuPont’s real-world experience, history of innovation, problem-solving success, and strong brands to help organizations transform their workplaces and work cultures to create safer, more efficient and more environmentally sustainable workplaces.

DuPont (NYSE: DD) has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802. The company believes that by collaborating with customers, governments, NGOs, and thought leaders we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment.