WHAT IS ADVANCED RECYCLING?



Companies are using advanced recycling and recovery technologies, also called chemical recycling, to complement ongoing recycling efforts.

Growing interest and investments in advanced recycling can reduce the amount of waste sent to landfills and generate a diverse range of products, such as industrial waxes, fuels, solvents, and plastic building blocks.

STEP 1:

Plastics that are not mechanically recycled are delivered for processing



STEP 2:

Contaminants like metal and glass are removed from the plastic stream



STEP 3:

Plastics are processed using advanced recycling technologies



Fuels can power cars, buses, ships, and planes



Polymers, naphtha, and chemicals can be used to create new products like plastics or used in manufacturing processes

STEP 4:

Outputs include polymers, naphtha, fuels, waxes, and specialty chemicals



STATES AND LOCAL GOVERNMENTS SHOULD ENSURE THEIR LAWS ARE UPDATED TO SUPPORT THE POTENTIAL OF ADVANCED RECYCLING



Advanced recycling and recovery technologies should be recognized as complementary to recycling and an important part of a community's integrated solid waste management.



Laws and regulations should identify advanced recycling and recovery companies as producers of an alternative energy source. Rather than a form of disposal, this process should qualify as utilizing raw materials for a manufacturing process under existing state and local regulations.



States should ensure their permitting frameworks and regulations for advanced recycling and recovery technologies reflect 21st century innovations.

THE BENEFITS AND VERSATILITY OF ADVANCED RECYCLING TECHNOLOGIES

Today's versatile advanced recycling technologies can convert post-use plastics into a range of useful outputs, such as industrial waxes, fuels, solvents, and plastic building blocks, to help grow 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.



BENEFITS OF EXPANDING ADVANCED RECYCLING TECHNOLOGIES



Advanced recycling technologies complement traditional recycling by converting post-use plastics into valuable products.



If all the post-use plastics in municipal solid waste were converted to fuel instead of landfilled, these plastics could power up to 9 million cars per year.



Advanced recycling technologies offer the opportunity to reduce greenhouse gas emissions by up to 60%-70% over new forms of crude oil extraction.