Agilyx Research Center (ARC)

With more than a decade of experience as plastic depolymerization and advanced recycling industry leaders, Agilyx is at the forefront of developing break-through technologies and processes to help solve the problem of plastic waste.



Services we provide

The ARC provides a range of services including **characterization** and **identification** of plastic streams that can be turned into **feedstock** sources matched to advanced recycling processes. **Projects range from small-scale lab, through pilot plan, to full-scale identification and design of commercial facilities.**

Expertise in plastic waste

Using our **extensive polymer** and mixed polymer expertise (including co-polymers, binders, multi-layers), plastics sources can be matched to provide rapid turnaround of suggested pathways. Follow-up with **physical characterization**, pilot-scale processing, pre and post- processing treatment and sample generation provide data that can be used as design input for **full-scale process design projects**.



Rapid matching using our extensive feed-to-product expertise



Feed characterization services



Detailed feedstock specification definition



Bench and pilot-scale advanced depolymerization



Generation of multi-liter quantities of products for evaluation purposes



Pre and post-process treatment



Feed, product and by-product physical and chemical analysis



Packaged Feasibility Studies



Providing Experimental Data Inputs for scale-up and commercial designs

Our innovative solutions

Plastics can be broken down into smaller chemical building blocks, including high-value hydrocarbons and monomer units, allowing currently unrecyclable plastics to enter a circular economy. Agilyx's core pyrolysis processes can handle a variety of waste sources including industrial scrap, plastics collected from environmental clean-up, and materials that have entered the current waste/recycling streams.



Styrenyx: Agilyx's advanced recycling technology

A pioneer in the advanced recycling sector, Styrenyx uses depolymerization to break polystyrene waste back into its virgin-equivalent building block.



TruStyrenyx: All-in-one platform for polystyrene waste

Combines Styrenyx depolymerization technology and Technip Energies' purification expertise to yield a recycled styrene monomer of exceptionally high purity. This styrene monomer can be reused in any styrene monomer end-market enabling a circular economy.



Agilyx Synthetic Crude Oil (ASCO)

Our advanced recycling technology can process mixed waste plastic into ASCO, which can then be refined to naphtha and aromatic chemicals—key building blocks for new plastics and other high-value products.

Helping our customers recycle plastic waste

- Do you have plastic waste or a hard-to-recycle or unrecyclable plastic?
- Do you want to investigate the potential pathways to turning that material into useful products via chemical advanced recycling?
- Do you want to do a feasibility study for recycling of large volumes of material?
 We can create a custom project plan to match your requirements and budget from

We can create a **custom project plan** to match your **requirements and budget** from **"Can I recycle this material?"** to **"I want to build a large commercial facility"** and all points in-between.