



# The Sustainable Polymers Tech Hub

**Goal:** Under the United States Department of Commerce, the Economic Development Administration (EDA) created the Regional Technology and Innovation Hub Program ("Tech Hubs") to strengthen U.S. economic and national security through place-based investments in the Greater Akron region with assets, resources, capacity and potential to become globally competitive within 10 years, in the technologies and industries of the future.

## Key Technology Focus Area

The Sustainable Polymers Tech Hub seeks to **advance global decarbonization** through **innovation and equitable economic growth** by bringing new polymer technologies to market that **reduce fossil fuel consumption**. Additional focus on workforce development in lifecycle assessment (LCA) and other skillsets critical to a sustainability workforce will support the **region's leadership in the industry for decades to come**.

## Program

### Phase 1

On behalf of the Polymer Industry Cluster, the Greater Akron Chamber was one of only 11 applicants to receive a Tech Hub Designation and a Strategy Development Grant (\$400K over 18 months).

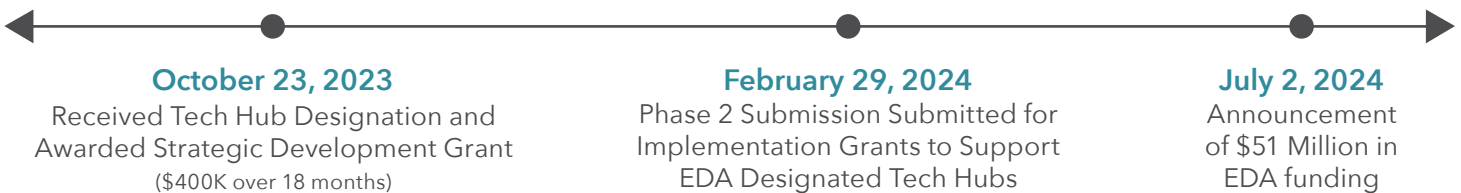
*Out of 400 applicants, we were 1 of 29 applicants to receive a Strategy Development Grant and 1 of 31 to receive a Tech Hub Designation.*

### Phase 2

Polymer Industry Cluster Selected for \$51 Million Federal Sustainable Polymers Tech Hub Phase 2 Investment.

*12 applicants were awarded an Implementation Grant in 2024. While we believe that the unfunded portion of our proposal is very important, we're committed to pursuing other funding sources to support that work.*

## Program Timeline



## Important Components



Economic sustainability of projects



Positive environmental impact



DEI/inclusive economic growth

## What is a Tech Hub Designation and what benefits does it include?

Tech Hubs Designation signifies a commitment to boost the local tech industry, create jobs, and enhance U.S. economic and national security. This designation is packaged with several benefits that can help the Polymer Industry Cluster achieve its shared goals - not only the exclusive opportunity to compete for an Implementation Grant, but also priority consideration for other funding programs, technical assistance on consortium governance and tech transfer, and support in FDI attraction efforts.

# Sustainable Polymers Tech Hub Projects

## Overview:

The \$51 Million grant will be distributed across 7 distinct yet interdependent projects, each led by a different partner organization. This award is important recognition of our region's global leadership, and can serve as a beacon for attracting new businesses, talent, and capital.



## 10 Year Goal

4,000+ direct jobs created or retained  
 \$1 billion+ private investment catalyzed  
 3.9 million tons of CO2 reduction annually

### Project 1

Total Federal + Match Funding:  
\$5,687,500

#### Commercializing Recycling of End-of-Life Tires

*Lead: Full Circle Technologies*

Environmentally-friendly process that recovers functional polymers from old tires and reproduce, including into soft pliable rubber pellets to create liquid asphalt

*Application: Major use of devulcanized rubber pellets, Ecorphalt, in the asphalt pavement industry to make roads more durable, prevent cracking, last longer*

### Project 2

Total Federal + Match Funding:  
\$10,461,826

#### Sustainable Polymer Composites via Liquid Phase Mixing

*Lead: The Goodyear Tire & Rubber Company*

Scale up an energy-efficient liquid phase mixing process that impacts composite materials in tires and across multiple industries

*Application: Tires and beyond*

### Project 3

Total Federal + Match Funding:  
\$12,358,208

#### Bio-Based Butadiene Feedstock

*Lead: BioVerde Tech LLC*

Manufacturing of sustainable Bio-Butadiene for green synthetic rubber and other products to reduce the CO<sub>2</sub> footprint and use of fossil fuels in the industry

*Application: synthetic rubbers, adhesives, plastics, and resins*

### Project 4

Total Federal + Match Funding:  
\$6,685,850

#### Carbon Black & Nanotube from Methane Source

*Lead: Huntsman*

Integrate a novel high performance carbon nanotube material into common polymer applications to reduce carbon footprint and improve performance

*Application: Lightweight composites for automobiles, aerospace, high-performance tires and rubber goods, and conductive fillers for EV batteries*

### Project 5

Total Federal + Match Funding:  
\$11,460,286

#### Safer Anti-Degradant for Tires and Plastics

*Lead: Flexsys*

Scale up the production of a molecule to replace 6PPD in tire production to reduce the environmental impact of rubber products while maintaining high performance and safety of the products

*Application: Tires and other rubber products*

### Project 6

Total Federal + Match Funding:  
\$8,070,113

#### Workforce Initiative for a Sustainable Environment (WISE)

*Lead: The University of Akron*

Strengthen and diversify the region's talent pipeline through sustainability education and training, including an emphasis on Life Cycle Assessment (LCA)

*Focus Areas: K-12 pathways, technical certificates, associate, bachelor, and advanced graduate degrees*

### Project 7

Total Federal + Match Funding:  
\$3,462,755

#### Regional Office of Innovation Governance

*Lead: Greater Akron Chamber*

Fortify and augment the Polymer Industry Cluster's Leadership Committee, staff, assets and activities to promote innovation, growth, accountability, and sustainability of efforts

*Focus Areas: Advocacy, communications, economic development, governance, sustainability, and more*

## Get Involved

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