



REVÍNO

**We will revive the reusable glass  
bottle ecosystem, cleaning the  
planet *one bottle at a time.***

**REVINO**



# Problem/Current Status

1. **69%** of US Glass is landfilled or downcycled annually.
  - 8.8 million tons of glass containers landfilled in 2021
2. **No** consumer incentive structures in recycling.
3. **No** engagement at Point of Sale
4. **All** 'Open' Reuse systems globally exist under DRS infrastructure.

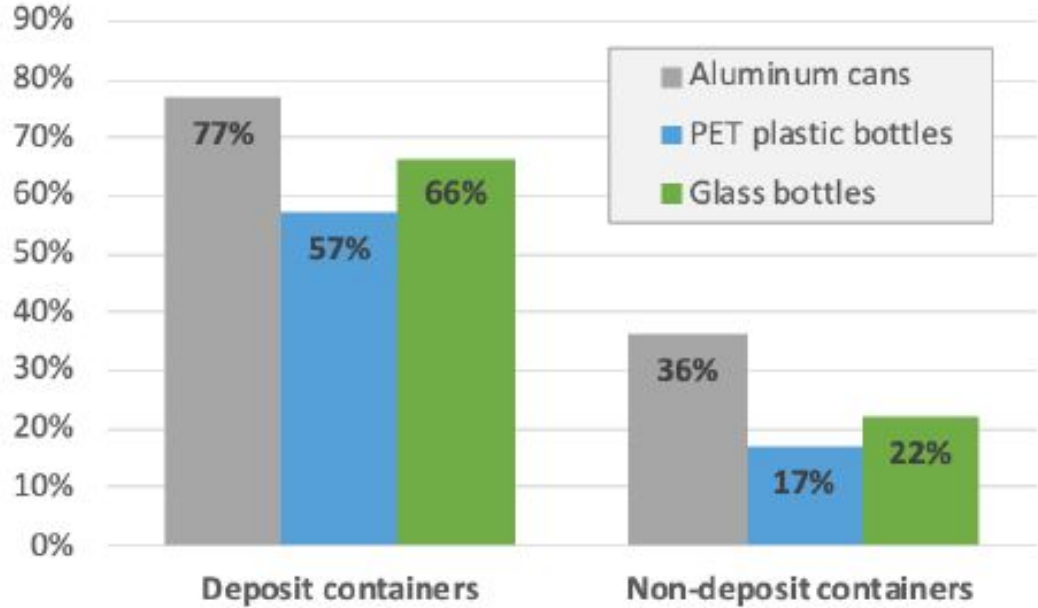


The UNITED STATES remains one of the only industrialized nations lacking commercial scale return and reuse bottle infrastructure.

98% of beer bottles sold in Ontario reused in 2023



U.S. Nominal Recycling Rates by Deposit Status, 2019



"2019 Beverage Market Data Analysis."

© Container Recycling Institute, 2022

DRS+Reuse = Gold Standard



# REUSE = MOST SUSTAINABLE

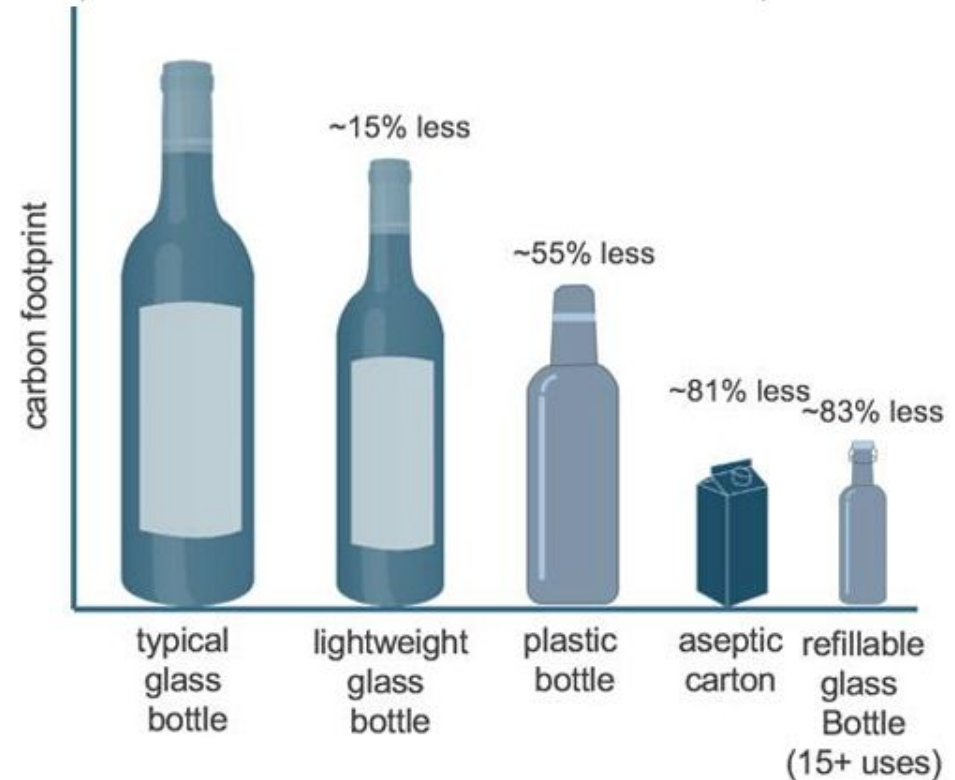
## Oregon:

- Infrastructure exists.
- DRS: [Saves Municipalities Money](#)
- Huge investments have built today's successful systems.

## Global Mindset Shift:

- DRS is the foundation.  
**Backed By: 'Rates and Dates' policy to incentivize.**
- Reduced rates of efficiency in recycling systems *more than offset* by reuse.
- Global Reuse Targets
  - ◆ EU: 10% by 2030, 40% by 2040
  - ◆ France: ALL packaging, 10% by 2027

Relative carbon footprint of wine packaging alternatives in relation to the typical single use glass bottle (same volume for all alternatives)



Source: Oregon DEQ - 2017 Wine Environmental Footprint Summary



# BOTTLE VALUE CHAIN



Where  
Revino  
Steps In



# WHAT'S IN IT FOR WINERIES?



Reduced reliance on overseas production



Stabilize fluctuating glass costs



Lowest cost option to significantly reduce Scope 3 emissions



'Sustainable' product sales grow ~2x faster than conventional.



# Policy Support

Following global best practices and PR3 standards on aligning reuse systems.



**‘Rates and Dates’ Legislation:**  
Set of supportive targets and policy to incentivize reuse.



**Encourage shared infrastructure:**  
Interoperable for brands, containers and consumers.

\*ORS 13/36A/ Chap. 459A Section 459.725



**Support Reverse Logistics:**  
“minimize the financial and environmental costs of moving these containers through the reverse supply chain.”





# TRACTION

**60+** Oregon wineries committed (and counting)!

WILLAMETTE VALLEY  
VINEYARDS

CRAMOISI  
VINEYARD

BJÖRNSON  
VINEYARD



  
Bethel Heights  
VINEYARD

  
WALTER SCOTT

  
Atticus

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Backing of manufacturing partner (O-I Glass.)

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***National*** Recognition: Imbibe, Wine Enthusiast,  
Upstream's Reusies Finalist, Fast Company & more.  
Winner: NextCycle Washington Accelerator Showcase



# REVINO IMPACT

by 2030

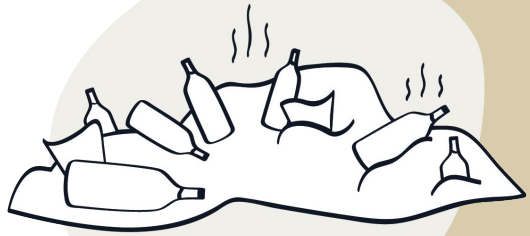
## Assumptions:

Wine focused w/limited batch  
washing (liquor, kombucha, ect.)

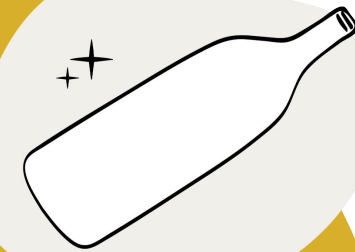
18% Market Share

495 g bottle weight

Below current reusable bottle return  
rates.



**23 million lbs.**  
of diverted waste



**55 million lbs.**  
of CO<sub>2</sub> saved





*“the reality is that it is working at a huge scale”*

– Matt Littlejohn, Senior Vice President, Oceana. On reusable programs globally

*“This is the future of the wine industry”*

– Eric Asimov, Reporter, New York Times. On Revino, LIVE Annual Meeting 2024

*“...a crying need for change”*

– Pete Danko, Reporter, Portland Business Journal. On Revino, Sept 2023

## Revino Featured In



OREGON  
ESTD 1981  
WINE PRESS

FASTCOMPANY

salon

SevenFiftyDaily



WINEENTHUSIAST®

KGW8 



# RESOURCES

## Research & Studies

[ZWE Oct20218 Case-Study Consumption-and-Production reWINE.pdf](#)

[zwe\\_reloop\\_report\\_reusable-vs-single-use-packaging-a-review-of-environmental-impact\\_en.pdf.pdf\\_v2.pdf](#)

[Willamette Valley Facts and Figures | Willamette Valley Wineries](#)

[PR3 Reuse System Standards](#)

[GPI: Glass import backlogs do not equal US glass "shortage" - Glass Packaging Institute](#)

[California Investigating Oil Companies For Alleged Plastic Recycling Deception : NPR](#)

[Promises on fighting climate change are falling far short : NPR](#)

[Mckinsey & Company Sustainability in Packaging Five Key Levers For Significant Impact](#)

[McKinsey & Company: Reusable Packaging: Key enablers for scaling](#)

[Porto Protocol - 'Reuse Ready' Campaign](#)

[Upstream](#), [Eunomia](#), [Oregon DEQ](#) and [ReLoop](#) all have detailed reports on building out reuse systems, comparisons to single-use packaging and impact of recycling vs. reuse in the beverage market.

## Supporting Articles

[Refillable Bottles Offer Benefits to Breweries | BeerAdvocate](#)

[Bay Area wineries will soon ask you to return bottles](#)

[Coca-Cola plans to use more refillable bottles. Why aren't all soda bo](#)

[Home page - The French Agency for Ecological Transition](#)

[2023 wine predictions: Higher prices, new zero-alcohol options and more - The Washington Post](#)

[2022 Year In Review: M&A Market Remains Active in 2022 in California and Pacific Northwest](#)

[Department of Environmental Quality : Oregon's Evolving Bottle Bill : Recycling : State of Oregon](#)



# QUESTIONS

We greatly appreciate your time and look forward to working with you as stewards towards a more sustainable future!



Follow-up:  
[info@revinobottles.com](mailto:info@revinobottles.com)

The Revino logo, featuring the word "REVINO" in a white, stylized font with a wine bottle silhouette integrated into the letter "V". A white curved line underneath the text suggests a smile or a wine glass rim. The logo is positioned in the bottom left corner of the image, which is a faded background of a vineyard with a tractor.

# APPENDIX



# MARKET DIRECTION

## Industry Future

- Reuse is the only low-carbon option for glass without heavy capital investments.
- Industry traction
  - Verallia White Paper on Reuse, 2020
  - Investments in Bout' à Bout' France, internal reuse project in Germany, Italy, Spain/wider EU project.
  - 'Reuse Ready' Campaign - led by Porto Protocol. Focus on transitioning to wash-off labels and standardizing bottles.

## Alternative Formats

BIB, Tetra Pak, Cans, Ect. Seeing wider adoption by consumers and industry manufacturers.

Glass expected to maintains highest shelf value and 'trust' level considering toxicity/microplastics.

- Oregon wine survey - 95% of respondents will purchase packaging based on sustainability impact.

## Increased Recycled Content.

- Leverage reuse systems for clean cullet supply.
- Potential for national bottle bill (also clean cullet feedstock.)





# FACILITY

**Utilities: Exclusive of personnel/office needs.**

	Cleaning Line	Warehousing & Staging (some outsourced)	Office & Personnel
Start-Up	3-5,000 ft <sup>2</sup>	4,000 ft <sup>2</sup>	500 ft <sup>2</sup>
Expansion	Included above	10,000 ft <sup>2</sup>	500 ft <sup>2</sup>
Future Total	5,000 ft <sup>2</sup>	14,000 ft <sup>2</sup>	1,000 ft <sup>2</sup>

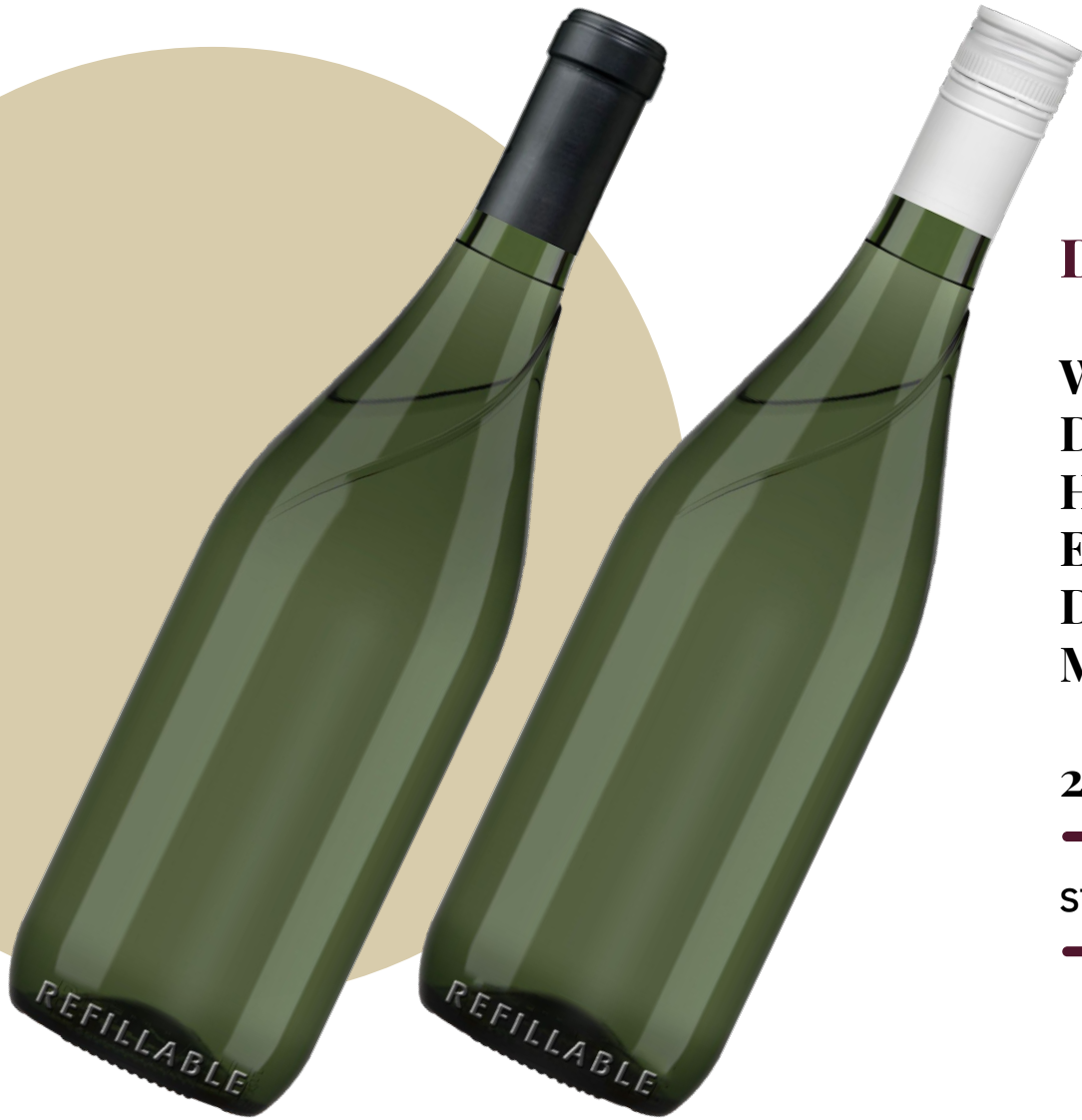


- **Water consumption:**
  - 180-350 mL/bottle
  - 95-184 gph - full speed startup phase
  - 332-462 gph at full expansion 10,000 + bottles per hour.
- **Effluent:**
  - Outflow under 11.5 pH
  - Minimal BOD, Primary Chemical - Lye
- **Power:**
  - 3 Phase, 480V
  - 300 amps at Max Load - Operating 40-120 amps
- **Gas:**
  - For wash system heating (or engineered storage tank/solar/heat pump solution)
- **Other**
  - Wash heat loss: 6-12 kcal per bottle
  - Ventilation considerations in wash area particularly with expansion.





# BURGUNDY BOTTLE SPECS



## Design Specifications:

**Weight:** 495 g

**Diameter:** 82 mm

**Height:** 291 mm

**Engineered for Reusable Use**

**Design and Manufacturing:** Owens-Illinois

**Manufacturing Plant:** Tracy, CA & Kalama, WA

## 2025 Updates

- ➔ Punt will be updated to sport reuse industry standard infinity symbol.
- ➔ Embossing updated to read "Reusable"



# MVP EQUIPMENT

1. [Seitz - Bottle Washer](#)
2. Heuft - High resolution automated bottle inspection

## Future Expansion Items:

1. Secondary Label Removal Equipment (For stubborn label materials or UV damaged adhesives)
2. Additional Internal Dryers
3. Crates & Crate Washer
4. Automated packer/unpacker
5. Recoat/scratch application equipment.

