

# YKK AP Integrated Report 2021



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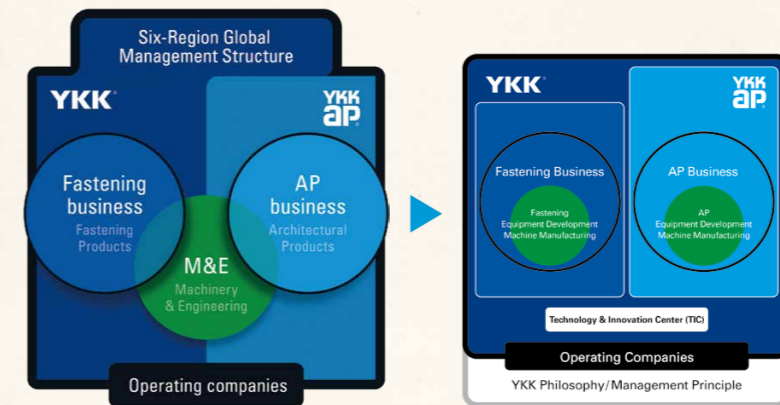
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A photo of the YKK 60 Building, the core base of our commercial products business (Sumida Ward, Tokyo). Designed by architect Fumihiko Maki, it opened in 1993.

## YKK Group Management Structure



In FY 2021, the YKK Group merged the YKK Machinery & Engineering Group, which had been responsible for manufacturing dedicated machines and developing equipment for the YKK Group, into the fastening business and AP business, respectively. Furthermore, YKK AP will switch from a six-region global management structure for the entire YKK Group to a consolidated management system in which Japan's YKK AP manages YKK AP Group companies around the world to sustainably enhance business competitiveness. In line with such reorganization, YKK AP's capital has changed from 10 billion yen to 14 billion yen. The YKK Group will strive for further growth as a corporate group that shares the YKK Philosophy and Management Principle.

\*Technology & Innovation Center (TIC)...A YKK organization that explores new technologies and business areas, and develops elemental technologies, etc., to enhance the business competitiveness of the entire YKK Group.

# YKK Group and YKK AP Philosophy

YKK's founder, Tadao Yoshida made the "Cycle of Goodness" the central philosophy of all business activities. Based on this philosophy, and in keeping with the times, Tadahiro Yoshida, the second YKK president and first president of YKK AP, established the Management Principle, "YKK seeks corporate value of higher significance." Then in 2021, based on these corporate philosophies, we formulated our "Purpose," which expresses the meaning of our existence. As we continue to focus on the "Architectural Products" of our company name, we are committing ourselves to being a company that builds a better society.

## YKK Philosophy

The corporate philosophy of YKK's founder, Tadao Yoshida, became the fundamental position of the YKK Group.

**CYCLE OF GOODNESS®**  
 "No one prospers without rendering benefit to others."



## Management Principle

Based on the "Cycle of Goodness" philosophy, our management principle highlights the importance of increasing corporate value in step with the times.

"YKK seeks corporate value of higher significance."



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

## Purpose

At YKK AP, building a better society through our activities is the meaning and purpose of our business.

*We Build a Better Society  
 Through Architectural Products*

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

# The Philosophy of YKK's Founder, Tadao Yoshida

As an important member of society, a company survives through coexistence. When the benefits are shared, the value of the company's existence will be recognized by society. When pursuing his business, YKK's Founder, Tadao Yoshida was most concerned with that aspect, and would find a path leading to mutual prosperity. He believed that using ingenuity and inventiveness in business activities and constantly creating new value would lead to the prosperity of clients and business partners and make it possible to contribute to society. This way of thinking is referred to as the "Cycle of Goodness" and has always served as the foundation of our business activities. We have inherited this way of thinking and have established this as the YKK Philosophy. Tadao Yoshida also described YKK Group as "an organization that is like a forest." Just as young trees and experienced trees, tall trees and short trees, all draw on their unique characteristics to grow independently to form a forest, so too do individual employees autonomously help each other in order to prosper together. At YKK AP, we look to embrace this "Forest Group" idea so we can grow together with society while emphasizing employee diversity.



YKK's Founder **Tadao Yoshida** (1908-1993)

Born in Uozu, Toyama in 1908. Founded the precursor to YKK, San-S Shokai, in 1934, and began the production and sales of fasteners. He expanded the use of machinery in fastener manufacturing and established automated production. He created a company with a unique form, a fastener manufacturer engaged in integrated production from raw materials to finished product and dedicated his life to the manufacture and sales of fasteners and building materials.

# The Thought of "Architectural Products"

When YKK AP's founder Tadahiro Yoshida established YKK Architectural Products, the name of the company included a thought to "always continue pursuing the highest levels of art and technology, two elements that have formed the basis of architectural culture throughout history." The products we create are the components (structural elements) of houses and buildings. Rather than just basic construction materials and parts, we set out to provide "Architectural Products," complete industrial products for buildings. We continue to provide products that meet the desire of customers and business partners, and in doing so, we continue to be a company that contributes to customers, business partners, and society at large. Now, to carry this thinking forward and to establish ourselves as a necessary part of this changing society, in 2021 we formulated our "Purpose." In addition to the spirit of curiosity and exploration toward art and technology that we have always fostered, we are aiming to create "Architectural Products" that have value in their time period, connect nature and people to the future, and thereby realize a better society. While embracing the ideas of our founder, we are placing "Purpose" at the center of our corporate philosophy and preparing to take on the challenges presented by this new era.



YKK AP's Founder  
 Current Corporate Adviser **Tadahiro Yoshida**

Joined Yoshida Kogyo K.K. (now YKK) in 1972. In 1990, established and became president of YKK Architectural Products (now YKK AP). After serving as president of YKK, and as representative director and chairman (CEO) of YKK and YKK AP, he gave up his representation and became a director for both companies in 2018. In June 2020, he retired from his director positions and became a corporate advisor for both companies. He has built the window business, facade business, and other businesses that became the foundations of today's YKK AP.

# History of the YKK AP Business

## 1957-1989

### Architectural products business begins

Yoshida Shoji Co., Ltd., the company that would eventually become YKK AP, was established in 1957 to undertake the sales and exports of fasteners manufactured by Yoshida Kogyo K.K. (now YKK). In 1959, the company began aluminum casting and extrusion operations, marking the beginning of YKK Group's involvement with architectural products. In 1966, the company launched sales of the residential aluminum product "High Sash." This helped to popularize aluminum sashes, which, thanks to the ease of processing and mass production, could meet the large-volume residential demand of the high economic growth period. The company continued to expand its range of products, from insulating glass to sashes and curtain walls for commercial buildings and exterior products.

## 1990-2004

### The founding of YKK AP

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. Tadahiro Yoshida (currently a corporate advisor) was named its first president, and the company shifted from a mass-production/mass-market product-out approach to a market-in system, which sought to respond to diversifying customer needs. In 2003, YKK's architectural products manufacturing divisions were integrated in order to unite the architectural products business within the YKK Group into a single body. Business expansion continued overseas and the structure of the company called YKK AP was built.

The AP business began in 1959 by leveraging the knowledge of aluminum material that had been gained in fastener manufacturing. Since then, the company has continued to meet the needs of customers through different eras, and to develop and provide products that offer new value that had previously not been identified by markets. Although the Japanese construction industry is on the decrease, as symbolized by new housing starts, the company has continued to expand business based on its foundational aims and is growing steadily.

## 2005-2010

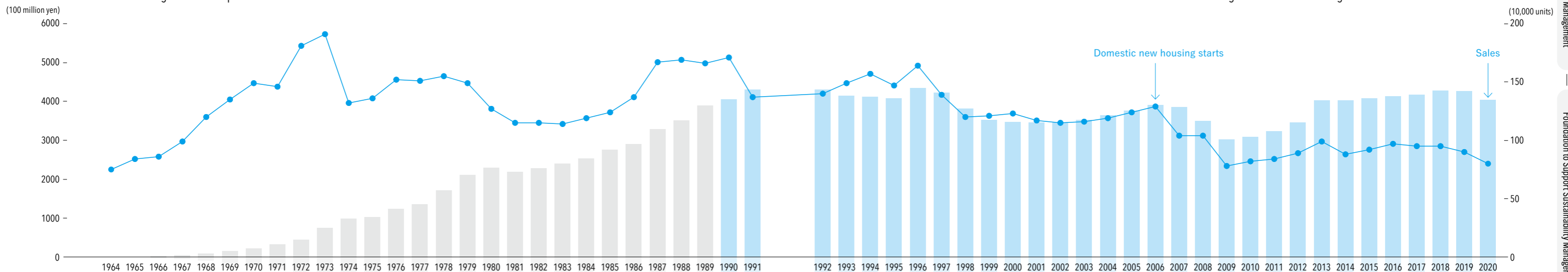
### From sash manufacturer to window manufacturer

The company set out to transform itself from a sash manufacturer to a window manufacturer. It turned away from its business supplying knockdown style sashes and began to provide finished window products. The window business brand APW series was launched, driven by a desire to improve windows in Japan. In 2007, YKK AP America Inc. took the lead in sales of residential vinyl windows, and in 2009 the APW 330 residential vinyl window was launched. The company worked to popularize vinyl windows throughout Japan. In 2008, YKK AP FACADE Pte. Ltd. was established in Singapore, marking the group's definitive move into the facade business.

## 2011-

### A company committed to products and manufacturing

In 2011, YKK AP's second president, Hidemitsu Hori, demonstrated our adherence to *monozukuri* under the policy of "a company committed to products and manufacturing." We further promoted the window business through our dedicated "MADO (window) Plant" and awareness-raising activities about vinyl windows, expanded our exterior and remodeling product lineup, and strengthened the engineering capabilities of the commercial products business to expand our market share. In FY 2020, we reorganized our overseas affiliated companies, and in FY 2021, we have integrated the functions of the YKK Machinery & Engineering Group to build a system that can handle the rapidly changing needs of society, striving for further sustainable growth.



**1959** Aluminum casting and extrusion work begin



**1961** Manufacture and sales of interior aluminum architectural products begin



**1962** Manufacture and sales of aluminum window sashes begin



**1976** Our first overseas affiliate, YKK Industries (Singapore) Pte. Ltd. (now YKK AP Singapore Pte Ltd), established

**1983** Manufacture and sales of vinyl sashes begin



**1986** YKK Alumico Indonesia (now PT. YKK AP Indonesia) is established as the first overseas plant with an integrated production system

**1990** The company is renamed YKK Architectural Products Inc. (YKK AP)

**1990** Sales of EXIMA system sashes for commercial buildings begin



**2002** The company is renamed YKK AP Inc.

**2003** YKK's Architectural Products Manufacturing Group is integrated into YKK AP Inc. and the architectural products business of the YKK Group becomes a fully integrated organization

**2003** Sales of SYSTEMA series of system sashes for nonresidential buildings begin



**2005** Proclamation to promote insulating glass of residential windows

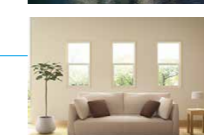
**2006** The window business brand APW series is launched



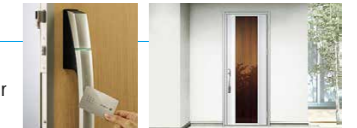
**2008** YKK AP FACADE Pte. Ltd. established



**2009** Sales of APW 330 vinyl windows begin



**2011** Operations begin at the Saitama MADO (window) Plant



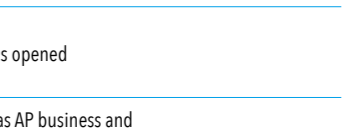
**2012** Sales of the Venato electronic smart door begin



**2014** Sales of the LUCIAS series of exterior products begin



**2014** Sales of the FRAME+ seismic retrofit frame begin

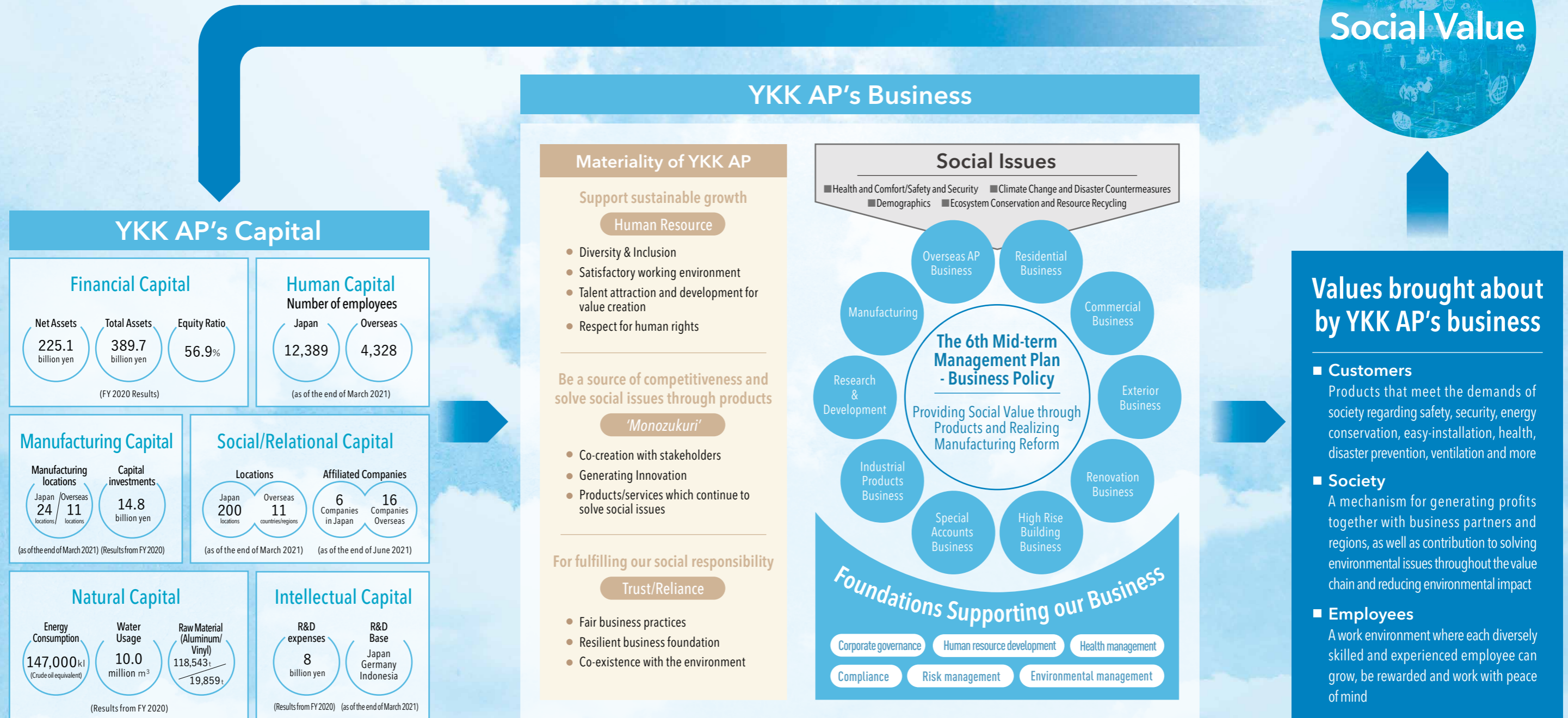


**2016** YKK AP R&D Center is opened

**2020** Reorganized overseas AP business and integrated capital relations and business operations of overseas affiliated companies into YKK AP

# The Value Creation Process at YKK AP

It can be said that YKK AP's value creation process concretely demonstrates the YKK philosophy of the "Cycle of Goodness" and YKK AP's Purpose.



## A Philosophy that Supports the Value Creation Process

### YKK Group's Philosophy

YKK Philosophy

CYCLE OF GOODNESS®  
"No one prospers without rendering benefit to others."

YKK Management Principle

"YKK seeks corporate value of higher significance."

### YKK AP's Purpose

*We Build a Better Society Through Architectural Products*

## President's Message

# Becoming a company that builds a better society through sustainability management

## President Representative Director Hidemitsu Hori

Joined YKK in 1981. Served in U.S.A. from 1989 to 2006. After returning to Japan in 2006, served as YKK AP Vice President of Corporate Planning and Director and Senior Vice President of Business Groups, before reaching his current post in 2011.



## Business Performance in FY 2020

### Changes of demand from the COVID-19 pandemic became favorable

The health and lives of many were threatened due to the spread of COVID-19 in FY 2020, and the global economy was also greatly affected. The same was true for the construction industry, where a significant decrease in sales was expected for our company as well at the beginning of the year. However, more interest in windows was seen among consumers who have been working from home or refraining from outings as a result of the need to improve their living environments and prevent the spread of infection through ventilation at home. Although sales and profits decreased in FY 2020, largely impacted by the market volume decline, this encouraged each business to take action going forward.

The demand for vinyl windows mainly in the Tokyo metropolitan area has greatly exceeded that of the previous year, and disaster prevention products such as shutters are also selling well. In the exterior business, further growth is expected along with a market share increases as a result of total coordination offers with residential buildings. The commercial products business was significantly affected by COVID-19, but a fair number of orders is still being received, so there will be room for growth in the



"GR Wind-Resistant Shutters" with improved wind resistance performance

three pillars of our residential, exterior, and commercial products businesses once the market recovers.

### Taking on new work styles in the post-pandemic world

With the popularity of online sales, it is a great achievement to have had new interactions with the BtoC field. A total of 270,000 users visited the "PRODUCTS PARK 2020" online exhibition, in contrast to the goal of 50,000. We have also enhanced the way of communication on our website. Our content on "How to effectively ventilate your home," posted in response to the demand for information on "ventilation" following COVID-19, received more than 300,000 views. We are enhancing our organization and structure to further expand this field going forward.

### Overseas Business company reorganizations completed; expectations for sales increase

Although business in China quickly recovered from COVID-19, sales declined in the second half following the slump in the targeted super luxury real estate market. In the U.S.A., despite the poor performance in the key commercial business, residential business performed well, with record-breaking sales. Similarly, we have been promoting our business activities, despite the impact of COVID-19, in each country/region.

Under such circumstances, 16 overseas affiliates of the YKK Group were restructured into our company in September 2020. In the past, YKK Corporation was in charge of capital for many overseas affiliates while YKK AP Inc. handled business operations, but now we have successfully established a management structure with a sense of speed by integrating capital and business operations. Amid the declining volume in Japanese domestic new housing start figures, we will strive to increase overseas sales and expand our business there.



Online content: "How to efficiently ventilate your home"

## Sustainability initiatives

### "Contributing to society" wins endorsement of employees

The support received from employees regarding our efforts for sustainability management and the direction of our company is a great achievement. Just like the saying, "a company is its people," our greatest strengths are employee ability and the support and empathy of our employees.

By contributing to society, that is, to the sustainable development of various stakeholders, we believe that employees will become closer to the company and that society will recognize the meaning of our existence. Accordingly, we will strive to develop products that meet societal demands relating to health, disaster prevention and mitigation, and energy conservation.

Amid increased worldwide awareness of carbon neutrality and circular economy, we are also aiming to achieve carbon neutrality by 2050. We will start off by improving our own capital investment that will contribute to the reduction of CO<sub>2</sub> emissions. We would also like to create a carbon neutral window manufacturing line. In addition to energy conservation investments such as the adoption of highly efficient equipment, we will roughly triple our investment in renewable energy usage and promote efforts to reduce CO<sub>2</sub> emissions from the production line to virtually zero.

Furthermore, our products, including windows, doors, and curtain walls, play a major role in energy conservation and thermal insulation. These products can greatly contribute to achieving carbon neutrality in buildings. By popularizing these products, we will expand the amount of CO<sub>2</sub> reduction from their use.

Reducing our own emission and expanding the amount of reduction through the use of our products—we will invest and develop new technologies from these two perspectives.



Adoption of captively-consumed renewable energy (Yamanashi Factory)

## Management themes from the mid- to long-term perspective

### The 6th Mid-term Management Plan - Business Policy

In the new Mid-term Management Plan for FY 2021 to FY 2024, we have formulated the business policy of "Providing social value through products and realizing manufacturing reform." We strive to be a company that society relies on, by offering products that meet social demands and improving our technological capability. Under such circumstances, we will build a new plant to strengthen the commercial products business in the Tokyo metropolitan area and increase sales in the residential business with new products that utilize our technological capability. In addition, we newly established the Machinery and Engineering Department through a functional integration with the YKK Machinery and Engineering Group, which has been at the core of the YKK Group's technology. By having in-house engineering functions for equipment development and machine manufacturing, we will not only speed up product development, but also take on the challenge of developing new technologies such as smart factories. By also strengthening our digital and IoT capabilities, which are the basis of future business development, we aim to become a company



"New smart door" equipped with face recognition functions

with expertise not only in hardware, but also in software. In near term, new housing start figures are expected to decrease due to the lumber shortage. In light of this, we will focus on the exterior, interior, and remodeling fields. Regarding our priority measures for improving the remodeling of multi-family residences in the commercial products business, we will strive to develop products and installation methods for window and door repairs and improve services to further differentiate ourselves in the multi family home stock market in the Tokyo metropolitan area and Kansai area, which is expected to grow in the future.

Overseas, we will promote swift management by taking advantage of the effects of our business restructuring, and expand business by focusing on new markets and business considerations, partnerships with other companies, and M&As. To accomplish this, we would also like to create a "virtual overseas assignment" system in which Japanese employees can engage in overseas work without relocating. Until now, employees usually had to move overseas to work locally. However, the spread of remote work has demonstrated that tasks can be carried out to a certain extent even without being present in person. Under this system, employees who cannot be assigned overseas for various reasons will also be able to engage in overseas work. We will start by taking on the challenge of virtually assigning manufacturing and development engineers overseas.

On the other hand, the future remains unclear due to the COVID-19 pandemic, so we have decided to limit our figure-based plans to only FY 2021, as it would be difficult at present to formulate one for each of the four years of the Mid-term Management Plan. This fiscal year, we will continue formulating figure-based plans for FY 2022 and beyond while anticipating the business environment.

### Efforts for Employees' "Satisfactory" and "Pleasant" working environment

Employee ability is YKK AP's greatest strength. We are focused on providing an environment that values our employees because the company is kept intact by each and every one of them.

Remote work rapidly became widespread during the COVID-19 pandemic. We have been working to improve the remote working environment as one of our workstyle reforms, and we are pleased

that these efforts were effective in protecting the safety and security of employees during the pandemic. Working toward the goal of reducing the in-person attendance rate to 50% or less post pandemic, we are also transitioning to electronic documents and seals, allowing employees to freely change desks, and expanding the number of satellite offices. However, the stress that comes along with remote working has also become apparent, so we will work hard to address this area also.

Meanwhile, the "Workplace Improvement Committee" of the Manufacturing Division has expanded the number of employees who can work remotely and freely take paid leave in addition to the measures being implemented against COVID-19, to improve the welfare and work environment of plant employees who cannot remotely work. Enhancing such ease of work should lead to more motivation to work.

The YKK Group abolished the mandatory retirement age system in April 2021. As the YKK Group conducts business activities centered on "fairness," we came to the conclusion that an age-based mandatory retirement system for employees and lower salaries for the reemployed were not in line with such "fairness." Accordingly, we created an environment where employees can work regardless of age as long as they can fulfill their required role. The salaries

of employees aged 65 and over will not be affected as long as they can carry out their duties as before. However, it is necessary to ensure that allowing more veteran employees in the company will not reduce opportunities for young and mid-career employees. To foster diversity, it is not acceptable for the managerial age to be biased toward veteran employees. Upon considering the ideal age structure, we will reduce the required age for managerial positions. I believe my role is to create an environment where employees, regardless of age, can have the motivation to work.

### Products and businesses that build a better society

As the foundation of these businesses, we have newly formulated our "Purpose," which expresses the meaning of our existence. The words, "We Build a Better Society Through Architectural Products," also demonstrates our commitment to contribute to society and solve social issues through business. We hope that our customers who use our products will be "glad they chose YKK AP." I sincerely want us to be a company that can please each customer, and on a bigger scale, society as a whole. By sharing this desire with all YKK AP Group employees around the world as the Purpose of our business activities, we will develop businesses and products for a better society.



## The 6th Mid-term Management Plan (from FY 2021 to FY 2024)

We formulate four-year mid-term management plans, and in the 6th Mid-term Management Plan that starts in FY 2021, we established a policy for business development that meets social demands to drive sustainable growth.

### Overall Policy of YKK Group's 6th Mid-term Management Plan

The 6th Mid-term Management Plan, which begins in FY 2021, inherits the "Technology Oriented Value Creation" vision from the 5th Mid-term Management Plan (FY 2017 to FY 2020). "Creativity to Realize a Sustainable Society" is the new plan's most important point, and "Diverse human assets" has been added to the concepts of "Product appeal & proposal capability" and "Technology & manufacturing capability" set forth in the 5th Mid-term Management Plan.

Regarding the management structure of the YKK Group, upon revising the capital and business management structure of YKK and YKK AP in FY 2020, the Group's Machinery & Engineering Group was integrated into the fastening business and AP business from FY 2021. The structure was changed to further speed up the engineering, which involves the development of equipment and manufacturing of machinery in line with each business. Additionally, the Technology Innovation Center will be newly established as a research and development division.

In response to this change in management structure, YKK will have a 5 region management system with the fastening business at its core, while YKK AP will have a consolidated management system with Japan's YKK AP at its core. Under differing management

system, both companies will be part of the corporate group that shares the YKK Philosophy, "Cycle of Goodness," and the Management Principle, "YKK seeks corporate value of higher significance." The newly established Technology Innovation Center will support both businesses from a technical perspective and enhance the competitiveness of each business.

#### ●YKK Group The 6th Mid-term Management Vision

#### Technology Oriented Value Creation

#### Creativity to Realize a Sustainable Society

- Product appeal & proposal capability
- Technology & manufacturing capability
- Diverse human assets

### The overall policy of YKK AP's 6th Mid-term Management Plan

In addition to our ongoing YKK Philosophy and Management Principle, we have established the foundation of our Purpose, "We Build a Better Society Through Architectural Products," and we will promote activities in collaboration with the YKK AP Group in Japan and overseas based on our 6th Mid-term Business Policy of "providing social value through products and realizing manufacturing reform."

To provide social value through products, we will offer products that meet the demands of society regarding safety, security, energy conservation, easy installation, health, disaster prevention, ventilation and more. To realize manufacturing reform, we will strength-

en our technological capability through the establishment of our Machinery and Engineering Department and promote structural reform through the creation of platforms and smart factories. In the residential business, we will develop new products for energy conservation, ventilation, safety and security, and in the commercial products business, we will work to enhance business in the Tokyo metropolitan area and renovation. In the midst of uncertain conditions in the overseas business, we will expand business according to the state of each country/region. Through these businesses, we will systematically work toward the realization of carbon neutrality by 2050.

#### ●YKK AP the 6th Mid-term Business Policy

#### Providing Social Value through Products and Realizing Manufacturing Reform

##### 〈 Providing Social Value through Products 〉

- Providing products that meet the demands of society, including safety, security, energy conservation, easy installation, health, disaster prevention, ventilation, and others
- Providing products backed by technology which satisfy customers.

##### 〈 Realizing Manufacturing Reform 〉

- Manufacturing reform by enhancing technological capabilities (Machinery & Engineering integration), platforming & smart factorization
- Production Line in which people and equipment operate with high efficiency by establishing a business foundation and utilizing digital data

### YKK AP's FY 2021 Business Plan

In the FY 2021 business environment surrounding YKK AP, the newly built residential market is expected to gradually recover from the prolonged impact of the COVID-19 infections. Meanwhile, the remodeling market is expected to recover due to the new demand for more residential space. Accordingly, YKK AP plans to achieve consolidated Japan and overseas net sales of 423.1 billion yen (105% year on year) and operating income of 21.4 billion yen (102% year on year).

#### YKK AP's (planned) consolidated business results for FY 2021

Unit: 100 million yen

	FY 2020 results				FY 2021 plan				
	Japan	Overseas	Eliminations	Total	Japan	Overseas	Eliminations	Total	Year on year
Net sales	3,532	662	-166	4,028	3,708	690	-166	4,231	105%
Operating income	159	56	-5	209	166	49	-2	214	102%
Ordinary income	176	56	-2	230	177	49	-2	225	98%
Net income	174	43	-2	215	106	36	-2	141	66%

#### Formulation of the Mid-term Management Plan

As grasping the highly uncertain business environment is the top priority, we decided to formulate a single-year plan for FY 2021, rather than a four-year mid-term management plan. The plan for the remaining three years will be planned during 2021.

### YKK AP's FY 2021 Investment Plan

We plan to invest a total of 29.8 billion yen in FY 2021 through the construction of a new plant for commercial business in the Tokyo metropolitan area, the YKK AP 30 Building, sustainability investments, and investments to streamline and increase production in the U.S.A., Suzhou, and Indonesia. Through this unprecedented assertive capital investment plan, we will promote sustainable growth by making investments aimed at business growth and early cost effectiveness.

#### YKK AP's investment plan for FY 2021

Unit: 100 million yen

	Investment description	Investment amount
Japan	Increased production (new factories, etc.) and new products	88
	Streamlining	37
	Digital-related	36
	Building (YKK AP 30 Building)	30
	Sustainability-related	24
	Development of infrastructure, etc.	41
	Total	256
Overseas	Streamlined production in the U.S.A., Suzhou, and Indonesia	42
	Total	298



## YKK AP Business Segments

# Priority Measures of Each YKK AP Business/Division in Line with the Mid-term Management Plan Business Policy

Each business and division has put forward priority measures based on the 6th Mid-term Management Plan Business Policy, "Providing Social Value through Products and Realizing Manufacturing Reform." Here is an outline of their specific measures and the commitment of their leadership.

※For details, visit our website : <https://www.ykkap.co.jp/company/en/about/business/>

## Residential Business

### Proposing comfortable lifestyles with windows and doors

Focusing on our "APW" window business brand, we propose lifestyles that are "safe and secure" and offer "health and comfort" through windows and doors. We aim to create a house-friendly and people-friendly society.

#### Main products

- Windows
- Entrance doors/sliding doors
- Interior doors/partitions
- Window shutters

#### Mid-term priority measures

The residential business has focused on promoting windows with high thermal insulation, particularly vinyl windows. Our goal is not only to achieve energy conservation, but to take on societal challenges such as improving residents' health and property values. In the 6th Mid-term Management Plan, in order to achieve a high thermal insulation ratio of 80% we will move forward with value propositions centered on two product series—the "APW" vinyl window series and the "APSWORD II" aluminum-vinyl composite windows launched in April 2021.



We will deploy products under the themes "safe and secure" and "health and comfort" adapted to fit changing lifestyles, and bolster our lineup of products with outstanding functionality and refined designs. And by continuing and enhancing the new communication methods which we began in FY 2020 such as online events and exhibitions, we will cultivate ways to clearly convey the value of our products to our customers and business partners.

#### Corporate officer's commitment

As living environments change and needs continue to diversify, value propositions that consider the themes "safe and secure" and "health and comfort" will become even more important. We want our customers' homes to be the place they feel most secure. To achieve that, we will redouble our efforts to propose value-added products such as high thermal insulation windows that help maintain comfortable room temperatures and shutters with high wind pressure resistance that protect against typhoons. We will continue to deliver "safety and security with windows" to our customers and contribute to communities and society.



Director, Senior Vice President  
Residential Business  
**Akira Uozu**

## Commercial Business

### Creating beautiful and functional urban spaces

We provide value-added solutions such as facade designs and energy conservations for office buildings, condominiums, medical facilities, and more to contribute to shaping urban scenery and achieving a sustainable society.

#### Main products

- Office building windows
- Curtain walls
- Building entrances
- Remodeling products
- Windows and doors for residential buildings

#### Mid-term priority measures

In the 6th Mid-term Management Plan, the commercial products business will aim for "further increasing market share" and "boosting profitability." To strengthen sales touchpoints for new construction and renovations alike, we will make use of "AZ five Tokyo" to propose ready-made products, "PROPOSAL 8th" to propose made-to-order and custom-made products, and online exhibitions, "to help inspire proposals." In the renovation sector, we will respond to needs for "ventilation" and "contactless" and create a renovation market through proposals further strengthened by integration of the renovation organization.

In our product lineup, we will expand our fire-resistant products for multi-family residences, improve our ability to propose exterior designs and expand features and sizes for fire-resistant products for non-residential buildings, and improve our ability to propose thermal insulation refurbishment of multi-family residences for renovations.

We will also improve cost competitiveness through manufacturing reform, make supply chain enhancements such as shortening lead times, and work together across manufacturing, sales, and technical teams to boost business competitiveness.



#### Corporate officer's commitment

It is our mission to provide high-quality products, technology, and installation that can be used "safely and securely" for long periods, thus contributing to improve the value of buildings. We will respond to changing customer needs by offering new products and services to enhance customer satisfaction. As construction sites face labor shortages, we will work toward resolving this industry-wide social problem through the development of products and installation methods that require less labor and by working with the YKK AP Group Installation Cooperative to promote the training of young technicians.



Senior Vice President  
Commercial Business  
**Hiroyuki Seguchi**

## Exterior Business

### Proposing spaces that make living more comfortable

We will create new value by deploying products that unite "house" and "garden." We are providing exterior products that make it easy to fully coordinate the residential property and each family's lifestyle.

#### Main products

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

#### Mid-term priority measures

In the 6th Mid-term Management Plan, the exterior business will strengthen its organization and systems corresponding to sales channels based on a policy "to boost sales by providing fully coordinated proposals for buildings and exteriors."

In the new construction, exterior, and remodel markets, we will bolster existing sales channels and strengthen sales to link proposals for full coordination of buildings and exteriors to increased sales. With the creation of a new "Planning Management Department," we are also aiming to bolster the ability to make proposals for all-inclusive designs that encompass the surrounding streetscape especially for properties built for sale. We began to work with garden exterior sector for commercial buildings from FY 2020. We deployed exterior products for office buildings used by many people, multi-family residences, factories, warehouses, and more, and will make efforts to expand the business further. By strengthening both our product appeal and sales capabilities, we will continue to grow the exterior business.



#### Corporate officer's commitment

Through the exterior business, we provide "health and comfort," "energy conservation," "energy creation," and "safety and security" to customers and society. We are also working to develop and popularize environmentally friendly products such as exterior products that promote greening and non-formaldehyde products that are developed as healthy products for residents and are also recyclable. We will continue to provide social value by focusing on developing products that solve social issues and create value for customers.



Senior Vice President  
Exterior Business  
**Masato Shinozuka**

## YKK AP Business Segments

## Renovation Business

## Bringing new value to residences

We bring value to old residences that exceeds the value of new construction by using our renovation products and installation methods to improve the design, thermal insulation, convenience, and quake-resistance of windows and doors.

## Main products

- Window remodeling
- Door remodeling
- Quake-resistance retrofitting

## Mid-term priority measures

In the 6th Mid-term Management Plan, the renovation business will strengthen proposal capability centered on windows and doors to contribute to the improvement of living environments under the themes of "safe and secure" and "health and comfort."

For single-family houses, we will bolster our products that offer "energy conservation," "quake resistance," and "disaster prevention and mitigation." In the condominium sector, we will launch products for private condominium areas and promote further high thermal insulation as well as raise awareness and create demand for window remodeling using digital technology. For single-family house renovations in particular, we will build on the knowledge gained through the 14 homes that took part in the "Renovation Demonstration Project for the Housing Performance Improvement" up until FY 2020 to further spread awareness of improvement renovations by taking steps such as the launch of the "Association of Performance Improvement Renovation," a network of building contractors engaged in renovation with the goal of "bringing security and health to all homes through renovation."



## Corporate officer's commitment

Through renovation that achieves "mitigation of summer heat and winter cold," "energy conservation," "preparation for earthquakes and other disasters," "extending the life of the building," and more while retaining the good parts of an existing home, we will provide "safe and secure," living environments that offer "health and comfort" and help realize a sustainable society. And by communicating to society at large to spread awareness of remodeling products and renovations, we can help solve social issues such as abandoned houses.



Vice President  
Renovation Business  
**Toshiki Kikui**

## High Rise Building Business

## Facades that increase a building's value

We undertake the process from design to installation of facades for office buildings, condominiums, high-rise complexes, and more to provide the optimal facade system, fit for the purpose and needs.

## Line of business

- Curtain walls (made-to-order and standard)
- Office building windows

## Mid-term priority measures

The High Rise Building Division has provided challenging facades for target projects safely and steadily. As a result of handling each individual projects with care, we are seeing our reputation for technology and responsiveness rise. Based on these results, we have set forth further sales growth as our goal for the 6th Mid-term Management Plan. We will work together with the Commercial Business, gradually expand the areas we support, and enhance our sales touchpoints via next-generation concept proposals by "PROPOSAL 8<sup>th</sup>" and proposals for priority measures. In the first half of the Mid-term Plan, we will work on our systems and foundations to become a "partner" for each project rather than a "vendor." On the technical side, we will implement effective proposals to respond to market needs such as diversification of designs, heat load reduction, improved thermal insulation, and ventilation in order to add value to construction.



## Corporate officer's commitment

As work styles change, the roles and functions expected from office buildings change, and new designs and performance suited for the future are needed for facades as well. It is up to us to work in new ways to make them a reality. At the same time, by providing our facade systems we will contribute to beautiful cityscapes, comfortable indoor environments, and reduction of environmental impact through consciousness of CO<sub>2</sub> emissions in the manufacturing and installation stages.



Vice President  
High Rise building Division  
**Kazuhiro Kitano**

## Special Accounts Business

## Providing products for a quick response to market needs

We provide high-performance window and door products to meet the needs of housing manufacturers and residential equipment companies based on universal design and consideration for the environment from our customers' point of view.

## Line of business

- Window and door products for home builders (prefabrication)
- Doorways and windows for modular bathrooms

## Mid-term priority measures

In the 6th Mid-term Management Plan, Special Accounts will work to "offer products for changing markets." We will continue to bolster the collaborative efforts between development, manufacturing, and sales and enhance our product appeal to provide the responsiveness and quality necessary amid ever-diversifying needs. In the home builder (prefabrication) sector, we will work to increase partner and customer satisfaction by further evolving our products through improvements such as the environmental performance and design of aluminum-vinyl composite windows and entrance doors with high thermal insulation. We will also consider the development of window and door products aimed at "disaster prevention and mitigation." For the modular bathroom sector, in addition to further evolution of existing bathroom doorway products we will consider them for non-residential projects such as hospitals, care facilities, and hotels as well as for further reduction of installation labor in condominium renovations.



## Corporate officer's commitment

In Special Accounts, development, manufacturing, and sales work together as one to operate business for each of our partner companies. We will focus on further improving the environmental performance and universal design of window and door products in order to contribute to "safe and secure" lifestyles that offer "health and comfort" through our products. In addition, we will contribute to the promotion of ZEHs and a decarbonized society by developing products to meet the changing needs of the market.



Vice President  
Special Accounts  
**Makoto Takayasu**

## Industrial Products Business

## Supporting industrial sector with aluminum profiles

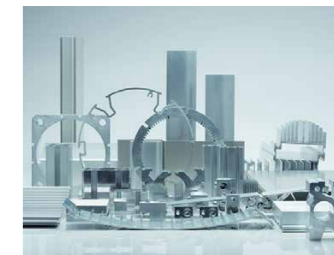
We provide high-quality extruded aluminum based on our knowledge of materials, profile designs, extrusion molding and surface treatment, processing, etc., and our advanced technology capabilities we have fostered in the manufacturing of aluminum building materials

## Line of business

- Components of machinery and equipments
- Architectural components
- Auto parts
- Sustainable products

## Mid-term priority measures

Given the market environment for the industrial products business, we cannot expect a large increase in domestic demand and we will face increasing competition from domestic and international manufac-



turers. With lifestyles and work styles changing as a result of the COVID-19 pandemic, we will work even more closely with our business partners and the manufacturing, technical, and sales teams will work together as one to grow the business in the 6th Mid-term Management Plan. By leveraging the technology and knowledge acquired from the manufacturing process for aluminum architectural products, we will make investments in accordance with market needs to build on the equipment and alloys we currently have in order to respond to various needs and expand into new business areas. In the architectural products sector, we will expand sales of value-added products such as laminate profiles and processed items that are certified as non-combustible. In non-architectural sectors, we will work to expand sales in the automotive sector. As we work to continue satisfying our business partners with aluminum profiles, we will contribute to solving social issues through our business.

## Corporate officer's commitment

The popularity of highly recyclable aluminum profiles contributes to the creation of a recycling-based society and helps to reduce product weights. These weight reductions lead to increased work efficiency and lighter load at work sites with aging workforces, create energy savings in automobiles and trains in the transportation sector, and contribute to achieving SDGs. By delivering the "safe and secure" materials and components best suited for our business partners' *monozukuri* needs, we will continue to support customers' healthy and comfortable lifestyles.



Vice President  
Industrial Products  
**Atsuhito Baba**

YKK AP Business Segments

## Research & Development

### Creating new value through *monozukuri*

We have consolidated our research, development, and verification activities in Kurobe City, Toyama. By building rapid and timely product development systems, we are implementing *monozukuri* processes in the pursuit of high quality and advanced technology.

#### Mid-term priority measures



In the 6th Mid-term Management Plan, we will engage in creating new value with products and technologies that respond to environmental and social changes. At the same time, we will pursue and deploy flexible and efficient *monozukuri* as well as sustainability. In product appeal and technology, we will focus on the customer's point of view and pursue thorough cultivation and improvement of the four types of quality (product, worksite, usage, and information) throughout the product lifecycle. In addition, we will use platforms built for each product to work toward integrating information and improving efficiency throughout the value chain from design and development to manufacturing and supply, installation, and maintenance after completion. To meet society's demand for sustainability, we will apply product lifecycle management (PLM) to all business activities to work toward both SDGs and the growth and expansion of the business. And by proactively disclosing a variety of information by considering the users' point of view, we will enable more beneficial proposals and information sharing.

#### Corporate officer's commitment

Windows and doors have a large impact on various performance aspects of a building, including "thermal insulation," "air flow and ventilation," "daylighting," "crime prevention," and "disaster prevention." Recent changes in society and the natural environment are leading to changing needs in architecture and windows and doors. In particular, "safe and secure" and "health and comfort" are in demand from society overall, and are a key part of achieving sustainability. Through all our products, we will contribute to a enriched society that is "safe and secure" and offers "health and comfort."



Director, Senior Vice President  
Research & Development

**Shuichi Mizukami**

## Manufacturing

### Concentrating our technology to achieve higher quality

From the optimal materials for *monozukuri* to components and manufacturing equipment, we build integrated production systems to develop and produce our products in-house. We continue to devote ourselves to *monozukuri* and providing high-quality products consistently.

#### Mid-term priority measures



In the 6th Mid-term Management Plan, we will execute on manufacturing and supply measures to improve competitiveness in both business and product in line with a basic policy to "increase competitiveness in the market through product-based *monozukuri* reform." *Monozukuri* reform consists of "platforms" to standardize products, equipment, and production lines, "smart factories" to promote digital transformation based on an information foundation and digital technology, and a production base policy to improve competitiveness through optimal production and supply systems. In FY 2021, we merged functionality with the Machinery and Engineering department, the technical core of the YKK Group, to form Machinery and Engineering. Through this merger, we will strengthen our technology by deepening differentiation technology and working toward equipment standardization and cost reduction. In addition, we will develop environmentally friendly materials and improve packaging reduction and recycling technologies to contribute to a sustainable society.

#### Corporate officer's commitment

We will improve efficiency and reduce energy consumption through systematic updating of building infrastructure and facilities, as well as developing labor-saving facility technologies and deploying logistics measures across the country. The result will be a strengthening of our manufacturing and supply systems as well as greater consideration for the environment. Based on the concept of building work environments that facilitate work and motivate employees and the idea of "exceptional safety," we will work to eliminate workplace injury, prepare for natural disasters, and further strengthen our safety systems.



Senior Vice President  
Manufacturing

**Hiroshi Abe**

## Overseas AP Business

### Operating businesses rooted in individual countries and regions

The requirements for architectural products such as windows, doors, and curtain walls differ from country to country and region to region due to varying climates, cultures, and other factors. Since establishing our first overseas company in Singapore in 1976, we have conducted business operations by extending roots into the local communities to deliver products and services that meet their needs. In FY 2020, we restructured 16 overseas companies in 11 countries and regions. By focusing capital and business operations in YKK AP, we will further accelerate management. With YKK Founder Tadao Yoshida's encouragement to "become part of the local community" in our hearts, we will take the *monozukuri* capabilities we built in Japan and deploy them worldwide.

#### Mid-term priority measures

We expect uncertainty to continue in FY 2021 due to the effects of COVID-19 in North America and Asia and a downturn in the targeted super-luxury real estate market in China. Against this backdrop, we will implement "growth strategies targeting 100 billion yen in sales" in the 6th Mid-term Management Plan. In addition to growth centered on North America and China, we will work to grow the business, develop new markets, and promote new businesses in Asia as well as develop talent to support our overseas business. With the restructuring of overseas companies' capital and changes to the business management system, we will work with the management divisions to strengthen YKK AP's global governance system. On the business promotion front, we will work to improve the speed of our overseas companies' businesses by partnering with the Manufacturing Division to build manufacturing and supply systems for overseas companies and partnering with the Reserch & Development Division to develop new products for new target markets.



#### Corporate officer's commitment

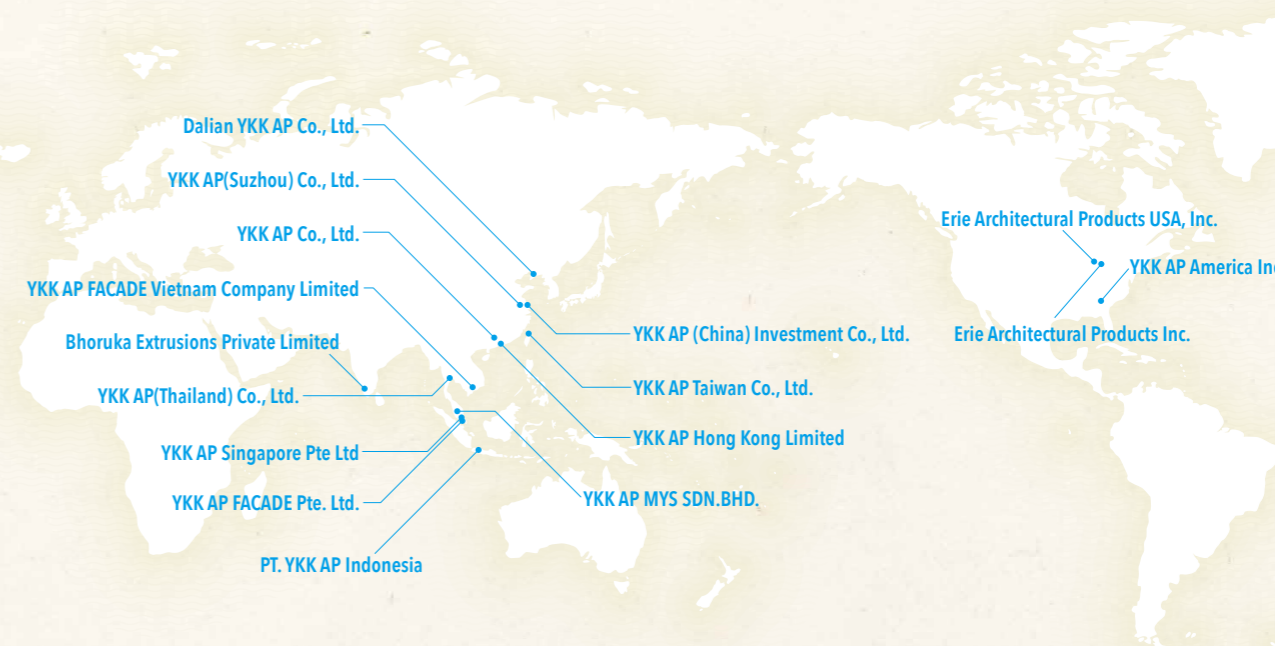


Vice President  
International Business

**Tetsuya Onodera**

To provide customers with products that fit the climate, culture, and needs of 11 countries and regions, we have placed manufacturing bases and product development functions in each region. For example, the YKK AP R&D Center (Indonesia) is researching passive design and windows and doors suited to the climate and architecture of the hot and humid area centered on Southeast Asia. By reflecting these results in our products, we will provide the social value of improved living environment through windows and doors.

#### Overseas presence



## YKK AP Business Segments

## Overseas AP Business

## North America

We design, manufacture, and sell products centered on commercial aluminum building products for the commercial business and residential vinyl windows for the residential business. We offer products that meet regional needs such as thermal insulation products that lead environmental policy, safety products that address the increasing risk of hurricanes and more, and unit curtain walls that address labor shortages.

## Mid-term priority measures

As uncertainty continues in the U.S.A. economy, YKK AP America will work to build a foundation for the APA (YKK AP America) group as a major North American architectural products manufacturer. Priority measures include further sales growth driven by management and strategy integration between the commercial business and Erie Architectural Products Inc. In the residential business, we will work toward business scale expansion through strengthening our product strategy and manufacturing base as well as expanded sales of value-added products via model changes to existing products. In addition, as a foundational strategy for both businesses, we will further speed up business deployment and strengthen governance by improving our science and technology and management functions.



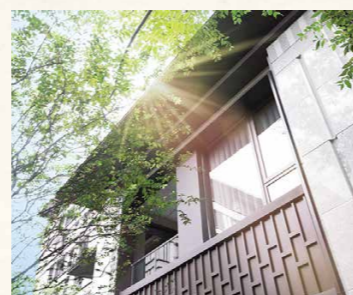
## China

The business is operated by YKK AP Co., Ltd. in China, which designs, manufactures, and sells aluminum and thermal insulated aluminum profile products for the Chinese domestic market, YKK AP (Suzhou) Co., Ltd., which manufactures parts, curtain walls, and window products as a global manufacturing and supply base, Dalian YKK AP Co., Ltd., a manufacturing base for vinyl profiles for the Japanese market, and YKK AP (China) Investment Co., Ltd., which oversees the aforementioned companies.

## Mid-term priority measures

The domestic demand business will emphasize "entry into the mid-luxury market," "focus on the renovation sector," and "introducing new products." Based on a predicted downturn in new construction in the super luxury market, we will introduce products for the mid-luxury market and rework the cost structure. We will also bolster business by expanding renovation stores and introducing renovation products centered on East and South China. In new products, we will develop and introduce entrance doors that integrate facial recognition technology and our advantages of brand, quality, and design for the new construction and renovation sectors.

For the export business, we will leverage international cost competitiveness to supply parts, curtain walls, window products, and vinyl profiles.



## India

In addition to the primary domain of aluminum profile extrusion and sales, we launched the AP business in 2019 and are moving forward with the manufacture and sales of aluminum window products. We have entered the market with a focus on super luxury and luxury multi-family residences, and are contributing to improving living environments in India.

## Mid-term priority measures

We are aiming to increase customer satisfaction by providing high-quality and value-added products. We will work to systemize architectural extrusions in the profile business, evolve into high-efficiency factories in manufacturing, and expand IWIN-S variations in the AP business to improve living environments through YKK AP brand windows in the growing Indian market.



## Taiwan

We are operating the business to respond to a changing market through the design, manufacture, and sales of non-residential products and renovation-focused products that ensure ease of installation and quality for the pre-owned residential market, centered on high water-tight sashes suited to Taiwan's frequent large-scale typhoons. We are also engaging in the development of installation contractors to further improve installation quality.

## Mid-term priority measures

With sustainability and growth as a new shape of top branding and aiming for sales growth through structural reform, we will work to expand our share in central and southern Taiwan, an area targeted for focused effort, and all luxury residential markets. In addition, we will expand the business area through deeper involvement in the non-residential and renovation sectors and stabilization in the curtain wall sector. For products, we will work to develop and introduce products in the mid-price range, build systems to increase production and shorten lead times, and reduce processing costs. For installation design, with the introduction of a licensing system we will move forward with engineer development including distributors as well. In addition, we will build a fair and just business operation system by strengthening our management foundation and governance.



## Indonesia

With the first overseas integrated production facility in the overseas AP business, we are engaged in the design, manufacture, and sales of products centered on aluminum profiles and sashes for the domestic market and Asia. As one of the first in Indonesia to begin the industrial production of windows, we are working to expand the business with products that match market trends, which change along with economic development.

## Mid-term priority measures

While we have worked to spread awareness of the AP brand by expanding sales of processed and assembled items centered on the high-end market, in the 6th Mid-term Management Plan we will sell profiles to more fabricators in addition to the high-end market and aim for increased volume in the mid-range market that is showing rapid growth as trends change. By introducing high-quality and reasonably priced new processed and assembled items for the mid-end market before the competition and achieving market penetration, we will contribute to raising residential quality in Indonesia. By building the two pillars of the "profile business" and "the fabrication and assembly business," we will work to increase sales volume and add value as our highest priorities.



## Facade Business

We provide project management including facade design, engineering, procurement, and construction for high-rise and complex architecture. With the technology to handle diverse designs and our engineering capability, we will take on renovations for building exteriors as well.

## Mid-term priority measures

With bolstering our foundation to expand bases and creating synergy with the overseas AP business as the key measures, in our existing market of Singapore, we will focus on the renovation sector and take on orders for mid-scale properties. We are researching Europe and the U.S.A. as new markets to consider business models that leverage our expertise in the facade business, brand, and technical abilities.



Feature YKK AP's Sustainability Management

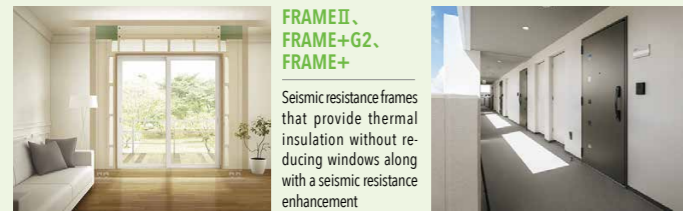
# Social issues YKK AP takes on and corresponding products

The environment around us sees major change on a daily basis, such as climate change and disasters, demographic changes, COVID-19 countermeasures, and accompanying lifestyle changes. As YKK AP engages in sustainability management, we are committed to deploying products and services that address social issues. We will expand products and services that build better society and work toward solving social issues.

## Products to prepare for climate change or disasters

### Minimizing earthquake damage

We propose seismic resistance products to reduce earthquake damage in a lineup that supports both new construction and renovations.



**FRAMEII, FRAME+G2, FRAME+**  
Seismic resistance frames that provide thermal insulation without reducing windows along with a seismic resistance enhancement

**Entrance doors for multi-family residences with seismic resistance and security features**  
Entrance door products that still open and close even if the door frame is deformed in an earthquake

### Typhoon/heavy rain countermeasures

We propose a wide variety of products such as windproof shutters to protect homes from sudden downpours that are growing increasingly frequent in recent years and increasingly large and intense typhoons as well as high-performance carports that can withstand large typhoons.



**APSPWORDII NEO-R** Aluminum-vinyl composite windows that ensure comfort and performance while preventing damage from heavy rains and strong winds  
**GR wind-resistant shutters** Strong shutters that protect homes from typhoons with 1.5 times the wind pressure resistance of conventional models  
**EXIMA 31Wb** High water tightness windows for high-rise residences with high-performance water tightness against strong typhoons and heavy rains



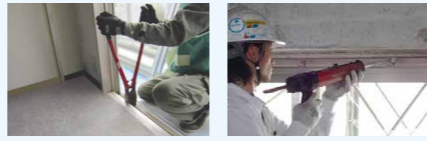
**Leonport neo GR** Folded plate steel roofing carport with wind resistance performance equivalent to 62 m/s  
**YRB-A (Taiwan)** High water tightness sashes, a core product in Taiwan, where typhoon damage is common  
**ProTek® (U.S.A.)** Hurricane resistant and blast mitigation products primarily aimed at commercial facilities in the U.S.A.

### Easy-installation products

We are developing easy-installation products to address the challenge of labor shortages in the construction industry stemming from the aging of society in Japan.



**Kantan Mado Remo (easy window remodeling)** A series of window remodeling products that enables replacement with the newest thermal insulation windows without breaking walls  
**Kantan Door Remo (easy door remodeling)** A series of front door remodeling products that enables replacement with a new door or sliding door while retaining the existing door



**Commercial building sashes (GRAF method)** A window refurbishment method for non-wooden buildings that enables window replacement with simple installation in a short timeframe  
**Commercial building sashes (non-welding method)** An installation method for non-wooden buildings that enables sash installation without welding

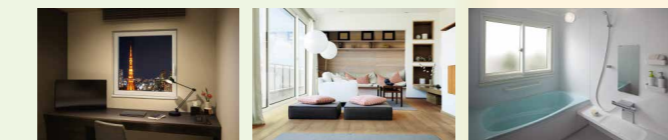
### Decarbonization

We are developing products to reduce emissions of greenhouse gases that cause global warming and achieve a decarbonized society. We are deploying a wide variety of products that improve thermal insulation for buildings to create living environments that do not require excessive heating and cooling, thereby keeping energy usage low.

★ indicates products that contribute to both "decarbonization" and "thermal environment improvement."



**"APW" Vinyl window series★** A series of high thermal insulation vinyl windows that uses vinyl frames with high thermal insulation performance  
**APSPWORDII NEO★** Aluminum-vinyl composite windows that offer energy savings, disaster preparation, and safety features  
**Outer Shade★** Exterior western-style blinds that block direct sunlight to keep interior temperatures from rising



**HOTEL MADO★** Vinyl windows for hotels that offer high thermal and sound insulation to create comfortable and quiet guest rooms  
**APSPWORD NEO-LB★** Aluminum-vinyl composite windows for non-wooden residences that reduce condensation and can be used on middle floors  
**Mado Remo - PLAMADO U Inner Window★** Window renovation products that improve thermal insulation by installing additional window inside existing windows

## Products that address demographic changes

### Labor-saving jigs

As advanced functionality leads to increased window weight, this increases the burden on workers and transporters. We are developing support jigs as a way to ensure safety and efficiency during transportation and installation, while at the same time ensuring product quality. These jigs also deliver labor savings and serve as a response to the aging workforce.



**KT001™ Assembly Support** Support jigs that reduce risk and burden on workers who assemble heavy windows  
**Glass Conveyor** Conveyor carts that can support large-size glass  
**Mado Raku Lift** Specialized lifts to support the raising of windows on construction sites



**Hoisting Jig for Scaffolding** Hoisting jigs that reduce labor needs for heavy objects when lifting and turning large-size glass panes  
**Easy Hand Crane** Support jigs that help with unloading from trucks  
**Mado Raku Lift** Specialized lifts to support the raising of windows on construction sites

### Universal design products

We are addressing customers' needs by developing many products with detailed consideration for universal design, so children, the elderly, and people who use wheelchairs can live safely and securely.



**Flat sill products** Window and door products that eliminate uneven sill to prevent tripping and falling  
**Renju wide-opening sliding doors for wheelchairs** Wide-opening entrance sliding doors to address concerns from people in wheelchairs



**Door Remo - Outset Sliding Door** Remodeling products to convert from standard doors to sliding doors for more spacious entryways  
**Paltner UD Fence Series** Handrails to assist with walking for safety and comfort

## Products that contribute to "health and comfort" and "safety and security"

### Ventilation/contactless

We are developing products for infection countermeasures to enable effective intake of outside air into the home, ventilation while windows are closed, and contactless control with a door opener.



**Ventilation doors / sliding doors** Entrance doors and sliding doors with ventilation mechanisms to resolve smells and humidity in the entryway  
**Wind Catch Combi-Windows** A combination of window types that can bring wind into a room more effectively  
**Clear Net Window Screen** Window screens and screen doors that offer excellent ventilation as well as improve views, block insects, and are easy to clean  
**Remote Control Slit Shutters GR** Shutters that can let in light and wind even when closed by opening slits



**Less Touch II** Contactless door openers that can be used to operate doors, etc. without touching them directly with hands  
**Windows with Ventilators** Ventilation units that enable ventilation by opening slits even when the window is closed  
**Delivery box products** Delivery boxes with refined designs and functionality to accept packages when no one is home  
**Windows with ventilation fans** Ventilation products that enable ventilation of specific areas as well as use as a 24-hour ventilation system

### Product safety

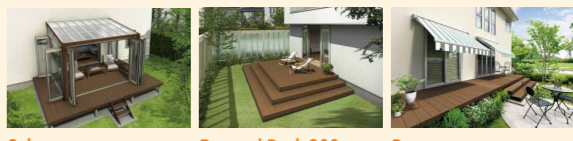
Loopless style products can be operated easily by pulling a single cord. We are focused on developing products that address customers' needs for safety and security.



**Loopless style**  
The operation cord was changed from the conventional loop to a loopless design to be safe and secure.

### Comfort

We offer a variety of products that improve the comfort of homes, such as beautiful and easy-to-use decks to create spaces to enjoy nature, and awnings to take in the wind.



**Solarea** Spaces for terraces and balconies to enjoy nature while inside the home  
**Rewood Deck 200** Reconstituted wood decks made mainly from wood powder and plastic for excellent weather and water resistance  
**Parasorea** Exterior awnings that allow natural wind indoors while blocking direct sunlight

Feature YKK AP's Sustainability Management

# Products to Address Climate Change and Disasters

Among various social issues, responding to the significant climate change and intensifying disasters in recent years is an urgent priority.

To contribute to a sustainable society and the safety and security of the people who live in it, YKK AP is engaging in product development and business efforts to address climate change and disasters.

## The effects of climate change on people's lives

In recent years, the climate change resulting from global warming is significantly affecting people's lives all over the world.

As one effect of climate change, the typhoons making landfall in Japan show a trend of growing larger and affecting a wider area. In 2018, Typhoon Jebi marked a maximum instantaneous wind speed of 58.1 m/s and produced powerful winds across Japan, breaking maximum daily wind speed records at 78 AMeDAS locations.\* Typhoon Faxai in 2019 was also extremely large scale, producing a maximum instantaneous wind speed of 57.5 m/s. These typhoons caused severe damage in regions where they made landfall.

Japan is also known for its frequent earthquakes. Recent years have seen many large earthquakes of 6 or greater on the Japanese seismic scale, and the 2016 Kumamoto earthquakes and the 2018 Hokkaido Eastern Ibari earthquake marked 7 on the same scale.

In response to the increasing frequency and intensity of natural disasters, YKK AP created the Disaster-Resilient Technology Office as part of the Research & Development Division in April 2020. We are working to develop technology for verification in disaster-like

situations and disaster preparation in order to clarify and visualize damage, transmit information useful for safety, and develop products to respond to disasters.

## Products for typhoon/hurricane response

"GR wind-resistant shutters," a new product designed for typhoons with wind resistance performance to withstand wind pressure (negative pressure) under wind speeds of 62 m/s, feature wind resistance of 1,200 Pa (negative pressure), 1.5 times that of standard shutters. In addition, the shutters can prevent window glass from breaking even if a 2 kg piece of wood propelled by strong winds hits it at a speed of 44 km/h. The high-performance carport "Leonport neo GR," designed with large-scale typhoons in mind, features more columns and beams for increased wind resistance to withstand typhoons and strong winds, as well as resistance to snow load to address heavy snowfall.

In overseas markets, we offer the hurricane-resistant product brand "ProTek®" in the U.S.A. We also offer "StyleGuard®" hurricane-resistant products for residential homes in coastal areas.

These products are designed and tested to comply with the International Building Code (IBC) and American Society for Testing and Materials (ASTM) hurricane requirements.

Taiwan is beset by frequent, large-scale typhoons, and damage from water leakage around windows and doors is common. In response, we developed "YRB-A" high water tightness sashes with industry-leading watertight performance. We are working to deploy products that meet customer needs in each region.

## Minimizing earthquake damage

We are also working to produce earthquake countermeasure products for the Japanese market. Conventional seismic retrofitting can lead to more walls and fewer windows, but we have developed "FRAME II" to enable seismic retrofits without reducing windows and add thermal insulation around the windows at the same time.

In an earthquake, there is also a risk of the door frame warping and preventing the entrance door from opening, trapping occupants inside. We offer seismic resistance and security features that allow entrance doors for multi-family residences to open and close even if the door frame is deformed in an earthquake.

## Disaster-Resilient Technology Office initiatives

With disasters such as strong winds, torrential rain, and earthquakes in mind, the Disaster-Resilient Technology Office studies damage during disasters, laws, regulations, and guidelines related to disasters, and trends in technology to address disasters.

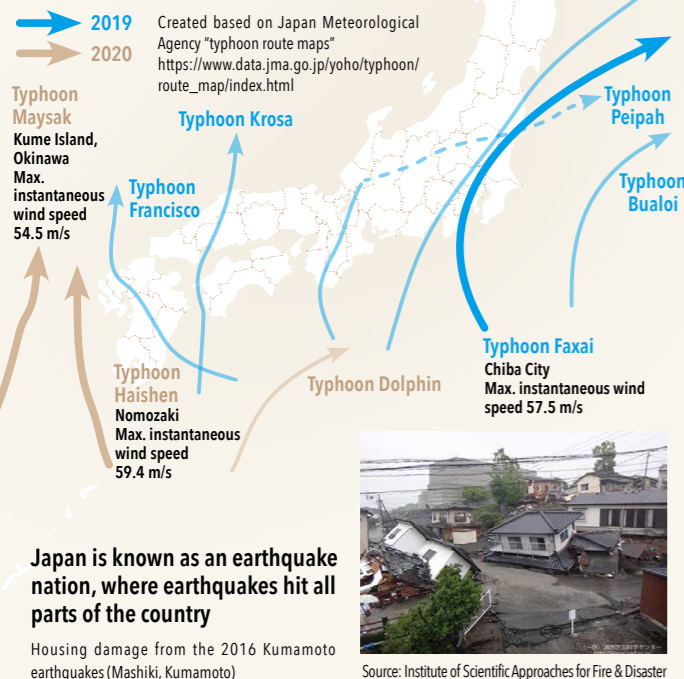
In addition, it conducts verification by recreating disaster situations to confirm how products are affected. The verification results are then examined to extract issues and help in technology development.

## Helping old residences outperform new construction

It is said that there are approximately 62 million units of single-family home housing stocks in Japan. As circulation and utilization of these homes becomes a social issue, renovation that adds performance and value that exceeds new construction is gaining attention as a way to address this. The key points are "thermal insulation," "earthquake resistance," and "disaster prevention"—reducing health risks to residents from extreme heat in the summer and temperature differences in the winter, making preparations for large-scale earthquakes, and protecting the home from natural disasters that are growing in scale.

YKK AP is cooperating with regional construction firms that build housing all over Japan to advance the "Renovation Demonstration Project for the Housing Performance Improvement" to add value that exceeds new construction to existing housing stock. We completed 2 projects in FY 2017, 4 in FY 2018, and 4 in FY 2019, receiving top honors in the open division for the "2019 Renovation of the Year" awards. In FY 2020 we renovated 4 secondhand single-family houses and demonstrated performance levels that exceeded standard new construction in terms of "thermal insulation" and "earthquake resistance."

### Large-scale typhoons with maximum instantaneous wind speeds over 55 m/s hit Japan in 2019 and 2020



### YKK AP products to prepare for climate change and disasters

#### Typhoon-resistant products (Japan)

##### Carports

The "Leonport neo GR" (left) is a high-performance carport designed to resist large-scale typhoons by increasing the number of columns from two rows to three, increasing the number of beams, and increasing the aluminum thickness to bolster its strength. It has the highest performance levels of all YKK AP carport products, with wind resistance equivalent to 62 m/s. It is also designed to handle heavy snow, with snow load resistance of 100 cm.

##### Shutters

"GR wind-resistant shutters" (left photo) are strong shutters that protect the home with wind resistance performance of 1,200 Pa (negative pressure), 1.5 times that of conventional shutters. Testing is indispensable when developing products like these. The photo at right shows the impact of heavy windborne debris in a windborne debris impact test of architectural glass in a windstorm (JIS R 3109). The shutters are strong enough to prevent window glass from breaking even if a 2 kg piece of wood hits it at an impact speed of 12.2 m/s (44 km/h).

#### Typhoon/hurricane-resistant products (overseas)

##### U.S.A.

The hurricane-resistant product brand ProTek® is used in various regions, especially those affected by hurricanes. The photo shows a building completed in 2019 on the Tulane University campus in New Orleans.

#### Earthquake-resistant products (Japan)

##### Seismic frames

"FRAME II" simultaneously offers thermal insulation and seismic retrofitting around the home's windows, a structural weakness, while still retaining their size.

##### Taiwan

The "YRB-A" high water tightness sashes feature watertight performance of 1,500 Pa, making them stand out in comparison to products from Taiwanese companies. The usability of the functional parts and high-end feel to match local needs also set the product apart.

##### Entrance doors (with seismic resistance and security features)

The seismic resistance and security features on entrance doors for multi-family residences offer both everyday security and a smooth escape route in case of an earthquake.

### Renovation for the housing performance improvement

#### Demonstration project "Home in Fuji, Shizuoka"

During installation

After renovation

Earthquake resistance comparison based on simulation

Before renovation	After renovation
0.35	1.68
High probability of collapse	Will not collapse

# Materiality of YKK AP

To drive YKK AP's sustained growth, we have identified "Materiality (priority issues)" based on our Purpose. We will establish systems to make progress on the materiality issues, and further bolster YKK AP's sustainability management.

## The positioning of materiality and the 6th Mid-term Management Plan

We have identified materiality issues as a strategic initiative to drive our company's sustainable growth along economic, environmental, and social themes. Engaging in these materiality issues means putting into practice the YKK Philosophy, Management Principle, and Purpose. To achieve our Purpose of "building a better society," we will invest capital and resources in the materiality issues that should be prioritized. Also, each of our businesses will put the 6th Mid-term Management Plan into practice to create social and economic value.

## The approach to identifying materiality issues and the identification process

To identify materiality issues, we began with our company's Purpose that we established in 2021. The Purpose consists of three key elements:

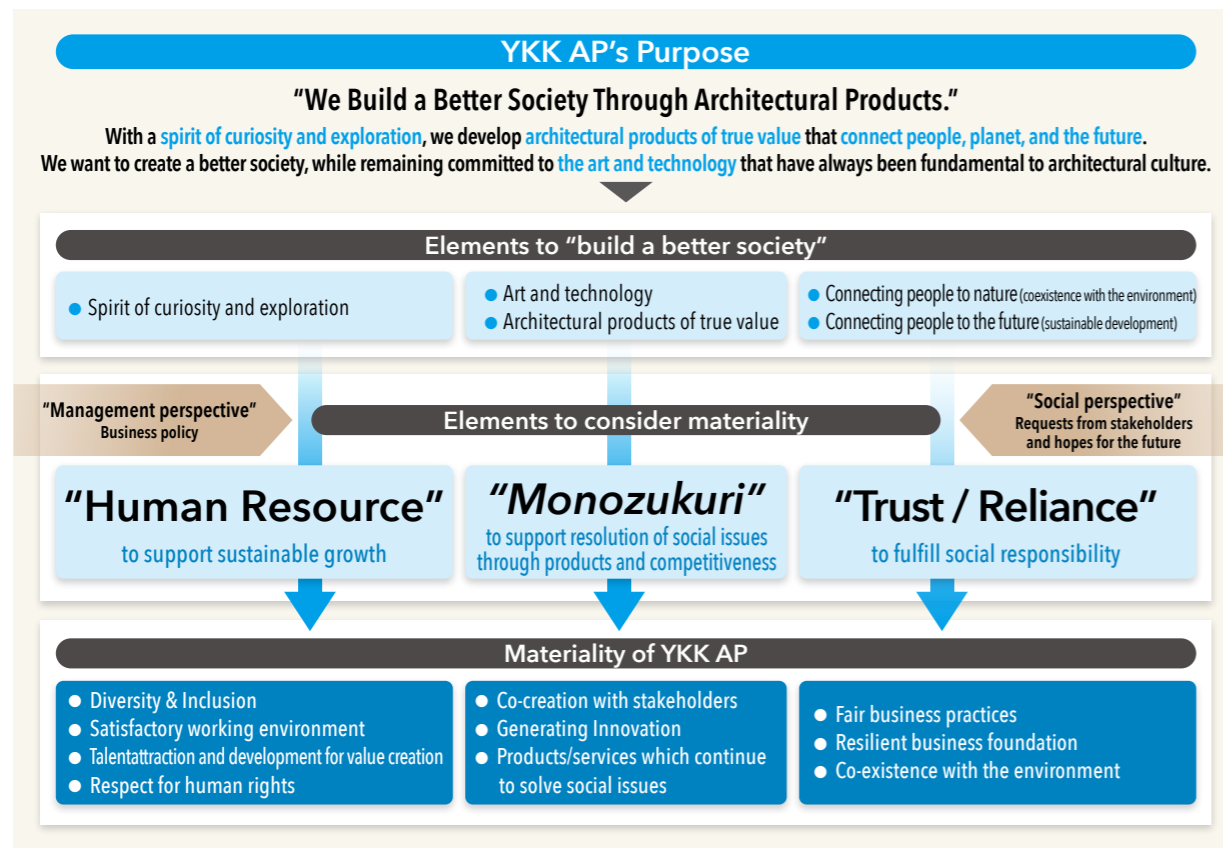
- The "Human Resource" to support sustainable growth, indicated by "the spirit of curiosity and exploration,"
- The resolution of social issues through products and the "Monozukuri" at its source, indicated by "art and technology" and "architectural products of true value,"
- "Trust / Reliance" to fulfill our social responsibility, indicated by "connecting people to nature and the future."

With these elements as the core, we added a "management perspective" related to sustainable business growth and a social perspective related to sustainable social development.

For the management perspective, we extracted themes with high impact on our business from the business policy. For the social perspective, we analyzed the importance to each of the stakeholders and extracted materiality issue candidates. And from the candidates extracted from these perspectives, we selected the most important ten items as our materiality issues.

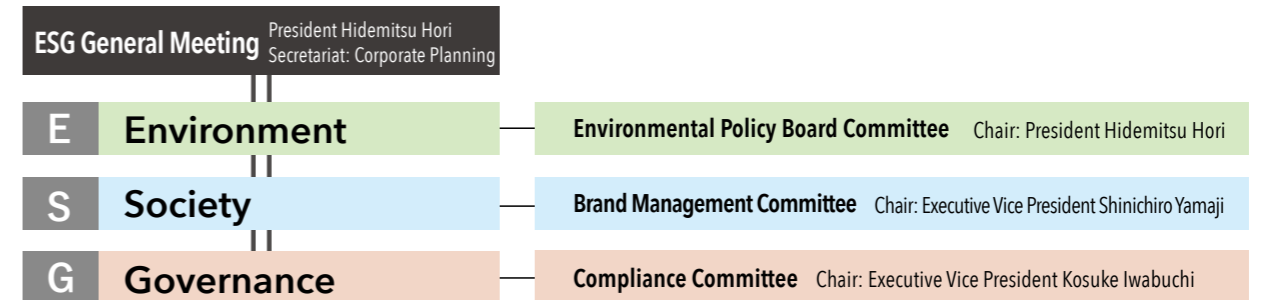
\*For details, visit our website : <https://www.ykkap.co.jp/company/en/sustainability/materiality/>

### • The approach to identifying materiality issues, guided by our Purpose



## System to promote sustainability and materiality

In FY 2019, YKK AP created the "ESG General Meeting" as an organization to engage with and drive sustainability. Headed by the president, it is held twice a year to comprehensively discuss various themes and bring people together toward sustainability manage-



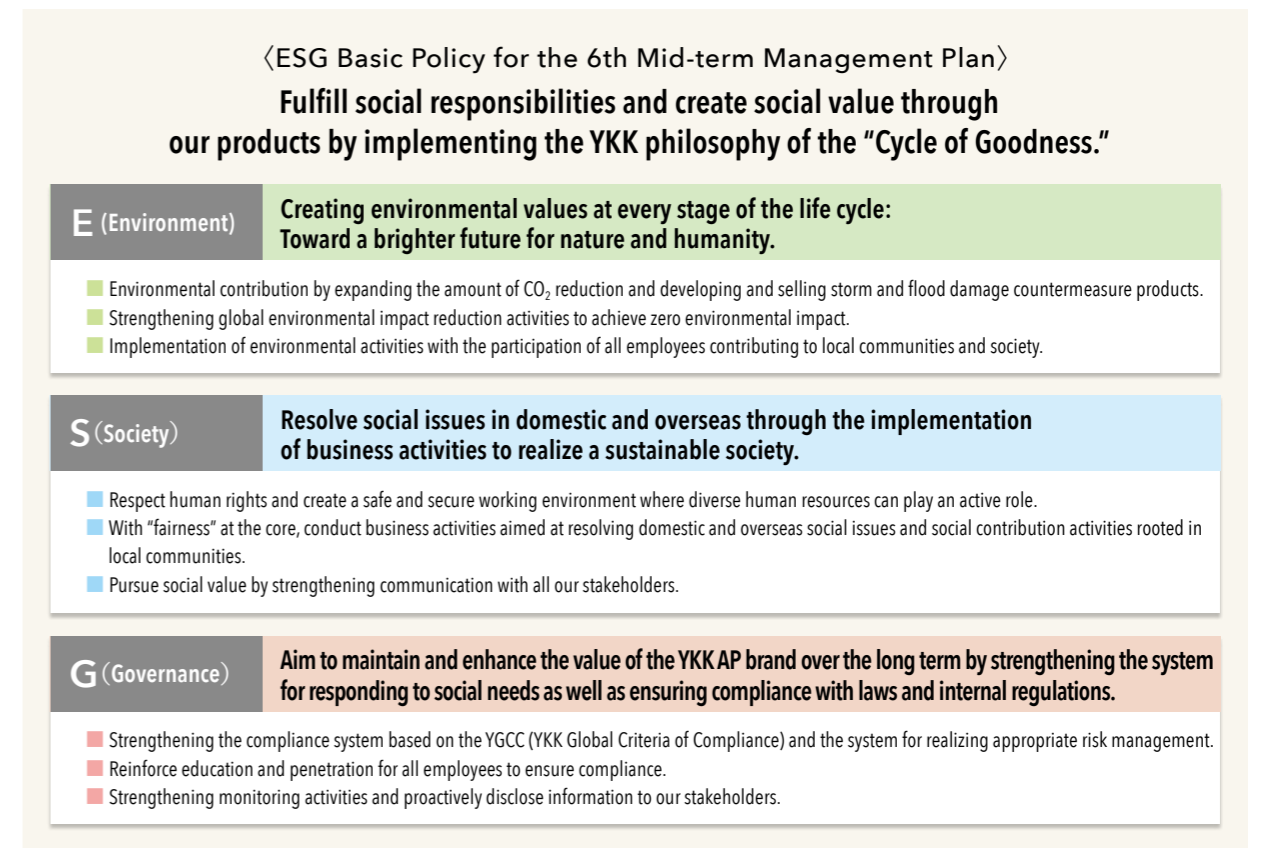
## Further advancing sustainability management

To further advance sustainability management in the 6th Mid-term Management Plan, the ESG General Meeting that oversees YKK AP's sustainability management as a whole established the "ESG Basic Policy."

ment. The Environmental Policy Board Committee takes the lead on environmental themes, the Brand Management Committee handles social themes, and the Compliance Committee handles governance. In addition, the "Materiality Promotion Working Group" was created to report directly to the "ESG General Meeting". We are building a system in which each committee chair can responsibly engage in their areas while coordinating with the relevant internal departments.

The ESG Basic Policy is to fulfill social responsibilities and create social value through our products by implementing the YKK Philosophy of the "Cycle of Goodness."

Based on this policy, the committees that lead E (environment), S (society), and G (governance) will deploy specific initiatives to the entire company through business activities and put the policies and key measures for each theme into practice.



# YKK AP Sustainability Management System

For each of the YKK AP materiality issues established based on our Purpose, we have organized targets for related SDGs.  
 4 directors in charge of manufacturing, sales, engineering, and administration will drive progress toward each of the 17 SDGs.  
 Each has established initiatives for the 169 SDG targets and will play a strong role in the system to advance the materiality issues.

## Related targets of SDGs

Materiality of YKK AP	Initiatives	Related targets of SDGs																	Page numbers in this booklet
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
<b>"Human resource" to support sustainable growth</b>	<b>Diversity &amp; Inclusion</b> ● Promotion of women's advancement in the workplace ● Promotion of hiring of persons with disabilities				4.7	5.1 5.4 5.5			8.2 8.5		10.3								P50
	<b>Satisfactory working environment</b> ● Health management ● Promotion of diverse work styles ● Establishing safe and secure workplace environments			3.3 3.4	4.4				8.5										P39 P50-51
	<b>Talentattraction and development for value creation</b> ● Establishing human resource education and training systems ● Improving training of global human resources ● Improving training of engineering human resources				4.3 4.4				8.2										P43 P50
	<b>Respect for human rights</b> ● Compliance with laws, regulations, and norms related to respect for human rights ● Harassment prevention ● Promotion of social responsibility in our supply chain	1.3				5.4 5.5			8.5 8.7 8.8										P49
<b>"Monozukuri" to support resolution of social issues through products and competitiveness</b>	<b>Co-creation with stakeholders</b> ● Co-creation ecosystem with customers and suppliers ● Employee engagement								8.5				12.6 12.8				17.16 17.17	P36 P42 P56	
	<b>Generating Innovation</b> ● Enhancement of the R&D system ● Development of new technology ● Evaluation and verification of products and methods ● Recycled materials and natural energy								8.4	9.4 9.5		11.c	12.2 12.5				17.17	P36-37 P42-43 P48	
	<b>Products/services which continue to solve social issues</b> ● Providing safe and secure lives with health and comfort ● Addressing demographic issues ● Countermeasures for climate change and disasters			3.3 3.4				7.3		9.4		11.1 11.5	12.8	13.1 13.2 13.3					P24-27 P44-45
<b>"Trust/Reliance" to fulfill social responsibility</b>	<b>Fair business practices</b> ● Corruption prevention and fair competition ● Responsible political involvement ● Enhanced promotion of compliance								8.7				12.6				16.5	P54	
	<b>Resilient business foundation</b> ● Strengthened internal controls ● Business continuity plan (BCP) ● Risk management											11.b	12.6					P55	
	<b>Co-existence with the environment</b> ● Reduction of CO <sub>2</sub> emissions ● Circular economy ● Reduction of chemical substances ● Reduction of water use			3.9				6.3 6.4	7.2 7.3		9.4		11.6	12.2 12.4 12.5	13.2	14.1		17.16	P46-48



## Stakeholder Dialog

# YKK AP's Management Strategy which Balances Economic and Social Needs

Professor Kunio Ito, who issued a human resources version of the Ito Review in 2020 and who is a proponent of the importance of purpose, and President Hidemitsu Hori of YKK AP, who established YKK AP's Purpose in 2021, sat down to discuss YKK AP's management strategy for sustainable growth.

**Kunio Ito**, Director of Hitotsubashi University CFO Education and Research Center / **Hidemitsu Hori**, President Representative Director of YKK AP

## Mr. Kunio Ito

Professor emeritus, Hitotsubashi University. Former president of the Japan Accounting Association. Chaired the Ministry of Economy, Trade and Industry project "Competitiveness and Incentives for Sustainable Growth: Building Favorable Relationships between Companies and Investors," for which the final report (Ito Review) garnered a large response overseas as well as in Japan and drove the subsequent reform of Japanese corporate governance. Serves as chair of the TCFD (Task Force on Climate-related Financial Disclosures) Consortium starting in May 2019.



## "Purpose" engenders a sense of ownership in employees

**Hori:** In addition to the existing YKK Philosophy and Management Principle, we established "We Build a Better Society Through Architectural Products" as our Purpose for existence in society.

**Professor Ito:** It's wonderful that you established Purpose on top of your corporate principle. Purpose is created by the current management and employees, so it creates a sense of ownership and triggers dialogue between management and employees and also among employees. The discussion of purpose revisits capitalism to ask why we work and what the company exists for. I think Purpose can pose the question of how the company and employees can be happy.

**Hori:** So it's important to have a dialogue with employees about Purpose.

**Professor Ito:** Yes. One executive asked me, "Is it okay for Purpose to change over time?" If the company's core technology or social environment changes significantly, I think it's okay for Purpose to change.

**Hori:** So Purpose is something you discuss to create, and it can change. That's easy to understand for new employees, too.

## Laying the Foundations for the Future of YKK AP

**Hori:** Our sales and market share are on the rise at the moment, but given the scale of the domestic market in Japan we will hit a limit in a number of years. I think what we do now as we look ten



Hidemitsu Hori

years ahead is extremely important. Unless we think about what's next and take action, there won't be any innovation.

As one of those actions, we brought in external talent to bolster the IT Division. I worked in the U.S.A. for 17 years, so bringing in people from outside the company is a matter of course. The new talent is working on a plan for a new initiative in the U.S.A.

In addition, we created a new organization to drive a new business with the future in mind. The number of carpenters and installation technicians to work on construction sites is decreasing. We are considering how we want the company to look in the future, including business models to do that work in factories and provide products that include windows along with the roof, walls, and foundation all in one package.

And with the expanded online possibilities due to the COVID-19 pandemic, we are considering virtual overseas assignments for our employees. This plan will connect those who develop technology in Japan with international businesses. Even employees who can't transfer abroad for a variety of reasons can be deeply involved in overseas business without leaving Japan.

Also, with the YKK Group's removal of the mandatory retirement system in FY 2021, the average age of our employees will rise. I would like to lower the average age of our managers, however. Eventually, I think the average manager will end up being younger than the average employee.

**Professor Ito:** The COVID-19 pandemic has made it easier to enact reforms. Even companies that were aware of problems had difficulty making changes in normal times.

**Hori:** Right now, I would like to see our employees build a large network of personal connections. For our top-level employees in particular, I want to see them proactively attend various gatherings to make connections and hear various things. Unless they get

to know many people and take an interest in various fields, they might not notice the value of an idea that a subordinate brings to them.

**Professor Ito:** That's true, there are times when managers nip innovation in the bud without meaning to. When future business models plateau and no new ideas emerge, it's often because of a lack of contact with other industries.

Because of your long years of experience working overseas, you're able to view headquarters (the main office) from the outside, and you can see issues clearly. Your unique ideas to create new strategies and your ability to spot people's talents and hidden potential are wonderful.

## SDGs and Materiality of YKK AP

**Hori:** Working toward SDGs is a priority issue, but we believe it's also necessary to take steps beyond that.

**Professor Ito:** Japanese corporations tend to have low consciousness of materiality rooted in their organizations. I think a good approach is to determine the company's material issues and what should be done in the next 30 or 50 years, and then decide what to do in the next 5 years to accomplish that.

**Hori:** For example, we're thinking about developing windows with functionality that has never been developed before. We want to work with partners such as startup companies.

**Professor Ito:** Your company has the ability to change existing lifestyles for the better. You can take global issues like climate change and make them your company's materiality issues. I'd like to see you create technological innovations that can solve society's issues. I have high expectations for your company's development going forward.



Kunio Ito

# Foundations to Support Sustainability Management

Based on the YKK Philosophy of the "Cycle of Goodness" and its Purpose, YKK AP manages its business from the standpoint of sustainability. By generating added value in each *monozukuri* activity and proactively addressing each issue in the foundations that support it, we want to contribute to the resolution of social issues and achievement of the SDGs as a company that builds a better society through our business.

## The YKK AP value chain



## Foundations to support our business



# Monozukuri Perspective

The perspective of the consumer, the perspective of the professional user, and the needs of society are indispensable elements in *monozukuri*.

The three technology facilities in Kurobe City, our Technology Headquarters, work together as one to capture the multiple perspectives and needs, share, and consolidate them to realize *monozukuri* to solve issues. We also share information and findings with international teams to engage in *monozukuri* to provide new value to homes. These findings and data, infused with the spirit of co-creation, are invaluable for *monozukuri*.

## Research, development, and verification systems

### Pursuing high quality and advanced technology through co-creation with stakeholders

The cycle of development, evaluation/verification, technology proposals, and information sharing serves as the foundation of the *monozukuri* process at YKK AP. This is carried out by "YKK AP R&D Center," "Value Verification Center," and "Partners Support Studio."

YKK AP R&D Center is where YKK AP's technology and knowledge is gathered. Here, teams delve into research and deepen their knowledge in their specialized fields to deliver high-quality product development and propose advanced technologies. The Value Verification Center conducts the evaluation and verification that is indispensable for product development and providing new product value. To collect in a broad range of findings and data, verification is conducted from three perspectives – "user verification" by consumers, "field verification" in which various usage environments are recreated, and "analysis and simulation" through numerical simulations. In field verification, we work with the Disaster Prevention Research Institute, Kyoto University to conduct verification under actual conditions or in recreations of actual conditions for windows and shutters in typhoons and strong winds as well as for energy conservation and sound insulation for internal windows

and insulating glass in schools. User verification, on the other hand, verifies product value from the user's perspective. We ask consumer monitors of different age groups and physical attributes to operate products so we can check the products' safety and usability. With the spread of COVID-19, we are beginning efforts to conduct online verification of architectural products, etc. in the monitors' homes.

The Partners Support Studio presents proposals based on our technology and quality in response to issues and requests from professional users. We share issues via joint installation verification and more as well as exchanging opinions and information to work toward solutions.

In addition, the "Central Research Laboratory" works with external research institutes to research window engineering and architectural physics from its locations in Tokyo and Kurobe.



Field verification for typhoon and strong wind conditions

Field verification in a school

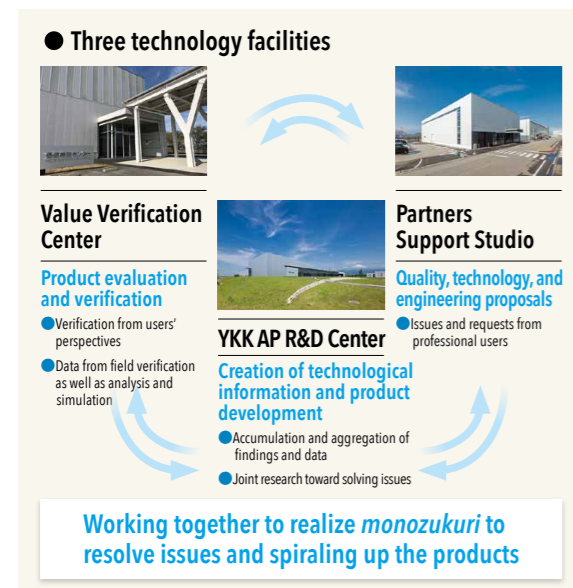


Online user verification

Joint installation verification in the Partners Support Studio

### "Central Testing Center," registered as a Japan National Laboratory Accreditation (JNLA) testing laboratory under the Industrial Standardization Act

The Central Testing Center works to ensure the quality of our products. It is registered as a JNLA testing laboratory that conforms to the standards established by the International Organization for Standardization and the International Electrotechnical Commission. Strict testing from a third-party stance bolsters YKK AP's product quality assurance system.



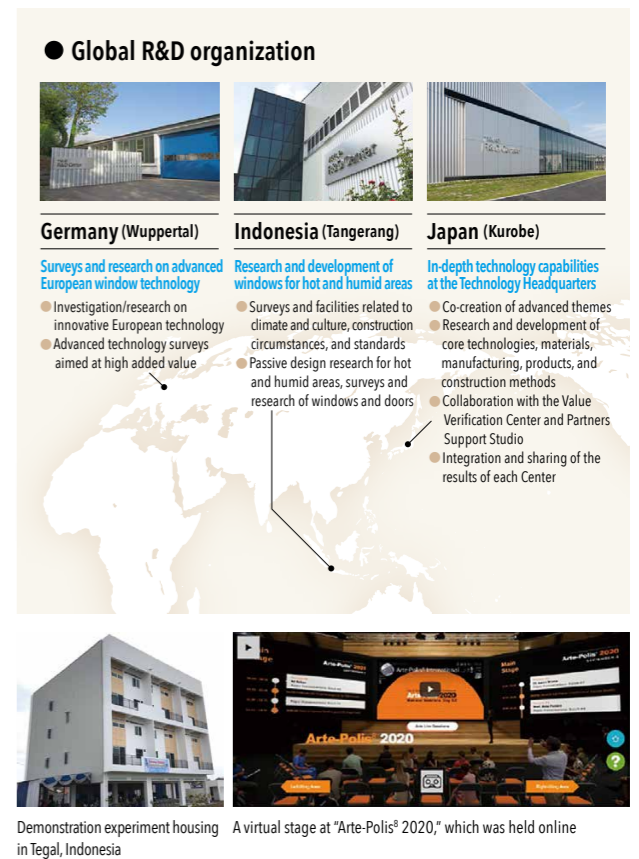
## Overseas research and development

### Sharing information on warm, cold, and hot-humid regions to develop the optimal products

YKK AP has also strengthened its global research and development structure. We opened the YKK AP R&D Center in Germany in 2017, and in Indonesia in 2018. This has made it possible to accumulate and share information from the warm climate of Japan, the cold climate of Germany, and the hot-humid climate of Indonesia, leading to the development of the optimal products.

At the YKK AP R&D Center (Germany), we investigate and research innovative European technology in the fields of energy conservation architecture and building materials, and promote high added-value in windows and doors through functional parts, thermal insulation of windows and doors, and frames and glass, etc.

At the YKK AP R&D Center (Indonesia), we conduct investigations, research, and development related to energy conservation construction methods and windows and doors suited to hot-humid regions. In addition, we are engaged in research on passive design (the design of comfortable living environments that utilize natural energy) as well. Further, we are participating in an industry-government-academia joint research project on the theme "Energy conservation multi-family residences for middle-income earners." We propose windows and entrance doors that provide effective ventilation for housing used in demonstration experiments aimed at achieving comfortable rooms that utilize coolers and other air-conditioning devices as little as possible. In the fall of 2020, we participated in "Arte-Polis® 2020," an international conference that gathers professional engineers and researchers in the fields of architecture and urban planning. We will continue to contribute to the improvement of living environments based on the knowledge we have gained from such projects.



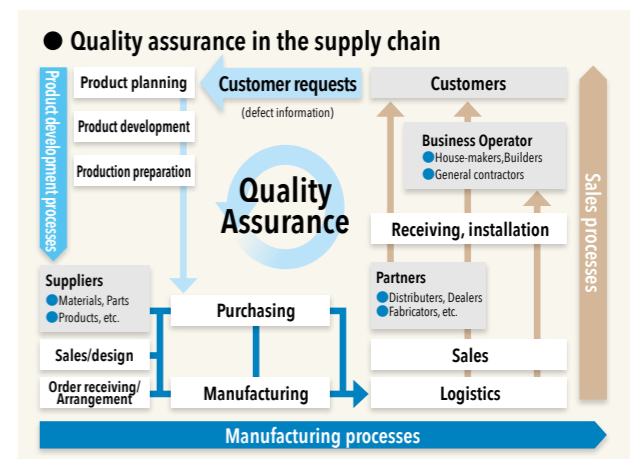
## Product safety and quality assurance

### Higher levels of customer satisfaction by thoroughly ensuring product safety and quality

Ensuring the safety and quality of products is absolutely critical in manufacturing. In 2008, YKK AP formulated the "YKK AP Product Safety Basic Policy" aimed at contributing to establishment of the "culture of product safety" being promoted by the Ministry of Economy, Trade and Industry, and providing customers with safety and security. We have worked to ensure product safety. YKK AP was selected as the recipient of the "METI Minister's Award" at the "Best Contributor to Product Safety Awards (sponsored by METI)" in 2017. This was the third time we won the METI Minister's Award, and we were certified as a "Gold Contributor to Product Safety" as a result.

In 2019, we established the "Quality Assurance Department," and have encouraged operation of processes to ensure quality throughout the entire supply chain, from product development to production and sales, thereby ensuring quality. Further, we are working to integrate requests from customers and business partners, reports of faults, and opinions regarding inspections and repairs as quality

information. This has led to elimination of faults at an early stage as well as prevention of faults, contributing to providing social value through products that create a high level of customer satisfaction.



# Monozukuri Practice

Our "integrated production system" is considered to be YKK AP's greatest strength in manufacturing. YKK AP focuses on in-house development, manufacturing, processing and assembly of aluminum, vinyl, and other materials, components, and manufacturing equipment. In addition, we have established processes for elemental technology used in development of materials, recycling technology, and also created systems for logistics, sales, and manufacturing, thereby making it possible to provide a stable supply of high-quality products. We aim for a high level of quality by achieving a seamless integrated production system to improve efficiency and productivity further.

## Integrated production system

### We even develop and manufacture manufacturing equipment, delivering a high level of quality through a seamless integrated production system

YKK AP has integrated all manufacturing processes and conducts them at its own manufacturing sites in Japan and overseas. The glass used in vinyl windows and other core products is procured as raw sheets, and we process it into Low-E glass and triple-glazed glass in-house. In addition, we handle the entire process beginning with melting the bullion in the case of aluminum, and combining the raw materials in the case of vinyl. Accessories and functional parts, screws, and screen nets, etc., are also manufactured in-house.

The functions of the YKK Machinery & Engineering Group, which had been handling development and manufacturing of specialized equipment for our products, were transferred to YKK AP in FY2021. We are working to enhance further our technical competitiveness through seamless and rapid collaboration between the Machinery and Engineering Department, the Research & Development Division, and the Manufacturing Division.

We believe that our insistence on integrated in-house production enables us to develop technology quickly, control costs throughout the supply chain, and ensure quality. The reason that the philosophy of "starting at the source," under which we pursue materials and equipment in order to solve problems, has taken root, is specifically because of our integrated production. This basis was built by Tadao Yoshida, YKK's founder. In the 1940s, the U.S.A. was a far more industrially advanced nation. Seeking to compete with their fastening products, Tadao spent 2.5 times the company's capital at the time, to import and study U.S.A.-made machinery. He developed his own improved equipment and implemented a business form of integrated production, which is from raw materials to productionization. We will continue to move forward, carrying on and protecting that spirit, and manufacture high-quality products.

#### Promoting efficient logistics through "White Logistics"

A shortage of drivers has led to the distribution industry facing rising delivery costs and other issues. Our company supports the "White Logistics" Movement promoted by the Japanese Ministry of Land, Infrastructure, Transport and Tourism and others, in order to ensure stable distribution. YKK AP has submitted to the secretariat a declaration of voluntary activities aimed at sustainable distribution, such as "Using pallets, etc.," "Consolidating delivery dates," and "Consolidating pickup and dispatch locations," and is working for greater efficiency and productivity in distribution.

**Materials**

We produce materials in-house: for aluminum, from melting process to extrusion molding and surface treatment; for vinyl, from mixing raw materials to extrusion molding.

**High-performance glass**

We process our own high-performance and high-functioning insulating and triple insulating glass.

**Components**

YKK AP manufactures accessories, functional parts, screws, and even screen nets, etc., in-house.

**Manufacturing equipment**

YKK AP has developed its own manufacturing equipment, production line, and process control system, etc., and has implemented it in the company's plants in Japan and overseas.



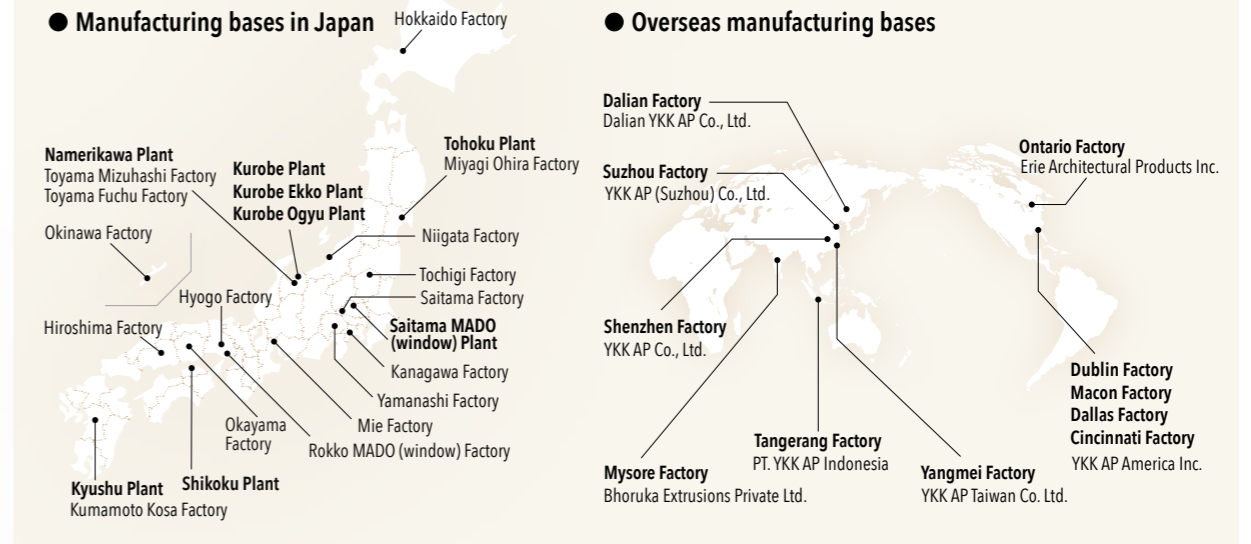
**Processing, assembling, packaging**

Our APW vinyl window series products are produced in our carefully controlled plants, from preparing the glass to manufacturing the components and assembling the windows, thereby ensuring high performance.



**Logistics**

We have an efficient and flexible delivery system in place.



### Rollers, screws, and other parts and components are manufactured in-house, aiming at a higher level of reliability.

YKK AP develops and manufactures the components in-house for the "keystones" of our product lineup. In Japan, parts and components are manufactured at "Kurobe Ekko Plant" in Kurobe City, Toyama Prefecture. The plant produces rollers, screws, and other metal and vinyl functional parts, on the foundation of our technology development capabilities, including elemental technology. The plant also has various types of test and evaluation functions, and ensures the quality of the parts.

"YKK AP (Suzhou) Co., Ltd.," located in China, is another important site for manufacturing YKK AP's components, which are supplied to the plants around the country. The performance laboratory at YKK AP (Suzhou) has been recognized for the appropriateness of its test methods, the reliability of its measuring technology, etc., and in 2020, the laboratory was certified by the China National Accreditation Service for Conformity Assessment (CNAS) based on the international laboratory standard ISO/IEC 17025. The site is contributing to improving YKK AP's quality and brand value. High-quality parts and components produced in-house are also one of YKK AP's major strengths.



Kurobe Ekko Plant



Left: YKK AP (Suzhou) Co., Ltd.

Right: Certificate of CNAS accreditation acquired by the performance laboratory

## Health and safety

### A satisfactory and pleasant working environment for the sake of health and peace of mind of our employees

Creating a safe and healthy workplace for employees who are responsible for manufacturing is also an important theme. YKK AP promotes a stress-free, pleasant working environment by introducing air-conditioning equipment and clothing as measures against the heat. We have improved cafeterias, restrooms, and other aspects of the environment to move forward with creation of a satisfactory workplace where employees can work vibrantly. In addition, to increase safety further, we implement safety reviews on manufacturing equipment according to laws and regulations and the health and safety regulations of YKK Group, and only authorize use of equipment that passes the review. Starting from FY2017, we also implement "periodic machinery and equipment safety inspec-

tions" once every three years. The machinery and equipment of all manufacturing lines have been compiled into a database, which is periodically reviewed, in an effort to promote intrinsically safe equipment.



# Monozukuri and Sales

The first step to create a pleasant and safe living environment with YKK AP products is to have customers learn about our products.

The base for that is the showrooms around the country. In addition to helping customers learn more about the products, we propose the optimal product through exhibition spaces for performance comparison and confirmation.

Meanwhile, we also promote product proposal and provision of information via the Internet.

With proposals for energy conservation and healthy environment which is based on architectural knowledge, YKK AP supports customers in realizing comfortable living.

## BtoC activities

### Purposing healthy and comfortable living by utilizing both real and online showrooms

YKK AP has established showrooms throughout Japan to enable customers—the end users—to actually “see, touch, and experience” YKK AP products. The showrooms are more than just product displays. Rather, customers can feel for themselves the differences in thermal insulation and soundproofing and learn how to maintain products, and we communicate the importance of carefully selecting windows and the performance required from windows. Further, specialized advisors propose the optimal products matching the needs of the customer and support their efforts to create better houses. Showrooms operated jointly with TOTO Ltd. and DAIKEN Corporation have also been established in 13 locations nationwide.\* Plumbing, flooring materials, and a variety of other products can be checked at the same time there. In addition, P-STAGE, presentation rooms, and other exhibition facilities are utilized as places to come into contact with customers in many regions.

In the fall of 2020, in response to the spread of COVID-19, YKK AP released “O-uchi de Showroom,” which allows visitors

to check functions and designs of products from their homes. Just as with the real showrooms, advisors use videos to give easy-to-understand explanations of the key points of selecting windows and entrance doors. Customers who have a hard time visiting a showroom due to distance, and want to consider products without worrying about time, can see advisors’ proposals whenever and wherever they want. Further, we held Products Park 2020, an online new product exhibit, from June through December 2020. Under the theme of “Relief with Window,” we released a special website that can be viewed on smartphones, tablets, PCs and various other devices, and used a full lineup of video content to propose products that enable ideal home building, whether new construction or remodeling. The website has been a great hit, with more than 270,000 visitors so far.

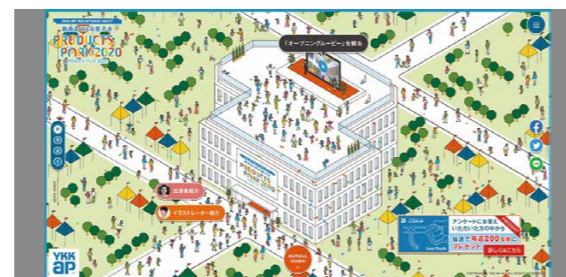
We will continue to disseminate information on products, through showrooms and other online contents, and propose ideas to customers to create safe, secure, healthy, and comfortable houses.



Display of house entrance at “Showroom Shinjuku”



Thermal insulation experience exhibit at “Showroom Sapporo”



Virtual exhibit venue at “Products Park 2020”



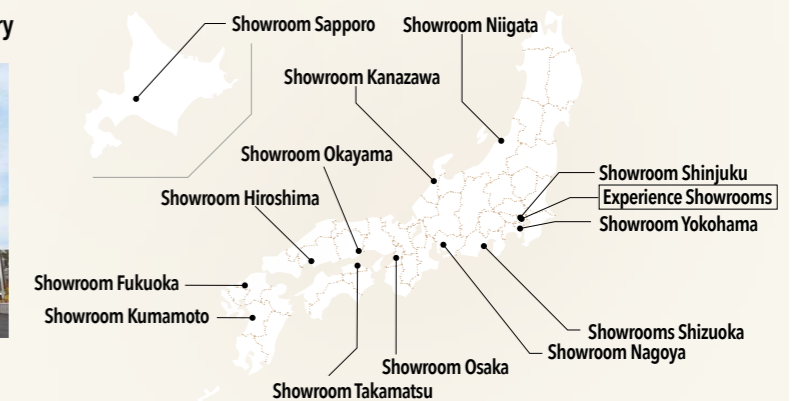
Product highlights presentation movie at “Products Park 2020”

\* Some showrooms are jointly operated with TOTO Ltd.

### ● YKK AP Showrooms around the country



Showroom Okayama (TOTO, YKK AP Okayama Collaboration Showroom), opened in March 2020



## BtoB activities

### Sharing of information through facilities and forums for professional users

Having professional users gain a deeper understanding of YKK AP products that contribute to solving social issues and enabling healthy, comfortable living is crucial in making customers familiar with those products. “YKK AP Experience Showroom” in Shinagawa, Tokyo is a facility established to help professional users in the construction industry and learn about our products. Visitors can experience the performance of windows through the “Thermal Insulation Effect Experience Room,” where windows are installed in a freezer set to a temperature of 0°C to 5°C, and five rooms with differing thermal insulation specifications showing the differences in room temperature and condensation.

Further, in the past we have conducted forums related to each business nationwide as a setting to provide information to professional users, but in FY 2020 we also launched an online promotional activity called “YKK AP Relations Next,” built on the concept of taking our relationships with business partners to the next stage. As part of

this, we began hosting “Live Stream Forum 2020,” an online forum for professional users involved in home-building, in June 2020. We merged the window, exterior, and renovation forums, which had been held separately, into a single live forum, featuring lectures from experts on topics such as high-performance homes, disaster prevention/mitigation, and exteriors. The forum was conducted seven times, with a combined total of 6,612 participants. We will continue holding the forums both virtually and face-to-face, in an effort to share information with professional users.



A view of the YKK AP Experience Showroom

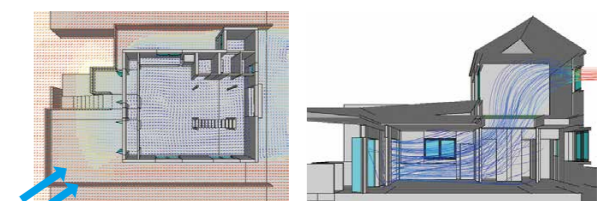


A scene from “Live Stream Forum 2020”

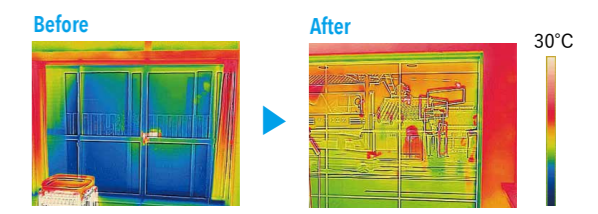
## SE (Sales Engineers)

### Achieving house-building that solves challenges based on a broad range of knowledge related to residences

One of our greatest strengths in proposing solutions is sales engineers (SE) who make technical proposals together with sales representatives. Our 51 sales engineers belong to Product Development, Residential Business, Research & Development Division and are located at 14 sites in Japan. Based on their knowledge not only of windows but also the entire residence, sales engineers propose the optimal products and layouts in light of the results of “ventilation,” thermal insulation,” sunlight simulations,” etc., which analyze the most effective window types and installation locations. Further, they make proposals to respond to the Building Energy Efficiency Act that was revised in 2020, as well as proposals to address social issues, such as the “Stay Home Garden” exterior that enriches time when forced to stay at home, and “Renovation for the Housing Performance Improvement,” which leads to revitalization of the stock housing market.



Air flow simulation



Thermal insulation simulation

# Monozukuri and Installation

YKK AP products are not completed just by being manufactured. They will be completed only when they are installed in houses and buildings and they begin to function for customers to use. In other words, just like the product itself, installation is closely related to quality.

Meanwhile, Japan's low birthrate and aging population has resulted in a decrease in the number of installation technicians and other human resources involved in the construction industry, and a worker shortage is one of the significant issues that the industry is currently facing. YKK AP is striving to develop human resources and labor-saving efforts, etc., to solve such social issues and further improve the quality of installation.

## FE (Field Engineers)

### Contributing to improvements in installation quality by refining technological capabilities through an internal qualifications system

Field engineers (FE) are engineers who contribute to business by working on the front lines of installation sites. Field engineers belong to the Field Technical Center (FTC) of the Fabrication Technology Department in the Manufacturing Division. There are currently 41 working at 10 regional offices and 14 sites in Japan. They provide technical guidance to professional users in each area through training and educate them on how to ensure final quality and prevent faults. Further, in addition to visiting the site and investigating the causes when a fault has occurred, they provide feedback to the FTC and Product Development, leading to improved products.

As engineers, they need established targets to refine their technical capabilities, but there are no national, public, or private certi-

fications directly related to the field engineer role. Accordingly, the education working group of the FE Operations Improvement Review Committee, which was launched in FY 2016, proposed an internal certification system. The secretariat for the certification system was launched in FY 2017, and the basic concept and details of the system were examined. The system began operation in FY 2018. As of FY 2020, eight engineers had been certified for Level 1 and six for Level 3. Field engineers with refined technical capabilities provide stable quality and service in installation work.



"APW" installation training

## Co-creation and co-working bases

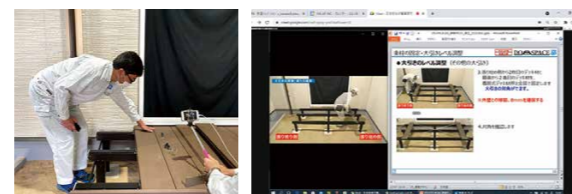
### Sharing issues and technical information and leveraging them to improve installation quality

Co-creation and co-working with professional users involved in construction are indispensable to solving issues and improving installation quality. The bases for such activities are "Partners Support Studio" and "DO SPACE Ageo." Opened in 2019, the Partners Support Studio is a facility to share issues faced by professional users and propose solutions based on our technology and quality. DO SPACE Ageo was opened in 2020 to develop and improve exterior installation technicians and to transfer installation skills. As products and technology become more diverse, we have developed and implemented a training curriculum aimed at ensuring a high level of quality. Further, we are striving to improve further installation technology capabilities by sharing the techniques of experienced installation technicians that should be transferred to the next generation.

COVID-19 made it difficult to visit either facility in FY 2020, but we started online activities for professional users nationwide and are actively providing them with technical and product information.



A live technology meeting in the Partners Support Studio



Online training in DO SPACE Ageo related to exterior products

## Installation Skills Training Academy

### Aiming to develop human resources and transfer skills, which are two issues in the construction industry

In 2013, we established the "Installation Skills Training Academy" jointly with the "YKK AP Group Installation Cooperative," which is composed of sash and curtain wall installation specialists. Every two years, trainees participate in a training program divided into three levels: Standard Course, Standard Course 2, and Specialist Course. It is said that it normally takes ten years of actual work experience to acquire the skills for sash and curtain wall installation,

but our Training Academy trains technicians in as little as six years, with three courses based on skill level. Even in the midst of the COVID-19 pandemic, we are working to create practical application instructional videos and VR content. Going forward, we will work with the Installation Cooperative to address human resource development and skills transfer, which are the issues faced by the construction industry.

#### ● Acquiring skills through training at the Installation Skills Training Academy



## Labor-saving in installation work

### Supporting jigs contribute to labor-saving, safe, and efficient operation

Along with advances in window function such as high thermal insulation and fire-protection, the weight of windows has increased. Meanwhile, the on-site installation technicians have been aging. In response to such circumstances, YKK AP is developing support jigs to save labor during transportation and installation. The "KT001™ Assembly Support" secures glass with a suction pump. This enables workers to transport and assemble glass without touching it directly. We have also developed an easy hand crane for loading and unloading of trucks, a hoisting jig for scaffolding that lifts and turns

glass panes, and other jigs to assist in the installation of heavy items. The use of such support jigs can reduce man-hours and contribute to ensuring safety during installation and transportation and increasing efficiency.



KT001™ Assembly Support



Easy Hand Crane

## Installation guidance to overseas installation technicians

### Achieving a high level of installation quality by implementing training around the world

As we deploy our businesses around the world, it is important to maintain installation quality in order to ensure product quality. To this end, we dispatch our employees and Installation Cooperative instructors to overseas construction sites and training center to provide installation guidance and training. In 2017, we established an "Installation Skills Academy" for members of the Installation Cooperative that is made up of local installation contractors in Taiwan, where we have implemented the same installation contracting business model as Japan, and have a high share of the luxury condominiums mar-

ket. We are engaged in efforts to teach Japan's installation technology and installation quality. In China, where our focus is on system sales, we have established installation training centers in Shenzhen and Suzhou. We train the installation specialists of customers. In Indonesia as well, we conduct installation training in order to improve the technical skills of local installation technicians.



Teaching wooded wedge installation methods onsite in Taiwan

# Monozukuri and Product Use

YKK AP products are deeply connected to our customers' lives. Accordingly, we focus efforts on enhancing information, maintenance response, etc., to enable customers to use our products safely and securely for a long time. We provide information through a variety of media, including websites and leaflets, on how to use and maintain our products safely to enable healthy and comfortable living. We aim to improve the quality of our response when a fault or malfunction occurs, and further increase our customers' satisfaction.

## Providing information to customers

### Promptly disseminating accurate information and supporting healthy and comfortable living

Windows and doors—YKK AP's core products—significantly affect the indoor environment. We actively disseminate information related to methods of using our products effectively, with the aim of making our customers' living space healthier and more comfortable.

In FY 2020, we particularly put effort into offering information on measures against COVID-19. We began releasing information regarding effective ventilation at the early stage of April, when the infection was starting to spread. In September, we launched the website content "For New Life Style" to help people have a more pleasant time while staying at home. Then, in November, we released "MADO KOTO - Temperature/Humidity/Ventilation Version" featuring temperature, humidity, and ventilation, which are important elements that affect the comfort of spaces. We provide in-depth information that includes the knowledge of specialists in

order to achieve healthy and comfortable living environments.

Further, as a Gold Contributor to Product Safety, we also invest effort in disseminating information aimed at achieving an even higher level of safety and peace of mind. In particular, when children, who have small hands and bodies, use windows or doors, etc., there is a possibility of accidents that would not occur with adults. To prevent such accidents, we collaborated with "The Poop Workbook" series that is popular with children to create a booklet that enables mainly elementary school students to have fun learning about how to use windows and doors safely, as well as the online game "The Poop Home Safety Workbook: Windows and Doors Version," and released them in May 2021. We will continue providing information through a variety of media aimed at ensuring the safety and peace of mind of all people who use windows and doors.



"For NEW LIFE STYLE" website



"MADO KOTO - Temperature/Humidity/Ventilation Version" website



"The Poop Home Safety Workbook: Windows and Doors Version" booklet



"The Poop Home Safety Workbook: Windows and Doors Version" online game

## Customer support

### Quickly providing easy-to-understand user instructions

YKK AP products get older along with the buildings in which they are installed. We strive to provide information regarding how to use the products and maintenance to enable customers to use our products safely and securely for a long time. For example, we print QR Codes\* on product labels to allow customers to access methods of use and maintenance quickly. When the QR Code is read with a smartphone, etc., customers can check the proper use and maintenance of the relevant product easily.

In addition, the "Owner's Manual" that is provided to customers by the construction company at the timing of hand over and other manuals are produced after "user verification assessments" conducted by our Value Verification Center. They check the safety and ease of use of the product, etc., and confirm that the necessary information has been provided and that the explanations are easy to understand. They also confirm that the information is organized so that it can be intuitively grasped, and the product can be used easily, correctly, and safely.

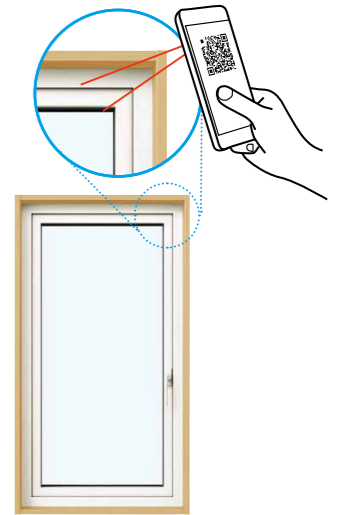
Through such activities, we aim to have all customers use our products safely for a long time.



QR Code on a product label



"Owner's Manual"



Note: "QR Code" is a registered trademark of Denso Wave Incorporated.

## Maintenance response

### Higher levels of customer satisfaction through improved and uniformed response quality

Prompt response in the event of a malfunction or other fault is crucial to having customers use our products safely for a long time. YKK AP strives to improve the level of response quality and make it uniform by having Maintenance Business Development Department take the lead in sharing information with the Maintenance Centers in each region.

We are also working to improve response quality and call reception environment in the Call Centers that play an important role as consultation desks for customers. Further, we launched the YKK AP Certified Maintenance Technician Association to share information

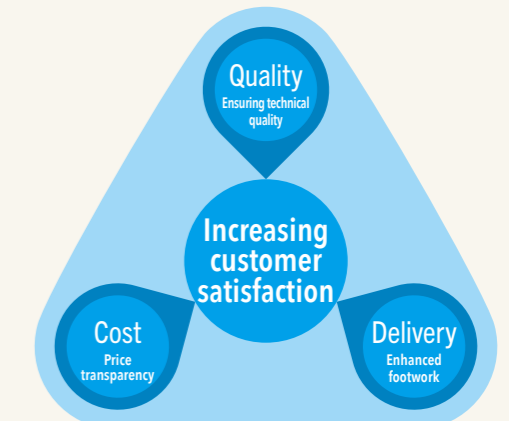
by certifying installation technicians who have superior skills as YKK AP Certified Maintenance Technicians\* and having them join the Association. YKK AP strives to improve the level of response quality and make it uniform by implementing technical training, etc.

\* No. of Certified Technicians: 548 (as of June 1, 2021)



A YKK AP Certified Maintenance Technician conducting maintenance on a shutter

#### Basic Action Policy of the YKK AP Certified Maintenance Technician Association



# Co-existence with the environment

With the intention to build a better society and environment for the next generation, YKK AP is taking on the challenge of creating new value and achieving zero environmental burden through technical innovation. We strive not only to create environmental value in "research/development/verification," "materials procurement," and "manufacturing/logistics," but also to solve environmental issues at the "sales," "installation," and "product use" stages. In addition, we are strengthening efforts in each area with the aim of achieving carbon neutrality in 2050.

## YKK AP Environmental Action Plan aimed toward 2050

### Aiming to resolve environmental issues throughout the value chain

YKK Group has established the "YKK Group Environmental Vision 2050," which maps out the long-term orientation of our environmental initiatives. Under this policy, YKK AP has established a vision for 2050 to "achieve zero environmental burden throughout the entire lifecycles within our business activities." In the Mid-term Environmental Policy for 2021 to 2024, we have set environmental targets for the entire value chain with the aim of resolving and contributing to the resolution of the environmental issues of "climate change," "resource recycling," "water," and "biodiversity," and are working to achieve them.

As the structure for promoting these activities, the "YKK AP Environmental Policy Board Committee," chaired by the president, formulates and approves environmental policy and strategy from

a management perspective. Under that policy, the "YKK AP Environmental Committee" incorporates the environmental policy into sales, research & development, manufacturing, management, and overseas divisions. Further, in FY 2019, we agreed to the Task Force on Climate-related Financial Disclosures (TCFD). Based on it, we analyze scenarios of climate-related risks and opportunities to determine the impact on our business and finances and incorporate the findings into our management strategies.

To confirm the progress of these environmental policies and environmental compliance, we conduct annual internal environment audits. We have also acquired ISO 14001 certification at all locations in Japan and at ten locations overseas and are continually working to increase the level of environmental management.



## Taking on the challenge of carbon neutrality

### Horizontal deployment of energy conservation and expansion of renewable energy

YKK AP has revised its target of reducing greenhouse gas emissions by FY 2030, from 30% to 50% (compared to FY 2013). In February 2021, this target was certified by the international organization Science Based Targets initiative (SBTi) as being "well below 2°C" based on scientific evidence.

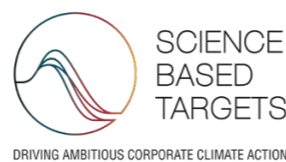
In FY 2017, we set the goal of achieving a 30% reduction by FY 2030. We achieved this early, in FY 2020, and have therefore raised the target figure to an even more ambitious level. To achieve this, we have nearly tripled our investment in renewable energy, and have otherwise taken our efforts to achieve carbon neutrality in 2050 to an even higher level.

In addition, raw material procurement accounts for nearly 90% of our Scope 3 CO<sub>2</sub> emissions. In particular, the procurement of aluminum (mining, refining, and overseas transportation), which we use to make aluminum window frames, etc., has a significant

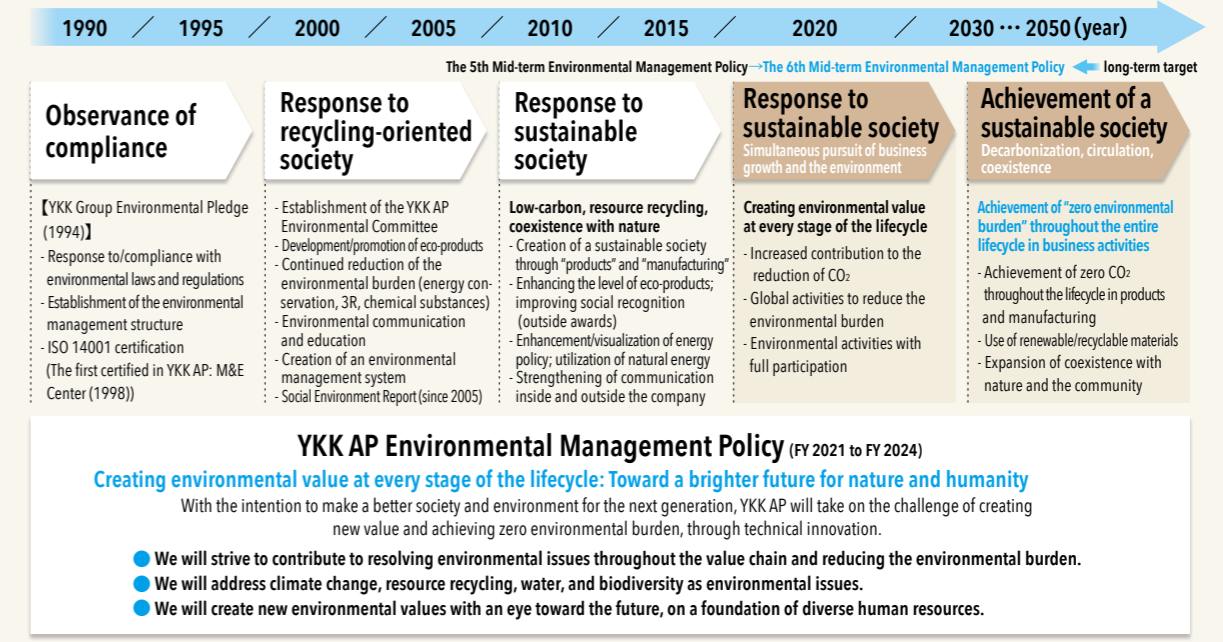
impact. In addition to increasing the ratio of recycled aluminum use, we are promoting the market penetration of vinyl windows.

At the product-usage stage, we are helping to reduce CO<sub>2</sub> emissions in offices and houses by boosting the market penetration of vinyl windows. In FY 2020, our reduction contribution was 212% of the FY 2013 level, and we will contribute to further reductions by increasing the adoption of vinyl windows.

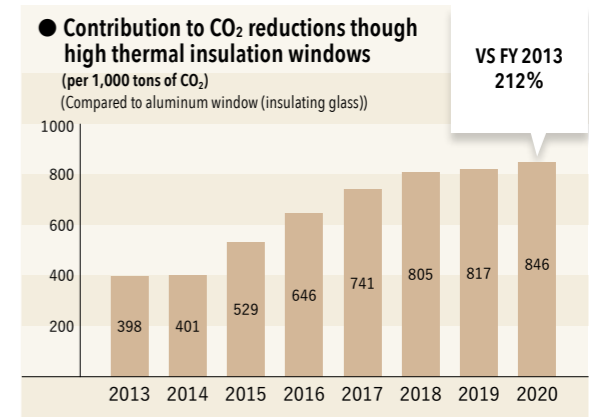
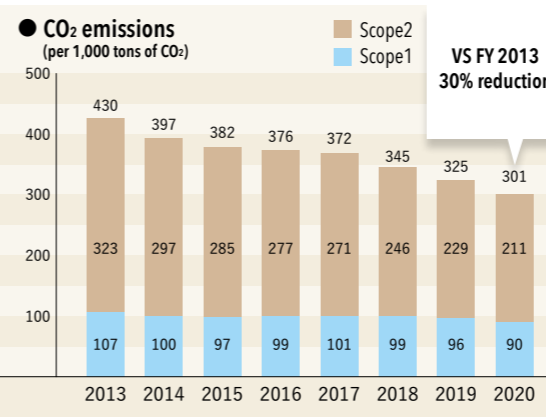
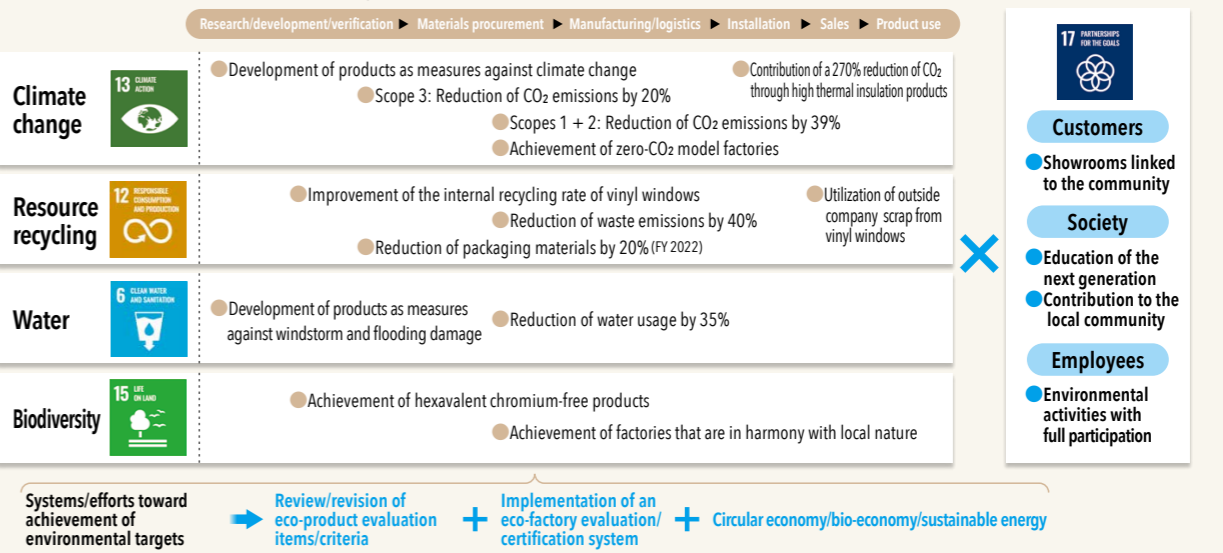
In regard to logistics, we have introduced double-trailer trucks for transportation over land, which enhances loading efficiency by increasing the amount of cargo to 1.8 times the original load. We will continue to reduce CO<sub>2</sub> emissions through the introduction of modal shifts and large-capacity trailers, etc.



## YKK AP's environmental activity history and the target as we move toward 2050



## FY 2024 environmental targets (Compared to FY 2013)



About the Scopes ● Scope 1...Direct greenhouse gases emissions from fuel burned by own company ● Scope 2...Indirect greenhouse gases emissions from electricity used by own company ● Scope 3...Indirect greenhouse gases emissions from across own company's supply chain (excluding Scopes 1 and 2)



## Taking on the challenge of a circular economy

### Engaging in effective use of resources and waste reduction

Our company is promoting in 3R activities\* (reduce, reuse, recycle waste, etc.) in order to achieve a circular economy.

In terms of waste produced in our business activities, we aim to "improve our recycling rate (zero landfill)" and "reduce the production of waste by 40%," and are working to turn waste into valuable resources, recycle waste, and improve yield rates.

As for "improvement of our recycling rate," we have already achieved a recycling rate of 100% for industrial waste generated from manufacturing sites in Japan, and 91% at our overseas manufacturing sites. Through these initiatives, for Japan and overseas in total, we have achieved a 99% recycling rate and zero emissions as defined by our company (a recycling rate of at least 97% of waste generated in conjunction with our business activities).

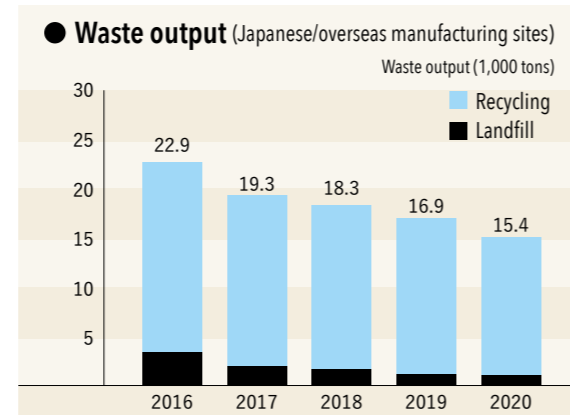
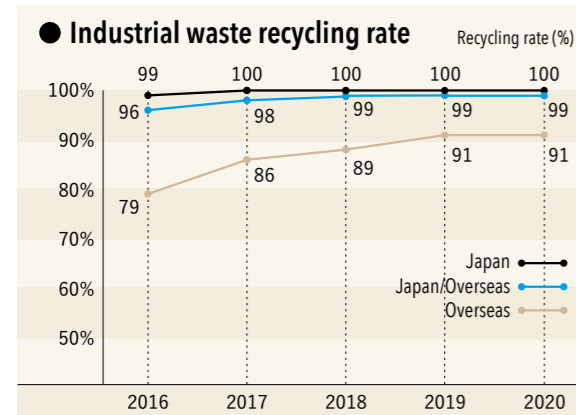
In regard to "reduction of industrial waste," we began focusing on reduction of plastic packaging materials from FY 2020 and are promoting palletization and returnable packaging in distribution. Further, we are promoting the conversion of waste to valuable materials by manufacturing RPF (refuse-derived paper and plas-

tic-densified fuel), which uses film, laminate, and other waste plastic as raw materials. Through these initiatives, we reduced the combined total amount of waste product in Japan and overseas in FY 2020 by 33% compared to FY 2016.

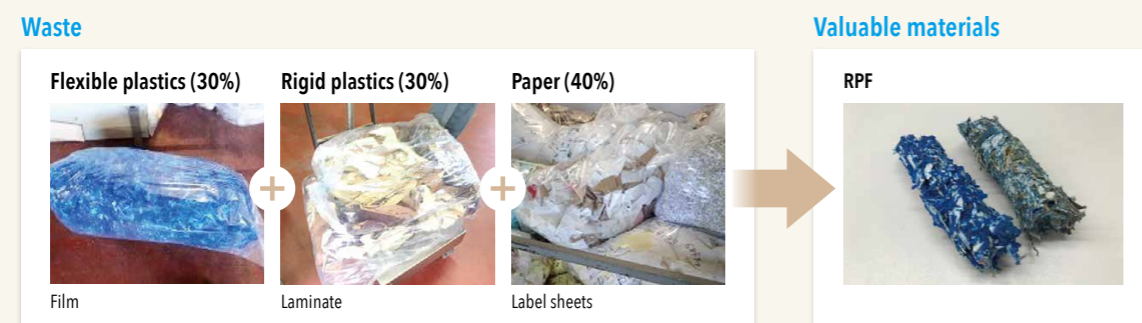
### Initiatives to reduce, reuse, and recycle water

We also promote 3Rs for water. We strive to achieve sustainable water usage through measures to conserve water and control leakage. We also focus on expanding the recycling of cooling water and reuse of washing water through advanced processing.

At YKK AP America's Dublin Factory, efforts to reduce factory water usage, etc., have been recognized, and the company was selected in the "Clean Water Heroes," as an organization which aims to protect water resources in the "Georgia's 2020 Clean 13 report." The report highlights activities that lead to clean rivers, strengthened local communities, and a sustainable future for Georgia. YKK AP was the only organization selected in the corporate manufacturing division.



### Conversion of waste into valuable materials (RPF)



\* 3Rs: Reduce, Reuse, Recycle  
 Note: For details, see our "YKK AP Environmental Report 2021": <https://www.ykkap.co.jp/company/jp/sustainability/environment/report2021/> (Information in Japanese)

## Satisfactory Workplace and Human Resource Development

YKK AP's employees are diverse in age, gender, nationality, and a variety of other attributes.

We aim to be a company in which each employee can fully show his or her individuality and ability.

We engage in establishing a "satisfactory" and "pleasant" working environment, and an environment that generates "challenges," "foresight," and "innovativeness."

Since FY 2021, we have not only implemented a new human resources system that abolishes the conventional mandatory retirement age system, but we have accelerated the promotion of diversity in an effort to create new value that reflects diversity.

### Approach to and engagement with human rights

#### Compliance with the "YKK Group Human Rights Policy Statement" Respecting the human rights of all people involved in our business

As a company doing business globally, we respect the human rights of every individual stakeholder in every country and region, in accordance with the "YKK Group Human Rights Policy Statement."\* We ask our business partners involved in our products and services to comply with the Statement, not to mention have our employees understand and embrace the principles thoroughly.

Also, in the United Nation's "Guiding Principles on Business and Human Rights," there are increasing concerns on issues such as forced labor and child labor. We are working to gather related

information and establish a structure to address these issues.

#### YKK Group Human Rights Policy Statement

##### [1] Equal Opportunity and the Prohibition of Discrimination

Based on the concept of "fairness," the YKK Group respects the human rights, individuality and personal character of its stakeholders in all countries and regions of operation. YKK does not condone discrimination, harassment or other acts that disregard human rights. YKK promotes fair business activities by prohibiting the violation of human rights and by taking appropriate action should an infringement occur.

##### [2] Respect for Basic Labor Rights

The YKK Group respects basic labor rights in all countries and regions of operation, including freedom of association and the right to collective bargaining.

##### [3] Respect for Employment Practices in Countries and Regions of Operation

The YKK Group respects the laws, regulations and employment practices of all countries and regions of operation. It also prohibits the use of child labor and forced labor.

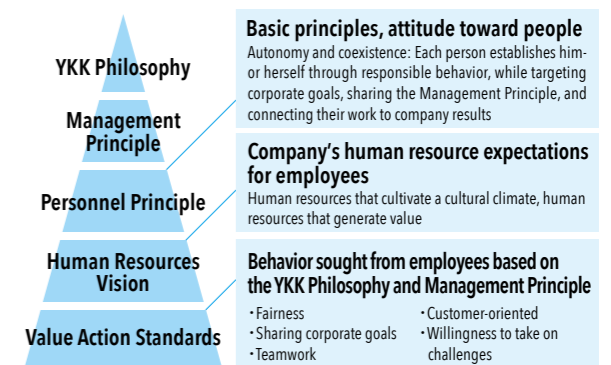
\*For details, visit our website:  
<https://www.ykk.com/english/corporate/csr/humanrights.html>

### Approach and system related to human resources

#### A further commitment to a "performance-based meritocracy," based on "fairness," "job (role)," and "autonomy"

Based on the idea of "autonomy and coexistence," YKK Group creates systems and environments in which each and every employee can demonstrate their full potential, regardless of age, gender, educational background, and so on. The goal is to create a "Forest Group," a company in which every employee has a consciousness of being a manager, and grows strongly together as a group, like a forest that is made up of individual trees. To create value as such an organization, we work to develop human resources and achieve truly fair personnel systems.

In the reforming of our personnel systems, we are further focusing on "performance-based meritocracy" in terms of roles, under the philosophy of "fairness," "job (role)," and "autonomy," while aiming for equality of roles, results, and treatment regardless of age, gender, educational background, or nationality. In the past,



we operated a system for the rehiring of retired employees up to age 65, but we abolished the mandatory retirement age system in FY 2021. This makes it possible for individuals to work regardless of their age as long as they are able to fulfill the role required by the company. The company supports independent working styles by clarifying the expected working methods and the abilities and experience needed to perform roles, and provides opportunities for employees to forge their own careers and put forth their own intentions.

## Promoting diversity

### Improving of corporate value through inclusion of diverse human resources

YKK AP promotes diversity with the aim of utilizing the diversity of human resources to create new value and increase our future competitiveness in the international community.

In particular, as priority issues, we are striving to strengthen the hiring of female employees and support their career development, as well as to expand and entrench the employment of persons with disabilities.

Further, in conjunction with abolition of the mandatory retirement age system, we are working to establish an environment in which people can work regardless of their age, and to expand the hiring of human resources who have foreign citizenship.

#### Business leaders' development

##### Graduate school dispatching and MOT/MBA overseas studies

Aiming to develop the human resources that will lead the next generation of business, we dispatch employees to graduate schools (doctorate/master's programs) in Japan and overseas and provide support for MOT and MBA study abroad. Research themes are not limited to current business, and we recommend the themes that anticipate the next generation of management, such as "robotics," "AI/machine learning," "DX," "environmental response of the next generation," etc. We aim for diversified ideas as an organization by helping employees to gain specialized knowledge and a multifaceted perspective that expand beyond the framework of the company. In FY 2020, we dispatched 15 employees.

## Work style reform

### Promoting the creation of a healthy and flexible working environment

In FY 2018, YKK AP established the "Work Style Reform Committee," chaired by Executive Vice President Kosuke Iwabuchi, and since then has engaged in efforts to improve working styles. We have promoted the establishment of environments to achieve "working style regardless of location." Owing to these initiatives, we made a smooth transition to remote work even in the midst of the COVID-19 pandemic, and ensured the safety and security of our employees. We are also expanding satellite offices to support flexible working styles of employees for whom it is difficult to establish a working environment at home. As of FY 2020, these activities are limited mainly to the Tokyo metropolitan area, but we will consider further expansion, and increase the options for working locations.

Through these initiatives, we were able to achieve a remote work rate of more than 80% of our employees\*—significantly higher than the 70% requested by the government—under the declaration of a state of emergency that began in April 2021.

At the same time, we have established the Workplace Improvement Committee, which is working to bolster infection prevention measures, improve workplace environments, and create a system that facilitates the use of paid leave, with the aim of "creating a pleasant workplace" at manufacturing sites where remote work environments are not available.

\* Employees who are able to work from home in areas under the state of emergency declaration

## Health management

### Considering employee and family health as a management issue, and promoting prevention measures

Our company considers employee and family health to be a management issue.

In order to implement and also clarify our health management initiatives inside and outside the company, we issued a "Health Declaration" in 2018. Under the Declaration, we strive to reduce lifestyle-related diseases and control mental disorders. Further, we have promoted the establishment of a healthy environment through "building a workplace toward zero-secondhand-smoke," and were recognized as a "2021 Certified Health & Productivity Management Outstanding Organization (Large Corporation Division)."

#### Health Declaration

YKK AP aspires to become a company where all employees are able to work with pride and pleasure. We believe that a prerequisite for achieving this goal is for all our employees and their family members to maintain and improve their mental and physical health, which will enable every employee to demonstrate their unique qualities and capabilities to the maximum and to propel our company's growth and contribute to society. Based on this concept, our company, Health Insurance Society, employees and their families are united in their endeavors for health promotion.

For details, visit our website : <https://www.ykkap.co.jp/company/en/sustainability/health/>

## Improving employee management participation awareness

### Working to disseminate the Management Principle amongst employees through various opportunities

The YKK Group undertakes activities to reinforce the Management Principle so as to strengthen the foundations of the YKK Philosophy, and Management Principle, so that they are implemented and disseminated, and that all employees move toward the same vector.

As a concrete example, "talking sessions" are held at our various locations between supervisors and staff in which participants share actual cases, and employees consult with supervisors to review their own cases using the "Core Values implementation check sheet." In this way, it is hoped that all employees can experience the YKK AP way and thus foster a sense of unity that enhance corporate value.

### Sharing the benefits of the Employee Stockholding Association, in which approximately 80% of qualifying employees participate



Video message released in December 2020

YKK's Founder, Tadao Yoshida, stated that "employees should participate in company management and share in its prosperity," and also that "stock is a certificate for participating in business." Based on his management philosophy, the YKK Group (Japan) established the Employee Stockholding Association, with the goal of encouraging management participation by employees and building their wealth. YKK Employee Stockholding Association is the largest shareholder in YKK, and approximately 80% of qualifying employees participate. Meetings are usually held twice a year, but in FY 2020, they were not held due to the spread of COVID-19. Instead of the planned meetings, we reported on performance and explained future activities through a written message from the President in June and a video message from the management side in December, which included responses to questions submitted by members in advance.

### We run employee health maintenance programs in collaboration with external organizations

YKK AP (Japan) runs several initiatives to promote the maintenance of employee physical and mental health. One of these is our health consultation service, both inside and outside the company, where employees can get advice, either in person or by phone or email. Inside the company, employees can consult with industrial physicians at business locations or with physicians, public health nurses, and nurses at health management centers. We also cooperate with external organizations to provide mental healthcare for employees. As well, we provide face-to-face, email, and phone counseling not only to employees, but also their cohabitant families as well. This program promotes employee health maintenance by enabling employees to consult with counselors about workplace relationships that tend to cause stress, as well as concerns about their own future and career.

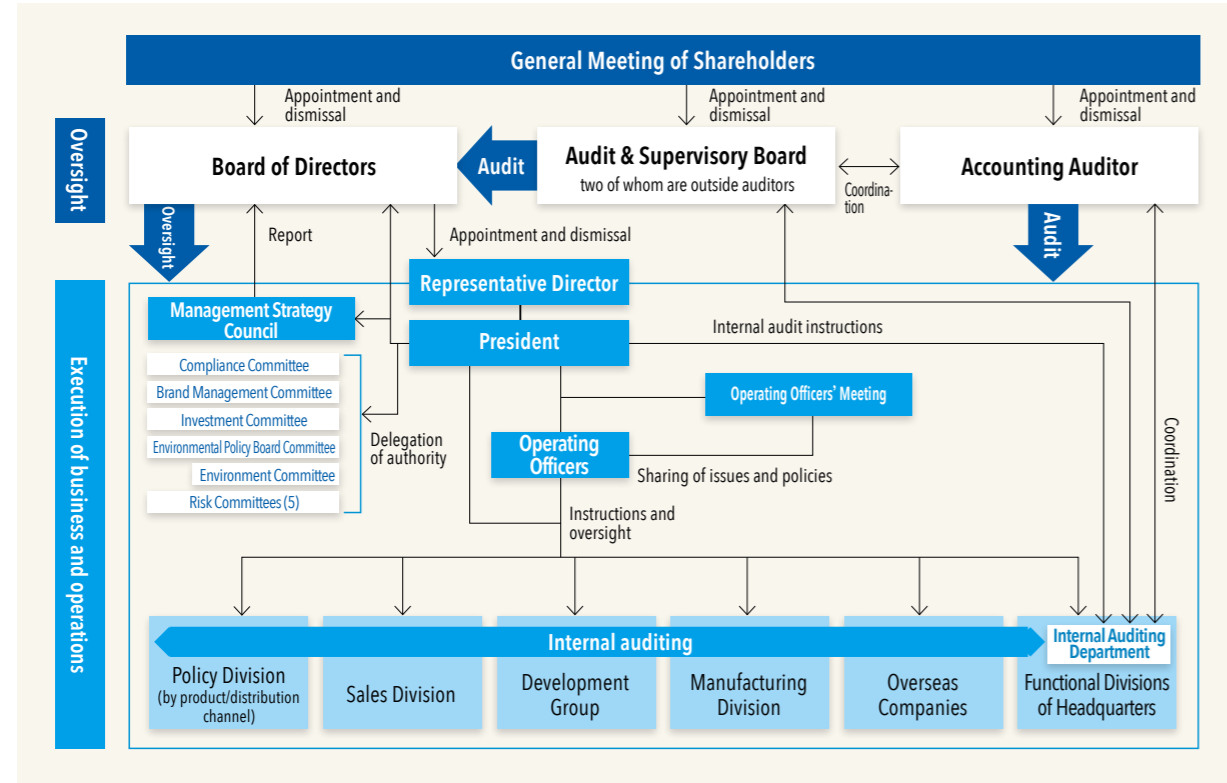
### ● Diversity initiatives

	Step 1 (Previous)	Step 2 (Current)	Step 3 (Goal)
	Compliance with laws/rules Focus on superficial characteristics	Acceptance of diversity Management from diversity to value creation	Creation of value
<b>Educational background</b>	Labor Standards Act	Hiring of human resources with a variety of career backgrounds; fair evaluation	Equal role Equal results Equal treatment
<b>Age</b>	Act on Stabilization of Employment of Elderly Persons	● Abolition of mandatory retirement age system: Hiring regardless of age, gender, or nationality	
<b>Gender</b>	Act on Securing, etc., of Equal Opportunity and Treatment between Men and Women in Employment Act on Promotion of Women's Participation and Advancement in the Workplace (2016)	Promotion of the active participation of women; promotion of women for management positions/section manager-level positions ● Management positions: FY 2020: 111 → FY 2024 target: 140 ● Section manager-level positions: FY 2020: 390 → FY 2024 target: 500	Utilize the characteristics of individuals, create new value, and contribute to business.
<b>Nationality</b>	Immigration Control and Refugee Recognition Act (Illegal employment)	● Proactive hiring of foreigners	
<b>Disabilities</b>	Act on Employment Promotion etc., of Persons with Disabilities	● Utilization of disabled individuals according to their nature: FY 2020: 2.35% → FY 2024 target: 2.4%	Enhancement of work and life
<b>Working style</b>	Labor Standards Act	Achievement of work-life balance ● Encouragement of male employees to take childcare leave: FY 2020: 64% ● Promotion of taking paid vacation: FY 2020: 61% → FY 2024 target: 80% ● Total actual working hours: FY 2020: 1,855 hours	

# Corporate Governance

As we inherit the philosophy of the “Cycle of Goodness,” we strive to enhance our corporate governance system in an effort to further enrich our corporate value. Our company’s basic approach to corporate governance involves several organizations and systems. The Board of Directors serves to make decisions on important matters, such as the company’s management policy, and serves as an oversight function. The Audit & Supervisory Board, meanwhile, is the company’s auditing organization. The final component of the company’s basic approach is the Operating Officer System, a framework that helps the company promote the execution of business and operations.

## Corporate Governance Structure



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

Directors comply with the regulations of the Board of Directors and follow the rules regarding director duties, and appropriately carry out business based on the division of duties. They regularly attend compliance training offered by lawyers, etc., and submit to the company written oaths pledging to comply with laws and regulations in performing their duties as directors. In addition, we have introduced the Operating Officer System to ensure the faster execution of business and operations via the separation of management and execution. While directors dedicate themselves to realize total optimization, operating officers execute individual businesses and operations with responsibility and authority, in accordance with the policies resolved in the Board of Directors meeting.

## Main Committees for Executing Business/Duties

### Compliance Committee

We work to improve the compliance system of our company and subsidiaries. A compliance director is appointed, and he reports to the directors and audit & supervisory board members regarding the development of the compliance system and compliance status.

### Brand Management Committee

This committee considers and formulates important policies for our company from a technical standpoint.

### Investment Committee

We established the Investment Committee to discuss particularly important investment cases. By going through the review in the committee, they can be evaluated more efficiently by the Board of Directors meeting.

### Environmental Policy Board Committee and Environment Committee

The Environmental Policy Board Committee was established to determine our environmental policies and measures, and to supervise the progress of our environmental policy. Also, the Environment Committee promotes the policies of business execution divisions and supervises their progress.

### Risk-related Committees (5)

We have appointed a Chief Risk Management Officer (CRO) to promote YKK AP's risk management. We established a Quality Committee, Trade Management Committee, Crisis Management Committee, Information Security Committee, and Technical Asset Management Committee in order to maintain and enforce regulations.

## Directors and Board of Directors (as of June 2021)

### Chairman Representative Director



#### Akira Yoshida

March 1977: Joined Yoshida Kogyo K.K. (now YKK)  
1988 to 1995: Served in the U.S.A.  
April 2004: YKK Vice President  
April 2009: YKK Senior Vice President  
June 2011: Director  
YKK Director, CFO Senior Vice President  
April 2012: YKK Director, CFO, Executive Vice President  
April 2019: YKK Director, Vice Chairman, CFO  
June 2020: Chairman Representative Director (currently)  
YKK Director (currently)

### President Representative Director



#### Hidemitsu Hori

March 1981: Joined Yoshida Kogyo K.K. (now YKK)  
1989 to 2006: Served in the U.S.A.  
April 2007: Vice President  
April 2009: Senior Vice President  
June 2009: Director, Senior Vice President  
June 2011: President Representative Director (currently)

### Director



Executive Vice President, Business Process Re-engineering

#### Fumio Niizeki

March 1977: Joined Yoshida Kogyo K.K. (now YKK)  
April 2012: Vice President  
June 2014: Director, Vice President  
April 2016: Director, Executive Vice President (currently)

### Director



Executive Vice President, General & Administration

#### Kosuke Iwabuchi

March 1986: Joined company  
1996 to 2009: Served in the U.S.A. and China  
April 2009: Vice President  
April 2016: Executive Vice President  
June 2016: Director, Executive Vice President (currently)

### Director



Executive Vice President, Manufacturing

#### Kazuo Matsutani

March 1981: Joined Yoshida Kogyo K.K. (now YKK)  
April 2009: Vice President  
June 2016: Director, Vice President  
April 2018: Director, Executive Vice President (currently)

### Director



Executive Vice President, Renovation Business

#### Wataru Otani

March 1981: Joined Yoshida Kogyo K.K. (now YKK)  
April 2001: YKK Vice President  
April 2004: YKK Senior Vice President  
June 2004: YKK Director, Senior Vice President (until June 2018)  
June 2018: Director, Executive Vice President (currently)

### Director



Executive Vice President, Sales & Marketing

#### Shinichiro Yamaji

March 1981: Joined company  
April 2009: Vice President  
April 2017: Executive Vice President  
June 2020: Director, Executive Vice President (currently)

### Director



Senior Vice President, Research & Development

#### Shuichi Mizukami

July 1985: Joined Yoshida Kogyo K.K. (now YKK)  
April 2009: Executive Chief Engineer  
April 2010: Vice President  
June 2020: Director, Vice President  
April 2021: Director, Senior Vice President Research & Development (currently)

### Director



Chairman, YKK Corporation

#### Masayuki Sarumaru

March 1975: Joined Yoshida Kogyo K.K. (now YKK)  
1977 to 1994: Served in the U.S.A.  
June 1999: YKK Vice President  
June 2008: YKK Director, Executive Vice President  
June 2011: YKK President Representative Director (currently)  
June 2018: YKK Chairman Representative Director (currently)  
June 2020: Director (currently)

### Director



Senior Vice President, Residential Business

#### Akira Uozu

March 1985: Joined company  
April 2013: Vice President  
April 2021: Director, Senior Vice President Residential Business (currently)

## Audit & Supervisory Board and its Members (As of June 2021)

### Audit & Supervisory Board Member (outside)



#### Susumu Miyoshi

April 1970: Joined Japan Airlines Co., Ltd.  
April 2001: Executive Officer of same  
April 2004: President of the Americas branch of same  
April 2009: Senior Managing Executive Officer of same  
February 2010: Retired from same  
June 2011: YKK AP Outside Audit & Supervisory Board Member (currently)

### Audit & Supervisory Board Member (full-time)



#### Hisao Miyamura

March 1978: Joined Yoshida Kogyo K.K. (now YKK)  
2002 to 2008: Served in China  
April 2008: YKK Vice President (until March 2018)  
June 2018: Full-time Audit & Supervisory Board Member (currently)

### Audit & Supervisory Board Member



#### Kiyotaka Nagata

March 1979: Joined Yoshida Kogyo K.K. (now YKK)  
April 2008: YKK Vice President  
April 2009: YKK Executive Chief Specialist  
June 2013: Outside Audit & Supervisory Board Member YKK Full-time Audit & Supervisory Board Member (currently)  
June 2016: Audit & Supervisory Board Member (currently)

### Audit & Supervisory Board Member (outside)



#### Takashi Miyatani

April 1991: Registered as a lawyer (Daini Tokyo Bar Association)  
January 1998: Mori Sogo (now Mori Hamada & Matsumoto) Partner Lawyer (currently)  
June 2007: YKK AP Outside Audit & Supervisory Board Member (currently)

## Audit & Supervisory Board

In general, the Audit & Supervisory Board, which consists of four Audit & Supervisory Board members, holds meetings 12 times a year to audit the execution of duties by directors from a legal and valid standpoint. They also attend major meetings such as the Board of Directors Meeting, express opinions as necessary, and visit each location to conduct audits in accordance with the audit policy. Two of the Audit & Supervisory Board members are invited from outside the company. With expertise in corporate legal affairs along with advanced knowledge and experience in corporate management, they conduct audits from an objective and fair-minded stance.

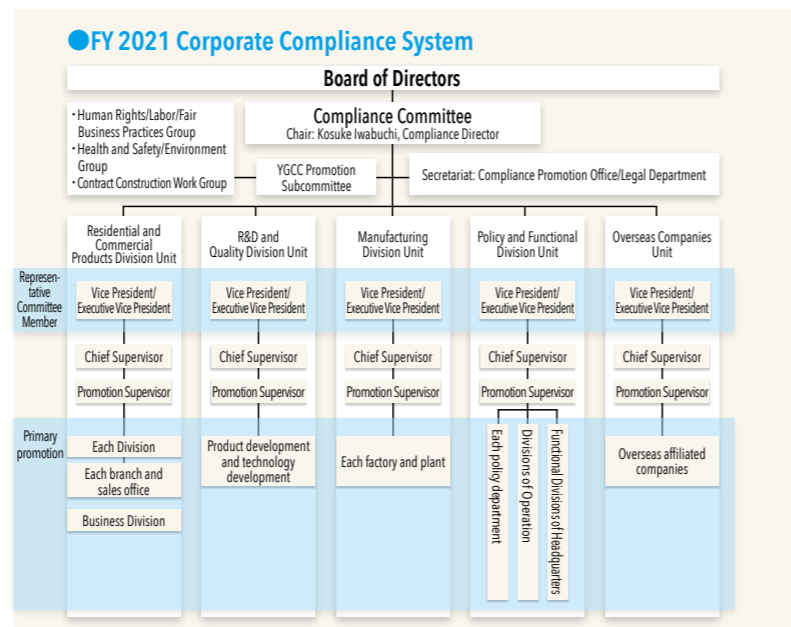
## Compliance

Not only do we ensure strict compliance with laws, regulations, and internal rules, we also strengthen our system in response to “social demands.”

### Corporate Compliance System and Education

We have established a Compliance Committee chaired by the compliance director to promote the YKK AP Group corporate compliance system. Divided into five units, this system promotes compliance activities of YKK AP and affiliated companies.

In addition to regularly holding compliance training for corporate officers, at least two hours of compliance training is provided to all employees per year. We also provide education led by each specialized department and committee to persons involved in specialized fields (personnel labor, purchasing, environmental safety, trade, information security, technical asset management, etc.).



### Standards for Compliance Activities: “YKK Global Criteria of Compliance”

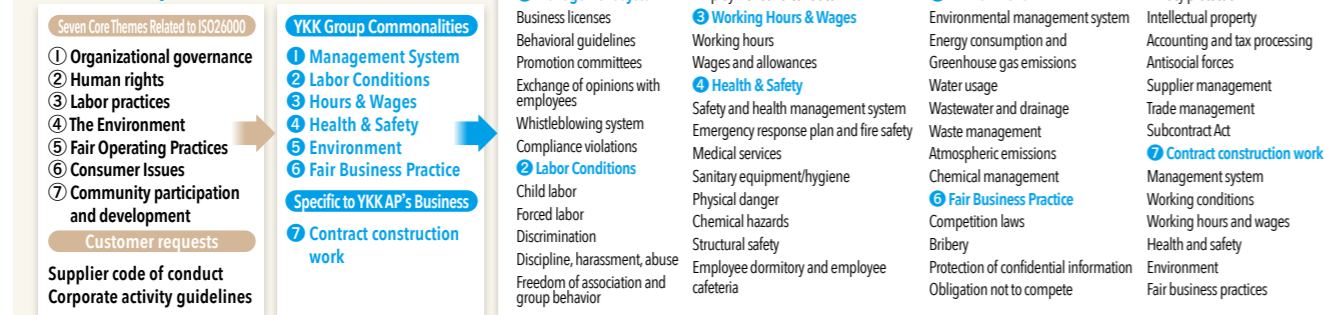
Since FY 2019, YKK AP has been implementing the “YKK Global Criteria of Compliance (YGCC),” which are the YKK Group’s compliance standards based on the YKK philosophy “Circle of Goodness” and ISO26000. We continued implementation in FY 2020 despite the impact of COVID-19, and expect to complete deployment to key locations in Japan and overseas in FY 2021, keeping them in place

throughout operations.

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

We also strive to improve overall compliance literacy throughout the company with YGCC education efforts by the Compliance Promotion Office, and further improve transparency and sustainable business activities in the supply chain.

### The 7 Aspects of YGCC



### Whistleblowing System

YKK Group has introduced the “YKK Group Whistleblowing System” to prevent illegal business acts in carrying out business activities and build a strong compliance-adhering structure by taking early action. The system allows employees to anonymously consult and report behavior that violates laws, work regulations, and company

rules to internal and external contact points. We also have consultation desks inside and outside of the company to help employees with work environment matters, mental concerns, and health.

From FY 2020, we also set up hotlines and whistleblowing contact points for YKK AP America Inc. and YKK (China) Investment Co., Ltd. to enhance overseas operations by starting to grasp the number of reports, etc.

## Risk Management

### Strengthening of Risk Management System

YKK AP has established five risk committees (Quality Committee, Trade Management Committee, Crisis Management Committee, Information Security Committee, and Technical Asset Management Committee) to promote risk management.

In addition, we have appointed a CRO since 2008 to strengthen our risk management system and establish a governance system for emergencies. Under the leadership of the CRO, each committee develops regulations and promotes activities.

### Risk Map Development and Selection of Key Risks

We assess the risks surrounding the business and create a risk map according to changes in the environment, the urgency of response to the risks, and the expected scale of damage. Among these, we identify 36 key risks (figure on the right) that have a significant impact on management. We then clarify the divisions in charge and prioritize measures to prevent the risks in ordinary operations.

### BCP Initiatives

In preparation for disaster and risk occurring, we have formulated business continuity plans (BCPs) at all locations in Japan and over-

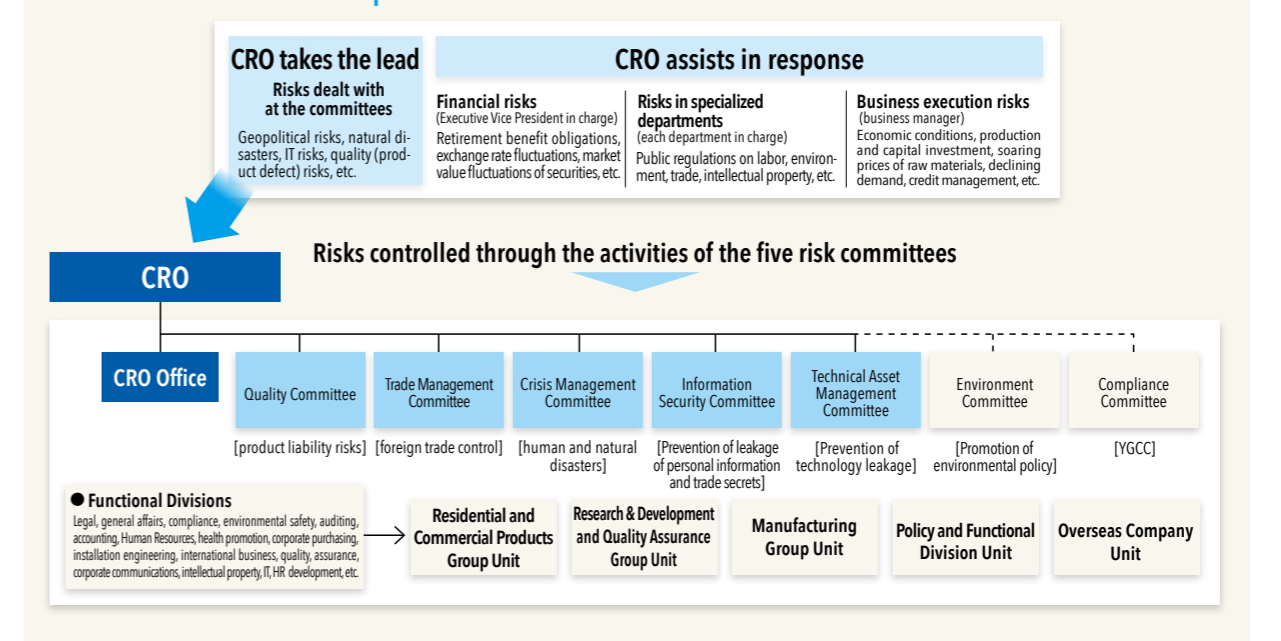
seas. We carry out regular disaster drills every year, and in FY 2020, we conducted BCP training online due to the spread of COVID-19.

As part of the supply chain BCP, we also purchase our materials from multiple suppliers, strive to grasp and improve the supply chain (through supplier reassessment and reorganization), arrange emergency substitutions, secure inventory, and provide support with management improvement.

### List of Key Risks

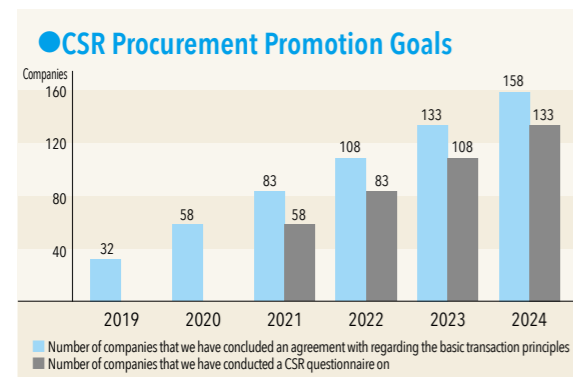
Risks	
Declining demand, sluggish economy, intensifying competition	Leak of confidential information
Marketing failure, delayed entry	Technology leak
Fire, explosion, arson	Delays in product or technology development
Quality defects, accidents due to product defects, recalls	Emergence of innovative technology
Client bankruptcy	Groundwater pollution
Destruction or failure of systems, software, equipment, database	Earthquakes, tsunamis, eruptions
External or media trouble	Acquisition, merger, or alliance failure
Soaring prices and decreasing supply of raw materials and fuels	Damage or failure of machinery and equipment
Exchange rate fluctuation	Workplace injury (including installation contracts)
Lack of retirement savings	Illegal dumping or disposal of waste
Boycotts and anti-Japanese protests	Typhoons, torrential rains, floods
Transfer pricing tax violations	Loss of commercial rights to major customers
Outbreak of infection and diseases	Electricity, gas, or water supply failure
Death from overwork due to long working hours, mental illness, etc.	Tightened environmental regulations
Long-term interruption or suspension of communication lines	Soaring wages and salaries
Data erasure or falsification, etc.	Power shortages, rolling blackouts, seasonal drought
Intimidation, kidnapping, terrorism	Large-scale criticism of official website or social media content
Trouble in large or highly complex projects	Political change, asset confiscation

### Risk classifications and response



## Procurement

YKK Group enforces a procurement policy consisting of organizational governance, human rights, labor practices, the environment, fair business practices, and consumer issues. We promote CSR procurement to fulfill our social responsibilities throughout the supply chain based on this policy. To deepen mutual understanding with business partners, we have established our "Basic Transaction Principles" that stipulate the following five principles: compliance with laws, regulations, and social norms along with fair and ethical transactions, consideration of human rights and the labor environment, consideration of the environment along with safety and health, quality and product safety assurance, and information security assurance. By FY 2020, we concluded agreements with 58 major business partners. Going forward, we will conduct CSR questionnaires to confirm the results of our efforts and strive to conclude agreements with more than 150 companies by FY 2024.



### YKK Group Procurement Policy

Ever since YKK's founding, we have based our business activities on the conviction, under the "Cycle of Goodness" YKK Philosophy, that an enterprise is an important member of society, that it must thereby coexist with other elements of society, and the value of its existence will be recognized by the benefits it shares with society. The belief behind this is that no one prospers without rendering benefit to others. We carry out business activities with the aim of bringing mutual prosperity, and our intent is that innovative ideas and inventions will result in business expansion for the YKK Group, which in turn would bring prosperity to customers and business partners, and thus benefit all society. This is none other than our execution of corporate social responsibility.

### Steps toward CSR Procurement

FY 2020: First Step

Create basic transaction principles

Request companies to conclude the basic transaction principles

Concluded the basic transaction principles with 58 companies

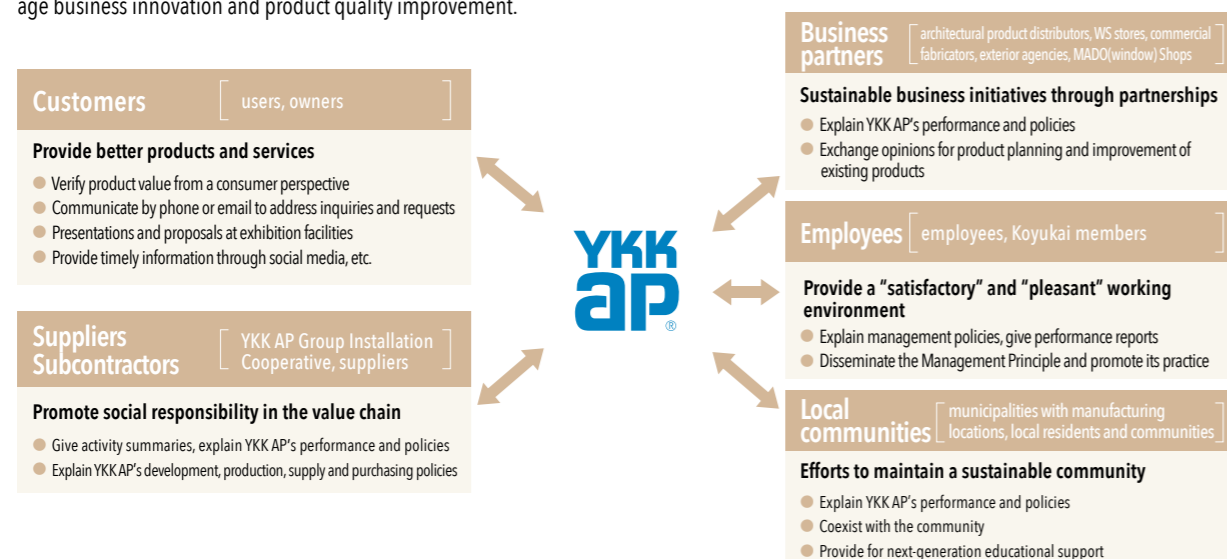
FY 2021: Second Step

Create and conduct CSR questionnaires

Increase the number of companies in agreement

## Stakeholder Dialog

We work with all stakeholders, including employees, customers, business partners, and local communities, to continue being a company that is trusted by the community and loved by society. We strive to improve our corporate value by providing a place for dialogue as necessary to encourage business innovation and product quality improvement.



## YKK AP in Numbers

# Key Consolidated Financial Data

Net sales		
FY 2018	FY 2019	FY 2020
<b>428.0</b> billion yen	<b>425.8</b> billion yen	<b>402.8</b> billion yen
Japan Sales <b>376.4</b> billion yen	Japan Sales <b>374.5</b> billion yen	Japan Sales <b>353.2</b> billion yen
Overseas Sales <b>73.0</b> billion yen	Overseas Sales <b>71.3</b> billion yen	Overseas Sales <b>66.2</b> billion yen
Overseas Ratio <b>16%</b>	Overseas Ratio <b>16%</b>	Overseas Ratio <b>16%</b>

Operating income/Operating income margin		
FY 2018	FY 2019	FY 2020
<b>23.5</b> billion yen	<b>22.8</b> billion yen	<b>20.9</b> billion yen
Operating income margin <b>5.5%</b>	Operating income margin <b>5.4%</b>	Operating income margin <b>5.2%</b>

FY 2020		
Profit and loss	Financial status	Cash flow status
<b>Ordinary income</b>	<b>Net assets</b>	<b>Cash flow from operating activities</b>
<b>23.0</b> billion yen	<b>225.1</b> billion yen	<b>29.6</b> billion yen
<b>Net income attributable to owners of parent company</b>	<b>Total assets</b>	<b>Cash flow from investing activities</b>
<b>21.3</b> billion yen	<b>389.7</b> billion yen	<b>-3.8</b> billion yen
<b>Comprehensive income</b>		<b>Cash flow from financing activities</b>
<b>48.3</b> billion yen		<b>-9.6</b> billion yen
<b>Financial indicators</b>	<b>Capital investments / R&amp;D expenses</b>	<b>Ending balance of cash and cash equivalents</b>
<b>Equity ratio</b>	<b>Capital investments</b>	<b>27.2</b> billion yen
<b>56.9%</b>	<b>14.8</b> billion yen	
<b>Return on equity</b>	<b>R&amp;D expenses</b>	
<b>9.6%</b>	<b>8.0</b> billion yen	

Note 1. Net sales do not include consumption tax.

Note 2. Return on equity is calculated based on ending equity capital, as this is the first year of consolidation.

Note 3. Figures have not been audited by a certified accountant or audit firm.

## YKK AP in Numbers

Main Non-Financial Data \*Results are for each fiscal year unless specifically noted

## Number of employees

FY 2018	FY 2019	FY 2020
Japan <b>12,311</b> Men 75% Women 25%	Japan <b>12,325</b> Men 75% Women 25%	Japan <b>12,389</b> Men 74% Women 26%
Overseas <b>4,010</b>	Overseas <b>4,284</b>	Overseas <b>4,328</b>

Women in management positions Note: Data from YKK AP alone (Japan)  
Note: Includes Japanese employees working abroad

FY 2018	FY 2019	FY 2020
<b>86</b> (4.6%)	<b>99</b> (5.2%)	<b>111</b> (5.7%)

Employment rate of persons with disabilities Note: Data from YKK AP alone (Japan)  
Note: Includes Japanese employees working abroad  
(average for each fiscal year)

FY 2018	FY 2019	FY 2020
<b>2.21 %</b>	<b>2.26 %</b>	<b>2.35 %</b>

Contribution to CO<sub>2</sub> reductions through sustainable products Note: Data from YKK AP Group (Japan)

FY 2018	FY 2019	FY 2020
<b>202 %</b> (VS FY 2013) <b>805,000</b> tons of CO <sub>2</sub>	<b>205 %</b> (VS FY 2013) <b>817,000</b> tons of CO <sub>2</sub>	<b>212 %</b> (VS FY 2013) <b>846,000</b> tons of CO <sub>2</sub>

Rate of vinyl window use Note: Data from YKK AP alone (Japan)

FY 2018	FY 2019	FY 2020
<b>23.5 %</b>	<b>26.2 %</b>	<b>28.9 %</b>

Average age Note: Data from YKK AP Group (Japan)  
Note: Includes Japanese employees working abroad

FY 2018	FY 2019	FY 2020
Men <b>42.8</b> years old Women <b>39.7</b> years old	Men <b>42.8</b> years old Women <b>40.1</b> years old	Men <b>42.8</b> years old Women <b>40.0</b> years old

Rate of employees who take childcare leave Note: Data from YKK AP alone (Japan)

FY 2018	FY 2019	FY 2020
Men <b>42.7 %</b> Women <b>98.2 %</b>	Men <b>49.2 %</b> Women <b>99.0 %</b>	Men <b>63.9 %</b> Women <b>94.8 %</b>

Rate of employees who take paid leave Note: Data from YKK AP Group (Japan)

FY 2018	FY 2019	FY 2020
<b>68.9 %</b>	<b>78.4 %</b>	<b>60.9 %</b>

Ratio of new constructions to remodeling projects Note: Data from YKK AP Group (Japan)  
Note: Based on net sales

FY 2018	FY 2019	FY 2020
Residential <b>New 77%</b> Remodeling <b>23%</b>	Residential <b>New 76%</b> Remodeling <b>24%</b>	Residential <b>New 75%</b> Remodeling <b>25%</b>
Commercial <b>New 74%</b> Remodeling <b>26%</b>	Commercial <b>New 73%</b> Remodeling <b>27%</b>	Commercial <b>New 76%</b> Remodeling <b>24%</b>

Occurrence rates of accidents that required time off from work (Figures represent the frequency of workplace injury that occurred over a sum total of one million working hours and those that resulted in death or injury)  
Note: Data from YKK AP alone (Japan)

FY 2018	FY 2019	FY 2020
<b>0.04 %</b>	<b>0.22 %</b>	<b>0.24 %</b>

## Major Awards

## YKK AP Kurobe Plant and Kurobe Ekko Plant

FY 2019 Workplace Occupational Safety Awards  
Special Award of ExcellenceJapan Aluminum Association  
May 2020

## YKK AP Co., Ltd.

15th and 16th AL-Survey  
Architectural Windows and CW Industry Brand List  
Top 10 Window Brand List  
Selected for the 6th consecutive yearChina Construction Metal Structure Association  
August 2020, March 2021Residential Window Sash:  
1st Place for the 5th consecutive year  
Residential Entrance Door:  
1st Place for the 5th consecutive year2020 Ranking of the Most Desirable Architectural  
Products and Equipment Manufacturers  
(Nikkei Home Builder December 2020 issue)  
November 2020"APW 511" sliding patio door, residential window shutter,  
Pitatto key system, LUCIAS delivery box

## Kids Design Award 2020

Design that promotes children's creativity and future category  
Design that contributes to the safety and security of children category

NPO Kids Design Association, August 2020

## YKK AP America Inc. Dublin Factory

Georgia's 2020 Clean 13 Report:  
Clean Water HeroesGeorgia Water Coalition  
October 2020Residential Window Sash:  
1st Place for the 10th consecutive year  
Residential Entrance Door:  
1st Place for the 5th consecutive year  
Commercial Building Aluminum Sash and Curtain Wall  
1st Place for the 16th consecutive year2020 Ranking of the Most Desirable Architectural  
Products and Equipment Manufacturers  
(Nikkei Architecture November 26, 2020 issue)  
November 2020

## YKK AP Taiwan Co., Ltd.

Manufacturer of the most  
desirable architectural products  
and facilities for use in an ideal home  
Window Sash Category:  
1st Place for the 9th consecutive yearTaiwan Building Aesthetics Cultural and Economic  
Association; an incorporated association  
November 2020

## YKK AP Co., Ltd.

Most Desirable Architectural Product  
Brand Award Selected for  
the 11th consecutive yearChina Real Estate Association  
March 2021

## Company Outline

Corporate Name	YKK AP Inc.
Headquarters Address	1, Kanda Izumi-cho, Chiyoda-ku, Tokyo, 101-0024, Japan TEL: +81-3-3864-2200
Capital	14.0 billion yen
Foundation	July 22, 1957
Accounting Period	March 31 of every year
Description of Business	Design, manufacturing, installation and sales of the following products <ul style="list-style-type: none"> <li>● Residential Products</li> </ul> Windows, shutters, storm doors, window screens, window grills, residential electrical products, front entrance doors, side entrance doors, bathroom doors, interior doors, interior stairs, wood flooring, balcony, patio doors, awning, gates, fences, carports, cladding products, insulating glass, etc. <ul style="list-style-type: none"> <li>● Commercial Products</li> </ul> Windows, doors, curtain wall, steel products, remodeling products, storefront products, landscape <ul style="list-style-type: none"> <li>● Others</li> </ul> Aluminum profile products, manufacturing machinery, architectural parts, etc.
Main Banks	Mizuho Bank, MUFG Bank, Hokuriku Bank
Domestic Affiliated Companies	YKK AP Okinawa Inc., Pros Inc., Iwabuchi Inc., YKK AP Ruxy Inc., Nitto Inc.
Overseas Affiliated Companies	YKK AP America Inc., Erie Architectural Products Inc., Erie Architectural Products USA, Inc., YKK AP (China) Investment Co., Ltd., Dalian YKK AP Co., Ltd., YKK AP Co., Ltd., YKK AP (Suzhou) Co., Ltd., YKK AP Hong Kong Limited, YKK AP Taiwan Co., Ltd., PT. YKK AP Indonesia, YKK AP MYS SDN. BHD., YKK AP (Thailand) Co., Ltd., Bhoruka Extrusions Private Limited, YKK AP FACADE Pte. Ltd., YKK AP Singapore PTE LTD, YKK AP FACADE Vietnam Company Limited

## Editorial Note

Thank you for reading the "YKK AP Integrated Report 2021."

In FY 2021, we formulated our Purpose, "We Build a Better Society Through Architectural Products," as our new corporate message. We created this integrated report with the hope that our stakeholders will be further aware of our various activities. We aim to be a company striving for a better society through our business.

We hope this "YKK AP Integrated Report 2021" will help readers gain a better understanding of our company. Going forward, we will work to keep improving the report by reflecting your opinions and suggestions.

## YKK AP Integrated Report 2021

Extent of Coverage	YKK AP Inc. YKK AP Domestic Affiliated Companies YKK AP Overseas Affiliated Companies
Period Covered	FY 2020 (April 1, 2020 to March 31, 2021) Note: This report partially includes information outside the coverage period
Date of Publication	November 2021
Inquiries	YKK AP Inc. 1, Kanda Izumi-cho, Chiyoda-ku, Tokyo, 101-0024, Japan Corporate Communications TEL: +81-3-3864-2321 Sustainability Promotion Department TEL: +81-3-3864-2135 https://www.ykkap.co.jp/en/