



# YKK AP Integrated Report 2024



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Editorial Policy

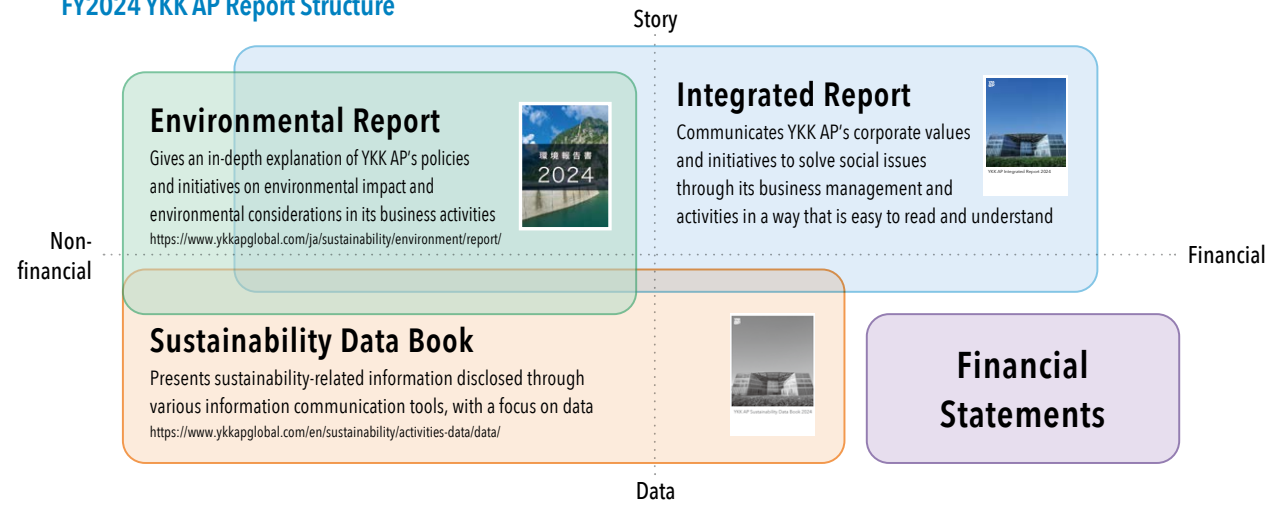
The YKK AP Integrated Report 2024 is intended to provide stakeholders with a broader understanding of our various efforts to be a company that makes people happy through its business activities, in accordance with our Purpose, "We Build a Better Society Through Architectural Products."

This report was produced with reference to the "International Integrated Reporting Framework" of the International Integrated Reporting Council (IIRC), the "Guidance for Collaborative Value Creation" of the Ministry of Economy, Trade and Industry," and the "GRI Standards" of the Global Reporting Initiative (GRI). Based on integrated thinking that balances social value and economic value, it is structured to convey YKK AP's value creation process over the short, medium, and long term as a story of value creation.

Extent of Coverage  
YKK AP Inc.  
YKK AP Domestic Affiliated Companies  
YKK AP Overseas Affiliated Companies

Period Covered  
FY2023  
(April 1, 2023 – March 31, 2024)  
Note: Some of the information included in this report is from outside of the period covered.

FY2024 YKK AP Report Structure



Note: The other YKK Group reports published by YKK are This is YKK (Integrated Report), the YKK Annual Securities Report, and the YKK Group Business Report.

YKK Group Management Structure

Since 1934, when YKK's founder Tadao Yoshida began processing and selling fasteners, the YKK Group has developed its business by creating new value in fasteners through the establishment of an integrated production system and overseas expansion. Today, the YKK Group is a group of companies that share the YKK philosophy of CYCLE OF GOODNESS® and the Management Principle — "YKK seeks corporate value of higher significance," with YKK's fastening

business and YKK AP's AP (Architectural Products) business\* at its core. While sharing common ideas and philosophies, since 2021 we have been enhancing our business competitiveness through management structures that are best suited to each of our businesses. The Technology & Innovation Center (TIC) serves as a bridge between the two businesses while making contributions on the technical side.

\* A business involving the design, manufacture, installation, and sale of industrial products for construction.



The cover and the image above show the YKK AP M&E CENTER BUILDING (Namerikawa City, Toyama Prefecture). Construction was completed in 1992 on the site of the Namerikawa Plant, which plays a central role in the manufacture of parts for the commercial business, such as highly challenging curtain walls and steel doors.



# YKK Group and YKK AP Philosophy

At the core of YKK AP's business activities are the "YKK Philosophy," the "Management Principle," and the "Purpose."  
These ideals form the basis of employees' conduct and management decisions.  
Taking these to heart, YKK AP will continue to take on the challenges presented by this new era, and aim to be a company that builds a better society.

## YKK Philosophy



YKK's founder  
**Tadao Yoshida** (1908–1993)

As an important member of society, a company survives through coexistence. When the benefits are shared, the value of the company's existence will be recognized by society. When pursuing his business, YKK's founder, Tadao Yoshida was most concerned with that aspect, and would find a path leading to mutual prosperity. He believed that using ingenuity and inventiveness in business activities and constantly creating new value would lead to the prosperity of clients and business partners, making it possible to contribute to society. This way of thinking is referred to as the CYCLE OF GOODNESS, and has always served as the foundation of our business activities. We have inherited this way of thinking and have established this as the YKK Philosophy.

## Management Principle

"YKK seeks corporate value of higher significance."



Seeking corporate value of higher significance, YKK will pursue innovative quality in the seven key areas shown above.



YKK AP's founder, Currently Corporate Advisor of YKK and YKK AP  
**Tadahiro Yoshida**

The YKK Group's Management Principle, based on the spirit of the CYCLE OF GOODNESS, is "YKK seeks corporate value of higher significance." We aspire to become a company that is appreciated by our customers, valued by society, and where all employees are able to work with pride and pleasure. As a means to achieve this, we will enhance the quality of our products, technology, and management. In putting these into practice, we always place Fairness at the foundation of all our business activities. This Management Principle was formulated in 1994 by Tadahiro Yoshida, then president of YKK and YKK AP.

## Purpose

*We Build a Better Society  
Through Architectural Products*

With a spirit of curiosity and exploration, we develop architectural products of true value that connect people, planet, and the future.  
We want to create a better society, while remaining committed to the art and technology that have always been fundamental to architectural culture.

YKK AP's Purpose expresses our desire to be a company that contributes to society through our products and services. That is, to continue to meet the desires of our customers and business partners with the Architectural Products that form the structural elements of houses and buildings. In doing so, we continue to be a company that contributes to customers, business partners, and society at large. While carrying on the ideals embodied in the company name "YKK AP," we aspire to remain an integral and essential part of this ever-changing society.

## Initiatives to Instill our Philosophy

In order to support sustainable business growth, YKK AP is working to create an environment in which employees are conscious of the YKK Philosophy, Management Principle, and Purpose in their daily work. One example of this is the "talking sessions," where employees at each location and division share their own practices and ideas. These meetings are held annually to create opportunities for every employee to think about the connection between their work and the YKK Philosophy, Management Principle, and Purpose, and to help these ideals become widely understood and embraced. Through communication based on exchange and dialogue, we aim to foster a sense of unity in each division and the company as a whole, as well as to develop the people and culture that will support sustainable growth. In FY2023, talking sessions were held at all of the approximately 2,000 divisions in Japan (sales, development, technology, manufacturing, and management).





## President's Message

Akira Uozu, President Representative Director

## The Path to Becoming a Global Leading Company is in Sight

### Looking back at FY2023 and working toward becoming a 1 trillion yen company

On assuming the position of President in April 2023, and taking the YKK philosophy of the CYCLE OF GOODNESS® and the YKK AP Purpose of "We Build a Better Society Through Architectural Products" as a basis, I developed "Evolution 2030," which sets global leading company as a vision for "how we seek to be in 2030 and how we ought to be," and defines how to make that vision a reality. Based on the three policies of "Contribute to the Global Environment," "Create New Value for Our Customers," and "Prioritize Employee Well-Being and Engagement," I have been promoting management under the slogan of "Become a Global Leading Company Through the Evolution of Architectural Products." At the end of this first fiscal year, I feel that the path to this goal is gradually coming into sight.

My definition of a "global leading company" is to be number one in terms of sales in two businesses: windows and curtain walls (below, "CW"). To this end, it is important how to add value to the products and technologies we offer.

The development of wooden windows, which we have been working on for some time, has made progress, and the products launched on the market in July 2024. Wooden windows, with their superb aesthetic and thermal insulation properties, can be used together with vinyl windows to further insulate the home. Thus far, YKK AP has placed a focus on vinyl windows when promoting the conversion of windows and doors to products with higher thermal insulation performance, and we see the commercialization of wooden windows as the first step toward "Create New Value for Our Customers." In addition, we will launch the EXIMA 55 aluminum-vinyl composite window, a high thermal insulation product for commercial buildings, in FY2024. These wooden windows and the conversion of

commercial windows to high thermal insulation products will be very effective in achieving decarbonization and carbon neutrality in the future.

In Europe, where I conducted an inspection tour in FY2023, I realized that the construction market is shifting its needs from scrap-and-build to renovation of only the building envelope (outer walls, roof, windows, and other parts of the building exterior), which produces less CO<sub>2</sub>, and that there are new business opportunities in this market. Accordingly, we are planning to expand into Europe with windows and other high thermal insulation, added-value products for home extensions and commercial building renovations.

### "Evolution 2030" roadmap development project

In FY2023, a project team was established to develop a roadmap for the realization of "Evolution 2030". Consisting of about 20 upcoming leaders, mainly mid-career and young employees, the team discussed specific approaches such as how to expand the base of existing businesses to increase sales and how to create new businesses.

I believe that this kind of concerted effort, in which our employees come together as one, is vital in our quest to become a leading company.

### Sales and profits increase in FY2023, but fall one step short of the plan

FY2023 ended with an increase in both sales and income, with net sales rising 5.8% from the previous fiscal year to 538.1 billion yen and operating income rising 43.5% to 25.6 billion yen.

Both net sales and operating income remained high through the third quarter due to two price revisions and the 3-ministry subsidy scheme, a government measure that provides subsidies for retrofitting with high thermal insulation windows, which

President Representative Director

### Akira Uozu

Joined YKK AP in 1985. Since joining the company, he has been engaged in architectural products sales. After serving as Vice President and General Manager of the Sales Division's Window Business Planning Department, Head of the Residential Business, Head of the Sales Division, and Director and Executive Vice President for International Business, he has been in his current position since April 2023.



boosted demand for energy-conserving retrofitting. Sales grew substantially in the residential remodeling and commercial building renovation sectors, centered on inner windows, and the further promotion of conversion to high thermal insulation windows also led to a significant increase in sales. However, orders declined in the fourth quarter as the subsidy scheme wound down, and we did not achieve what we had planned for FY2023.

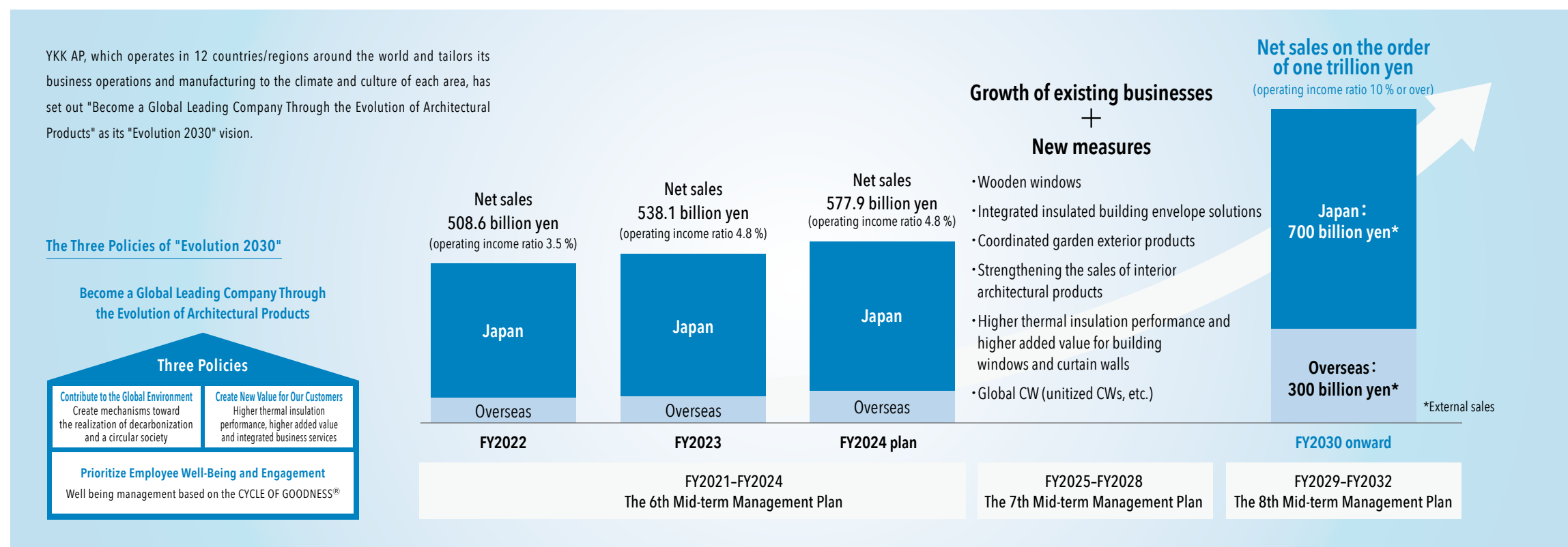
The number of new housing starts in FY2023 was lower than in FY2022, falling to 93% of the previous year's level. To date, YKK AP has focused on new construction, but with the number of new construction starts in Japan declining for both residential and commercial buildings, there is a need to focus on residential remodeling and commercial building renovations, where growth can be expected.

The exteriors market has also declined. The overall market for wall exteriors has fallen below 90% of the previous year's level. However, with regard to garden exteriors, people are becoming more inclined to enjoy their gardens at home in the wake of the COVID-19 pandemic. Although market conditions are lukewarm, we believe that this market is still very promising.

Overseas, in North America, the architectural products market for both commercial and residential buildings declined due to ongoing high interest rates. The market is also shrinking in China, with stagnant investment and an ongoing slump in terms of enthusiasm for buying houses.

### A robust response to changes in the external environment, including personnel shortages and logistics issues

As the weak yen and other factors continue to drive up the cost of materials, the external environment surrounding YKK AP is changing at a dizzying pace. We must continue to monitor the situation closely, but if we turn our attention inwards, we are facing a business environment in which it is difficult to generate profits even if we pass on the higher cost of materials to our customers. As such, a strategy to ensure steady profits is required. In FY2023, a rapid increase in the volume of orders received due to a government subsidy scheme resulted in delays in the delivery of inner windows, which caused great inconvenience to our customers and business partners. In order to respond to the increased activity in the remodeling and renovation markets, we expanded our production sites for

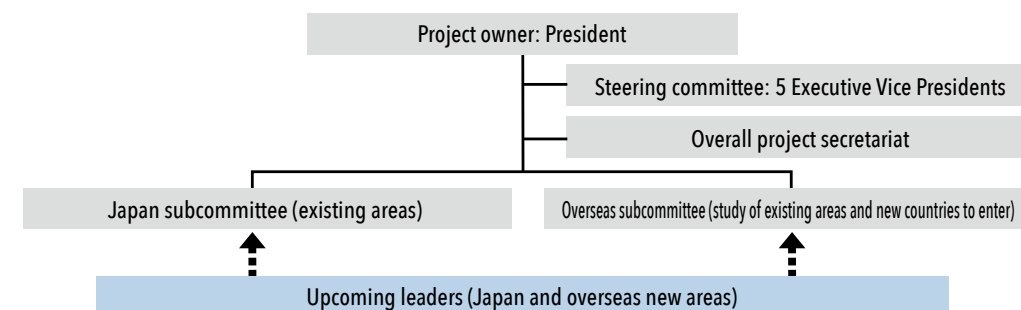


remodeling products and made capital investments to handle increased production for FY2024, with new production lines built at the Tochigi Factory, Hyogo Factory, and Kyushu Plant to increase daily production capacity and strengthen production and competitiveness. Another issue we have identified is the shortage of installation staff for remodeling products. We held installation training sessions for home electronics retailers and hardware stores to enable a wide variety of parties to install our products. We are also expanding our sales channels.

A response is also required to deal with the "2024 Problem" in logistics. Thus far, we have tried to reduce the amount of time drivers spend on duty by setting up warehouses in the vicinity of demand areas and shifting modes for long-distance transportation. Currently, in order to reduce the time spent by truck drivers in factories and warehouses, we are undertaking measures such as systems to optimize the loading of products onto pallets and then onto trucks, and the deployment of support staff to reduce the time spent waiting for or loading and unloading cargo. We will ask our business partners for their understanding with respect to reflecting the increased logistics costs in our prices.

### Organizational diagram of the project to develop a roadmap for the realization of "Evolution 2030" (outline)

The president serves as project owner and has established a system to formulate a roadmap for the realization of "Evolution 2030." Upcoming leaders are also participating in subcommittees and joining in the discussions.



Achieved commercialization of wooden windows. APW 651 sliding patio door, wooden windows with triple insulating glass, launched in 2024



EXIMA 55 aluminum-vinyl composite windows for commercial buildings, scheduled for launch in September 2024. Promoting even higher thermal insulation performance in commercial buildings





Factory (left) and factory interior (assembly process, right) belonging to Thai CW manufacturers YHS International and Siam Metal, which became subsidiaries in December 2023. They are expected to play a key role in the expansion of the CW business in Asia



The new building at the Saitama Factory, the core factory for the Commercial Business, began operations in July 2023. It is able to reduce manufacturing costs by 25% compared to existing factories and shorten the lead time from order placement to delivery by up to 11 days. It is also environmentally friendly, achieving effective zero CO<sub>2</sub> emissions



In October 2023, the Tokyo Metropolitan Area DC was opened in Kazo City, Saitama Prefecture (photo shows interior) to strengthen the supply system for residential products in the Tokyo metropolitan area. Furthermore, inventory management allows the number of nighttime and long-distance trips by truck drivers to be reduced, and this is expected to alleviate the burden on drivers

### Measures to expand global sales and improve profitability

In April 2023, we launched the Global Curtain Wall Business Division to strengthen our domestic and international CW business. To expand overseas sales channels for CW, with the aim of developing products with high thermal insulation performance and establishing a mass production system, in December 2023 we welcomed Thai CW manufacturer YHS International Ltd. and its manufacturing company, Siam Metal Co., Ltd., into the YKK AP Group. Together with our plants in China, Canada, and Namerikawa, Japan, this will allow us to supply 600,000 m<sup>2</sup> of curtain walls each year. As for the Global Curtain Wall Business Division, it will work to move into Europe and expand the business in Asia, including Thailand, Vietnam,

and Malaysia. Regarding vinyl windows in the overseas AP business, a new plant in the U.S.A. began operations in December 2023, and we are working to bolster orders.

In China, we will launch products in the growing mid-price range market, and in Taiwan, we will expand our business area. In both cases, we will seek to move into new areas, such as renovation of commercial buildings. In Indonesia, we are aiming to further expand sales by developing new channels.

The YKK Group operates in 70 countries and regions. We will also use this knowledge to expand into new areas.

### Steadily evolving initiatives to implement materiality

#### Providing an employee-friendly workplace and fulfilling work

In FY2021, taking as a basis our Purpose of "We Build a Better Society Through Architectural Products," we identified materiality for the company and set indicators under three major themes: Human Resources, Monozukuri, and Trust / Reliance.

In the area of Human Resources, we are promoting factory automation and building an environment in which people of all ages and genders can play an active role. Having employees take on the responsibility of machine maintenance means that there will be more opportunities for women and seniors than ever before. Employees have asked for multipurpose restrooms and changing rooms at each manufacturing site. We are delighted that our employees have submitted these requests

on their own initiative, and we are working to accommodate them as soon as possible.

We provide career training for employees of all ages to help them develop the career that they want, regardless of the division they were assigned to when they joined the company. It is our hope that they will continue to enjoy themselves, be highly motivated, and continue to challenge themselves to achieve their own goals.

#### Enhancing logistics technology to strengthen the product supply system

With respect to "Monozukuri," we are working to improve the logistics technology that underpins supply. To address the "2024 Problem" in logistics mentioned earlier, in October 2023 we opened the Tokyo Metropolitan Area DC (Distribution Center), a logistics site that will enable us to shorten the time drivers are on duty by changing inventory management and transportation methods, and to efficiently sort goods through the introduction of shelf-transporting robots. In addition to strengthening the system for supplying residential products to the Tokyo metropolitan area, we will pursue logistics DX and robotics to achieve a stable supply system.

#### Considering the use of "green aluminum" to reduce CO<sub>2</sub> emissions

Part of the theme of "Trust / Reliance" is "co-existence with the environment." Aluminum is an important material used in many of our products, and as part of our efforts to promote a decarbonized and circular society, we are looking into the

establishment of a stable procurement scheme for market-obtained recycled materials, as well as the use of "green aluminum." In terms of vinyl recycling, we are working to increase the recycling rate of vinyl scraps generated in the vinyl window manufacturing process, and have set a target of 100% recycling of in-house products by FY2024. We are also researching recycling technologies for external products and technologies for recovering products from the market in collaboration with industry, government, and academia.

As a result of these efforts, FY2023 marks the third consecutive year of record net sales. In FY2024 and beyond, we will continue to be aggressive in developing the market and take on the challenge of realizing materiality.



In December 2023, the "Global Curtain Wall SUMMIT 2023" was held in Japan for the first time. The meeting brought together people from various countries and regions to share views and strengthen ties between YKK AP companies involved in the CW business and the Global Curtain Wall Business Division





Message from the Financial Officer

Focus on ROA and Operating Income Ratio to Improve Capital Efficiency

Director and Executive Vice President  
Kosuke Iwabuchi



Investing in the people that form the foundation of our business

In its "Evolution 2030" vision, YKK AP has set a goal of becoming a leading company with net sales on the order of one trillion yen. We envision our domestic business generating net sales of 700 billion yen and our overseas business generating net sales of about 300 billion yen, resulting in a highly profitable company with an operating income ratio of 10% or more.

In order to increase efficiency and profitability, we are currently working to standardize operations and develop an information infrastructure that uses IT to connect information from each business division. We are also conducting research on smart factories that could lead to labor savings and increased operational efficiency. Through these initiatives, we will consolidate operations, make operations more visible, and strengthen internal controls.

What we are now emphasizing is investment in people, who form the foundation of our business. As Japan's population continues to decline, a shortage of engineers to perform design and installation management has started to emerge in the construction field as well. Although we will put our efforts into education and other areas, it is also important to achieve labor savings in these areas using digital and robot technologies. In this context, we will invest in training and hiring human resources with both operational and digital expertise who can take the lead in business process re-engineering.

Through the appropriate allocation of personnel based on evaluation of each employee's role and achievements, we will work to invigorate the workforce and promote a fulfilling workplace environment.

Promoting growth in the overseas business through locally grounded management

Growing into a company with net sales on the order of one trillion yen will require expanding new businesses. We hope to use the funds generated by increasing the profitability of existing businesses for research and development of technologies that will form the basis of new businesses.

In Japan, we plan to expand our business by leveraging YKK AP's strengths, such as its nationwide distribution channels, the materials and fabrication technologies it has cultivated through its manufacturing operations, and the installation technologies it has developed to attach its products to buildings. Overseas, it is important to develop products tailored to local climates and cultures, and we must also put effort into developing local human resources who share the YKK Group's corporate philosophy. In addition, for business development in the U.S.A., China, India, and other countries with extensive land areas, how to supply products is also an important issue, and we are carefully considering strategies for production and logistics sites as well as sales strategies.

While overseas businesses will receive investment from Japan until they become independent, such as in the process of starting up and building business foundations, once they become self-sustaining and establish a profit structure, we hope to see them invest their own funds for growth in their respective regions and aim for management grounded in local communities.

Examining assets and profits to improve ROA

We will continue to emphasize return on assets (ROA) as a financial indicator to determine whether investments that lead to increased corporate value are being made.

With respect to assets, we will strengthen administration

Financial highlights P56

	FY2021 (Results)	FY2022 (Results)	FY2023 (Results)
Net sales (consolidated)	446.3 billion yen	508.6 billion yen	538.1 billion yen
Operating income	17.3 billion yen	17.8 billion yen	25.6 billion yen
Operating income ratio	3.9 %	3.5 %	4.8 %
Return on assets (ROA)	2.7 %	3.5 %	4.0 %
Equity ratio	56.2 %	57.9 %	64.6 %
Return on equity (ROE)	4.8 %	6.1 %	6.6 %

Note: Transactions with parties inside the Group have been offset in net sales (consolidated).

by the Investment Committee, which deliberates on important investments from the perspective of investment economics, cost of capital, and other factors. Meanwhile, with respect to profits, we will ensure that those responsible for each business are aware of the need to improve profitability, using the operating income ratio as an indicator. While examining both assets and profits, we will strive to improve ROA and capital efficiency.

The ROA for FY2023 was 4.0%, but we are aiming for 6-7% over the medium to long term. To achieve this, it is also necessary to rethink the essence of our products. Investment in production equipment will grow as the variety of products increases. It is my hope that we can improve investment efficiency through an approach of building a common platform and then adding variations in design and other aspects.

In response to changes in society, such as the Subcontracting Act, and with a view to properly managing cash flow, YKK AP is currently in the process of reviewing the contract conditions for terms of payment as well.

The financial results for FY2023 showed net sales of 538.1 billion yen, a record high for the third year in a row. The main reason for this was a surge in demand for remodeling in Japan following the start of a government subsidy scheme supporting energy conservation measures for residential properties.

Although the growth in orders exceeded our expectations, and we initially caused inconvenience to our customers and business partners due to a delay in investment in manufacturing equipment, we were ultimately able to significantly increase sales of vinyl windows and remodeling products. The steady implementation of price revisions in response to soaring prices of raw materials and supplies resulted in a 43.5% increase in operating income over the previous fiscal year.

FY2024 Investment Plan (based on orders)

		Unit: 100 million yen	
Nature of investment		FY2023 (Results)	FY2024 (Plan)
Japan	Increase production capacity and support new products	96	52
	Streamlining support	54	60
	Digital-related	53	64
	Sustainability-related	38	23
	YKK AP30 Building / YKK AP Technology Museum	78	19
	Infrastructure development, etc.	40	59
Total		361	280
Overseas	U.S.A.: Increase production capacity, streamlining support, etc.	62	32
	Indonesia, India, etc.: Increase production capacity, streamlining support, etc.	8	48
	China and other Asian regions: Increase production capacity, streamlining support, etc.	10	14
	Total	81	94
Total		443	375

Improved profitability through cost reductions and appropriate pricing

In FY2024, the continued depreciation of the yen will have a significant impact on material prices, and rising interest rates will be reflected in mortgages, affecting the residential market as well. The cost of addressing the "2024 Problem" in logistics will also continue to rise. We will carefully assess the market, focusing on major items, while keeping a close eye on trends in the market and materials, and will take care to improve management efficiency and maintain the balance between supply and demand.

Our biggest challenge is to reduce costs, and we intend to use our technological capabilities to tackle this carefully and in fine detail. Since its founding, the YKK Group has held fast to the idea of "Three-Party Sharing," in which profits generated from inventions and innovations are divided three ways between users, business partners, and YKK Group, with YKK Group developing and investing from its own share to create products that benefit society. Based on this philosophy, we will enhance profitability while maintaining appropriate prices.

Capital investments for FY2024 are expected to total 37.5 billion yen, and we will continue to invest in such areas as the development of our information infrastructure and others. Meanwhile, we plan to invest a cumulative total of 50 billion yen in sustainability-related activities from FY2023 to FY2030. While there are also direct environmental investments such as solar power generation, we expect that updating aging equipment, such as by improving energy conservation, will also have positive environmental benefits.

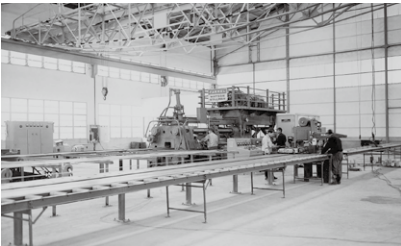
I believe that in the future, non-financial factors may also have an impact on the financials. As the Financial Officer, I will also keep a close eye on the financial impact of environmental, human, and other ESG risks.



Our History of Value Creation

The AP business began in 1959, leveraging our knowledge of aluminum materials acquired through fastener manufacturing. Since then, we have continued to develop and supply products that meet customer needs in every era and also provide new value.

1957-1989  
Architctural Products Business Begins



Aluminum extruder installed in 1959

Yoshida Shoji Co., Ltd., the predecessor to YKK AP, was established in 1957 to undertake the sales and exports of fasteners manufactured by Yoshida Kogyo K.K. (now YKK). The company launched its architectural products business in 1959 and launched the Hi-Sash residential aluminum window sash in 1966. Product development was also expanded.

1959	Aluminum casting and extrusion work begin
1961	Manufacture and sales of interior aluminum architectural products begin
1962	Manufacture and sales of aluminum window sashes begin
1976	Our first overseas affiliate, YKK Industries (Singapore) Pte. Ltd. (now YKK AP Singapore Pte. Ltd.), established
1983	Manufacture and sales of vinyl sashes begin
1986	First overseas plant with an integrated production system, YKK Almico Indonesia (now PT YKK AP INDONESIA), established

1990-2004  
The Founding of YKK AP



The inaugural press conference of YKK AP's first President, Tadahiro Yoshida (currently Corporate Advisor), in May 1990

In 1990, YKK Architectural Products (abbreviated to YKK AP) was founded out of its parent company, Yoshida Shoji Co., Ltd., as the core company of the YKK Group's architectural products business. In 2003, all architectural products businesses in the YKK Group were fully consolidated into one. This established YKK AP's corporate structure.

1990	The company is renamed YKK Architectural Products Inc. (YKK AP)
1990	Sales of EXIMA system sashes for commercial buildings begin
2002	The company is renamed YKK AP Inc.
2003	YKK's Architectural Products Manufacturing Group is integrated into YKK AP Inc. and the architectural products business of the YKK Group becomes a fully integrated organization
2003	Sales of SYSTEMA series of system sashes for non-residential buildings begin

2005-2010  
Evolution into a Windows Manufacturer



The APW 330, launched in 2009

With the goal of "transforming from sash manufacturer to windows manufacturer," the company takes a new direction as a producer of windows, supplying windows as finished products, and announces the window business brand APW. In 2009, it launched the APW 330 vinyl window. The Overseas Facade Business also began full-scale activities.

2005	Proclamation to promote insulating glass for residential windows
2006	The window business brand APW series is launched
2007	Value Verification Center established
2008	YKK AP Facade PTE. LTD. established
2009	Sales of APW 330 vinyl windows begin

2011-2022  
A company Committed to Products and Manufacturing



The Saitama MADO (window) Plant, which began operations in 2011

Hidemitsu Hori, who became President in 2011, adopted a policy of "a company committed to products and manufacturing," increasing market share by promoting the window business, including vinyl windows, expanding exterior and remodeling products, and strengthening engineering capabilities in the commercial business.

2011	Operations begin at the Saitama MADO (window) Plant
2012	Sales of the Venato electronic smart door begin
2014	Sales of the LUCIAS series of exterior products begin
2016	YKK AP R&D Center is opened
2020	Reorganized overseas AP business and integrated capital relations and business operations of overseas affiliated companies into YKK AP
2021	Part of the YKK Machinery & Engineering Group is transferred and the "Machinery & Engineering Department" is established

2023-  
Become a Global Leading Company Through the Evolution of Architectural Products



New building at Saitama Factory completed in 2023



Global Curtain Wall SUMMIT 2023

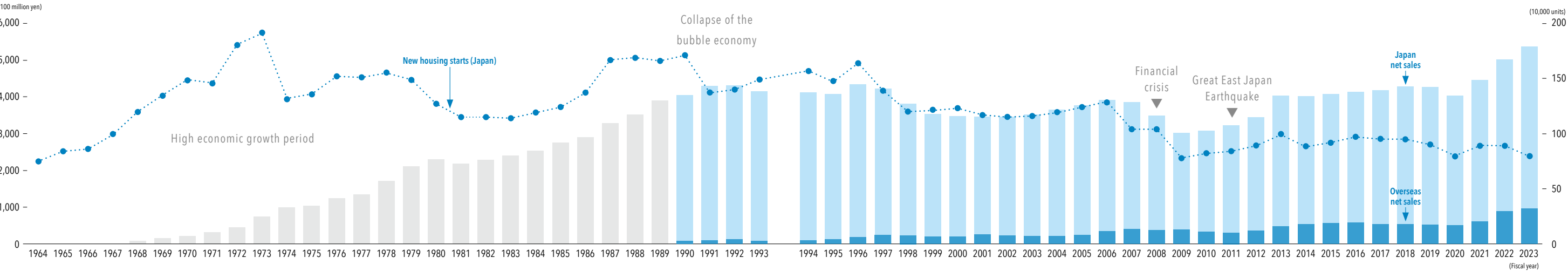


New vinyl window plant in the U.S.A., which began operations in 2023



The APW 651 wooden window, launched in 2024

When Akira Uozu assumed the office of president in 2023, a review was conducted of "how we seek to be in 2030 and how we ought to be," and the vision "Evolution 2030" put forth the goal of "Become a Global Leading Company Through the Evolution of Architectural Products." In Japan, we strengthened our production capacity of aluminum architectural products for commercial buildings by commencing operations at a new building at our Saitama Factory in 2023. In addition, YKK AP Healthcare Inc. was established in 2024 to grow health management into a new business axis. We are also further promoting conversion to high-performance, energy-conserving windows, and in 2024 we will begin selling wooden windows with high thermal insulation performance and aesthetic appeal. Overseas, a new vinyl window plant began operations in the U.S.A. in 2023, establishing a manufacturing and supply system to increase sales of vinyl windows. In addition, to strengthen the CW business in Japan and overseas, we established the Global Curtain Wall Business Division and acquired shares in the largest CW manufacturer in Thailand. We are also stepping up "smart factorization" and innovation creation through DX, centered on the xTech Lab in North America, which opened in 2023.





# The Value Creation Process

## Opportunities and Risks

- Health and Comfort/Safety and Security
- Demographics
- Climate Change and Disaster Countermeasures
- Ecosystem Conservation and Resource Recycling

## Sources of Value Creation

### Management Capital

p.18-19



Financial Capital



Human Capital



Manufacturing Capital



Social/Relational Capital



Natural Capital



Intellectual Capital

## Business Activities

### Our Strengths in Monozukuri p.20-21

**Manufacturing and Logistics**  
In pursuit of manufacturing and delivery quality

**Sales**  
Product appeal and proposal capability

**Material Procurement**  
Responsible material procurement

**YKK AP's Value Chain**  
High-quality products and services provided by an integrated production system that unites manufacturing, sales, and technology

**Installation**  
In pursuit of greater installation quality

**Research, Development, and Verification**  
Creating technologies to support monozukuri

**Product Use**  
User-friendly and socially-friendly products

### Materiality p.22-45

Human Resources to Support Sustainable Growth  
p.24-28



- Diversity & inclusion
- Fulfilling workplace environment
- Talent attraction and development for value creation
- Respect for human rights

"Monozukuri" to Support Resolution of Social Issues through Products and Competitiveness  
p.29-32



- Co-creation with stakeholders
- Generating innovation
- Products/services which continue to solve social issues

"Trust/Reliance" to Fulfill Social Responsibility  
p.33-45



- Fair business practices
- Resilient business foundation
- Co-existence with the environment

**YKK AP's Business Segments**  
p.48-55

Residential Business

Exterior Business

Commercial Business

Global Curtain Wall Business

Aluminum Profile Business

Overseas AP Business

**The 6th Mid-term Business Policy**  
p.46  
Providing Social Value through Products and Realizing Manufacturing Reform

### Foundations

Supporting our Business

**Corporate Governance**  
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**Human Rights and Human Resources**  
p.24-28

**Compliance**  
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**Risk Management**  
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**Environmental Management**  
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**DX Promotion**  
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## Value Created

### Purpose p.4-5

*We Build a Better Society Through Architectural Products*

### The "Evolution 2030" Vision p.6-11

**Become a Global Leading Company Through the Evolution of Architectural Products**

SOCIETY

CUSTOMERS

EMPLOYEES

### Social Value

- Contribute to the Global Environment  
p.40-45
- Create New Value for Our Customers  
p.32
- Prioritize Employee Well-Being and Engagement  
p.24-28

### Economic Value

- Standards targeted in "Evolution 2030"
- Net sales on the order of one trillion yen
- Operating income ratio 10 % or over  
p.6-13

## Principles that Support the Value Creation Process

p.4-5

**YKK Philosophy** The CYCLE OF GOODNESS®: "No one prospers without rendering benefit to others."



**Management Principle:** "YKK seeks corporate value of higher significance."





# Management Capital

YKK AP's Purpose is "We Build a Better Society Through Architectural Products."

These six types of capital are the source of this cycle of providing value to customers, society, and employees through corporate activities that create high quality products and services.

We aim to achieve sustainable growth by strategically investing capital while assessing business opportunities and risks.

Extent of coverage: YKK AP Group (Japan + overseas)

Period covered: FY2023 (April 1, 2023–March 31, 2024) or as of March 31, 2024

## Financial Capital ➡ P12



Equity ratio: **64.6 %**

Return on assets (ROA): **4.0 %**

## Human Capital ➡ P24



Employees in Japan: **12,991**

Employees overseas: **4,843**

## Social and Relational Capital ➡ P29



Japan business sites: **194**

Overseas business sites: **58**

Affiliated companies Japan: 8, Overseas: 21<sup>\*1</sup>

### Financial foundations supporting our business

Based on the YKK philosophy, the CYCLE OF GOODNESS<sup>®</sup>, the entire YKK Group is improving capital efficiency based on group financing. YKK AP will invest capital with the goal of achieving a return on assets (ROA) of 6–7%. Overseas, we are promoting the appointment of local employees to management positions, aiming for a "system that allows overseas profits to be reinvested locally." Making dynamic investment decisions in line with local conditions has strengthened our competitiveness on the global level. In order to realize the "Evolution 2030" vision, which aims to achieve net sales on the order of one trillion yen, we will invest financial capital in Japan and overseas at the most effective time.

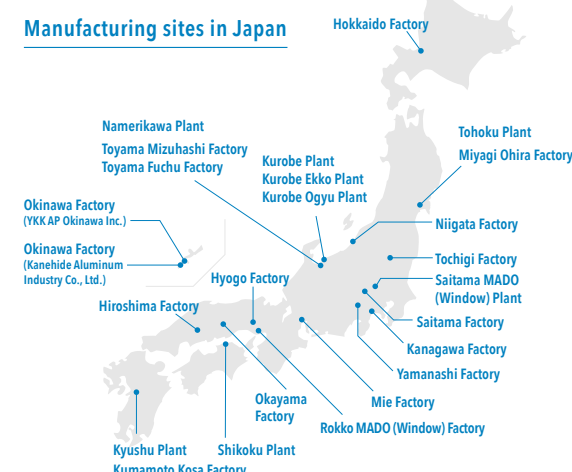
### A "Forest Organization" with a shared corporate philosophy

We conduct human capital management based on the concept of "Forest Management," as advocated by YKK's founder Tadao Yoshida, and are aiming to become a vibrant "Forest Organization" that grows autonomously by making the most of each individual's unique characteristics. Under the leadership of the CHRO (Chief Human Resources Officer), a position established in 2021, our human resources strategy is to recruit employees internally who will take on the challenge of creating new businesses through innovation, and to strengthen the organizational system of related divisions. In addition, to support individual career development, we will strengthen the "common mentor" career consultation system, introduce digital/IT literacy education, and improve employee engagement by creating an employee-friendly and fulfilling workplace environment.

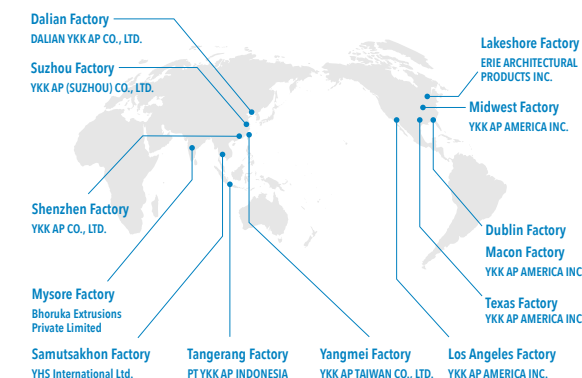
### Co-creation relationships based on trust and reliance with stakeholders

To remain a company that is a well-loved part of society, we not only pursue profits as a single company, but also value our relationships with all of our stakeholders, including our employees, customers, business partners, and local communities. In order to improve YKK AP's brand appeal and have the value of its presence recognized, we place great importance on communication and provide opportunities for dialogue and co-creation in various forms. We will contribute to the sustainable development of society by staying attuned to the needs of each of our stakeholders, identifying issues and developing technologies, and by solving social issues through our products and services.

### Manufacturing sites in Japan



### Overseas manufacturing sites



## Manufacturing Capital ➡ P20 ➡ P31



Manufacturing capital investment: **20.7 billion yen**

Manufacturing sites Japan: **25**, Overseas: **13**<sup>\*2</sup>

## Natural Capital ➡ P40



Energy consumption: **141,000** kl (crude oil equivalent)

Water use: 8.3 million m<sup>3</sup>

## Intellectual Capital ➡ P21



Research and development expenses: **10.6 billion yen**

Number of employees dispatched by the company to obtain degrees (Ph.D., MBA, MOT): 21 (cumulative total)

Patents held: 1,466

### High-quality products and services provided by an integrated production system

Based on YKK AP's integrated production system, which is one of its strengths, the company is enhancing its technological competitiveness by conducting monozukuri that is coordinated with manufacturing technology from the product development stage. In addition to planned capital investments that anticipate supply and demand from a medium-term perspective, we will strengthen our manufacturing and supply capabilities while actively making investments that create an employee-friendly and fulfilling workplace environment. DX promotion is also picking up pace, including optimization of production activities through the introduction of smart factories, and making safety measures and demand/supply forecasting more efficient using AI.

### Creating environmental value at all stages of the lifecycle

We have set numerical targets for the four environmental issues specified in the YKK AP Environmental Management Policy: "climate change," "resource recycling," "water," and "biodiversity," and are taking on the challenge of creating new value through technological innovation and achieving zero environmental impacts. At our manufacturing sites, we are promoting reductions in energy use through the introduction of high-efficiency equipment and the use of renewable energy. In addition, to address the risk of water use restrictions in different regions, we are working to reduce water consumption by promoting water recycling and reclamation. We are also further expanding activities to create environmental value, such as green procurement of raw materials and environmentally friendly design.

### Monozukuri based on a system of research, development and verification Incorporating new perspectives to generate innovation

With development and technical research bases in Kurobe and Tokyo in Japan, as well as in Germany and Indonesia, we conduct research, development, and verification on a global scale to create value from the customer's perspective and to improve our technological capabilities. In FY2023, we launched the Technical Research Division to step up research and study of new technologies with an eye to the future. Among other activities, it is engaged in the development of recycling technologies for product materials in order to achieve a circular society. We also conduct joint research with various research institutions and dispatch employees to graduate schools. Furthermore, we are putting our efforts into strategic management and application of intellectual assets, with the aim of improving our competitiveness and brand value through patent applications and ownership of patent rights.

<sup>\*1</sup> Affiliated companies are as of July 2024. <sup>\*2</sup> Manufacturing sites are as of May 2024.



# Our Strengths in Monozukuri

YKK AP's "integrated production system" is the greatest strength of our monozukuri.

We handle everything in-house, from the development and manufacture of materials, components, and production equipment to processing and assembly.

In the value chain, we have also established processes to create high-quality products and services, including the research and development of new technologies and materials, and the establishment of manufacturing and logistics systems.

We will create new value by achieving even greater efficiency through our seamless, integrated production system.

## YKK AP's Value Chain



## Research, Development, and Verification

### Development and technology research sites and the Central Testing Center Laboratory

The YKK AP R&D Center, Value Verification Center, and Partners Support Studio, all located in Kurobe City, Toyama Prefecture, are responsible for the cycle of development, evaluation and verification, technical proposals, and information communication that form the foundation of YKK AP's monozukuri process. The YKK AP R&D Center is a center of technology and expertise which develops high-quality products. The Value Verification Center conducts "user verification" using consumer monitors and "field verification" that reproduces the natural environment. Finally, the Partners Support Studio presents proposals aimed at addressing the issues of professional users, based on our technology. Furthermore, the Central Testing Center Laboratory, a JNLA-registered testing laboratory that meets international standards, reinforces our product quality assurance system through rigorous testing.

### Research, Development and Verification on a global basis

YKK AP has also strengthened its global research and development system. In addition to Japan, R&D centers have been established in Germany and Indonesia to conduct research and studies in different regions: Japan for warmer regions, Germany for colder regions, and Indonesia for hot and humid regions. This information is compiled and shared to develop products optimally suited to each region.

The Technical Research Division, established in FY2023, is responsible for technology, research, and development from a global perspective. It is working on technology, research, and development for new technologies and new materials, including the development of recycling technology to achieve a 100% aluminum recycling rate (in Japan) and the development of organic materials to become carbon neutral.

## Manufacturing

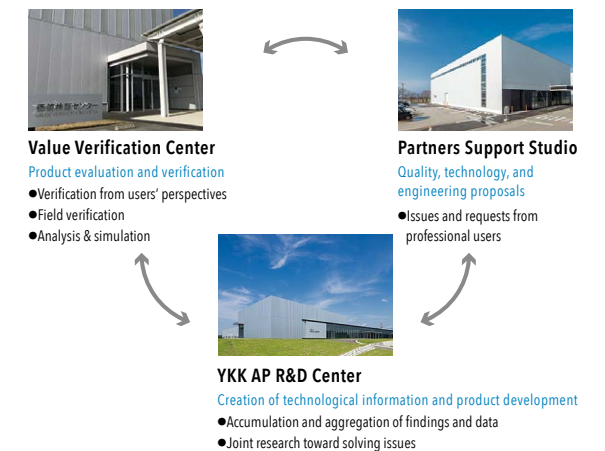
### Integrated Production System

YKK AP is committed to an "integrated production system," in which the company itself handles everything from materials, components, and production equipment to processing and assembly. Our insistence on such a system enables us to develop technology quickly, control costs throughout the supply chain, and guarantee reliable quality.

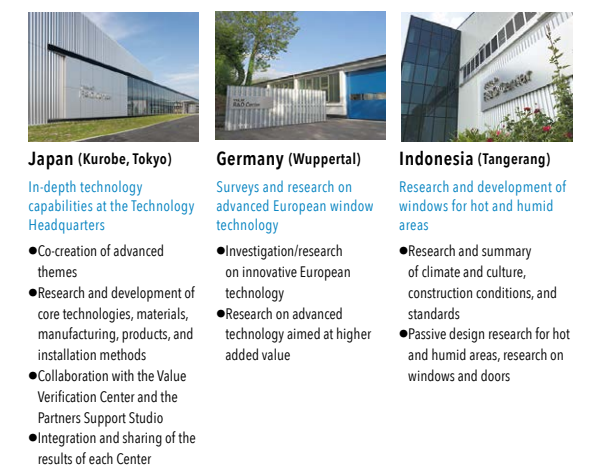
In addition, all manufacturing processes are carried out at YKK AP's domestic and overseas manufacturing sites. This includes processing the glass used for our mainstay products such as vinyl windows from raw sheets, melting the raw metal for the aluminum materials we use, and blending the raw materials for vinyl. Even the development and manufacture of components, which constitute the backbone of our products, is carried out in-house. In addition, an in-house division called Machinery and Engineering is responsible for the development and manufacture of equipment for making our products. We are working to further enhance our technological competitiveness through seamless collaboration between the Machinery and Engineering Department and the research and manufacturing divisions.

We are also deploying technology developed in Japan overseas, such as by introducing a labor-saving production line from Japan at YKK AP AMERICA's new vinyl window plant. Going forward, we will pursue "smart factorization" and aim to improve productivity through DX.

### Development and technology research sites



### Research, Development and Verification on a global basis



### The cornerstone of YKK AP's monozukuri: the integrated production system





Materiality-based Initiatives

The materiality (priority issues) set forth for FY2021 were identified based on our Purpose. We have established a promotion department for each materiality, and are working to tackle them through implementation of the 6th Mid-term Management Plan (FY2021–FY2024).

The ESG General Meeting, headed by the President, is made up of the Environmental Policy Board Committee, which focuses on the environment; the Brand Management Committee, which focuses on society; and the Compliance Committee, which focuses on governance.

The "Materiality Promotion Working Group," which reports directly to the ESG General Meeting, conducts materiality efforts and manages KPIs in collaboration with the ESG General Meeting and the promotion department for each materiality.

Our process for identifying materiality is described on our website.  
<https://www.ykkapglobal.com/en/company/management/materiality/#process>

The 6th Mid-term Materiality Targets and promotion departments

	Materiality	Promotion departments	Initiatives	Indicators	FY2021 (Results)	FY2022 (Results)	FY2023 (Results)	FY2024 (Targets)	Related SDGs	
"Human Resources" to Support Sustainable Growth	Diversity & inclusion	Human Resources Department	Promote an inclusive corporate culture where employees with a diverse range of skills and experiences respect one another and work together	Number of women in management positions ◇ <sup>1</sup>	113	122	133	140		
				Rate of persons with disabilities among employees ◇ <sup>1</sup>	2.28 %	2.30 %	2.44 %	2.50 %		
				Ratio of men's to women's wages (average) ◇ <sup>1</sup> *Parentheses indicate the ratio of men's to women's wages for section managers	68.6 % (86.4 %)	69.7 % (87.7 %)	68.8 % (88.4 %)	71.0 %		
	Establishment of a fulfilling working environment	Work Style Reform Committee	Develop a fulfilling workplace environment in which each employee can thrive with motivation and demonstrate his/her best performance	Rate of employees who take childcare leave (men) ◇ <sup>1*1</sup>	53.2 %	73.2 %	67.7 %	Over 50 %		
				Employee engagement ◇ <sup>1</sup>	51 %	49 %	50 %	70 %		
	Development and training of human resources to create new value	CHRO Human Resources Department Human Resources Development Department	Attract, train, and promote next-generation leaders and invest in the necessary talent for sustainable growth	Number of times employees obtained qualifications eligible for public qualification incentives ◇ <sup>1</sup>	2,548	1,748	1,313	Over 1,500		
				"Value Creation Academy," the next-generation leader development program ◇ <sup>1</sup> ● Number of participants *Figures in parentheses indicate cumulative number of participants ● Number of corporate officers appointed (cumulative total)	9(195) 29	9(204) 32	9(204) 34	9(213) —		
				Number of employees sent by the company to obtain degrees (cumulative total) ◇ <sup>1</sup> (Ph.D., MBA, MOT)	13	17	21	27		
	Respect for human rights	Compliance Committee Human Resources Department Corporate Purchasing Department	As part of corporate social responsibility, give consideration to human rights not only in the company itself, but also in the supply chain and other areas associated with the company	Enforcement of the YKK AP Human Rights Policy in business activities in each country and region Expand and enhance content of human rights and harassment training						
				Number of companies that we have concluded an agreement with regarding the basic transaction principles (cumulative total) ◇ <sup>1</sup>		821	1,184	1,226	1,226	
				Number of companies for which CSR surveys have been implemented ◇ <sup>1</sup>		Previous version 48 <sup>*2</sup> Revised version	— —	1,184 <sup>*2</sup> —	— 106 <sup>*3</sup>	
"Monozukuri" to Support Resolution of Social Issues through Products and Competitiveness	Co-creation with stakeholders	Brand Management Committee	Continue to create value through active dialogue with our key stakeholders: customers, society, and employees	Customers: Expansion of technical proposal and training options for domestic and overseas business partners Society: Promote activities that link customer feedback to the development and improvement of products and services and the provision of information Employees: Promote initiatives to gather a wide range of employee ideas and apply them to our business						
	Generating innovation	Executive Vice President	Promote innovation in business concepts and production/business processes from a medium- to long-term perspective for sustainable growth	Establish programs to develop and create innovative human resources ● Establish AP innovation programs and systems to accelerate and promote creation of new business ● Develop a foundation for fostering an innovative organizational culture and developing innovative human resources						
	Products/services which continue to solve social issues	Business Divisions/Units in charge	Create new value and contribute to the sustainable development of society by taking on the challenge of solving social issues through our products and services	Rate of high thermal insulation window use (for single-family houses) ◇ <sup>2</sup>	70 %	75 %	79 %	90 %		
				Rate of vinyl window use (for single-family houses) ◇ <sup>2</sup>	31 %	31 %	35 %	41 %		
"Trust/Reliance" to Fulfill Social Responsibility	Fair business practices	Compliance Committee	Conduct business activities ethically and with integrity by ensuring compliance with laws, regulations, and social norms under a global governance system	Ratio of sustainable product <sup>*4</sup> sales ◇ <sup>3</sup>	38.4 %	37.8 %	40.3 %	43.1 %		
				Number of sites implementing YKK Global Criteria of Compliance (YGCC) ◇ <sup>3</sup> *Number in parentheses indicates number of sites where internal audits have been conducted	55 (20)	56 (27)	57 (27)	53 (27)		
	Resilient business foundation	CRO Risk Committees (5)	Increase resilience through risk management that enhances management transparency and honest and fair corporate governance, in addition to responding to unforeseen events	Expand and enhance content of compliance training ● Conduct compliance video training and e-learning for all employees						
				Strengthen the CRO-led risk management system and speed up the response to emergencies Review BCP on an all-hazards basis ● Responses to infectious diseases, major natural disasters, supply chain interruptions, cyber incidents, etc. ● Recovery and operation through reliable management after the BCP is activated						
	Co-existence with the environment	Manufacturing Division PJ	Contribute to reducing environmental impact and mitigating and adapting to climate change by promoting a decarbonized, recycling-based society and expanding sales of environmentally friendly products	YKK AP CO <sub>2</sub> emissions ◇ <sup>3</sup>	325 kt CO <sub>2</sub>	304 kt CO <sub>2</sub>	285 kt CO <sub>2</sub>	275 kt CO <sub>2</sub>		
Waste output (manufacturing sites) ◇ <sup>3</sup> * Figures in parentheses represent units of intensity				15.9 kt (3.57 t/100 million yen)	15.4 kt (3.03 t/100 million yen)	17.4 kt (3.23 t/100 million yen)	17.0 kt (2.94 t/100 million yen)			
Water consumption (manufacturing sites) ◇ <sup>3</sup> * Figures in parentheses represent units of intensity				9.8 million m <sup>3</sup> (2,205 m <sup>3</sup> /100 million yen)	8.9 million m <sup>3</sup> (1,749 m <sup>3</sup> /100 million yen)	8.3 million m <sup>3</sup> (1,538 m <sup>3</sup> /100 million yen)	8.2 million m <sup>3</sup> (1,419 m <sup>3</sup> /100 million yen)			

Extent of coverage  
◇<sup>1</sup>: YKK AP (non-consolidated)  
◇<sup>2</sup>: YKK AP Group (Japan)  
◇<sup>3</sup>: YKK AP Group (Japan and overseas)

Details of our materiality promotion system are available on our website.  
<https://www.ykkapglobal.com/en/company/management/materiality/#system>

\*1: Until FY2021, calculated based on the Ministry of Health, Labour and Welfare's Basic Survey of Gender Equality in Employment Management.  
From FY2022 onwards, calculated in accordance with the method of publication under the revised Act on Childcare Leave and Caregiver Leave.  
For FY2022, the number of employees who took childcare leave across fiscal years is included.

\*2: In FY2021 and FY2022, the survey was conducted for business partners with whom an agreement on the Basic Transaction Principles had been concluded.  
\*3: In FY2023 and FY2024, the survey was conducted for large-lot business partners and business partners that handle particularly important materials and components.  
\*4: Defined as architectural products that contribute to achieving the SDGs by solving priority social issues such as energy conservation, easy installation, disaster prevention/mitigation, safety/security, and health/hygiene.



Respect for Human Rights

Formulation of the YKK AP Human Rights Policy

In accordance with the CYCLE OF GOODNESS® approach, we respect the human rights of every individual stakeholder in every country and region. In FY2023, the YKK AP Human Rights Policy was formulated in line with the revision of the YKK Group Human Rights Policy. YKK AP has set out its own Human Rights Policy that, while sharing the fundamentals of the YKK Group policy, takes into account human rights related to YKK AP's business activities. Accordingly, we will further strengthen our efforts to fulfill our corporate social responsibility by appealing not only to our employees but also our business partners.

Reviews and impact assessments relating to human rights

By assessing new human rights risks, the Human Rights Working Group (WG) established within the Compliance Committee is working to ascertain the current situation and evaluate these risks' importance and severity. In FY2023, a human rights impact assessment was conducted for employees in Japan. In accordance with the YKK Global Criteria of Compliance (YGCC), the YKK Group's compliance standards based on ISO 26000, human rights risks were identified by mapping an assessment of severity and likelihood of occurrence for each human rights issue. Based on the results of the assessment, we have established a governance system and preventive and corrective measures to reduce risks related to "long working hours," "discrimination," "harassment," "workplace accidents," and "leakage of personal information," and

Details of the YKK AP Human Rights Policy are available on our website.  
<https://www.ykkapglobal.com/en/sustainability/society/humanrights/policy/>

are stepping up our efforts accordingly.

In addition to the risks identified in the human rights impact assessment, we are also pursuing zero-tolerance initiatives in the areas of "child labor," "forced labor," and "emergency planning and fire safety."

With regard to industrial health and safety initiatives in Japan, we continue to conduct regular equipment and machinery safety audits every three years to ensure the intrinsic safety of our equipment. In addition, Safety Patrol Day, in which the President and plant managers make safety patrols of workplaces, is held every year as a YKK Group-wide initiative. Since FY2023, we have provided training to workplace leaders to incorporate hazard prediction into their training, further strengthening safety awareness. As a result, the industrial accident incidence rate for FY2023 was 0.10\*.

Regarding the supply chain, in FY2023, we began exploring the implementation of risk assessments. In FY2024, we are proceeding with a human rights impact assessment for our overseas employees.

\*Data from YKK AP Group (Japan). The number of work-related fatalities and injuries that result in one or more days of absence from work or the loss of a body part or its function. Calculated by dividing the number of fatalities and injuries due to industrial accidents by the total number of actual working hours and multiplying by 1,000,000.



On Safety Patrol Day, President Uozu makes patrols to confirm safety measures at a plant

The "forest management" approach handed down to the present day

Based on the idea of "autonomy and coexistence," YKK Group creates systems and environments in which every employee can demonstrate their full potential, regardless of age, gender, educational background, and so on. It was Tadao Yoshida, YKK's founder, that proposed the idea of "Forest Management." Forest Management means that just as there are both large trees with years of experience and the tree rings to show it, as well as young trees with thin trunks, each works to its own particular strengths, moving forward together. As such, it is an approach in which everyone is both a worker and a manager (with a sense of participation in the business). This is one of the key ideas of the YKK Group's philosophy, the CYCLE OF GOODNESS which has been passed down to the present.



Human Resources Strategy

We are implementing human resource strategies centered on well being management based on the CYCLE OF GOODNESS®. We aim to be a company that is sought out by a wide variety of people by implementing policies from the following four perspectives: (1) making the workplace employee-friendly, (2) investing in talent, (3) providing growth opportunities, and (4) creating job opportunities.

In terms of (1), making the workplace employee-friendly, we are promoting varied work styles and diversity & inclusion by strengthening the efforts of the Work Style Reform Committee and the Workplace Improvement Committee. For (2), investing in talent, in addition to existing training programs, we are restructuring our education system to foster creativity and conceptual improvement and to develop global human resources. (3), providing growth opportunities, involves strengthening support for individual career formation and development. Finally, in terms of (4), creating job opportunities, we will improve our personnel system and operations, increase the take-up rate of annual paid leave, and



implement measures to strengthen recruitment.

We have established employee engagement and other key items as indicators to measure the degree to which these goals have been achieved, and we perform regular progress checks accordingly.

Key items in YKK AP's human capital management

(1) Human resource strategies to create innovation	• Developing, securing, and energizing engineers who will take on the challenge of new technologies (technology) • Human resources (sales and administration) to create and commercialize new business models
(2) Management strategy and human resource strategy to drive global growth	• Mechanisms for developing the next generation of co-creative management and executive personnel • Developing and securing human resources to drive new businesses and overseas operations (bases and factories)
(3) Implementing mechanisms and measures to increase employee engagement	• Creating a workplace environment that fosters employee satisfaction and fulfilling work
(4) Establishing and operating a flexible personnel system that is responsive to management strategy	• Establishing a flexible personnel system to accommodate new work styles • Establishing a talent management system for strategic personnel assignment and development

YKK Corporate Philosophy

The YKK Group's corporate philosophy is the CYCLE OF GOODNESS®  
We are an organization that...

- 1. Is like a forest
- 2. Thinks of capital as a loan
- 3. Promotes technological innovation
- 4. Respects humanity
- 5. Expands and improves its management base

A Group with respect for humanity

YKK's founder Tadao Yoshida explained the "YKK Corporate Philosophy" to employees at a meeting in February 1981 (left). The first point is "a group like a forest," and the fourth, "a group that respects humanity," is a phrase that is commonly used as part of today's concept of diversity and inclusion (below).

"We will not discriminate on the basis of race, gender, religion, occupation, social status, or any other grounds. With faith and propriety, we will respect each other's abilities, maintain a strong work ethic, build mutual trust, work together, learn together, and move forward as one, based on the laws, customs, and practices of all nations of the world."



## "Human Resources" to Support Sustainable Growth

## Diversity & Inclusion

YKK AP has issued the "Diversity & Inclusion Declaration" with the aim of utilizing the diversity of human resources to create new value and increase our future competitiveness in the international community. In addition to promoting systems such as flextime work and telework, a system has been in place since FY2022 that allows employees to apply for a change of work location if they wish to accompany their spouse on a job

transfer, allowing them to continue their careers without having to resign. In addition to establishing environments and designing systems that enable a diverse range of human resources to play an active role, as priority issues, we are striving to strengthen the hiring of female employees and support their career development, as well as to expand and consolidate the employment of persons with disabilities.

### Activities and environmental improvements for promoting the active participation of women

We have continued our career development support program for female employees, "AP Women's Career Development Program," with 225 employees participating in FY2023. This program supports participants in their long-term career development.

In addition, at the "AP Career Café," which is open to participants in the program who wish to attend, attendees were able to talk with women in management positions, as female

role models, and exchange information with others who are facing the same problems, helping to alleviate their worries and concerns about assuming a management position. In FY2023, 64 employees participated in exchanges on such themes as "an exchange of views with female managers" and "an exchange of views on balancing work and childcare/nursing care."

### Evolution of our Overseas Companies Structure

As a company that operates globally, in 12 countries and regions around the world, YKK AP is promoting the appointment of local employees to management positions at its overseas companies. As we aim to become a global leading company, it is essential to have human resources who empathize with our corporate philosophy and have a deep

understanding of the culture and background of each country or region, and a locally grounded approach to management is the key to providing optimal products and services to local customers. Local human resources are already serving as senior managers at YKK AP AMERICA, YKK AP(China), DALIAN YKK AP, YKK AP TAIWAN, and Bhoruka Extrusions (India).

YKK AP CO., LTD.

#### Local employees, including management, respond quickly to local needs and changes in the market



YKK AP CO., LTD.  
President  
**Liu Zhaohui**

The YKK AP China Group actively promotes local human resources to management and department head positions, attracting motivated and capable employees. We feel that the deep involvement of local employees (including senior management) has led to more efficient internal communication, faster decision-making, a substantial improvement in employee motivation, and a strengthening of core competencies.

In terms of development, local employees are uniquely able to understand the needs of local customers, making it easier to develop products that meet customers' demands, and so approach the market more effectively.

With respect to sales, it is easy for them to communicate with business partners, which makes a significant contribution to expanding business areas and sales channels.

In the new construction business, we have deepened our efforts in the luxury residences market, and our door and window products have been used in landmark properties throughout China. Since 2018, we have been expanding our areas of business in collaboration with a leading Chinese real estate company.

The Chinese government is aiming to achieve carbon neutrality by 2060, and we are actively responding to the government's call, focusing on the development and widespread adoption of high thermal insulation products. In response to the needs of the real estate market, we are also working to address not only the high-end market, but also the mid-range market with cost-effective products. Amidst the need for even greater cooperation between production, sales, technical and administrative divisions, we have high hopes for the contributions of our local employees.

## Establishment of a Fulfilling Working Environment

In addition to improving workplace environments at regional and manufacturing sites, we are introducing systems and establishing environments in which each employee can fully demonstrate their abilities, including the development of personnel systems, measures based on our human resource strategy, salary revisions, and the expansion of qualification

allowances and support for qualification acquisition. Salary increases in FY2023 were approximately 6.5%\*, and starting salaries in FY2024 were about 10% higher on average. Production line workers have also been provided with company smartphones to facilitate information sharing and communication.

\*Includes newly instituted position allowances, etc.

### Employee engagement

In Japan, we have been conducting an engagement survey of YKK AP Group employees, excluding temporary employees, since FY2021. Although FY2022 saw a decline in engagement to 49%, this figure rose to 50% in FY2023 with a reduction in overtime rates and an increase in the take-up rate of annual

paid leave. Engagement as measured in this survey is considered one of the most important items with respect to human capital, and we will conduct follow-up on an ongoing basis.

YKK AP AMERICA INC.

#### Valuing Every Employee Increases Engagement and Productivity



YKK AP AMERICA INC. (right)  
**Oliver Stepe**

YKK AP AMERICA INC.  
Senior Vice President and Chief Human Resources Officer (left)  
**Patrys Wiid**

Oliver Stepe, President and CEO, and Patrys Wiid, Senior Vice President and Chief Human Resources Officer, who oversees human resources, will introduce YKK AP America Inc., a company with one of the highest levels of employee engagement in the YKK AP Group.

**Stepe:** My goal is to create a company that is open and inclusive to all employees as well as customer satisfaction. I see improving employee engagement as a top priority.

**Wiid:** In 2016, when we started to conduct surveys, the engagement was 66%, but by 2024 it had risen to 72% with employee survey participation of 91%. Many employees are highly motivated in their work.

**Stepe:** The key to increasing engagement is to listen to employees' opinions, including critical ones, acknowledge them, and make improvements where possible. And we must continue this cycle.

**Wiid:** As part of this effort, starting in 2022, we are conducting "CARE conversations," in which all employees are encouraged to communicate with

management and supervisors in an informal manner. This is not a meeting to discuss business matters, but an opportunity to ask what support they need in the workplace to be successful in their role and to provide an opportunity for the employee and the manager to connect in more informal manner.

**Stepe:** It may sound simple, but talking about and listening to negative opinions about the company is important. We are implementing this challenging initiative for all employees, including hourly employees in our manufacturing departments.

**Wiid:** Currently, we have achieved 100% participation in the CARE Conversation program. In addition, we feel that the manufacturing division is seeing positive results, as it is linked to higher engagement and there are signs of improvement in turnover. Other programs we have introduced include an employee recognition program called "Kudos," which stands for praise and appreciation, in which employees express their gratitude to their coworkers and are recognized for actions based on the company's core values.

**Stepe:** We started operations at our new residential plant in the U.S.A. at the end of 2023 and launched a new line of vinyl windows shortly thereafter. It was a turning point that opened up a new working environment for our employees, but we believe we were able to overcome it because of our high employee engagement.

**Wiid:** We believe that taking care of our employees also means that they take care of our customers. That should be a key driver for expanding our business through increased sales and productivity in our day-to-day operations.

**Stepe:** In business, how each and every employee can grow as an individual and as a professional is important, and I believe that the YKK AP Group as a whole must work to improve employee engagement, which is a core pillar of "Evolution 2030."



## "Human Resources" to Support Sustainable Growth

## Development and Training of Human Resources to Create New Value

## Enhancing employee training

We are enhancing our training for employees in order to improve their individual skills and develop human resources who can contribute to our business and organization. In addition to providing digital and IT literacy education for all employees, the "Value Creation Academy" for developing

Details of the YKK AP training systems are available on our website.  
<https://www.ykkapglobal.com/en/sustainability/society/hr-strategy/#training>

## Career development support

YKK AP supports career development to encourage autonomy and growth on the part of every employee. We are implementing a variety of measures in this regard, such as "career interviews" to discuss future career plans with superiors, a "common mentor" system that allows employees to discuss career-related concerns with company colleagues in the same position who face the same issues, and support aimed at developing the next generation of human resources who will lead our business, including sending employees to study at graduate schools (doctoral and master's degrees) in Japan and overseas, and support for studying abroad on MOT and MBA programs.

In addition, since FY2023, we have been enhancing our "Career Plan Declaration" program. This is aimed at supporting the career development of employees by allowing them to think about their own careers, registering their strengths and future aspirations in the talent management system, and using this information as a basis for transfers, assignments, and the

future business leaders, and "level-stratified training" for newly appointed managers and leaders, we also support opportunities for self-development, such as 6-month online English conversation training and e-learning for DX and IT-related knowledge and business skills.

provision of educational opportunities.

In addition, in the context of the abolition of the mandatory retirement age system and the resolution of career issues for each age group, we are expanding the scope of career training, which used to be conducted at milestone ages such as 40 and 50, to include the third year of employment, 30, and 60 years of age.

Meanwhile, in May 2024, we launched the "Technical University of YKK AP," an in-house university, to provide growth opportunities and career development support to employees involved in the manufacturing division. For approximately seven months (three hours per week), students learn basic knowledge and skills related to the type of work they wish to do. After completion of the program, we will provide support for individual career development through job transfers and further learning opportunities, and this will also help in identifying human resources from manufacturing sites and strengthening frontline capabilities.

## Voice Comments from an employee who obtained a Ph.D.



Environmental Technology Office  
Architecture and Wellness Technology  
Group  
Technical Research Division  
**Naoko Kishimoto**

I completed my Ph.D. at the University of Tokyo, where I conducted research on methods for assessing the impact of the thermal, light, and visual environmental performance of windows and doors on the comfort and energy conservation properties of residential buildings. Through this research, I developed methods to quantitatively evaluate the effects of windows on comfort and energy conservation properties. I hope to keep working toward the development of buildings that offer comfort and energy conservation, and to propose windows that suit the characteristics of particular locations and the people who live there.

## Voice Voice from a senior employee



Aluminum Profile Manufacturing  
Department, Extrusion Line  
Kurobe Plant  
Manufacturing Division  
**Tetsuo Tanii**

I am in charge of die management and calibration for aluminum extrusion. As I will turn 65 in 2024, I have decided to "choose my own work style," including the timing of my retirement, taking my family and my own health into consideration. Now, as a calibration instructor, I assist the line manager in teaching and training die calibrators. I hope to contribute to the workplace by passing on my own knowledge and skills to future generations to help them develop their careers.

## "Monozukuri" to Support Resolution of Social Issues through Products and Competitiveness

## Co-creation with Stakeholders

As part of our corporate management, which is grounded in our Purpose, we have established a Multi-Stakeholder Policy that emphasizes the co-creation of value with a diverse range of stakeholders. We strive to improve our corporate value by using dialogue with stakeholders, conducted as necessary, to support innovation in our operations and improvements in product quality.

Details of our Multi-Stakeholder Policy are available on our website.  
<https://www.ykkapglobal.com/en/sustainability/society/stakeholder-communication/multistakeholder/>



## Customers

## Provide better products and services

In addition to verifying product value from the consumer's perspective, we share inquiries and opinions received by the Customer Service Center with relevant company departments to improve our products and services. Furthermore, at our showrooms, where customers can actually see, touch, and feel our products, we suggest the products best suited to their needs.

Since April 2024, our quality management system has been undergoing a thorough renewal. Quality management will be further enhanced by integrating product defect information previously administered by individual business divisions into a common company-wide database. In addition, to ensure that our products can be used safely over the long term, we are working to improve and standardize the quality of our maintenance services, as well as continuing to raise awareness about safety through regular reminders on social media, our website, and advertisements.



Showroom



Raising awareness of product-related accident prevention on our website



## Business partners

## Sustainable business initiatives through partnerships

For our business partners, we hold "Policy Briefings" every year in various locations throughout Japan to explain our business performance and policies for the fiscal year. In addition, we have established a "Business Partners Association" and an "Association of Performance Improvement Renovation" for the purpose of promoting mutual sustainable growth and market expansion. Network-based exchanges of information and collaborative initiatives will also be used to further promote our business. Furthermore, together with MADO (Window) Shop, which handles window remodeling, we exchange opinions on product planning and improvements and enhancements to existing products.

YKK AP also operates the Partners Support Studio, where we propose technologies to professional users, at the Kurobe Ogyu Plant. 2024 marks the studio's sixth year of operation, and it has achieved 5,000 visitors to date.



FY2023 Policy Briefing



Partners Support Studio



## "Monozukuri" to Support Resolution of Social Issues through Products and Competitiveness



### Suppliers and vendors

#### Promotion of social responsibility in our supply chain

Each year, YKK AP hosts a "Procurement Policy Briefing" for suppliers to give them an explanation of the company's performance and policies. In FY2024, the Global Procurement Department was established in the Manufacturing Division. This department will work to enhance the competitiveness of the products we procure by expanding our supply chain, both in Japan and overseas.

In FY2013, in a joint effort with the "YKK AP Group Installation Cooperative," which is composed of specialists in the installation of sashes and curtain walls for commercial buildings, we established "Installation Skills Training Academy" at two sites. In addition, with the aim of resolving the shortage of sash and curtain wall installation technicians, we operate "DO SPACE" Exterior Installation Academies at three sites in Japan. These academies work to train installation technicians and pass on installation skills.



### Local communities

#### Promoting social responsibility as a corporate citizen

Underlying YKK AP's corporate activities is the philosophy of the CYCLE OF GOODNESS®, which states that "no one prospers without rendering benefit to others." In accordance with this philosophy, we consider "co-existence with the regional community" to be essential, and are engaged in social contribution activities through our business, including safe operations and awareness of the environment and noise pollution, at all of our locations and divisions in Japan and overseas. We aim to contribute to the development of local communities and the resolution of issues by implementing and sustaining activities that meet the needs of each community, such as locally-based volunteer activities, environmental conservation activities, and support for the education of the next generation, who will take on the burden of our future.



### Employees

#### Dialogue with management, and the Employee Stockholding Association (YKK "Koyu-Kai" Partnership)

As a means of strengthening the foundation for all employees to head in the same direction, the YKK Group has established opportunities for dialog between management and employees. In the roundtable meetings held annually since FY2021, members of management make in-person visits to each location in Japan and overseas companies to engage in reciprocal communication with employees. In FY2023, these meetings were held a total of 41 times at 34 locations, with more than 400 participants. In addition, under the management philosophy of YKK's founder, Tadao Yoshida, that "stocks are certificates for participating in business," we have established the YKK "Koyu-Kai" Partnership (employee stockholding association), in which about 80% of all eligible individuals participate. Reports on management performance and Q&A sessions, etc., are conducted in meetings held twice each year.



FY2023 Procurement Policy Briefing



"Installation Skills Training Academy (Saitama Academy)," newly established at the Saitama Factory in April 2024



"DO SPACE Kyushu," newly established at the Kyushu Plant in September 2023



Qualified employees serving as instructors at a local practical skills workshop



A donation of food items to a nearby nursing home by DALIAN YKK AP



FY2023 roundtable meeting



FY2023 meeting of the YKK "Koyu-Kai" Partnership

## Generating Innovation

#### Shift of the APW 330 to a "One Factory" system

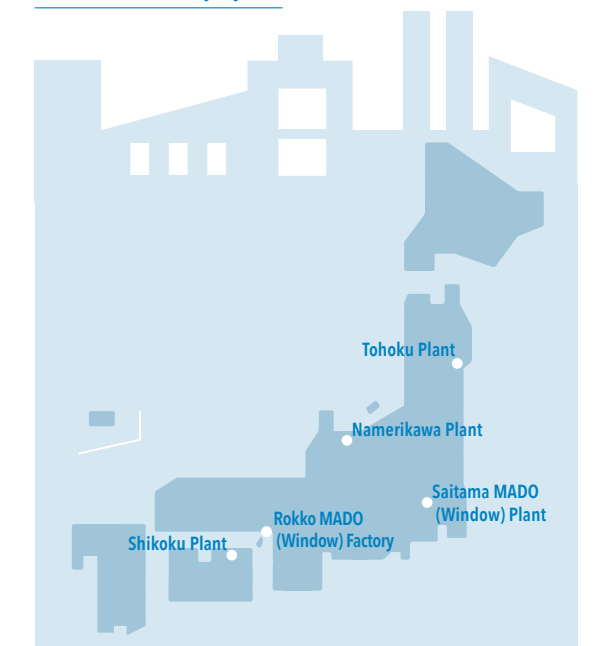
APW 330 vinyl windows, YKK AP's flagship product, are manufactured at five sites nationwide. From February 2024, the APW 330 has been shifted to a "One Factory" system, in which all of these sites are centrally managed. Previously, when an order for APW 330 windows was received, production was performed at the manufacturing site closest to the delivery destination. However, with the introduction of the "One Factory" system, production is performed at the most efficient site as determined by the system based on various conditions, such as the order production situation at each manufacturing site and the distance from the manufacturing site to the delivery destination. In addition to preventing delivery delays and reducing delivery costs, the production control personnel assigned to each manufacturing site can now work on other tasks.

From June 2024, we are also implementing a "One Factory" system for Mado Remo - PLAMADO U Inner Windows. We plan to gradually introduce the system for other products for which demand may be concentrated at certain times of the year.

#### Improving logistics efficiency and productivity

In October 2023, we opened the Tokyo Metropolitan Area DC, a storage-type logistics site for residential windows, doors, and exterior products, in order to realize a stable supply system ahead of the "2024 Problem" in logistics. Until now, products for immediate delivery in the Tokyo metropolitan area have been sent from regional manufacturing and logistics sites in the evening of the day the order is received, arriving during the night at the Tokyo Metropolitan Area TC (Transfer Center) (Saitama Prefecture), a pass-through logistics center, from where they are sorted and delivered. The Tokyo Metropolitan Area DC ensures lead times and reduces the number of overnight long-distance shipments through inventory

#### A system for centralized management of five manufacturing sites Shift to a "One Factory" system



management based on demand forecasts in which shipment status is subdivided by item and by area.

Shelf-transporting robots have been installed on the premises, and a Goods To Person (GTP) system, in which robots carry inventory storage shelves to the operators, is in operation. Workers can perform picking and sorting for 100 trucks at once while remaining in their fixed positions, leading to labor and personnel savings. The same technology is also scheduled for introduction at a new vinyl window plant in the U.S.A., which began operations in December 2023.

Going forward, we will continue to promote logistics DX and robotics with the aim of achieving sustainable logistics.



"ESR Kazo Distribution Center 2," where the Tokyo Metropolitan Area DC is located



Shelf-transporting robots operating at the Tokyo Metropolitan Area DC



"Monozukuri" to Support Resolution of Social Issues through Products and Competitiveness

## Product Development for Solving Social Issues

YKK AP's 6th Mid-term Business Policy calls for "Providing Social Value through Products and Realizing Manufacturing Reform," and in addition to providing value to stakeholders, the company is developing products that contribute to solving social and environmental issues in each country and region.

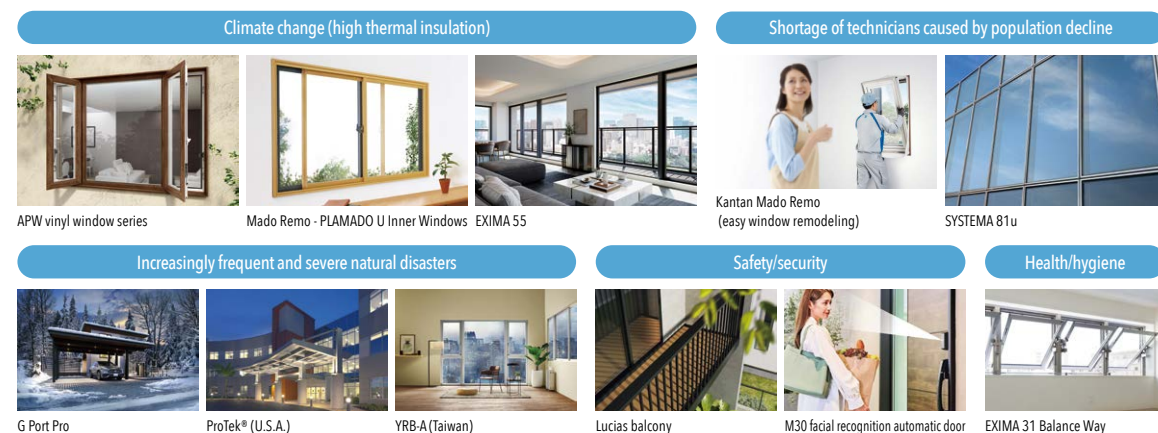
### Climate change (high thermal insulation)

YKK AP is rolling out high thermal insulation products to address climate change. The APW vinyl window series, our flagship product line, as well as Mado Remo - PLAMADO U Inner Windows, a remodeling product that attaches a vinyl window to the inner side of a window, contribute to reductions in energy used for heating and cooling by improving the thermal insulation performance of windows and doors. In addition, EXIMA 55 aluminum-vinyl composite windows for commercial buildings are scheduled for launch in September 2024. In the future, we will also work to achieve higher thermal insulation performance in mid- and high-rise constructions.

### Shortage of technicians caused by population decline

YKK AP is developing easy-installation products that will help resolve the aging workforce and personnel shortages in the construction industry, problems that are growing more serious as the Japanese population declines. The window remodeling product Kantan Mado Remo (easy window remodeling) allows window replacement using existing window frames. SYSTEMA 81u, a unitized curtain wall for mid-rise buildings launched in January 2024, can be mounted using the unit installation method, in which finished units manufactured using an integrated production system at the factory are lifted into place by a crane, eliminating the need for scaffolding at the construction site. Shortening installation time in this way will lead to labor savings for installation technicians.

### Main products to address social issues



### Increasingly frequent and severe natural disasters

In preparation for typhoons, heavy rains, heavy snow, and other natural disasters, which are becoming increasingly frequent and severe, YKK AP has created a lineup of products tailored to individual countries and regions. In addition to the G Port Pro Series of carports with industry-leading snow and wind resistance, we also offer the ProTek® series of hurricane and explosion-proof products in the U.S.A. Meanwhile, in Taiwan, where typhoon damage is common, the YRB-A sash, with high watertight performance, is a core product.

### Safety and security, health and comfort

We are also putting our efforts into developing products that contribute to users' safety, security, health, and comfort. Lucas balconies are a product designed to prevent children from climbing up and falling. The M30 facial recognition automatic door, the industry's first automatic door for single-family houses to be equipped with a face recognition key, is linked to a linear system that opens and closes magnetically, providing both safety and convenience.

Ventilation is important in improving the quality of the indoor environment and creating hygienic living spaces. Interior comfort is enhanced by ventilation doors, which let in natural breezes even while the doors are closed, and natural ventilation windows (balance way), in which the screen itself is balanced to efficiently ventilate the room.

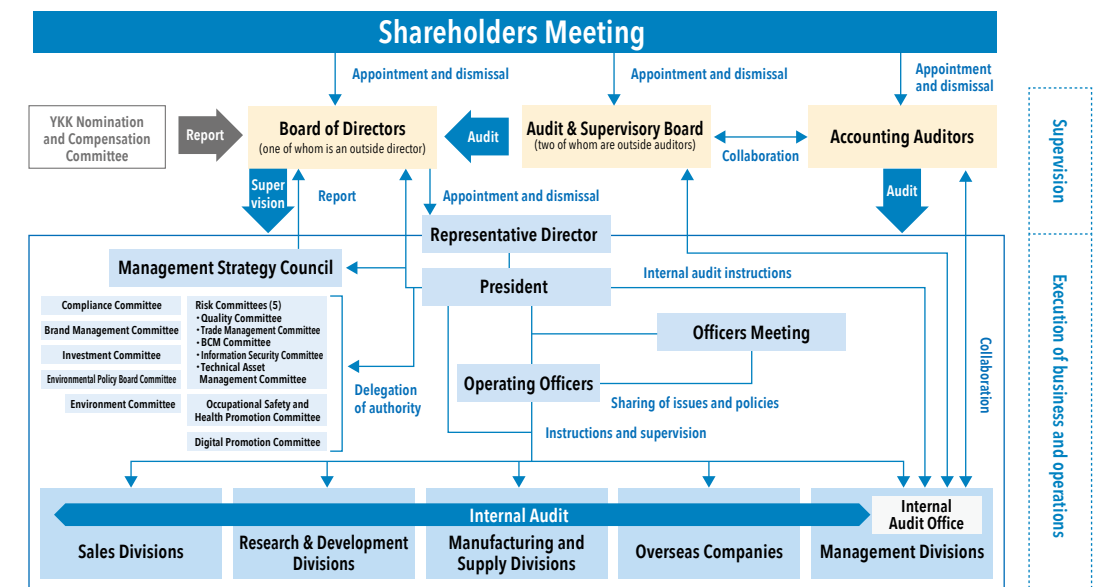
"Trust/Reliance" to Fulfill Social Responsibility

## Fair Business Practices

We aim to enhance our corporate governance system to further increase corporate value.

Based on an organizational system in which the Board of Directors serves as the decision-making and supervisory body and the Audit & Supervisory Board serves as the auditing body, YKK AP has adopted an Operating Officer System to promote the execution of business and operations.

### Corporate governance system



### Separation of management and execution (Execution of duties by directors, Operating Officer System)

Directors comply with the regulations of the Board of Directors and follow the rules regarding director duties, and carry out business appropriately based on the division of duties. They regularly attend compliance training offered by lawyers, etc., and submit to the company written oaths pledging to comply with laws and regulations in performing their duties as

directors. In addition, we have introduced the Operating Officer System to ensure the faster execution of business operations via the separation of management and execution. While directors dedicate themselves to realizing total optimization, operating officers execute individual businesses and operations with responsibility and authority, in accordance with the policies resolved on at the Board of Directors.

### Main committees for executing business/duties

Committee	Number of committee members	Number of meetings in FY2023
Compliance Committee	16	2
Brand Management Committee	33	2
Investment Committee	10	12
Environmental Policy Board Committee	12	1
Environment Committee	54	4
Quality Committee	6	4
Trade Management Committee	13	3
BCM Committee	14	3
Information Security Committee	11	4
Technical Asset Management Committee	10	3
Occupational Safety and Health Promotion Committee	28	—
Digital Promotion Committee	38	—

Details of the main committees are presented in the Sustainability Data Book.  
<https://www.ykkapglobal.com/en/sustainability/activities-data/data/governance/#section01-08>

### YKK Nomination and Compensation Committee

Members: 5 (including 2 outside directors)  
 Number of meetings in FY2023: 10


The YKK Group has set up the Nomination and Compensation Committee in YKK as an advisory body, and its members are appointed by resolution of the YKK Board of Directors. The Nomination and Compensation Committee deliberates on the election and dismissal of directors, Audit & Supervisory Board members, operating officers, and executive specialists, as well as their compensation, and reports back to the Board of Directors.

\*Number of committee members as of June 2024




"Trust/Reliance" to Fulfill Social Responsibility

Directors and Board of Directors (as of June 2024)




Chairman of the Board  
Chairman Representative Director  
Director, YKK Corporation

Hidemitsu Hori




President Representative Director

Akira Uozu




Vice Chairman Director

Shinichiro Yamaji




Director  
Executive Vice President

Kosuke Iwabuchi




Director  
Executive Vice President

Shuichi Mizukami




Director  
Executive Vice President/  
Head of Manufacturing Division

Hiroshi Abe




Director  
CHRO (Chief Human Resources Officer)

Kazuo Matsutani




Director  
Chairman, YKK Corporation

Masayuki Sarumaru



Director  
Executive Vice President

Koichi Ebihara



Director (outside)

Tomoko Inoue

Personal histories of directors and their attendance at meetings are presented in the Sustainability Data Book.  
<https://www.ykkapglobal.com/en/sustainability/activities-data/data/governance/#section01-04>

Board of Directors meetings in FY2023

Number of meetings	14 (including extraordinary meetings)
Average number of agenda items	10
Average time per meeting	3 hours
Main agenda items and reporting items	<ul style="list-style-type: none"><li>• Matters related to the Shareholders Meeting</li><li>• Matters related to directors, operating officers, and executive specialists</li><li>• Matters related to personnel and organizations</li><li>• Matters related to business</li><li>• Matters related to the disposal and transfer of important assets</li><li>• Matters related to Japan and overseas affiliated companies</li></ul>

**Policy on determination of compensation for directors**

In order to raise awareness of ensuring consistency between sustainably increases in corporate value and paying stable dividends to shareholders, as well as improving business performance, YKK AP's basic policy is to set compensation for directors in consideration of the company's results and to

The Board of Directors deliberates and resolves on important matters, determines management policies, and supervises the execution of business operations. Currently, the Board has 10 directors (no more than 10 members), and the main results of deliberations in FY2023 are shown on the left. In order to promote active discussions, important matters are discussed at the Management Strategy Council before being brought up at the Board of Directors' meeting, external Audit & Supervisory Board members (outside experts) attend and state their opinions, and the chairman, president, and Audit & Supervisory Board members exchange opinions (three times in FY2023).

In an effort to ensure transparency in the Board of Directors and further enhance corporate value, we appointed a new outside director in FY2024.

determine the appropriate level of compensation for each director in accordance with their responsibilities. Specifically, directors' compensation consists of base salary and officers' bonuses as short-term compensation and retirement benefits as long-term compensation.

Audit & Supervisory Board and Members (as of June 2024)



Chairman of the Audit & Supervisory Board Audit & Supervisory Board Member (outside)

Fuminao Hachiuma



Audit & Supervisory Board Member (full-time)

Hisao Miyamura



Audit & Supervisory Board Member YKK Corporation Audit & Supervisory Board Member (full-time)

Kiyotaka Nagata



Audit & Supervisory Board Member (outside)

Mina Sekiguchi

Personal histories of Audit & Supervisory Board members and their attendance at meetings are presented in the Sustainability Data Book.  
<https://www.ykkapglobal.com/en/sustainability/activities-data/data/governance/#section01-04>

Audit & Supervisory Board meetings in FY2023

Number of meetings	14 (including extraordinary meetings)
Average number of agenda items	3
Average time per meeting	1.5 hours
Key audit items	<ul style="list-style-type: none"><li>• Business promotion initiatives</li><li>• Initiatives to establish a common infrastructure for AP business</li><li>• Business management system for overseas affiliated companies</li><li>• Initiatives to strengthen the quality assurance system</li><li>• Safety management system</li><li>• Sustainable management initiatives</li><li>• Strengthening the business management system for domestic affiliated companies</li></ul>

The Audit & Supervisory Board, which consists of four Audit & Supervisory Board members, held 14 meetings in FY2023 to audit the execution of duties by directors from the standpoint of legality and propriety. They also attend major meetings such as the Board of Directors Meeting, express opinions as necessary, and visit each location to conduct audits in

accordance with the audit policy. Two of the Audit & Supervisory Board members are invited from outside the company. With a high level of insight, experience, and expertise in corporate management, they conduct audits from an objective and fair-minded stance.

Skill matrices

Category	Name	Company management	Global	Specialist field				
				Sales and marketing	Manufacturing and technology	Financial and accounting	Organization and personnel	Legal and compliance
Director	Hidemitsu Hori	●	●	●		●	●	
	Akira Uozu	●	●	●				
	Shinichiro Yamaji			●				
	Kosuke Iwabuchi		●			●	●	●
	Shuichi Mizukami				●			
	Hiroshi Abe				●			
	Kazuo Matsutani			●	●		●	
	Masayuki Sarumaru	●	●	●			●	
	Koichi Ebihara			●				
	Tomoko Inoue (outside)					●	●	●
Audit & Supervisory Board Member	Fuminao Hachiuma (outside)	●	●	●			●	
	Hisao Miyamura		●			●		
	Kiyotaka Nagata					●		
	Mina Sekiguchi (outside)		●	●		●	●	

Note: The above does not represent all of the expertise, knowledge, or experience possessed by each individual.



## "Trust/Reliance" to Fulfill Social Responsibility

## Roundtable Discussion: Chairman of the Board and Outside Audit &amp; Supervisory Board Members

## Incorporating an "outside pair of eyes" into decision-making and achieving growth through appropriate risk-taking



Photo, from left

Chairman of the Audit & Supervisory Board  
Audit & Supervisory Board Member (outside)**Fuminao Hachiuma**

He has served as Executive Officer &amp; Vice President of Ajinomoto, President and Representative Director of J-Oil Mills, Chairman of the Japan Oilseed Processors Association, and Chairman of the Japan Foods &amp; Biotechnology Intellectual Property Rights Center. He currently serves as an outside director of Seven &amp; i Holdings and Subaru.

Audit &amp; Supervisory Board Member (outside)

**Mina Sekiguchi**

After working for major accounting firms in Japan and abroad, she founded Resonancia LLC to promote understanding of energy. She currently serves as an outside director of PENTA-OCEAN CONSTRUCTION and as a part-time auditor at the Japan Atomic Energy Agency.

Chairman of the Board  
Chairman Representative Director**Hidemitsu Hori**

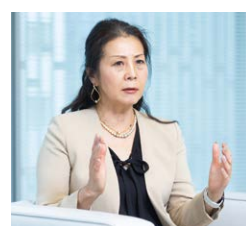
## Outside members of the Audit &amp; Supervisory Board, serving as an "outside pair of eyes"

## Advice for risk-taking with peace of mind

**Hori:** In 2024, YKK AP appointed its first outside director (Ms. Tomoko Inoue, Full-time Audit & Supervisory Board Member at Hino Motors). Mr. Hachiuma and Ms. Sekiguchi have served as outside Audit & Supervisory Board Members since 2023. They use their experience and knowledge to share their candid opinions from the perspective of those outside the company.

**Hachiuma:** As a company manager myself, I have often benefited from the help of outside members of Audit & Supervisory Boards. It is surprising what you don't realize when you are just running a business from the inside. There are things that can be seen and said only from an outside perspective.

**Sekiguchi:** When I was appointed as an Audit & Supervisory Board Member, I was told that they wanted my opinion on "what is normal and what is not in the outside world." As such, I am



aware of the need to serve as an "outside pair of eyes."

**Hori:** You have both consistently provided us with many useful observations. Particularly with regard to risk, it is very helpful

when someone points out that there has been insufficient consideration from a particular perspective.

**Hachiuma:** In today's environment, business managers must be willing to take more risks and move forward. However, there are key points that need to be addressed when doing so. Many of the problems that occur in society result from a lack of openness, a disparity between internal common sense and public perception, or leaks of information. I would like to offer advice on these factors that can damage corporate value, allowing management to move forward with confidence, taking risks correctly and appropriately.

**Sekiguchi:** Outside Audit & Supervisory Board members at listed companies give opinions on management in their capacity as representatives of a diverse range stakeholders, including minority shareholders, vendors, and employees.

Although YKK AP is a privately held company, I am mindful of the governance of listed companies, and try to speak from a similar perspective.

With the macro environment surrounding companies changing dramatically, including social conditions and climate change, it is very difficult to move toward the next stage of growth while ensuring that everything is still done properly. I would like YKK AP to maintain its unique strengths and aim to become a privately held company with excellent governance.

## For transparency in governance, obtaining information is the first step

## Identifying important agenda items and taking time for deliberation

**Hori:** YKK AP has become the market leader in window sales in Japan, and to achieve its next stage of growth, we are actively considering alliances and acquisitions to expand into new areas, including overseas markets. The lack of staffing and information may have appeared to the two of you as floundering.

**Hachiuma:** Well, YKK AP had a change of president last year. It is in the process of establishing new leadership and building a system that will move forward with a sense of urgency. This structure is not something that can be established overnight, and it was right to proceed even if there was not sufficient preparation.

**Hori:** I believe that in order to communicate to our stakeholders how we are actively moving toward growth and to ensure transparency in governance, it is first important to ascertain information within the company.

**Sekiguchi:** There is a need to strengthen communication and escalation, and to have a system in place to ensure that information on what is happening internally and externally reaches the management team in a timely manner. YKK AP is now working to centralize data, and it is also important to establish a system structure that shows exactly what is going on in terms of business operations.

**Hori:** The Board of Directors has to deliberate on and consider a large number of matters within a limited amount of time. We have given instructions to ensure that materials submitted to the Board of Directors are written in a way that is easy for everyone to understand, without using jargon or internal shorthand. I would also like to once again redefine the role of

the Board of Directors so that sufficient time can be allocated for deliberations on the company's core agenda. Going forward, we will also consider conducting effectiveness evaluations.

**Sekiguchi:** There is a lot on the Board of Directors' agenda, from mergers and acquisitions to capital investments, succession plans, globalization, systems, and more. It is important to identify the really important things that need to be resolved and to take as much time as possible for deliberation.

**Hachiuma:** It is not easy for outside Audit & Supervisory Board members to determine the specific details of each agenda item. While we make every effort to obtain information from the front lines, our role is to check the process leading up to the resolution and to ensure its legality, plausibility, and reliability. The rest is up to the executive side of things.

The question is how to create an efficient framework for future challenges while maintaining a sense of urgency.

## Working for growth based on the CYCLE OF GOODNESS® while maintaining a culture of taking on challenges

**Hori:** What should we keep in mind when aiming to become a leading company with net sales on the order of one trillion yen?

**Hachiuma:** A culture of taking on new challenges is one of YKK AP's strengths, and one that I hope you will uphold. We want to support your efforts in this regard, while keeping an eye out for any pitfalls.

In moving into new areas to achieve growth, it is imperative to achieve diversity. Creating common values within that is also a new challenge. I am confident that YKK AP, with its corporate philosophy firmly in place, will be able to achieve this goal.

**Sekiguchi:** Future growth will require broadening in terms of both geographic area and business domains. If mergers and acquisitions are used to integrate technology and human resources, it will likely transform the company into a new YKK AP, and I believe that this is where a new order will emerge. It is my hope that, based on the spirit of the CYCLE OF GOODNESS, which YKK AP has upheld since its founding, and which can be considered its defining characteristic, the company will deliver growth in the spirit of providing good things to society.





"Trust/Reliance" to Fulfill Social Responsibility

Compliance

Compliance in the YKK Group refers to "not only observing laws and regulations and internal rules, but also complying with the social norms expected of us in the course of our corporate activities." To realize compliance management, we have established a Compliance Committee consisting of five units (Sales, Development & Technology, Manufacturing & Supply, Administration, and Overseas) to strengthen monitoring of compliance with rules, regulations, and guidelines.

In addition to regular compliance training for corporate officers, all employees receive at least two hours of compliance

training per year on topics such as curbing long working hours, eliminating harassment, preventing bribery, and complying with subcontracting laws.

For persons heavily involved in compliance work, we also provide education in specialized fields led by the relevant specialized departments and committees (personnel, purchasing, health and safety management, trade management, information security, technical asset management, the environment, etc.).

Standards for compliance activities  
"YKK Global Criteria of Compliance"

YKK AP has introduced the YKK Global Criteria of Compliance (YGCC), the YKK Group's compliance standards based on the YKK Philosophy and ISO 26000, and the adoption of the YGCC at major sites in Japan and overseas was completed in FY2021. From FY2022 onward, we have been promoting the

establishment of YGCC operation while accommodating new business sites.

We regularly carry out YGCC audits such as self-inspection and internal audits. Standardized monitoring contributes to reduction of on-site workloads by eliminating duplicate monitoring items.



Operation of the whistleblowing system and ongoing activities to raise awareness of the system among users

The YKK Group implemented the "YKK Group Whistleblowing System" in 2006, establishing a system that enables individuals to consult with/report to consultation desks inside and outside the company anonymously regarding behavior that violates laws, work regulations, or internal rules. In addition, the principle of whistleblower protection prohibits the disadvantageous treatment of any individual for making a consultation.

We are also committed to the mental and physical health of our employees, and have established a consultation service to address workplace environment problems, mental health concerns, and other health issues. Whistleblowing systems have also been established at overseas companies, with systems for consultation and notification put in place.

Furthermore, in July 2023, a new "YKK Group Supplier Reporting Contact Point" was established to provide redress for those involved with the company from human rights violations that may arise in the course of corporate activities.

Risk Management

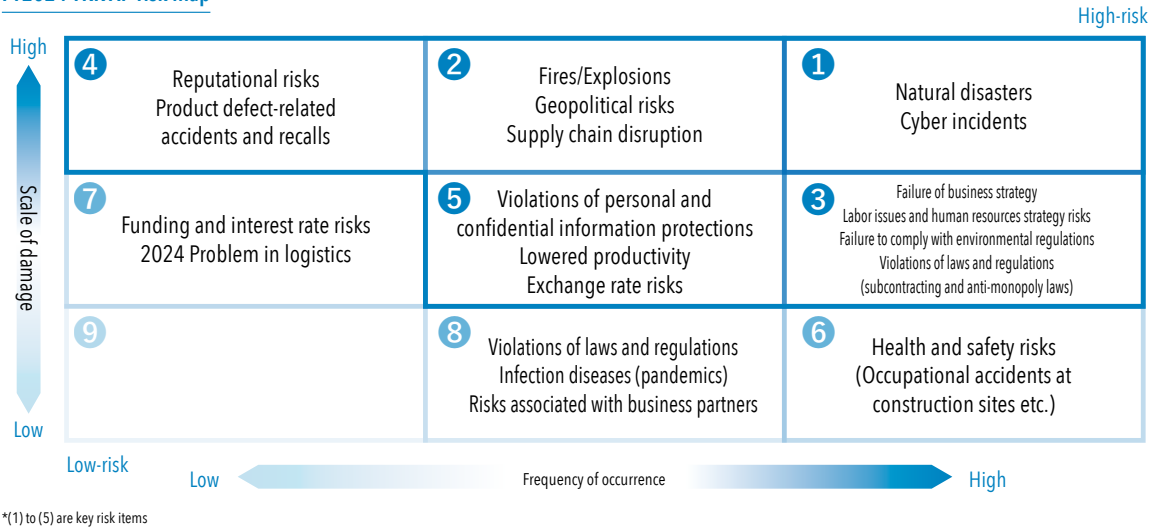
In order to strengthen the risk management system and establish a governance system for emergencies, YKK AP has formed five risk committees (Quality Committee, Trade Management Committee, Crisis Management Committee, Information Security Committee, and Technical Asset Management Committee), under the guidance of the Chief Risk Management Officer (CRO), to conduct risk management. Rules and regulations have been established for each committee and are in operation accordingly.

In FY2024, the Crisis Management Committee, which has

jurisdiction over natural disasters, fires, explosions, and social incidents, was renamed the Business Continuity Management (BCM) Committee to put a greater focus on business continuity.

We assess the risks surrounding the business and create a risk map according to changes in the environment, the urgency of response to the risks, and the expected scale of damage. Risks that have a significant impact on management are designated as key risk items, and policies and initiatives for damage estimates, proactive countermeasures, education and training, etc. are developed as appropriate to the nature of the risk.

FY2024 YKK AP risk map



Response to main key risks

**Natural disasters**  
(earthquakes, tsunamis, typhoons, torrential rains)

**External environment and potential risks**  
There is a risk that business activities may be disrupted due to damage from major earthquakes, windstorms, and floods. In addition to physical damage such as casualties among employees, diminished production capacity due to damage to equipment, etc., and restoration costs for such, business activities may suffer long-term stagnation due to the suspension of essential utilities, logistics gridlock, and other factors.

**Initiatives**

- In the event of a disaster, a task force headed by the president will be established. BCM Committee members will serve as the heads of BCP task forces for their respective functions, and will oversee, direct, and generally manage the emergency response.
- A BCM Committee has been established to deliberate and decide on policies and measures for business continuity, and is in charge of formulating, maintaining, and updating the BCP, as well as conducting education and training.

**Cyber incidents**

**External environment and potential risks**  
Trade secrets may be lost or leaked due to computer virus infections or unauthorized access, or information systems may be disrupted due to cyber-attacks or telecommunication service outages, resulting in business shutdowns. With the expansion of DX and remote work, the possibility of forced shutdowns or loss of company secrets or other data due to intrusions into information systems is increasing.

**Initiatives**

- Establishing and operating IT-BCP (action plan, system, escalation process, etc. based on IT-BCM guidelines)
- Establishing an incident response system (IT security system, IoT products)
- Strengthening response by setting up subcommittees in the Information Security Committee for specific roles

**Supply chain disruption**

**External environment and potential risks**  
The supply chain may be affected by political and economic changes in countries around the world, such as sharp increases in energy and raw material prices arising from geopolitical risks, higher logistics costs, import/export restrictions, and significant fluctuations in foreign exchange rates.

**Initiatives**

- Implementing supply chain BCP, including consideration of alternative arrangements and manufacturing policies for global supply
- Measures for goods purchasing ((1) Hedging schemes and multiple purchasing (2) Regular exchange of information with suppliers, inventory policy (3) Design and application of routes to deal with interruptions to distribution networks)
- Addressing economic downturns and increased competition



"Trust/Reliance" to Fulfill Social Responsibility

Environmental Management

Environmental targets and initiatives

YKK Group has established the "YKK Group Environmental Vision 2050," which maps out the long-term orientation of our environmental initiatives. Under this vision, YKK AP has established a goal for 2050 of "achieving zero environmental impact in our business activities throughout the entire product lifecycle."





In the Mid-term Environmental Policy for FY2021 to FY2024, we have set environmental targets for the entire value chain with the aim of resolving and contributing to the resolution of the four environmental issues of "climate change," "resource recycling," "water," and "biodiversity," and are working to achieve them.

As the system for promoting these activities, the "YKK AP Environmental Policy Board Committee," chaired by the

president, formulates and approves environmental policy and strategy from a management perspective. Under that policy, the "YKK AP Environmental Committee" incorporates the environmental policy into sales, research & development, manufacturing, management, and overseas divisions.

In addition, to confirm the progress of these environmental policies and environmental compliance, we conduct annual internal environment audits. We have also acquired ISO 14001 certification at all locations in Japan and at eleven locations overseas, and are continually working to increase the level of environmental management. In 2023, we were certified as an "Eco-First Company" by the Minister of the Environment in recognition of our position as an environmentally progressive company in the industry.

environmental burdens aimed at achieving zero environmental impacts. In particular, we have set targets for four environmental issues (see figure below) and are taking action to achieve them.

[Environmental Issues and Initiatives]		[FY2030 environmental targets (relative to FY2013)]	
<div><div>13</div><div>CLIMATE ACTION</div></div> <div>Climate change</div>	We will be proactive in the development and sales of products that contribute to the reduction of GHG emissions and products that address climate change. We will also promote efficient energy use and the introduction of renewable energy sources to achieve zero GHG emissions from our business activities and value chain.	●CO <sub>2</sub> Scopes 1 + 2: 80 % reduction in emissions ●CO <sub>2</sub> Scope 3: 30 % reduction in emissions	
<div><div>12</div><div>RESPONSIBLE CONSUMPTION AND PRODUCTION</div></div> <div>Resource recycling</div>	To minimize resource input, we will work to use materials for internal and external recycling and reduce packaging materials. In addition, to minimize waste emissions in our business activities, we will promote thorough sorting of waste and its conversion into valuable resources.	●Aluminum recycling rate <sup>*1</sup> : 100 % ●Vinyl recycling rate <sup>*2</sup> : 100 %	
<div><div>6</div><div>CLEAN WATER AND SANITATION</div></div> <div>Water</div>	To achieve sustainable use of water, we will work to recycle water in our business activities and reduce the environmental impact of wastewater.	●Water use: Reduction of 36 %	
<div><div>15</div><div>LIFE ON LAND</div></div> <div>Biodiversity</div>	We will develop individuals who can coexist with nature and contribute to local communities and society, as well as conducting environmental activities with everyone participating.	—	

<sup>\*1</sup> Ratio of input of recycled materials from the market to the input of aluminum raw materials  
<sup>\*2</sup> Rate of internal reuse of internally generated vinyl scraps

The YKK AP Environmental Management Policy and environmental promotion system are presented in our Sustainability Data Book.  
<https://www.ykkapglobal.com/en/sustainability/activities-data/data/environment/>

Disclosure of information under the TCFD

recommendations

In January 2019, YKK AP received "2°C Target" certification from the Science Based Targets (SBT) Initiative, an international organization, and in May of the same year, YKK AP endorsed the

Task Force on Climate-related Financial Disclosures (TCFD) recommendations and has assessed the impact of its business activities in terms of both climate-related risks and opportunities and reflected them in its Management Strategy.

Governance

YKK AP has a Board of Directors as the decision-making and oversight body for important matters such as management policy, an Audit & Supervisory Board as the company's auditing organization, and has introduced an Operating Officer System to help the company promote the execution of business and operations. In particular, sustainability issues are addressed by the "ESG General Meeting," chaired by the president, which conducts cross-functional activities by formulating policies from a company-wide perspective and rolling them out to related divisions and domestic and overseas group

companies. The Environmental Policy Board Committee, which is chaired by the president and has jurisdiction over the environmental area within the ESG General Meeting, formulates and approves environmental policies and strategies, including on climate change, from a management perspective, and monitors their progress. The "Environment Committee" rolls out these environmental policies and strategies to our manufacturing and sales sites in Japan and overseas, and confirms how they are being implemented through mutual internal environment audits.

Strategy

In line with the TCFD recommendations, we are identifying and assessing the significant risks and opportunities that the issue of climate change poses to the AP Business.

Type		Financial impact on the business	Measures
Transition risks	Reputation	Loss of corporate value due to delay in responding to public demands, such as carbon neutrality	With an Executive Vice President as project leader, the Carbon Neutrality Project was launched in FY2021, and six working groups were established with the participation of young engineers, with initiatives underway in each group. In FY2023, the target year for achieving carbon neutrality was moved forward from FY2050 to FY2040, demonstrating the increased urgency of our initiatives.
	Market	Increased costs due to energy resource depletion	We are promoting the introduction of high-efficiency equipment (production equipment, lighting, and air conditioning) with the aim of reducing energy consumption per unit of production by 1.3% or more per year over the medium to long term. In addition, we are implementing various measures to reduce energy consumption, such as the use of renewable energy, reductions in air leaks, and reductions in waste heat.
Physical risks	Urgent	Increased damage from natural disasters, supply chain fragmentation	In preparation for disaster and risk occurring, we have formulated BCPs at all locations in Japan and overseas. In addition, after reviewing and updating the Business Continuity Management (BCM) Code to ensure prompt implementation of BCPs, we are working to ensure it is thoroughly instilled across functional axes and on a regional site basis. In addition to purchasing materials from multiple suppliers, understanding and improving the supply chain, and securing inventories of critical management items in case of emergencies, the research and development, manufacturing, and purchasing divisions work together to set up alternative sources of supply, and other efforts taking the BCP into account are conducted from the product development phase.
	Chronic	Restrictions on business activities due to water shortages caused by reduced rainfall	Water is used for cleaning and cooling in our production processes. In some areas, there is a risk of water use restrictions due to drought, and we are working to reduce water consumption by reviewing water intake for industrial use and implementing multi-level use of water, recycling, and reclamation.
Opportunities	Products/ Services	Increased demand for high thermal insulation products	The APW vinyl window series delivers high thermal insulation performance across the board, and includes the APW 430, a world leader in this regard. By expanding sales of high thermal insulation products like these, we are not just helping to reduce energy consumption, but are also improving indoor thermal environments and providing comfortable living spaces.
		Increased demand for carbon-free and recycled-resource products (e.g., recycled aluminum)	Since recycling aluminum requires less energy, CO <sub>2</sub> emissions can be significantly reduced to only about 3% of those required to produce new aluminum ingots (new metal) from bauxite. By maximizing the use of used aluminum sashes and other materials recovered from the market, we aim to achieve an aluminum recycling rate of 100% by FY2030. To realize this goal, we are introducing an aluminum recycling furnace and developing technologies to separate out impurities.

Risk management

Risks related to the business as a whole are assessed and reviewed once a year, prioritized by "scale of damage" and "frequency of occurrence," and each risk is managed by the relevant committee or division. Climate change-related risks (natural disasters, inadequate response to

environmental regulations, etc.) are also identified as key risks and incorporated into the management process, with policies developed and monitored on a global basis by the Environment Committee and the BCM Committee.

Indicators and targets

In order to achieve carbon neutrality, we have set medium- and long-term goals certified by SBTi and formulated an environmental action plan to achieve them in conjunction with our mid-term business plan. In addition, under the "Evolution 2030" Vision announced in March 2023, we have brought forward our targets to reduce the company's own CO<sub>2</sub> emissions by 80% in FY2030 and by 100% in FY2040 (both relative to FY2013). Progress with respect to these indicators and targets is disclosed in the Environmental Report.

Indicators		Targets
Scope 1+ 2 <sup>*1</sup>	Reductions in YKK AP CO <sub>2</sub> emissions	80 % reduction by FY2030 (relative to FY2013)
Scope 3 <sup>*1</sup>	Reductions in CO <sub>2</sub> emissions in the supply chain	30 % reduction by FY2030 (relative to FY2013)
During product use <sup>*2</sup>	Increased contributions to CO <sub>2</sub> reductions	216 % in FY2024 <sup>*3</sup> (relative to FY2020)

<sup>\*1</sup>: Data from YKK AP Group (Japan + overseas)  
<sup>\*2</sup>: Data from YKK AP Group (Japan)  
<sup>\*3</sup>: Calculated based on the latest FY2024 plan



## "Trust/Reliance" to Fulfill Social Responsibility

### Addressing Climate Change

YKK AP is working to reduce GHG emissions and adapt to climate change in all of its business activities. We are proceeding with initiatives based on the carbon neutrality roadmap developed by the Carbon Neutrality Project, which is led by an Executive Vice President. Aiming to achieve a 80% reduction in Scope 1 and 2 and a 30% reduction in Scope 3 relative to FY2013 by FY2030, we will accelerate capital investment and technological development while reviewing each platform for products and monozukuri.

#### Scope 1 and 2 initiatives

We are working to reduce the amount of fuel and electricity used in our manufacturing processes. In addition to improving the efficiency and energy-conservation performance of our production facilities, we are electrifying our heat source equipment and switching from liquid fuels to natural gas. Furthermore, we are using existing technologies to develop and demonstrate the use of hydrogen, ammonia, and other substances in our gas burners.

We are also working on energy creation from renewable sources, such as solar, hydro, and wind, and as of FY2023, we have increased the amount of renewable energy installed to five times the FY2021 level.

In order to measure our progress in reducing CO<sub>2</sub> emissions, we established a database to visualize CO<sub>2</sub> emissions by identifying the energy consumption of each piece of equipment at the manufacturing stage.

As of FY2023, we have reduced Scope 1 and Scope 2 emissions by 33% relative to FY2013 levels.

#### Scope 3 initiatives

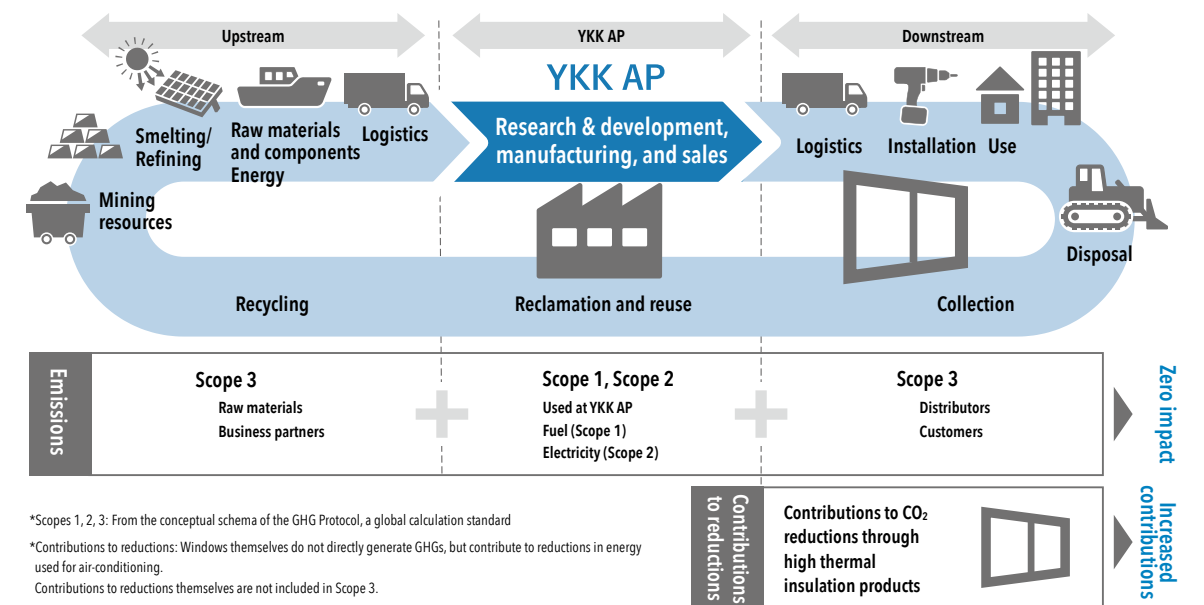
Scope 3 emissions account for the majority of the CO<sub>2</sub> emissions associated with YKK AP's business activities across

the supply chain as a whole. Of these, emissions from the procurement of raw materials for products account for 80% of the total. In particular, the procurement (mining, refining, and overseas transportation) of aluminum ingots used for aluminum products and other products has a significant impact, and increasing the utilization rate of recycled materials (re-used raw materials such as aluminum scrap recovered from the market) will have the greatest impact toward achieving carbon neutrality. All aluminum scraps generated in the manufacturing process are reused, and we have already achieved an internal recycling rate of 100%. Furthermore, we are aiming to achieve a 100% aluminum recycling rate for materials on the market generated outside the company, and have improved this rate to 33% as of FY2023. We are involved, as the lead company, in the "Creation of a Toyama Resource Recycling Society Model," an industry-academia fusion hub concept project to revitalize aluminum-related industries in Toyama Prefecture, led by the University of Toyama. In this way, we are conducting in-depth technical development of aluminum recycling through collaboration between industry, government, academia, and the private sector.

In regard to logistics, as of FY2023 we have introduced 15 double-trailer trucks for transportation over land, increasing the amount of cargo transported at once by 1.8 times the previous level. By introducing "trunk line relay transportation," which includes consolidating transportation routes and improving loadability by combining partial loads, "secondary delivery," which includes joint delivery and alternate-day delivery, and "modal shift," which includes using railroad containers, we are making ongoing efforts to reduce CO<sub>2</sub> emissions.

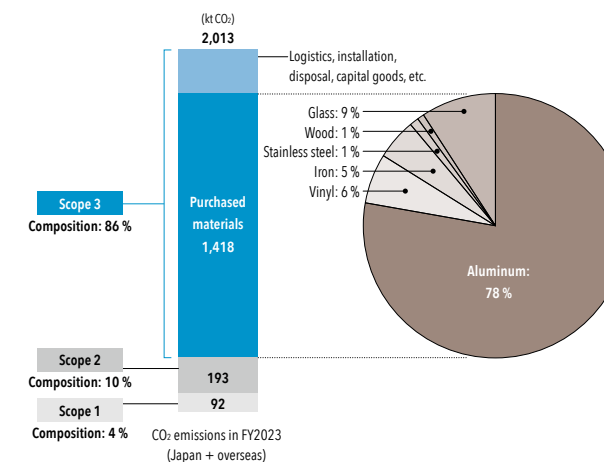
As of FY2023, we have reduced Scope 3 emissions by 10% relative to FY2013 levels.

### Lifecycle of YKK AP products and CO<sub>2</sub> emissions



### Breakdown of YKK AP's CO<sub>2</sub> emissions (FY2023)

In the supply chain as a whole, procurement of materials (smelting, etc.) under Scope 3 accounts for a large proportion of emissions, and aluminum materials account for a large proportion of these.



Aluminum, also known as "electricity in a can," requires a large amount of electricity for electrolysis to refine it from raw materials such as bauxite. However, because aluminum can be remelted using only a small amount of energy, aluminum recycling plays a very important role in reducing CO<sub>2</sub> emissions.

#### Scope 1, Scope 2

##### Expand installation of solar power generation, small-scale hydroelectric power generation, and wind power generation

One of the six working groups of the Carbon Neutrality Project, which is part of our efforts to achieve carbon neutrality, the Energy Creation Working Group (WG) is promoting the introduction of in-house use of renewable energy on the company's own premises. To date, a total of 9,792 kW of solar and small-scale hydroelectric power generation has been installed at nine locations in Japan and overseas. Furthermore, we will accelerate the installation of renewable energy with the goal of expanding energy creation to a total of 15,300 kW by FY2024 and reducing CO<sub>2</sub> emissions by 7,900 tons vs. FY2020.

We are also working to further expand the use of wind power along the coast by conducting installation trials.



Left: are solar panels installed at DALIAN YKK AP CO., LTD.  
Right: is wind power generation equipment installed at the Kurobe Ekko Plant

#### Scope 3

##### Introduction of YKK AP's first aluminum recycling furnace

YKK AP is introducing recycling furnaces in order to increase the company's ratio of input of market-obtained recycled materials to the input of aluminum raw materials. While ordinary melting furnaces can melt large quantities of market-obtained recycled materials by heating them with a burner, adding large quantities of such materials leads to oxidation and increased aluminum depletion. A dedicated recycling furnace, which uses a different method than a melting furnace, can reduce the amount of wear and tear during aluminum melting.

In September 2023, the Shikoku Plant installed YKK AP's first recycling furnace and began operation. By combining this recycling furnace with our melting furnaces, we were able to increase the recycling rate for market-obtained materials generated outside the company, reaching 50% in a single month in December 2023.



Recycling furnace at the Shikoku Plant.  
At the back left is an automatic material feeder



## "Trust/Reliance" to Fulfill Social Responsibility

### Resource Recycling (Circular Economy)

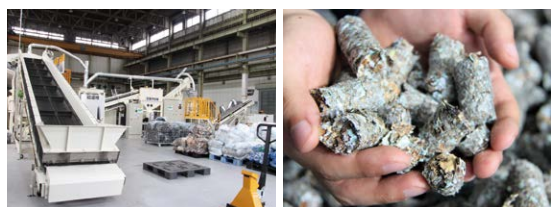
YKK AP is working to develop products that take into account resource recycling and establish a system to provide products with low environmental impact, thereby minimizing the environmental impact generated after products are shipped, during the distribution process, during use, and after use. In addition, in order to reduce the amount of waste generated throughout the product lifecycle, we analyze the factors that cause waste to be produced and promote the sustainable use of resources by adopting the concept of the "circular economy."

#### Installation of RPF production equipment and expansion of operations

YKK AP has been engaged in the "3Rs"\* of reducing, reusing, and recycling waste and other materials. At the RPF (solid fuel derived from paper and plastic) manufacturing facility that has been in operation at the Kurobe Ekko Plant since FY2021, a system for sorting and collecting raw materials from major plants in Toyama Prefecture has been established, and in FY2023, 212 tons of RPF was produced and sold, against a planned output of 203 tons.

As of FY2023, we had reduced the total amount of waste emissions in Japan and overseas by approximately 35%, in units of intensity, relative to FY2016.

\*The 3Rs: Reduce, Reuse, Recycle



Left: RPF manufacturing equipment in operation at the Kurobe Ekko Plant. Right: Finished RPF

#### Social implementation of vinyl window recycling

In order to implement recycling of vinyl windows circulating on the market, thereby reducing the amount disposed of in landfills, YKK AP is participating as a member of the "Vinyl Window Recycling Committee," which is formed mainly of industry associations. The association is engaged in industry-government-academia collaboration to establish a system to collect and recycle vinyl windows after use.

Furthermore, in January 2024, it announced its "Vision for Vinyl Window Recycling." This vision sets goals such as bringing recycled products to market by the end of 2024 and utilizing 10,000 tons of recycled materials annually by 2030, and is stepping up the pace of these initiatives.



Regular meeting of the Vinyl Window Recycling Committee

#### Toward improved vinyl recycling rates

We are also actively engaged in recycling the vinyl produced during the manufacturing process for vinyl windows and after use. We have installed crushing and sorting equipment at each of our vinyl window manufacturing sites, and by reusing the materials as raw materials for vinyl profiles and gaskets\* for insulating glass, our internal recycling rate had improved to approximately 45% by the end of FY2023.

\*Parts used to fit glass into sashes



Left: Vinyl scraps generated during the vinyl window manufacturing process. Right: A vinyl profile made from reused vinyl scraps (gray parts are recycled materials)

#### Implementation of guidelines for environmentally friendly design

To minimize CO<sub>2</sub> emissions throughout the supply chain, YKK AP applies its "Environmentally Friendly Design Guidelines" during product development. We evaluate and improve products with respect to the following five items over the product lifecycle: "visualization of CO<sub>2</sub> emissions," "standardization of packaging materials," "visualization of environmentally hazardous substances," "ease of disassembly and separation," and "environmentally friendly design guidelines and evaluation methods." In particular, with regard to packaging materials, we are expanding the use of reusable packaging materials and reducing the amount of plastic used. In FY2023, CO<sub>2</sub> emissions were calculated when developing new products, and further reductions were explored.

#### Environmental Topics

In accordance with the YKK philosophy — CYCLE OF GOODNESS®, YKK AP's social contribution activities in Japan and overseas include community-based environmental conservation activities and support for educating the next generation of children and students, who will take on the

burden of our future. In addition, we are actively working on energy conservation and energy creation to reduce our environmental impact, as well as raising awareness among our employees. Here are some of the topics that we are working on as we move toward "co-existence with the environment."

#### [Conservation of Biodiversity]

##### Contributing to decarbonization through mangrove planting (Indonesia)

As part of its social contribution activities, PT YKK AP INDONESIA has been working with related government agencies and agricultural partners in the Tangerang region to conserve mangroves since 2015. It is believed that mangroves absorb very large amounts of CO<sub>2</sub>, thereby contributing to decarbonization, and a total of 31,000 saplings have been planted to date. The trees planted in June 2023 were of the "Bruguiera cylindrica" variety. This is a rare type of mangrove that requires protection, as it needs human assistance in the nursery and can only be seeded once a year. These environmental conservation initiatives will be conducted on an ongoing basis going forward.



Mangrove planting activities with relevant government agencies in Tangerang, Indonesia

#### [Supporting Education of the Next Generation]

##### Donations of medaka fish to local elementary schools Oshiete!! Medaka-Sensei Project (Japan)

As part of its activities to support environmental education, the Kyushu Plant has conducted the "Oshiete!! Medaka-Sensei Project" every year since 2010. Japanese medaka (ricefish), an endangered species, are bred and raised at the plant, and a cumulative total of 1,800 fish have been donated to elementary schools in Yatsushiro City, Kumamoto Prefecture, as science teaching materials, and classroom visits are also conducted. Now in its 15th year, children from the elementary schools to which fish were donated in the early years of the project have joined YKK AP. Working in the Environmental Facility Management Office, the division that oversees the project, they are now raising medaka themselves. Through social contribution activities undertaken as part of our business, we will continue to communicate the importance of environmental conservation.



Donation of medaka to an elementary school in Yatsushiro City, Kumamoto Prefecture in May 2023



Inspecting energy-saving equipment at the Kurobe Plant

#### [External Evaluation of Environmental Initiatives]

##### Achieved an "Outstanding Business Operator (Class S)" rating under the Energy Conservation Act for nine consecutive years (Japan)

Through investments in energy-conservation equipment and the installation of solar power generation equipment for self-consumption, YKK AP has achieved reductions in energy use that exceed the effort targets set as standards under the Energy Conservation Act (Act on Rationalizing Energy Use). As a result, the company received the highest rating of Outstanding Business Operator (Class S) in the Business Operator Classification Evaluation System (for submission in FY2023) conducted by the Agency for Natural Resources and Energy. This is the ninth consecutive year since FY2016, when this system was first established, that YKK AP has been awarded this rating.

Water resources and biodiversity initiatives are presented in our Environmental Report. (In Japanese only)  
<https://www.ykkapglobal.com/ja/sustainability/environment/report/>



The 6th Mid-term Management Plan

The YKK Group 6th Mid-term Management Vision

Technology Oriented Value Creation

- Creativity to Realize a Sustainable Society ..... Product appeal & proposal capability / Technology & manufacturing capability / Diverse human assets

The 6th Mid-term Business Policy

Providing Social Value through Products and Realizing Manufacturing Reform

- Providing Social Value through Products ..... Providing products that meet the demands of society, including safety, security, energy conservation, easy installation, health, disaster prevention, ventilation, and others
- Realization of Manufacturing Reform ..... Manufacturing reform by enhancing technological capabilities (Machinery and Engineering (KOKI) integration), platforming & smart factorization / Developing technologies for achieving carbon neutrality

The 6th Mid-term Business Plan

In FY2023, domestic demand for energy-saving renovations increased due to the 3-ministry subsidy scheme, and sales of remodeling products, such as vinyl inner windows and products for commercial buildings, grew substantially. Overseas, meanwhile, performance was particularly strong in China, Taiwan, and Indonesia. As a result, net sales totaled 538.1 billion yen (105.8% of the previous year's), a record high for the third consecutive year, and operating income was 25.6 billion

yen (143.5% of the previous year's). In FY2024, the final year of the mid-term management plan, the company will work on priority measures based on its Business Policy. In Japan, this will involve promoting higher thermal insulation performance and higher added value in the Residential and Commercial businesses, as well as enhancing thermal insulation proposals using the ongoing 3-ministry subsidy scheme. Overseas, in North America, we will strengthen our manufacturing and supply system by establishing a new site for manufacturing commercial architectural products and operating a new vinyl window plant, and in Asia, we will work to build a foundation for the Curtain Wall (below, "CW") Business, centered on YHS International and Siam Metal in Thailand. Planned net sales and operating income are 577.9 billion yen (107.0% of the previous year's) and 27.6 billion yen (110.3% of the previous year's), respectively.

Unit: 100 million yen

	FY2021 (Results)	FY2022 (Results)	FY2023 (Results)	FY2024 (Plan)
Net sales	4,463	5,086	5,381	5,779
Operating income	173	178	256	276
Operating income ratio	3.9 %	3.5 %	4.8 %	4.8 %

The 6th Mid-term Investment Plan

In order to further grow our business both domestically and internationally, we have drawn up a record-breaking investment plan for the 6th Mid-term Management Plan. With respect to

Unit: 100 million yen

	FY2021 (Results)	FY2022 (Results)	FY2023 (Results)	FY2024 (Plan)
Japan	226	201	361	280
Overseas	37	135	81	94
Total	264	337	443	375

Note: Based on orders

capital investment plans, in addition to investments necessary for business continuity, such as for replacement of aging equipment and health and safety reasons, we will advance aggressive production expansion and rationalization investments where the expected returns ensure the investment's rationality.

In FY2024, we plan to invest a total of 37.5 billion yen. In Japan, this will be focused on production increases, support for new products, digital-related activities, streamlining support, and infrastructure consolidation, and overseas, on production increases and streamlining support in Indonesia and India.

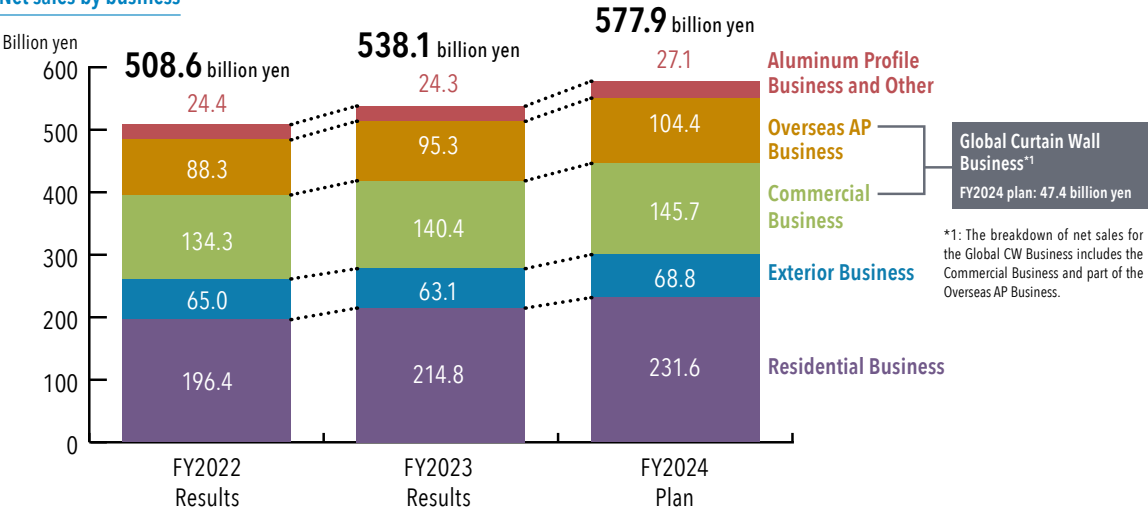
Business Portfolio

Business Portfolio

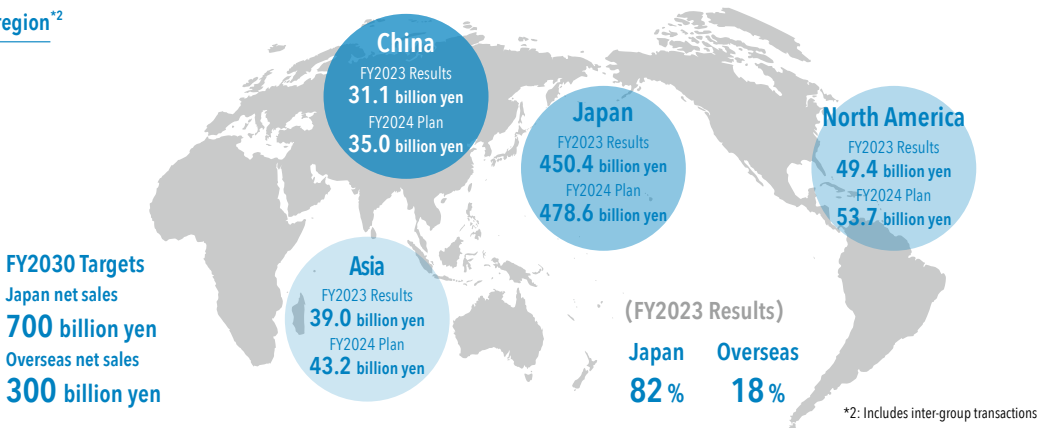
YKK AP considers its business portfolio to comprise the business fields of Residential, Exterior, Commercial, Global CW, Aluminum Profile, and Overseas AP, and the regional divisions of Japan, North America, China, and Asia. In each business and

region, we are implementing business strategies based on the 6th Mid-term Management Plan and strategies to achieve "Evolution 2030."

Net sales by business



Net sales by region<sup>\*2</sup>



Future outlook

To achieve YKK AP's "Evolution 2030," which aims for net sales on the order of 1 trillion yen, we are forecasting net sales of 700 billion yen in our domestic business and about 300 billion yen in our overseas business. Two initiatives are essential to achieving this: growing existing businesses and developing new businesses. The development of new businesses is aimed at the peripheral areas of existing businesses. For example, YKK AP Healthcare, founded in 2024, hopes to develop unique healthcare products and services related to our existing

businesses, such as interior architectural products.

M&As and new businesses require investments to be effectively timed. We have established guidelines to ensure that, even if we fail to achieve the desired results, the impact on the company as a whole will be minimized. In order for us to take on the challenge of these new businesses, existing businesses are also required to generate profits. We will seek to improve profit margins by creating demand, improving the unit price of proposals by providing added value, and improving and streamlining the supply system.





## Residential Business

### Proposing comfortable lifestyles, starting with windows and doors

- A wide variety of high thermal insulation windows for healthy and comfortable living
- Disaster prevention and mitigation products with a focus on safety and security that support the building of earthquake- and typhoon-resistant homes
- An enhanced lineup of products for remodeling windows and doors in the private areas of condominiums and single-family homes
- Use of account management to provide business partner-specific product proposals

#### Main products

- ◎ Windows
- ◎ Entrance doors/sliding doors
- ◎ Interior doors/partitions
- ◎ Window shutters
- ◎ Remodeling windows/doors
- ◎ Quake-resistance retrofitting
- ◎ Window and door products for home builders (prefabrication)
- ◎ Doorways and windows for modular bathrooms



Planned net sales for FY2024 **231.6 billion yen**

Number of sales sites: **96**

Number of manufacturing sites: **16** \*As of April 2024

#### Market environment and business strategy

Although new housing starts in Japan is declining, demand for high thermal insulation window and door products and window and door remodeling is being driven by government subsidy schemes. The sales volume of vinyl windows in FY2023 was 103% of the previous year's level, with the APW 430 high performance triple-glazed vinyl window in particular, at 130% of the previous year's level, driving the shift to higher thermal insulation performance. The rate of vinyl window use in sales for single-family homes in Japan was 35%, and the combined rate of high thermal insulation products, comprising vinyl windows and aluminum-vinyl composite windows, was 79%. In window and door remodeling products, the sales volume of inner window products increased to 211% of the previous year's. The home builders field (prefabricated) has seen a slowdown in contracting work, and a shift to strengthening of wooden houses and homes built for sale is underway. Net sales for remodeling products and modular bathrooms were 175% and 102% of the previous year's, respectively.

In FY2024, we aim to achieve a 90% installation rate for high thermal insulation windows through initiatives such as sales of wooden windows and stronger vinyl window proposals aimed at builders of homes for sale. Other measures to be pursued include enhanced support for subsidy schemes based on improved high thermal insulation products, expansion of sales channels for interior architectural products, and commercialization of panels with built-in windows. Looking ahead to 2030, we will pursue further evolution of windows through greater market penetration of wooden windows, proposals for total thermal insulation of entire houses based on integrated insulated building envelope solutions, and the generation of demand for interior architectural products. Meanwhile, in order to achieve carbon neutrality by 2050, we are also working to reduce CO<sub>2</sub> emissions throughout the lifecycle of our products.

#### Major topics for FY2023

##### Further strengthening of production capacity for inner windows and vinyl windows

With the decision to continue the subsidy scheme supporting energy conservation in housing, implemented in collaboration between the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment, demand is expected to continue increasing. As such, we are expanding our production system by bolstering production capacity for inner windows. New production lines have been built at the Tochigi Factory, Hyogo Factory, and Kyushu Plant, increasing nationwide production capacity by approximately 4.5 times relative to FY2022. We have also enhanced our production system for vinyl windows, and in October 2023 we began production of APW 430 high-performance triple-glazed vinyl windows at our Namerikawa Plant (Namerikawa City, Toyama Prefecture), our third production site for these windows in Japan, following the Hokkaido Factory and the Tohoku Plant, MADO (Window) Factory.



Mado Remo - PLAMADO U Inner Window

## Exterior Business



### Proposing spaces that make living more comfortable

- Fully coordinated proposal capability for buildings and exteriors
- Creating markets through proposal-based products for comfort in buildings and exteriors and garden space
- Ensuring ease of selection through the development of a product system for luxury, mid-range, and regular product types

#### Main products

- ◎ Balconies
- ◎ Carports
- ◎ Gates & fences
- ◎ Terraces
- ◎ Exterior materials



Planned net sales for FY2024 **68.8 billion yen**

Number of sales sites: **33**

Number of manufacturing sites: **9** \*As of April 2024

#### Market environment and business strategy

The wall exteriors market has been particularly lackluster due to a decline in new housing starts and rising material prices, and the garden exteriors market is also shrinking. Given these market conditions in FY2023, sales of wall exterior products were lower than the previous year, and sales of exterior products such as gates and fences were also lower than the previous year, a result of cuts in budgets for exterior construction. Conversely, demand for folded-plate roof carports, which are designed to resist wind pressure and snow buildup, expanded to include non-snowy regions, and sales exceeded market conditions to reach 106% of the previous year's level.

In FY2024, the Exterior Business will continue strengthening its organizations and systems corresponding to sales channels, based on a policy of "boosting sales by providing fully coordinated proposals for buildings and exteriors." In the new construction, exterior, and remodeling sectors, we will strengthen and expand sales of garden exteriors, with a focus on home builders, and wall exteriors, with a focus on sales channels. For custom-built homes, we will offer value-added proposals through "all-inclusive building and exterior designs," and for homes built for sale, we will promote proposals that integrate buildings and exteriors into a unified cityscape. Looking ahead to 2030, we will continue to develop and propose products based on the same concept, while also strengthening our proposals for coordinated garden exterior products, which offer functionality, design, and added value. We will also pursue product development and production systems aimed at carbon neutrality, as well as development of easy-installation products and disaster prevention products.

#### Major topics for FY2023

##### Strengthening the organizational system for each channel

To strengthen sales in the residential sector, including the Exterior Business, we are developing existing sales channels and strengthening the organizational structure for each channel. In FY2024, in order to coordinate route and direct sales channels in the Residential Business and distributor channels in the Exterior Business, we established the Residential & Exterior Business Division to oversee the divisions in these two businesses. The divisional functions of the Residential and Exterior businesses will be integrated, and each division will be organized to specialize in strategic and policy planning and the implementation thereof. In this way, through policy coordination and integration of divisional office functions, we will work to further grow sales in the residential sector.







## Commercial Business

### Creating beautiful and functional urban spaces

- Strong product appeal long recognized by users, including office building windows and curtain walls
- Sales and proposal capabilities through a nationwide sales network
- Technical capabilities to handle high-difficulty properties

#### Main products

- ◎ Commercial windows
- ◎ Curtain walls (custom and standard)
- ◎ Commercial entrances
- ◎ Windows and doors for multi-family residences
- ◎ Remodeling products



Planned net sales for FY2024 **145.7 billion yen**

Number of sales sites: **77**

Number of manufacturing sites: **8** \*As of April 2024

#### Market environment and business strategy

In the new construction sector, the market for multi-family residences is shrinking due to the aging population and fewer households, while the market for non-residential properties is shrinking due to the decline in large-scale redevelopment projects. In the renovation sector, multi-family residences have seen an increase in the number of stock properties in the optimal age range for renovation and an increase in demand for renovation due to government subsidy schemes, while the non-residential market has remained strong due to an increase in demand for renovations of educational facilities aimed at extending their service life and adding disaster prevention measures. Given this environment, in July 2023 we put the Saitama Factory new building into operation and reorganized our manufacturing and supply system in the Tokyo metropolitan area. As sales measures, we have enhanced our sales development system and customer contact points to increase orders. In the renovation sector, we strengthened proposals for taking advantage of government subsidy schemes for multi-family residences, and for service life-extending renovations for educational facilities. As a result of these initiatives, net sales came to 105% of the previous year's level.

In FY2024, we launched the SYSTEMA 81u unitized curtain wall for mid-rise buildings in April, and we will work to popularize the product by promoting its value in terms of labor savings, shorter installation period, safety, and quality. In addition, we will use the opportunity provided by the EXIMA 55, an aluminum-vinyl composite window for commercial buildings scheduled for release in September, to promote higher thermal insulation performance in non-wooden buildings. The goal is to achieve a 50% rate of high thermal insulation performance in commercial buildings by 2030, and to achieve decarbonization and carbon neutrality by 2050. To address the shortage of technicians, we will work to develop human resources and labor saving measures.

#### Major topics for FY2023

##### Reorganization of the manufacturing and supply system in the Tokyo metropolitan area and strengthening of the renovation sector

In July 2023, operations began in a new building at the Saitama Factory. Making this the core plant for our Commercial Business, we will reorganize our manufacturing and supply system to increase our competitiveness in the Tokyo metropolitan area and other parts of eastern Japan, further improve productivity, and enhance our services. In the renovation sector, we took advantage of the 3-ministry subsidy scheme to promote the creation of a market for large-scale remodeling of multi-family residences. In September 2023, we launched APSWORD NEO-LB (GRAF method), an aluminum-vinyl composite window specially designed for renovation of low-rise buildings. Going forward, we will launch the EXIMA 55 (GRAF method), an aluminum-vinyl composite window for mid- to high-rise construction, promoting higher thermal insulation performance in commercial buildings.



Saitama Factory new building



## Global Curtain Wall Business

### Contributing to the creation of urban spaces by integrating manufacturing, sales, and technology

- The ability to make proposals to create the highly challenging facades that customers demand
- Technical capabilities that enable us to solve problems in building exteriors as the situation demands
- Process management capabilities to carry out large projects
- A flexible production system with manufacturing sites around the world (Japan, China, North America, and Thailand)

#### Main products

- ◎ Curtain walls and other products for commercial building facades (custom and semi-custom)



Planned net sales for FY2024 **47.4 billion yen**

\*Japan (large-scale, high-difficulty sector): 25.8 billion yen, Overseas: 21.6 billion yen

Japan business sites **5**

Overseas business sites **6** \*As of April 2024

#### Market environment and business strategy

The market for the Global Curtain Wall Business is expanding, with rising demand for green facades and renovations in metropolitan areas, especially in developed countries, as well as growing demand for new construction in emerging economies. In Japan, demand in the large-scale, high-difficulty sector is expected to continue, especially in metropolitan areas, while in Asia, the use of 3D exteriors and large glass facades in podium areas is increasing. In FY2023, net sales in Japan were 24.2 billion yen due to strong sales for large properties, backed by a track record of safe and reliable technical capabilities in the super high-rise, high-difficulty sector. In the global market, the Global Curtain Wall SUMMIT 2023 was held to bring together all of our Global Curtain Wall sites and strengthen our global operations infrastructure. Meanwhile, we also made YHS International Ltd., a major curtain wall manufacturer in Thailand, one of our consolidated subsidiaries. As a result of these initiatives, overseas net sales amounted to 20.5 billion yen.

In FY2024, we will continue to enhance the profitability of existing businesses and strengthen our global operations infrastructure. Looking ahead to 2030, we will also work to establish a flexible and resilient global manufacturing and supply system, pursue competitiveness by enhancing integrated manufacturing and sales operations, differentiate ourselves through environmental facade technology, and enter new markets using business models tailored to the characteristics of individual areas.

#### Major topics for FY2023

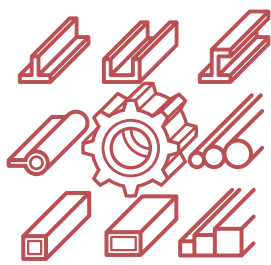
##### Building a global supply system, starting with the Asia region

In December 2023, we acquired shares in YHS International Ltd., Thailand's largest curtain wall manufacturer, and its manufacturing company, Siam Metal Co., Ltd., to build a foundation for our Asian curtain wall business, with Thailand as its base. Starting by bolstering our supply capabilities in Asia, we will work to build a stable supply system on a global scale. Through such measures as optimizing property management methods and resources, we will increase overseas sales by strengthening our global operational infrastructure. In addition, we will implement specific market-entry models for each of our existing and new businesses, resulting in products and supply chains that are tailored to the needs of each market.



Exterior view of YHS International Ltd. factory (above), Curtain wall assembly process at YHS International Ltd. factory (below)





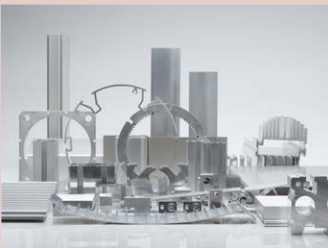
## Aluminum Profile Business

### Supporting the industrial sector with aluminum profiles

- Providing high quality aluminum profiles based on our advanced technological skills, cultivated through the manufacturing of aluminum architectural products
- Integrated production from casting, extrusion to surface treatment at four manufacturing sites in Japan
- Ownership of large 14-inch (6,500 tons) and 10-inch (4,000 tons) extruders

### Main products

- ◎ Components for machinery equipment
- ◎ Auto parts
- ◎ Architectural components
- ◎ Eco-friendly products, sustainable products



Planned net sales for FY2024 **27.0 billion yen**

Number of sales sites: 6

Number of manufacturing sites: 4

\*As of April 2024

### Market environment and business strategy

The construction sector, our main segment, is in a difficult situation due to a slowdown in new housing starts and other factors, but new demand related to the shift to electric vehicles, automation, and labor saving is emerging in the non-architectural products sector. In FY2023, despite the positive news of a recovery in automobile production, the Aluminum Profile Business was significantly impacted by the slowdown in new housing starts, resulting in a sales volume of 99% of the previous year's level. However, the number of transactions increased, primarily in the key area of construction products, and our market share exceeded that of the previous year. Net sales were 99% of the previous year's level, reflecting a decline in sales linked to the aluminum ingot market.

In FY2024, in the construction sector, we will strengthen our points of contact with our business partners and pursue further brand change. In the non-architectural products field, manufacturing, sales, and technology will work in unison to expand market share by capturing growing demand for electric vehicles and similar products. Furthermore, looking ahead to 2030, we aim to expand our business as the "manufacturer of choice" by making proposals that lead to sustainable growth for our business partners. In order to reliably meet needs alongside highly specialized engineers and manufacturing staff, we will also continue to develop human resources who can provide value to our business partners and society.

## Main Initiatives



### Healthcare

A new company, YKK AP Healthcare Inc., was founded in January 2024 to plan, develop, and market healthcare-related products and services. In collaboration with healthcare-related companies, YKK AP will create a health management model that utilizes sensing technology for the early detection of disease and other health issues in buildings. We will also work to create new value for our customers by developing YKK AP's own healthcare products and services related to existing business areas such as interior architectural products.



### Building Integrated Photovoltaics

In May 2024, we entered into a business alliance with KANDENKO CO., LTD. for the development and promotion of Building Integrated Photovoltaics (BIPV). Expanding the area devoted to photovoltaic power generation is essential for realizing a renewable energy society. BIPV, which utilizes the windows and walls of commercial buildings, is a promising solution to these issues. This initiative will aim to popularize BIPV, with YKK AP responsible for product development and KANDENKO for installation technology and system development.



## Overseas AP Business

### Operating businesses rooted in individual countries and regions

- Global operations in 11 countries and regions, primarily in North America, China, and Asia
- Product development tailored to the climate and culture of the countries and regions in which we operate, combined with local manufacturing and sales systems
- A system for providing technical and manufacturing support from Japan

Planned net sales for FY2024 **104.4 billion yen**

Number of sales sites: 48

Number of factory sites: 12

### Market environment and business strategy

While markets in individual foreign countries and regions are shrinking, sales of architectural products for commercial and residential buildings in North America are up from the previous year, and in terms of domestic demand in China, sales in the mid-range market are strong. In Taiwan, sales of products for multi-family residences have been strong, and in Indonesia, sales of new aluminum products in the residential sector have remained brisk.

Going forward, we will aim for further growth of existing

businesses in each country and region in order to achieve the goal set out in "Evolution 2030," which is to achieve overseas net sales of 300 billion yen. In addition, the Global Curtain Wall Business Division will play a central role in expanding the unitized CW business overseas, while seeking synergies with ERIE ARCHITECTURAL PRODUCTS in North America and YHS International in Thailand. Consideration is also being given to entering the European market. A target has been set of 100 billion yen in capital investment by 2030.

## North America

### Vision and business strategy

YKK AP AMERICA designs, manufactures, and sells products centered on commercial aluminum architectural products for the Commercial Business and residential vinyl windows for the Residential Business. In particular, it focuses on products that meet regional needs such as thermal insulation products that lead environmental policy, safety products that address the increasing risk of hurricanes and more, and unitized curtain walls that address personnel shortages.

We have set "Establish the AP America Group as the Dominant North American Architectural Products Company" as the business policy in the 6th Mid-term Management Plan. In the Commercial Architectural Products Business, a new integrated manufacturing and sales facility was founded in California in April 2024. While strengthening sales on the West Coast of the U.S.A., we will expand our property business by leveraging our regionally-based service model and design capabilities. Furthermore, in cooperation with ERIE ARCHITECTURAL PRODUCTS, we will work to expand our customer base in North America and increase orders through technical proposals. Meanwhile, in the Residential Architectural Products Business, production of vinyl windows at a new plant began in December 2023. We will utilize new products produced in our state-of-the-art facilities, equipped with highly efficient integrated production systems, to strengthen sales in untapped areas within six southern states in the U.S.A.



Products:  
Windows and sashes, curtain walls, doors





## China

### Vision and business strategy

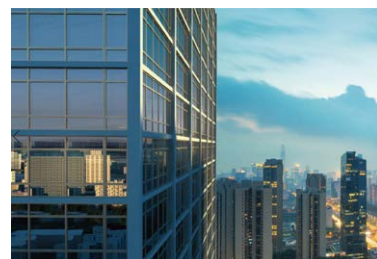
Our business in China is operated by YKK AP (CHINA), which designs, manufactures, and sells aluminum and thermal insulated aluminum profile products for the Chinese domestic market, YKK AP (SUZHOU), which manufactures components, curtain walls, and window products as a global manufacturing and supply base, DALIAN YKK AP, a manufacturing base for vinyl profiles for the Japanese market, and YKK AP (CHINA) INVESTMENT, which oversees the aforementioned companies. The YKK AP brand is also highly regarded in China, having been the first foreign company to win the "Architectural Windows and CW Industry Brand List, Top 10 Windows Brand List" for nine consecutive years.

The business policies of the 6th Mid-term Management Plan are to "expand business by accelerating growth of existing businesses and developing new businesses" and "rebuilding the manufacturing and supply system to support sustainable growth." As priority measures, we are working to develop new customers in the mid-range market in the domestic business and to expand sales channels in the renovation business. Going forward, we plan to further expand sales by strengthening proposals for wide-opening products and new anodized aluminum colors for the new housing market, and by introducing ventilation products and other products specifically aimed at the renovation market.



#### Products:

Windows and sashes, curtain walls



## Indonesia

### Vision and business strategy

Indonesia is home to YKK AP's first overseas integrated production plant, and the company is engaged in the design, manufacture, and sale of aluminum profiles and sashes for the domestic and Asian markets. We were one of the first companies in the country to commercialize windows, and we are expanding our business with products that reflect the changing market trends resulting from economic development.

Until now, we have sought to spread awareness of the YKK AP brand by expanding sales of processed and assembled products, aimed mainly at the high-end market. However, the 6th Mid-term Management Plan aims to increase the number of processing facilities to which we sell profiles and to increase sales volume in the mid-range market, which is growing rapidly as a result of changing trends. In addition to expanding the variants of MADELA, a sash for commercial buildings aimed at the upper-mid range market, which went on sale in 2021, we will introduce new products such as high-quality factory-manufactured entrance doors and aluminum carports with superior corrosion resistance, durability, and design. Furthermore, by making proposals of these as sets, we will increase sales volume for single-family houses built for sale in the upper-mid range market, and also provide added value. In addition, we will promote the development of our manufacturing infrastructure by enhancing productivity and increasing production through factory restructuring.



#### Products:

Windows and sashes, carports, curtain walls



## Taiwan

### Vision and business strategy

In Taiwan, we design, manufacture, and sell products for non-residential buildings, as well as remodeling products, focusing especially on high watertight performance sashes tailored to the weather conditions of Taiwan, which is frequently hit by large typhoons.

As the top brand in Taiwan, we will pursue structural reforms to achieve further growth, strengthen proposals for high value-added products, and increase sales, especially in central and southern Taiwan, an area where we are stepping up our efforts. In addition, in order to exploit the mid-range market, we will develop new products, further streamline our production lines, and reduce costs by strengthening our production system.



#### Products:

Windows and sashes



## India

### Vision and business strategy

In addition to the extrusion and sales of aluminum profiles, which is our main area of business, we are also engaged in the manufacture and sales of aluminum window products for high-rise and multi-family residential buildings, low to mid-rise buildings, and multi-building houses.

By providing high-quality, high-value-added products, we also hope to use YKK AP brand windows to improve living environments. In the profiles business, we are strengthening our cost competitiveness by making capital investments. We are also working to expand the variations of our core window product, IWIN-S, and to strengthen our ability to make proposals to the mid-range volume market.



#### Products:

Windows and sashes, curtain walls, aluminum profiles



## Singapore

### Vision and business strategy

YKK AP FACADE provides total project management including design, engineering, procurement, and installation of facades for super high-rise and complex architecture.

In order to meet the needs of environmentally friendly architecture, the company has amassed expertise in designing highly heat-shielding, highly insulating, facades for both new construction and renovation, and has expanded its range of technical proposals as a facade specialist using sunlight load simulations and sunlight shielding devices. Efforts are underway to strengthen our project management capabilities to earn the trust of our business partners.

#### Products:

Curtain walls



Photo: CapitaLand



Financial and Non-Financial Data

Key Consolidated Financial Data

	FY2020	FY2021	FY2022	FY2023	FY2024 (Plan)
Net sales (consolidated)	402.8 billion yen	446.3 billion yen	508.6 billion yen	538.1 billion yen	577.9 billion yen
Japan	353.2 billion yen	388.6 billion yen	425.7 billion yen	450.4 billion yen	478.6 billion yen
Overseas	66.2 billion yen	79.7 billion yen	115.8 billion yen	119.5 billion yen	132.0 billion yen
Overseas ratio	13 %	14 %	17 %	18 %	18 %
Operating income	20.9 billion yen	17.3 billion yen	17.8 billion yen	25.6 billion yen	27.6 billion yen
Operating income ratio	5.2 %	3.9 %	3.5 %	4.8 %	4.8 %

\*Transactions with parties inside the Group have been offset in net sales (consolidated).  
\*The overseas ratio is the proportion of overseas sales out of net sales to external customers.

		FY2020	FY2021	FY2022	FY2023
Profit and loss	Ordinary income	23.0 billion yen	18.6 billion yen	21.3 billion yen	28.3 billion yen
	Net income attributable to owners of parent company	21.3 billion yen	11.1 billion yen	15.2 billion yen	18.8 billion yen
	Comprehensive income	48.3 billion yen	19.7 billion yen	27.6 billion yen	48.7 billion yen
Financial status	Net assets	225.1 billion yen	241.8 billion yen	266.0 billion yen	312.1 billion yen
	Total assets	389.7 billion yen	426.5 billion yen	455.8 billion yen	478.8 billion yen
Financial indicators	Return on assets (ROA)	5.5 %	2.7 %	3.5 %	4.0 %
	Equity ratio	56.9 %	56.2 %	57.9 %	64.6 %
	Return on equity (ROE)	9.6 %	4.8 %	6.1 %	6.6 %
Cash flow	Cash flow from operating activities	29.6 billion yen	26.9 billion yen	32.3 billion yen	53.4 billion yen
	Cash flow from investing activities	△3.8 billion yen	△19.8 billion yen	△22.8 billion yen	△44.1 billion yen
	Cash flow from financing activities	△9.6 billion yen	△5.4 billion yen	△4.9 billion yen	△5.6 billion yen
	Ending balance of cash and cash equivalents	27.2 billion yen	31.7 billion yen	37.6 billion yen	46.8 billion yen
Capital investments/R&D expenses	Capital investments	14.8 billion yen	20.6 billion yen	29.6 billion yen	44.4 billion yen
	Sustainability investment	—	—	—	3.9 billion yen
	R&D expenses	8.0 billion yen	9.0 billion yen	9.3 billion yen	10.6 billion yen

\*Return on assets (ROA) for FY2020 is calculated based on total assets at the end of the fiscal year, as this was the first year of consolidation.  
\*Return on equity (ROE) for FY2020 is calculated based on ending equity capital, as this was the first year of consolidation.  
\*Sustainability investment represents the amount ordered for the current fiscal year.  
\*Figures have not been audited by a certified accountant or audit firm.  
\*The consolidated financial data for profit and loss, financial status, financial indicators, and cash flow have been reviewed by an audit firm since FY2021.

Key Non-Financial Data

		FY2020	FY2021	FY2022	FY2023
Number of employees ◇ <sup>3</sup>	Japan	12,484	12,819	12,802	12,991
	Ratio of men to women (Japan)	Men: 74 % Women: 26 %	Men: 74 % Women: 26 %	Men: 74 % Women: 26 %	Men: 73 % Women: 27 %
	Overseas	4,328	4,158	4,341	4,843
Average age ◇ <sup>2</sup>	Men	43.6 years old	43.8 years old	44.2 years old	44.3 years old
	Women	41.0 years old	41.3 years old	41.8 years old	42.0 years old
Number of women in management positions ◇ <sup>1</sup>	Number of employees	110	113	122	133
	Ratio	5.9 %	5.8 %	6.2 %	6.5 %
Rate of employees who take childcare leave ◇ <sup>1*1</sup>	Men	64.2 %	53.2 %	73.2 %	67.7 %
	Women	93.6 %	97.5 %	96.6 %	102.8 %
Employment rate of persons with disabilities (average for each fiscal year) ◇ <sup>1</sup>		2.33 %	2.28 %	2.30 %	2.44 %
Rate of mid-career hires ◇ <sup>1</sup>		32.4 %	34.9 %	44.5 %	58.0 %
Rate of employees who take paid leave ◇ <sup>1</sup>		60.9 %	67.1 %	71.3 %	76.7 %
Smoking rate among employees ◇ <sup>1</sup>		30.7 %	29.3 %	28.6 %	28.3 %
Participation rate in health promotion campaigns ◇ <sup>1</sup>		67.4 %	67.5 %	69.5 %	67.9 %
Contributions to CO <sub>2</sub> reductions through high thermal insulation products ◇ <sup>2</sup>	vs. FY2020	100 %	117 %	127 %	173 %
	Quantity	468 kt CO <sub>2</sub>	548 kt CO <sub>2</sub>	594 kt CO <sub>2</sub>	811 kt CO <sub>2</sub>
Ratio of new constructions to remodeling projects ◇ <sup>2*2</sup>	Residential	New construction: 75 %	New construction: 77 %	New construction: 76 %	New construction: 69 %
		Remodeling: 25 %	Remodeling: 23 %	Remodeling: 24 %	Remodeling: 31 %
	Commercial	New construction: 76 %	New construction: 70 %	New construction: 69 %	New construction: 67 %
		Renovation: 24 %	Renovation: 30 %	Renovation: 31 %	Renovation: 33 %
Rate of vinyl window use ◇ <sup>2*3</sup>		29 %	31 %	31 %	35 %
Number of locations ◇ <sup>3</sup>	Japan	200 locations	201 locations	195 locations	194 locations
	Overseas	60 locations	57 locations	57 locations	58 locations
Manufacturing sites ◇ <sup>3</sup>	Japan	24 sites	24 sites	24 sites	24 sites <sup>*4</sup>
	Overseas	11 sites	11 sites	11 sites	12 sites <sup>*5</sup>

Extent of coverage  
◇<sup>1</sup>: YKK AP (non-consolidated)  
◇<sup>2</sup>: YKK AP Group (Japan)  
◇<sup>3</sup>: YKK AP Group (Japan and overseas)  
  
\*1: Until FY2021, calculated based on the Ministry of Health, Labour and Welfare's Basic Survey of Gender Equality in Employment Management. From FY2022 onwards, calculated in accordance with the method of publication under the revised Act on Childcare Leave and Caregiver Leave. For FY2022, the number of employees who took childcare leave across fiscal years is included.  
\*2: Based on net sales  
\*3: Rate of vinyl window use in sales for single-family homes  
\*4: Does not include the Okinawa Factory of Kanehide Aluminum Industry, which became a domestic affiliated company in May 2024.  
\*5: Does not include the Los Angeles Factory, which opened in April 2024.



Supported Initiatives, Certifications, and Key External Assessments

Supported Initiatives and Groups, Certifications

◆Task Force on Climate-related Financial Disclosures / TCFD (Financial Stability Board)  
May 2019



◆Science Based Targets / SBT (SBT initiative)  
February 2021



◆United Nations Global Compact / UNGC  
May 2021



◆Partnership Building Declaration  
(Conference for the Promotion of Building Partnerships for the Future)  
June 2022



◆Japan Partnership For Circular Economy (Ministry of the Environment, Ministry of Economy, Trade and Industry, Keidanren)  
October 2022



◆Minister of the Environment-certified "Eco-First Company" (Ministry of the Environment)  
April 2023



◆GX League (Ministry of Economy, Trade and Industry)  
April 2023



◆Resilience Certification (Association for Resilience Japan)  
August 2023



◆Circular Partners (Ministry of Economy, Trade and Industry)  
February 2024



Evaluations of Product Safety Initiatives

◆Certified as a Gold Product Safety Company (Ministry of Economy, Trade and Industry)  
November 2017  
\*Certification extended in January 2023



In 2017, YKK AP received the Minister of Economy, Trade and Industry Award for the third time at the Product Safety Awards (PS Awards) and was certified as a "Gold Contributor to Product Safety." The first follow-up, which is conducted every five years after certification, was conducted, and certification was extended in January 2023.

Major Award Topics for the Year

September 4, 2023	YKK AP (THAILAND) CO., LTD.	Showroom Receives Design Excellence Award 2023 for Excellence in Interior Design
September 27	YKK AP Inc.	M30 face recognition automatic door for single-family homes wins Incentive Award (Kids Design Association Chairperson's Award) at the 17th Kids Design Awards
October 4	YKK AP AMERICA INC.	"T Series Entrance Systems" and "YHS 50 TU Storefront System" win at the BLT Built Design Awards 2023
October 18	YKK AP FACADE PTE. LTD.	Awarded the Systems Award at the CTBUH Awards 2023
November 23	YKK AP Inc.	Ranked No. 1 in "sashes for single-family homes" for 13 consecutive years, No. 1 in "entrance doors for single-family homes" for 8 consecutive years, and No. 1 in "aluminum sashes and curtain walls for commercial buildings" for 19 consecutive years in "Most Desirable Architectural Products and Equipment Manufacturers Ranking 2023 (Nikkei Architecture)"
December 7	YKK AP TAIWAN CO., LTD.	No. 1 in the sash category for 12 consecutive years in the "manufacturer of the most desirable architectural products and facilities for use in an ideal home" survey
March 20, 2024	YKK AP CO., LTD.	Selected for the 13th consecutive time in the windows category of the Desirable Architectural Products Brand Award
March 29	YKK AP Inc.	Achieved an "Outstanding Business Operator (Class S)" rating under the Energy Conservation Act's Business Operator Classification Evaluation System for nine consecutive years

Company Outline

**Corporate Name**  
YKK AP Inc.

**Headquarters Address**  
1, Kanda Izumi-cho, Chiyoda-ku,  
Tokyo, 101-0024, Japan

**Capital Stock**  
14.0 billion yen

**Established**  
July 22, 1957

**Accounting Period**  
March 31 of every year

**Affiliated Companies**

**Japan**  
YKK AP Okinawa Inc.  
Pros Inc.  
Iwabuchi Inc.  
YKK AP Ruxy Inc.  
Nitto Inc.  
YKK AP Healthcare Inc.  
Kanehide Aluminum Industry Co., Ltd.\*1  
TERAYAMA Inc.\*2

**North America**  
YKK AP AMERICA INC.  
ERIE ARCHITECTURAL PRODUCTS INC.  
ERIE ARCHITECTURAL PRODUCTS USA, INC.  
YKK AP Technologies Lab (NA) Inc.

**Asia**  
YKK AP (CHINA) INVESTMENT CO., LTD.  
DALIAN YKK AP CO., LTD.  
YKK AP CO., LTD.  
YKK AP (SUZHOU) CO., LTD.  
YKK AP (SHANGHAI) INTERNATIONAL TRADING CO., LTD.\*2  
YKK AP HONG KONG LIMITED  
YKK AP TAIWAN CO., LTD.  
PT YKK AP INDONESIA  
YKK AP MYS SDN. BHD.  
YKK AP (THAILAND) CO., LTD.  
YKK AP Corporate Services (Thailand) Co., Ltd.  
YHS International Ltd.  
Siam Metal Co., Ltd.  
YKK AP VIETNAM COMPANY LIMITED  
Bhoruka Extrusions Private Limited  
YKK AP FACADE PTE. LTD.  
YKK AP SINGAPORE PTE LTD

**Memberships**  
Japan Sash Manufacturers Association  
Japan Building Openings Association  
Japan Construction Material & Housing Equipment Industries Federation  
Association of Living Amenity  
Japan Federation of Housing Organizations  
Wooden Home Builders Association of Japan  
Japan International Association for the Industry of Building and Housing  
Japan - China Association for Building and Housing Industry  
Japan Aluminum Association, etc.

\*1: As of May 2024  
\*2: As of July 2024

YKK AP Integrated Report 2024

Date of Publication	November 2024
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