

Eastman Chemical Company

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Statement for the Record

Senate Children's Health and Environmental Sustainability Subcommittee

Growing Long-Term Value: Corporate Environmental Responsibility and Innovation

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Chairman Udall, Senator Alexander, and members of the subcommittee thank you for the opportunity to testify this morning. The topic of today's hearing, corporate environmental responsibility and innovation are concepts Eastman pursues every day in order to remain competitive in an industry that is truly global.

About Eastman

At Eastman Chemical Company, we manufacture and market the chemicals, fibers and plastics that give everyday products the strength, design and functional characteristics desired by customers around the world. Even though our products are not household names, they are used in making everything from the packaging for your food, drinks and personal care products, to the fabric in your clothing and home furnishings, the paint on your house and automobile, and the plastics in your bicycle helmet and golf clubs.

Our extensive product line is supported by strong technical services. Customers rely on Eastman's expertise to help create innovative products that are competitive in today's challenging marketplace.

The world today is a dynamic place and we see new entrants in our markets every year. Perhaps more than ever, people care about the legacy they leave for future generations and are ready to take action to address social and environmental concerns. Many companies see these challenges as threats. At Eastman, we see them as opportunities for which we continue to take an unconventional approach to succeeding in the marketplace. We have developed a number of transforming initiatives that do more than simply respond to challenges. They allow us to embrace change and continue to find ways to innovate and improve.

Technology, quality, operational excellence, and customer service are just some of our strengths. Eastman people actively work to protect people and the environment and to uplift the standards of the economic, physical and social world in which we live and work. We have been involved in making life better, healthier, and safer for people around the world. We know it takes more than bricks and mortar to make a company great – it takes collaboration and partnerships with all the sectors of our economy - both public and private.

Partnership with the U.S. Department of Energy (DOE)

One public partnership that Eastman has benefitted from is with the U.S. Department of Energy. In 2010, Eastman signed the DOE *Save Energy Now* LEADER pledge (now the Better Buildings, Better Plants program), with a goal to reduce energy intensity over a 10 year period by 25%.

The energy intensity baseline was established as 2008, the year that Eastman became an ENERGY STAR® Partner. In 2008, Eastman established an auditable measure consistent with DOE guidelines and has reduced its energy intensity by 5.3%.

Eastman has benefitted in other ways from this voluntary government program as well. In particular, we have received valuable training and external assessments by highly skilled engineers for steam, pumping systems, and compressed air.

- An assessment of our river water pumping system resulted in several actionable recommendations that resulted in a savings of more than \$300,000.
- An assessment of our compressed air system resulted in recommendations for savings of \$294,000.

During the assessments, DOE involved our engineers. This hands on experience enabled Eastman employees to conduct their own assessments, resulting in more savings. These internal assessments used specific knowledge from the DOE training as well as general guidelines for how to conduct assessments. In total, our internal energy team has identified more than \$3M in savings opportunities. In fact, DOE recognized Eastman in 2011 for having exceeded the 2.5% energy reduction target of the Better Buildings, Better Plants program in a single year.

Receipt of 2012 ENERGY STAR Partner of the Year

Another public partnership that Eastman has greatly benefited from is with the Environmental Protection Agency. Earlier this year, EPA named Eastman an ENERGY STAR® Partner of the Year for strategically managing and improving energy efficiency in 2011. Eastman was one of 36 organizations selected for this honor from a total of about 20,000 partners and is only the second chemical company ever selected. Eastman was recognized for strategically managing and improving energy efficiency during 2011.

This voluntary EPA program is widely recognized at Eastman as a major contributor to the success of our energy program which is built on the ENERGY STAR Guidelines for Energy Management.

An important part of the ENERGY STAR program is the opportunity for interaction with other industrial partners. We participate in Focus Group meetings and the Peer Partner Network. These interactions with other Partner companies have fostered sharing of best practices and implementation of novel approaches. ENERGY STAR provides helpful tools such as Portfolio Manager to help us understand building energy use. In addition, WWW.ENERGYSTAR.GOV provides tips for saving energy at home and educational resources for our children. Eastman has shared these resources with 140 schools in its Putting Children First partnership.

Recognition from the American Chemistry Council (ACC)

Eastman is recognized as a leader in the chemical industry as well. Eastman's energy efficiency efforts have a rich history with consistent improvements over time. The American Chemical Council, the premier trade organization representing the chemical industry, recently recognized Eastman with several ACC Energy Efficiency Awards – this is the 19th consecutive year Eastman has received such awards. Since 2008, we have received awards for projects that totaled

reductions of more than four and a half billion Btus and over a half a million tons of greenhouse gas emissions.

Significant Investment in Energy Efficiency Efforts

These programs have led Eastman to make significant investment in energy efficiencies. Even though most of our operating assets are located in the US, last year over 45 percent of our sales revenue came from outside the US and Canada. Accordingly, we have to control costs here in the US so we can compete globally, and one way we do this is through our energy efficiency program.

More than \$35 million was invested in implementing more energy efficient manufacturing processes during 2010 and 2011. In 2011 alone, we documented \$11.6 million in savings from energy projects. In 2012, the energy team is managing a budget of more than \$10 million that is to be spent on improving energy efficiency.

Energy Efficiency projects have an attractive economic payback and reduce our energy consumption and greenhouse gas emissions. And such projects are very low risk. They are often easily understood projects that can be readily implemented and will achieve the anticipated savings as long as energy prices remain constant or rise.

We also have an Innovation and Sustainability Council (5 executive and 2 vice president team members) that provides corporate governance on sustainability and innovation investments and is actively engaged in our energy management programs.

Eastman is committed to investing in research and development to discover innovative technologies and processes that help meet our customers' ever-changing needs.

We have set a 2015 goal that two-thirds of revenues from new product launches will come from products advantaged on assessed sustainability criteria. The criteria include materials content, energy and emissions, and toxicity. Currently, more than half of the forecasted revenues from our innovation pipeline are from sustainably advantaged products.

Our Technology Organization established a Process Efficiency Team that ranked chemical processes by energy intensity. Beginning with the most energy intensive processes, the PhD chemical engineers assigned to this work evaluated processes as if they were being completely redesigned in order to foster breakthrough ideas.

Eastman has identified and catalogued over 1000 energy efficiency ideas. The database is continually supplemented with additional ideas identified through energy surveys, external assessments, and manufacturing initiatives. Energy engineers regularly mine the database of ideas and propose the most promising one based on current energy prices and manufacturing practices, to manufacturing staff engineers and area managers.

The Challenge

While many projects have been identified that will reduce energy use and greenhouse gas emissions, there are a number of barriers that prevent industry from full implementation. Most of these barriers can be attributed to competition for resources. Eastman, like many other

industrial companies, establish our capital expenditure budget based on our expected earnings, dividends we pay our investors, and investments that will result in growth. Our investors count on growth to improve the value of their investment. These growth projects require financial and design and labor resources to implement. We also have to budget for projects to comply with environmental regulations. Those projects typically have large capital expenditures with no return. For our annual capital spend to return above our cost of capital and meet our obligations to investors, we are often limited to only implementing those energy efficiency projects that have the highest rate of return. With the new, low natural gas pricing due to shale gas production and because of our highly efficient cogeneration facilities, our cost of energy is lower, making it difficult to justify energy efficiency projects based on cost alone. As higher payback energy efficiency projects are completed first, finding energy reduction projects that can be economically justified will become increasingly more challenging.

The Results of Insight

When it comes to energy efficiency and greenhouse gas emissions reduction, the chemical industry should be seen as part of the solution. The products we make help other sectors be more efficient – from the development of lightweight material that make vehicles more fuel efficient to the discovery of bio-based raw materials that take the place of those sourced from petroleum.

Our suppliers and customers are manufacturers, too, and face similar challenges when working on energy efficiency projects. Eastman collaborates with customers to help them meet their sustainability goals. We promote sustainability practices across our value chains, and have completed cradle to gate Life Cycle Analyses or LCAs on approximately 60% of our products, comprising about 80% of our 2010 revenues. Approximately 80% of our growth pipeline is sustainably advantaged compared with market alternatives.

Eastman's customers have recognized the importance of a favorable product Life Cycle Analyses. They also understand that much of the carbon contribution comes upstream of their manufacturing process. Requests from customers have begun, and are expected to grow, to improve the carbon footprint of downstream products. Eastman strives to retain and grow our business through strategic relationships with our customers so we are taking steps to understand these concerns and to drive innovation to meet the demands.

In closing, I would like to thank you for the opportunity to tell Eastman's story here today. It is encouraging that the Congress is interested in what the private sector is doing on its own to promote innovation and improve efficiency. Hopefully, this dialogue will help drive public policies that meet the shared and individual goals of both the government and the business community. I am happy to answer any questions you may.