

# Recycled Plastics in Asphalt

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# Topics

- Context
- Why focus on asphalt as a recycled plastics end market?
- What are the key questions for consideration?
- What resources are available?

A photograph of three children participating in a recycling activity. A boy in a blue shirt is on the left, a boy in an orange shirt is in the center, and a girl in a pink shirt and glasses is on the right. They are gathered around a blue recycling bin. The boy in the center is holding a clear plastic bottle, and the girl is holding a clear plastic bottle. The boy on the left is holding a clear plastic bottle. The background is a bright, outdoor setting with green foliage. The text 'Plastics Division Sustainability Goals' is overlaid on the top of the image in a dark blue font. The text 'WE RECYCLE' is visible on the side of the blue bin.

# Plastics Division Sustainability Goals

## ✓ 2040 Goal

- 100% of plastics packaging is reused, recycled or recovered

## ✓ Interim Goal (2030)

- 100% of plastics packaging is recyclable/recoverable

## ✓ Best practice goal

- 100% of Division's U.S. manufacturing sites participate in Operation Clean Sweep Blue by 2020, with all North American sites by 2022

## 2030 & 2040 Goals

- 100% of plastic packaging will be recyclable or recoverable by 2030.
- 100% of plastics packaging will be reused, recycled or recovered by 2040.

## Guiding Principles

**Principles for Eliminating Plastic Waste through a Circular Economy**

The American Chemical Council (ACC) supports and promotes the use of plastic packaging that is designed for reuse, recycling, or recovery. The ACC is committed to ensuring that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it. The ACC is committed to ensuring that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

The Commission

ACC is pleased to announce the U.S. goals for plastic packaging by 2030: 100% of plastic packaging will be recyclable or recoverable by 2030, and 100% of plastic packaging will be reused, recycled or recovered by 2040. The Commission will continue to work with industry, academia, and other stakeholders to ensure that these goals are met in a way that is safe for the environment and the health of the people who use it.

- 1. National Recycling Strategy** - A national recycling strategy is needed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

  - Support the development of a national recycling strategy that is designed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.
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- 2. National Reuse Strategy** - A national reuse strategy is needed to ensure that plastic packaging is designed to be reused, recycled, or recovered in a way that is safe for the environment and the health of the people who use it.

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- 3. National Circular Economy Strategy** - A national circular economy strategy is needed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

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- 4. National Policy Framework** - A national policy framework is needed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

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- 5. National Research and Innovation Strategy** - A national research and innovation strategy is needed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

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- 6. National Education and Outreach Strategy** - A national education and outreach strategy is needed to ensure that plastic packaging is designed to be recycled or recovered in a way that is safe for the environment and the health of the people who use it.

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## Roadmap to Reuse

**Roadmap to Reuse**  
Plastic Solutions for America

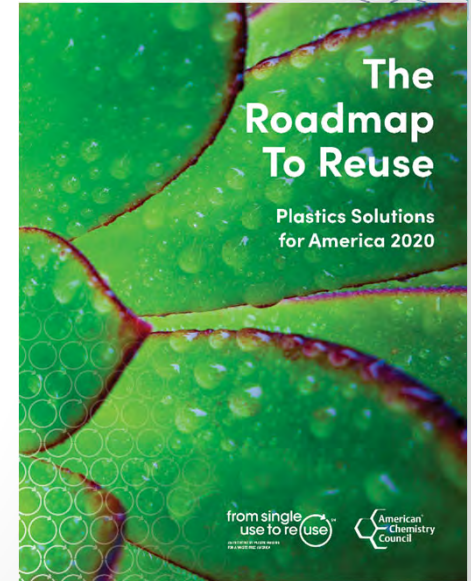
from single use to re(USE)  
American Chemistry Council

	Phase I: <b>Jump-start Reuse</b> (2021-2023)	Phase II: <b>Move to Reuse</b> (2024-2027)	Phase III: <b>Full Reuse Complete</b> (2028-2040)
<b>Value chain engagement</b>	Develop a common framework for reuse and recycling	Expand reuse and recycling programs	Expand reuse and recycling programs
<b>Consumer engagement</b>	Develop a common framework for reuse and recycling	Expand reuse and recycling programs	Expand reuse and recycling programs
<b>Access to recycling</b>	Expand access for multi-family	Expand access for industrial markets	Expand access for multi-family
<b>Collection and separation capability</b>	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass
<b>Recycling capabilities</b>	Improve infrastructure for recycling	Expand reuse and recycling programs	Expand reuse and recycling programs
<b>Economics / end markets</b>	Economic support for infrastructure investments	Economic support for infrastructure investments	Economic support for infrastructure investments

**Continuous stakeholder actions**

Focus Area	Recycling	Reuse (Current)	Reuse (Target)	Recovery	Industry aligned	Coalition
<b>Value chain engagement</b>	Develop a common framework for reuse and recycling	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs
<b>Consumer engagement</b>	Develop a common framework for reuse and recycling	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs	Expand reuse and recycling programs
<b>Access to recycling</b>	Expand access for multi-family	Expand access for industrial markets	Expand access for industrial markets	Expand access for industrial markets	Expand access for industrial markets	Expand access for industrial markets
<b>Collection and separation capability</b>	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass	Address gaps for food, paper, metals, and glass
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## Plastic Solutions for America Report



62  
Projects

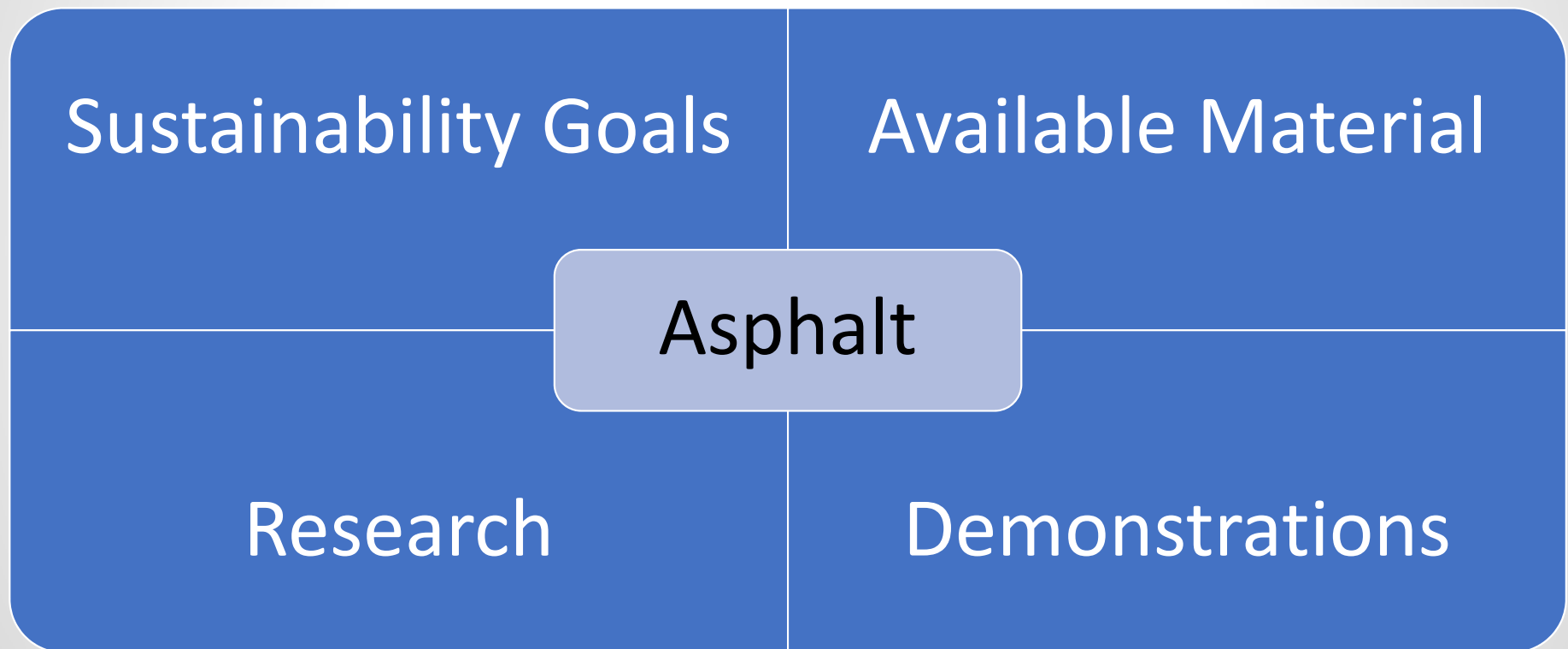
\$5.3B  
Worth

POTENTIAL  
TO DIVERT

3.6M  
Tons of landfill materials

83% of these investments are in the growing field of advanced recycling, which is crucial modern infrastructure needed to accelerate a circular economy for plastics.

# Intersection



# Demonstration Projects

International

Domestic

India

West Java

United  
Kingdom

Texas

Michigan

California

# Key Questions

Tests

Post use

Incentives

Vendor



# Resource Hub

Portal

- Latest research
- Public policy
- LCA: rPE mixes
- Case studies,  
demonstration projects

# LCA: Recycled Content in Asphalt

**LCA**

- Cradle-to-Gate data
- ISO 14044: Model
- Commons LCA

# Recent Example

- Parking lot
- Equal to 71,000 retail shopping bags.
- If scaled in US, asphalt could become a top end market for PE films.

LyondellBasell

## Commentary: Plastic bags into parking lots—it's possible

The Plastics Industry Association and partners test a new application for plastic bags through its NEMO project.



November 15, 2020

Patrick Krieger

Commodities

Municipal Recycling

# Feedback





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