

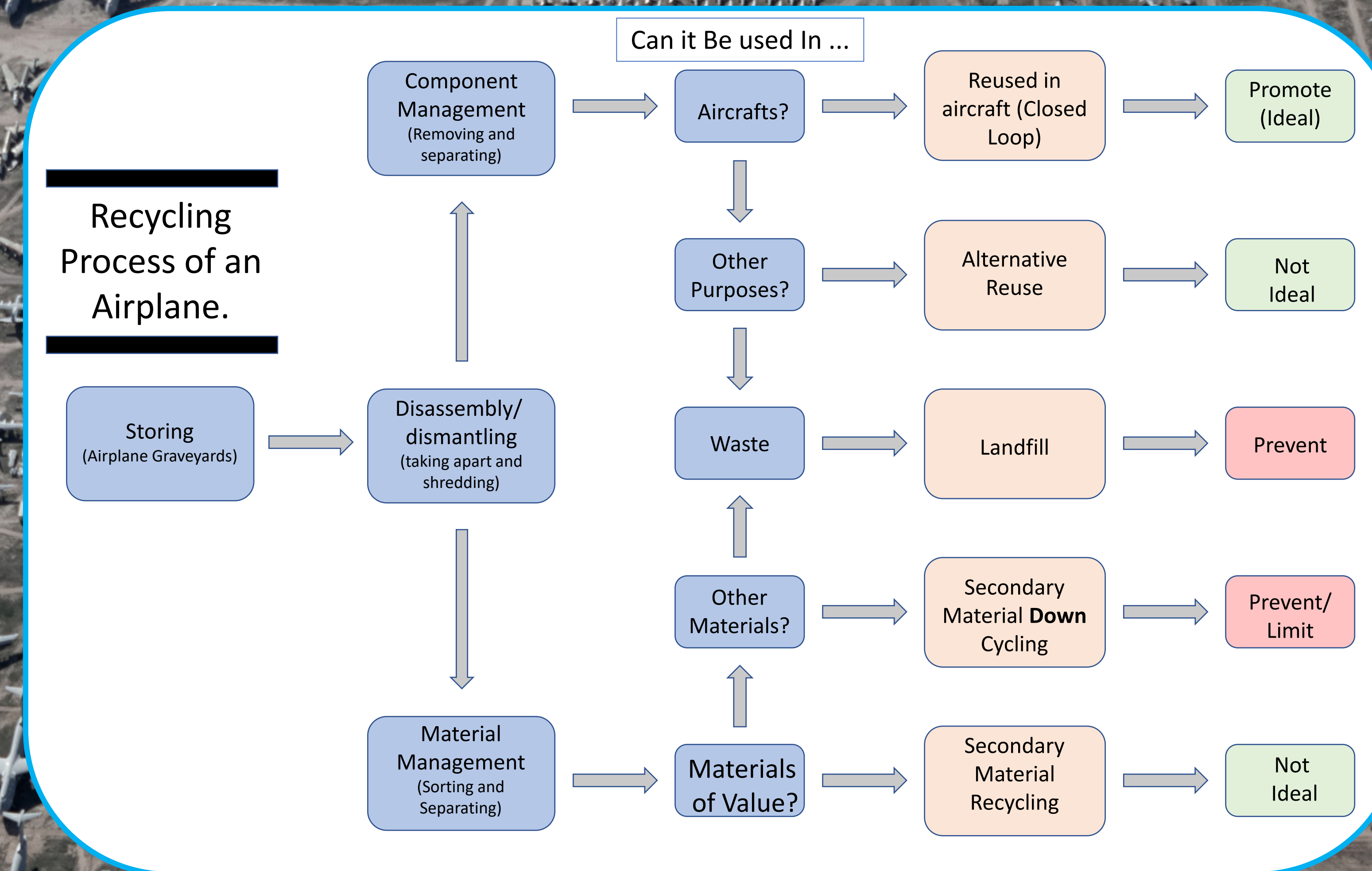
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## Abstract

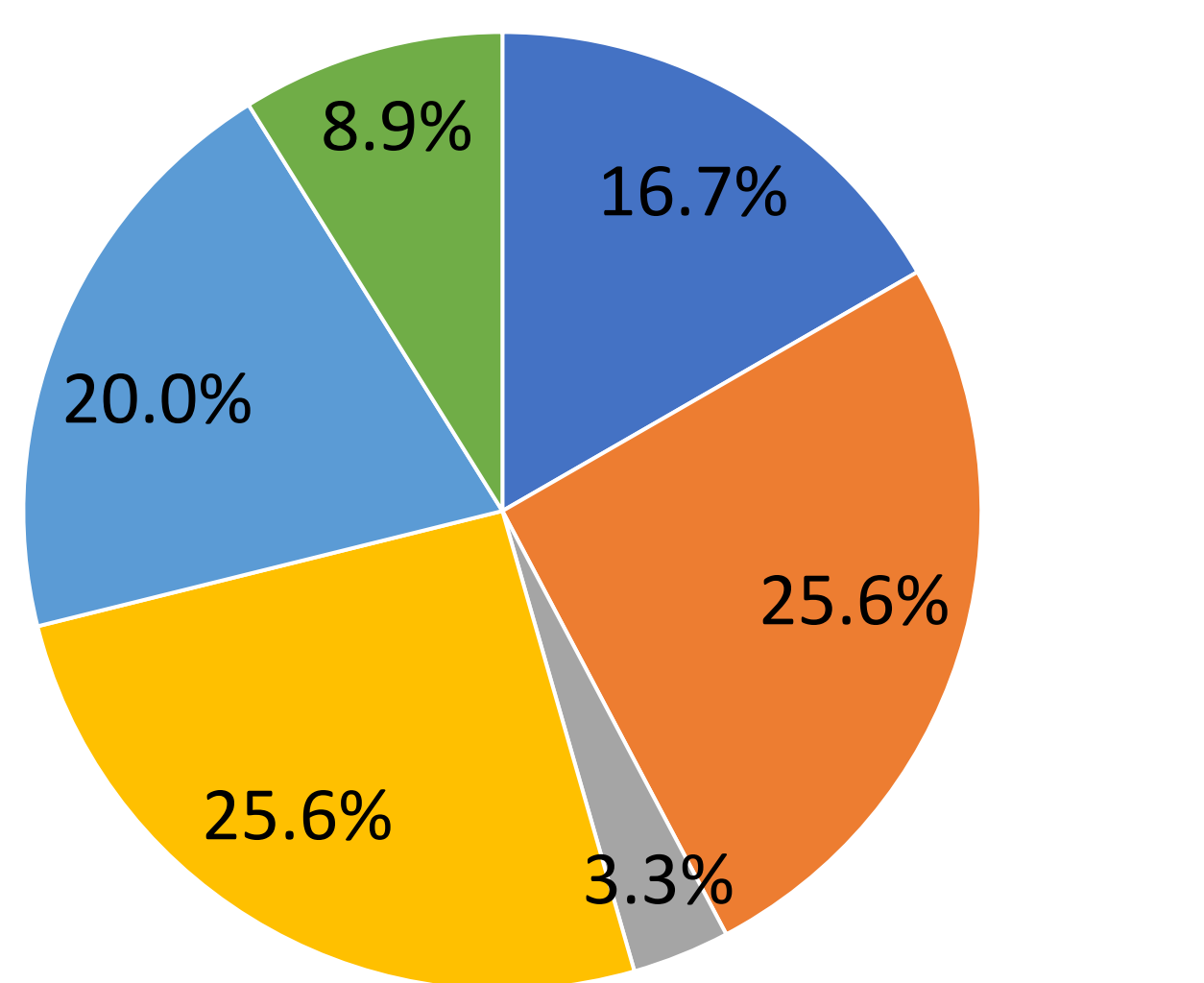
The purpose of our research was to design a policy to minimize aluminum waste in the aerospace industry. The focus was on airplane graveyards and what aluminum components are wasted. Overall, airplane engines are recycled in a closed loop, yet most aluminum components are wasted.

## Problem Statement

- U.S. recycling policies focus largely on municipal aluminum waste
  - A large contributor to industrial aluminum waste is airplane graveyards
  - The reason for this is the lack of regulation in the aerospace industry.



## Avg. % weight of aluminum components



- Systems
- Tail
- Engine
- Wings
- Fuselage
- Landing Gear

- The average weight of a Boeing 747 is about 200 tons
- For a typical Boeing 747 (made of 80% Al), about 128 tons of aluminum (or about \$332,800 worth) are wasted.

## Impact

- Increased closed-loop recycling of aluminum between aircraft manufacturers and aluminum recyclers.
- Prevention/ limiting of landfilled Aluminum.
- Recovery of aluminum from airplane graveyards to sell to recyclers

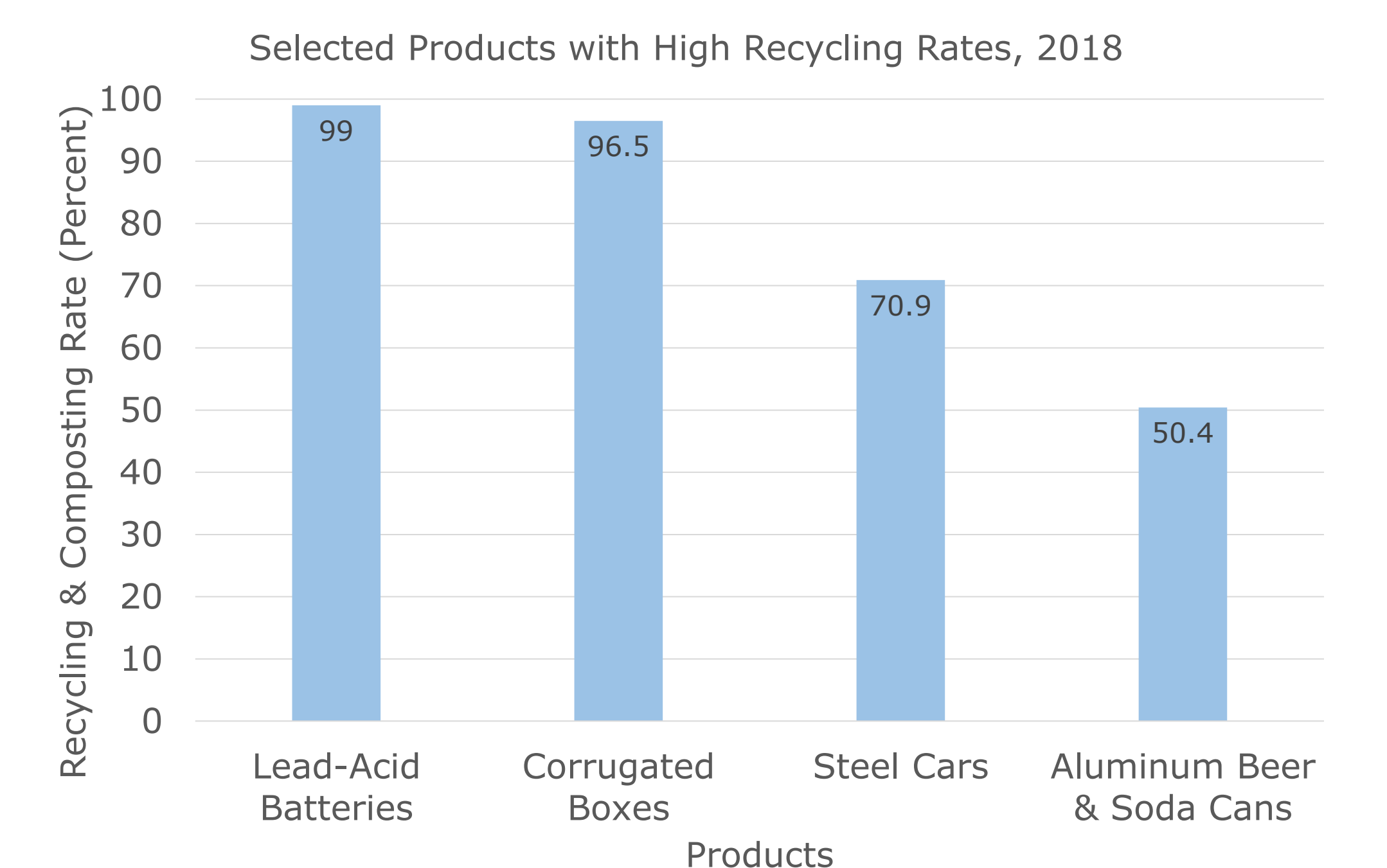
## Scan to view "Zeroing in On Recycling Binned Aluminum Act"



- Uses subsidies, fees, and taxes to incentivize closed-loop
- Encourages alloy standardization
- Requires manufacturers to submit recycling plans

## Rationale

- Aluminum recycling possible, but not incentivized
- Create incentives through policy for recycling of airplanes
- Policy is effective in promoting the recycling of other products



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