



Summary of Infrastructure Investment and Jobs Act

Provisions Relevant to the Batch & Specialty Chemical Industry

January _, 2022



OVERVIEW

On November 15, the [Infrastructure Investment and Jobs Act \(P.L. 117-58\)](#) was signed into law. The bill makes substantial investments in all manner of transportation-related activities—road, rail, boat, air and more.

“Buy America” Mandate (§§ 70901-70953)

The bill generally requires manufactured products and construction materials used in federally-funded infrastructure projects to be made in the United States. This preference requirement includes upstream components – 55% of the value of manufactured products, and 100% of the value of construction materials (which includes plastics and polymer-based products), must be made in the United States. The bill also seeks to boost other domestic content procurement preference programs by increasing their transparency, especially of waivers granted under them.

Federal Grants for Infrastructure Projects

The bill creates a wide range of programs to support the growth of cutting-edge or environmentally preferable technologies like electric vehicle charging stations, battery recycling or drunk-driver detection technology. These programs could create potential downstream business opportunities for SOCMA members, most likely as subcontractors or partners with grant recipients. Some of the pertinent grant programs are outlined below.

"Advanced Research Project Agency-Infrastructure" (§§ 25012-25013)

The Department of Transportation will support research projects that develop innovative solutions to reduce long-term costs of infrastructure development, mitigate transportation's lifecycle effects on the environment, such as greenhouse gas emissions, and promote resilience from physical and cyber threats.

Battery Processing and Manufacturing (§ 40207(a)-(e))

Manufacturing grants are available to carry out demonstration projects for:

- Processing of battery materials
- Advanced battery component manufacturing
- Advanced battery manufacturing

Battery Recycling Research and Development (§ 40207(f))

Multiyear grants are offered for research, development, and demonstration projects to increase the reuse and recycling of batteries, including:

- Extraction or recovery of critical minerals from recycled batteries
- Integration of increased quantities of recycled critical minerals in batteries
- Safe disposal of waste materials, toxic reagents, byproducts, and components recovered during the recycling process
- Optimization and cost-effectiveness of material derived from recycling batteries

Electric Drive Vehicle Battery Recycling and Second-Life Applications Program (§ 40208)

Grants are available for research, development, and demonstration projects to create innovative and practical approaches to increase the recycling and second use of electric drive vehicle batteries, including:

- Expanded uses for critical materials recovered from electric drive vehicle batteries
- Improvements and changes to electric drive vehicle battery chemistries.

Clean Hydrogen Research and Development Program (§ 40311-40315)

Multiyear grants are available for research, development, and demonstration projects to advance new clean hydrogen production, processing, delivery, storage, and use, equipment manufacturing technologies and techniques to:

- Increase efficiency and cost-effectiveness in the manufacturing process
- Increase efficiency and cost-effectiveness in the use of resources, including existing energy infrastructure
- Support domestic supply chains for materials and components
- Identify and incorporate nonhazardous alternative materials for components and devices

Clean Hydrogen Electrolysis Program (§ 40314 (new Energy Policy Act § 816))

Grants can be won for demonstration projects of technologies that produce clean hydrogen using:

- Low or high temperature electrolyzers, liquid-alkaline electrolyzers, membrane-based electrolyzers, and other advanced electrolyzers
- New highly active, selective, and durable electrolyzer catalysts and electro-catalysts that greatly reduce or eliminate the need for platinum or enable electrolysis of complex mixtures with impurities, including seawater
- Low-cost membranes or electrolytes and separation materials that are durable in the presence of impurities or seawater



Federal Support of Cleaner/More Energy-Efficient Manufacturing

The legislation creates a number of federal grant and consulting programs designed to promote the use of clean energy or greater efficiency in manufacturing.

Advanced Energy Manufacturing and Recycling Grant Program (§ 40209)

Grants are offered for eligible manufacturing firms with fewer than 500 employees at a plant site for qualifying advanced energy projects that re-equip a manufacturing facility with equipment designed to substantially reduce greenhouse gas emissions of that facility through:

- Installation of low- or zero-carbon process heat systems
- Carbon capture, transport, utilization, and storage systems
- Technology relating to energy efficiency and reduction in waste from industrial processes
- Other industrial technology that significantly reduces greenhouse gas emissions

Sustainable Manufacturing Initiative (§ 40522)

On the request of a manufacturer, the Office of Energy Efficiency and Renewable Energy of the Department of Energy will provide onsite technical assessments to identify opportunities for:

- Maximizing the energy efficiency of industrial processes and cross-cutting systems
- Preventing pollution and minimizing waste
- Improving efficient use of water in manufacturing processes
- Conserving natural resources