

WHAT ARE ADVANCED RECYCLING TECHNOLOGIES AND HOW SHOULD THEY BE REGULATED?

Innovative manufacturers are converting post-use plastics into valuable fuels, petroleum products and chemical feedstocks.

Advanced recycling and recovery technologies, also called chemical recycling, can convert post-use plastics into a range of useful outputs, such as oil, fuels, and other petroleum-based products, a range of useful outputs, such as feedstocks for new plastics, specialty polymers, oil, fuels, and waxes, to help power communities and other key parts of our economy, including transportation and manufacturing. These technologies also offer important environmental benefits, such as diverting valuable materials from landfill, transforming waste into an abundant source of alternative energy, and helping to reduce greenhouse gas emissions.

STEP 1:

Plastics that can't be economically recycled are delivered for processing



STEP 2:

Contaminants like metal and glass are removed from the plastic stream



STEP 3:

Plastics are heated without oxygen (pyrolysis)

STEP 4:

Gas is cooled and condensed into oil, fuels, and petroleum products



Fuels can power cars, buses, ships and planes



Petroleum products can then be used by manufacturers and industrial users



STATE AND LOCAL REGULATIONS SHOULD NOT BE A BARRIER AND SHOULD SUPPORT THE DEPLOYMENT OF ADVANCED RECYCLING TECHNOLOGIES



Advanced recycling facilities should be regulated like other manufacturing facilities. These facilities receive plastic feedstock that is converted to valuable fuels and petroleum products.



Laws and regulations should identify companies that manufacture fuels and petroleum products from post-use plastics feedstock as producers of alternative energy, not as waste disposal companies.



Making fuels and petroleum products from post-use plastic feedstocks complements traditional mechanical recycling and other integrated solid waste management programs.

REGULATING ADVANCED RECYCLING AND RECOVERY FACILITIES

Standalone advanced recycling facilities should be regulated just like any manufacturer that receives a feedstock and produces a product. In many jurisdictions this will require updates to existing laws and regulations. Below are some guidelines for how new advanced recycling facilities should be regulated.



Zone standalone advanced recycling facilities as light industrial.



Ensure advanced recycling feedstock is not classified as “solid waste.”

Definitions should allow post-use plastics to be classified as feedstocks or materials. “Solid waste” should only describe those materials that cannot be sorted and upgraded for re-use.



Don't regulate advanced recycling facilities as “landfills” or “waste-to-energy” facilities. Charging a “tip fee” does not change the nature of the advanced recycling facility.

A advanced recycling facility will only take very controlled materials and will not receive mixed materials beyond plastics. The acceptance of a fee does not make the feedstock a waste.



Let recyclers determine whether there is a viable market for their plastics.

Banning materials from use in advanced recycling facilities may result in large volumes of material being landfilled.



Allow storage of plastics onsite.

Typically an advanced recycling facility shouldn't need more than approximately one to three weeks of supply onsite.



Allow for disposal of off-spec feedstocks and by-products.

Inevitably, there will be some materials, such as metals, wood, and fiber, delivered to an advanced recycling facility that cannot be used.



Do not require unnecessary financial guarantees that discourage investment.

Materials that cannot be converted to fuels or petroleum products and other process wastes will be disposed offsite at regulated disposal facilities.

THE AMERICAN CHEMISTRY COUNCIL'S ADVANCED RECYCLING ALLIANCE FOR PLASTICS

has developed detailed guidelines to encourage innovation, consistent with the regulatory requirements for Air, Process Water and Stormwater, and management of Products and Co-Products.

TO LEARN MORE PLEASE SEE

Regulating Advanced Recycling Facilities and FAQ

<http://plastics.americanchemistry.com/Regulating-Chemical-Recycling>