

Restructuring of Supply Chain Management in Japan (Alcohol and Non-alcohol Beverages Businesses)



March 8, 2022

- **Vision for Asahi's supply chain management**
 - **Background**
 - **Vision**
- **Production site reforms**
 - **Reform schedule**
 - **Overview of measures**
 - **Shin-Kyushu Brewery model and specific measures**
- **Expected benefits**

Although we have surplus production capacity for beer-type beverages, we expect further profitability improvements through boosting manufacturing capabilities in growth categories



Beer-type beverages

- Despite efforts to expand sales of beer and other products, sales volume will likely remain flat or drop slightly due to the impact of the shrinking market
- Revisions will be made to rectify surplus production capacity in response to the impact of the contracting on-premise market



RTD low-alcohol beverages

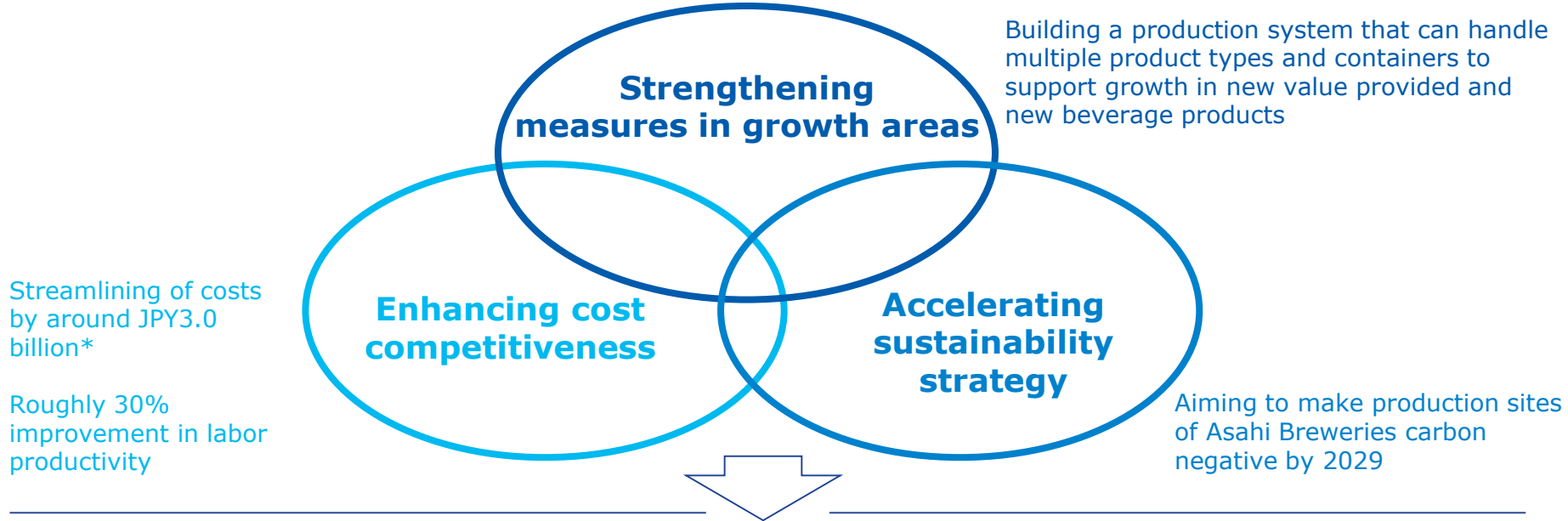
- We are targeting sharp growth in sales volume, given the rising demand in this market
- Production capacity will be ramped up in line with sales volume growth



Non-alcohol beverages

- This market is trending up slightly, and we are targeting steady growth in sales volume
- Production capacity will be ramped up in line with sales volume growth

Spearheaded by Asahi Group Japan, we will aim to be an industry leader in Japan and overseas in terms of costs, growth, and sustainability



Improvements in the execution and speed of Group-wide measures through synergies between the Alcohol Beverages, Non-alcohol Beverages, and Food businesses, greater utilization of the Group's global scale and knowhow, and the concentration into Asahi Group Japan of strategic decision-making concerning procurement, production, and distribution

*2026 full-year forecast (vs. 2021) for beer-type beverages only, after adjusting for increases in distribution costs, etc.

Overview of Supply Chain Management Restructuring Plan



We will overhaul our procurement, production, and distribution systems across all of our domestic businesses, starting with production

Procurement



- Centralize procurement for alcohol and non-alcohol beverages and switch to global procurement leveraging scale and best practices
- Adopt decarbonization measures in procurement, by making lighter cans, using recycled materials, etc.
- Use environment-friendly raw materials for plastic containers

Production



- Rationalize production capacity levels and business site locations for domestic businesses as a whole
- Shift to highly efficient production and generate new value
- Step up initiatives aimed at achieving carbon negativity

Distribution

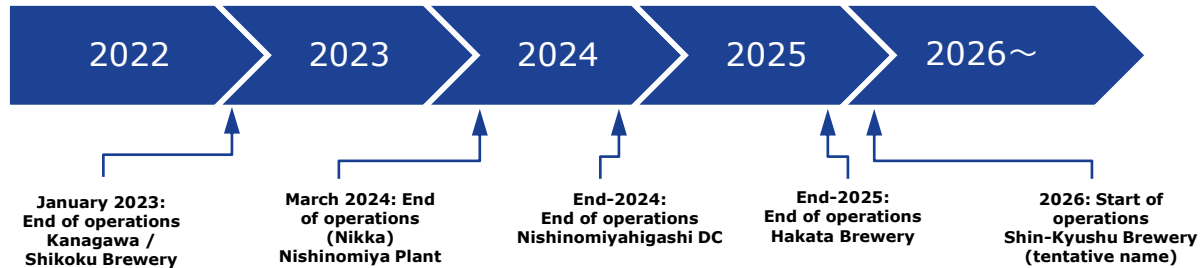


- Rationalize distribution network in line with production systems
- Maximize transportation efficiency
- Reduce CO₂ emissions with the above measures and implement working-style reforms for the distribution workforce in 2024

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Reform Schedule

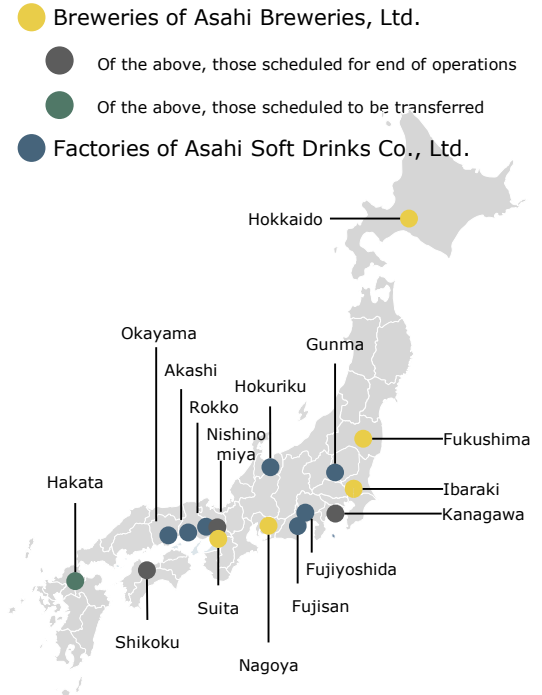
Building an optimal supply chain management system with initiatives spanning the Alcohol and Non-alcohol Beverages Businesses



- Shut down two Asahi Breweries production sites (Kanagawa Brewery and Shikoku Brewery) and migrate functions of the Hakata Brewery to the new Shin-Kyushu Brewery (tentative name). Build out an optimal production system for both alcohol and non-alcohol beverages.
- Roll out the next-generation production system model of the Shin-Kyushu Brewery to other production sites.

Note: Production sites of Asahi Breweries include Nikka Whisky's Nishinomiya Distillery (scheduled for closure)

Production Facilities



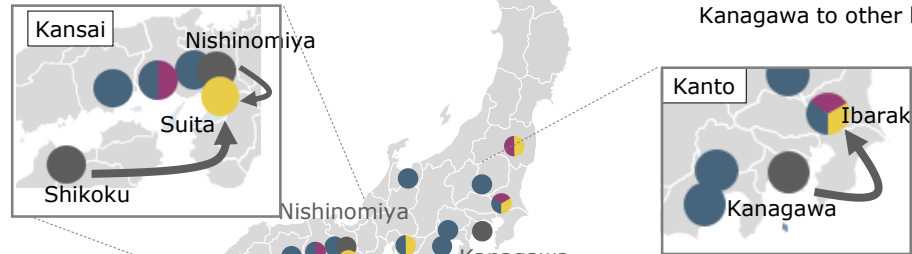
Enhancing Group-wide Production Efficiency

Enhance Group-wide production efficiency through the building of an optimal supply chain

Optimization of domestic supply chain

- Beer production site
- Non-alcohol production site
- RTD production site

- Consolidation of beer production at Shikoku to other breweries
- Consolidation of RTD production at Nishinomiya to Suita



- Consolidation of beer production at Kanagawa to other breweries

Shin-Kyushu Brewery (tentative name).

- Move from Hakata to the new Shin-Kyushu (tentative name) to manufacture beer, non-alcohol and RTD.

Seeking to improve profitability through supply chain restructuring

- Enhance capacity utilization through production site consolidation and optimization of production capacity
- Location of production sites based on local market size in each area (reducing transportation costs through local production for local consumption)
- Securing production capacity on the back of sales growth in non-alcohol and RTD low-alcohol beverages

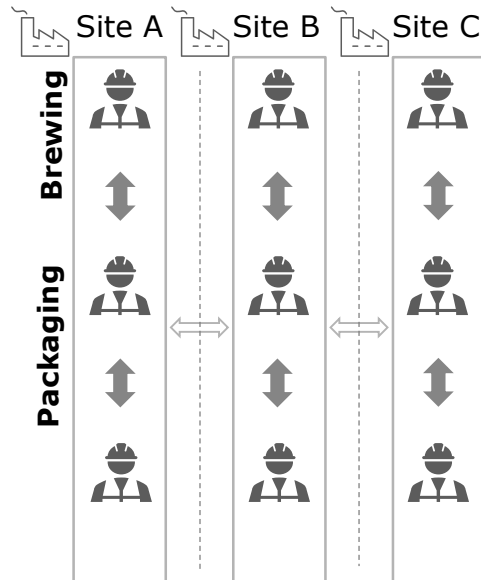
10% increase in capacity utilization

Enhancing Cost Competitiveness (Transforming Production Operations)

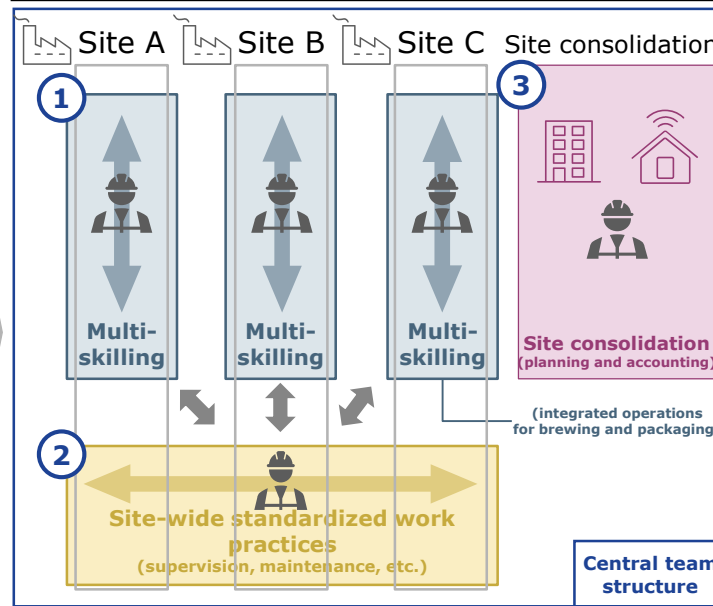
The establishment of a central team structure will dramatically enhance operational efficiency

Transforming production operations

Operations up until now



Efficient cross-organizational working style under a central team structure



Measures for improving operating efficiency

- 1 Multi-skilling:** Multi-tasking and integration of operations transcending units and processes
 - 2 Site-wide work standardization:** Making work more efficient through site-wide coordination and management, including production support operations
 - 3 Consolidation of sites:** Work quality enhancement and greater efficiency from the consolidation of planning and administrative tasks
- Automation and energy-saving:** Minimizing work tasks by upgrading to cutting-edge equipment and the use of digital technologies

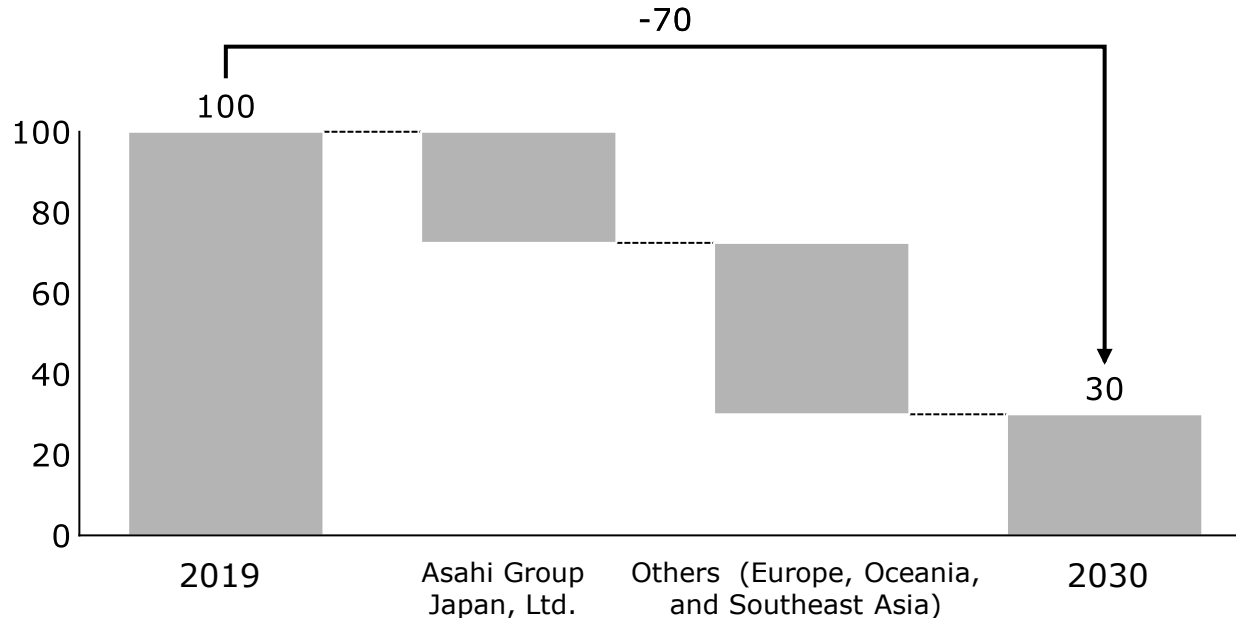
30% increase in labor productivity

Bolstering Sustainability Initiatives

(CO₂ Emissions Reduction Target)

We will aim to make the entire operations of Asahi Breweries carbon negative, thus contributing to the Group-wide target of a 70% reduction in emissions (vs. 2019 levels)

Asahi Group's CO₂ emissions (% compared to 2019)



Main initiatives of Asahi Group Japan

- Transforming production methods and facilities
 - Overhauling production processes
 - Making utility facilities more efficient
 - Uninterrupted operations
- Production powered by renewable energy
 - Solar power
 - Biomass energy
- Switching to renewable energy sources
 - RE100 electricity

Overview of Shin-Kyushu Brewery (Tentative Name)



Operations scheduled to come online in 2026. Will feature next-generation production systems and operate as a model brewery for the Asahi Group

Bolstering Environmental Responsiveness

- Greater production range (expanded to 30 products from 10)
- Capacity for manufacturing RTD beverages, Taruhai Club, and soft drinks
- Capacity for manufacturing multiple types of containers

Improving Cost Competitiveness

- 50% reduction in energy consumption
- Productivity improvements with the installation of remote monitoring, automation, and other new technologies
- Improvements in overall cost efficiency, including distribution

Bolstering Sustainability Strategy

- Innovation in manufacturing methods and greater energy efficiency
- Installation of CO₂ recovery system and carbon recycling technology
- Installation of renewable energy facilities



*Rendering

- **The brewery will be carbon negative (on a stand-alone basis) in 2026.**
- **Best practices of this brewery will be introduced to the Group's other production bases.**

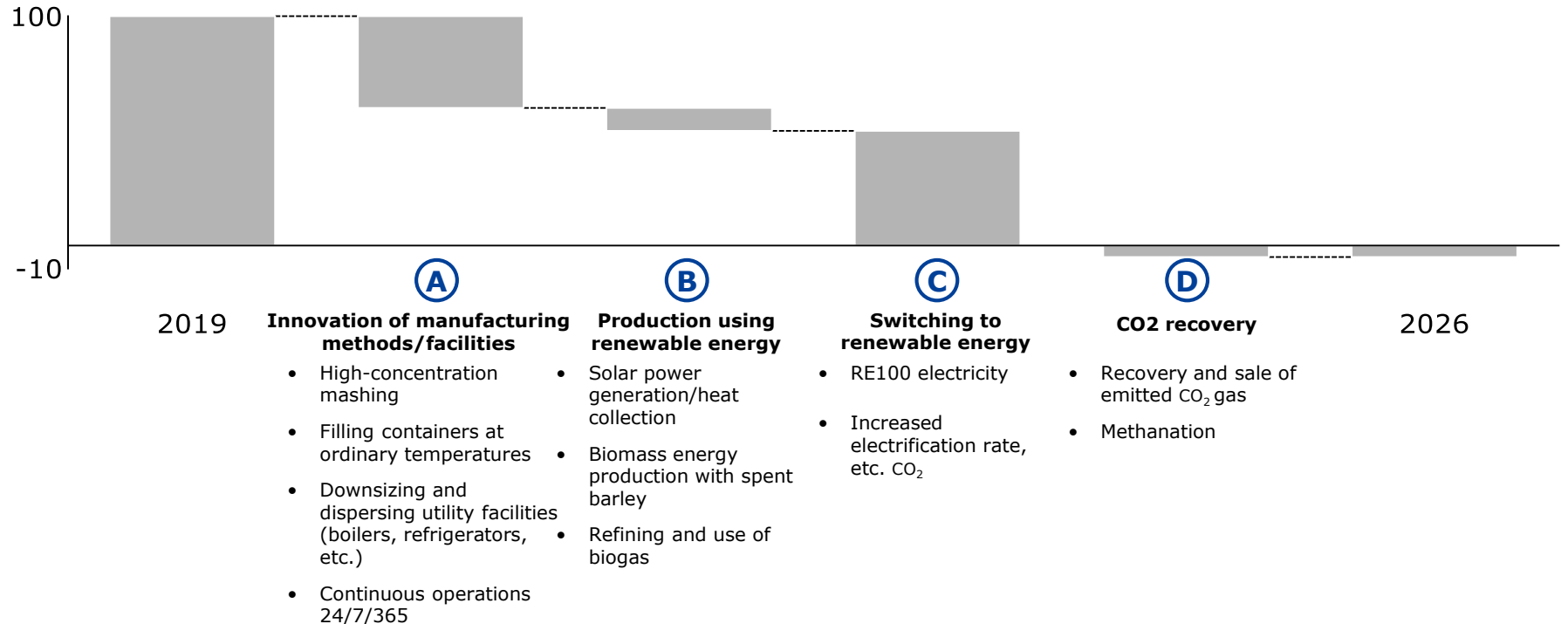
Accelerating Our Sustainability Strategy

(Achieving Carbon Negativity)



We will aim to achieve carbon negativity by innovating manufacturing methods, powering production with renewable energy, switching to renewable energy sources for electricity, and CO₂ recovery

Hakata Brewery CO₂ emissions (% compared to 2019)

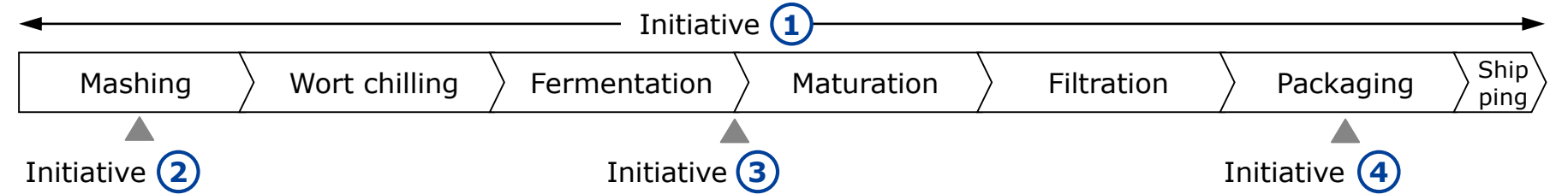


Accelerating Our Sustainability Strategy

(A: Innovation of Manufacturing Methods/Facilities)



Reducing CO₂ emissions by making innovative changes to manufacturing methods and equipment



① Streamlining across all processes

- Reduce transportation loss by downsizing and dispersing utility facilities installed at production sites (boilers, refrigerators, etc.)
- Make thermoelectric conversion more efficient with use of heat pumps, etc.



② High concentration mashing

- Reduce amount of energy needed for heating by mashing batches at a higher concentration than before



③ Fermentation tank maturation

- Improve cooling efficiency by rethinking fermentation and maturation processes
- Significantly reduce power needed to cool beer



④ Filling all containers at ordinary temperatures

- Aim to fill all types of bottles, cans, and kegs at ordinary temperatures (will be first time with bottles and kegs for Asahi (already implemented for can lines))
- Reduce energy used to warm products to prevent condensation, recover “cold energy” and use it for wort cooling and other processes



Accelerating Our Sustainability Strategy

(B: Production Using Renewable Energy)

Reducing CO₂ emissions by installing renewable energy facilities

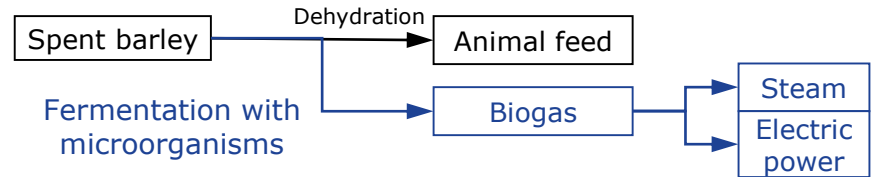
Solar power

- All rooftop space of new brewery to be covered with solar power panels and heat collection panels
 - To be Asahi's biggest such installation to date

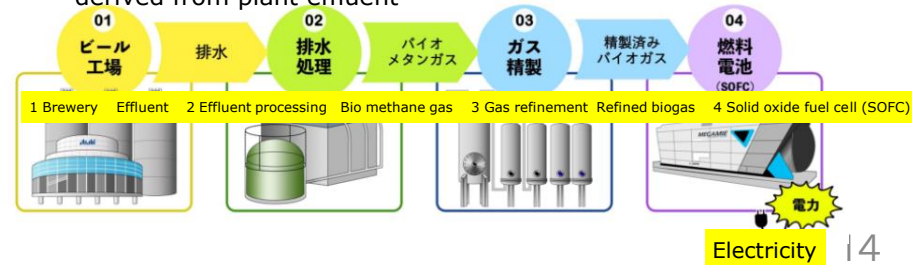


Biomass energy

- To start using methane gas produced through fermentation of spent barley dregs
 - Newly installed technology at the Shin-Kyushu Brewery



- Refining biogas can expand the scope of biomass application
 - Trials launched in October 2020 with the aim of establishing fuel cell power generation technology powered by biogas derived from plant effluent



Accelerating Our Sustainability Strategy

(C: Switching to Renewable Energy)

Reducing CO₂ emissions by increasing our electrification rate and the weighting of renewable energy among the energy purchased from external sources

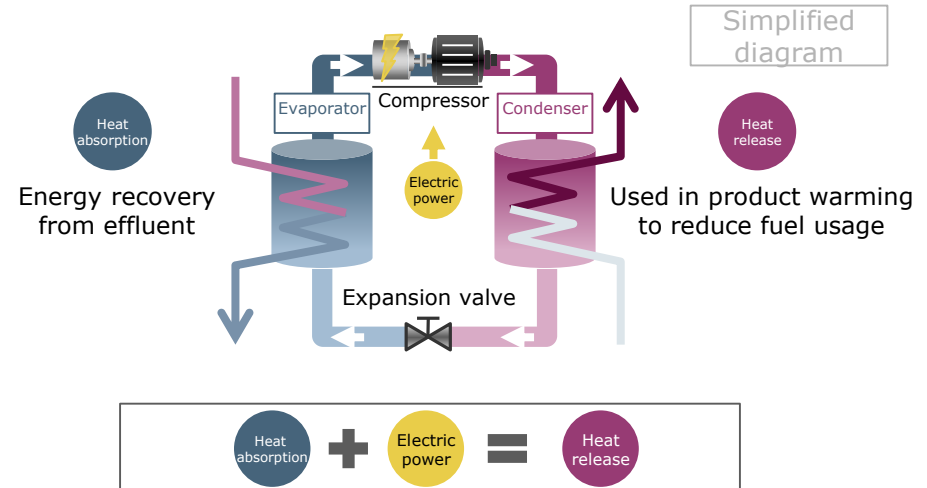
RE100 electricity

- Switching purchased electricity to electricity generated from renewable energy sources
 - We started using electricity from renewable energy sources in 2009
 - > Asahi Super Dry uses the most green power generated from natural energy of all products in Japan
 - We are currently working towards switching purchased electricity at all production sites in Japan to green power by April 2023



Increased electrification rate

- Switching the energy used to power production processes from fuel to electricity
 - We will pursue electrification (using heat pumps, etc.) by absorbing heat from currently underutilized waste heat, which can then be used to heat water or in product warming processes



Accelerating Our Sustainability Strategy

(D: CO₂ Recovery)

Reducing CO₂ emissions with the installation of CO₂ recovery systems and carbon recycling technology

CO₂ capture technology



- CO₂ emitted from boilers and the like is captured with high efficiency
- Applications: Raw material for synthetic methane (fuel); sold as liquefied carbon dioxide (as a coolant or for use in plant factories, etc.)
- Demonstration testing ongoing since January 2020 at the Asahi Group Research and Development Center (Moriya, Ibaraki Prefecture)

Methanation technology (synthetic methane fuel production)



- Captured CO₂ is used to synthesize methane by reacting it with hydrogen
- Applications: Fuel for boilers, cogeneration power systems, and fuel cells; injection into utility gas pipelines after calorific adjustment and odorization
- Demonstration testing ongoing since September 2021 at the Asahi Group Research and Development Center (Moriya, Ibaraki Prefecture)

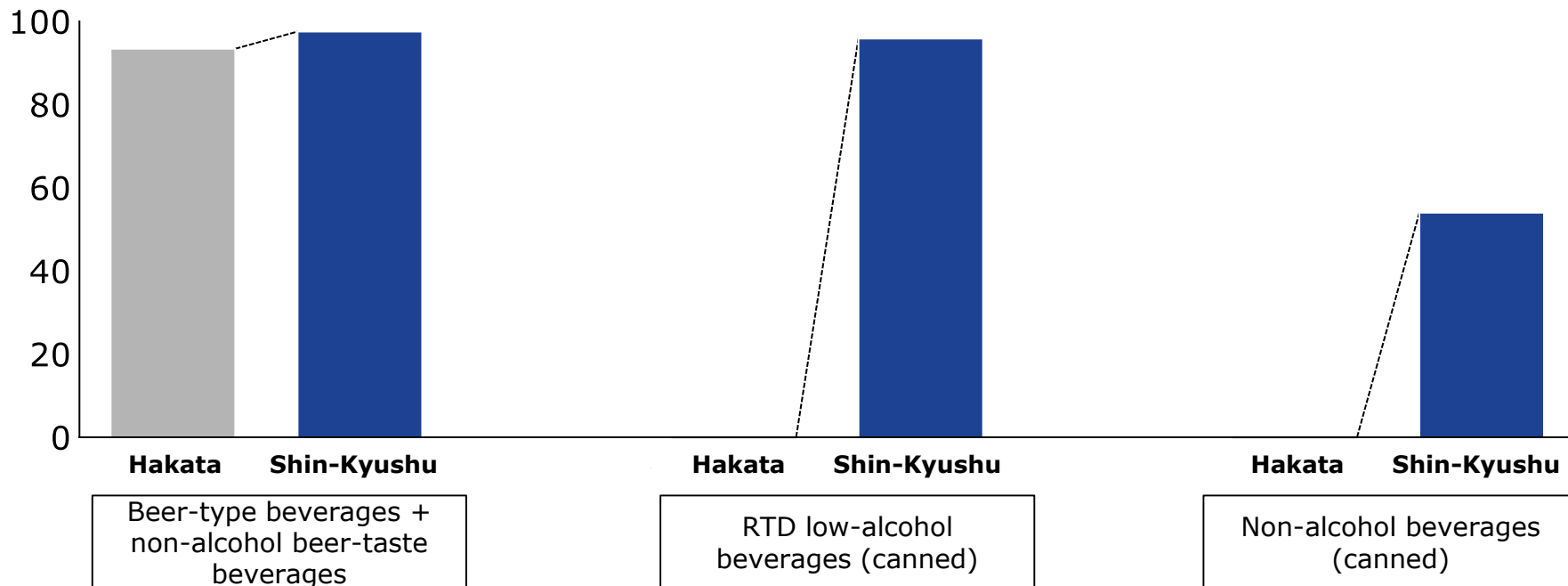
Strengthening Systems Underpinning Growth

(Improving Area-specific Supply-and-demand Factor)



Through high-mix production, we will aim to raise the area-specific supply-and-demand factor to around 100% for beer-type beverages, non-alcohol beer-taste beverages, and RTD low-alcohol beverages, with about 50% for non-alcohol beverages

Area-specific supply-and-demand factor in Kyushu (%)



Note: Supply-and-demand factor for Kyushu area = Kyushu area production volume ÷ Kyushu area shipment volume

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Expected Benefits

By enhancing Group production efficiency through supply chain management reorganization, we will aim to reduce costs, establish supply systems in growth areas, and achieve carbon negativity at all Asahi Breweries production sites by 2029



50% reduction in energy per unit of production
30% increase in labor productivity
Reduction in fixed costs owing to increase in capacity utilization



Group product mix*
Increase from 10 products to 30 products



Carbon negativity
Target year: 2026

Shin-Kyushu Brewery

Expanded deployment of next-generation production model

Cost benefits of roughly JPY3.0bn**

Supply system
Expanded high-product/container-mix production

Carbon negativity (all production sites)
Target year: 2029

Asahi Breweries overall

*Increase to 30 for beer-type beverages only; the number of RTD low-alcohol beverages and non-alcohol beverages will be also expanded in addition to this
**By 2026



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