Present State of Japanese Aluminium Industries

Japan Aluminium Association 10th November, 2018



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Introduction of JAA Outline of JAA

- © Founded in 1947
- © Located in Ginza, Tokyo
- © 135 members



 Metal Refining 	10
 Rolling/ Extruding 	34
 Fabricating 	25
 Forging/ Die-casting 	13
 Trading 	32
Others	14
TOTAL	128

related organizations



Introduction of JAA

Key Members are such as

- 1. Nippon Light Metal Co., Ltd.
- 2. Kobe Steel, Ltd.
- 3. Mitsubishi Aluminum Co., Ltd.
- 4. UACJ Corporation (former Furukawa-Sky & Sumitomo Light Metal)
- 5. Showa Denko K. K.
- 6. DAIKI Aluminium Industry Co., Ltd.
- 7. LIXIL Corporation
- 8. Sumitomo Chemical Co., Ltd.



Introduction of JAA Organization Chart of JAA General **Assembly Board of Directors** Policy & **Strategy Committee Energy & Planning Technology** Other **Environment** Committee Committee **Committees Committee** JAA

Introduction of JAA

Business Activity of JAA Three Pillars

Public Relations

New Demand & Technology Development

Human Resource Development

& Other businesses

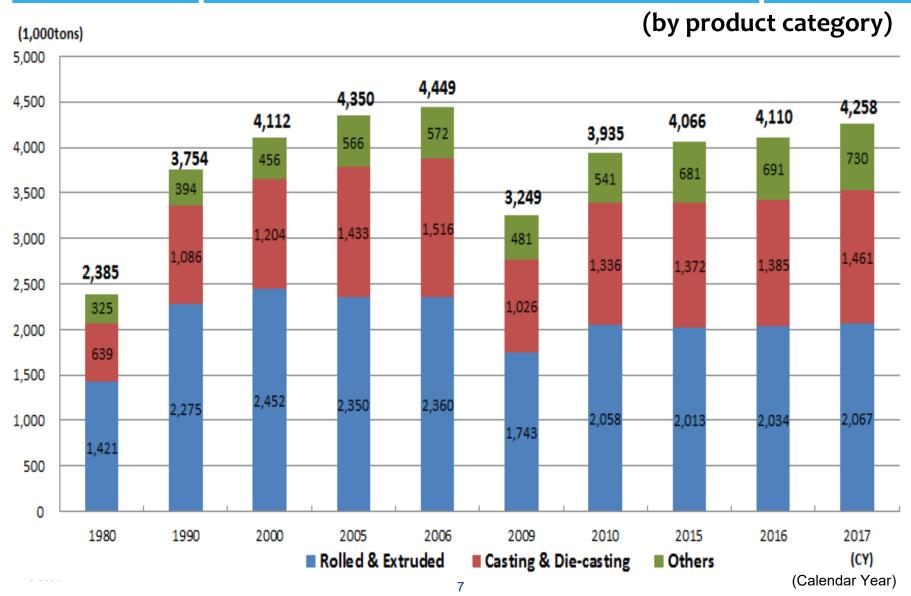
Statistics

Safety

Energy & Environment

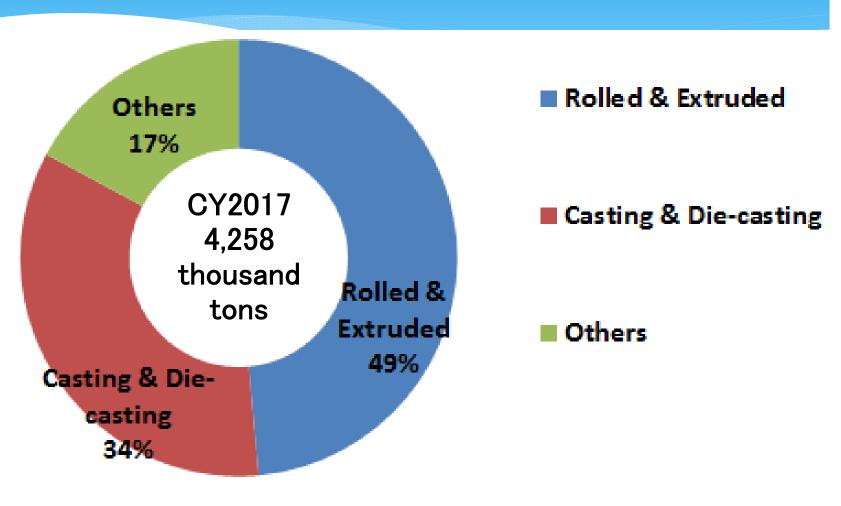


Shipment of Aluminium Products in Japan



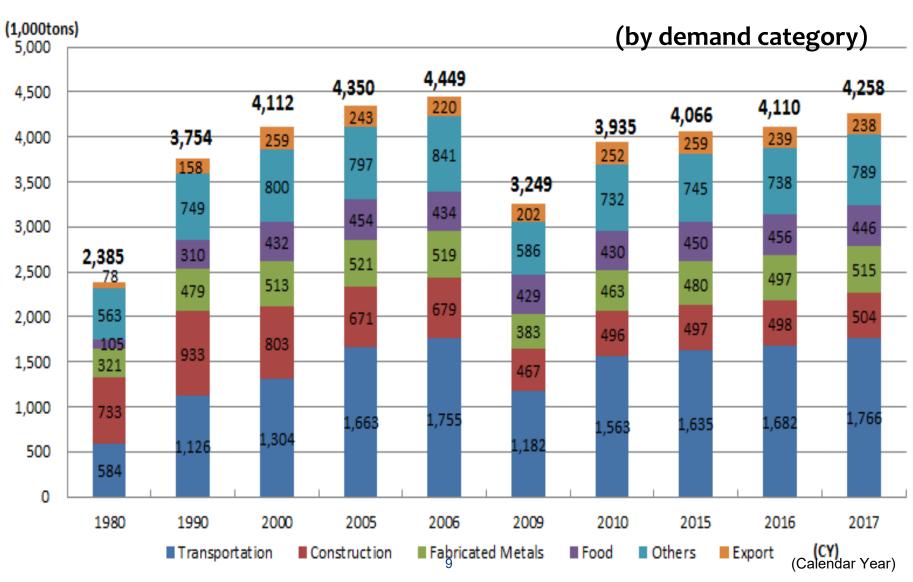
Shipment of Aluminim Products in 2017

(by product category)

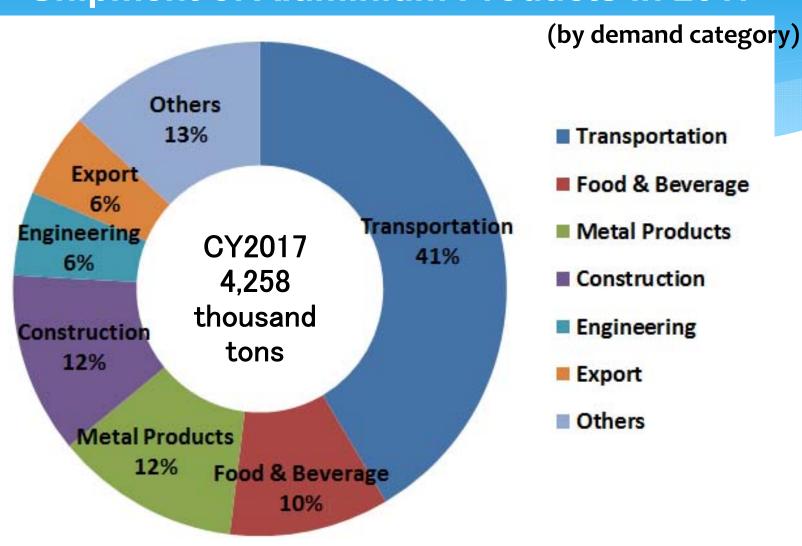




Shipment of Aluminium Products in Japan

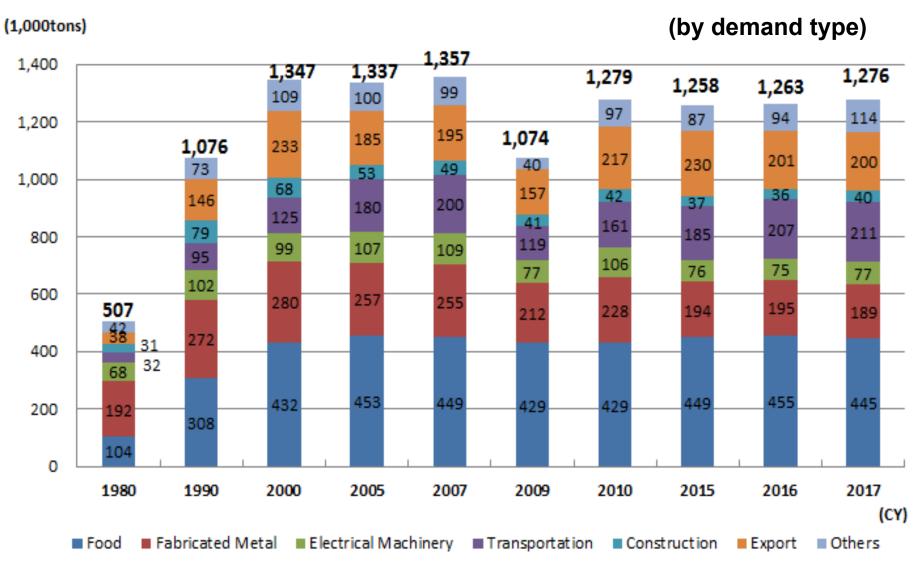


Shipment of Aluminium Products in 2017



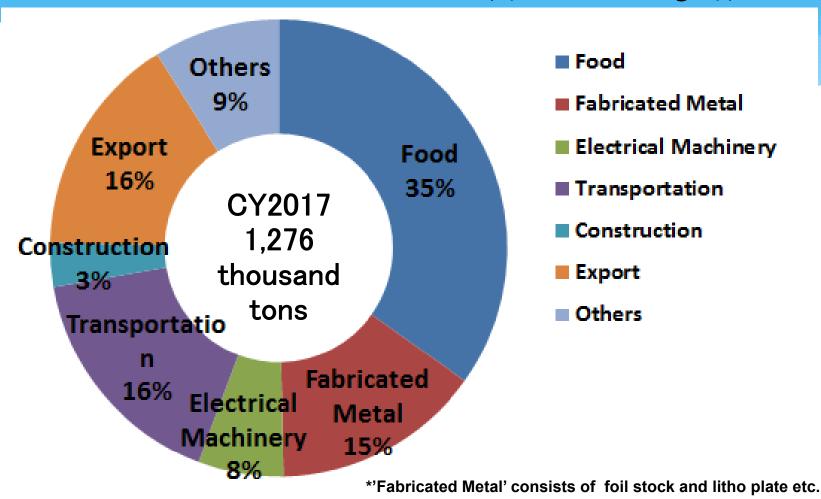


Present situation of Japanese Aluminium Industry Shipment of Rolled products in Japan



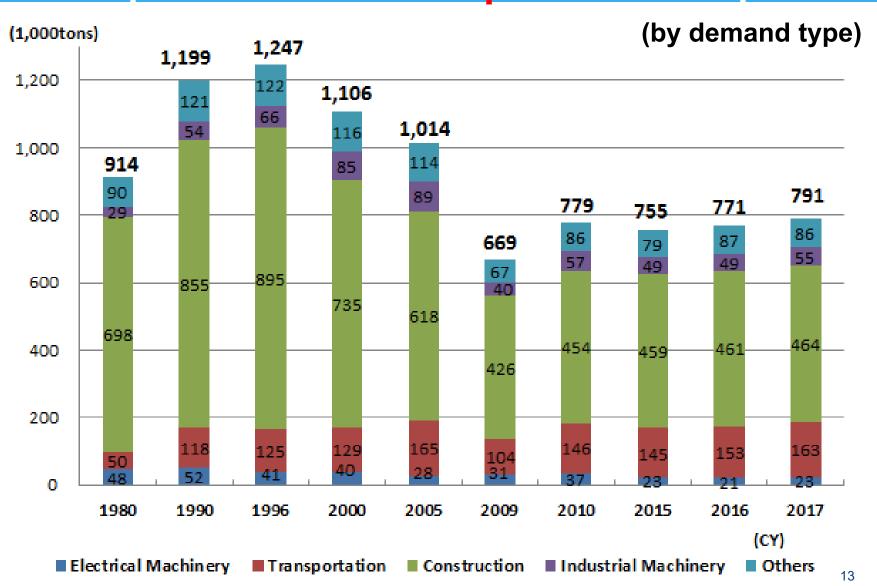
Shipment of Aluminium Rolled Products in 2017

(by demand category)



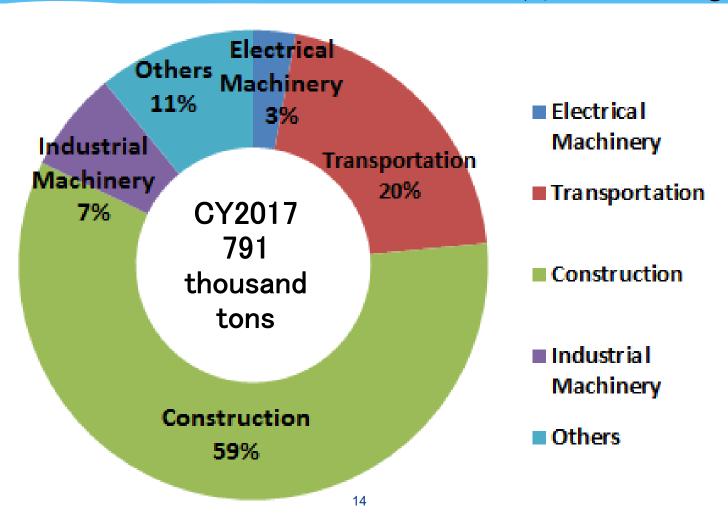


Present situation of Japanese Aluminium Industry Shipment of Extruded products in Japan



Shipment of Aluminium Extrusion in 2017

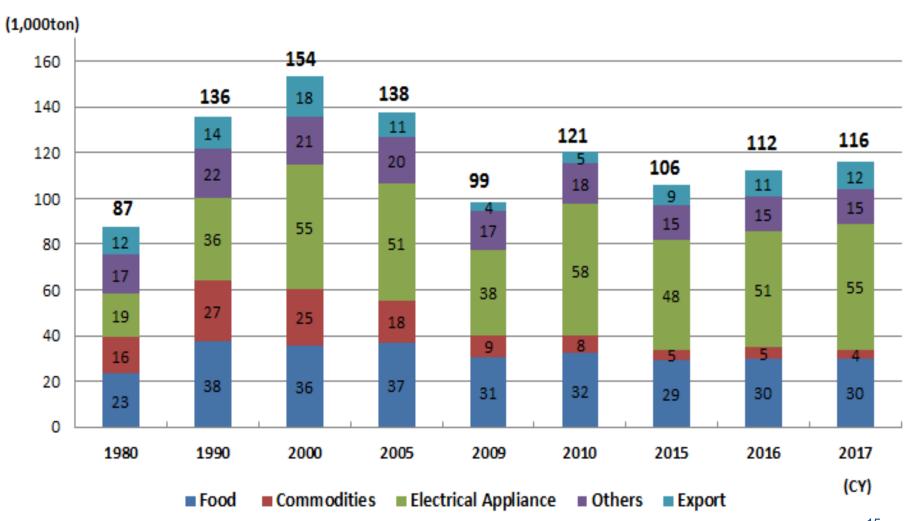
(by demand category)





Present situation of Japanese Aluminium Industry Shipment of Foil in Japan

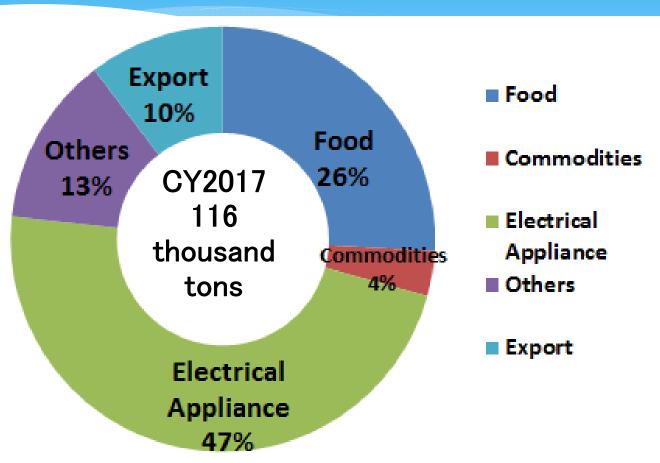
(by demand type)



2. Facts & Figures of Japanese Aluminium Industry

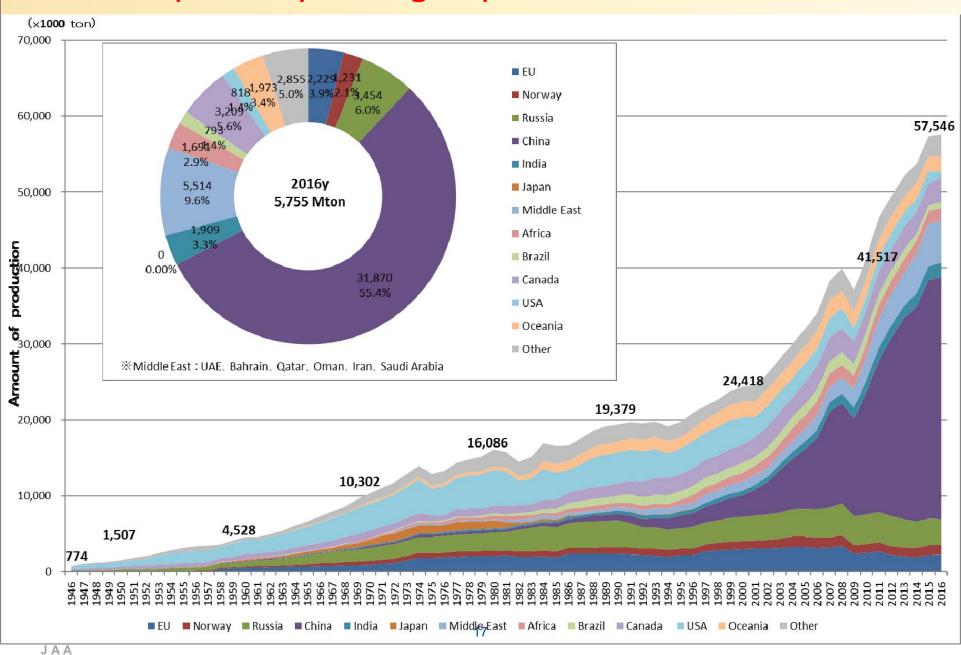
Shipment of Aluminium Foil in 2017

(by demand category)

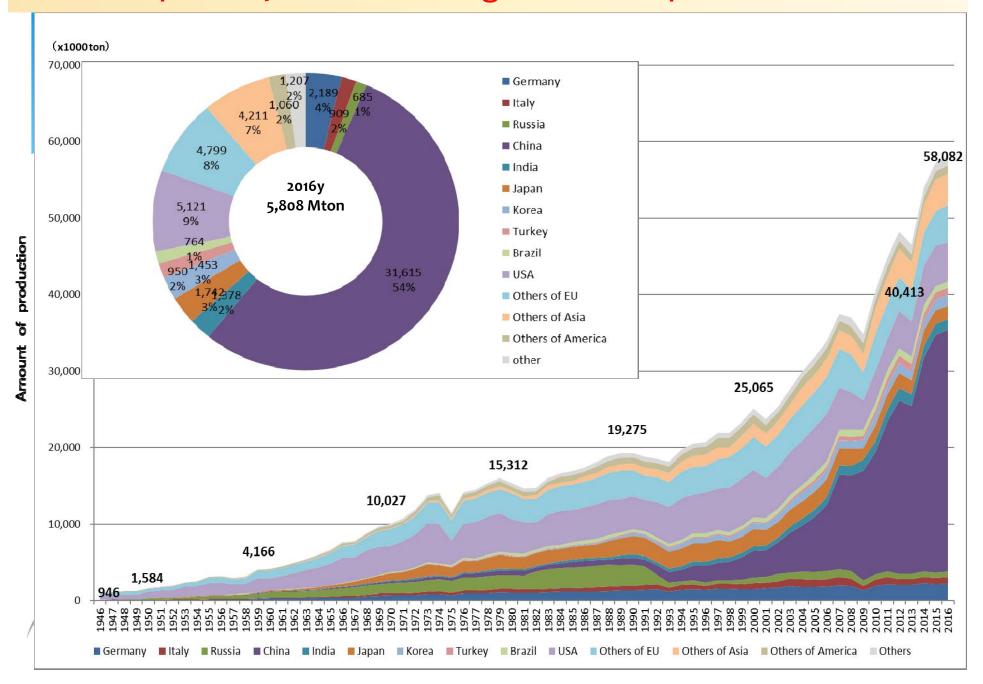


NOTE: 'Foil' is taken into account in the item of 'Foil stock' of 'Rolled product' in JAA statistics

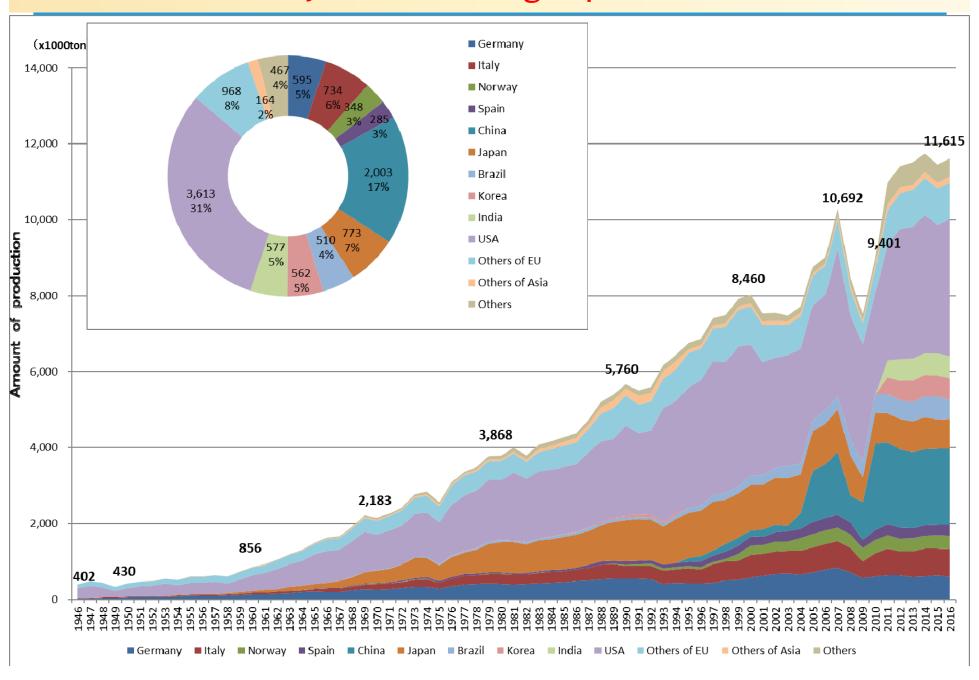
Trend of primary Al ingot production in the world



Trend of primary aluminum ingot consumption in the world



Trend of secondary aluminum ingot production in the world



The Aluminium Stewardship Initiative (ASI)

Progress of energy-saving, resource-saving and environmentally conscious products







Member 74 companies & Associations



















VISION

To maximise the contribution of aluminium to a sustainable society.

MISSION

To recognise and collaboratively foster responsible production, sourcing and stewardship of aluminium.

ASI standard

the ASI Performance Standard

ASI's Performance Standard covers critical issues for the entire aluminium value chain including

biodiversity management in mining,

indigenous peoples' rights,

greenhouse gas emissions,

waste management

and material stewardship.

the ASI Chain of Custody Standard.

A Chain of Custody standard is also in development, to link responsible production with responsible sourcing and support increased emphasis on sustainability in procurement practices.

Challenge for the future

* a large trend in the aluminum industry

As measures against global environment warming,

- 1) In products, reduction of weight of vehicle and acceleration of Electric vehicle for improving fuel economy
 - ⇒increase of wrought aluminuim alloy usage decrease of aluminium casting/die-casting?
 - ⇒Unbalance of scrap demand & Supply ?
- 2) In manufacturing process, use of environmentally friendly primary aluminum ingot and promote of recycling
- 3) Towards resource saving, improvement of property by metallic structure control rather than chemical composition control



Challenge for the future

JAA discuss and create the roadmap of aluminium industry in Japan

Objective

- 1. Show the direction of R & D in the next 25 years
- 2. Make common recognition of industry, academia and government,
- 3. Promote efficiently the contribution of aluminum industry to the Japanese economy

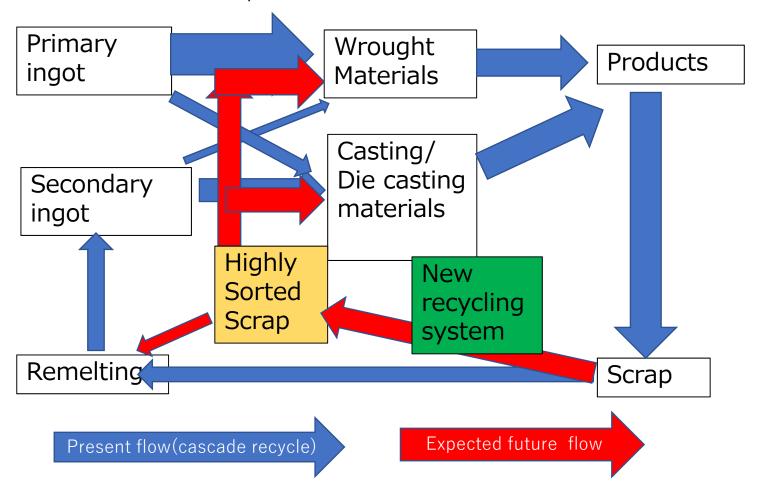
Main direction

- 1 Establishment of material technology / structure control technology
- 2 Establish recycling and reuse technology
- ③ Establishment of technology to expand usage (Improvement of aluminum performance and development of new function)

Challenge for the future

Construction of recycling society should be necessary for future aluminum industry in Japan.

It will be important to develop horizontally recycling with higher quality as product to product, not to depend on cascade recycling which is used as in the past.



Benefits of the New Recycling Process

- 1. Improvement of scrap value
 - ⇒ Improvement of aluminum recycling rate
 - ⇒ Reduction the amount of imported primary ingot

(Contribution to CO2 reduction in abroad for recycling-oriented economy)

- Construct the sustainable society with energy saving, CO2 reduction by direct charge in melting furnace
 - ⇒ Importance of "Development of non-contact rapid analysis technology for aluminum scrap"



Thank you for your attention

