



Hop Growers Conference 2024

Initiatives
Supporting
Differentiation

1.19.2024



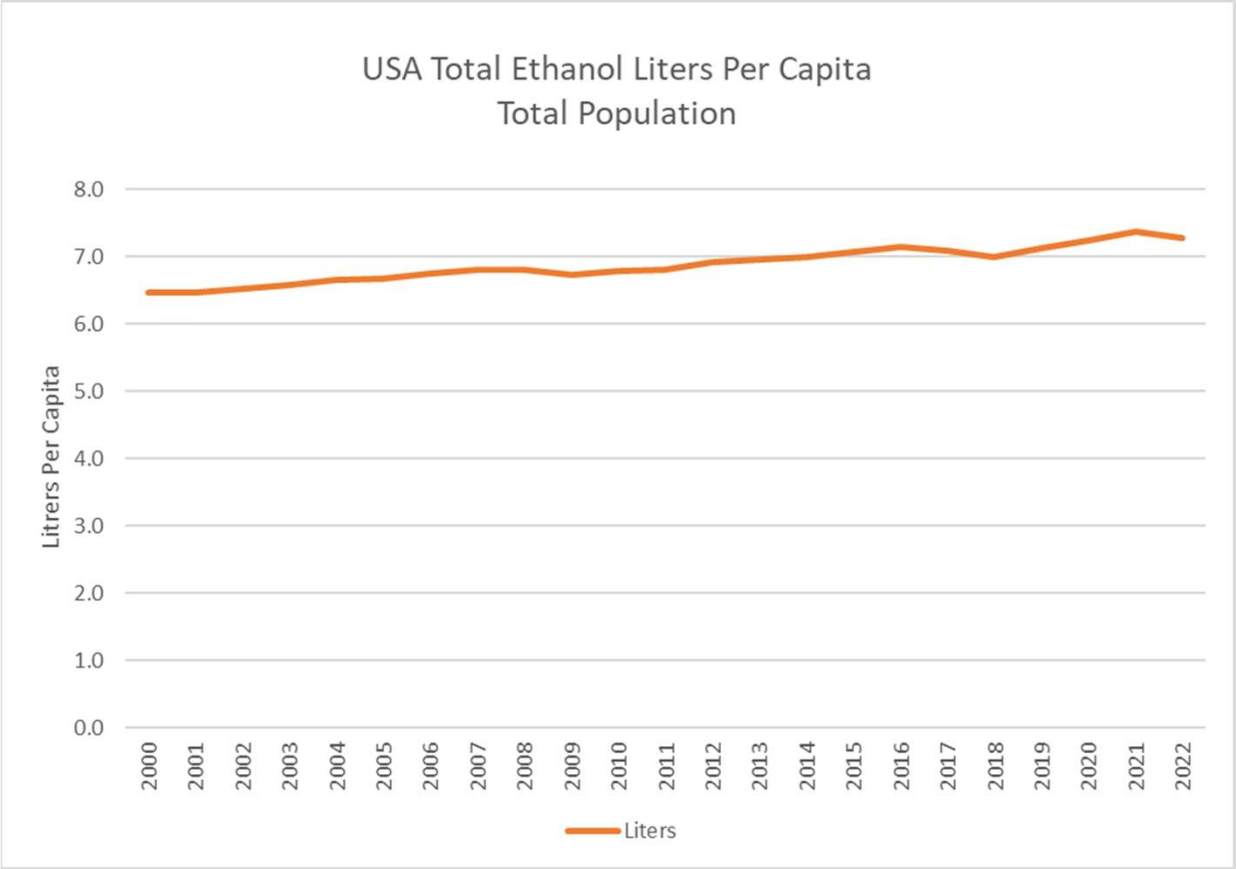
Share of Ethanol per capita by Beverage Type

A baseline of where beer stands vs other alcohol beverages

Q. What is the share of ethanol per capita across the alcohol beverage category?

- Developed the model and completed the study in four areas this year: the US, EU, UK, and Japan.
- We will expand this to approximately 100 countries in 2024, including 2023 data.

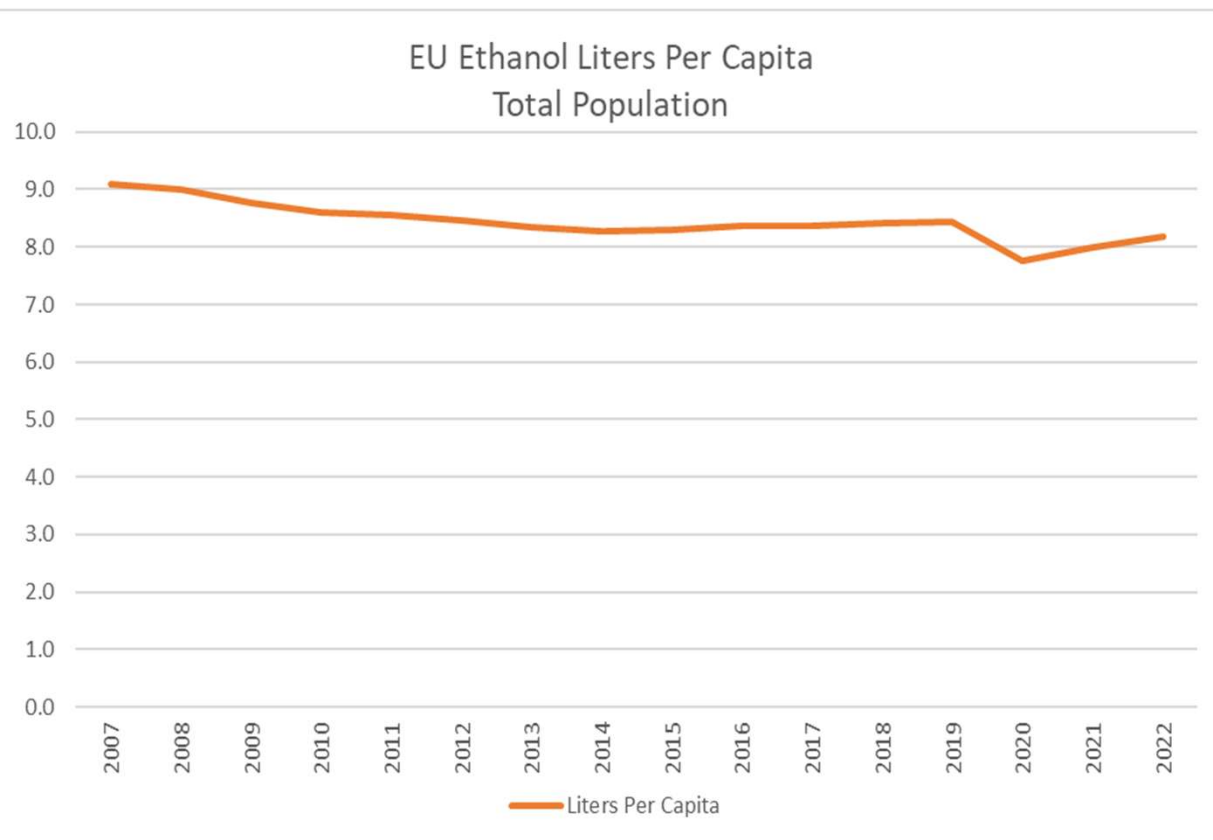
Share of Ethanol per capita by Beverage Type United States (2000 to 2022)



Year	Liters	Percentage share by type of drink based on alcohol content			
		Beer	Cider	Wine	Spirits
2000	6.5	58%	0%	13%	29%
2001	6.5	58%	0%	13%	29%
2002	6.5	57%	0%	14%	29%
2003	6.6	56%	0%	14%	30%
2004	6.7	56%	0%	14%	30%
2005	6.7	55%	0%	14%	31%
2006	6.8	55%	0%	15%	30%
2007	6.8	55%	0%	15%	31%
2008	6.8	54%	0%	15%	31%
2009	6.7	54%	0%	15%	32%
2010	6.8	54%	0%	15%	31%
2011	6.8	52%	0%	15%	32%
2012	6.9	52%	0%	15%	33%
2013	6.9	51%	0%	15%	33%
2014	7.0	51%	1%	15%	34%
2015	7.1	50%	1%	15%	34%
2016	7.1	50%	1%	15%	34%
2017	7.1	49%	1%	15%	35%
2018	7.0	48%	1%	16%	36%
2019	7.1	48%	1%	15%	36%
2020	7.2	47%	1%	15%	38%
2021	7.4	46%	1%	15%	39%
2022	7.3	45%	1%	14%	40%

Source: US Tax and Trade Bureau, US Department of Commerce and NBWA.

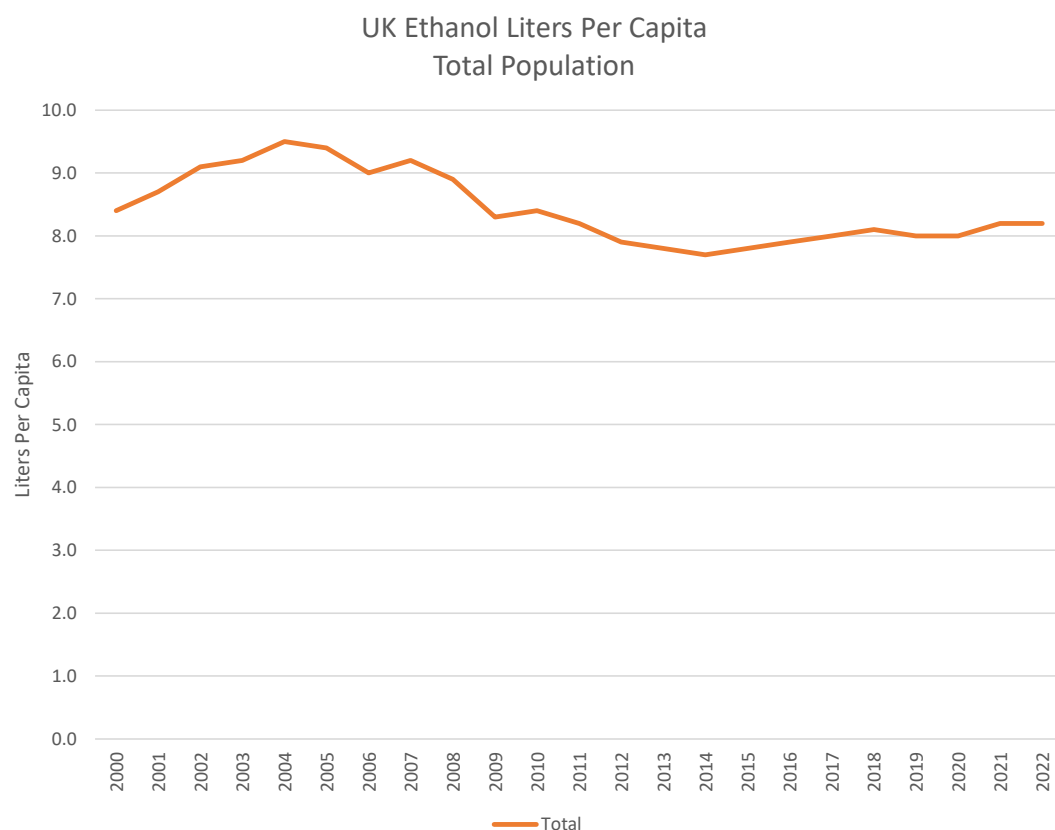
Share of Ethanol per capita by Beverage Type European Union (2007 to 2022)



Year	Liters Per Capita	Percentage share by type of drink based on alcohol content				
		Beer	Wine	Spirits	Cider	RTDs
2007	9.1	42.0%	36.8%	20.4%	0.3%	0.5%
2008	9.0	41.9%	36.9%	20.5%	0.3%	0.5%
2009	8.8	41.7%	37.2%	20.3%	0.3%	0.5%
2010	8.6	41.6%	37.3%	20.4%	0.3%	0.5%
2011	8.6	42.0%	37.0%	20.3%	0.3%	0.5%
2012	8.5	42.5%	36.6%	20.0%	0.3%	0.5%
2013	8.3	42.4%	36.4%	20.3%	0.3%	0.6%
2014	8.3	42.6%	36.3%	20.2%	0.4%	0.6%
2015	8.3	42.7%	36.4%	20.0%	0.4%	0.6%
2016	8.4	42.9%	36.2%	20.0%	0.4%	0.6%
2017	8.4	42.9%	36.1%	20.0%	0.4%	0.6%
2018	8.4	43.5%	35.5%	20.0%	0.3%	0.6%
2019	8.4	43.5%	35.6%	20.0%	0.4%	0.6%
2020	7.8	43.0%	35.9%	20.0%	0.4%	0.7%
2021	8.0	42.5%	36.1%	20.2%	0.4%	0.7%
2022	8.2	43.0%	35.6%	20.2%	0.4%	0.7%

Source: Euromonitor International

Share of Ethanol per capita by Beverage Type United Kingdom, 2000 to 2022



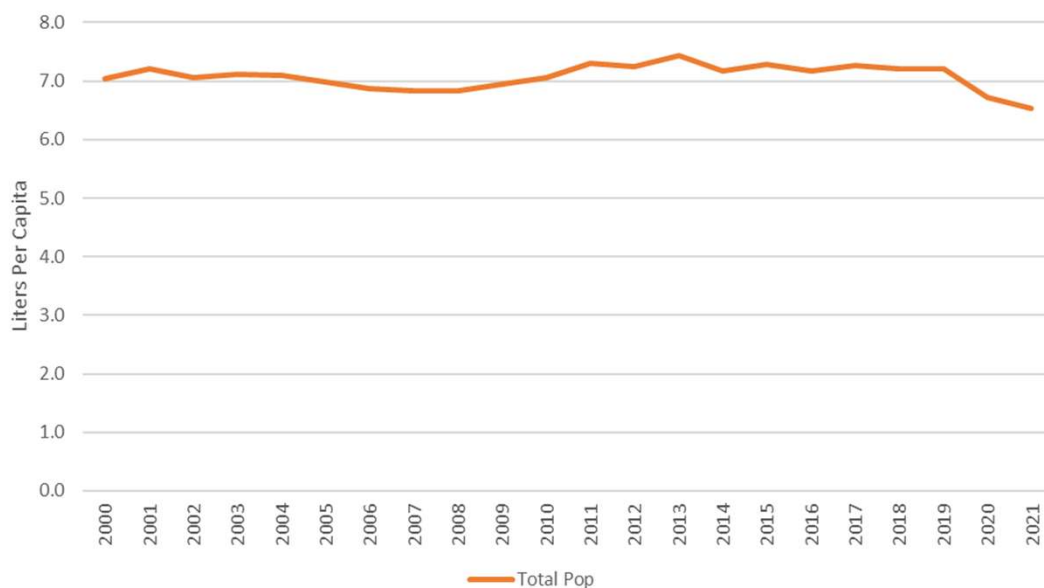
	Percentage share by type of drink based on alcohol content				
	Total	Beer	Cider	Wine	RTDs
8.4	48%	6%	24%	3%	19%
8.7	47%	6%	25%	3%	19%
9.1	46%	6%	26%	3%	19%
9.2	46%	5%	27%	3%	20%
9.5	44%	5%	29%	2%	20%
9.4	42%	6%	30%	2%	20%
9.0	43%	7%	30%	2%	19%
9.2	40%	7%	32%	2%	20%
8.9	39%	8%	32%	1%	20%
8.3	38%	9%	32%	1%	21%
8.4	37%	9%	32%	1%	21%
8.2	36%	9%	32%	1%	21%
7.9	36%	9%	33%	1%	22%
7.8	35%	9%	33%	2%	21%
7.7	36%	8%	33%	2%	21%
7.8	36%	8%	33%	2%	22%
7.9	36%	7%	32%	2%	23%
8.0	35%	7%	32%	2%	23%
8.1	36%	6%	31%	2%	24%
8.0	37%	6%	31%	2%	24%
8.0	33%	5%	33%	3%	26%
8.2	34%	5%	32%	3%	26%
8.2	36%	5%	31%	3%	26%

Source: British Beer and Pub Association

Share of Ethanol per capita by Beverage Type Japan 2000 to 2021



Japan Ethanol Liters Per Capita
Total Population



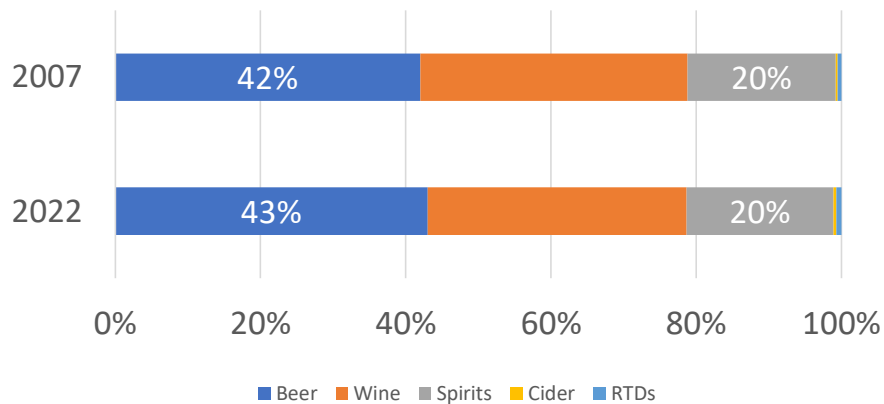
Year	Total Pop	Percentage share by type of drink based on alcohol content						
		Sake	Shochu	Beer	RTD	Spirits & Liquer	Fruit wine & fortified wine	Others
2000	7.0	18%	22%	40%	3%	12%	4%	2%
2001	7.2	17%	23%	39%	3%	13%	4%	2%
2002	7.1	16%	24%	39%	4%	12%	4%	2%
2003	7.1	15%	27%	36%	4%	13%	3%	2%
2004	7.1	14%	29%	36%	5%	12%	3%	2%
2005	7.0	13%	29%	36%	5%	11%	4%	2%
2006	6.9	13%	30%	36%	5%	11%	3%	2%
2007	6.8	13%	30%	36%	5%	12%	3%	2%
2008	6.8	12%	29%	35%	5%	14%	3%	2%
2009	6.9	11%	28%	33%	5%	17%	3%	2%
2010	7.1	11%	27%	32%	5%	19%	4%	2%
2011	7.3	10%	26%	30%	5%	23%	4%	2%
2012	7.2	10%	25%	30%	6%	23%	5%	2%
2013	7.4	10%	25%	30%	6%	23%	5%	2%
2014	7.2	10%	24%	29%	6%	24%	5%	2%
2015	7.3	10%	24%	29%	7%	24%	5%	2%
2016	7.2	9%	24%	29%	8%	23%	5%	2%
2017	7.3	9%	23%	28%	9%	25%	5%	2%
2018	7.2	8%	22%	28%	10%	25%	5%	2%
2019	7.2	8%	21%	27%	11%	26%	5%	2%
2020	6.7	8%	22%	26%	13%	25%	5%	2%
2021	6.5	8%	22%	26%	14%	23%	5%	2%

Source: Brewers of Japan

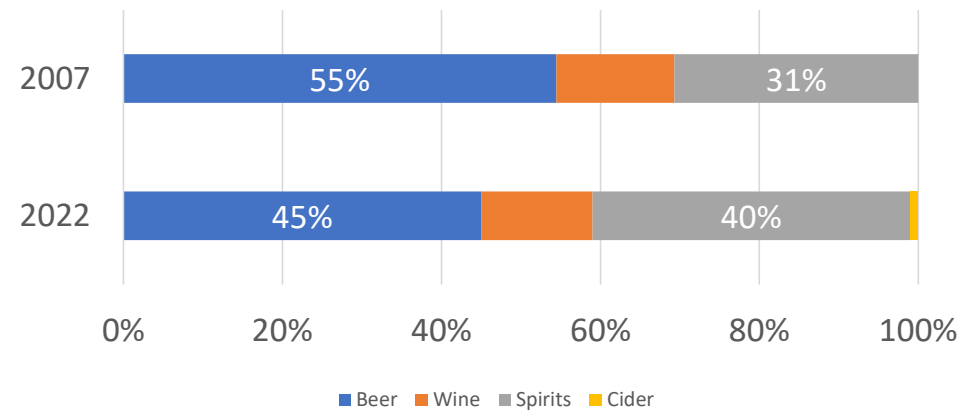
Shares Changes Over Time 2007 vs 2022



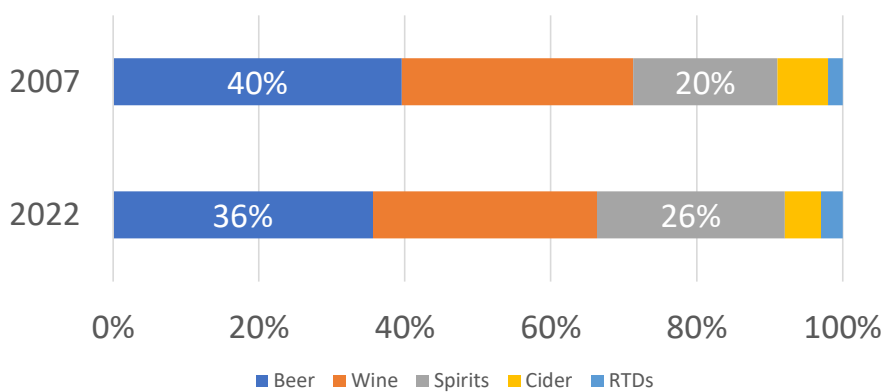
European Union



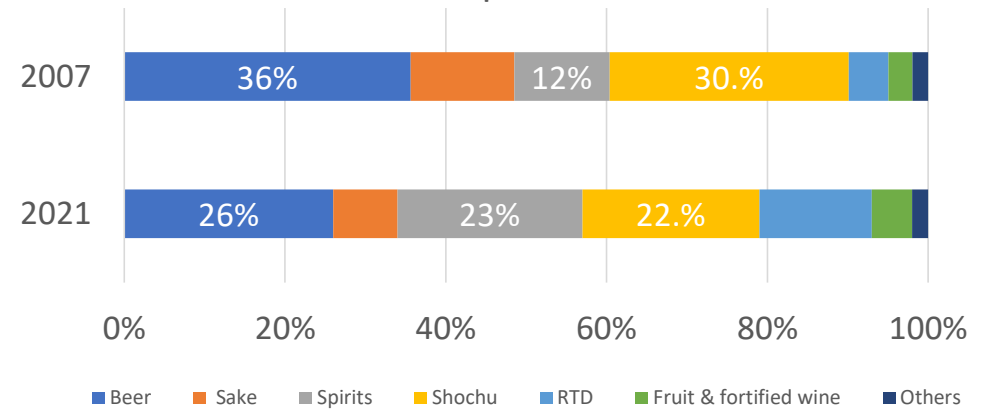
United States



United Kingdom



Japan



What are the
determinants
driving these
outcomes?

Building and Index
for Differentiation

Tax Policy - Pricing

Regulatory - Industry & Market Structure

Regulatory - Advertising & Marketing

Regulatory - Retail Access

Socio-Cultural - Consumer Preferences

Socio-Cultural - Demographic Changes

Trends in Narrative around Alcohol Taxation

- Alcohol is undertaxed
 - Exaggerated claims around how much alcohol taxes can contribute to domestic revenues and finance the SDGs.
 - Repeated suggestions that alcohol tax should represent a minimum percentage of the price (aligned with tobacco).

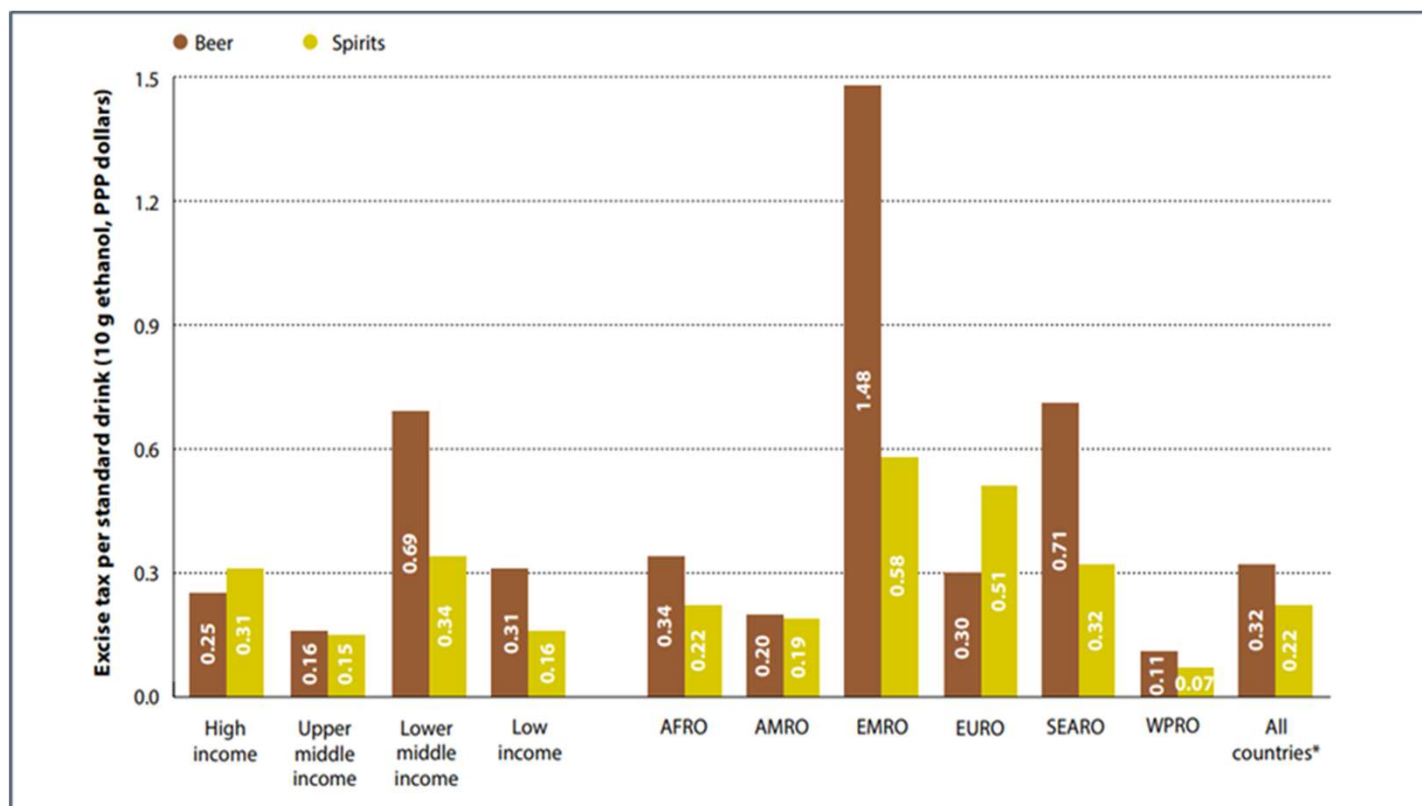
Engagement with Governments to drive the strategy of differentiated taxes and regulations within “beverage alcohol”.

- The rationale for lower rates of tax for lower alcohol beverages is accepted as a good tax policy to reduce the overall level of alcohol consumption & reduce alcohol-related harm.
- Lower excise rates for beer do not increase or initiate alcohol consumption.
- Reduced rates for local crop beer draw consumption away from untaxed alternatives and generate a greater local economic impact.

Excise Tax Benchmark by Beverage Type



In middle and lower-income countries, beer is paying a higher level of tax per 10g of ethanol than spirits.



Average excise level per 10g ethanol for beer and spirits in PPP international dollars by world bank income groups. WHO Global Alcohol Tax Report 2023, p 27



Development of Non-Alcoholic Beer by Brewers

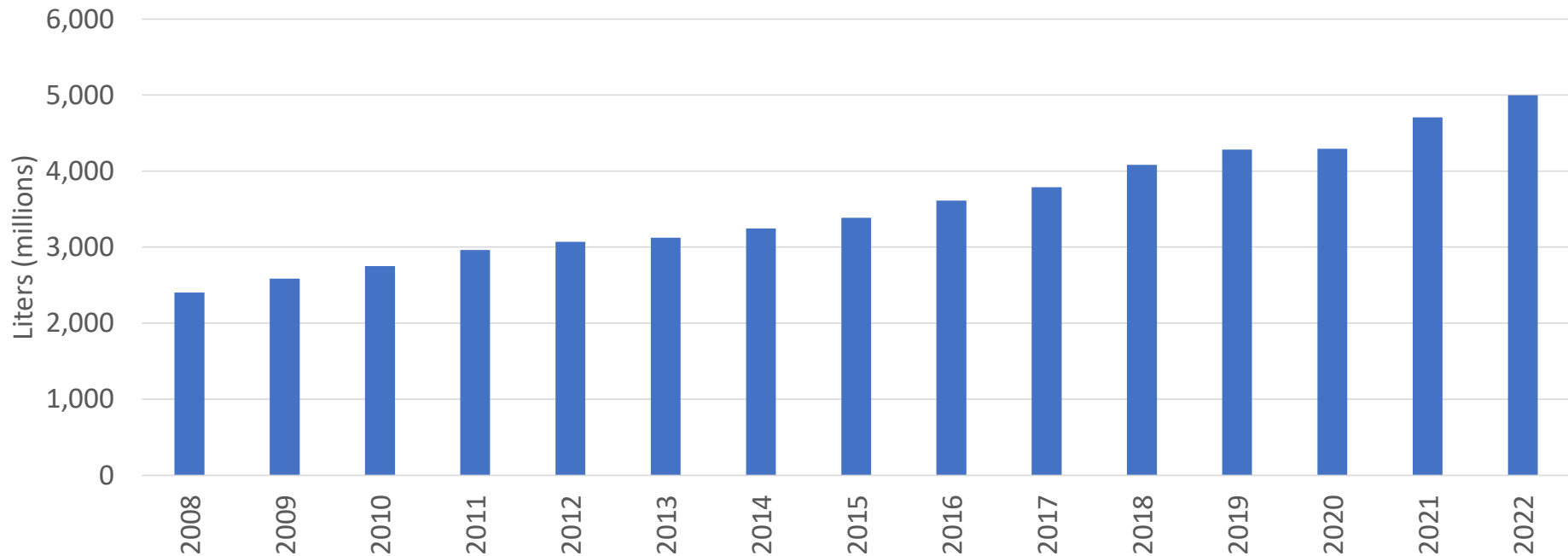
Volume of Non-Alcoholic Beer (<1.2% ABV)

- Core to our differentiation strategy is the role of Non - Alcoholic Beer as an alternative beverage.
- To support our case, we need to be able to measure the evolution of NA products across the alcoholic beverage category.
- We looked at the Global picture and completed a detailed study in four areas this year: the US, EU, UK, and Japan. We will expand our detailed research to approximately 100 countries in 2024, including 2023 data.

Global Volume of NA Beer

50m hl - 2.5% of global beer production (175b hl)

Beer NA

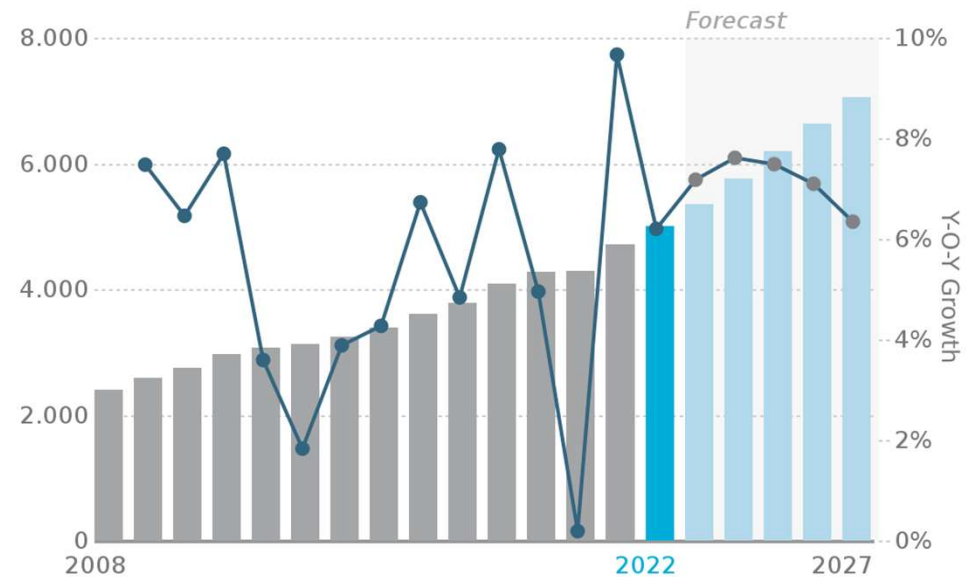


The Volume of NA Beer

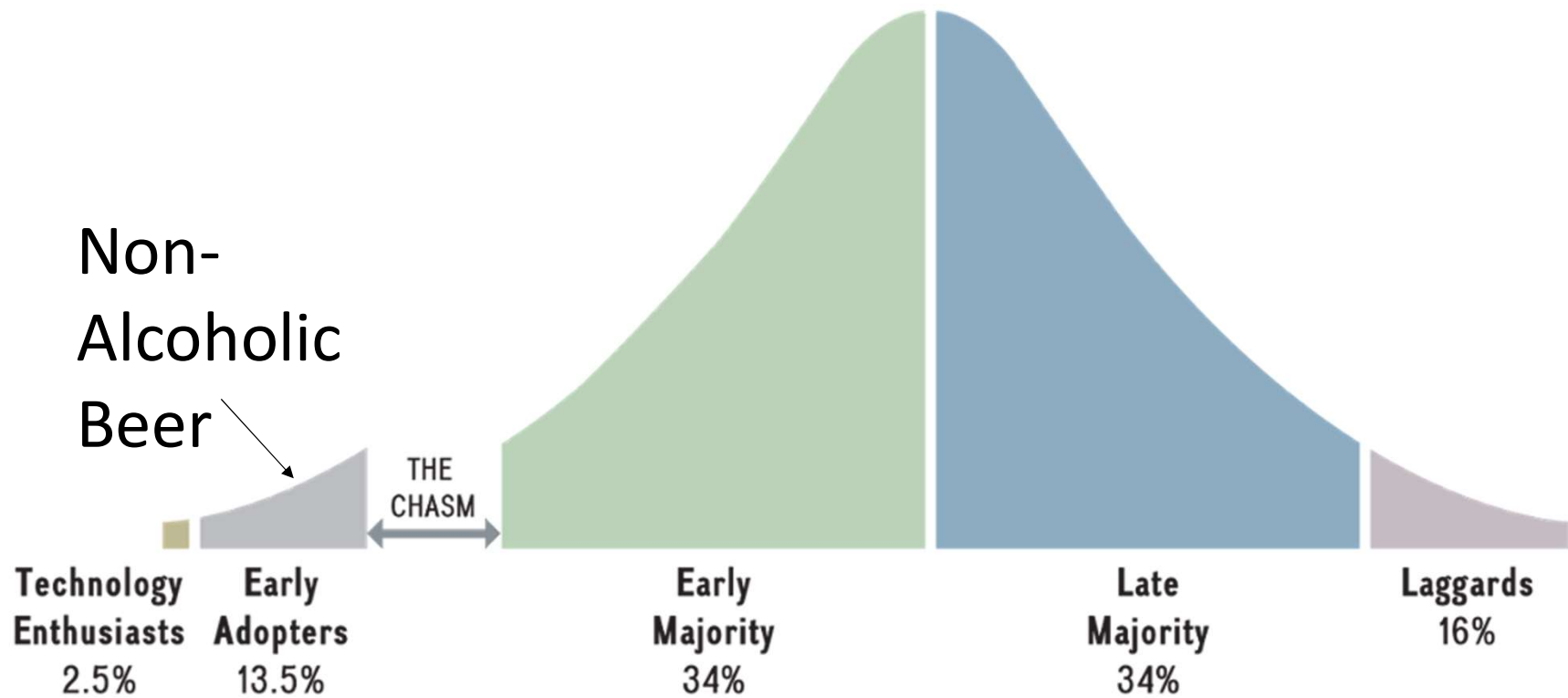


- Europe 25m hl
- Middle East & Africa 14m hl
- Latin & South America 5m hl
- Asia Pacific 4m hl
- North America 2m hl

Sales of Non Alcoholic Beer in World
Total Volume - million litres - 2008-2027



The Crossing-the-Chasm Framework

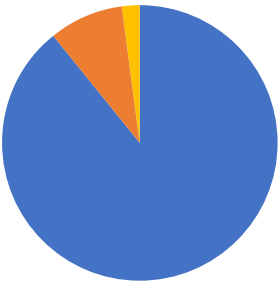


Source: Adapted from G.A. Moore (1991), Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream Customers (New York: HarperCollins), 17.

Current Status of Non-Alcoholic Beverages

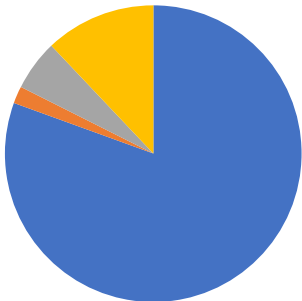


EU 2022



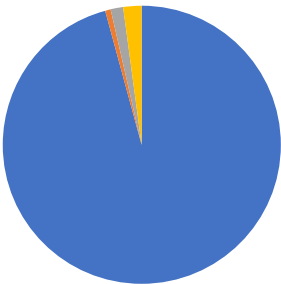
■ Non Alc Beer ■ Non Alc Spirits ■ Non Alc Wine ■ Cider

UK 2022



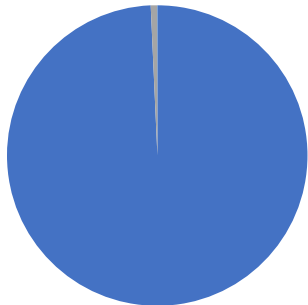
■ Non Alc Beer ■ Non Alc Spirits ■ Non Alc Wine ■ Cider

USA 2022



■ Non Alc Beer ■ Non Alc Spirits ■ Non Alc Wine ■ Cider

Japan 2022



■ Non Alc Beer ■ Non Alc Spirits ■ Non Alc Wine ■ Cider ■ Other

Engaging Global Agriculture Stakeholders



Economic Impact

- In 2019 brewers spent \$8.9 B on agricultural raw materials.
- In 2024, update this data, with a new study on Beer's Global Economic Impact.

The Vision

1. Provide increased support on policy issues that are important to beer's agricultural partners
2. Build a broad, consistent, and reliable constituency for differentiation.

Agriculture Stakeholder Engagement - Economics

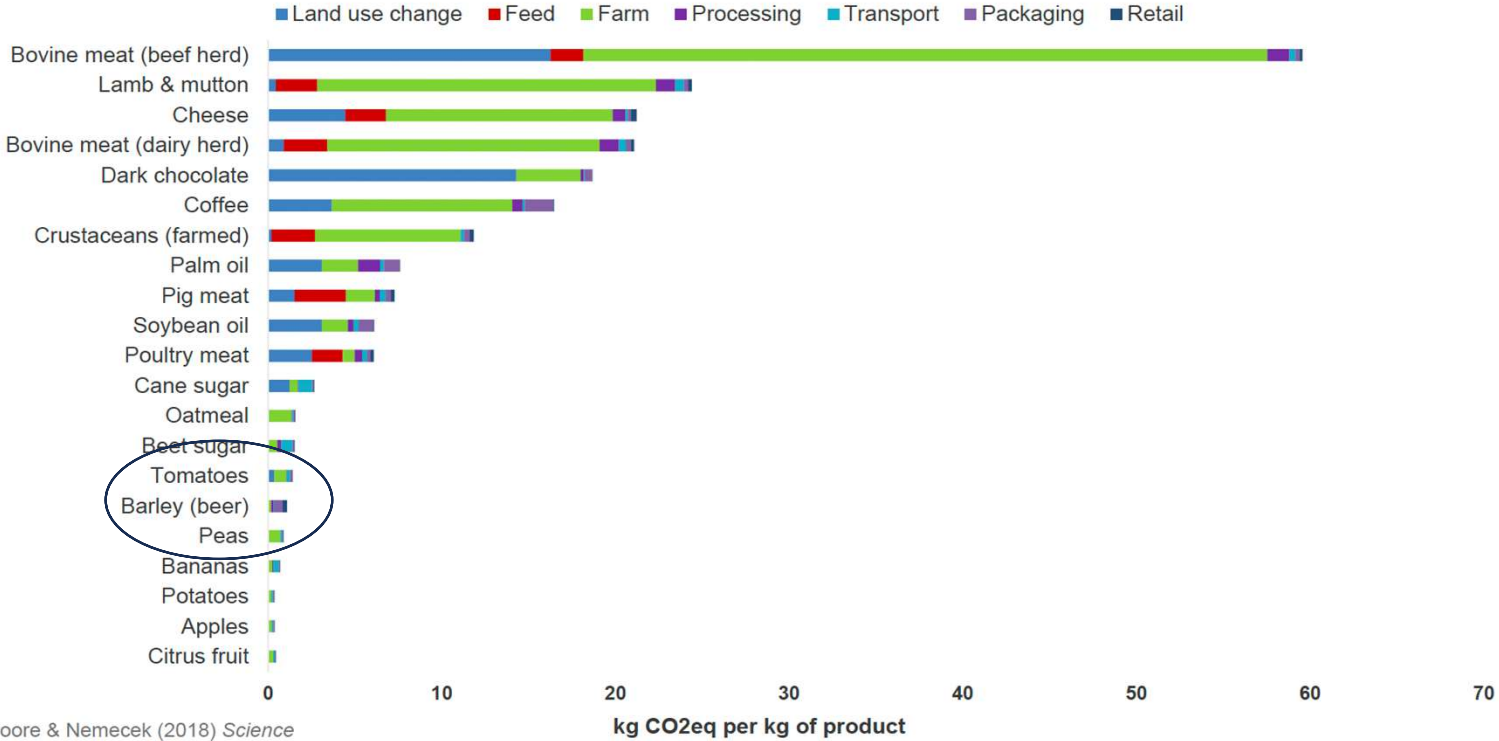
- Work with beer's agricultural suppliers:
 - To determine the number of farms/farmers that grow agricultural ingredients for beer.
 - Map the connections from national agricultural organizations to the MLOs.
 - Engage with FAO and other MLOs – including brewers, barley growers, maltsters, hop growers, and hop merchants.
 - Leverage the updated Economic Impact Study.

Agriculture Stakeholder Engagement – Sustainability

Improve the Metrics for Beer



Products differ strongly in terms of average impact...
Example: GHG emissions



Source: Poore & Nemecek (2018) *Science*

Agriculture Stakeholder Engagement - Sustainability

- Work with brewers, maltsters, and hop merchants:
 - Develop a database of sustainability measures, e.g., GHGs, Water use, Eutrophication, etc. for brewers and the farming supply chain.
 - To engage MLOs together to tell the story of how beer, at scale, contribute to meeting their sustainability goals.