

# 2023 Comprehensive Plastics Recycling Study



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October 23, 2023

# 2022 SENATE RESOLUTION 2852A - COMPREHENSIVE PLASTICS RECYCLING STUDY

## - REQUESTED POINTS OF STUDY --

### **RIRRC Contributions**

- A summary of Rhode Island's current requirements for plastics, glass, fibers, metals and aluminum recycling;
- Available information on the fate of plastics, glass, fibers, metals and aluminum collected for recycling in Rhode Island;
- An analysis of plastics, glass, fibers, metals and aluminum generation by type and current method of disposal;
- Information regarding recycling markets including in-state recycling, and national and international markets
- Estimates of the proportionate volume of plastics, glass, fibers, metals and aluminum recycled versus disposed of in landfills in Rhode Island;

### **DEM Contributions**

- A review of current initiatives in neighboring states and nationally to reduce plastics, glass, fibers, metals and aluminum and additional financial and market tools that may be employed;
- A comparison of container deposit programs, including their methods and administration, that rely on state administration with those that utilize third-party nonprofit entity administration subject to state regulation;
- An analysis of the ways and means to enhance the development and expansion of markets for postconsumer recycled plastic, glass, fibers, metals and aluminum, including state and local purchasing and procurement practices;
- A study of the costs and practicality of new recycled content technologies, including successful approaches to recycled plastic, glass, fibers, metals and aluminum materials development employed by other states;
- An analysis of the trends in new plastics, glass, fibers, metals and aluminum being developed, opportunities for reduction and recycling, and market development;
- Recommendations for market-based recycling opportunities for plastics, glass, fibers, metals and aluminum;
- Recommendations for incentives for expanded in-state end uses for plastics, glass, fibers, metals and aluminum; and
- A detailed plan regarding what would be necessary to implement a bottle redemption program based on best practices as identified in the study in Rhode Island within two (2) years;

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## 2- PROPORTIONATE VOLUME RECYCLED VERSUS DISPOSED

### - 2022 RIRRC RECYCLABLES STREAM ESTIMATE -

Figure 6 – FY 22 RIRRC Proportionate Tonnage Recycled

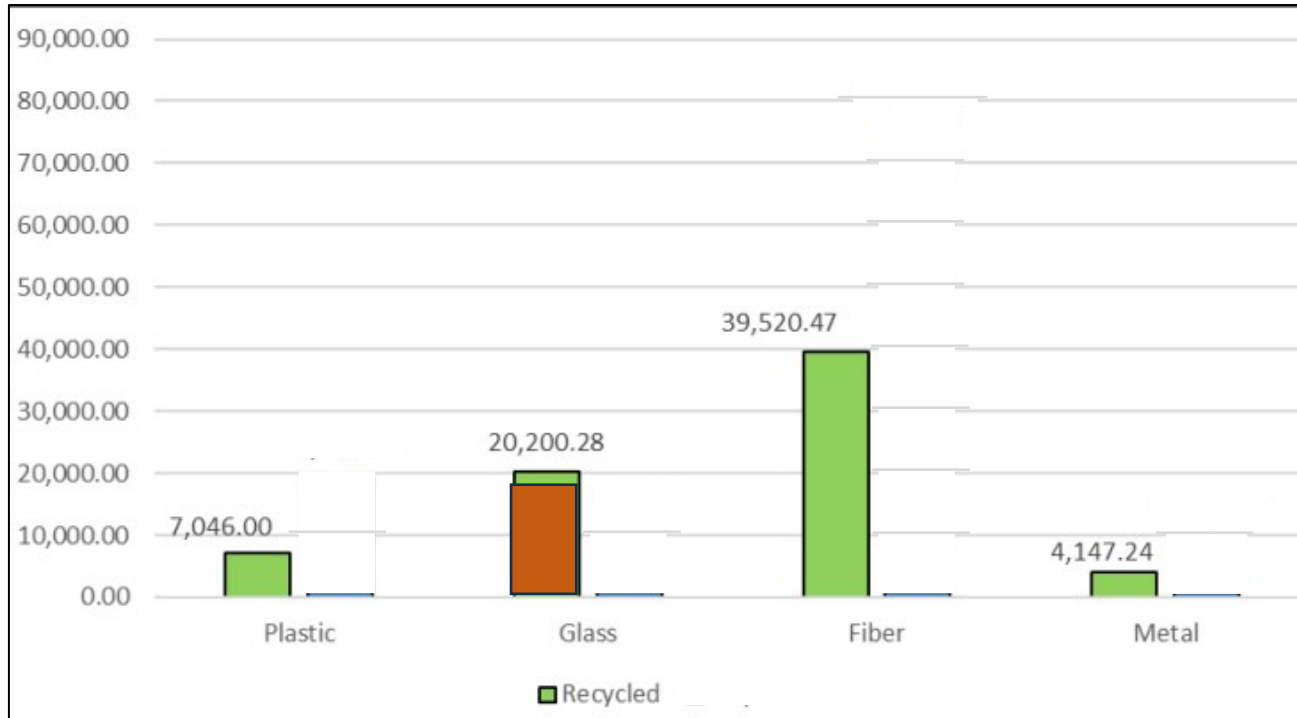


Figure 11 – FY 22 MRF Mixed Recycling Commodity Revenues

Mixed Recycling Material Type	MRF Outbound			
	Tons	% Tons	Revenue	% Revenue
Plastic				
PET (1)	4,279.85	6.04%	\$2,407,916.90	18.74%
HDPE (2)	2,000.66	2.82%	\$2,258,037.50	17.57%
PP (5)	765.49	1.08%	\$532,495.30	4.14%
Glass	20,200.28	28.49%	\$0.00	0.00%
Fiber				
Cardboard	23,017.40	32.46%	\$4,010,050.40	31.21%
Newsprint	13,540.57	19.09%	\$1,248,023.98	9.71%
Mixed Paper	2,962.50	4.18%	\$49,710.85	0.39%
Metals				
Aluminum	2,167.63	3.06%	\$1,511,557.30	11.76%
Tin	1,173.98	1.66%	\$569,776.31	4.43%
Scrap	805.63	1.14%	\$261,657.19	2.04%
Total	70,913.99	100.00%	\$12,849,225.33	100.00%

Redemption Container Recycled Estimate	Tons
PET Beverage	3,638
HDPE Beverage	390
Glass Bottles	17,170
Aluminum Cans	1,842
Total	23,041



### Redemption Container Assumptions

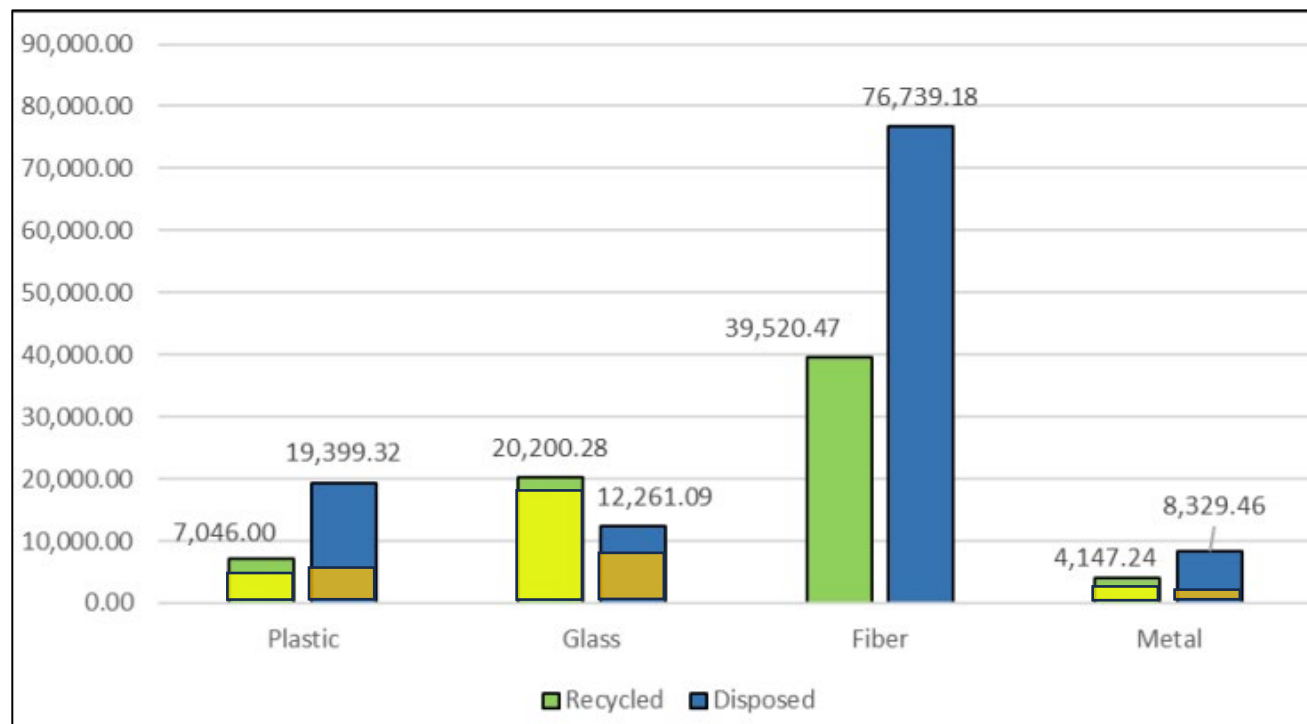
PET – 85%, HDPE - 20%, Glass – 85% and Aluminum - 85%



## 2- PROPORTIONATE VOLUME RECYCLED VERSUS DISPOSED

- 2022 RIRRC DISPOSAL STREAM ESTIMATE -

Figure 6 – FY 22 RIRRC Proportionate Tonnage Recycled vs. Disposed



Redemption Container Recycled Estimate	Tons
PET Beverage	3,638
HDPE Beverage	390
Glass Bottles	17,170
Aluminum Cans	1,842
Total	23,041

Redemption Container Landfilled Estimate	Tons
PET Beverage	3,771
HDPE Beverage	1,257
Glass Bottles and Jars	7,542
Aluminum Cans	838
Total	13,408

### Rhode Island Solid Waste Characterization Study

FINAL REPORT – December 31, 2015

Prepared for:

Rhode Island Resource Recovery Corporation



Prepared by:

DSM ENVIRONMENTAL



CASCADIA  
CONSULTING GROUP

# HOW DOES RHODE ISLAND COMPARE?

- FIRST-OF-ITS-KIND STATE-BY-STATE COMPARABLE ASSESSMENT OF RECYCLING RATES -



## Including Cardboard

- **Fourth** highest container and packaging recycling rate in the country when comparing to other non-redemption states
- **Twelfth** highest when compared to all States. (including 10 redemption States)

## Excluding Cardboard

- **Seventh** highest container and packaging recycling rate in the country when compared to other non-redemption States.
- **Sixteenth** highest when compared to all States (including 10 redemption States).

# Thank You



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