



AMERICAN  
CIDER  
ASSOCIATION

# Sustainability & Waste Reduction For Scaled-Up Cideries

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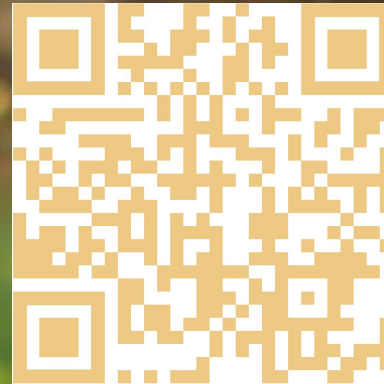
**PRESENTED BY:**

Cider Institute of North America





**Your go-to cider making resource**



[ciderinstitute.com](http://ciderinstitute.com)



## Jill Westra

Senior Manager, Sustainability

The Boston Beer Company



## Colin Schilling

CEO & Co-Founder

Schilling Cider



# AGENDA

- 1 Why should you care?
- 2 Highlight on Boston Beer Company:  
water use; wastewater; suppliers
- 3 Highlight on Schilling Cider:  
packaging; carbon accounting; EV fleet
- 4 Connecting with consumers:  
communications & storytelling
- 5 Steps to take & industry action items
- 6 Q&A



Interactive Q & A

Text us a question →  
**(253) 269-6105**



# Sustainability: Why You Need to Care

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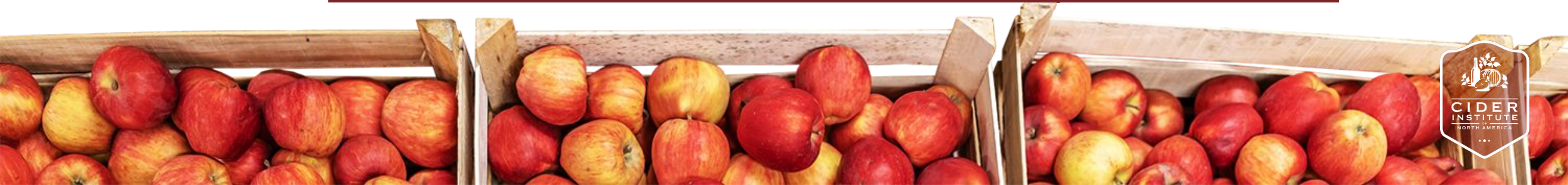
*Consumers are vetting brands like never before*



# Do drinkers care about sustainability?

- 78% of US consumers prefer sustainable products
  - Gen Z = 91%
- Sustainably marketed brands grew 40% faster over the past 5 years
- Consumers will pay more for sustainably marketed products
  - 2021: 64% would pay more
  - 2023: 68%
  - 2024: 80%

Bottom Line: Brands that do not embrace sustainability will fall behind



# Do drinkers care about sustainability?

The following factors leader to consumers choosing not to buy a brand

- 84% Poor environmental track record
- 83% Unsustainable packaging
- 82% Poor compliance record
- 82% Irresponsible ingredients sourcing

Bottom Line: Poor environmental practices will alienate your consumers

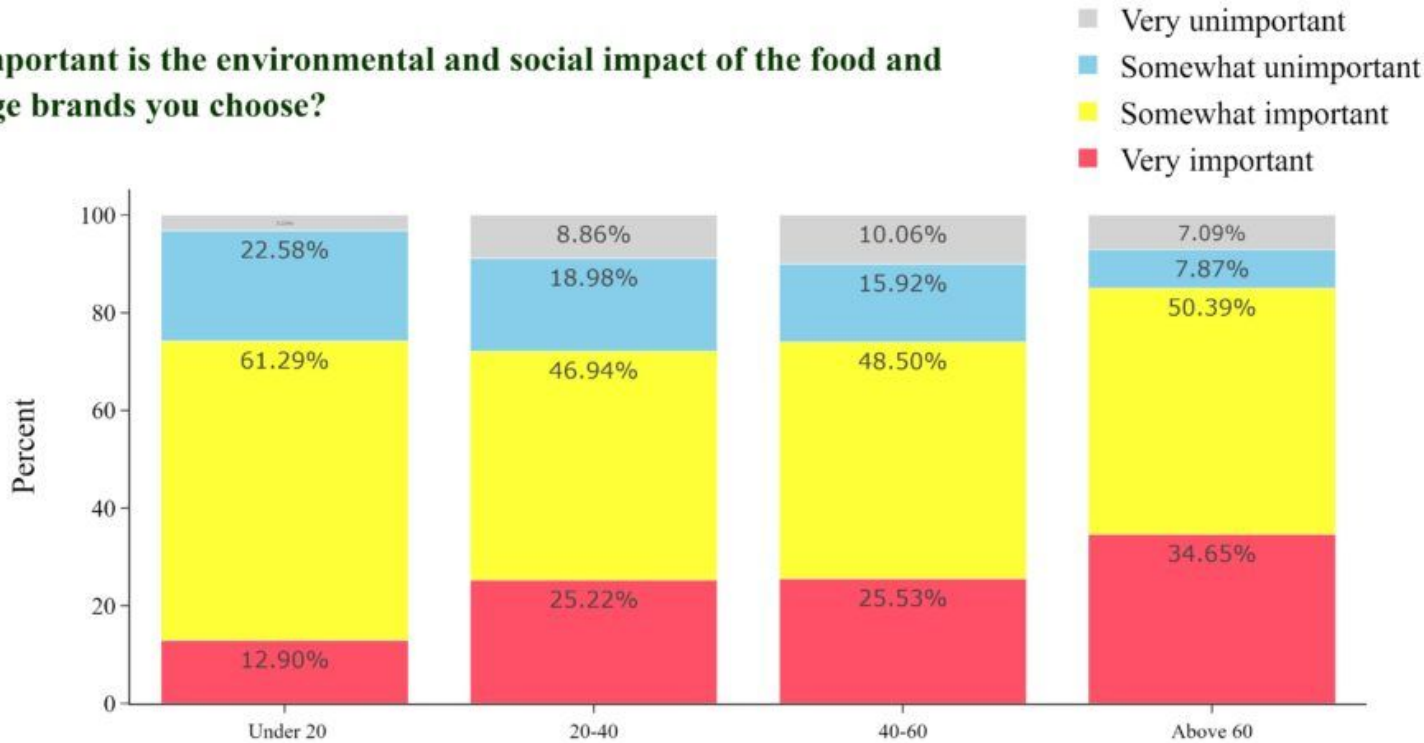


# Is this an opportunity for cider?



Peekage CPG Insights

**How important is the environmental and social impact of the food and beverage brands you choose?**



- All age groups care
- Cider is inherently more sustainable than most other bev-alc products

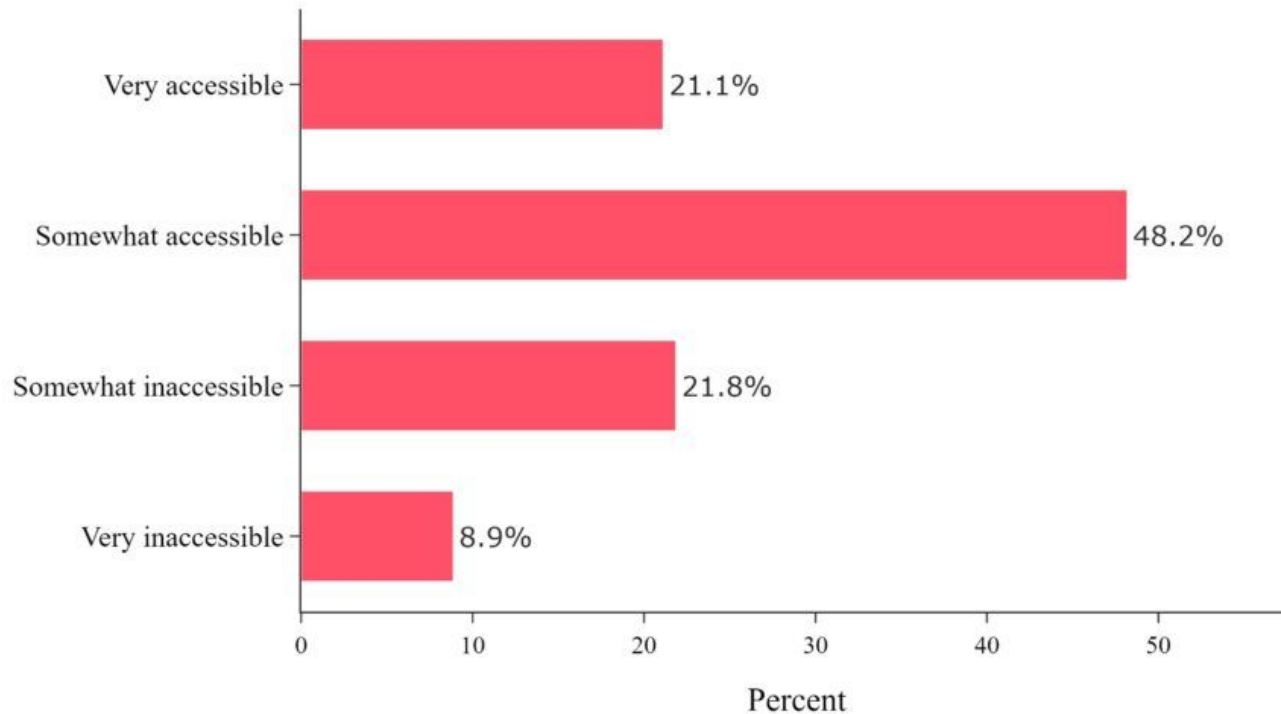


# Is this an opportunity for cider?



Peekage CPG Insights

How accessible are sustainable food and beverage products?



- All age groups care
- Cider is inherently more sustainable than most other bev-alc products
- But we don't offer enough options or tell our stories well!



# Boston Beer Company

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*Water use, wastewater, working with suppliers*



BOSTON BEER co.

· ESTD 1984 ·

# About Boston Beer

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# Beer & Beyond

Beer is our middle name, but we are so much more.  
Quality brands that speak for themselves.



**SAMUEL ADAMS**

The beer that started it all in 1984.

**BOSTON BEER co.**  
ESTD 1984



**DOGFISH HEAD**

Off-centered ales that hopped on the scene in 1996.



**TWISTED TEA**

Twisted, never-been-done-before innovation in 2001.

**ANGRY ORCHARD**  
HARD CIDER

**ANGRY ORCHARD**

The cider revolutionist founded in 1997.

**TRULY**

**TRULY HARD SELTZER**

An original, groundbreaking new category that launched in 2016.



**HARD MOUNTAIN DEW**

An epic brand turned HARD in 2022.



**SUN CRUISER**

An evolution in hard tea innovation that launched in 2024.

# SUSTAINABILITY JOURNEY

- July 2021 – First full-time Sustainability role (1) created
  - Creation of Sustainability Philosophy statement
  - Data collection begins
  - Grassroots engagement
- 2022 – Year 1
  - Materiality Assessment
  - First ESG report published
- 2023 – Year 2
  - Established Cornerstones of Priority for Sustainability
  - Align with UN SDGs
  - Calculated Scope 1 and Scope 2 emissions
  - First disclosure to CDP
- 2024 – Year 3
  - Setting goals & targets
  - Engaging with suppliers



# Sustainability in Practice: Getting off the Ground

What is your “why”?

What are your priorities?

Choose your level of ambition.

**OUR SUSTAINABILITY PHILOSOPHY** | BBC

**Our why:**

- > We see *Corporate Sustainability* as HOLISTIC, lying at the intersection of environmental management, social responsibility and economic improvement
- > We aim to reduce waste and maximize our investments across all pillars (Environmental, Social, Economic – see below)
- > We see an opportunity to improve people's lives and the world around us as we add value to our business.

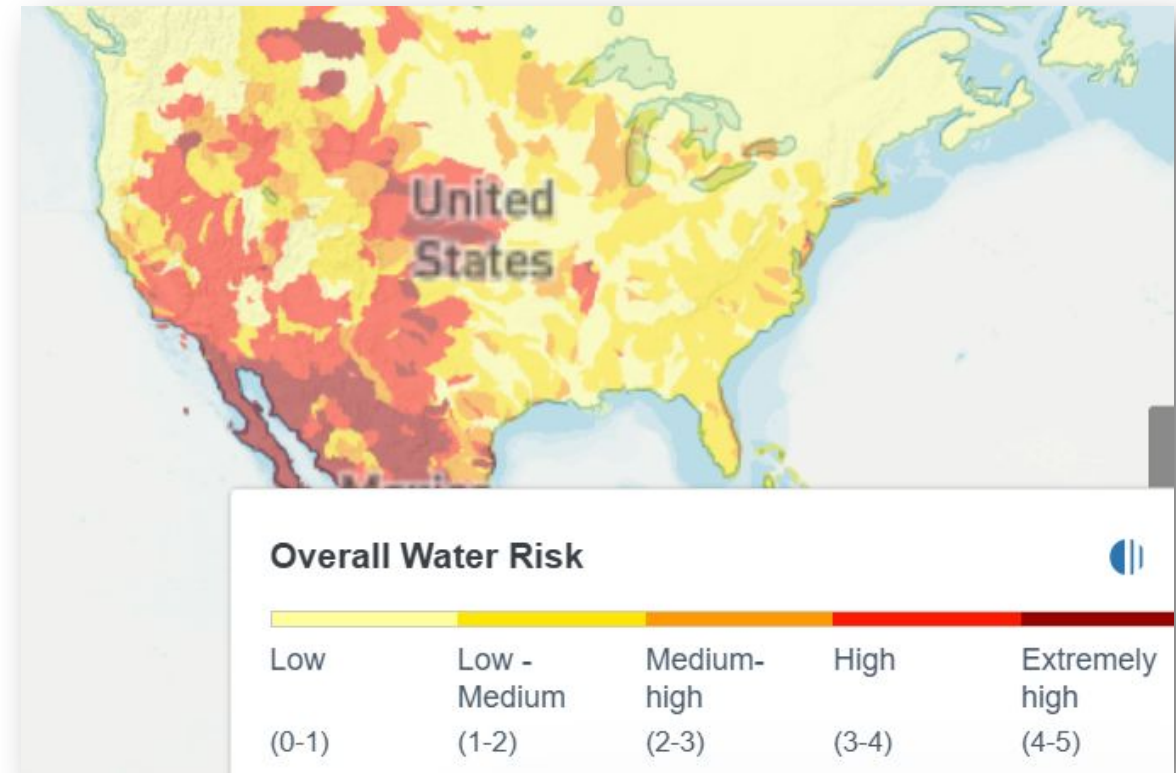
| ENVIRONMENTAL   | SOCIAL   | ECONOMIC   |
|---|--|--|
|                |                         |   |
| Consumption of natural resources, emission of pollutants, stewardship, waste management, et al. | Positive presence in our communities, value-added philanthropy, DEI, training, health and safety, et al. | Guarantee long-term profitability and return to stakeholders via corporate governance, risk management, codes of conduct and compliance, anti-corruption, talent attraction, retention, et al. |



Plan all the way to the end.

## Preparing for Long-term Water and Climate Challenges

- Water availability, pricing
- Scarcity/quality, competition, regulations
- Wastewater management



Map: WRI Water Risk Atlas

# Future-Proofing: Water

## Be Proactive: Importance of addressing issues now

- Assess local risk: identify potential challenges in supply and quality.
- Develop contingency plan: alternative water sources and treatment methods to ensure uninterrupted operations.
- Investigate water recycling opportunities to minimize freshwater use and reduce discharge.
- Adaptation Strategies: Water-efficient irrigation, rainwater harvesting, drought-resistant varieties.





## *Rising Costs*

- Increased frequency and severity of droughts, floods, and other extreme weather events strain water resources and infrastructure leading to higher treatment and distribution costs

# What's risky about water?



## *Availability*

- Climate change is exacerbating water scarcity & quality issues in many regions
- Water stressed regions are not limited to drought impacts



## *Regulatory aspects*

- Stricter environmental regulations require utilities to invest in advanced treatment technologies to ensure water quality.
- While these regulations are crucial for public health, they also increase operational costs

# Risk: Wastewater Management

- Current Challenges: Managing wastewater and regulatory compliance = \$\$
- Future Difficulties: Stricter regulations and higher fees
- Sustainable Practices: Reduce wastewater; on-site treatment; send effluent to local anaerobic digester (requires pre-treatment to ensure good balance of chem/bio)
- At Angry Orchard ciderhouse: increased septic capacity to accommodate more visitors

Notable uptick in stringency of water quality and wastewater treatment regulations, with penalties for non-compliance rising by approximately 15% annually over the last five years

(Source: Global Water Intelligence (GWI))

## What gets measured gets managed

- Tracking water withdrawal, consumption, wastewater
- Automation is best (but costly); metering helps
- Identify inefficiencies
- Set targets for improvement



# How well do you know Suppliers?



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**Key observation:** We have traditionally selected suppliers based primarily on the bottom line.

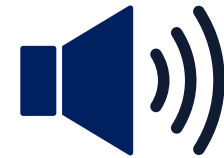
*Implication: Need to think deliberately about how suppliers can assist us reach our goals, from their side.*



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**Key observation:** Some of our suppliers offer opportunities not examined in the past. Largely thanks to their other customers' sustainability requirements.

*Implication: Using sustainability as a lens to examine how we partner with suppliers brings more opportunities to deepen supplier relationships than previously considered.*



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**Key observation:** Leveraging Procurement and QA departments for a more wide-angle view of what Suppliers can offer.

*Implication: Need to use sustainability to open up new conversations and add depth to our supplier relationships.*

## Cider House & Hospitality

- Work with vendors to identify compostable cup alternatives
- Work with local composting sites to close loop
- Increased sewer capacity, examine digester options
- Currently no irrigation
- Pomace to local Agri feed
- Arbor day initiative – 1,300 trees planted
- Growler month





# Schilling Cider

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*Packaging, carbon accounting, EV fleet*



# SCHILLING

HARD  CIDER

Our Sustainability Journey



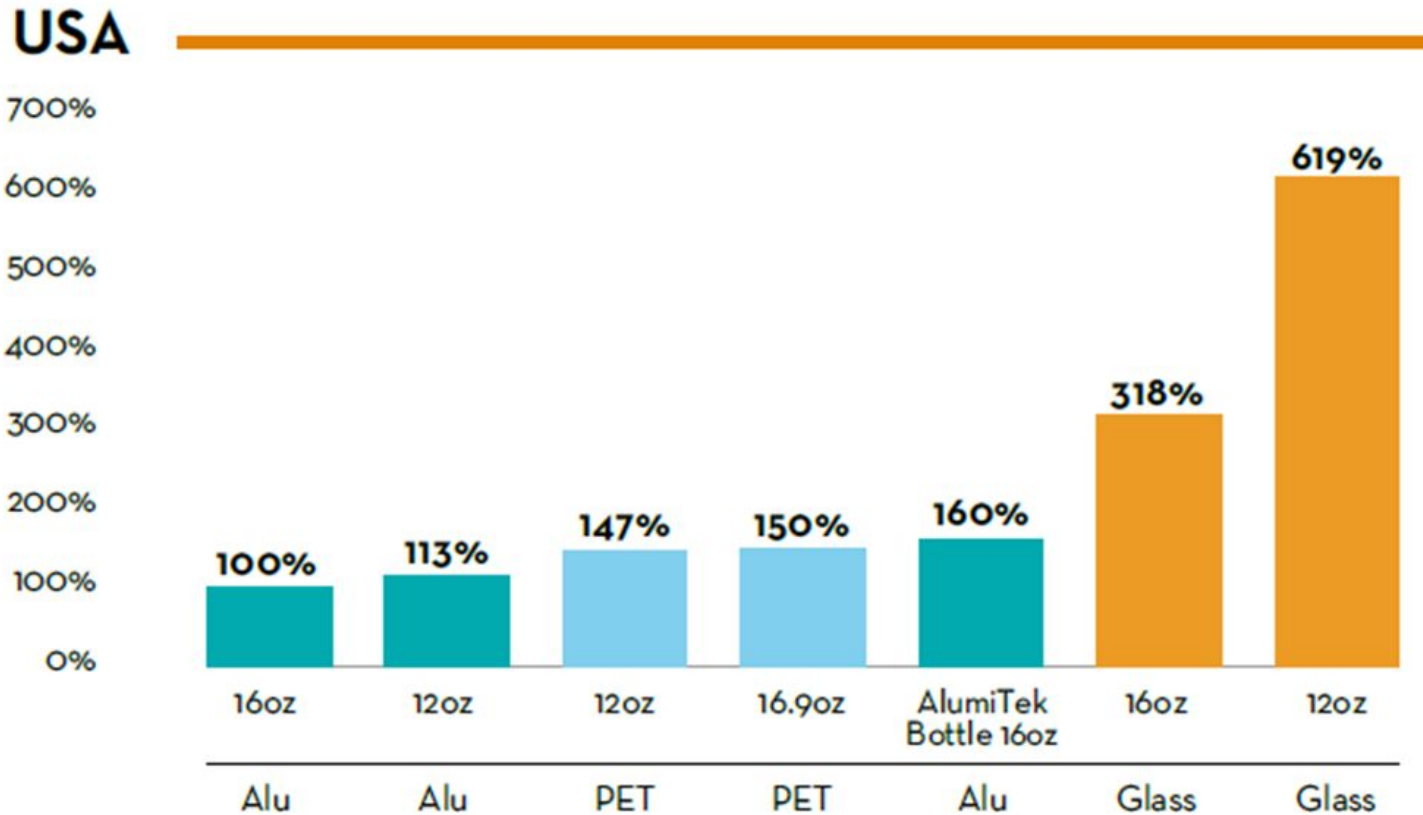
# Major Initiatives




- **2013:** First West Coast cidery in cans
- **2015:** All products packaged in recyclable or reusable packaging (NO wrapped or stickered cans)
- **2018:** Grant funded glycol to CO2 phase transitioning heat exchanger installed
- **2019:** State of the art canning commissioned decreasing energy usage by up to 85%
- **2021:** Schilling starts annual voluntary carbon accounting (Scopes 1,2 &3)
- **2022:** Keep It Wild annual fundraiser kicks off. \$200k raised and donated to preserve wild lands 2022-2024
- **2023:** Converts sales force to 100% electric vehicle fleet. Now 20+
- **2024:** #1 SKU Excelsior Imperial Apple becomes Climate Neutral by offsetting 105% of associated climate footprint

# Deep Dive: Packaging

Kegs > Cans > Glass bottles > Stickered Cans



**16oz**  
16oz aluminium cans have the lowest carbon footprints, followed closely by 12oz cans.



**6x**

The carbon footprint of a 12oz glass bottle is more than six times higher than a 16oz aluminium can.

# Deep Dive: Packaging

*Stickers and Sleeves negate can's sustainability advantages*

## What happens when a wrapped can gets recycled?

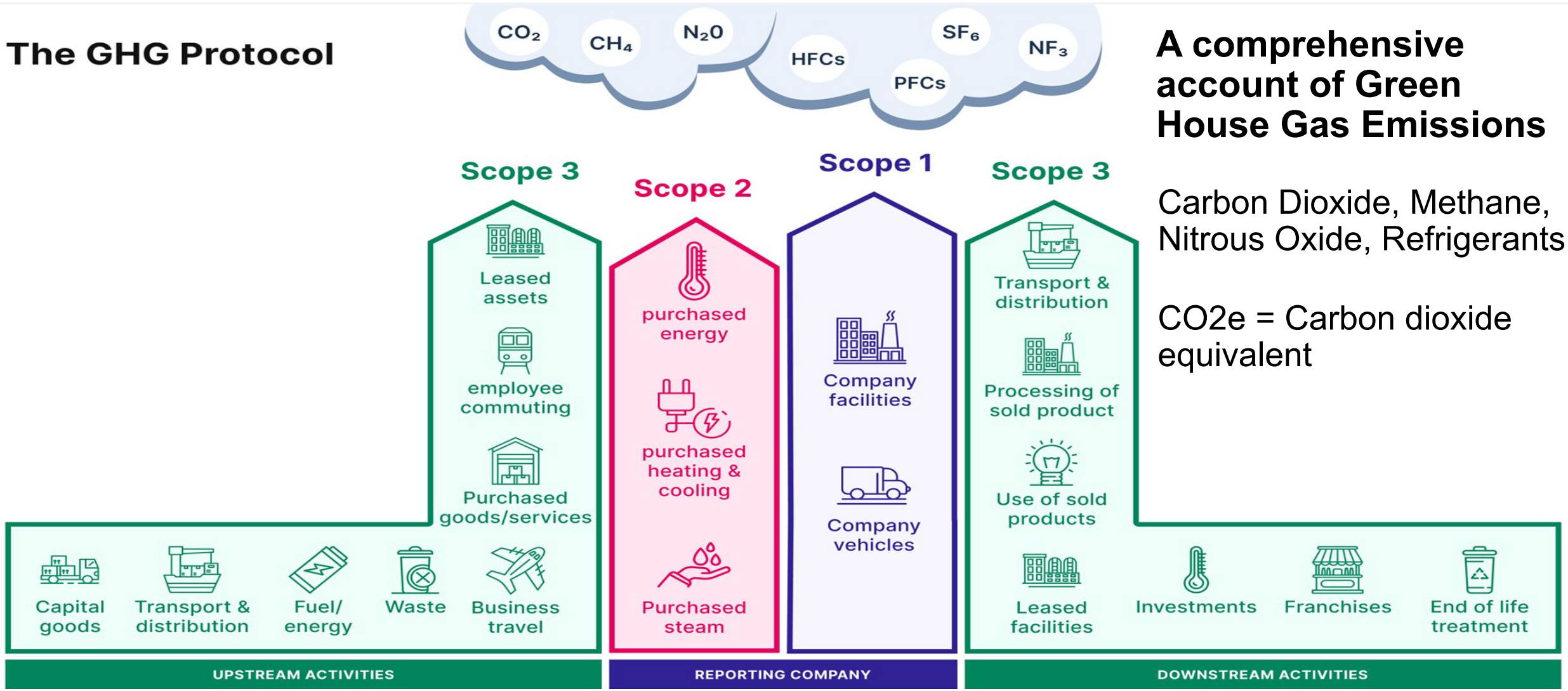
1. It gets **sorted into a landfill stream**
2. Its included in a batch of cans and **shipped abroad for recycling**
  - a. Cans are melted down to become new rolls of aluminum
  - b. 1 pallet of wrapped cans = 15 lbs of plastic burned off
3. Contamination of the mix is too high (>5 to 10%) and all cans wrapped and unwrapped are **diverted to landfill**

**Lots of digital printing options for small volume cans now!**

# Deep Dive: Carbon Accounting



## The GHG Protocol



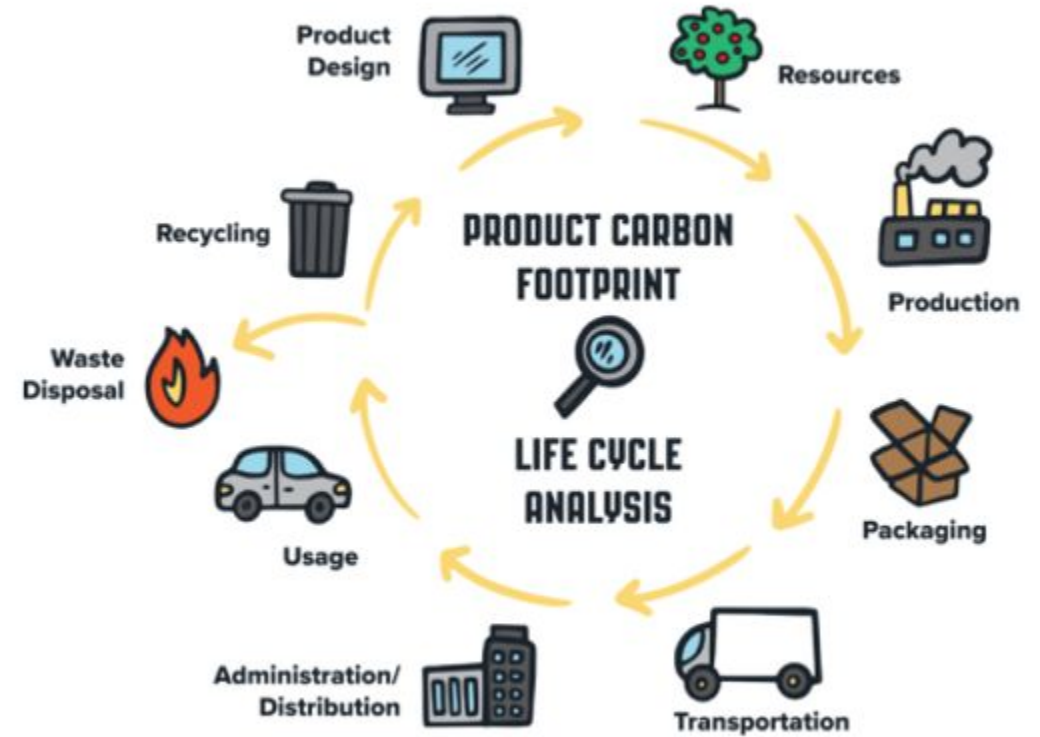
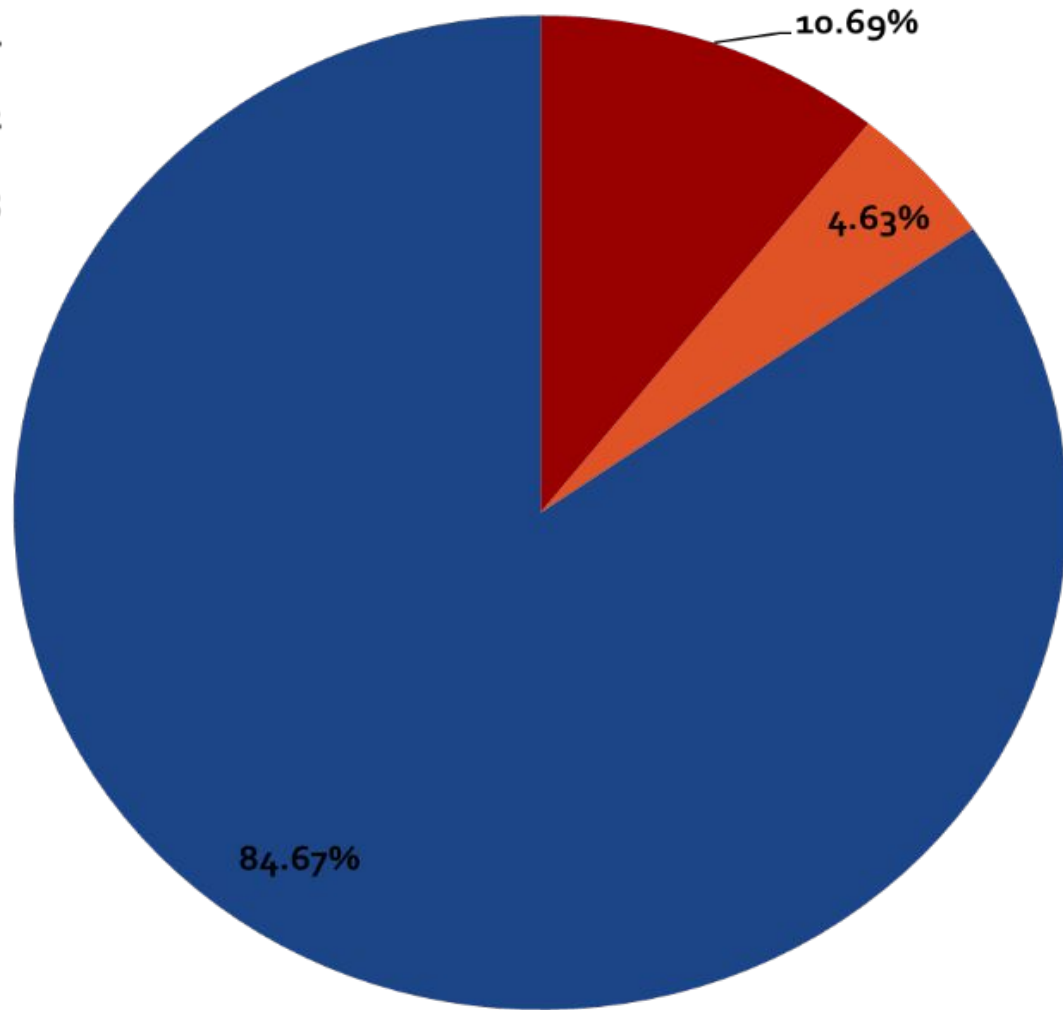
## A comprehensive account of Green House Gas Emissions

Carbon Dioxide, Methane, Nitrous Oxide, Refrigerants

CO<sub>2</sub>e = Carbon dioxide equivalent

# Deep Dive: Carbon Accounting

- Scope 1
- Scope 2
- Scope 3



# Deep Dive: Carbon Accounting



## SCHILLING CIDER PRODUCT SUSTAINABILITY DECLARATION

EXCELSIOR IMPERIAL APPLE CARBON  
NEUTRAL DOCUMENTATION 

### ABSTRACT

Schilling Cider has completed significant work voluntarily to account for carbon emissions of its business and in purchasing high quality carbon offset credits to offer 12oz cans of Excelsior Imperial Apple to its consumer carbon neutral.

## 2.3 TOTAL CARBON FOOTPRINT

**Table 1.** Total Carbon Footprint for Excelsior Imperial Apple 12oz

| PRODUCT                           | CRADLE-GRAVE EMISSIONS PER CAN (GRAMS CO <sub>2</sub> e) |
|-----------------------------------|--|
| 12oz Can Excelsior Imperial Apple | 269.09   |

**Table 2.** Carbon Footprint by lifecycle stage

| LIFECYCLE STAGE | 12OZ EXCELSIOR IMPERIAL APPLE (G CO <sub>2</sub> e) |
|-----------------|---|
| Upstream        | 160.91  |
| Production      | 30.67   |
| Downstream T&D  | 76.22   |
| EOL (Packaging) | 1.30  |
| <b>TOTAL</b>    | <b>269.09</b>                                       |

# Deep Dive: Carbon Accounting

**SCHILLING**  
HARD  CIDER



# Deep Dive: EV Fleet



*Why EVs make excellent fleet vehicles*



Interactive Q & A

Text us a question →  
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# Connecting With Consumers

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*Communications & storytelling*



# Telling Your Story

- Start with a narrow focus
- Do the work before you talk about it
- Offer full transparency and be authentic
- Align your work with your company values
- Personalize your content and share your journey
- Promote others who are also doing the work
- Leverage your work into your marketing where its real and aligned



# Marketing: Greenwashing?

- Consumers want sustainable products more than ever before...
- ...but making false or misleading claims can crush your brand
- Focus on doing the work first...
- ...then address connecting the work to your brand and story telling
- Avoid making moves that signal a lack of attention to sustainability



# What about Certifications?

- 3rd party verification and certification brings authenticity
- Authenticity and transparency are the cornerstones of this work
- Many vendors are not set up to work with small brands
  - How can we work together?
- There is push back in this space, in some cases certifications may not be worth the cost





# What Now?

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*Next steps for your business & action items for the industry*



# Steps for Businesses to Take

Cider can become the most sustainable bev-alc option!

- Cider naturally has a **lower carbon footprint verses bev-alc competitors** due to its inputs and selling model
- We are a small industry that can move faster
- Early adopters are building a road map and are more than happy to share
- Tell stories with your personalize content (orchard, local supply chains, etc)
- Avoid: Mixed material packaging
- Look up and benchmark industry standards (water, power etc...)
- Get **FREE** money! Look up local grants



# Action Items for the Cider Industry

- Support trade show vendors that can make you more sustainable
- Vet our vendors sustainability practices and encourage improvement
- Industry specific shared messaging and resources through ACA
- Carbon transparency movement? Can we do it?
- Water stress awareness/ benchmarking. Industry standards
- What are your ideas? How will you contribute?



Interactive Q & A

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# Thank you!



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