

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 Start of Architectural Products Business



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 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 sashes begin
- 1976 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 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)
Sales of "EXIMA" system sashes for commercial buildings begin
- 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
Sales of "SYSTEMA" series of system sashes for non-residential buildings begin

2005-2010 Evolution into a Window Manufacturer



The "APW 330," launched in 2009

With the goal of "transforming from sash manufacturer to window manufacturer," we take 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 Commitment 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 Overseas AP business and integrated capital relations and business operations of overseas affiliated companies reorganized into YKK AP
- 2021 Part of the YKK Machinery & Engineering Group is transferred and the Machinery & Engineering Department is established

2023- Becoming a Global Leading Company



The "APW 651" wooden window, launched in 2024

Akira Uozu assumed the office of president in 2023. YKK AP has set a goal of "Become a Global Leading Company Through the Evolution of Architectural Products" by 2030. In 2024, we promoted new businesses, including the establishment of YKK AP Healthcare Inc. and the development of Building Integrated Photovoltaics, aiming not only to grow our existing businesses but also to provide new customer value. We are also focusing on conversion to high-performance, energy-conserving windows, and as part of these efforts, we have begun 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 curtain wall (CW) business in Japan and overseas, we established the Global Curtain Wall Division and acquired shares in the largest CW manufacturer in

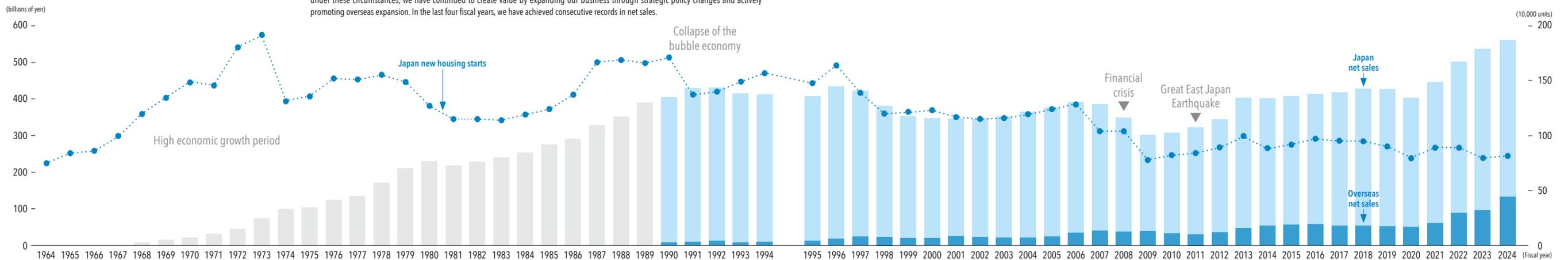


The "APW 651" wooden window, launched in 2024

Thailand. Furthermore, we have acquired shares in an aluminum sash manufacturer in Okinawa Prefecture, and will work to strengthen our manufacturing and supply capabilities for aluminum sashes not only in Okinawa Prefecture but also throughout the Asia region.

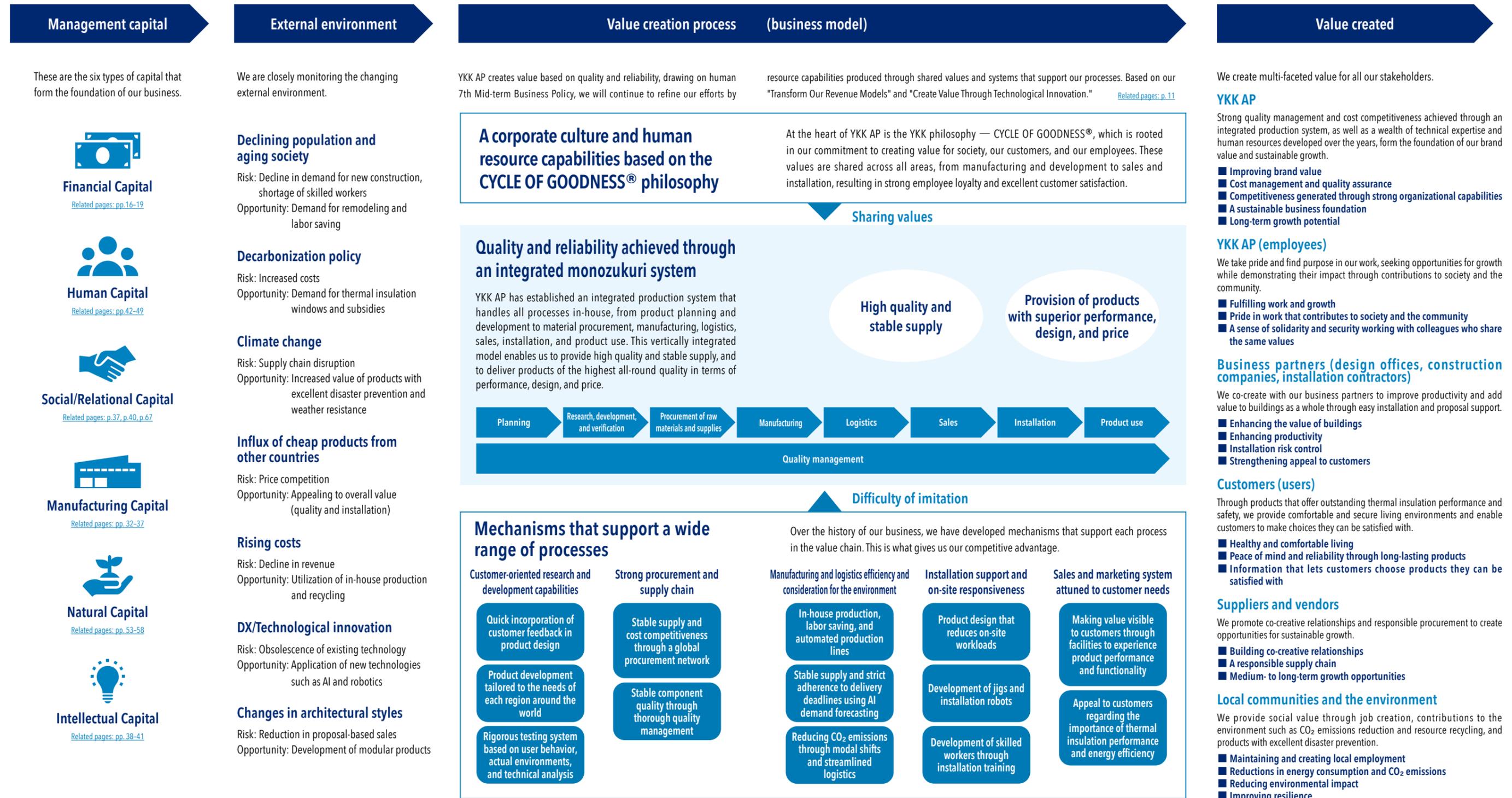
- 2023 Outstanding shares acquired in YHS International Ltd., a Thai curtain wall manufacturer, and Siam Metal Co., Ltd., its manufacturing company
YKK AP Healthcare Inc. established
Business alliance concluded with KANDENKO Co., Ltd. for the development and promotion of Building Integrated Photovoltaics
- 2024 Sales of "APW 651" sliding wooden patio doors with triple insulating glass begin
YKK AP Technology Museum opens

Net sales and number of Japan new housing starts



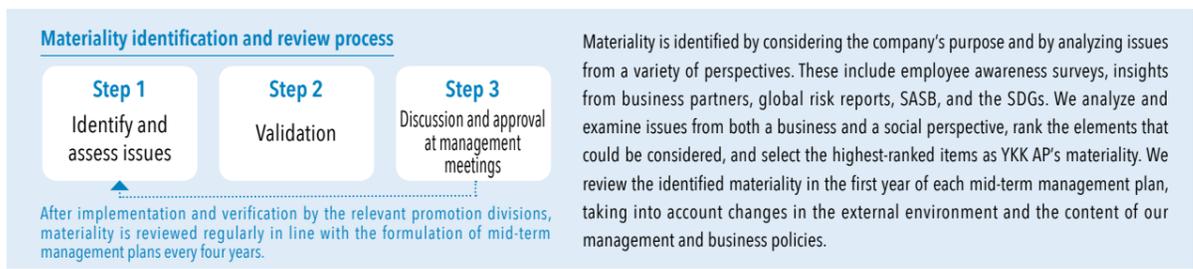
The Value Creation Process

Through the integration of a highly integrated production and sales system, human resources who can put our philosophy into action, and mechanisms that support a wide range of processes, YKK AP has established a distinct identity as a company that can create value beyond that of just a component manufacturer. These are unique strengths that cannot be easily imitated by other companies.



Materiality-Based Initiatives

In line with the start of our 7th Mid-term Management Plan, we reviewed our materiality (priority issues) in February 2025. YKK AP has designated promotion divisions responsible for each materiality issue to enhance its initiatives. The Sustainability General Meeting, chaired by the president, is composed of the Environmental Policy Board Committee, the Compliance Committee, the Human Rights Working Group (WG), the Human Resources Policy Committee, the General Administration Department, and the Chief Risk Management Officer (CRO). In addition, the Materiality Promotion WG is responsible for promoting materiality and managing KPIs.



Materiality is identified by considering the company's purpose and by analyzing issues from a variety of perspectives. These include employee awareness surveys, insights from business partners, global risk reports, SASB, and the SDGs. We analyze and examine issues from both a business and a social perspective, rank the elements that could be considered, and select the highest-ranked items as YKK AP's materiality. We review the identified materiality in the first year of each mid-term management plan, taking into account changes in the external environment and the content of our management and business policies.

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

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

Materiality targets in the 7th Mid-term Management Plan and promotion divisions

Materiality	Reasons for selection/Issues identified	How we seek to be	Promotion divisions	Indicators	FY2024 (results)	FY2025 (targets)	FY2028 (targets)	Related SDGs
"Human Resources" to support sustainable growth	Diversity & inclusion pp. 42-43, 46-47	As stated in our Diversity & Inclusion Declaration, in order to create new value, we must work on developing female leaders who can make proposals and improvements that draw on a diverse range of perspectives in the areas of sales, manufacturing, technology, and management.	Human Resources Department	Number of women in management positions ◇1	148	200 or more by end FY2028		
	A fulfilling and employee-friendly workplace pp. 42-43, 48	To enable diverse work styles, the Work Style Reform Committee will continue to discuss initiatives for new work styles, determine policies, and implement measures to create a fulfilling work environment. Along with conducting employee engagement surveys, we will continue to work on both practical and psychological measures to improve work fulfillment and the working environment, as well as to identify and quickly address any issues that may arise.	Work Style Reform Committee	Employee engagement ◇1 Rate of employees who take childcare leave (men) ◇1 Presenteeism ◇1 *WHO-HPQ absolute presenteeism	50 % 69.0 % 63	55 % by FY2028 70 % or over 64	67	
	Talent development for value creation pp. 42-45	Sustainable growth requires the constant creation of new value. Our employees are expected to take the initiative in enhancing their skills and experience, and to continue generating new ideas and solutions. Because independent learning and action toward achieving career goals lead to value creation for the organization, we provide support for our employees' career autonomy.	CHRO Human Resources Development Department	Achievability of career goals ◇1 *Percentage of employees who feel they can achieve their career goals Number of times employees obtained qualifications eligible for public qualification incentives ◇1 Next-generation leader development program ◇1 ● Number of participants *Figures in parentheses indicate cumulative number of participants ● Number of corporate officers appointed (cumulative total)	46 % 1,509 9 (213) 41	47 % 1,525 9 (222) 43	50 % 1,580 9 (249) 49	
	Respect for human rights p. 49	The YKK Group Code of Conduct, which serves as a set of guidelines for our business activities, clearly stipulates that we will not engage in discrimination or violate human rights under any circumstances. An important challenge for us is to ensure that our human rights policy, which complements the principle of "respect for human rights," is firmly integrated into all of our corporate activities and implemented effectively.	As part of our corporate social responsibility, we will promote business activities that aim to realize safety and security by making respect for human rights a fundamental part of our corporate activities, not only within the company but also throughout our supply chain, identifying and correcting any adverse impacts.	Compliance Committee Human Rights WG	Rate of participation in "Business and Human Rights" training ◇2 Number of companies conducting human rights risk assessments for our supply chains*1	81 % 111 ◇1	83 % 120 ◇2	95 % 180 ◇3
"Monozukuri" to support resolution of social issues through products and competitiveness	Products/services which continue to solve social issues pp. 32-41	All residential and non-residential buildings are required to comply with energy-saving standards by April 2025, and these standards are scheduled to be raised to ZEH and ZEB levels by 2030. High thermal insulation windows are already widely used for single-family houses, but they are yet to see widespread use in commercial buildings, so we must keep working to promote the adoption of windows with higher thermal insulation performance.	Business Divisions / Departments in Charge	Rate of high thermal insulation window use (for single-family houses) ◇2 *Based on windows sales volume	88 %	95 %	100 %	
				Rate of high thermal insulation window use (for commercial buildings) ◇2 *Based on orders for windows received	8 %	10 %	25 %	
"Trust/Reliance" to fulfill social responsibility	Fair business practices p. 52	Our basic approach to compliance involves not only adhering to laws, regulations and internal rules, but also to the social norms expected of us in our corporate activities. In response to growing expectations from stakeholders regarding compliance with laws, regulations, and ethical standards, we face the challenges of promoting a CYCLE OF GOODNESS®, ensuring fairness, deepening our global compliance system, and strengthening internal controls, thereby enhancing our corporate value and earning trust.	Compliance Committee	Activities to reinforce the Management Principle (rate of participation in talking sessions) ◇1 *Calculated based on the number of locations in FY2024	95 %*	92 %	99 %	
	Resilient business foundation pp. 50-51	We will conduct education and training to raise awareness of important risks among all employees and to increase the effectiveness of risk management. There is also a need to establish appropriate BCPs and implement well-considered risk countermeasures to improve resilience and reduce incidents that affect business continuity.	CRO Risk Committees (5)	Rate of participation in risk-related training ◇2 Number of serious cyber incidents ◇3	79 % 0	90 % 0	95 % 0	
	Co-existence with the environment pp. 53-58	Reducing CO ₂ emissions from our business activities is essential to helping achieve carbon neutrality. It is possible to significantly reduce CO ₂ emissions across the entire supply chain by reducing emissions involved in the procurement of raw materials such as aluminum.	To help make carbon neutrality a reality, we aim to achieve an 80% cut in emissions by FY2030, zero emissions by FY2040, and a 100% recycled aluminum usage rate by FY2030.	Environmental Policy Board Committee	Scope 1 and 2 (percentage reduction relative to FY2013) ◇3 Scope 3 (percentage reduction relative to FY2013) ◇3 Contributions to reductions in CO ₂ during product use ◇3*2 (Unit: kt CO ₂ over 30 years) Recycled aluminum usage rate ◇2	37 % 19 % 832 56 %	43 % 21 % 954 60 %	65 % 26 % 1,056 71 %

*1 The survey was conducted for large-lot business partners and business partners that handle particularly important materials and components
 *2 <<Comparison baseline>> Japan, China: FY2013 / U.S.A.: 2020 Georgia Energy Code

Feature 1:

Evolution of Monozukuri Systems for Value Creation

Manufacturing Capital Strategy

The competitive advantage of YKK AP's monozukuri: the integrated production system

YKK AP's monozukuri is supported by a value chain in which each activity—planning, research, development, verification, procurement of raw materials and supplies, manufacturing, logistics, sales, installation, and product use—creates added value.

Within this framework, we are committed to an "integrated production system," in which the company itself handles

everything from materials, components, and production equipment to processing and assembly. This system was established by YKK's founder Tadao Yoshida, who believed that in order to produce quality products during the post-war reconstruction period, it was essential to be highly discerning about the raw materials used. This approach remains

Hiroshi Abe
Director
Executive Vice President



Since joining the company in 1985, Abe has been involved in many manufacturing divisions from Hokkaido to Kyushu. In 2011, he launched the Saitama MADO (Window) Plant, and after serving as Head of the Manufacturing Division and Executive Vice President, he became a director in 2023. He is responsible for manufacturing, supply, procurement, and technology.

YKK AP's value chain



Customer-oriented research and development capabilities

The research and development divisions quickly incorporate feedback obtained from customers and business partners through our sales activities into product design. Our development sites in Japan and overseas develop products that meet the needs of each region. We have also established a testing and verification system based on internal standards that surpass JIS standards, and our design philosophy, which takes actual environments into consideration, is highly regarded.

Strong procurement and supply chain

We ensure stable supply and cost competitiveness through our global procurement network. In addition, thorough quality audits ensure stable quality of components that form the basis of our product appeal. In this way, we build relationships of mutual growth with our business partners.

Manufacturing and logistics efficiency and consideration for the environment

Through manufacturing equipment produced in-house, labor-saving and automated manufacturing lines, and AI-based demand forecasting, we have made stable supply of high-quality products and strict adherence to delivery deadlines a reality. We contribute to reducing CO₂ emissions through improvements in logistics efficiency, such as unit loading and truck reservation systems, and modal shifts.

Installation support and on-site responsiveness

We are working to improve installation quality and efficiency through product design that reduces installation time and workload, the development of jigs, the practical application of installation robots, and installation training programs for skilled workers. One typical example is the dry installation method for carports.

Sales and marketing system attuned to customer needs

We make hard-to-understand value "visible" through facilities and exhibits that allow customers to experience our products' performance and functionality. By communicating the importance of thermal insulation performance and energy efficiency, we have established our position as a trusted brand that offers go-to products.

unchanged in YKK AP's Architectural Products Business.

For example, windows, our leading product, are made up of a wide variety of components, including glass, aluminum and vinyl frames, functional parts, and screens. We purchase glass as raw panes and process it ourselves into Low-E glass and triple insulating glass. Similarly, the processing of profiles is all performed in-house: for aluminum, this involves everything from the melting stage, and for vinyl, from the blending of the raw materials. We use our technical development capabilities, including elemental technologies, to manufacture essential parts such as screen rollers, screws, and screen nets. We also have various testing and assessment functions to ensure even higher quality. The vital internal organization that supports this in-house integrated production system is the Machinery & Engineering Department. This department develops production equipment, manufacturing lines, process management systems, etc. in-house and installs them in our factories in Japan and overseas. The product development and manufacturing divisions work together seamlessly and quickly to further enhance our technological competitiveness.

Our biggest advantage: delivering products with "YKK AP quality"

The biggest advantage of an integrated production system is that it allows us to create products that meet YKK AP's stringent quality standards. We follow a "start at the source" approach, producing everything from raw materials to production equipment in-house in order to improve product quality and reduce costs. By expanding the scope of our in-house capabilities, we believe we can improve quality while also driving down costs. The YKK philosophy — CYCLE OF GOODNESS® includes the concept of Three-Party Sharing. For example, if another company produces something that costs 100 yen to make, we use our creativity and ingenuity to produce it for 50 yen, and the 50 yen profit is shared between the customer, our business partners, and the company. If we are unable to reduce costs, we will not be able to offer reasonable prices or return profits in this way. As such, reducing costs is indispensable for our operations as a company.

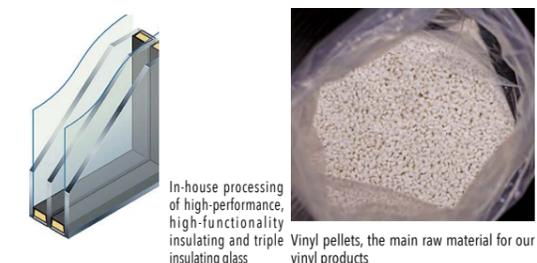
One example of how our in-house production contributed to future business success is YKK AP insulating glass, which began production and sales in 1984. We anticipated that thermal insulation windows would become popular in the future, but development was difficult. At the time, there were

doubts about YKK AP, which was not a glass manufacturer, manufacturing insulating glass. However, we introduced technology from Germany to inject argon gas between the two panes to improve the windows' thermal insulation performance. This became the "APW" series of high thermal insulation windows, which is now YKK AP's flagship product, ensuring the quality of finished windows and higher thermal insulation performance in windows and doors.

YKK AP (SHANGHAI) INTERNATIONAL TRADING CO.,LTD established, improving speed and cost awareness

In recent years, as our business has become more global and overseas sales make up a larger share of the total sales, it is essential to consider new initiatives that are not overly dependent on in-house production of parts and manufacturing equipment. In order to strengthen our procurement capabilities for the global expansion of the YKK AP Group's mid-priced products, in July 2024, we established YKK AP (SHANGHAI) INTERNATIONAL TRADING in Shanghai, China. Utilizing China's cutting-edge technology and diverse supply chains that meet YKK AP's quality standards, we procure materials, parts, and components. By supplying these to manufacturing sites in China and other Asian countries including Japan, we aim to strengthen the YKK AP Group's product appeal, cost competitiveness, and manufacturing and supply capabilities.

Our mission is to pursue monozukuri that allows us to keep raising the bar for "YKK AP quality." We will establish a further competitive advantage by capitalizing on our global procurement infrastructure under the YKK AP integrated production system policy, which is our strength, allowing end users to use our products with safety, peace of mind, and comfort.



In-house processing of high-performance, high-functionality insulating and triple insulating glass
Vinyl pellets, the main raw material for our vinyl products



600 million screws manufactured annually, all inspected with our 100% inspection system
In-house development and manufacture of manufacturing equipment

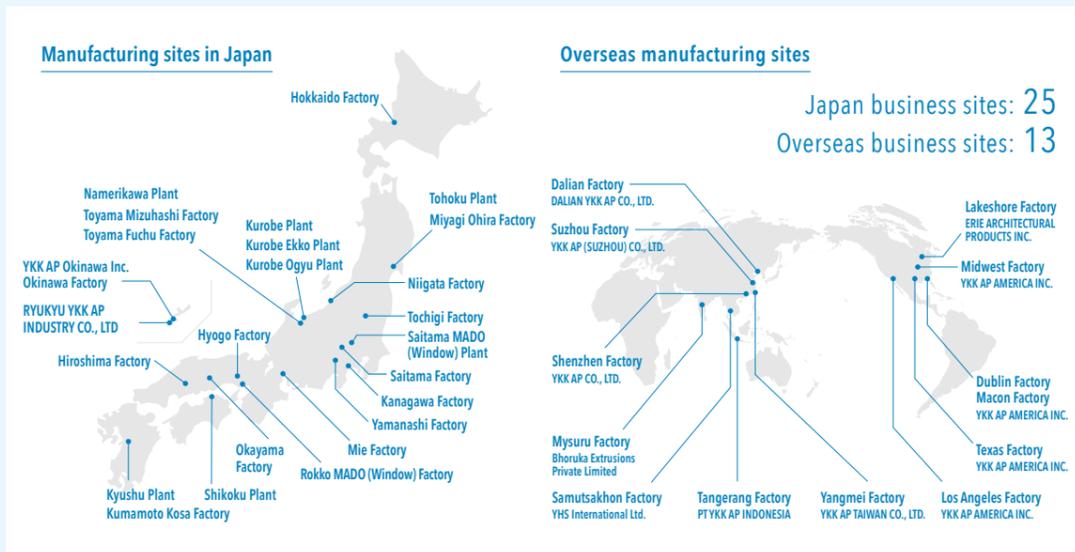
Feature 1: Evolution of Monozukuri Systems for Value Creation

Overview of manufacturing capital

Manufacturing products tailored to each country and region at 38 sites worldwide

The requirements for YKK AP's architectural products vary depending on the climate, geography, and culture of each country and region. To meet these needs, we operate businesses with strong roots in local communities and maintain a strong commitment to product development and

manufacturing in each country and region. The technologies developed by each company are consolidated at the YKK AP R&D Center in Japan and then rolled out laterally to other countries and regions, enabling us to continue our technology oriented value creation around the world.



Aiming to improve efficiency, competitiveness, and design through platforming

In recent years, we have been working on the platforming of products and manufacturing as a key theme. We began capital investment focused on platforming in FY2022, and the fence products were launched and switched over in FY2024. Through thorough automation and process integration, these platforming efforts aim to enhance production efficiency and cost competitiveness, as well as accommodating advanced design requirements. By standardizing product designs, as well as the assembly methods, parts, and equipment used in manufacturing, we have built automated production lines with integrated processes. This enables us to produce a wide variety of products on a single production line while reducing the number of personnel involved and the amount of floor space required. In addition, as with the "APW" series, our flagship window product that is manufactured near where it is needed, thereby reducing logistics costs and CO₂ emissions, we have expanded automated production lines for our fence products at

two manufacturing sites, the Kyushu and Tohoku plants, which are close to areas of demand. We hope that this will allow us to achieve 180% of FY2021 levels of productivity by FY2026.



The "SIMPLEO Fence," which was redesigned in 2024, incorporates platforming, an updated noise-free design, interoperability with other designs, and easier installation

Initiatives for improving industrial safety and product quality

Our "Exceptional Safety" approach, where safety stands apart

YKK AP considers the elimination of work-related accidents and the creation of healthy and comfortable workplaces to be the most important responsibilities of corporate management, and we aim to create a workplace environment where everyone can work safely and with peace of mind. While the slogan "safety first" is widely used in society, YKK AP has continued to uphold an "exceptional safety" approach, under which safety stands apart, rather than something to be compared with other responsibilities. As stated in the YKK AP Health and Safety Basic Policy, we are working to create a workplace environment where everyone involved in the entire supply chain can work safely and with peace of mind.

We are also stepping up our safety support overseas, with Japanese health and safety personnel visiting overseas sites to provide safety training and conduct safety inspections.

In addition, we will continue improvement efforts by identifying obstacles in work processes and shortcuts taken by workers in order to eliminate potential risks in the workplace. Every year, we hold the "Safety Initiative Awards" to recognize examples of improvements that can be replicated nationwide.

Frequency of work-related accidents



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

Developing safety management systems using AI, promoting overseas activities and award programs

To reduce the risk of work-related accidents and improve safety at manufacturing sites, we are collaborating with ACES, Inc., a startup company founded by the Matsuo Lab (now the Matsuo-Iwasawa Lab) at the University of Tokyo, which is renowned for its AI research, to develop a next-generation safety management system using AI image processing technology. In March 2025, this system was deployed on a trial basis at the Namerikawa Plant.

Based on the idea that a system that prioritizes safety should not lower worker motivation, we have adopted a supportive "watch-over" system that encourages workers to voluntarily follow established rules and protect themselves, rather than a "surveillance" system that identifies unsafe behavior and issues warnings.



Video illustration of a "watch-over" safety detection system. The system records and downloads unsafe behaviors such as running, tripping, or non-use of protective equipment, and allows analysis to be performed on a dashboard screen

The Quality Committee provides support to individual divisions, conducts employee awareness campaigns, and organizes the "Quality Month" event

YKK AP has established a Quality Committee and is working on issues such as quality, product safety, and product liability (PL) in order to deliver safe and reliable products to our customers. Based on the belief that providing high-quality products will lead to a stronger brand, the Quality Committee provides support to individual divisions and conducts employee training and awareness campaigns. Every November, during "Quality Month," manufacturing sites that have achieved outstanding results are visited by line managers, employee in charge of production technology, and quality management personnel from other sites, with the aim of sharing quality improvement activities implemented at manufacturing sites across Japan.



Line inspection conducted during Quality Month in November 2024. Participants came not only from within Japan, but also from YKK AP (CHINA) INVESTMENT, DALIAN YKK AP, and YKK AP (SUZHOU)

Feature 1: Evolution of Monozukuri Systems for Value Creation

The integrated production approach lives on in the evolution of our logistics

Overcoming the "2024 Problem" with palletization and introduction of systems developed in-house

In anticipation of the revision of the Logistics Act, which will require shippers and recipients of a certain size to appoint a Chief Logistics Officer (CLO) from April 2026, YKK AP established the position of CLO in April 2024. In addition, efforts to reduce time taken waiting for or loading and unloading cargo, which have been ongoing since 2015, are based on an integrated production approach that includes in-house manufacturing of equipment and devices. For shipping products from our factories, we have developed a number of systems for palletization (loading products onto pallets) in-house, including a pallet that offers higher loading efficiency than previous types, the "Y-Caps" system, which provides efficient instructions for loading onto pallets, and palletizing robot hands that efficiently sort shipments by destination.

In September 2024, we introduced the "MOVO Berth" truck reservation system at 30 manufacturing and logistics sites in Japan. The system allows users to reserve truck entry times and loading times, and check in and out upon arrival and departure from the site using a dedicated app installed on their mobile devices or phones. As this allows factories and logistics sites to know arrival times and numbers of trucks in advance, loading and unloading operations can be carried out efficiently. As a result, in October 2024, we achieved our goal of reducing the time taken waiting for or loading and unloading cargo to within two hours at all locations.

Information sharing with stakeholders essential for solving logistics issues

Looking ahead to the "2024 Problem," we established a Logistics 2024 Problem Countermeasures Committee, which includes our business partners and vendors. In order to continue our efforts to resolve logistics issues, we are organizing "transportation councils" at our sites nationwide and maintaining communication with our partners.

The government's guidance to shippers places particular emphasis on "time management," "transportation efficiency," and "holding time." In FY2025, we will add "transportation efficiency" as a key improvement theme and take the next step of reducing time taken waiting for or loading and unloading cargo to within one hour.

In 2026, companies will be required to report to the Ministry of Economy, Trade and Industry on the appointment of CLOs and the details of their medium- to long-term plans. In our logistics planning, coordination with our service rules is essential, and we will further promote information sharing with relevant departments, including sales divisions, to improve supply chain efficiency.



(Left) "Y-Caps" enables efficient loading of trailers and reduces unnecessary dispatches. (Right) The rate of reservations made using the truck reservation system "MOVO Berth" reached 96% as of October 2024

The Foundation of YKK AP's Monozukuri

Small group activities that bring together know-how from the field

Currently, approximately 400 circles at manufacturing sites across Japan are conducting small group activities on various themes such as productivity, quality management, and maintenance. By identifying issues in the field, collecting data, conducting detailed analyses, and promoting improvements through small group activities, we aim to raise awareness of issues among all employees working in manufacturing and supply, thereby enhancing our manufacturing capability.

In addition, every year, a "Small Group Activity Presentation" is held, where circles from across the country compete to showcase their achievements. The top circles that win within YKK AP participate in the YKK Group Competition, where they work together to improve manufacturing capabilities across the Group as a whole.



The aluminum processing/screen line at the Hokkaido Factory won the Grand Prize at the FY2024 Manufacturing Division Small Group Activity Presentation

Creating value through co-creation with stakeholders

"Co-creation" with our business partners and suppliers is essential for delivering safe and reliable products to our customers.

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, YKK AP established the "Installation Skills Training Academy" to develop young skilled workers. In April 2024, we opened the Saitama Academy at our Saitama Factory as our second training academy, following the Namerikawa Academy at the Namerikawa Plant. In addition to training facilities for general commercial building sashes and regular curtain walls, the academy also offers training in the measurement and installation of unitized curtain walls and remodeling products, which is not available at the Namerikawa Academy. This training is available not only to participants in the Installation Skills Training Academies but also to YKK AP employees.

In addition, with the aim of resolving the shortage of sash and curtain wall installation technicians in the exteriors industry, we operate "DO SPACE" Exterior Installation Academies at four sites in Japan. These academies work to train installation technicians and transfer skills.

Every year, we hold a "Procurement Policy Briefing" for our suppliers to express our gratitude for their cooperation in our procurement activities and to request further strengthening of our partnerships.



(Left) Practical installation training at the Saitama Academy. (Right) DO SPACE Mie, newly established in October 2024 within the Mie Factory

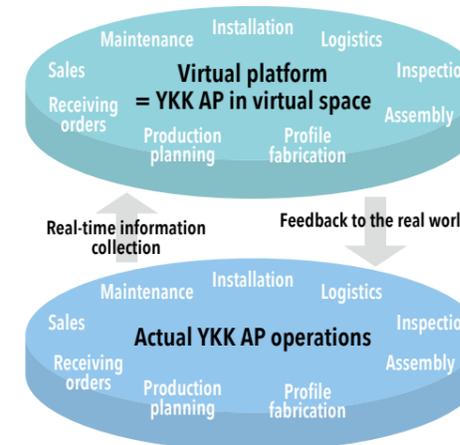
YKK AP's DX Strategy

YKK AP's digital transformation (DX) strategy goes beyond smart factory initiatives to connect all information obtained from across the YKK AP value chain using digital technology, thereby dramatically improving operational efficiency as a "smart company."

This requires the establishment of a unified data infrastructure that can be utilized across the entire value chain. To this end, we are reorganizing our business processes and various data models, working to standardize data

across YKK AP as a whole. This will form the basis not only for accelerating DX through the use of virtual platforms and enabling real-time management and decision-making, but also for ongoing optimization of the entire value chain through close collaboration with business partners and suppliers. We aim to be a company that can respond to the diverse needs of our business partners and customers with greater speed than ever before by balancing quality and speed and flexibly adapting to change.

Smart company schematic and examples of digital support



- Promoting DX using virtual spaces**
 - Simulations for new facility construction using digital twinning
 - Visualization of the entire factory
 - Remote maintenance of manufacturing sites using tele-presence
- Promoting DX in actual business operations**
 - Streamlining sales activities using tablets and smartphones
 - Improving manufacturing efficiency through robotics technology
 - Digitization of paper-based information and application of AI to business operations

Feature 1: Evolution of Monozukuri Systems for Value Creation

Intellectual Capital Strategy

Promoting innovation and enhancing our intellectual capital

YKK AP's strengths in intellectual capital lie in its all-round capabilities, which are based on brand appeal, product appeal, and sales capabilities. Brand appeal is, in other words, product quality itself, and is directly linked to the trust placed in us by end users. Product appeal refers not only to strict performance evaluations that go beyond national specifications and JIS standards, but also to designs that take into consideration usability, ease of assembly and installation. Of course, design is also important for a product to be chosen by customers, so we analyze trends at the Design Center, Product Research & Development Division and collaborate on an ongoing basis to incorporate their results into product research and development. I believe that our track record in sales, including our ability to deliver high-quality products on schedule and respond quickly to any problems or requests, is what builds trust with our customers.

Technical facilities that form the basis of the monozukuri process

Our strengths in terms of intellectual capital stem from the

Masahiro Yoshino
Senior Vice President,
Head of Technical Research
Division



Since FY2023, Yoshino has served as head of the Technical Research Division, which was established to accelerate the research and development of new technologies. He harnesses his management experience in departments such as research and development, manufacturing, and quality control to drive technological innovation.

cycle of development, evaluation, verification, technical proposals, and communication that forms the foundation of YKK AP's monozukuri process. The YKK AP R&D Center, Value Verification Center, and Partners Support Studio in Kurobe City, Toyama Prefecture, serve as bases for these activities (see Figure 1). The YKK AP R&D Center is a hub of technology and expertise where we conduct in-depth research and knowledge development in specialized fields to develop high-quality products. The Value Verification Center conducts "user verification" using user 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 and product quality. Here, we use full-scale model homes to exhibit our products and conduct performance tests, allowing our business partners to experience our quality and technology firsthand while exchanging opinions and information.

In addition, we have transferred some of the functions and personnel of the YKK AP R&D Center to the YKK 60 Building in Tokyo for the purpose of collecting information related to

research and development, facilitating smooth collaboration with joint research partners, and discovering new partners. We have already transferred functions related to the development of advanced products for the Residential and Exterior Businesses, and are conducting product development in collaboration with the R&D Center in Kurobe.

Strengthening collaboration between global R&D sites

YKK AP has also strengthened its global research and development system. Our R&D centers conduct research and development in the warm climate of Japan, the cold climate of Germany, and the hot and humid climate of Indonesia (see Figure 2). Information specific to these different climates is compiled and shared to develop products optimally suited to each region. In addition, in 2023, YKK AP Technologies Lab (NA) in the U.S.A. established "xTech Lab (cross-tech lab)," a research & development center for the digital field. We also dispatch employees from our Technical Research Division to conduct surveys, research and development relating to advanced digital technologies, and quickly incorporate the information gathered into the development of products and production lines.

Promoting technological innovation through open innovation

Our vision, "Evolution 2030," includes "Contribute to the Global Environment" as one of its policies. We believe that accelerating development and promoting innovation are essential for developing new technologies and materials that will be key to realizing decarbonization and a circular society.

Speeding up development in this way requires

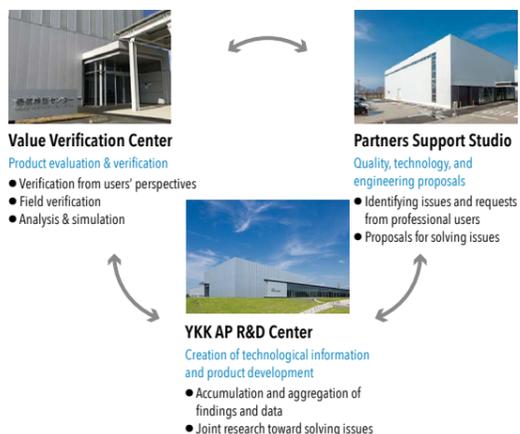
strengthening coordination between development, manufacturing, and sales. We are reducing the amount of "rework" in development by thoroughly implementing front-loading, which involves cross-departmental coordination from the early stages of development and establishing a system geared toward mass production. The YKK Group also has a Technology & Innovation Center (TIC) that serves as a research and development division for both the Fastening and AP businesses. Themes to be tackled are shared on a regular basis, and a cooperative framework has been established whereby the TIC conducts basic research and YKK AP's research divisions conduct applied research.

To promote innovation, we are collaborating with 31 universities and research institutes and 14 companies to conduct research and development, drawing on leading examples from overseas, including material recycling technologies aimed at realizing a circular society.

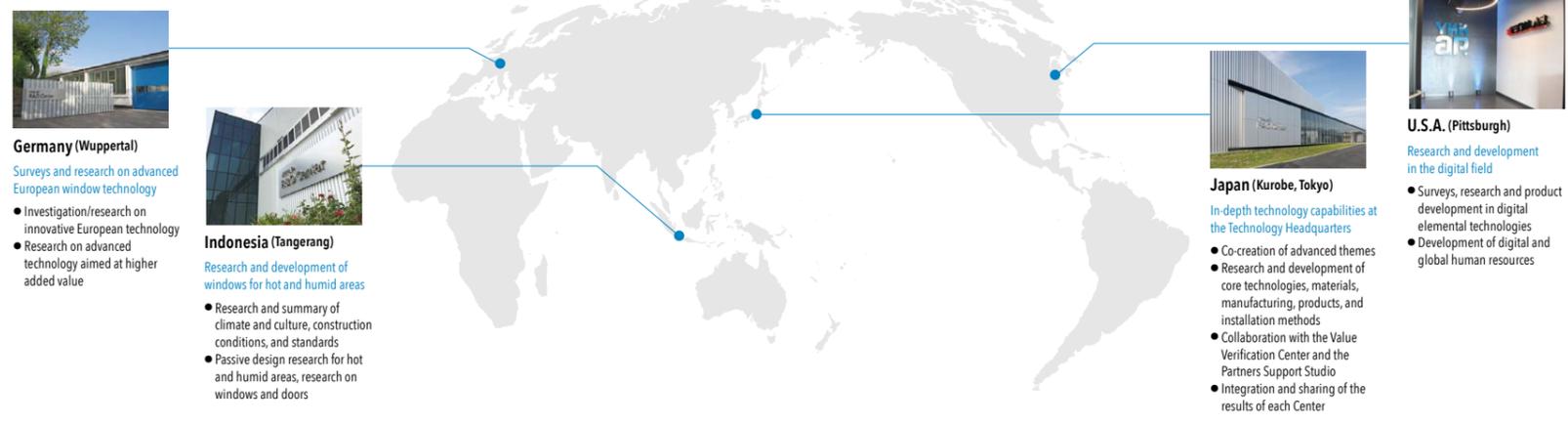
In addition, in order to accurately demonstrate the performance of YKK AP products and enable customers to make quantitative comparisons when selecting products, we are also conducting standardization activities. These include the development of international ISO standards for measuring sunlight shading performance in windows, as well as JIS standards for assessing the thermal performance of curtain walls and the condensation prevention performance of windows in Japan.

We will continue to combine the knowledge and skills of YKK AP to promote technological innovation.

Development and technology research sites (Figure 1)



Research, development and verification around the world (Figure 2)



Major examples of collaboration with universities, research institutes, and companies

- **KANDENKO**
Development of systems including installation technology and electrical components for Building Integrated Photovoltaics (BIPV)
- **Daito Trust Construction, NTT Docomo Ventures, Chubu Electric Power, etc.**
Launch of a cross-industry platform to develop and implement in society a model for early detection of sudden health issues and disease risks in living spaces
- **Tohoku University**
Establishment of a joint research program for next-generation aluminum resource recycling
- **University of Toyama**
Participation in an aluminum recycling research and development project involving industry, academia, government, and the private sector
- **Carnegie Mellon University, U.S.A.**
Joint research on the development of installation techniques using robot and IT technologies and on improving productivity

Feature 1: Evolution of Monozukuri Systems for Value Creation

Activities and structure of YKK AP's intellectual property department

YKK AP's intellectual property activities are premised on the basic policy of "contributing to the prosperity of our customers and business partners and contributing to society by encouraging the creation of intellectual property that generates new value while respecting the intellectual property of others, and by protecting and utilizing such intellectual property to promote the development of our business." In accordance with the YKK philosophy — CYCLE OF GOODNESS®, we conduct intellectual property activities from four perspectives: ensuring business continuity, leveraging business advantages, energizing

YKK AP's intellectual capital (FY2024 results)

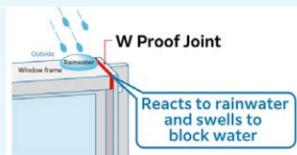
- R&D expenses: 11.9 billion yen
- Patents held: 1,517
- Design rights held: 981

Four perspectives on intellectual property activities

(1) Ensuring business continuity	<ul style="list-style-type: none"> ● Strict avoidance of infringement on others' intellectual property ● Early consideration and implementation of measures to resolve intellectual property issues
(2) Leveraging business advantages	<ul style="list-style-type: none"> ● Differentiation from other companies' products and services through the protection and utilization of intellectual property
(3) Energizing intellectual property creation activities	<ul style="list-style-type: none"> ● Building a foundation for creating new value through intellectual property training seminars and invention promotion activities
(4) Optimizing intellectual property costs	<ul style="list-style-type: none"> ● Cutting down on unnecessary applications ● Discarding of intellectual property rights that contribute little to business

Enhancing brand value by trademarking technology

One example of protecting and utilizing intellectual property to leverage our business advantages is our unique "W PROOF JOINT" technology, which prevents water leakage from window frames. By trademarking the technology itself, we differentiate ourselves from other companies and demonstrate our technical capabilities to our customers.



intellectual property creation activities, and optimizing intellectual property costs to support our sustainable growth and value enhancement as a company.

Certification as a "gold product safety company" extended

The Ministry of Economy, Trade and Industry (METI) recognizes companies and organizations for exceptional efforts in product safety through the Product Safety Award (PS Award). We received the highest award, the Minister of Economy, Trade and Industry Award, in the large manufacturing and importing companies category in FY2010, FY2014, and FY2017, and have been certified as a "gold product safety company" since 2017. In the follow-up audit conducted in January 2023, our new initiatives aimed at achieving higher levels of product safety, such as promoting product safety together with our business partners at the Value Verification Center and other company facilities, were assessed and our certification was extended.

In addition, YKK AP was selected as a site visit destination for FY2024 by the Product Safety Community, an initiative organized by METI for PS Award winners, and welcomed visits from METI and PS Award winners in March 2025. In addition to the Value Verification Center and Partners Support Studio, we introduced YKK AP's on-site product safety measures through facilities such as the Product Safety Learning Area, which is a permanent facility located at the Kurobe Ogyu Plant. Going forward, we will continue to demonstrate exemplary conduct as a leader in product safety measures.



◆ Certification as a "gold product safety company" (Ministry of Economy, Trade and Industry) November 2017
*Certification extended in January 2023



(Left) Inspection at the Partners Support Studio. (Right) In the Product Safety Learning Area, employees develop their awareness of product safety through experiences such as watching videos, as well as actual use of defective products and improved products

Intellectual Property Topics

Demonstration testing of BIPV

We have formed a business alliance with KANDENKO Co., Ltd. for the development and promotion of Building Integrated Photovoltaics (BIPV), which makes use of the windows and walls of buildings. Following a demonstration test conducted in front of Akihabara Station Square from July to October 2024, another demonstration test was conducted at the Sapporo Snow Festival in February 2025, confirming the effectiveness of the technology in various conditions, including environments surrounded by buildings and snowy conditions. From April 2025, we have also been conducting demonstration testing within Haneda Innovation City.



Demonstration testing lab established in Haneda Innovation City

Received the Trademarks for Humanity Award from the U.S. Patent and Trademark Office

YKK AP AMERICA is committed to addressing environmental issues by developing products with strong heat shielding, thermal insulation, and ventilation performance, and by reducing CO₂ emissions throughout the entire manufacturing and distribution process. In particular, as part of our product development strategy, we registered the trademark "enerGfacade®" in 2010 and have been developing a wide range of products, including entrances, storefronts, curtain walls, and balcony doors, under this sub-brand for sustainable products. In recognition of its provision of energy-efficient aluminum architectural products and company-wide efforts to address environmental issues, this trademark received the Trademarks for Humanity Award (sponsored by the U.S. Patent and Trademark Office) at the first awards ceremony, held in December 2024.



The award ceremony held at the U.S. Department of Commerce Auditorium

Development of "MABOT," a window installation robot for non-wooden buildings

In September 2024, YKK AP developed "MABOT," a window installation robot for non-wooden buildings (commercial buildings). MABOT is a series of robot systems that move autonomously and work alongside installation technicians, contributing to improved safety and productivity at construction sites and reducing the need for human labor. In February 2025, with the cooperation of YKK AP Group Installation Cooperative members IIZUKAKOGYO Inc. and TRUST CO., LTD., we began demonstration testing for window frame welding and inspection at actual construction sites. We will continue to develop and validate the system for practical use.



(Left) Automatic welding clamp robot "Welfixer 01." (Right) Field demonstration testing conducted in collaboration with installation cooperative companies

YKK AP showcases its development capabilities in Jakarta, Indonesia

In January 2025, the YKK AP R&D Center (Indonesia) participated in the "Seminar on Sustainable Housing, Buildings, and Cities" held in Jakarta, Indonesia (organized by the Japan International Association for the Industry of Urban Development, Building and Housing, among others). This seminar is a forum for sharing the knowledge, technology, and services of Japanese companies with the aim of making Indonesia's cities sustainable and livable. YKK AP R&D Center (Indonesia) hosted a business seminar and panel exhibition. At the seminar, the YKK AP R&D Center announced that research and development is underway on products suitable for hot and humid areas, taking into consideration factors that affect ventilation performance, such as building design and resident behavior.



The General Manager of the Research Division at YKK AP R&D Center (Indonesia) takes the stage

Feature 2:

Human Resources as the Foundation for Sustainable Growth and Organizational Strength

Human Capital Strategy



Yuka Murakami
Vice President,
Head of Human Resources
Department

Since FY2022, Murakami has served as the head of the Human Resources Department, responsible for all human resources-related matters. In accordance with our philosophy of encouraging employees to embrace change and take on new challenges with a positive attitude, she is reviewing our human resources strategy and implementing various personnel measures.

The key to realizing "Evolution 2030" is human resources and our future human resources strategy

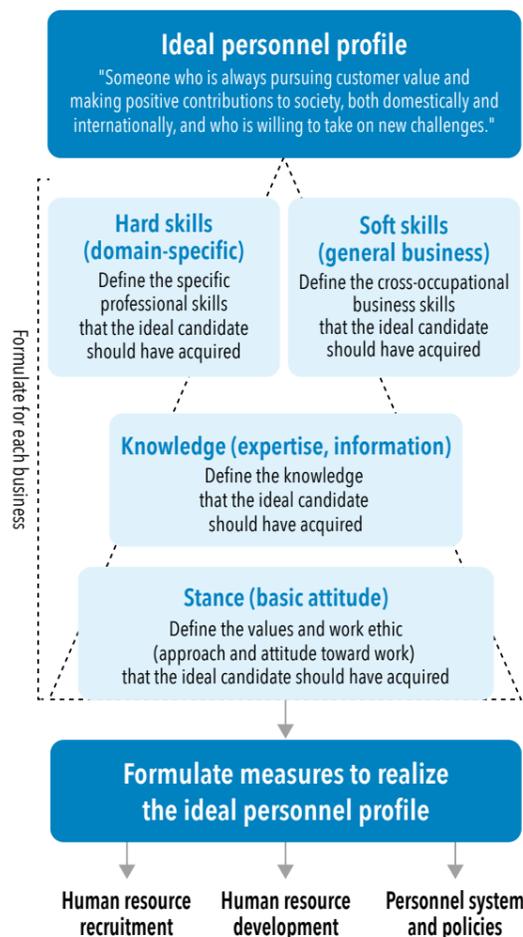
Realizing the "Evolution 2030" Vision requires moving on from the mature market cultivation phase in our management strategy. In order to create new markets, businesses, and value, it is necessary to restructure all our business plans and internal infrastructure, and the driving force behind this will be our human resources. I believe that developing and managing innovative human resources who can work globally with a broad perspective is essential for maximizing the potential of each and every employee and leading to the growth of the company.

In accordance with this view, we have formulated a "HR Strategy Roadmap" for the period from FY2024 to FY2030. The profile we are looking for is someone who is always pursuing customer value and making positive contributions to society, both domestically and internationally, and who is willing to take on new challenges. To achieve this ideal, the 7th Mid-term Management Plan aims to implement business-specific capability requirements in line with business strategies. At the same time, we will develop skill maps to visualize the gap between the personnel we require and the current state of our workforce. These will be used as a basis for implementing data-driven recruitment strategies, strengthening training systems, and promoting personnel allocation to maximize our organizational capabilities.

At the core of our human resources strategy lies YKK philosophy — CYCLE OF GOODNESS®, and the "Forest Management" philosophy advocated by YKK's founder Tadao Yoshida. "Forest Management" is the idea that, just as there are thick trees with many rings accumulated through experience, there are also young trees with thin trunks, tall trees, and short trees. Each type of tree has its own characteristics, and each works to its own particular strengths, moving forward together. This is the very essence of diversity and inclusion, which enables all employees to perform to the

best of their abilities regardless of age, gender, educational background, nationality, or experience, and it forms the bedrock of our human resource development policy. By upholding these universal philosophies and principles and translating them into specific measures based on the current

Process for setting personnel requirements



business environment, business issues, and human resource issues, we aim to achieve sustainable enhancement of corporate value.

Realizing fulfilling work and a pleasant working environment to "Prioritize Employee Well-Being and Engagement"

While laying the foundation for our human resources strategy in this way, we are also "Prioritizing Employee Well-Being and Engagement," which is an important issue in "Evolution 2030." We believe that achieving a situation where every employee feels a sense of growth through their daily work, finds fulfillment, and is motivated to perform to the best of their ability will drive sustainable growth for the company. To achieve this, it is essential that the company not only provide an environment, but also foster a culture and implement measures that enable employees to take the initiative in designing their own careers and to grow through challenges.

In FY2025, we updated one of the items related to human resources in our materiality from "Establishment of a fulfilling workplace environment" to "Fulfilling and employee-friendly workplace." In order to make workplace more fulfilling, we will enhance our support for autonomous career development, provide challenging work opportunities, and strengthen our efforts to ensure fair assessment and feedback. In terms of an employee-friendly workplace, we will keep improving the environment as we have done in the past, while promoting and expanding the use of systems that support diverse working styles. We believe that the synergistic effect of achieving improvements in terms of both fulfilling and employee-friendly workplace will lead to increased engagement, individual growth, and ultimately to improved productivity and innovation across the entire organization.

Creating an environment where everyone can continue to play an active role regardless of age is also an important part of our human resources strategy. The YKK Group abolished mandatory retirement in FY2021 to enable motivated and capable employees to carry on putting their knowledge and experience to good use. Our hope is that this will enable the transfer of technical skills and expertise possessed by experienced senior employees to the next generation, and that collaboration between different generations will create new value and enhance the vitality of the organization as a whole.

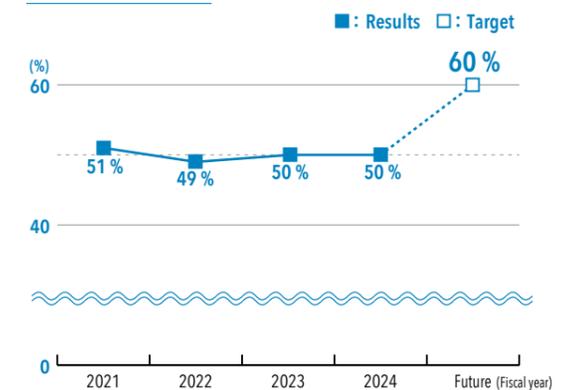
In FY2021, we replaced our existing employee satisfaction survey with an engagement survey. This survey has continued

every year since, and we monitor the results as an important indicator. The YKK AP Group (Japan) has maintained a score of around 50% positive responses, and we will aim for 60% going forward. To achieve this target, we will engage in open dialogue between management and employees on the issues identified in the survey results, and carefully implement solutions one by one to steadily improve engagement.

The 6th Mid-term Management Plan put particular emphasis on initiatives to support autonomous career development. In addition to providing age-specific career training for all age groups, we continue to operate a common mentor system that allows employees to consult with mentors outside their departments about their careers. Currently, approximately 90 employees in Japan have volunteered to serve as mentors, and 95% of employees who have used this program report that they were satisfied. These measures play an important role in encouraging each employee to think deeply about their career and take the initiative in acting.

Furthermore, in order to foster an organizational culture where employees continue to take on challenges without fear of failure, it is essential to ensure a sense of psychological safety. To this end, we are implementing harassment prevention training, multifaceted evaluation and feedback for management, as well as strengthening consultation services and response systems to prevent problems before they arise and to identify and resolve them quickly, thereby promoting an open and communicative workplace environment. We will continue to "Prioritizing Employee Well-Being and Engagement" by listening sincerely to our employees and engaging them in dialogue as we strive to create a working environment where they can thrive and find fulfillment in their work.

Employee engagement



*Covers the YKK AP Group (Japan)

Feature 2: Human Resources as the Foundation for Sustainable Growth and Organizational Strength

Human resource development and training to realize our management strategy

YKK AP is implementing a human resources strategy based on "Prioritizing Employee Well-Being and Engagement," in accordance with the CYCLE OF GOODNESS®. We will improve employee engagement by making an employee-friendly workplace that offers both fulfilling work and a pleasant working environment, as well as enhancing our workforce by actively investing in talent. Furthermore, we aim to be a company that is sought out by a wide variety of people by providing growth opportunities that lead to value creation and business growth, and by implementing management that creates job opportunities.

Individual career development support

We support the autonomous growth of our employees by providing career training for all age groups and a shared mentor system that offers cross-departmental career counseling by mentors with wide-ranging job types and experience. In addition, we have established a comprehensive support system to promote employees' acquisition of public qualifications, including full subsidies for distance learning tuition fees and qualification allowances.

In May 2024, YKK AP opened an in-house university, Technical University of YKK AP (AP Tech), as a place for employees involved in manufacturing to acquire expertise in a systematic way. It offers four specialized courses: fabrication technology, production management, quality management, and IT. The first batch of participants consisted of 37 employees, who went on to pursue new career challenges such as job changes and university enrollment.

Furthermore, in May 2024, we opened a robotics school with the aim of further developing personnel skilled in the use of robots. Robotics instructors were selected from each department of the Manufacturing Division, and a total of 45 employees participated in FY2024.



Robotics school

YKK AP's human capital (FY2024 results)

- Employees in Japan: 13,337
- Employees overseas: 4,915
(93 employees on overseas secondment)

Development of management personnel and global human resources

The Value Creation Academy, which aims to develop business leaders for the YKK Group, is a one-year program in which participants develop a deeper understanding of the company's Management Principle while learning about management strategy, financial accounting, marketing, and organization and human resource development. At the end of the program, participants present their proposals for addressing management issues. In FY2024, nine employees from YKK AP participated in the program.

We also have an overseas trainee program in which young employees are seconded to overseas companies for approximately six months to one year. In FY2024, we implemented an early secondment program for employees in their second year of employment, and three employees participated. In FY2025, we will increase the number of seconded employees to 11 and expand the program.

Meanwhile, in an effort to develop the next generation of business leaders who will lead YKK AP into the future, we continue to send employees to graduate schools and MOT/MBA programs in Japan and overseas, with three employees obtaining degrees in FY2024.

Furthermore, under the 7th Mid-term Management Plan, we plan to begin recruiting and training foreign personnel with a view to assigning them to overseas business sites in the future.



DALIAN YKK AP launched the "Blue birds Academy," a human resource development program for young employees, in FY2024. Approximately 15 division heads serve as instructors, teaching the basic knowledge necessary for management

Human resource development to create innovation

We are implementing digital IT literacy education with the aim of having employees acquire basic IT literacy, thereby improving work efficiency. In FY2024, we implemented an "Introduction to DX" program for all employees, with 81% completing the course. In addition, more than 2,000 employees have taken courses in spreadsheet software, data analysis, generative AI, and other topics. In addition, approximately 800 employees participated in courses aimed at acquiring digital and IT-related skills for self-improvement, which helped to advance basic understanding of digital transformation throughout the organization.

In addition, in FY2024, we supported practical classes held by Harvard University's Graduate School of Design (GSD) in Japan, with eight employees participating as associate

members. Together with 11 GSD students, participants gained a deeper understanding of the rich water resources and landscape of the Kurobe River alluvial fan, and had the opportunity to gain new perspectives and insights beyond their usual work.



GSD students give presentations at the YKK 50 Building

Building confidence through learning at AP Tech

In May 2024, I enrolled in the Production Management Course at Technical University of YKK AP (AP Tech), the company's in-house university, and learned how to make data-driven improvement proposals for issues such as inventory management and uneven workloads in my department. I was also able to interact with colleagues from all over the country, which broadened my horizons and helped me develop the ability to speak up and make suggestions on issues.

Going forward, I would like to draw on the knowledge I have gained at AP Tech and my experience in the field by using data to identify waste in the production process and make improvements. In addition, I hope to build a system to collect and make visible, accurate, and easy-to-use data, and to act as a bridge between the manufacturing floor and staff divisions to optimize the entire manufacturing process, aiming for human resources who can produce high-value-added work.



Production Management Office, Material Production Department, Kyushu Plant, Manufacturing Division

Kazuma Tsuruta

GSD gave me a new perspective beyond architecture

I participated as an associate member in a practical class conducted by the Harvard University Graduate School of Design (GSD) in Kurobe City. As I learned about the water resources, topography, and history of the Kurobe River alluvial fan, this project made me aware of the deep connection between the natural environment and people's everyday activities. Knowing that landscape design encompasses not only the natural environment, but also culture and lifestyle, has greatly broadened my own perspective as someone who deals with architectural products. There are many points of contact between architectural systems and landscape design, and I feel that there is potential to create products and services with new value by being aware not just of architecture alone, but also of its relationship with the surrounding environment and nature. In the future, I would like to broaden my perspective beyond architecture to make more comprehensive proposals.



Construction Technology Office, Architecture and Wellness Technology Group, Technical Research Division

Tadahisa Akiyama

Feature 2: Human Resources as the Foundation for Sustainable Growth and Organizational Strength

Creating a workplace where a diverse mix of employees can thrive

In accordance with the "Forest Management" philosophy advocated by YKK's founder Tadao Yoshida, we promote diversity and inclusion, striving to create systems and environments where each employee can demonstrate their full potential based on the principles of autonomy and coexistence, regardless of age, gender, educational background, or other factors.

Initiatives to promote the active participation of women

Under our Diversity & Inclusion Declaration, we are actively working to support the career development of female employees. As a result, the number of women in management positions reached 148 in FY2024, achieving the target we had set. To keep up this progress, we have set a target of 200 female managers by FY2028 and are implementing various measures to that end (YKK AP (non-consolidated)).

In FY2024, we continued the "AP Women's Career Development Program," a support program aimed at fostering the next generation of female leaders to help women build long-term careers, with 201 employees participating.

In addition, we have launched a "sponsorship system" in which executive vice presidents act as sponsors for female employees, providing appropriate coaching and guidance to support their advancement through interviews and other means. This is a system designed to produce the next generation of managers who can contribute to the business. The first batch of participants consists of six female employees, and from FY2025 onwards, the program will evolve into the "AP Women's Career Development Program Premium," which aims to accelerate the development of female managers at the department head level and above.

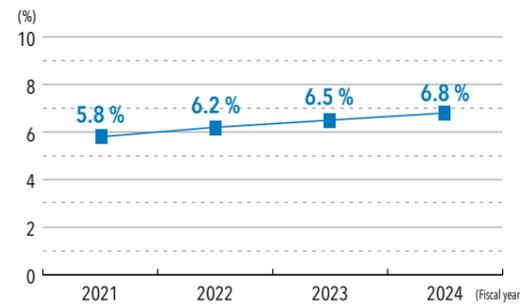
Other initiatives include the "AP FemCare Project" launched in FY2023, which involves providing "basic training on women's health" for all employees in Japan to improve literacy in women's health. In addition, we have introduced a "menstrual symptom relief program" for female employees who suffer from menstrual discomfort, which allows them to consult a gynecologist online and receive a prescription for low-dose birth control pills as needed. In this way, we are considering and implementing measures to maximize work performance by alleviating health issues specific to women.

Diversity & Inclusion Declaration

Based on the concept of "fairness," we will create new value through mutual recognition and acceptance of differences in age, gender, educational background, nationality, and disability, or other factors.

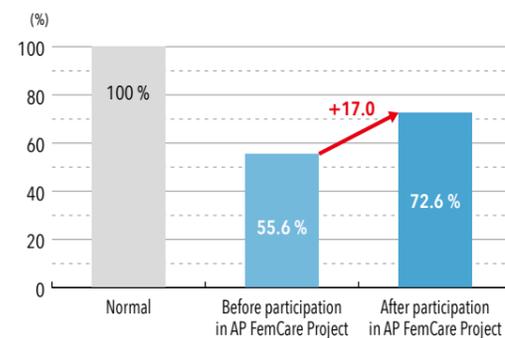
1. We aim to create a workplace where anyone can engage in their work actively and comfortably with motivation, regardless of generation.
2. We aim to cultivate female leaders who can make proposals and improvements utilizing diverse perspectives in the fields of sales, manufacturing, technology, and management.
3. We aim for a company that can respond to the demands of society through each employee's diverse values.

Rate of female managers



*Covers the YKK AP (non-consolidated)

Work performance scores during menstrual discomfort



*Survey covered: Participants in the AP FemCare Project

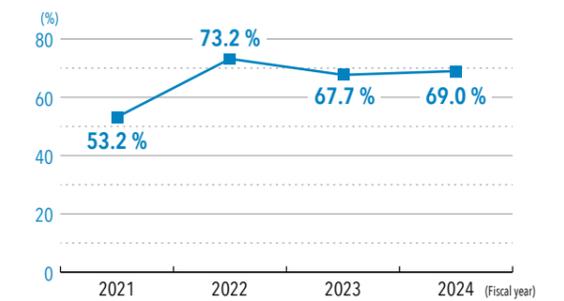
Support for balancing work with caregiving and childcare

Creating an environment where every employee can thrive and find fulfillment in their work requires achieving a balance between work on one hand and caregiving or childcare on the other. In February 2025, YKK AP held its first "seminar on balancing work and caregiving." The aim is to alleviate employees' anxiety and help them effectively prepare for caregiving by providing them in advance with knowledge about balancing work and caregiving.

Meanwhile, in terms of childcare, we offer a "Childcare Leave Warm-up Program" (Petit MBA for Childcare Leave), the costs of which are covered by the company, as a form of self-development support during parental leave and upon returning to work. Furthermore, in order to promote the use of childcare leave by male employees, we agreed to participate in the "IKUKYU.PJT" initiative proposed by Sekisui House, Ltd.,

which began in FY2024. These measures promote a deeper understanding of childcare among employees and foster a culture of mutual support. The rate of male employees taking childcare leave in FY2024 was 69.0%, exceeding the national target of 50% for 2025.

Rate of male employees taking childcare leave



*Covers YKK AP (non-consolidated)

Growth achieved through harmony between work and family life

Since joining YKK AP in 1996, I have consistently built my career in sales. After studying in the U.S.A. for several years, I now supervise a sales team for window systems in Taipei City. Working in such a high pressure and busy industry, time management is very important. I always remind myself to be positive and hardworking, but I try spend time with my family after work and not to bring work home with me.

YKK AP TAIWAN feels like a large family to me. Although everyone has their own job to do, we help each other all the time. We cooperate to accomplish every task.

That provides me with strong support in maintaining a good work-life balance and performing well in my job.



Sales Department, Taipei Branch Manager, Supervisor YKK AP TAIWAN CO., LTD.

Olivia Lin

Drawing on cultural diversity to take on monozukuri that makes people shine

Since 2023, I have been assigned to YKK AP AMERICA as an employee in charge of production technology. YKK AP AMERICA has a culture of giving praise, and during meetings, reports are always accompanied by advice on how to improve and words of appreciation. This is a valuable opportunity for the entire team to identify common challenges and share the joy of achieving goals.

At one point, Machinery & Engineering Department equipment introduced at the Macon Factory posed language barriers due to its complexity. In response, we have been pursuing and improving "user-friendly facilities" by incorporating visual manuals and defining common language for equipment.

Since taking up this position, I feel that I have developed a broader perspective on monozukuri. I hope that we will continue to design equipment that takes into consideration cultural and individual characteristics, building systems and structures that maximize people's potential.



Residential Business Division YKK AP AMERICA INC.

Mayu Kato

Feature 2: Human Resources as the Foundation for Sustainable Growth and Organizational Strength

Realizing a fulfilling and employee-friendly workplace

As in the past, we will continue to invest in improving the workplace environment while energizing individuals and organizations, aiming to create a workplace that is not only pleasant to work in but also provides a sense of fulfillment.

Initiatives for improving engagement

We hold roundtable meetings in Japan as a forum for dialogue between directors and employees. In FY2024, these meetings were held a total of 47 times at 40 locations nationwide, with a total of approximately 470 participants. By having management visit each location and engage in two-way communication, the meetings promote understanding of company policies and foster new insights.

We also hold "Family Day" events where employees and their families are invited to the office, have a company-sponsored club system that provides opportunities for employees to interact outside of work, and hold lunch gatherings to promote communication and foster connections between employees, thereby enhancing employee engagement and contributing to work fulfillment.



"Family Day" held at the YKK 80 Building in March 2025



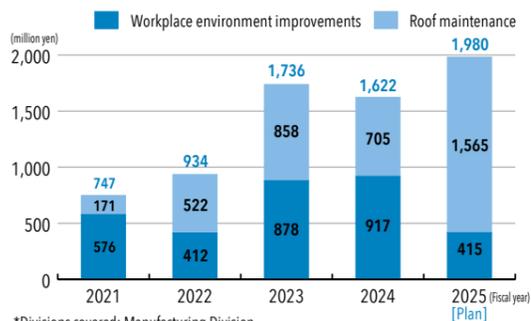
YKK AP AMERICA holds an annual National Sales Meeting where sales representatives from North America (the U.S.A. and Canada) gather to boost each other's motivation

Improvements to the workplace environment in manufacturing divisions

Our manufacturing divisions in Japan carry out planned environmental capital investments every year. In FY2024, we invested approximately 1.6 billion yen to improve the environment at each location, including restrooms, break rooms, cafeterias, and changing rooms. We will also continue investing in roof maintenance, which we began in earnest in FY2022, and will increase investment further from FY2025 to provide even safer and more comfortable working environments with improved thermal insulation performance.

In addition, we have established a Workplace Improvement Committee, in which plant and factory managers from across Japan meet every month to share issues and discuss solutions for improving the workplace environment.

Environmental capital investments



(Left) Break room at the Kurobe Ogyu Plant. (Right) Cafeteria at the Kanagawa Factory. Both were renovated in FY2024

Introduction of a refresh leave system

In FY2024, we introduced a "sabbatical leave system" that grants five days of special paid leave to regular full-time employees, employees for supplementary work, and temporary contract employees who have reached certain milestones in terms of years of service. The aim is to allow employees to refresh mind and body by taking extended vacations, thereby increasing their motivation to work and encouraging them to remain with the company for the long-term. In the first year, approximately 70% of eligible employees took advantage of the system.

Respect for human rights rooted in the CYCLE OF GOODNESS®

In accordance with the YKK philosophy — CYCLE OF GOODNESS®, YKK AP considers respect for the human rights of all stakeholders involved in our business, including our supply chain, to be a vital part of our corporate social responsibility.

Initiatives to address human rights issues

The YKK AP Human Rights Policy, established in 2023, was formulated based on the core values of the YKK Group, while taking into account human rights issues related to YKK AP's specific business activities.

Our policy for addressing human rights issues is formulated from a company-wide perspective at the Sustainability General Meeting. Based on this policy, the Human Rights Working Group (WG) within the Compliance Committee and related divisions take the lead in promoting interdepartmental activities across the entire group, both Japan and overseas.

The Human Rights WG identifies human rights risks based on an assessment of the current situation, evaluates them using a matrix of impact and likelihood, and reflects the results in preventive and corrective measures to be taken by the relevant divisions.

[Details of the YKK AP Human Rights Policy are available on our website. https://www.ykkapglobal.com/en/sustainability/society/humanrights/](https://www.ykkapglobal.com/en/sustainability/society/humanrights/)

Respect for the human rights of YKK AP Group employees

In FY2023, we conducted human rights risk assessment consultations with employees in Japan (YKK AP (non-consolidated)), in FY2024, we held consultations with employees at affiliated companies in Japan and overseas, and in FY2025, we plan to complete consultations at all YKK AP Group companies.

The results of assessments conducted thus far have identified "long working hours," "harassment," "work-related accidents," and "leakage of personal information" as issues in Japan, while "long working hours" and "harassment" are also concerns overseas. We have established a governance system for these matters and have defined preventive and corrective measures to reduce risks, as well as conducting YKK Global Criteria of Compliance (YGCC) audits. In addition, we aim to

ensure that each and every employee is aware of human rights, and we continue to provide e-learning training on business and human rights for all employees.



E-learning on business and human rights

Respect for human rights in the supply chain

As part of its corporate social responsibility, YKK AP promotes initiatives to respect human rights not only within the company but also throughout its entire supply chain. We request that our business partners comply with the YKK AP Human Rights Policy and promote CSR procurement based on procurement policies that include organizational governance and human rights. To this end, we are promoting human rights due diligence initiatives based on concluding agreements regarding our "Basic Transaction Principles," which clearly stipulate compliance with laws and regulations and fair transactions.

In FY2024, we conducted a questionnaire survey of 111 major Japanese suppliers, incorporating external expertise and taking into account risk factors commonly found in supply chains such as child labor, forced labor, and long working hours. As a result, although no direct cases of human rights violations have been identified at this point, we recognize the importance of revising the questionnaire to gain a more detailed understanding of the current situation and of continuing to monitor and take preventive measures against potential risk factors.

In FY2025, we will expand the scope of the survey to include the suppliers of Japanese affiliated companies, and in FY2026, we plan to include the suppliers of overseas affiliated companies. The survey results will be analyzed in order to implement prevention and mitigation measures.

Feature 3:

Building a Solid Foundation to Protect Trust and Confidence

Risk Management Strategy

Strengthening risk management as a "defensive measure" to support business growth

We are strengthening risk management to achieve a "resilient business foundation" which we have identified as part of our materiality (priority issues). Based on risk prevention, forecasting, and control, we are implementing risk management through five committees (Quality, Trade Management, BCM, Information Security, and Technology Asset Management) that establish and implement regulations. In addition, we are enhancing resilience by supporting business divisions in their risk activities based on specialized knowledge and expertise, preparing and training on BCPs (business continuity plans) during normal times, and establishing a governance system for emergency situations.

Formulation of the 7th Mid-term Risk Management Policy

The 7th Mid-term Risk Management Policy calls for "enhancing risk management throughout the AP Group to implement our management and business strategies." In order to implement the "offensive" strategy of business expansion based on the "Evolution 2030" vision, it is also extremely important to maintain strong "defensive" measures. We will contribute to sustainable growth and the enhancement of our corporate value by identifying and assessing business risks, taking measures to address them, and monitoring the implementation through a PDCA cycle.

One mid-term issue is the urgent need to implement risk management measures for each affiliated company, including those overseas, as their number continues to increase each year. In FY2024, we conducted risk training for managers at overseas companies. In FY2025, we will further strengthen monitoring of and collaboration with affiliated companies, as well as supporting the promotion of risk management.

In addition, it was discovered in FY2024 that some fire prevention equipment manufactured and shipped by YKK AP in the past had undergone flame shielding performance tests using test specimens that differed from the specifications in the application, and had been certified by the Minister of Land,

Midori Sato

Vice President,
CRO
(Chief Risk Management Officer)



As CRO since 2024, Sato is responsible for risk management for YKK AP as a whole. She works not only on improving resilience in the event of incidents, but also on creating mechanisms to prevent risks and providing effective training.

Infrastructure, Transport and Tourism. We recognize this as a very serious matter that affects our reputation as a company, and we will continue to thoroughly educate our employees on fire resistant products while also introducing audits into the product development and manufacturing processes. We will implement thorough risk management to ensure that no similar incidents occur ever again.

Setting materiality and indicators

We have established five materiality indicators to evaluate the effectiveness of risk management. "Rate of participation in risk-related training" is an indicator (FY2028 target: 95%) for raising the risk awareness of every employee in order to prevent cyberattacks and phishing emails, which have been on the rise in recent years, as well as misconduct and violations of laws and regulations. "Number of locations that have formulated BCPs" serves as an indicator to confirm whether BCPs are being properly developed and implemented at all Japanese and overseas sites. "Number of serious quality and product liability incidents," "number of serious cyber incidents," and "number of serious violations of laws and regulations" are indicators for showing that our day-to-day efforts are leading to reduced risks.



Risk training conducted for managers at overseas companies (YKK AP R&D Center)

Identification and countermeasures for key risks

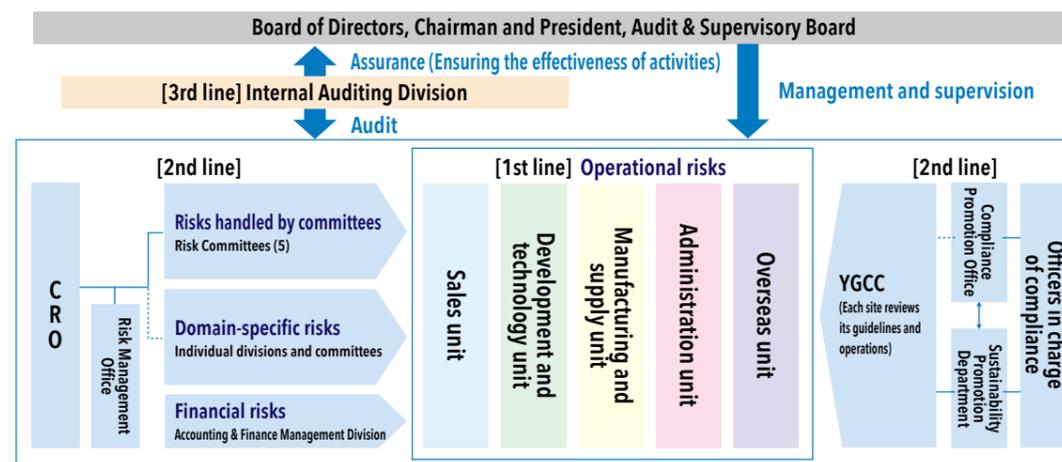
In FY2024, we reviewed our process for identifying key risks and, in addition to consultations with risk management departments, conducted risk surveys of business divisions and interviews with senior management to identify and analyze risks. In evaluating risks, we determine the level of risk based on the likelihood of occurrence and impact, as well as reputational risks and internal and external factors. This is then used as a basis for discussion and decision-making by the Board of Directors to identify key risks.

For FY2025, we have identified 27 categories of key risks, including system failures, cybersecurity, major natural disasters, product defects, and recalls. We will prioritize the allocation of business resources to these areas and implement measures to develop systems and countermeasures.

Our risk management promotion structure

YKK AP's risk management promotion structure is based on a three-line model. The five basic units (Sales, Development and technology, Manufacturing and supply, Administration, and Overseas) serve as the first line, taking the lead in risk management activities. Risk management departments and committees, which serve as the second line, support the first line with their specialized knowledge and expertise. The Internal Auditing Division, which serves as the third line, audits the effectiveness of the risk management activities of the first and second lines. Furthermore, by allowing self-checks of risk management activities based on the YKK Group's compliance standards, the YKK Global Criteria of Compliance (YGCC), we are clarifying the roles and responsibilities of each person and division in charge of conducting these activities, thereby enhancing their effectiveness.

Risk management/Compliance Advancement Structure



BCM (Business Continuity Management) initiatives

We are working to acquire the appropriate business continuity capabilities necessary to respond to major emergencies. To this end, we are enhancing our organizational strength through repeated training and preparation to enable rapid initial response and implementation of BCPs based on an all-hazards approach, covering large-scale natural disasters, supply chain disruptions, cyber incidents, and the spread of infectious diseases.

The first basic policy is "Prioritize human life, ensure safety, and prevent secondary disasters." In FY2024, based on the scenario of a major earthquake directly under Tokyo or a Nankai Trough earthquake, we conducted joint training exercises involving manufacturing and sales operations across different

areas, briefings for sales managers, and training exercises with Kurobe, which will serve as a backup base for the local disaster response headquarters in the event of a disaster in the Tokyo metropolitan area. Measures will be considered for each location to address issues identified during the training, and these will be reflected in BCP revisions and future training. We are also conducting initiatives that involve external contractors such as truck drivers and cafeteria staff in evacuation drills.



Joint training between the disaster response headquarters in Kurobe and the Tokyo metropolitan area (YKK AP 30 Building)

Feature 3: Building a Solid Foundation to Protect Trust and Confidence

Jumpei Ishii

Executive Chief Specialist
Legal Counsel
Head of Compliance Promotion Office,
Legal & Intellectual Property Department



Ishii works as a lawyer for YKK and YKK AP, handling legal affairs. In 2018, he studied abroad at the School of Law at the University of California Berkeley, U.S.A., and passed the New York State Bar Examination. In 2022, he was appointed as Executive Chief Specialist and Legal Counsel. From 2025, has also been serving as the head of the Compliance Promotion Office.

Compliance Strategy

Strengthening compliance based on the YKK philosophy — CYCLE OF GOODNESS®

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 and technology, Manufacturing and supply, Administration, and Overseas) to strengthen monitoring of compliance with rules, regulations, and guidelines.

In addition to regular compliance training for 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 (HR, purchasing, occupational 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 set out the YKK Global Criteria of Compliance (YGCC), the YKK Group's compliance standards based on the YKK Philosophy and ISO 26000, and is working to instill them at its locations in Japan and overseas.

We regularly carry out YGCC audits such as self-inspection and internal audits, and have standardized monitoring items to improve the effectiveness of the audit process and ensure continuous improvement.

Whistleblowing system

The YKK Group operates the "YKK Group Whistleblowing System," which allows individuals to consult with/report to consultation desks inside and outside the company anonymously regarding behavior that violates laws, work regulations, or internal rules. Efforts are underway to ensure that all users are aware of this system. In addition, the principle of whistleblower protection prohibits the disadvantageous treatment of any individual for making a consultation.

In FY2024, we established a Basic Policy on Customer Harassment based on the YKK AP Human Rights Policy. In addition to establishing a customer harassment consultation desk, we conduct training for employees to learn about customer harassment and methods for dealing with it.

Number of whistleblowing cases

Fiscal year	2021	2022	2023	2024
Cases	42	49	59	71

*Total number of inquiries received by the Japan consultation desk regarding the YKK AP Group (Japan)



Customer harassment training reinforces response skills through role-playing

Feature 3: Building a Solid Foundation to Protect Trust and Confidence

Hiroaki Shigezumi

Head of the Environment &
Facilities Department



As Head of the Environment & Facilities Department, Shigezumi is responsible for planning, drafting, and executing the company's environmental and facility policies. He believes that it is important to contribute to the environment and reduce environmental impact throughout the entire product life cycle.

Environmental Management Strategy

Promoting environmental management that leads to sustainable growth

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 impacts in our business activities throughout the entire product lifecycle." This fiscal year, we have formulated the 7th Mid-term Environmental Business Plan, setting targets for the period from FY2025 to FY2028. Among these, we have identified key environmental issues related to our business activities as materiality indicators.

Challenge to achieve a 100% aluminum recycling rate

In the 6th Mid-term Environmental Business Plan, which ended in FY2024, we set three indicators as KPIs: "CO₂ emissions (Scope 1 and 2)," "waste emissions (manufacturing sites)," and "water use (manufacturing sites)," and worked to improve them. We achieved our targets for CO₂ emissions and water use, but we fell short of our waste emissions target due to an increase in the volume of high thermal insulation windows handled and the resulting increase in glass waste generated during the manufacturing process. In addition to these indicators, the 7th Mid-term Environmental Business Plan will also focus on increasing the "recycled aluminum usage rate"¹.

The use of recycled aluminum and green aluminum as raw materials² is highly effective in reducing CO₂ emissions and contributes to both resource recycling and decarbonization. We will work to resolve environmental issues throughout the value chain and use this to drive business growth.

An effective environment promotion system

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 once a year. Under that policy, the "YKK AP Environment Committee" implements the environmental policy in individual divisions. The manufacturing, sales, and development divisions hold meetings four times a year, and the overseas division holds meetings twice a year to confirm the progress of environmental policies. In order to enhance the effectiveness of our environmental policies, we also conduct internal environment audits every year. In addition, we have acquired ISO 14001 certification at all locations in Japan and at 11 locations overseas, and are continually working to increase the level of environmental management.

¹ As defined by the Japan Sash Manufacturers Association (in Japanese only) <https://www.jsma.or.jp/documents/environment/environment/abid196.html>
² Green aluminum as raw materials: Aluminum ingots manufactured using renewable energy at the smelting stage, thereby reducing CO₂ emissions

Environmental policy targets and indicators

Theme	Indicators	FY2024 Results	FY2025 Plan	FY2028 Plan	FY2030 Targets	Goals for FY2050
Climate change	Scope 1 and 2 emissions	271 kt CO ₂ -37 %	244 kt CO ₂ -43 %	149 kt CO ₂ -65 %	86 kt CO ₂ -80 %	Zero CO ₂ emissions in the product and monozukuri lifecycle
	Scope 3 emissions	2,021 kt CO ₂ -19 %	1,975 kt CO ₂ -21 %	1,838 kt CO ₂ -26 %	1,746 kt CO ₂ -30 %	
Resource recycling	Recycled aluminum usage rate	56 %	60 %	71 %	100 %	Use of renewable materials (low carbon, recyclable)
	Waste emissions	18.7 kt -9 %	18.4 kt -10 %	14.7 kt -28 %	12.3 kt -40 %	
	Waste emissions per unit of intensity	33.4 t/billion yen	31.4 t/billion yen	21.0 t/billion yen	—	
Water conservation	Water use	8.14 million m ³ -34 %	7.94 million m ³ -37 %	7.60 million m ³ -40 %	7.35 million m ³ -42 %	Maximal reuse of water
	Water use per unit of intensity	1,499 m ³ /100 million yen	1,371 m ³ /100 million yen	1,076 m ³ /100 million yen	—	
Biodiversity	Number of social contribution activities	217	At least two per site	—	—	Monozukuri in harmony with nature and local communities

*Covers the YKK AP Group (Japan and overseas), base year is FY2013 (FY2016 for waste). However, the recycled aluminum usage rate is based on the YKK AP Group (Japan)

Feature 3: Building a Solid Foundation to Protect Trust and Confidence

Addressing climate change

YKK AP is working to reduce CO₂ emissions and address climate change in all of its business activities.

This initiative is being promoted by the Carbon Neutrality Project, led by the head of the Manufacturing Division. This project consists of seven working groups involving young engineers, and is promoting the formulation of a carbon neutrality technology roadmap and initiatives based thereon.

Aiming to achieve, relative to FY2013, a 80% reduction in Scope 1 and 2 and a 30% reduction in Scope 3 by FY2030, we will accelerate capital investment and technological development while reviewing each platform for products and monozukuri.

Furthermore, the popularization of high thermal insulation products will reduce the amount of energy used for heating and cooling, contributing not only to YKK AP's carbon neutrality but also to that of society as a whole.

Scope 1 and 2 initiatives

We are working to reduce the amount of fuel and electricity used in our manufacturing processes and offices. The Machinery & Engineering Department, which is responsible for

developing manufacturing equipment, is improving the energy efficiency through standardization and the adoption of energy-saving technologies. In terms of fuel, we are switching from liquid fuels to natural gas. Furthermore, with a view to the future, we are developing and testing the use of hydrogen and other gases in gas burners.

We are also working on energy creation from renewable sources, such as solar, hydro, and wind. As of FY2024, we have increased the amount of renewable energy installed to nine times the FY2021 level. This accounts for approximately 7% of YKK AP's total electricity consumption.

In order to measure our progress in reducing CO₂ emissions, we are also developing a database that tracks energy consumption by facility and manufacturing site and visualizes CO₂ emissions.

As of FY2024, we have reduced Scope 1 and 2 emissions by 37% relative to FY2013 levels.

Scope 3 initiatives

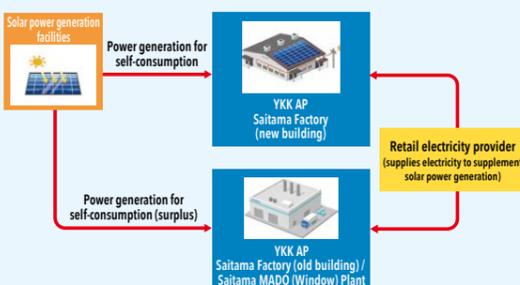
Scope 3 emissions account for the majority of the CO₂ emissions associated with YKK AP's business activities across

Environmental Topics

Expanding the use of renewable energy

We are promoting the introduction of self-consumed renewable energy on our own premises, and have achieved a total of 16,200 kW of solar power generation at 11 locations in Japan and overseas. With the expansion of renewable energy, surplus electricity is generated, and in FY2024, we started operating a "surplus electricity sharing on-site PPA" in the Tokyo metropolitan area. We have also established a system to fully utilize 100% of the electricity generated by solar power at the Saitama Factory (new building) by supplying it to the Saitama Factory (old building) and the

Illustration of operation of the "surplus electricity sharing on-site PPA"



Saitama MADO (Window) Plant. This initiative is expected to reduce CO₂ emissions by 512 tons per year. In addition, a large solar power generation facility has been installed at the Namerikawa Plant.

In March 2025, we introduced large storage batteries at our Kyushu Plant, and plan utilize surplus electricity during peak usage hours and at night. In addition, we are promoting demonstration tests of energy generation facilities tailored to regional characteristics, such as wind power and hydroelectric power generation utilizing water used in manufacturing processes. In FY2024, we achieved a reduction of 12,000 tons in CO₂ emissions through the introduction of renewable energy.



Large solar power generation facility installed at the Namerikawa Plant

the entire supply chain. Of these, emissions from material procurement for products account for 80% of the total. In particular, the procurement (mining, smelting, and overseas transportation) of aluminum ingots has a significant impact, and the utilization of recycled aluminum will have the greatest impact in achieving carbon neutrality.

We have already achieved a 100% internal recycling rate, and our next challenge is to expand the utilization rate of market-obtained recycled materials (recycled raw materials such as aluminum scrap recovered from the market). Since market-obtained recycled materials contain a variety of metals, we are focusing on improving separation technologies for extracting only high-quality aluminum.

The Shikoku Plant, which introduced a dedicated aluminum recycling furnace in FY2023, reached a recycled aluminum usage rate of 80% by the end of FY2024.

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 working to accelerate in-depth technical development of aluminum recycling through collaboration between industry, government, academia, and the private sector. From April 2024, a joint research course with YKK AP is being offered at Tohoku University to promote research aimed at realizing an aluminum recycling-oriented

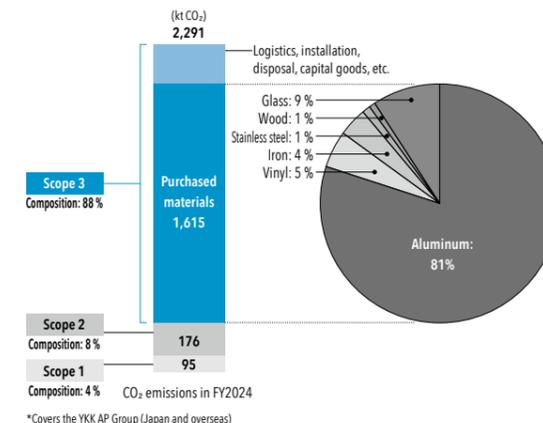
society.

We are also working to secure green aluminum raw materials by using green energy at the stage of smelting aluminum from bauxite, as well as to improve logistics efficiency by introducing double-trailer trucks and joint shipping. With respect to our business partners, we have circulated Green Procurement Guidelines and chemical substance management guidelines, and we also conduct a CSR survey based on environmental perspectives.

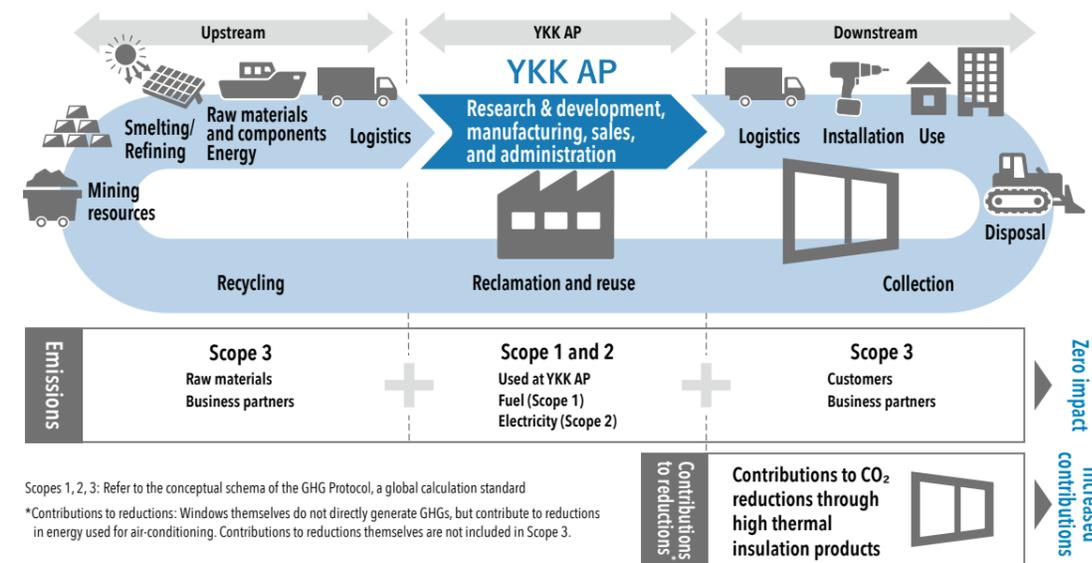
As of FY2024, we have reduced Scope 3 emissions by 19% relative to FY2013 levels.

Breakdown of YKK AP's CO₂ emissions (FY2024)

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



Lifecycle of YKK AP products and CO₂ emissions



Scopes 1, 2, 3: Refer to the conceptual schema of the GHG Protocol, a global calculation standard
 *Contributions to reductions: Windows themselves do not directly generate GHGs, but contribute to reductions in energy used for air-conditioning. Contributions to reductions themselves are not included in Scope 3.

Feature 3: Building a Solid Foundation to Protect Trust and Confidence

Disclosure of information under the TCFD recommendations

In 2019, YKK AP endorsed the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, and in 2021, it received "Well below 2° C" certification from the SBT (Science

Based Targets) initiative, an international organization. YKK AP assesses the impact of its business activities in terms of both climate-related risks and opportunities, and reflects 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 "Sustainability 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 affiliated

companies in Japan and overseas.

The "Environmental Policy Board Committee," which is chaired by the president and has jurisdiction over the environmental area within the Sustainability 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 the head of the Manufacturing Division as project leader, the Carbon Neutrality Project was launched in FY2021, and seven 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 (manufacturing 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. These efforts, which take business continuity planning (BCP) into account, begin as early as 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 use 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," which is among the top-performing windows in this regard. In FY2024, we launched a new wooden window, "APW 651," which combines high thermal insulation properties with aesthetic appeal. 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 ₂ emissions can be significantly reduced to only about 3% of those required to produce new aluminum ingots (new metal) from bauxite. We will promote decarbonization by expanding the reuse of used aluminum sashes and other materials recovered from the market and by obtaining green aluminum ingots smelted using renewable energy sources. To realize this goal, we are introducing an aluminum recycling furnace and developing technologies to separate out impurities.

Risk management

Business risks as a whole are assessed and reviewed once a year, prioritized by "severity" and "likelihood 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- to 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 CO₂ 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 Integrated Report and the Environmental Report.

	Indicators	Targets
Scope 1 and 2	Reductions in YKK AP CO ₂ emissions	80 % reduction by FY2030 (relative to FY2013)
Scope 3	Reductions in CO ₂ emissions in the supply chain	30 % reduction by FY2030 (relative to FY2013)
During product use	Increased contributions to CO ₂ reductions	220 % reduction by FY2028 (relative to FY2020)

*Covers the YKK AP Group (Japan and overseas)

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. Applying the "Sustainable Design Guidelines" during product development, we evaluate and improve products with respect to the following five items: "visualization of CO₂ emissions," "standardization of packaging materials," "visualization of environmentally hazardous substances," "ease of disassembly and separation," and "sustainable design guidelines and evaluation methods."

We are also actively working to improve the recycling rate for the vinyl produced during the process of manufacturing vinyl windows, as well as after use. We have installed crushing and sorting machines at each of our vinyl window manufacturing sites to reuse scrap materials as raw materials for vinyl profiles and parts for insulating glass. As a result, the internal recycling rate (scrap material reuse) has reached 67% as of the end of FY2024.

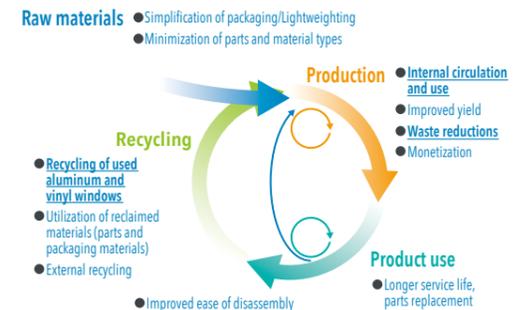
We also participate as a member of the "Vinyl Window

Recycling Committee," which is formed mainly of industry associations, and are working as part of an industry-government-academia collaboration program to establish a system for collecting and recycling vinyl windows after use. In addition to promoting the installation of machinery to crush and sort the collected vinyl, the committee is also discussing the standardization of quality and acceptance conditions in the collection process. If successful, this will bring us closer to mass production using recycled vinyl.

We also implement 3R activities to reduce, reuse, and recycle waste. For example, in FY2021, the Kurobe Ekko Plant began operating an RPF (Refuse-derived Paper and Plastics densified Fuel) production facility. This allows waste plastics, used paper, wood waste, and other waste materials to be converted into a valuable resource, and 225 tons of RPF were produced and sold in FY2024.

Waste emissions in FY2024, including both Japan and overseas, are down approximately 9% from FY2016 levels.

The circular economy approach



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

Environmental topics

Enhancing a stable supply system for green aluminum raw materials

YKK AP aims to achieve a 100% recycled aluminum usage rate by FY2030, while at the same time increasing the use of green aluminum. As part of our efforts to strengthen procurement of green aluminum raw materials, in December 2024 we increased our capital in Nippon Amazon Aluminium Co., Ltd. As a result, our transaction volume for aluminum ingots produced by Albras Co., Ltd., which is responsible for smelting in Brazil, is expected to increase approximately two-fold. Our overseas companies are also promoting procurement of green aluminum raw materials from the neighboring countries where they are manufactured.



Green aluminum ingots produced by Albras

Feature 3: Building a Solid Foundation to Protect Trust and Confidence

Water conservation

We are working to conserve water resources with the aim of achieving sustainable water use. Water is mainly used in production processes such as aluminum surface treatment, cleaning, and cooling, and we are striving to reduce water intake by promoting multi-stage use (reuse of the same water for multiple purposes) and recycling, as well as to prevent pollution of wastewater by using stricter voluntary control standards.

Nearly half of YKK AP's overall water use is attributable to aluminum surface treatment. In FY2024, we conducted a demonstration experiment to treat and reuse water used for surface treatment at the Shikoku Plant. Meanwhile, the Namerikawa Plant has installed a cooling unit for water circulation and has begun reusing used water for cooling.

In October 2024, in recognition of these efforts, YKK AP was certified as a "Water Cycling ACTIVE Company" under the "Water Cycle Company Registration/Certification Program" established by the Cabinet Secretariat Headquarters for Water Cycle Policy.



Cooling unit at the Namerikawa Plant

Biodiversity

To achieve the goal of "symbiosis with nature" set forth in the YKK Group Environmental Vision 2050, we are promoting initiatives to minimize biodiversity loss and environmental impact throughout the life cycle of our business activities, based on the global goal of "halting and restoring biodiversity loss by 2030 (Nature Positive)."

We are also actively engaged in cleanup activities and greening at our key locations in Japan and overseas. YKK AP INDONESIA has been conducting mangrove conservation activities in the Tangerang area since 2015, and in December 2024, the company received a CSR award by the Tangerang Regency Government in recognition of its longstanding efforts. In FY2024, 217 initiatives were implemented in Japan and overseas, including coastal cleanup activities at DALIAN YKK AP, tree planting activities at ERIE ARCHITECTURAL PRODUCTS, and cooperation in the release of landlocked salmon at the Tohoku Plant.



(Left) YKK AP INDONESIA employees plant mangrove saplings every year. (Right) Release of landlocked salmon at the Tohoku Plant in cooperation with the local community

Supported initiatives and groups, certifications

Climate change

◆ **Task Force on Climate-Related Financial Disclosures**
(Financial Stability Board)
May 2019



Climate change

◆ **SBT**
(SBT initiative)
February 2021



Resource recycling

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



Environmental management

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



Climate change

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



Resource recycling

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



Water conservation

◆ **Water Cycling ACTIVE Company**
(Cabinet Secretariat Headquarters for Water Cycle Policy)
October 2024

