

Revolutionizing Recycling by being .BinGenius



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• Automating Waste Sorting to Save Time, Money, and the Planet
• • •

What percentage
of single family
homes recycle?

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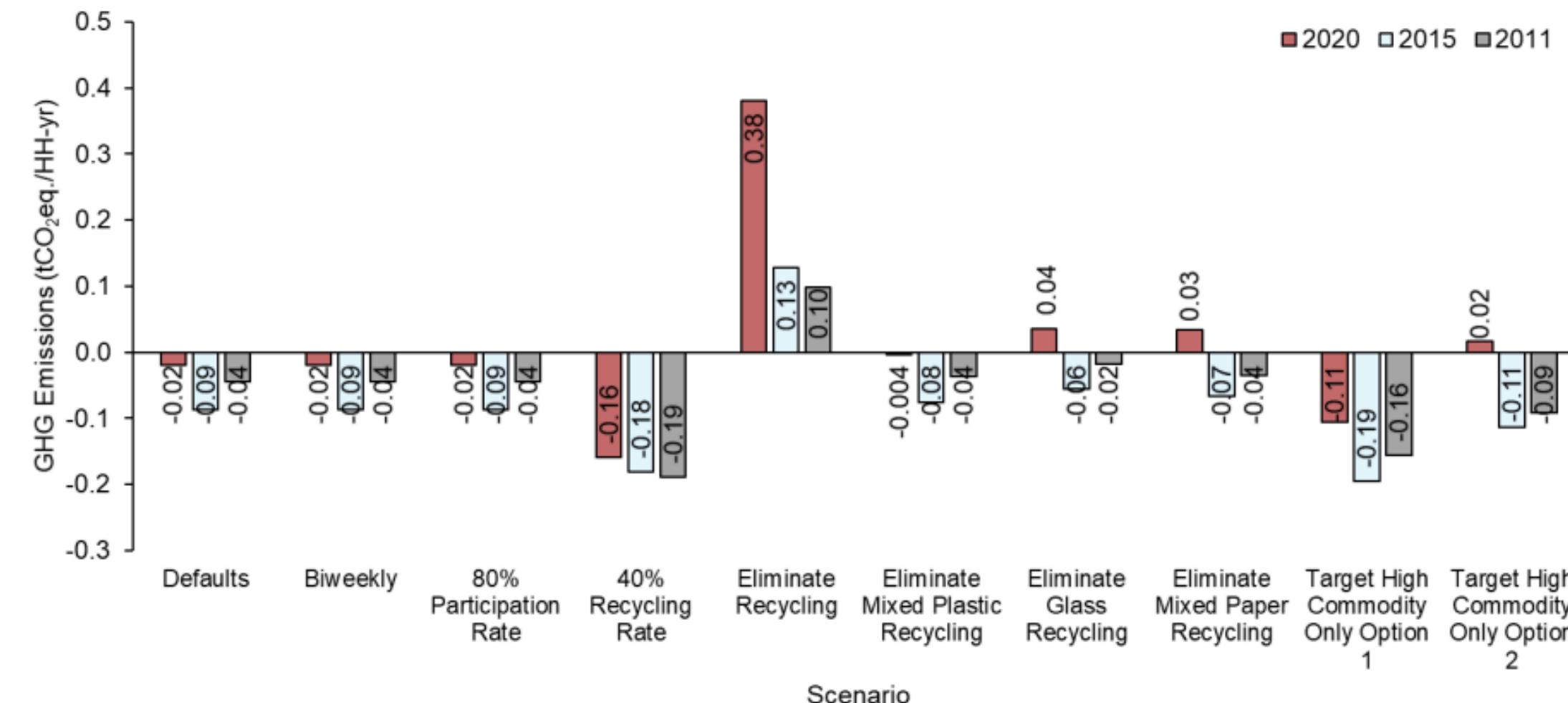
The average single-family residential recycling rate in Florida is around 30%

53-58% of the waste collected was landfilled

Source: University of Florida | Sustainable Materials Management Research Laboratory

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Carbon Emissions vs. Waste Management Costs



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Source: University of Florida | Sustainable Materials
Management Research Laboratory

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We believe in making recycling effortless and accessible for all—one smart bin at a time

1

Reduce environmental impact and costs associated with improper disposal

2

Streamline waste management by detecting and sorting materials automatically

3

Promote recycling habits in consumers by educating them on the use of AI.



Key Features

AI Camera

Sorts items in as little as 5 seconds by detecting material type

Durable & Adaptable

Designed for home, school, or business environments

Multiple Compartments

Recognize multiple types of recyclable materials

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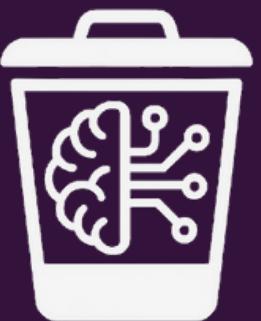


Recyclable – Soda Can

Demo



Cost Breakdown



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Item	Cost Per Unit	Reduced Cost per unit
Raspberry Pi 5/ Raspberry Pi Pico 2 W	\$79.99	\$6.99
Raspberry Pi AI Hat Plus 13 TOPS	\$69.99	-
Raspberry Pi Camera 3	\$24.99	\$69.99
Raspberry Pi 5 Active Cooler	\$4.99	-
Construction material	\$135.00	\$135.00
Total	\$314.96	\$211.98

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Timeline



Production and manufacture design

Ensure the product is fully equipped and optimized.

Commercial collaboration

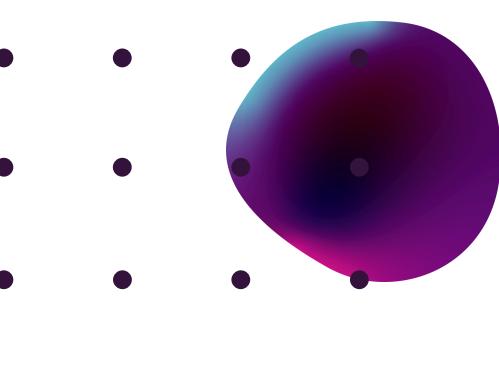
Implement waste management systems in public institutions.

Data collection and analysis

Analyze the data from the trash cans to identify trends amongst waste disposed.

Impact

Propose waste management strategies to corporations, to improve supply chain and manufacturing flaws.



Target customers

01

Public Establishments

Amusement parks, malls and shopping centers, public parks

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Educational Institutions

Universities, primary and secondary education schools.

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Sustainability-focused corporations

Accenture, The Walt Disney Company, Proctor & Gamble

Competitive advantage

Scalability & Versatility

Suitable for residential, commercial, and municipal applications

User-Centric & Intuitive Design

Same experience an individual would have when disposing waste

Cost Efficiency & Operational Savings

Lowers labor expenses and disposal fees by automating the sorting process



Matthew

Computer Science



Michelle

Mechanical Engineering



Estefania

Electrical Engineering

SHPE Tank Team

