



Aluminum lightens the world

アルミでかなえる、軽やかな世界

FY2026 Business Briefing

At the Forefront of Recycling

① Aluminum Can Recycling

October 19, 2026

Environmental Leading Department

‘MONOZUKURI’ Core Manufacturing Innovation Division

UACJ Corporation



Understanding Aluminum Beverage Cans Better

What makes such an advanced circular economy possible?

Here, we discuss aluminum properties, required beverage container characteristics, and usage



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Advantages of Aluminum Beverage Cans – Tapping the full potential of the material



✓ **Sealed**

A good way to enjoy a cold beer

✓ **Light and conducts heat well**

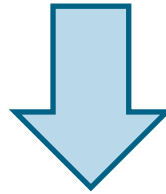
Economical shipping, fast cooling

✓ **Ideal for mass/homogeneous production**

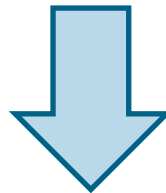
Aluminum as Beverage Can Stock – From a recycling perspective



✓ **Easy to sort**



✓ **An inherently valuable material (metal)**



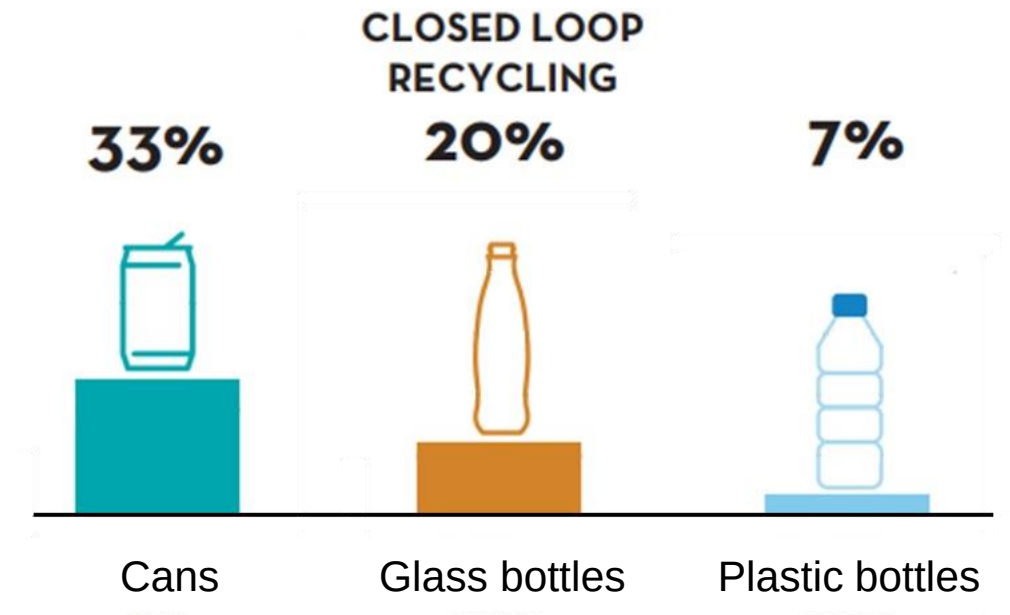
✓ **Collection networks that make sense economically**

Container Stock Good for Recycling – Aluminum

Current worldwide beverage container recycling

Recycling rate: amount reused instead of discarded

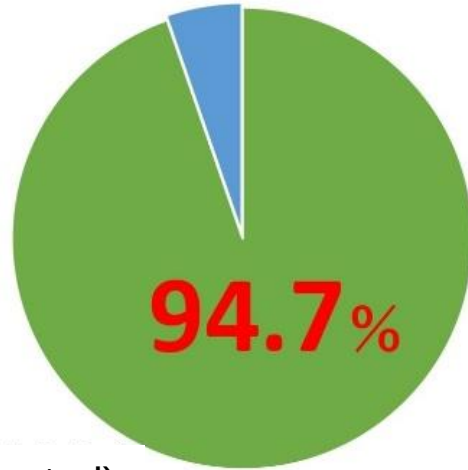
Rate of recycling into the same type of container stock



Reference: [Aluminum, the Sustainable Option for Beverage Cans \(PDF\)](#)

Aluminum Can Recycling in Japan – High collection rate and quality

Recycling rate

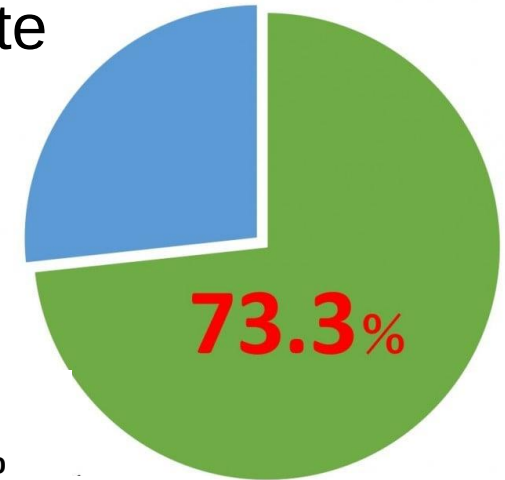


Amount recycled (domestic/exported):
280,492 tons (216,237+64,255 tons)
Domestic consumption: 296,292 tons

= **94.7%**

FY2024: 99.8%

Can-to-can rate



Amount used for can stock:
158,595 tons
Domestic recycling:
216,237 tons

= **73.3%**

FY2024: 75.7%

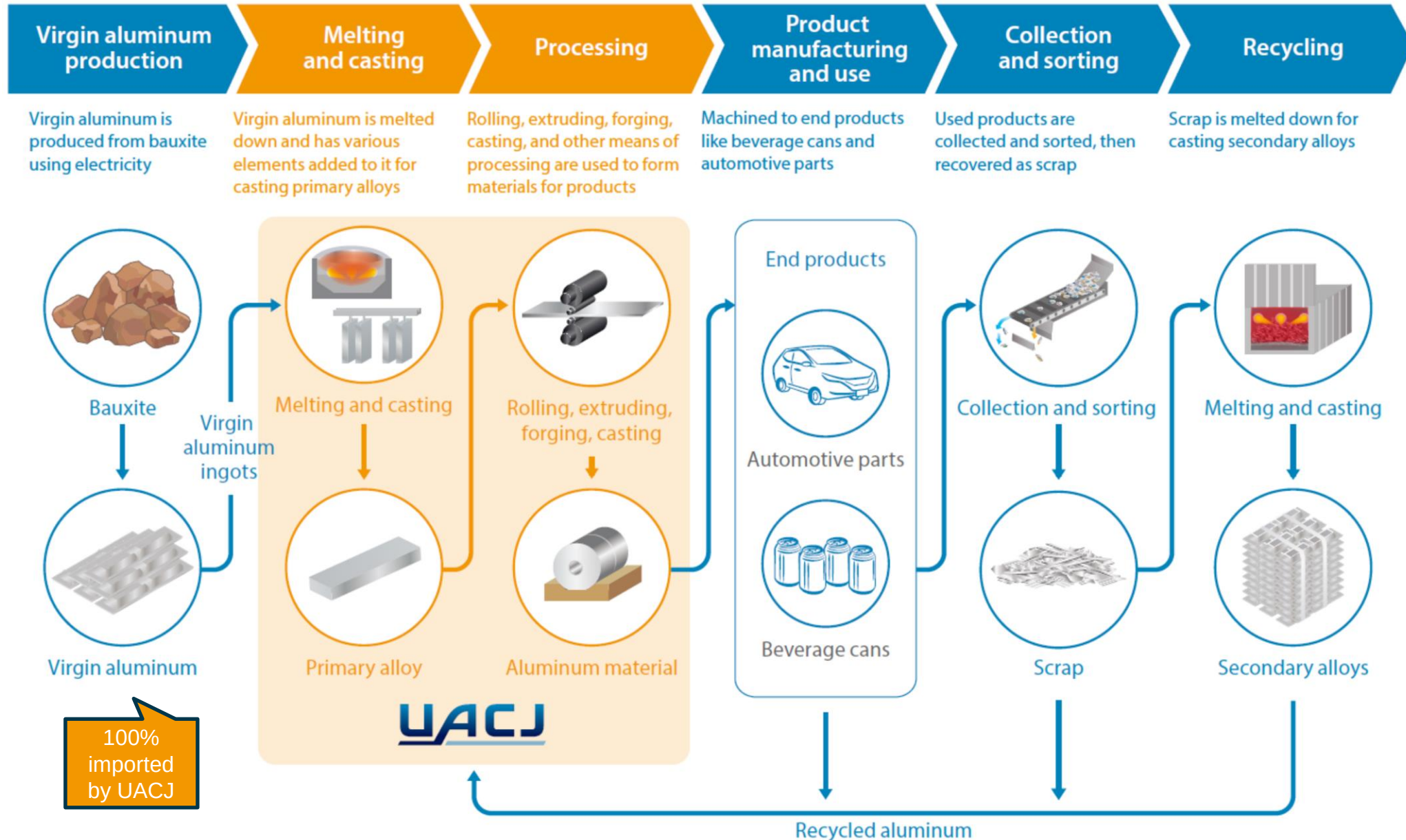
Source: [Recycling Rate | Japan Aluminum Can Recycling Association](#)

Aluminum Recycling and Climate Change

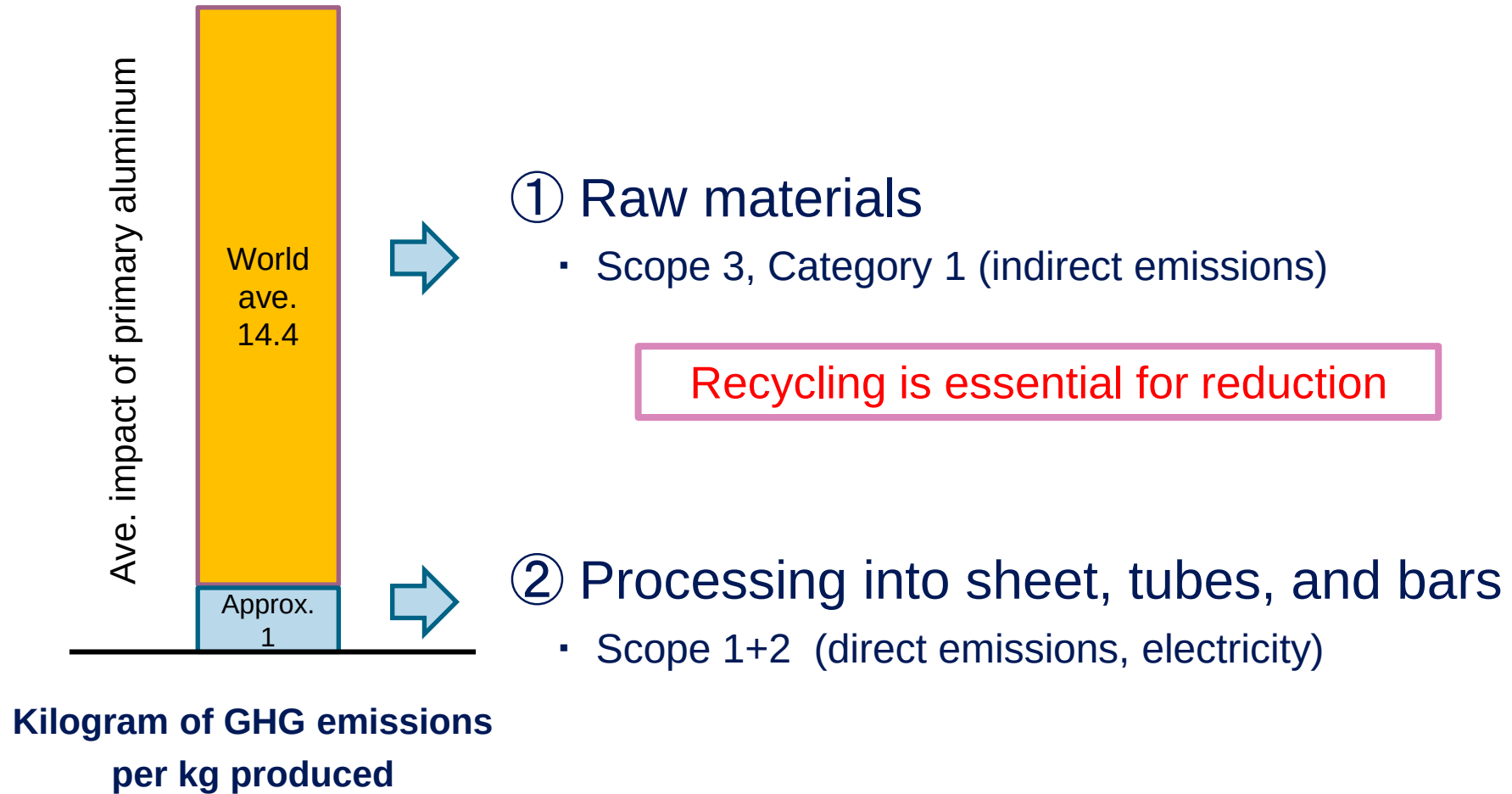


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Recycling Aluminum



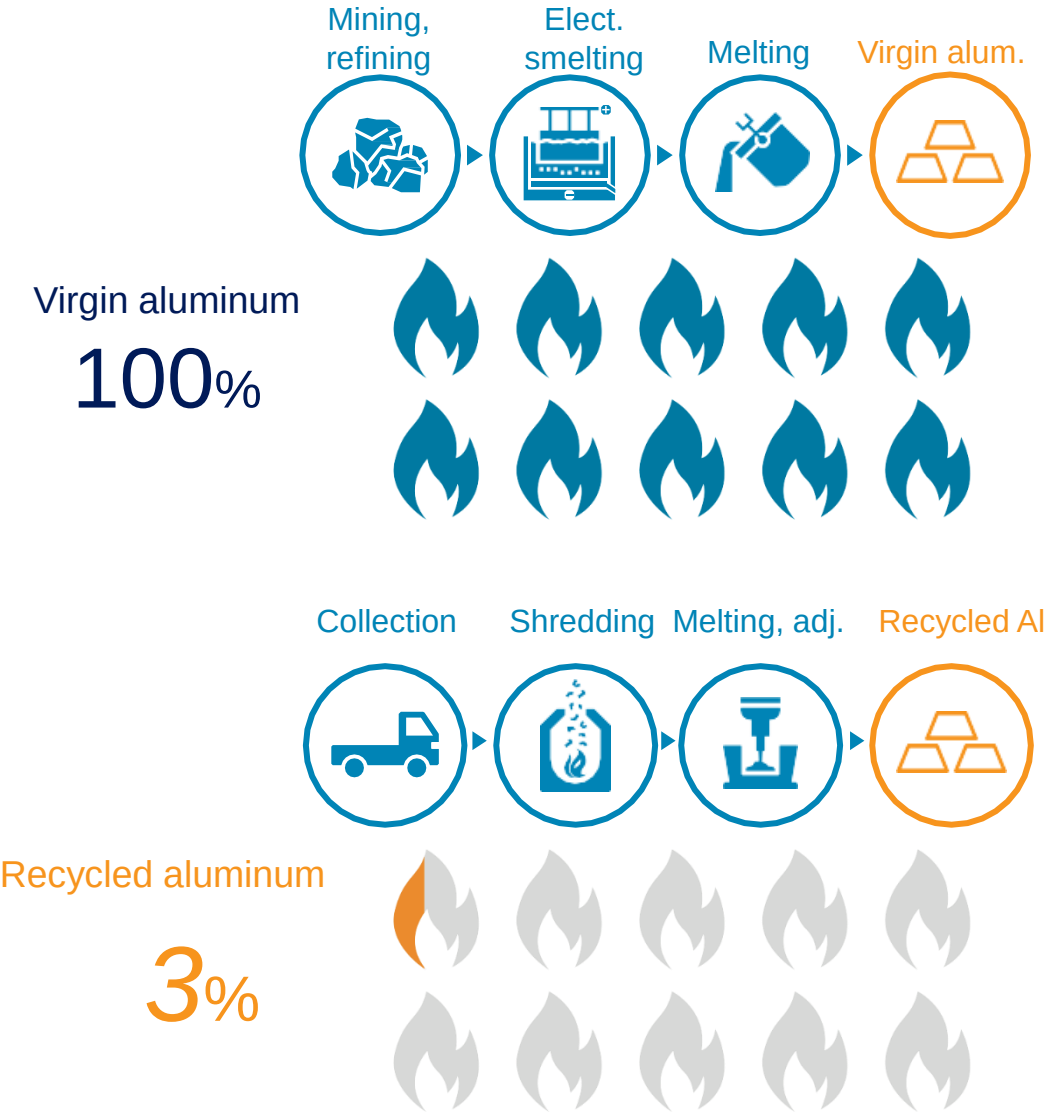
Environmental Impact (GHG) of Wrought Aluminum Products



Source: Primary Aluminum Greenhouse Gas Emissions Intensity – International Aluminum Institute

Benefits of Aluminum Recycling

Renewable energy used: only 3%



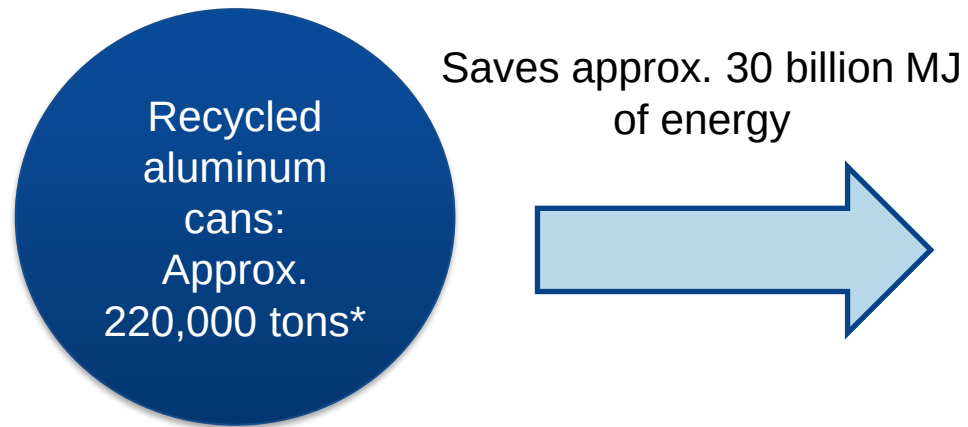
GHG from producing 1 kg of virgin vs. recycled aluminum

14.5
kgCO₂e/kg Al

0.3
kgCO₂e/kg Al

Environmental Benefits of Aluminum Can Recycling

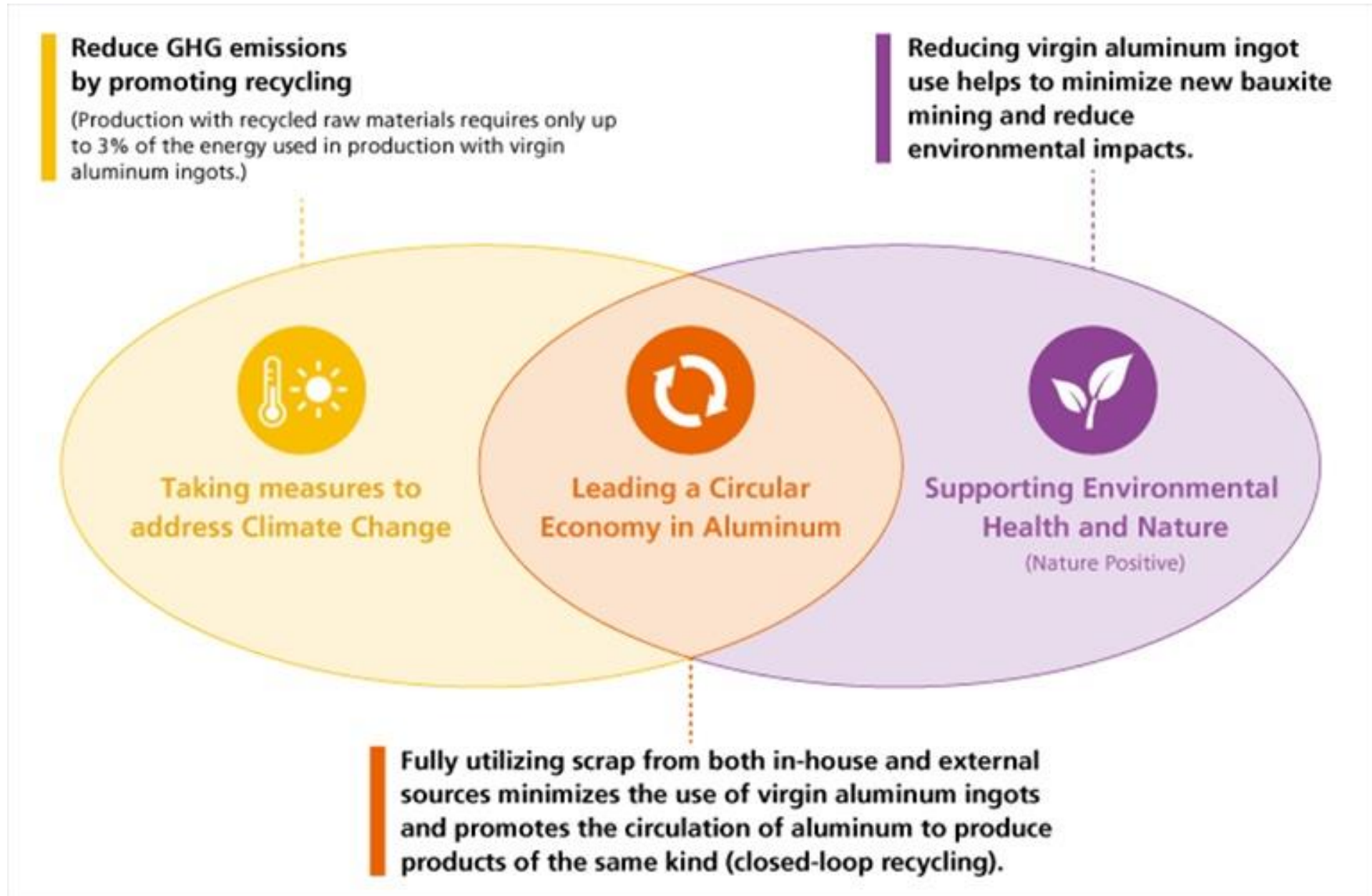
Greatly saves energy and reduces CO₂ emissions across society as a whole



Nearly 15 days of electricity for all 50 million households nationwide

*Aluminum cans recycled in Japan in 2020, according to a Japan Aluminum Can Recycling Association publication on recycling
Inventory Analysis Report on Melting Scrap for Wrought Materials, Japan Aluminum Association

Three Environmental Materialities at UACJ



Developments in the Beverage Can Value Chain



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Appreciation of Recyclable Materials – Driving use of aluminum

European Packaging and Packaging Waste Regulation (PPWR): Phased in from August 2026

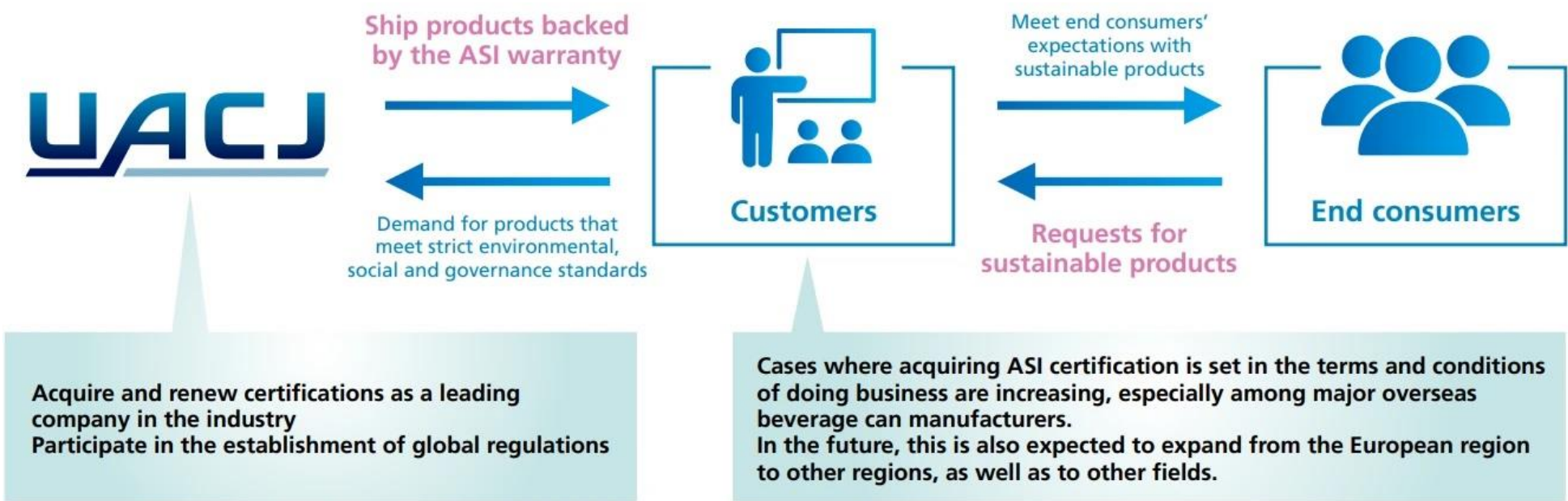
→ Aluminum cans in the value chain are recyclable and can have high recycled content

Regulatory developments on recycled materials under EU circular economy policies

Segment	Name and Description
Automotive	Regulation on Circularity Requirements for Vehicle Design and on Management of End-Of-Life Vehicles Mandates use of recycled plastic
Batteries	Batteries Regulation Mandates use of recycled materials such as copper, nickel, and lithium
Containers, packaging	Packaging and Packaging Waste Regulation (PPWR) Bans disposable/single-use containers Mandates use of recycled plastic content in plastic packaging
Construction, buildings	Construction Products Regulation Prioritizes use of recycled materials

ASI Performance- and CoC-Certified Materials

ASI Standard Name	Certification Mark	Criteria, Standards
Performance Standard		Does the factory or business meet ESG standards?
Chain of Custody Standard		Are certified materials suitably tracked and managed, from mining until products are finished?

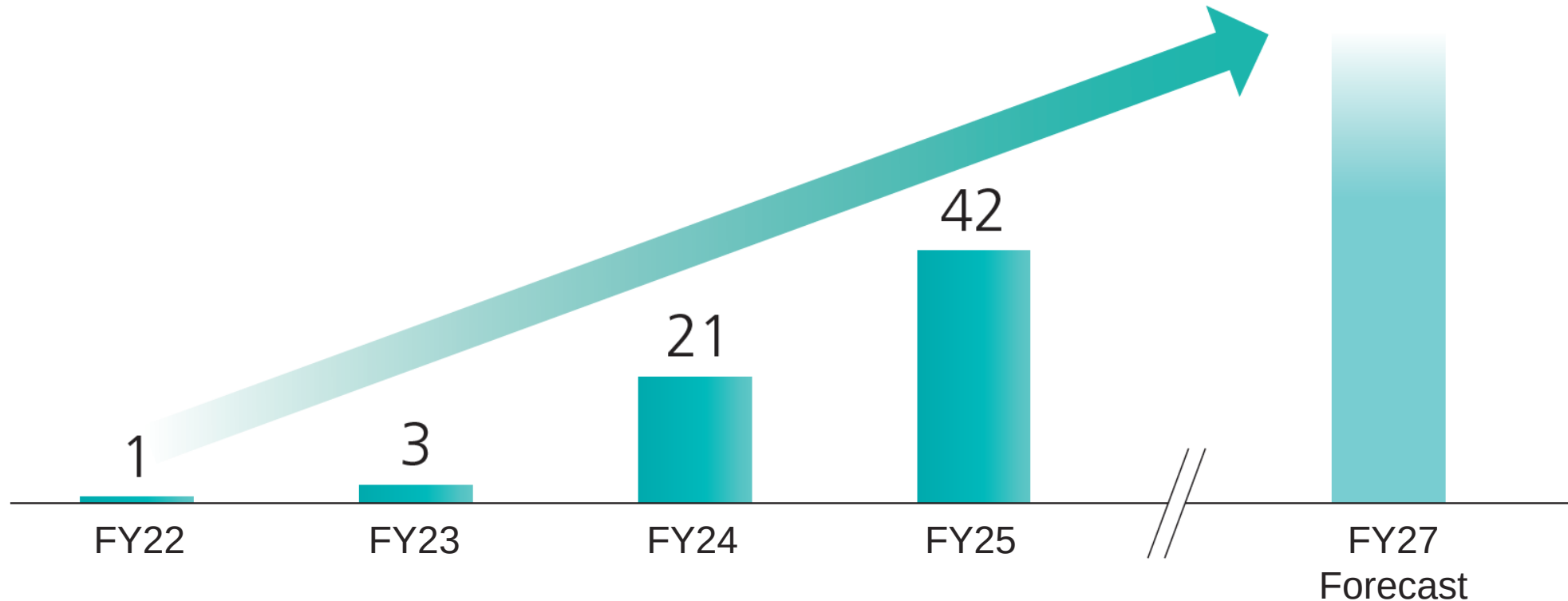


Needs for a Circular Economy: ASI CoC-certified materials, counted as mass balance inputs

Recycled materials provide environmental assurance
More can stock customers around the world are requesting certified materials



Sales volume of ASI-certified materials



※ Calculations are based on the 2022 fiscal year as 1.

Further Improvements and Promising Technology

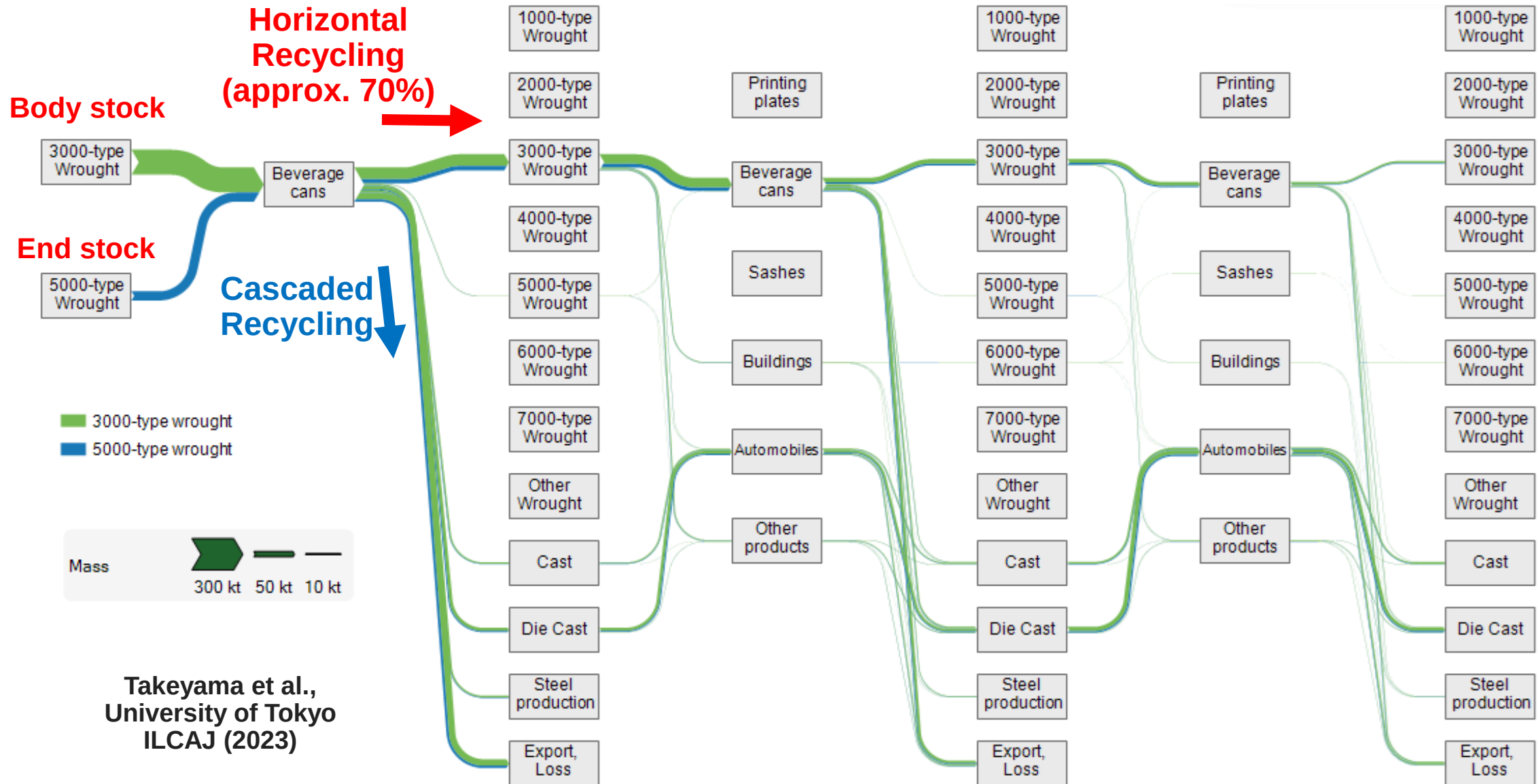
Measures supporting horizontal/closed-loop recycling

- **Development of easily recyclable alloys**
- **UBC separation technology**
(better recycling with existing alloys)



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Considering Room for Growth – More horizontal recycling supports sustainability

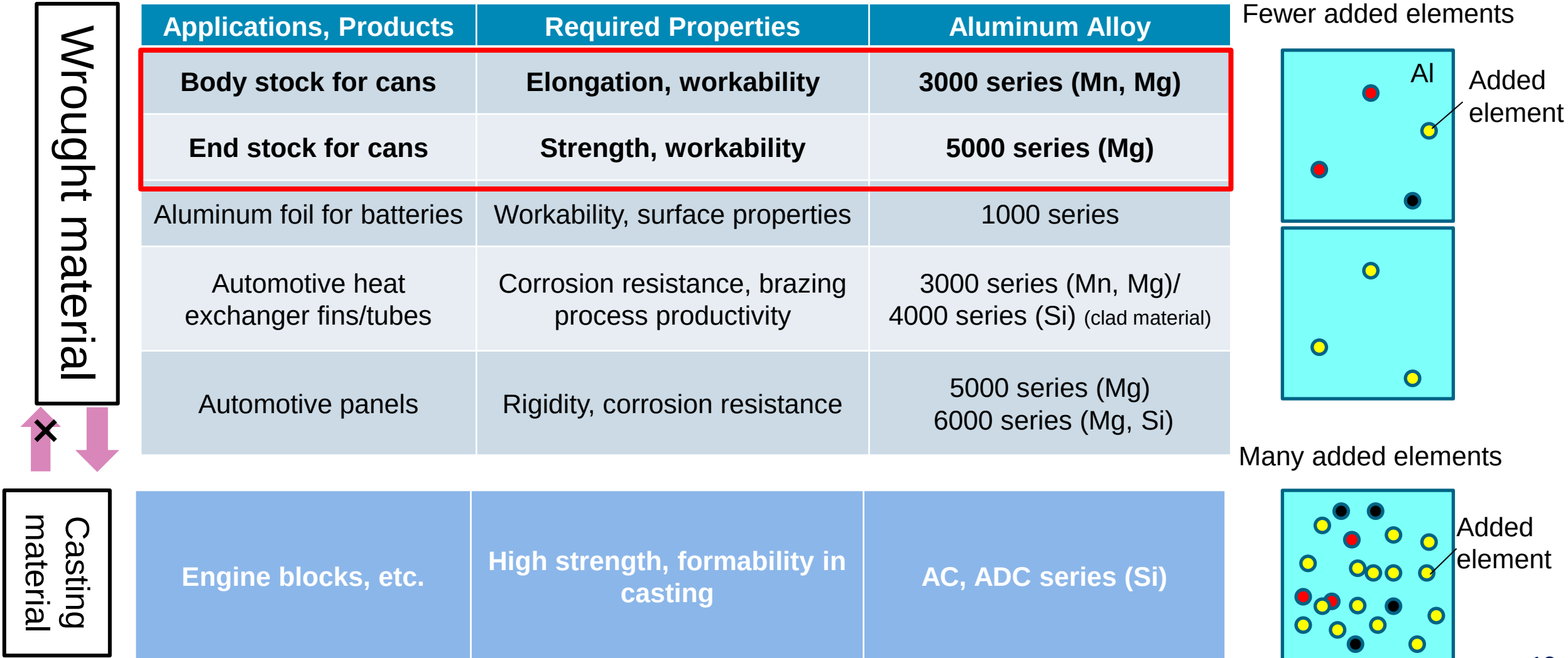


Takeyama et al.,
University of Tokyo
ILCAJ (2023)

Flow of aluminum in Japan

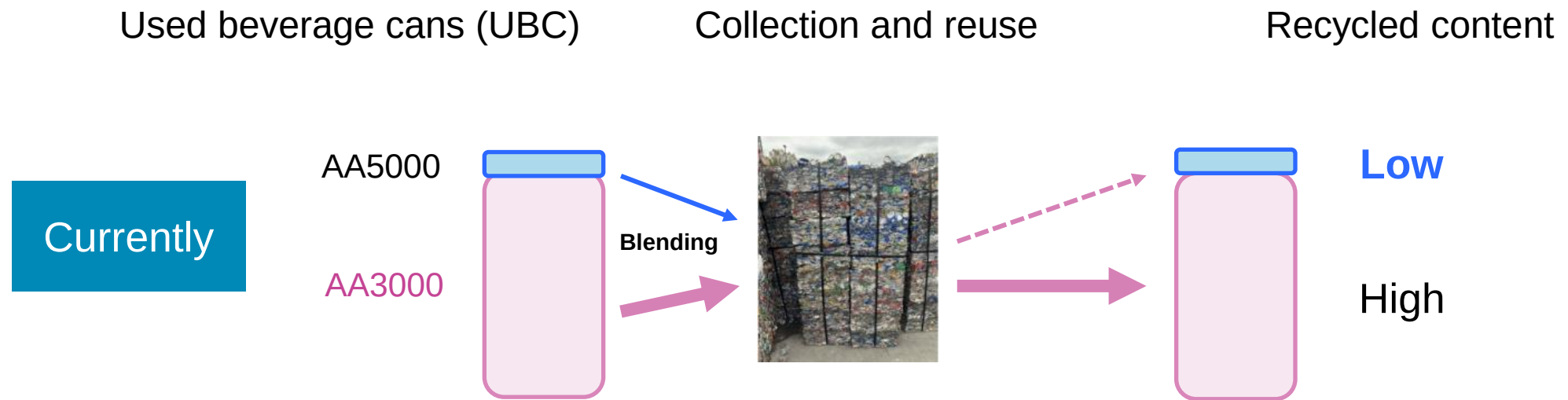
Aluminum Alloy Recycling

Some limitations apply to recycling into different alloys, and the flow into casting is one-way

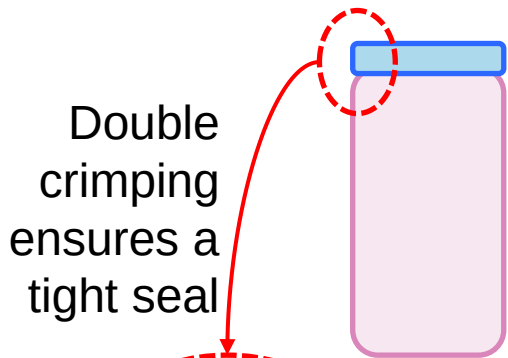


UACJ Yamaichi Aluminum Can Recycling (UYAR) Impact on Recycling

An optimal solution for a linear economy:
Potential for improvement in recycling



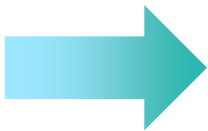
Impact of the End-Body Separation on Recycling



	Alloy	Si	Fe	Cu	Mn	Mg
End	5182	-0.20	-0.35	-0.15	0.20-0.50	4.0-5.0
Body	3104	-0.6	-0.8	0.05-0.25	0.8-1.4	0.8-1.3
Blend		-0.5	-0.7	0.07-0.23	0.6-1.2	1.4-2.0

Differences in composition determine the maximum recycled content

Separating the mixed material of UBC enables maximum use as container body and end material



AA5000



For end material

AA3000



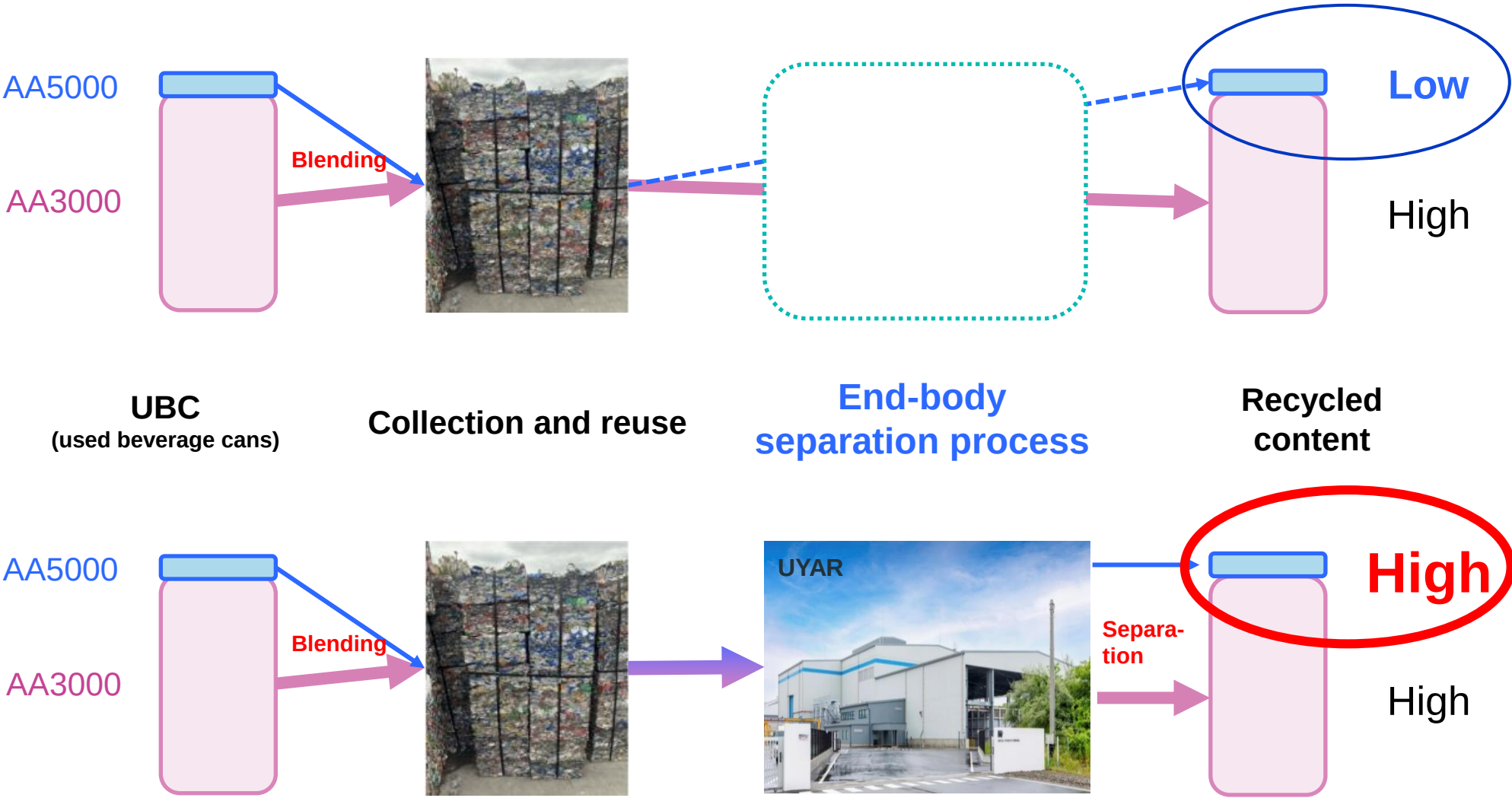
For body material

Journal of Packaging Science & Technology, Japan,
Vol. 23, No. 6 (2014)

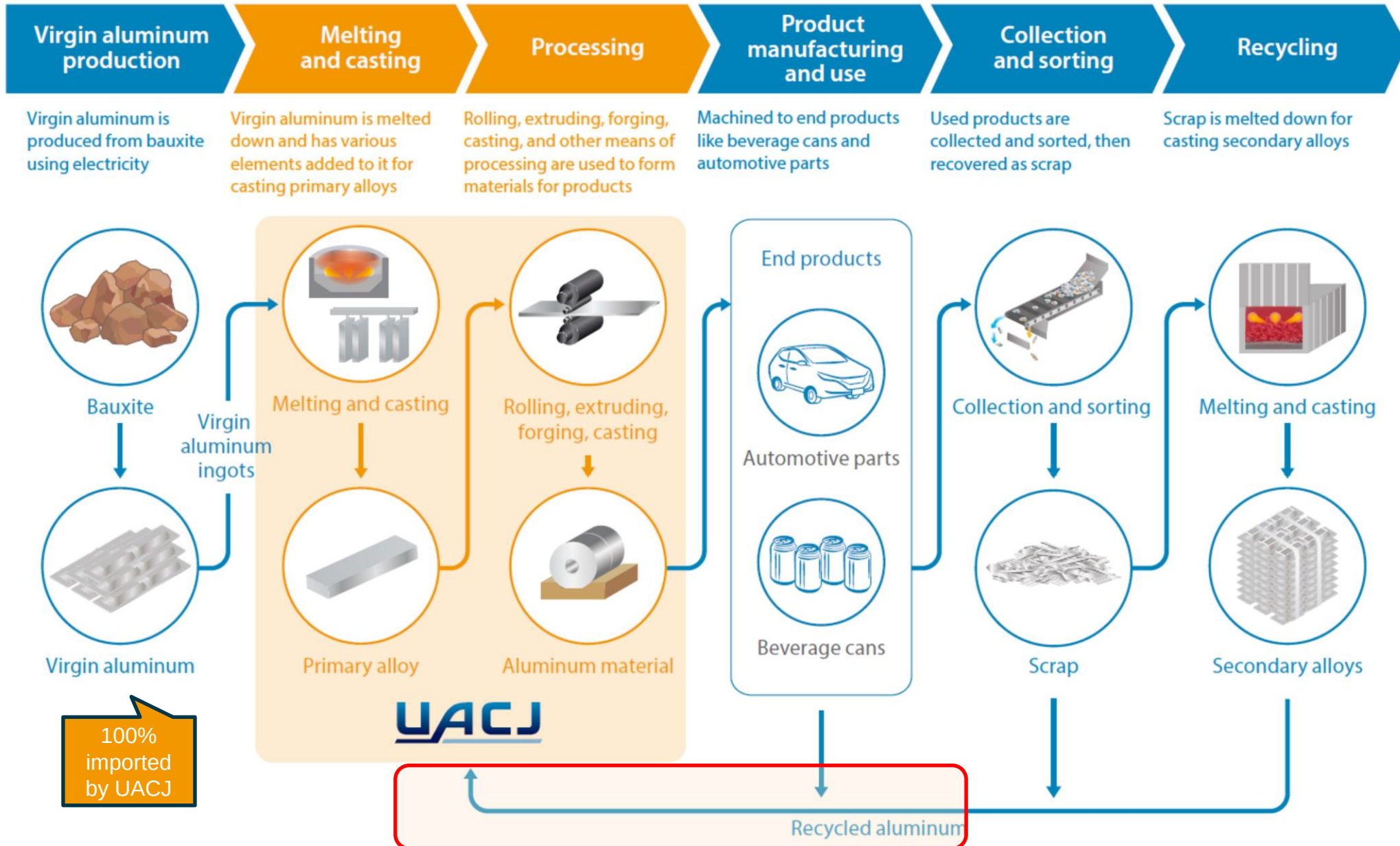
UYAR Impact on Recycling – Revolutionary materials

Currently

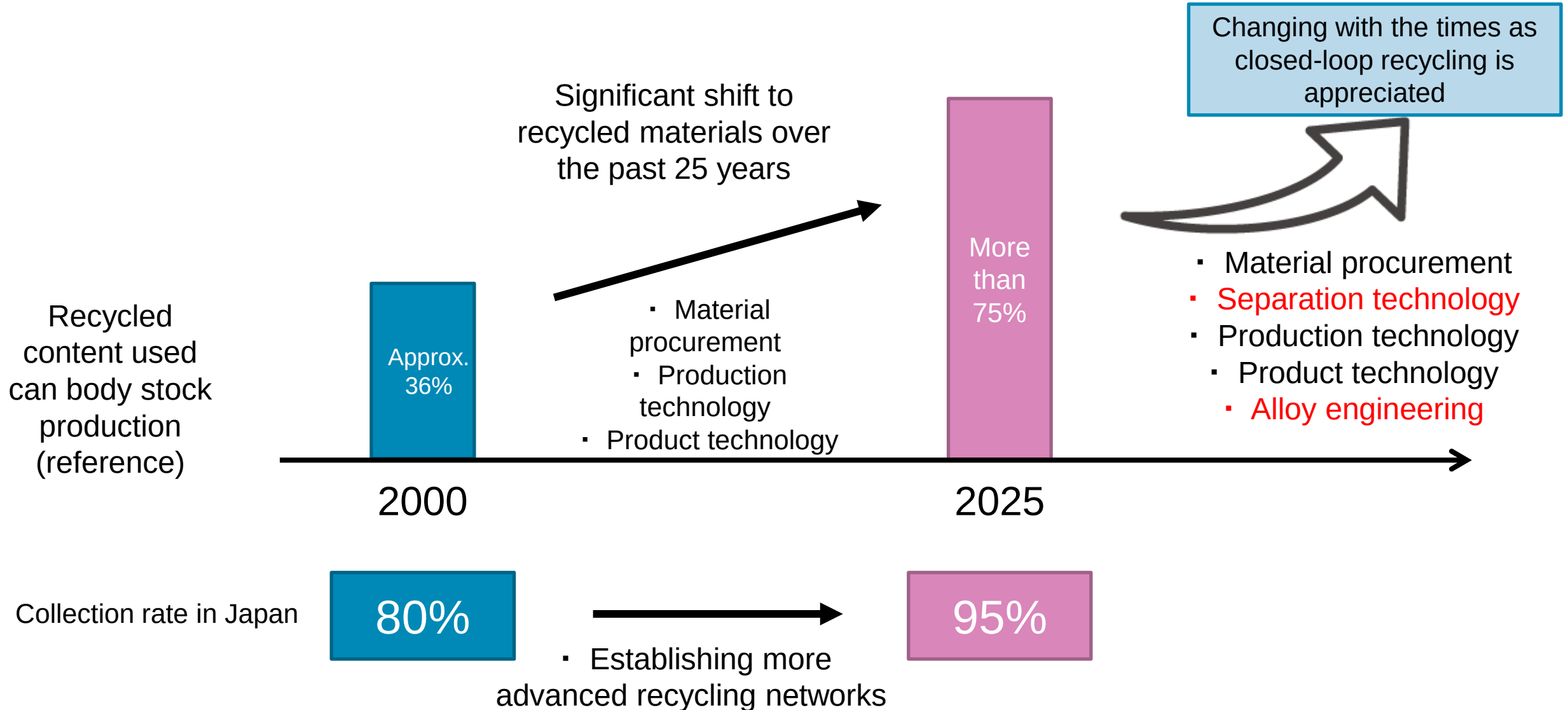
In the Future



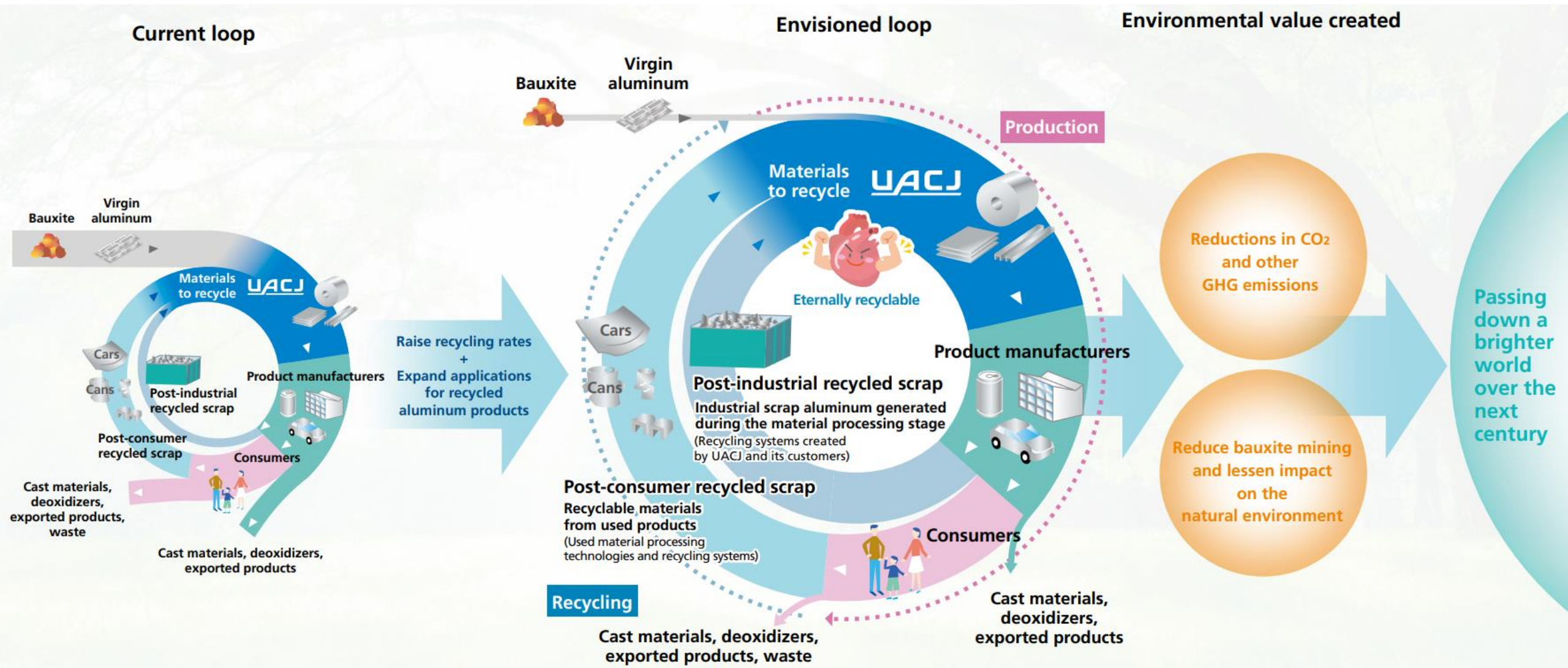
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Competitiveness Honed by UACJ – Skills and techniques capitalizing on materials



Wrapping Up: Central Roles of Aluminum in Recycling





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