





# **Sustainable Polymers Tech Hub Projects**

#### **Overview:**

**Project 1** 

**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

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.



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-Butadience 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**

10 Year Goal

4,000+ direct jobs created or retained

\$1 billion+ private investment catalyzed

3.9 million tons of CO2 reduction annually

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**

