



**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE U.S. DEPARTMENT OF ENERGY
AND THE AMERICAN CHEMISTRY COUNCIL
ON PLASTICS INNOVATION**

The U.S. Department of Energy (DOE) and American Chemistry Council (ACC) (each referred to individually as a “Party” and collectively as the “Parties”) are entering into a Memorandum of Understanding (MOU) to enhance innovation in energy efficient plastics recycling and reduce waste through enhanced recovery of post-use plastics, which represent an important store of energy derived from petroleum, natural gas, and renewable feedstocks.

I. Background

ACC is a non-profit trade association established in 1872 which represents a diverse set of more than 150 companies engaged in the business of chemistry. In 2018, ACC’s Plastic Division member companies which manufacture or distribute plastic resin in the United States adopted circular economy goals to re-use, recycle or recover 100 percent of plastics packaging by 2040. Resin manufacturers recognize that it will take collaboration across the value chain and with government and academia to achieve these goals. This MOU falls under the framework of *DOE’s Plastics Innovation Challenge*, a comprehensive program to accelerate innovations that will dramatically reduce plastic waste in oceans and landfills and position the U.S. as a global leader in advanced plastics recycling technologies and in the manufacture of new plastics that are recyclable by design. DOE and ACC intend to develop and conduct cooperative activities related to *DOE’s Plastics Innovation Challenge* where such cooperation advances the domestic plastics supply chain, positioning the United States for global leadership in advanced recycling technologies while improving economic and environmental outcomes.

II. Purpose and Authority

The purpose of this MOU is to identify a framework for cooperation and partnership in areas of common interest that take advantage of the different strengths of DOE and ACC. The Secretary of Energy’s authority to enter into agreements is set forth in Department of Energy Organization Act (Pub. L. 95-91, as amended; 42 U.S.C. §7256).

III. Responsibilities of the Parties

DOE and ACC agree to work together toward the following goals:

- **Collection, Sorting and Pre-processing of Plastics for Advanced Recycling:**
 - Develop resource mapping to identify areas of the U.S. where advanced waste preprocessing would best be focused leading to reduced plastic waste in oceans and landfills.
 - Develop novel collection technologies to prevent plastics from entering waterways and the ocean and minimize landfilled plastic waste.
 - Develop advanced and techno-economically viable preprocessing techniques tailored to mixed waste streams that include plastics containing municipal solid waste, and is focused on removing contaminants, providing a value-added stream of feedstock for conversion to chemical and plastics feedstocks, chemicals, fuels and other useful products.

- **Conversion to Add Value:**
 - Identify the U.S. supply chain related to advanced recycling and position it for opportunities to save and conserve energy resources so that raw materials, intermediates, and finished products can more efficiently rejoin the supply chain.
 - Develop approaches for mechanical and chemical processing of deconstructing post-use plastics into useful chemical building blocks of interest across the supply chain that can be upgraded into higher value products, which encourages further recycling.

- **Quantify Energy Efficiency and Environmental Benefits of Plastic Recycling**
 - Apply sustainability analysis to identify the energy efficiency and environmental benefits of various, non-proprietary “recycling to product” technologies as well as “design for recyclability” with emphasis on energy efficiency, reduction in water use, and other agreed on parameters.

- **Design for Recyclability:**
 - Develop new polymers that are inherently designed for recycling while meeting the performance requirements of polymers in applications today and tomorrow.

Specific work plans to support these goals may be developed by the Parties and incorporated as additional addenda under this MOU by mutual consent of the signatories or their designees.

IV. Points of Contact

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V. Independence

Each Party has sole control and authority at all times over its employees, contractors, facilities, and agents. No representations will be made by any Party that would create apparent agency, employment, or partnership with another Party.

VI. Responsibilities

Each Party remains responsible for its own costs and expenses, negligence, and/or willful misconduct in connection with the execution and performance of this MOU.

VII. Intellectual Property

In the event that any intellectual property rights should arise from activity undertaken within the scope of this MOU, the Parties understand that disposition and protection of such intellectual property will be governed by the intellectual property provisions of a separate agreement governing the underlying work performed, for example, a cooperative agreement, grant, or cooperative research and development agreement.

VIII. Terms and Termination

This MOU shall remain in effect for five (5) years from the date on which it becomes effective, or until terminated by either Party upon 30 days written notice to the other Party.

IX. Miscellaneous

This MOU in no way restricts either of the Parties from participating in any activity with other public or private agencies, organizations, or individuals.

This MOU is neither a fiscal nor a funds obligation document. Nothing in this Agreement authorizes or is intended to obligate the Parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.

This MOU is not legally enforceable and does not create any legal obligation on the part of either Party, nor does it provide a private right or cause of action for or by any person or entity. This MOU is subject to, and will be carried out in compliance with, all applicable laws, regulations, and other legal requirements.

This MOU may be modified by mutually acceptable written amendment duly executed by authorized officials of DOE and ACC. Its provisions will be reviewed annually and amended/supplemented if mutually agreed upon in writing.

This MOU constitutes the full and final understanding of both Parties on all subjects contained within it. All prior negotiations, understandings, and agreements are merged into this Agreement.

The Parties have caused this MOU to be executed in duplicate originals by their duly authorized representatives and is effective on the date of the last signature below.

For DOE:



Mark W. Menezes
Under Secretary of Energy
U.S. Department of Energy

Date: 02/03/2020

For ACC:



Christopher L. Jahn
President and CEO
American Chemistry Council