



**U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Power**

Hearing

**“American Energy Security and Innovation: An Assessment of Private-Sector
Successes and Opportunities in Energy Efficient Technologies”**

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Statement Submitted for the Record

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Arkema Inc. appreciates the opportunity to submit written comments to the Subcommittee on Energy and Power of the House Energy and Commerce Committee. Arkema Inc. delivers safe and innovative chemical solutions that meet today’s growing demands and is a premier provider of chemicals and materials in the global marketplace.

We appreciate the Committee’s interest in highlighting private sector successes in developing and implementing energy efficient technologies. Arkema’s Calvert City, Kentucky facility, as well as many of our other 26 facilities in the United States, manufactures and produces chemicals and materials that are used in a variety of applications that help individuals, businesses and organizations achieve increased energy efficiency. We believe there is a strong role that the chemical manufacturing industry

can play in helping to create energy solutions for a strong, secure and energy efficient future, and Arkema is proud to play a key part in these efforts.

About Arkema Inc.

Arkema is a diversified chemicals manufacturer and like other multi-national corporations operates facilities around the world. In the United States, we have 25 manufacturing locations and two research centers that collectively employ approximately 2,500 people. Arkema Inc. is the U.S. subsidiary of Arkema S.A., a European-based chemical manufacturing company that operates in North America, South America, Europe and Asia.

Arkema's roots in the U.S., and its participation in international trade, go back to the Pennsylvania Salt Manufacturing Company, which in 1860 became the first entity to export refined petroleum from the United States. The newest operating refrigerant manufacturing facility built in the United States is at our Calvert City, Kentucky plant, which alone employs 270 workers and contributes more than \$50 million to the local economy each year.

As a corporation, Arkema is committed to upholding the highest standards for safety and the environment. We strive to meet these goals by optimizing our manufacturing and procurement processes and activities. Our efforts in these areas are also at the forefront of our innovation policy, and they help drive the development of our product offerings.

Materials and Technologies that Promote Energy Efficiency

Arkema produces and manufactures a range of materials and products that have energy efficiency applications and uses. At our Calvert City facility, for example, we produce two products that have energy efficiency uses. Our Kynar® PVDF resin is a tough coating used on the exterior of many buildings, including in high performance cool roof coatings that can provide substantial energy savings to building owners and operators. Arkema also produces fluorochemicals at the Calvert City facility, and these are used as coolant in air conditioners and refrigeration equipment and also in various foam insulation applications that can also help achieve energy savings in buildings.

Arkema also supplies a number of products into the automotive industry that can help auto manufacturers achieve better energy efficiency. From coatings, refrigerants, plastics, polymers, and resins, Arkema serves a number of automobile parts suppliers and manufacturers to foster technological advancements for motor vehicles. Arkema produces materials and products for the auto industry that make vehicles safer, more reliable, more attractive, more environmentally-friendly and more fuel-efficient.

For example, the following Arkema products and materials can be found in a variety of different automotive applications: Rilsan® HT products can significantly reduce weights by replacing a variety of metal and rubber parts and tubes, and since the Rilsan® products are biobased, they are also environmentally friendly; Kynar® PVDF, noted above, is also used in a variety of exterior parts and trim and exhibits high performance in terms of durability and strength; and Plexiglas® is used in a variety of automotive applications.

In addition, other business units produce a variety of materials and stabilizers that are used in many different automotive parts to help produce strong and lighter-weight parts. Other Arkema materials such as thermoplastic and thermoset composites; resins; foamed polymers; carbon nanotubes and lighter-weight sheets that can replace glass in some cases (e.g., sunroofs) are all potential solutions that could help reduce automobile weights and, in turn, reduce fuel consumption and provide greater energy efficiencies.

Additionally, Arkema has technologies that play key roles in energy storage systems and batteries, including materials that can help make such systems less expensive, more environmentally friendly and safer. Arkema coatings and technologies also play key roles in photovoltaic systems and help improve their durability and efficiency. Our work in both of these areas can help contribute to increased energy efficiency for the automotive and building sectors.

Finally, Arkema is involved in various efforts to develop and implement industrial energy recovery technologies. This work includes development of high temperature heat pumps for recovery of waste heat from industrial facilities and other ongoing developments on new fluids for high temperature heat pumps and other energy recovery applications. At our Calvert City facility, for example, we have improved our energy intensity (energy consumed per pound of product produced), and, in 2012, our energy intensity was 17% better than our baseline year. We achieved this greater efficiency through a variety of capital and process improvements at our facility, and these enhanced efficiencies help reduce our manufacturing costs and improve our competitive position.

Our company and our employees are proud of the contributions that we make to help promote and achieve energy efficiency. We believe Arkema materials and the

chemical manufacturing industry can help provide critical energy efficiency solutions for the U.S. and the world. Recent data from the American Chemistry Council indicates that chemistry products and technologies save 8 to 10.9 quadrillion BTU's in energy per year for a cost saving of up to \$85 billion per year.

As the Committee continues its work in the area of energy efficiency, we urge your support for policies that recognize and encourage the important contributions of materials producers and the chemical manufacturing industry to efforts to promote and achieve energy efficiency improvements. We hope that you will not hesitate to call on us or the chemical manufacturing industry if we can be of assistance.

Thank you, again, for your interest and your consideration.