

# The Future of Alcohol

Roland Berger's Alcohol industry white paper – 2026

May 2026

Roland  
Berger

# Executive Summary

- The alcohol industry is at a structural inflection point.
- This second release of our industry publication "**The Future of Alcohol**" confirms and deepens the central thesis of its 2025 predecessor: global alcohol consumption is on an irreversible downward trajectory, with (in the worst-case scenario) volumes projected to halve by 2050. This is not a cyclical correction – it is a permanent reset, driven by the convergence of health consciousness, generational value shifts, accelerating regulation, and demographic change.
- The original seven disruption hypotheses – spanning market polarization, luxury segment resilience, the rise of functional non-alcoholic beverages, advanced fermentation, water scarcity, sophisticated flavor pairing, and shifting market structure – remain valid and are now reinforced by new data. Per-capita consumption has declined or stagnated across every global region over the past decade, with developed markets leading the contraction. The tobacco analogy is instructive and sobering: taking the Japanese market as an example, once WHO-led frameworks gained institutional traction, tobacco consumption fell by 75% between 2000 and 2024. Today, alcohol is on a structurally analogous trajectory.
- This edition introduces two critical new strategic dimensions.
  - First, "**Alco-Tech**": technology leadership – particularly advanced fermentation science and AI-driven personalization. Advanced technology is repositioned not as an operational efficiency lever but as a primary growth engine, capable of extending alcohol-origin innovation into adjacencies including agri-tech, health, bio-energy, on the one hand and of supporting futuristic, hyper-personalized luxury consumer experiences on the other hand.
  - Second, "**Alco-Politics**": the industry's relationship with regulation must be fundamentally reframed. Rather than reacting defensively to inevitable tightening, leading companies must take the offensive – shaping regulatory agendas, co-authoring "healthy alcohol" standards, and deploying differentiated political strategies across Europe, North America, and Asia.
- The strategic imperative is unambiguous: companies that wait for the market to stabilize will find themselves competing in a permanently smaller market, on terms set by others. The winners of 2035 will be those who act now – investing in technology platforms, shaping the regulatory narrative, and converting structural disruption into durable competitive advantage.

# In 2025, Roland Berger's **Future of Alcohol Study** identified 7 disruption hypotheses with the potential to transform the shape of global alcohol markets

Recap of 2025 Future of Alcohol study

Existing markets

**1. World liquor consumption will decrease by 50% by 2050**

Although currently growing, the market is poised to shrink in the mid-term due to a growing trend of aversion to alcohol, spreading sobriety, and tighter regulations

**2. Luxury alcohols will remain a resilient market segment**

As the market polarizes, luxury value propositions will remain a protected segment of sustainable profitable growth

**3. The market structure will evolve towards 3 distinct groups of players**

[1] Luxury niche players sponsored by prominent individuals, supported by [2] high value OEMs will compete against [3] the top 5 global groups of brands

Emerging & future markets

**4. Functional, non-alcoholic drinks will replace alcohol**

Non-alcoholic beverages reproducing the effects of alcohol without its negative impacts on health will disrupt existing competitive landscape of alcoholic beverages

**5. More sophisticated flavor pairings will arise**

In the future, flavor pairing will include multiple factors linked to individual consumer and his/ her environment, made possible via innovation in beverage preparation

**6. Whoever controls water will control the alcoholic & other beverage industry**

Water scarcity will require beverage manufacturers to expand their involvement in the agricultural sector and irrigation systems, in addition to acquiring water sources

**7. Advanced fermentation technology will become a new source of revenue**

Growing applications of fermentation technology (in e.g. alternative proteins and bio-energy) will provide alcohol manufacturers with new business opportunities

**This edition deepens our core projection and introduces two new strategic dimensions that are already reshaping the industry**

The 3 core subjects of this edition

**Is the market contraction structural or cyclical ?**

**What competitive advantage does "Alco-Tech" create?**

**What strategic opportunities does "Alco-Politics" unlock?**

# The structural decline of alcohol consumption is now confirmed, leading the industry to now plan for a fundamentally and permanently smaller market

Is market contraction structural or cyclical?

**ALCOHOL'S  
DECLINE IS  
STRUCTURAL  
AND  
IRREVERSIBLE**

- The three ages of alcohol regulation confirm that the industry is now entering its most restrictive era yet

---

- Regulatory asymmetry indicates that developing markets are now reinforcing alcohol regulation twice faster than mature markets

---

- Forward-looking governments are choosing education over regulation as the more powerful tool for driving long-term shifts in alcohol consumption behavior

---

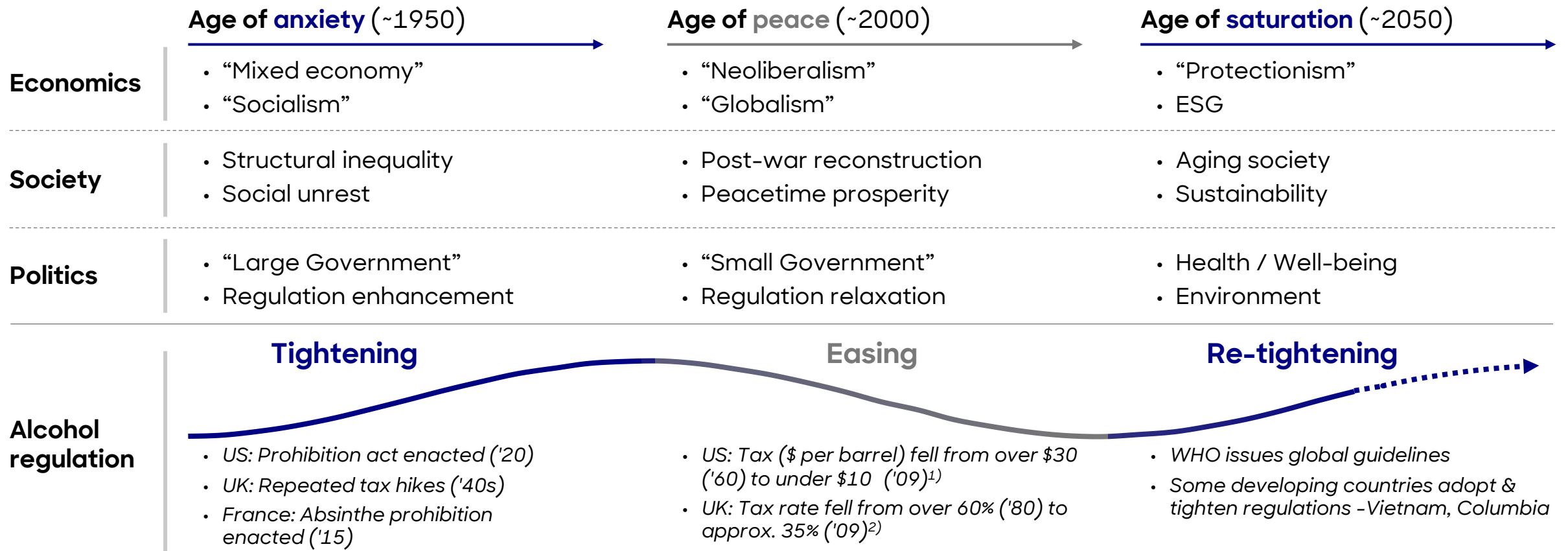
- Western moderation trends have accelerated and could be replicated to other markets exposed to similar route-causes

---

- Tax-as-lever, social denormalization and government's sequenced approach make tobacco decrease a good indicator for future alcohol trends (e.g. Japan)

# The three ages of alcohol regulation confirm that the industry is now entering its most restrictive era yet

History of regulations in the alcohol industry



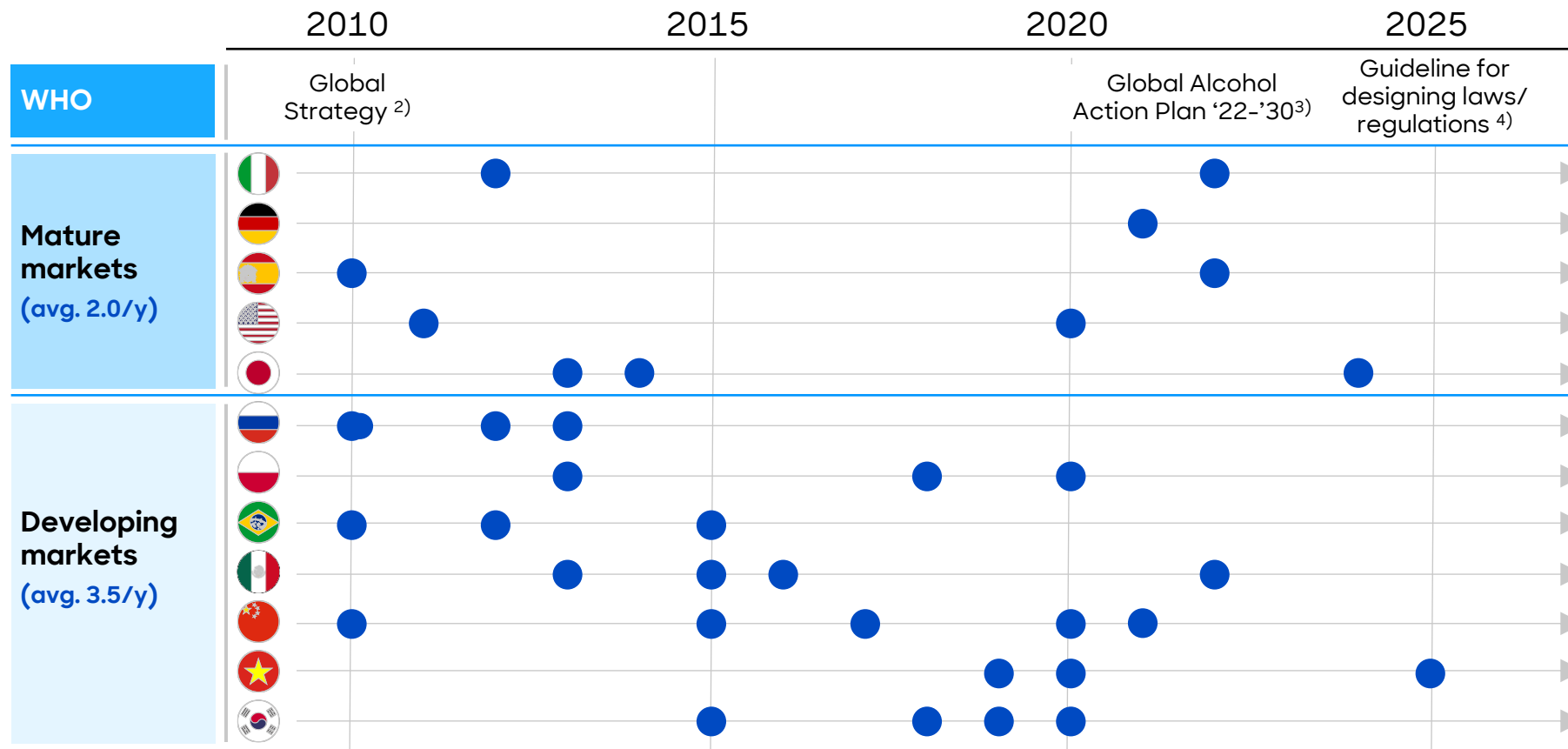
1) Average real federal excise tax on distilled spirits from 1951 to 2009, adjusted for inflation based on the Consumer Price Index for All Urban Consumers;

2) Alcohol duty payable per unit of alcohol in the UK, adjusted to September 2022 prices

# Regulatory asymmetry indicates that developing markets are now reinforcing alcohol regulation twice faster than mature markets

Alcohol regulations<sup>1)</sup> in high-consumption countries

●: Regulation amendment/ reinforcement






**Regulatory asymmetry**

- Regulation data reveals structural divergence : developing markets are reinforcing alcohol regulations at nearly twice the rate of mature markets (avg. 3.5 vs. 2.0 amendments per year)
- Yet the direction of travel is uniform – no market is moving toward liberalization, and the WHO Global Alcohol Action Plan 2022–2030 provides a convergent institutional framework within which both groups are operating

1) Nationwide regulations only; for tax, nationwide and shifts in tax structure only, 2) aims to reduce the harmful use of alcohol, 3) builds on the 2010 Global Strategy, 4) follows WHO's Global Alcohol Action Plan


# Forward-looking governments are choosing education over regulation as the more powerful tool for driving long-term shifts in alcohol consumption behavior

Examples of countries moving from regulation to education

	 <b>Poland</b> (2013)	 <b>Vietnam</b> (2019)	 <b>China</b> (2021)
<b>Educational approach</b>	<b>Educate values</b>	<b>Educate behaviors</b>	<b>Create alcohol-free environment</b>
<b>Target age</b>	15-19 years old	Elementary to high school students	Elementary to high school students
<b>Description</b>	<ul style="list-style-type: none"> <li>• Focus on values (love, family, safety)</li> <li>• Emphasize how alcohol negatively affect these values</li> <li>• Not the usual “it’s bad for your health” message</li> </ul>	<ul style="list-style-type: none"> <li>• Activity-based sessions (in class and extracurricular activities)</li> <li>• Focus on skills to refuse drinking/ handle meeting drunk people</li> </ul>	<ul style="list-style-type: none"> <li>• “No drinking” signs at school</li> <li>• Alcohol brands may not be used for school names, facilities, etc.</li> <li>• No alcohol sales around schools</li> </ul>

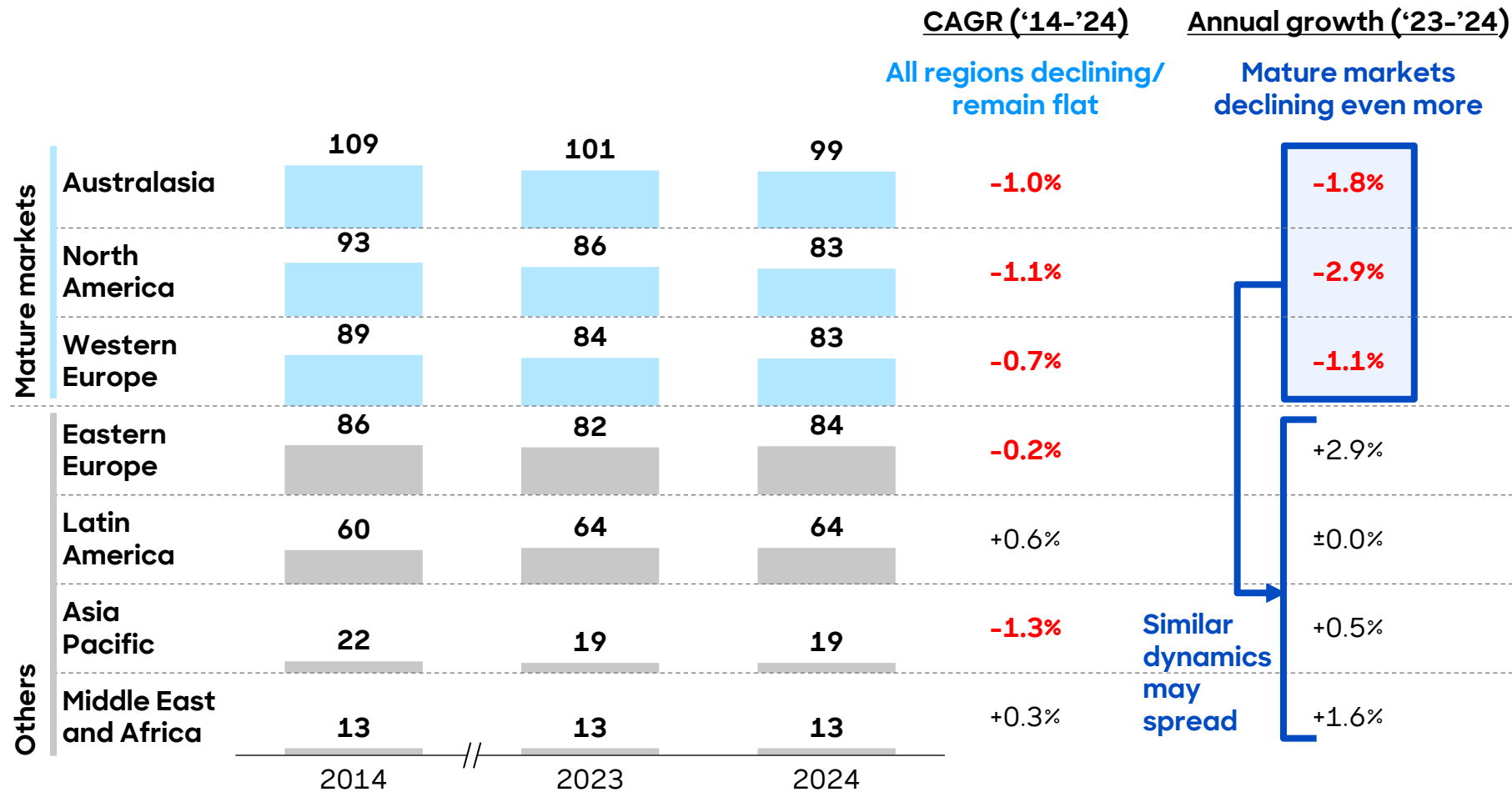
**Education more powerful instrument than regulation**

- The shift from regulation to education represents an escalation in government intervention : regulation controls access and price – education reshapes values, norms, and identity
- When governments embed alcohol awareness into school curricula they are engineering a generational realignment of attitudes toward alcohol.
- The long-run consequence is an adult population that is structurally less inclined to drink



# Western moderation trends have accelerated and could be replicated to other markets exposed to similar route-causes

Alcohol consumption per capita [L] by region



## Replication is possible when :

- Regulatory convergence is already underway
- Urbanisation and rising incomes are associated with growing health awareness
- Digital / mobile penetration is high and makes health campaigns deployable & low cost

## Replication is slower when (e.g.):

- Alcohol (esp. spirits & beer) is deeply integrated into social & business rituals
- Informal or illicit supply reduces the effectiveness of tax & regulations

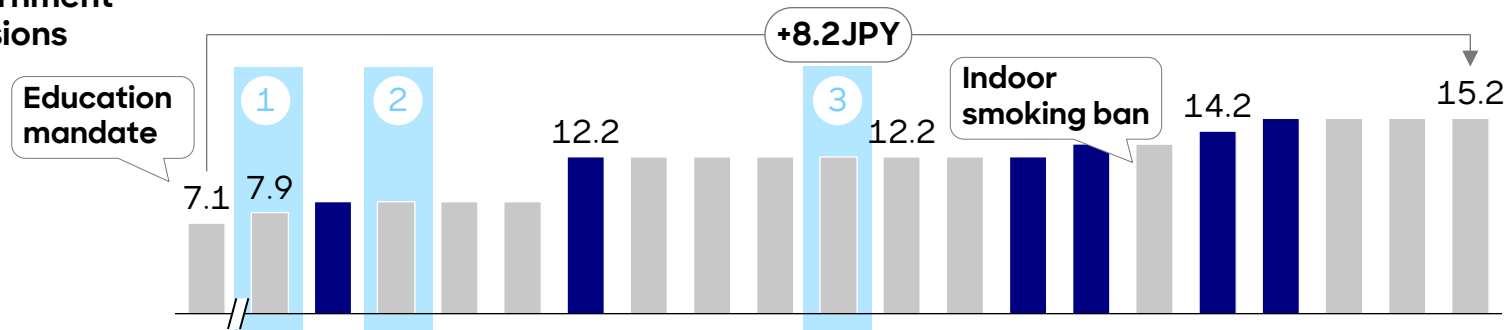
# Tax-as-lever, social denormalization and government's sequenced approach make tobacco decrease a good indicator for future alcohol trends (e.g. Japan)

Japanese tobacco industry as an analogy of alcohol

## Tobacco regulations and consumption decrease in 25 years

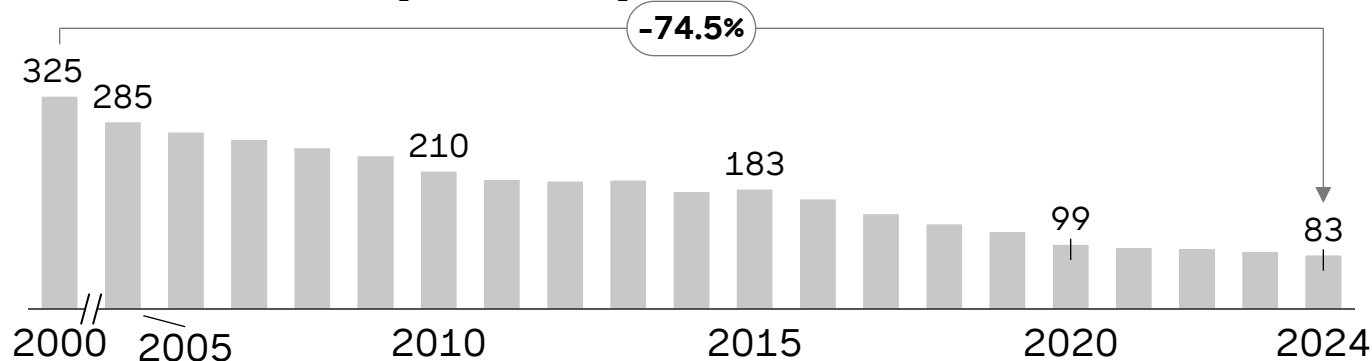
Local government decisions

Tax per tobacco [JPY]



Consumption decline

Tobacco Consumption [bn tobaccos]



### Major legislation triggers :

- 1) 2005 - WHO FCTC<sup>1)</sup> establishment  
Intergovernmental negotiating body for tobacco control
  - 2) 2007 - FCTC Cop # 2  
Initiatives protecting from secondhand smoke
  - 3) 2014 - FCTC Cop # 6  
Price & tax measures to reduce demand
- Local Japan tax increases

### Where the analogy has relevant limits:

- Multiple consumption occasions of alcohol, embedded in food culture, celebration & social identity
- Portfolio diversity of alcohol choices may act as a buffer
- Absence of second-hand harm equivalent (which was a decisive moral accelerator of tobacco decline)

1) Framework Convention on Tobacco Control

# With per-capita consumption declining, harnessing "Alco-Tech" leadership is the key to survive in alcohol market and to expand into other fields

What competitive advantage does "Alco-Tech" create?

## ALCO-TECH LEADERSHIP BECOMES MANDATORY

- The sector's technology agenda is bifurcating across two strategic axes: biological innovation and digital intelligence – both are non-negotiable

---

- Yeast has evolved from a brewing input into a proprietary biological platform capable of generating value across agriculture, health, and beyond

---

- Mapping AI across the alcobev value chain reveals that the highest potential opportunities are in precision agriculture and consumer facing applications

---

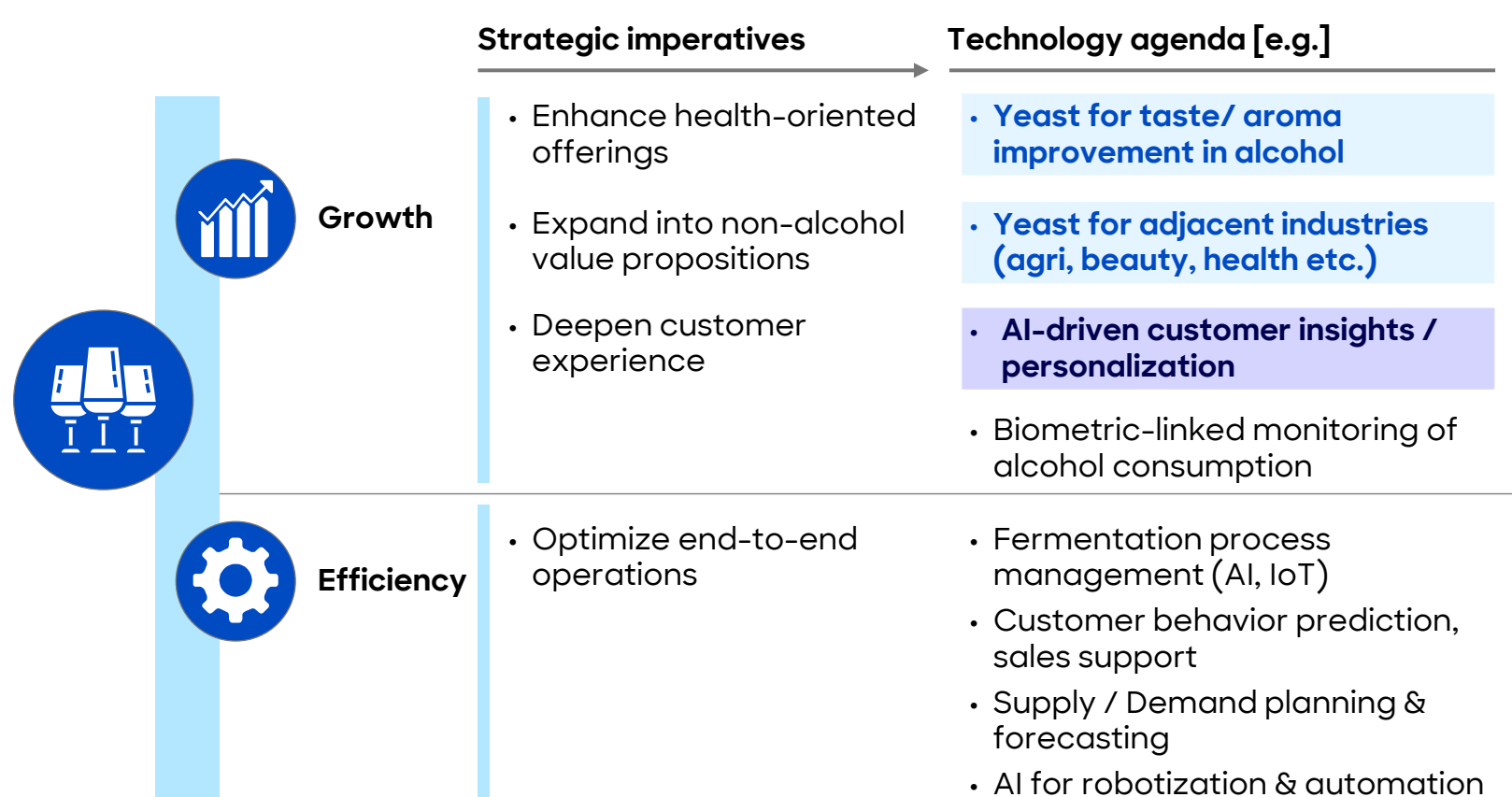
- For example, AI-powered flavor pairing is set to transform wine discovery & selection just as streaming platforms transformed music consumption

---

- Case study : Invintory is an AI-powered wine pairing app that is positioned as a key player in the future of personalized wine consumption

# The sector's technology agenda is bifurcating across two strategic axes <sup>1)</sup>: biological innovation and digital intelligence – both are non-negotiable

Technology as performance improvement lever



## Biological innovation

- Recent innovation convert yeast – initially an ingredient used for alcohol yield, flavor consistency and fermentation reliability – into a platform, i.e. a bio technology with applications in agri, health & beauty,...
- ... allowing alcobev companies to pivot into "fermentation technology companies" with a beverage distribution channel

## AI / digital intelligence

- AI-powered pairing applications allow hyper-personalized beverage recommendation at scale.
- For wine in particular – where complexity & expertise are barriers to purchase, the model disrupt customer experience and buying decisions

1) Based on the degree of attention in the industry determined based on Google search results with more than 50 million hits, May 2026

# Yeast has evolved from a brewing input into a proprietary biological platform capable of generating value across agriculture, health, and beyond

Expanded uses of yeast

Yeast for taste/ aroma improvement in alcohol

Yeast for adjacent industries (agri, beauty, health etc.)



## Company

- Canadian probiotic manufacturer
- Develops and sells microorganisms (yeast, bacteria)

- Subsidiary of a Japanese brewing company
- Produces agri material using brewing yeast tech

## Material

- Yeast

- Yeast cell walls upcycled for bio-stimulant production

## Value innovation

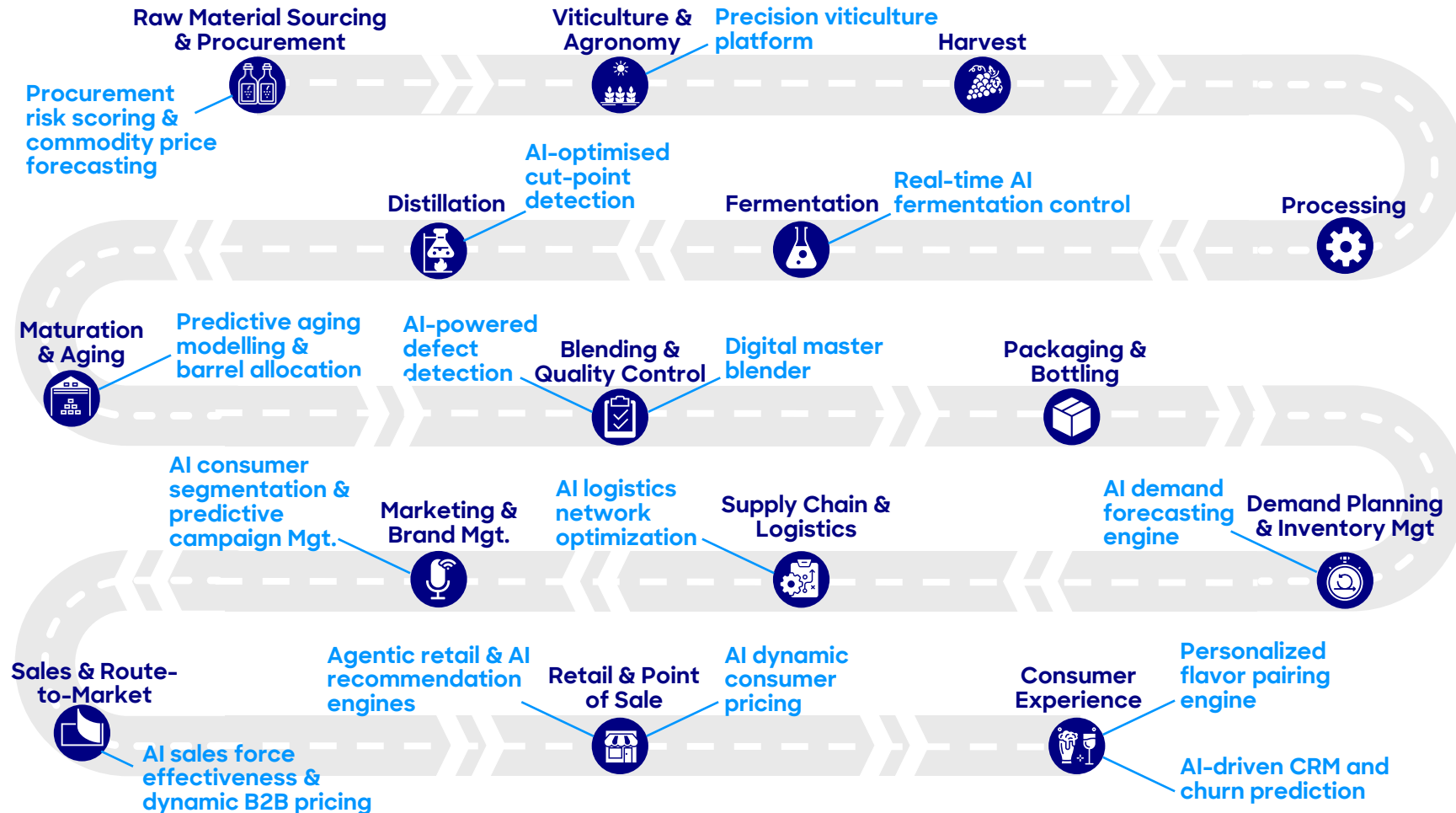
- Lallemand's yeast strains deliver superior flavour at low or zero alcohol content solve the single biggest commercial barrier to the non/low-alcohol category: taste.
- It is the technical unlock that makes functional flavour equivalence between alcoholic and non-alcoholic beverages achievable at commercial scale.

- Asahi's solubilisation of yeast cell walls for use as agricultural bio-stimulants is transformative : it converts a brewing by-product (historically treated as waste) into a premium agri-input, simultaneously addressing sustainability imperatives and creating a net-new B2B revenue stream at no incremental cost

## Opportunity

No-lo category acceleration - Circular economy value capture - IP / licensing revenue - Adjacent industry entry

# Mapping AI across the alcobev value chain reveals that the highest potential opportunities are in precision agriculture and consumer facing applications



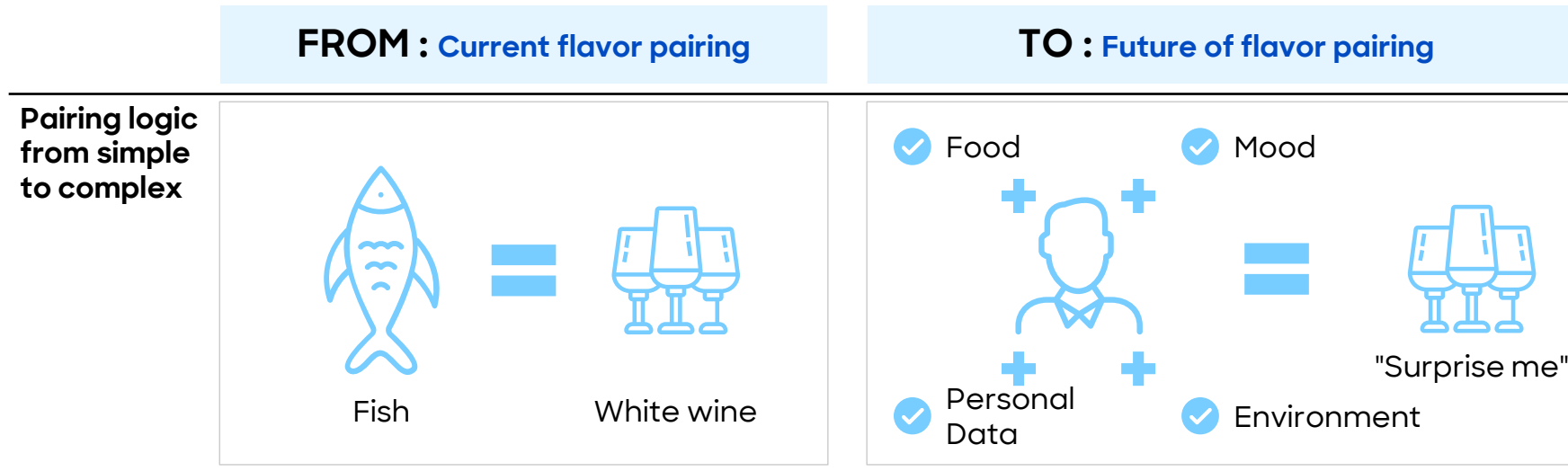
### High potential opportunities :

- The highest-concentration AI value lies at two extremes of the value chain – the agronomic input end (where AI protects the raw material quality and cost base) and the consumer-facing end (where AI converts personalization into revenue uplift and loyalty)
- The middle of the chain – production and logistics – offers genuine but more incremental returns
- The strategic investment priority should be consumer-facing AI first, precision agriculture second

● Macro-process steps — AI use-cases

# For example, AI-powered flavor pairing is set to transform wine discovery & selection just as streaming platforms transformed music consumption

Expanding the concept of flavor pairing



### Objectives

Pairing limited to few alcoholic beverages / ingredients, with simple factors considered :

- ✓ **Food**
  - Main ingredient type
  - Cooking method
  - Balance of primary tastes, etc.

Customized pairing considering multiple information sources :

- ✓ **Food**
- ✓ **Mood** - Hunger level, emotions, health
- ✓ **Personal data** - Genetic, behavior, taste
- ✓ **Environment** - Time, weather, companions

### Transforming alcohol selection from consumer-led to AI-based:

- The analogy is **Spotify's Discover Weekly** : algorithmic music curation transformed music discovery & deepened platform loyalty
- AI-powered flavor pairing will transform beverage discovery, with the platform capturing the relationship

### Commercial Implications:

- Increased willingness-to-pay
- Category expansion & new product discovery
- Personal, product & pairing data become a strategic asset
- Increased loyalty: Trust in AI advisors creates stickiness



# Case study : Invintory is an AI-powered wine pairing app that is positioned as a key player in the future of personalised wine consumption

AI pairing using multiple parameters

## Holistic wine management



- Toronto-based wine technology startup, founded in 2018
- Born from a personal need : the founder could not locate bottles in his own cellar
- Now the leading platform for wine collectors to manage, track, value, and discover their bottles via mobile app and web
- Expanding from individual collectors to B2B



- Users register personal wine collection on INVINTORY

- Input info such as meal content, preferences, dinner atmosphere via Chat bot

- AI recommends wine / wine glasses from user's collection


**Data ownership as a strategic asset**  
Accumulating consumer collections, pairing preferences, drinking behavior that can be monetized with brands

**Discovery & trial at scale**  
Exposing consumers to new wines & spirits & driving category exploration

**Engagement through 'collection management'**  
Registration mechanics creating repeat engagement & rituals

**Coupled with agentic commerce, AI pairing has the potential to be transformative and category-redefining :**

- Automatically replenishing a consumer's collection based on AI consumption patterns
- Proactively sourcing and purchasing a bottle matched to a dinner reservation detected in the consumer's calendar
- Executing cross-platform wine purchasing (marketplace, DTC, retail) without any consumer-initiated browsing



# The alcohol industry must shift from regulatory follower to regulatory architect and engage in shaping the rules

What strategic opportunities does "Alco-Politics" unlock?

**STOP  
REACTING  
START RULE-  
MAKING**

- Shaping the rules means building consortia to define healthy alcohol standards while deploying differentiated political strategies by region

---

- Governments, manufacturers, and retailers should collaborate to standardize a shared definition of healthy alcohol – those who define it first will win the market

---

- The same strategy cannot serve three regions, leading alcohol companies to build differentiated regulatory approaches for Europe, North America and Asia

---

- The Eco Beauty Score example shows that first movers who define standards capture a structural advantage

---

- The uneven application of MAHA across states illustrates the need for brands to engage regulatory discussions at state level

---

- Asia's high marketing responsiveness is the strategic lever for consumer-led brand positioning – and a way to shape demand before regulation does

# Shaping the rules means building consortia to define healthy alcohol standards while deploying differentiated political strategies by region

## Stop reacting...

- The alcohol industry has historically adopted a defensive posture toward regulation – lobbying against restrictions, seeking delays, and treating compliance as a cost center.
- This approach is no longer strategically viable.
- The regulatory trajectory is irreversible; the only meaningful strategic question remaining is: **who writes the rules?**

## ... Start rule-making

3 main reasons why industry leaders should seek for "first mover advantage" defining healthy alcohol standards :



Shape criteria that are favorable to existing portfolio and innovation pipeline



Build consumer trust through perceived transparency and proactive health commitment



Force competitors and the industry to operate within a framework designed by leaders

## The way forward

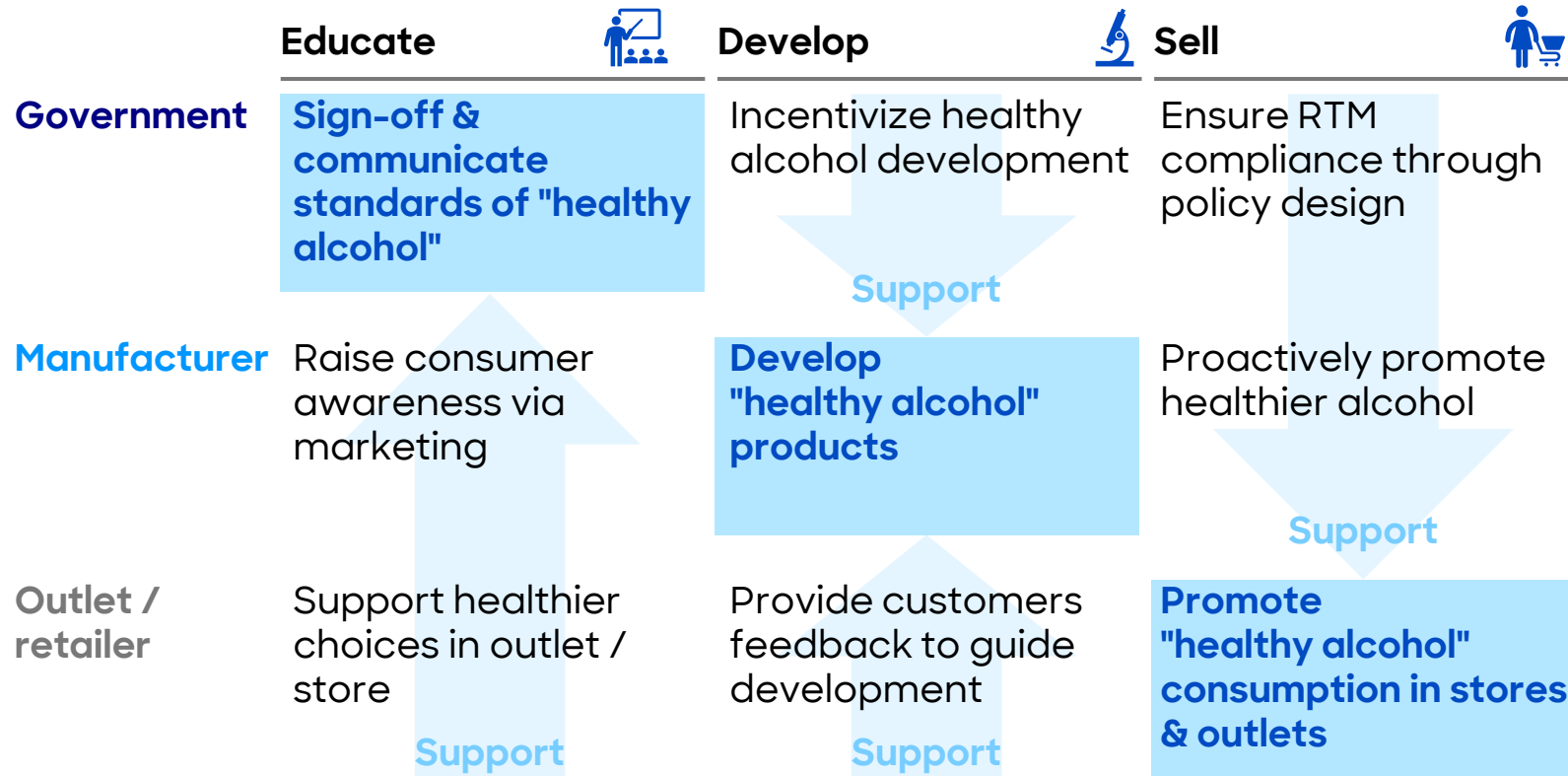
Become a rule maker



Develop an Alco-politics approach by region

# Governments, manufacturers, and retailers should collaborate to standardize a shared definition of healthy alcohol - those who define it first will win the market

## Roles on healthy alcohol standards definition



### The success of the tripartite model lies in incentives alignment :

- Manufacturers gain regulatory legitimacy and preferential retail positioning
- Governments gain a credible health narrative with genuine industry cooperation
- Retailers gain a curated, health-differentiated product range that drives footfall, basket value, and category authority

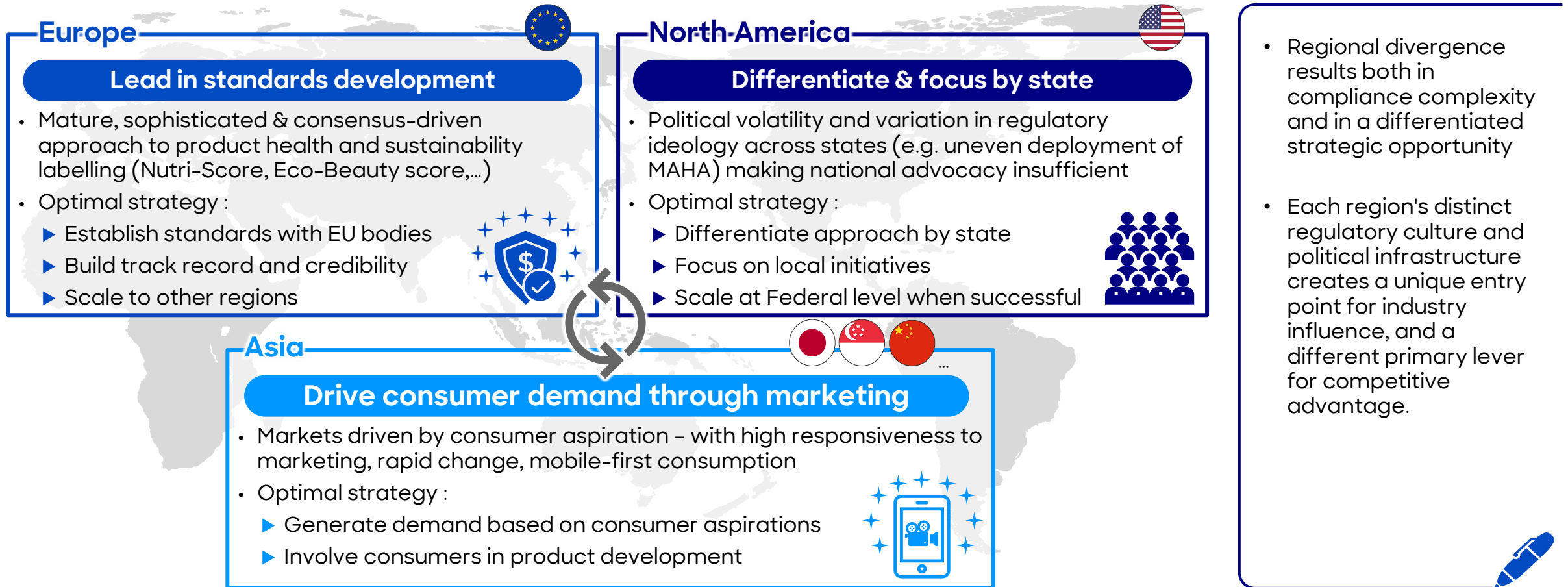
### To play their part, brands must invest in R&D and communication, e.g. :

- Commissioning independent research
- Engaging WHO-aligned health bodies
- Building customer & consumer-facing health credentials



# The same strategy cannot serve three regions, leading alcohol companies to build differentiated regulatory approaches for Europe, North America and Asia

## Region-specific approaches



# The Eco Beauty Score example shows that first movers who define standards capture a structural advantage

Leading standards development from Europe

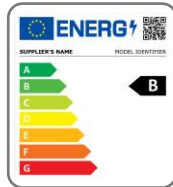
## Multiple EU scoring standards...



**F&B - Nutriscore**  
Nutritional quality of packaged food products



**Beauty- EcoBeauty score**  
Environmental impact of products (E2E lifecycle)



**EU - Energy Label**  
Energy efficiency of household appliances, lighting, and vehicles



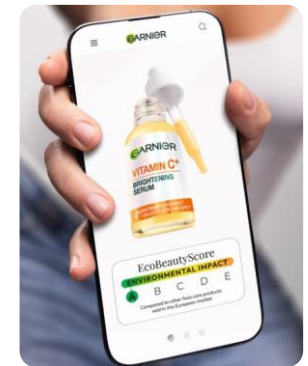
**F&B - Ecoscore**  
Environmental impact of products (E2E lifecycle)

## The Eco-Beauty Score initiative



- A global rating of environmental impacts of cosmetic products across their entire lifecycle, aiming at improving transparency on the total impact of beauty products and guide consumers.
- Idea initiated by L'Oréal with 4 other beauty players (80% European founders) : LVMH, Unilever, Henkel, Natura & Co
- From the initial idea, the EBS Consortium was established in February 2022, bringing together 36 companies and associations, growing to 50 members in the first year.
- **The Eco Beauty Score today :**
  - Live operational scoring system across Europe and the UK
  - Fully deployed consumer-facing environmental label
  - The world's first global, science-based environmental scoring system for beauty
  - 70+ members (corporate & associations) worldwide

- L'Oréal played an influential founding role
- It had developed its own product impact labelling system 2 years before and used that expertise to help shape the scoring methodology of the consortium



# The uneven application of MAHA across states illustrates the need for brands to engage regulatory discussions at state level

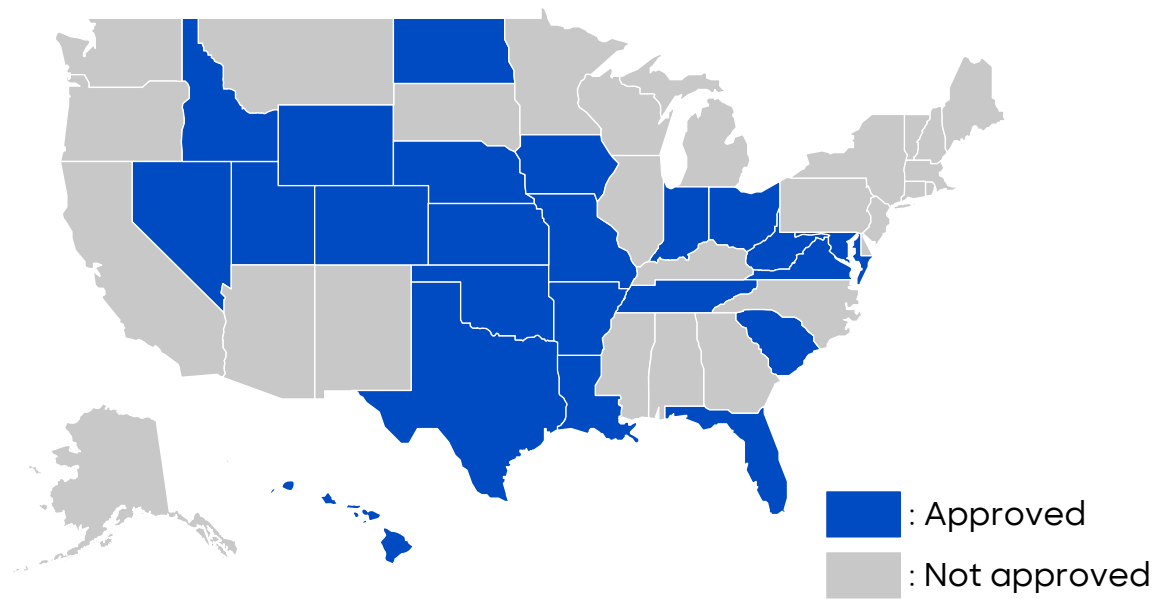
Adopting a focused approach in the U.S.

## The MAHA<sup>1)</sup> initiative

- MAHA commission established in February 2025
- Health policy initiative from the US Government with 4 priorities :
  - Revising Supplemental Nutrition Assistance Program (SNAP)<sup>2)</sup>
  - Removing petroleum-based food dyes
  - Overhauling Generally Recognized as Safe (GRAS)<sup>3)</sup> standard
  - Reworking dietary guidelines

### Restrictions on SNAP benefits

- USDA restricted the purchase of non-nutritious items
- As of April 2026, USDA approved waivers for 22 states



- The MAHA initiative's uneven illustrates the strategic challenge facing alcohol companies in North America.
- Federal health policy direction is clear and accelerating whereas execution is fragmented across state lines. This creates a dual dynamic:
  - Risk for companies that assume uniform regulatory application and plan national strategy accordingly
  - Opportunity for those that engage at the state level early and selectively

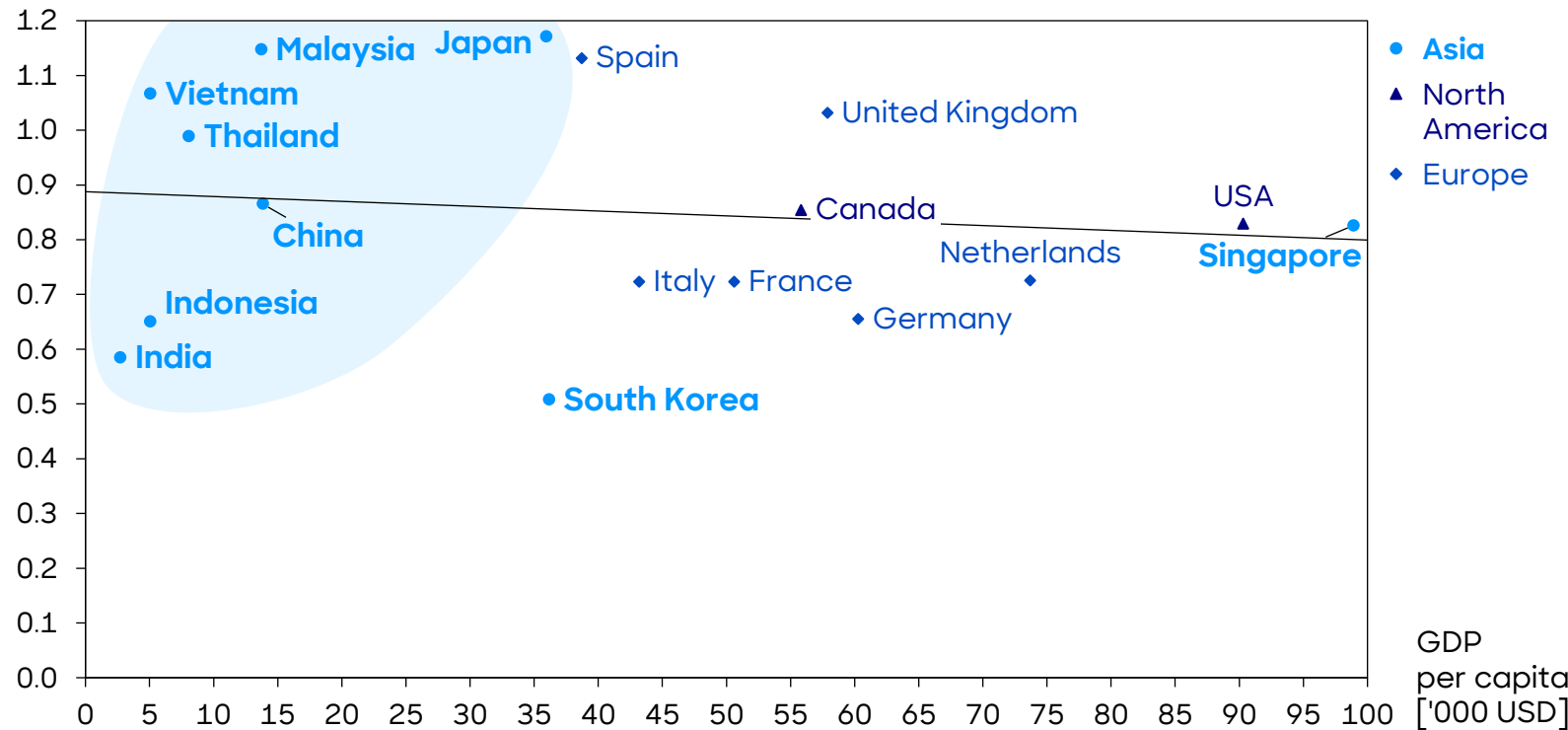
1) Make America Healthy Again; 2) SNAP program aims at providing food benefits to low-income families; 3) GRAS standard is designed for food ingredients that are considered safe

# Asia's high marketing responsiveness is the strategic lever for consumer-led brand positioning – and a way to shape demand before regulation does

Driving marketing-led demand in Asia

## Advertising expenditure across markets

Advertising expenditure as a percentage of GDP[%] - 2025



### An opportunity in Asia for consumer brands that does not exist in western markets?

- Advertising expenditure as a share of GDP is higher across Asian markets, and consumer responsiveness to marketing investment is stronger
- This combination signals that consumer aspiration is more brand-sensitive than in mature markets – and that well-executed marketing investment generates higher returns

### For alcohol companies, this creates a valuable window:

- In markets where regulation has not yet reached the intensity of the West, brand-building and lifestyle association can be achieved through consumer-led positioning & marketing campaigns rather than regulatory negotiation



# The future of alcohol is being written now – by technology leaders, political architects, and the brands courageous enough to lead

## Thought starters

### Key insight



#### The decline is major, structural, and irreversible

This is not a scenario to debate : LONG TERM structural decline is the baseline. Every commercial strategy must be rebuilt on this foundation.



#### No region is exempt – and no timeline is safe

Developed markets are contracting fastest and the assumption that emerging markets offer a durable volume refuge is risky



#### Fermentation science is a platform, not a process

Yeast and fermentation have scalable applications far beyond alcohol and are most underutilized asset in the industry.



#### AI is both the new sommelier and the new COO

From precision viticulture to personalised consumer pairing & agentic retail, AI has the potential to redefine the industry's business model



#### Brands must have a say in the regulatory agenda

Brands must be co-authoring the definition of "healthy alcohol," NOT waiting to comply with a definition imposed by others.



#### Europe, US and Asia demand tailored regulatory approaches

Europe rewards standard-setting leadership. The US require state-by-state political intelligence and Asia responds to consumer-led marketing

### What this means for brands



#### Reinvention is not optional

The brands of 2050 will be fermentation technology and AI companies with alcohol portfolios – not alcohol companies deploying technology.



#### Luxury is resilient – but only if redefined

Premium and luxury segments will remain protected, but only for brands that reframe luxury around provenance, personalization, and wellness.



#### No industry player leading "healthy alcohol" standard-setting

Regulatory leadership will be hard to match with marketing budgets. No alcohol industry consortium exists to lead the change.



#### NOLO is not the competition – it is the growth engine

Brands that own the flavour science, yeast technology, and pairing intelligence will capture the next decade of expansion.



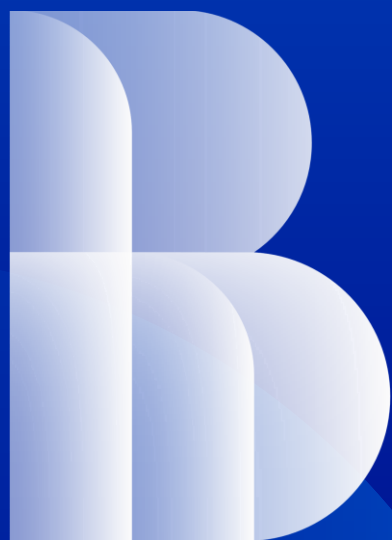
#### Agentic commerce and AI pairing will reshape RTM's

Brands that do not own consumer data and recommendation engines will cede the consumer relationship to platforms



#### The runway is shorter than the industry believes

The tobacco precedent demonstrates that once the regulatory, social, and behavioral effects aligns, the trajectory locks. For alcobev, the time is now.



Roland  
Berger