

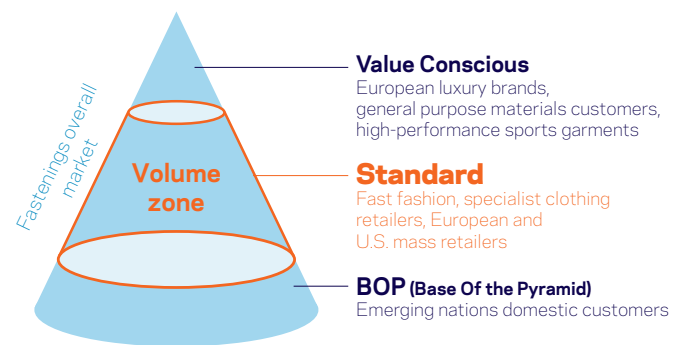
6th Mid-term Business Policy and Business Strategy

Sustainable Growth Under the New Normal - Responding to diverse customer needs and acquiring customers -

Under the 6th Mid-term Management Plan (FY2021 to FY2024), we continue the vision of “Technology Oriented Value Creation.” YKK has formulated a 6th Mid-term Business Policy and Business Plan based on three primary points identified as necessary to achieve “Creativity to Realize a Sustainable Society,” which are “product appeal & proposal capability,” “technology & manufacturing capability” and “diverse human assets.”

We see the dramatic changes anticipated by the new normal after the COVID-19 pandemic as an opportunity to pursue sustainable growth together with society under the policy to provide “better products at a lower cost and greater speed, more sustainably.” As a milestone in the 6th Mid-term Management Plan, YKK has undergone organizational restructuring in FY2023 to adapt to the fiercely changing business environment. That is why we will promote initiatives that put sustainability at the core of management based on this new structure. In addition, YKK must respond to current world affairs that leave the future uncertain as well as the continually changing business environment. That is why we have added “delivering turnaround times demanded by customers” and “thorough health and safety management” to our medium-term direction in an effort to improve customer satisfaction and ensure employee safety.

📌 Fastening Business market categories



Business Environment

Social

- COVID-19 impact
 - Limits on economic activity
 - Logistics disruption, rise in transport costs
- Vaccine rollout, national economic stimulus measures, etc. led to consumption recovery in Europe and the U.S.
- Surging raw material costs (non-ferrous metals/crude oil)
- Growing geopolitical risks

Market

- Expanding demand for sustainability in the apparel industry

Technology Innovation

- Changes in the customer value chain due to advances in information technology



YKK Philosophy, Cycle of Goodness® / Management

YKK Group Code

<6th Mid-term Business Policy>

Sustainable Growth Under the New Normal - Responding

“Turn change into opportunity”
“Contribution to Society” - Continue
“Better products at a lower cost and

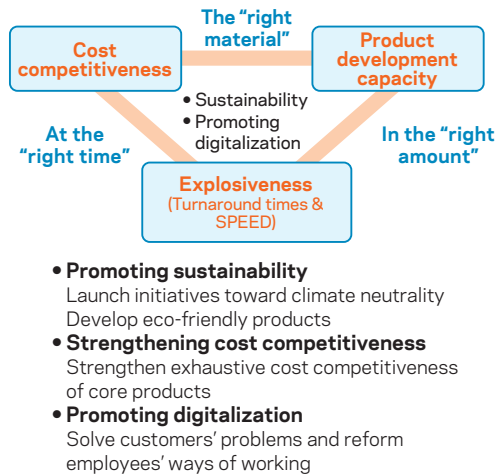
Medium-term Direction

- Flat organizational structure → P.29
 - Enhancing sustainability → P.31
 - Strengthening product planning and development → P.37
 - Thorough pursuit of cost competitiveness → P.39
 - Strengthening the use of digital technologies → P.40
- +
- Delivering turnaround times demanded by customers
 - Thorough health and safety management

Important Points and Targets of Business Execution in the New Normal

In the new normal after the COVID-19 pandemic, the “right time, right material, and right amount” will become an even greater requirement to supply customers with only the material they need in the right amount at the right time. The tasks to tackle in order to satisfy these requirements are to better position sustainability at the core of management, thoroughly reinforce the cost competitiveness of our core products, and further promote digitalization to support these efforts.

(100 million units/yen)



	FY2021 results	FY2022 results		FY2023 plan
Zipper unit sales	102.9	92.9	YoY: 90.2 %	100.8
Net sales	3,481	3,805	YoY: 109.3 %	3,962
Operating income	423	437	YoY: 103.2 %	497
Sales OI ratio	12.2 %	11.6 %	YoY: -0.6 pt	12.5 %
Foreign exchange	USD	112.27 yen	136.13 yen	130.00 yen
	EUR	130.50 yen	141.14 yen	140.00 yen
	RMB	17.49 yen	19.76 yen	19.30 yen

Principle “YKK seeks corporate value of higher significance.”
of Conduct

to diverse customer needs and acquiring customers -

to be a company for the social good -
greater speed, **more sustainably**”



Vision for the Medium- to Long-term

Technology Oriented Value Creation

Continuing to be a “social good” company

Better products at a lower cost and greater speed, more sustainably

Medium-term Direction

Flat Organizational Structure

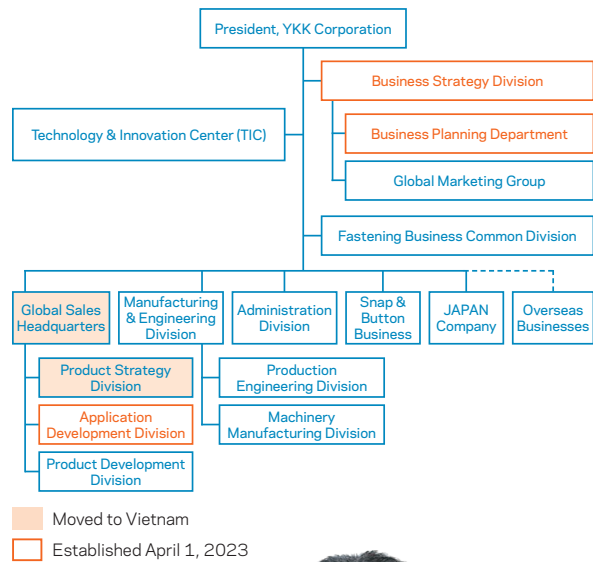
Organizational Restructuring for Immediate Response to the Drastically Changing Business Environment

In FY2021, the first year of the 6th Mid-term Management Plan, YKK reorganized and changed from a divisional structure to a flat structure consisting of functional organizations. The goal was to achieve sustainable growth even in the face of accelerating changes in the business environment over the period of the plan. Furthermore, with an eye toward responding to diverse customer needs and acquiring customers, in FY2023 we established the new Business Strategy Division and moved the functions of the Global Sales Headquarters to Vietnam, to place the organization closer to both customers and markets. This will boost customer satisfaction by incorporating global customer demands into our sales strategies.

Establishment of Business Strategy Division and Relocation of Global Sales Headquarters Function to Vietnam

As global circumstances and the environment surrounding our business change more rapidly than anticipated, we began implementing organizational restructuring in FY2023, the turning point of the current Mid-term Management Plan, with an eye toward the 7th Mid-term Management Plan and beyond. We established a new Business Strategy Division, with the Business Planning Department and Global Marketing Group (GMG) below it. The goal is to efficiently and rapidly promote business strategies. As well, the Global Sales Headquarters was restructured to specialize in strategies for individual sales functions, while the headquarters' functions was shifted to Vietnam, on the front lines of overseas garment manufacturing, in order to formulate and implement sales strategies closer to garment manufacturing regions. Within the headquarters, we placed the Product Strategy, Application Development, and Product Development Divisions. We also established the Glocal Supply Strategy Group, which is tasked with providing optimized "glocal" services spanning multiple business regions to garment manufacturers with geographically diverse locations.

▶ The Business Execution Structure of YKK Corporation (from April 1, 2023)



Everything for Maximizing Customer Satisfaction

Koichi Matsushima

Director
 Executive Vice President, Business Strategy and Business Strategy Division

In FY2021, YKK reorganized and changed from a divisional structure to a function-based organization, a so-called flat structure, and raised awareness within the company that we work as "One YKK." At the time, I was the head of the Global Sales Headquarters, and we integrated sales and product development to speed up our response to customers. Another major result was the optimization and streamlining of sales-related tasks through the introduction of digital tools and other measures.

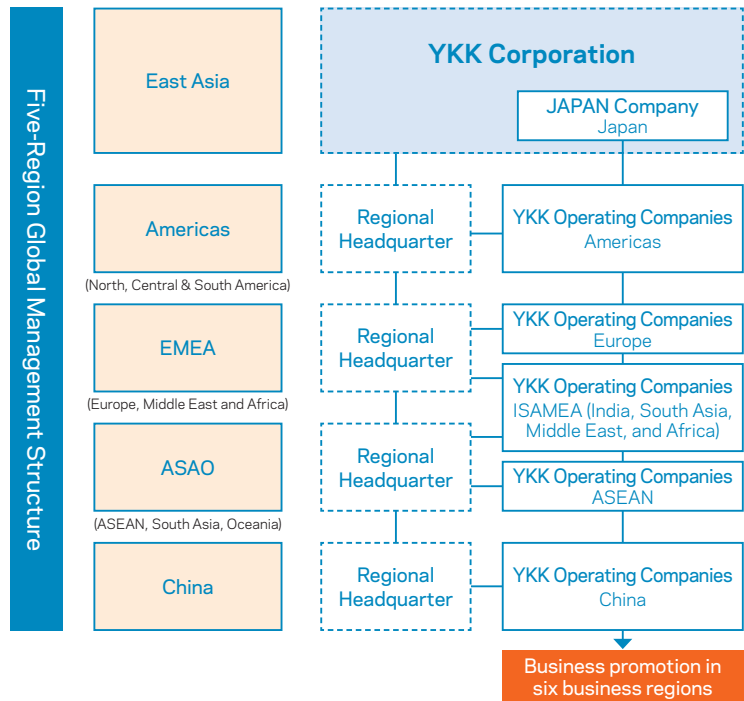
The goal of the new Business Strategy Division is to promote business strategies more efficiently and rapidly. To achieve this, I believe that it is vital for the division to play a central role in horizontally connecting functions

(sales, manufacturing and engineering, and administration) of the YKK fastening business as a whole and drawing up and implementing business-wide strategies. In particular, by pursuing faster delivery times and speed and cost competitiveness, which have been identified as company-wide issues, we will be able to meet diverse customer requests and raise customer satisfaction. We have been focusing on this task for some time, but having the division take the lead in the project further accelerates these efforts. Sharing information on a weekly and monthly basis and participating in meetings, such as the Sustainability Committee and Digital Promotion Committee, will enable us to rapidly implement strategies and achieve our goals.

Global Management Structures

Regarding our overseas management structure, we shifted to a Five-Region Global Management Structure (East Asia, Americas, EMEA, ASAO, and China) in FY2021. At the same time, we split the governance and business promotion organizations, and established six business regions (Japan, Americas, Europe, ISAMEA, ASEAN, and China), which are classified according to trade area or commercial distribution. Each business region will promote business under a business promotion manager (business leader) assigned therein and strengthen both the appropriate marketing methods for the region and production engineering capability. Under this new system, regional headquarters provide managerial support to the six business regions, with a focus on capital management and strengthening corporate governance.

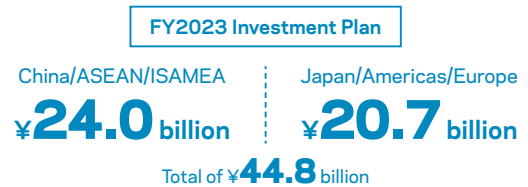
Sixth Mid-term Regional Management Structure



Investment Plans for Each Region

As an investment plan to make sustainability the basis of our management, further enhance the cost competitiveness of our core products, and pursue the digitalization that supports these efforts, we are scheduled to invest ¥44.8 billion in FY2023. We will actively undertake investment in future high-growth countries and regions, balanced to match the characteristics of each region. An investment of ¥24.0 billion is planned for China, ASEAN, and ISAMEA and ¥20.7 billion in the Americas and Europe. As well,

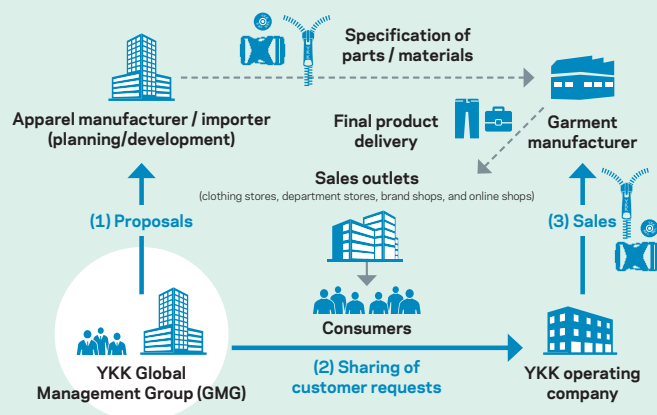
we will focus on sustainability and digital-related investment for the future.



YKK Strengths, GMG Performing on the World Stage

YKK's Global Marketing Group (GMG) works across countries and regions. We have dedicated YKK representatives for each customer in place at customers' manufacturing locations dispersed around the world. The role of GMG is to make proactive proposals, connect customer requirements with YKK operating companies in each country and region, and promote the development of new products. It is truly an organization that is responding to diverse customer needs and acquiring customers.

Examples of GMG's Work



Medium-term Direction **Enhancing Sustainability**

Management Centered on Sustainability: YKK Sustainability Vision 2050

In October 2020, YKK formulated the YKK Sustainability Vision 2050. Targets were set for five themes—climate change, material resources, water resources, chemical management, and respect people—and we are working toward the achievement of the related SDGs and climate neutrality by 2050.

In FY2022, we redoubled our efforts to tackle issues such as climate change and resource recycling based on the sustainability promotion systems in each region around the world. The promotion of investments into energy-saving production equipment, solar power generation and other such technologies aims to tackle climate change and other social issue to realize a sound global environment.



Enhancing initiatives throughout the entire supply chain

Asako Yoshioka
Vice President, Sustainability Department

We can say that sustainability is encoded in YKK's very DNA, in the form of our Cycle of Goodness® philosophy and its proposition that “no one prospers without rendering benefit to others.” Going beyond in-house initiatives, the reduction of GHG emissions throughout the entire supply chain is also important. We cooperate with customers, business partners, and external industry organizations to work actively on solving global environmental and social issues.

Sustainability-related investment (capital investment) 8.6 billion yen (FY2023 business plan)

Portion of investment earmarked for CO₂ emission reductions 6.0 billion yen


YKK Sustainability Vision 2050 - Achievement of Climate Neutrality by 2050 -

Theme	Goal	SDGs
climate change Tackle GHG emissions Increase use of renewable energy	Reduce emissions of CO ₂ and other greenhouse gases in our company and supply chain. <ul style="list-style-type: none"> • Scope 1 and 2 50% reduction by 2030 (from a 2018 baseline year) • Scope 3 30% reduction by 2030 (from a 2018 baseline year) Be carbon neutral by 2050.	
material resources Increase use of sustainable materials	By 2030, switch to 100% sustainable textile materials (recycled materials, naturally-derived materials, etc.)	
	By 2030, replace all vinyl/plastic packaging materials with sustainable packaging, including recyclable/reusable forms.	
	Reduce the amount of waste to be landfilled or incinerated at all production sites.	
	By 2030, increase the waste recycling rate to 90%.	
water resources Reduce water use and manage wastewater	We will reduce our water intake through efficient usage, the development of new water saving production methods, and the increased recycling of wastewater.	
	Strictly manage wastewater at all manufacturing sites in accordance with Government regulations and YKK in-house standards established based on industry standards such as ZDHC (Zero Discharge of Hazardous Chemicals).	
	Manage and further reduce the use of chemical substances in product manufacturing from input to output in accordance with our own standards (YKK Restricted Substance List), which was established based on industry standards such as ZDHC MRSL (Manufacturing Restricted Substances List)	
chemical management Manage and reduce chemical usage	Our finished products meets international textile safety standards such as OEKO-TEX® STANDARD 100 ensuring they are free of harmful substances.	
	Develop new production methods that reduce and eliminate the use of toxic chemicals.	
	By valuing diversity, being inclusive, respecting human rights, and improving the work environment, we will create better and safe workplaces throughout our supply chains. We will ensure that each individual can work with peace of mind, make the most of his or her individuality, and lead a healthy and happy life.	
respect people Uphold human rights and ensure fair, safe work environments	Implement YGCC audit (YKK Global Criteria of Compliance), a comprehensive standard based upon YKK's Cycle of Goodness philosophy and the ISO26000 guidelines, at YKK Group facilities. Periodic evaluations by 3rd party auditors are conducted to assure transparency and improvement of sustainable practices.	

Realizing Our Vision through Partnerships

As the idea of sustainability, which seeks to realize a sustainable society, becomes an increasingly global trend, YKK cooperates with and contributes to sustainability efforts through international initiatives and membership in external industry organizations.

As well, we undertake self-assessments and external audits using the Higg Index, a suite of standards and module tools for assessing environmental and social impacts developed by the Sustainable Apparel Coalition (SAC). We post the results of Higg Index external audits for each of our locations on our website.

 [Higg Index external audit: Scores by location
https://www.ykkfastening.com/sustainability/higg.html](https://www.ykkfastening.com/sustainability/higg.html)

Organization Memberships/Initiatives, etc.

- Joined the Sustainable Apparel Coalition (SAC) **September 2018**
- Signed the Fashion Industry Charter for Climate Action **March 2020**
- Signed the Net-Zero Recovery statement **May 2020**
- Acquired 1.5°C Target commitment certification under the Science Based Targets initiative (SBTi) **March 2021**
- Joined the Japan Sustainable Fashion Alliance **September 2021**
- Joined the Ellen MacArthur Foundation Network **April 2022**
- Joined the 30by30 Alliance for Biodiversity **August 2022**
- Signed the United Nations Convention on Biological Diversity (CBD) COP 15 Business Statement for Mandatory Assessment and Disclosure **October 2022**

FY2022 results	FY2023 plan
<ul style="list-style-type: none"> • Scope 1 and 2 GHG emissions: 289,543t (46.9% reduction from 2018 baseline) • Scope 3 GHG emissions: 690,418t (20.9% reduction from 2018 baseline) • Renewable energy ratio of all power consumption: 46.1% • Locations running on 100% renewable energy: 31 • Locations using solar power generation systems: 21 	<ul style="list-style-type: none"> • Continue carrying out initiatives that aim to achieve the FY2030 emission reduction targets based on the SBTi certification to limit the temperature rise due to climate change to less than 1.5°C • Scope 1 and 2 GHG emissions FY2023: 432,241t or less (21.0% or more reduction from 2018 baseline) • Scope 3 GHG emissions FY2023: 764,069t or less (12.5% or more reduction from 2018 baseline)
Proportion of sustainable materials: 26% (up 14 points year-on-year)	Proportion of sustainable materials FY2023: 41%
Switch to sustainable packaging materials: 27.6%	Switch more plastic inner packaging materials to sustainable alternatives
Landfill waste: 6,282t (down 525t year-on-year)	Waste intensity FY2023: 4% reduction (year-on-year)
Waste recycling rate: 87.3% (up 0.3 points year on year) Moved forward the target year for a recycling rate of 90% from 2030 to 2025	Waste recycling rate of at least 88.0%
Water intake: 10.086 million t (down 1.338 million t from FY2018)	Water intensity: 2% reduction (compared to FY2022)
Approval of a partnership with Zero Discharge of Hazardous Chemicals Programme (ZDHC) to devise ZDHC guidelines for zippers and buttons	Roll out in-house wastewater management rules revised based on industry wastewater management standards
<ul style="list-style-type: none"> • Addition of the AFIRM Restricted Substances List and per-and polyfluoroalkyl substances (PFAS) as statutory compliance to the annual revisions of YKK RSL based on customer requests • Adoption of the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) for the management of chemical substances used in manufacturing processes 	<ul style="list-style-type: none"> • Annual revision of YKK RSL and communication of same to suppliers as well as implementation of appropriate surveys for suppliers • Carry out AFIRM RSL and all-encompassing fluorine tests • Verify the level of compliance with the ZDHC MRSL for the chemical substances used in manufacturing processes and expand use of the ZDHC MRSL • Cooperate with suppliers to properly assess the level of ZDHC MRSL compliance for unverified products
<ul style="list-style-type: none"> • Incorporation of the management of restricted substances in the processes for developing new products or changing materials • Periodic renewal of the OEKO-TEX® STANDARD 100 certification 	<ul style="list-style-type: none"> • Add AFIRM RSL testing as an item for the management of restricted substances when developing new products or changing materials • Periodically renew the OEKO-TEX® STANDARD 100 certification
Expansion of the lineup of products made with AcroPlating® technology, a new plating technology	Development to reduce dimethylformamide (DMF) as a measure to reduce chemicals with high atmospheric emissions
<ul style="list-style-type: none"> • Implementation of YGCC self-checks/audits at all applicable locations • Review and revision of YGCC audit items and scope • Revision of the YKK Group Human Rights Policy 	<ul style="list-style-type: none"> • Through implementation of YGCC and the promotion of CSR procurement, continue to identify/assess human rights risks as required by UNGP • Enhance the human rights reporting and consultation services that are made available to business partners

YKK Sustainability Vision Formulation Process

One important business partner of YKK is the fashion industry. Conventional business models in this sector entail mass production, mass consumption, and large volumes of waste have a huge impact on the environment, which is increasing the importance of CO₂ emission reductions, water resource management, chemical substances management, sustainable use of resources, and other initiatives to respond to environmental issues. Initiatives to tackle social and labor issues are also indispensable, whether those to respect human rights or build safe working environments. The importance of addressing these social issues on a global scale goes beyond the fashion industry to a wide range of other domains. As a company with obligations in these industries, YKK is aiming to actively spearhead initiatives that can solve these environmental and social problems. In response to this business landscape, in the YKK Sustainability Vision 2050 in October 2020, YKK identified five themes as “Materiality” (priority issues) covering not only the environment but also society and labor. These were climate change, material resources, water resources, chemical management, and respect people. We have set targets under each of these five themes and are working toward the related SDGs.

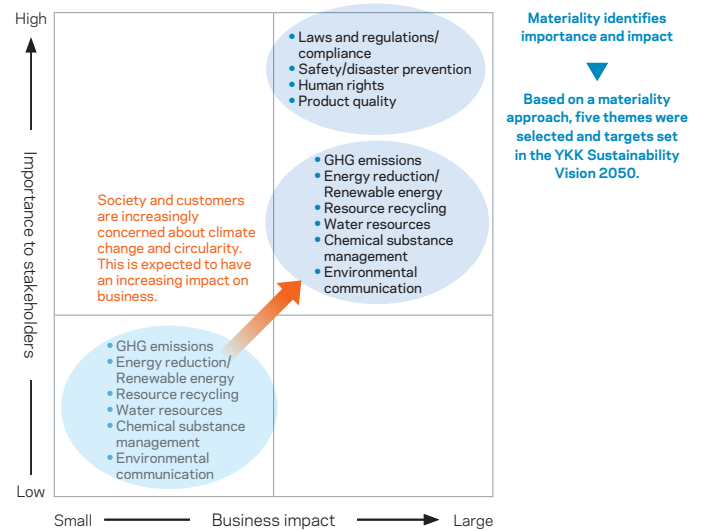
Sustainability Promotion Structure

A YKK Sustainability Committee chaired by the president of YKK is established. Working groups are created for each theme that work to solve issues as we aim to achieve the targets of the YKK Sustainability Vision 2050. Overseas, Sustainability Committees for each region have been established since FY2021 in response to the committee structure at Headquarters, in order to disseminate and implement Headquarters’ sustainability policies and measures, thereby establishing a global promotion system.

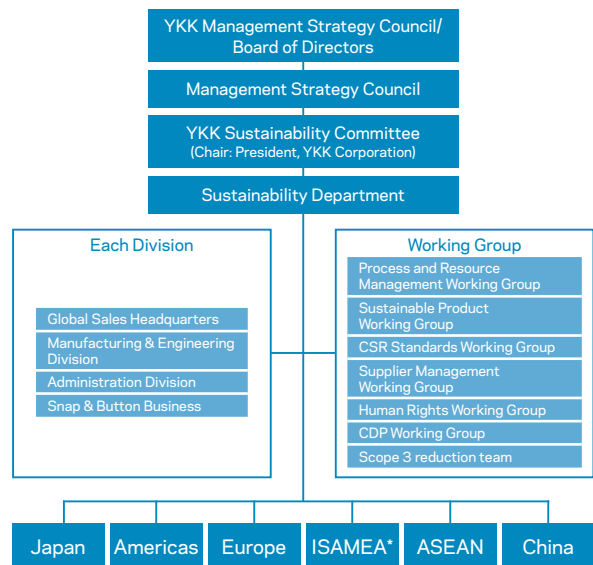
Sustainability Committee Meetings and Actions

The Sustainability Committee convened three times in FY2022. It heard reports and held discussions about various issues and measures to solve them, in communication activities and within the seven working groups established under the Sustainability Committee (Process and Resource Management WG, Sustainable Product WG, CSR Standards WG, Supplier Management WG, Human Rights WG, CDP WG, and Scope 3 reduction team).

Materiality Analysis (Identifying Priority Issues)



Sustainability promotion structure



* India/South Asia/Middle East/Africa

Meeting	Month	Content
1st	July 2022	Reports about the progress of initiatives carried out by working groups (WG) and about efforts undertaken by Sustainability Committees in each region
2nd	September 2022	Reports about the progress of initiatives carried out by WG and about efforts undertaken by Sustainability Committees in each region
3rd	March 2023	Reports about the progress of initiatives and activity plans for the next fiscal year from each WG and climate change initiatives undertaken in five regions overseas (China, ASEAN, ISAMEA, Europe, and Americas)

Information Disclosure Founded in the TCFD Recommendations

Since the adoption of the Paris Agreement in December 2015, there has been more and more momentum to evaluate the impact climate change has on business activities worldwide. Within this business climate, the TCFD announced its recommendations in June 2017, which YKK signed onto as a supporter in 2019.

YKK evaluates and strives to incorporate the impact climate change may have on its business activities into its business strategies according to the TCFD recommendations.

1. Governance

The YKK corporate governance system essentially consists of the Board of Directors, which carries out decision-making and supervisory functions related to management policies and other important matters, and the Audit & Supervisory Board, which carries out auditing functions. We have also introduced an officer system to promote business execution. In addition to regular meetings held once a month, the Board of Directors holds extraordinary meetings as necessary to discuss and make decisions on business plans as well as organizational and other important management matters. It receives reports and supervises the progress of the business execution of each Group company as well.

The Sustainability Committee launched as an advisory body for the Board of Directors discusses and promotes management policies and strategy related to sustainability, such as climate change. The president serves as chair of the Committee.

2. Strategy

YKK identifies and evaluates major risks and opportunities for the Fastening Business related to climate change according to the TCFD recommendations.

Type		Financial impact on YKK
Transition risk	Current regulation	Risks of higher operation costs of YKK plants and the YKK buildings if the carbon tax rises in the future
Physical risk	Acute	Risks of manufacturing bases suffering damage due to more frequent and severe flooding due to the rising temperature
	Chronic	Risks of declining profits due to higher air-conditioning costs at YKK plants and skyrocketing raw material prices driven by the rising average temperature worldwide
Opportunity	Products/Services	Opportunities to expand the number of products using recycled and other sustainable materials
	Resource efficiency	Opportunities to improve energy efficiency of equipment and broaden the adoption of renewable energies in order to mitigate the payment of the carbon tax in the future

3. Risk Management

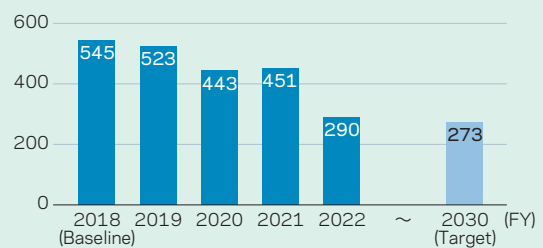
In accordance with the Risk Management Policy, risks are identified once each year by each organization in this business, worst-case scenarios and the status of response are confirmed, and the risks are assessed in 16 stages according to the scale of loss and damage and the frequency of occurrence. In addition, risks that are anticipated to have an impact of ¥100 million or more per year are deemed to be key risks that should be managed at the corporate management level. We also incorporate climate-related risks into the Group-wide risk assessment and management process to anticipate not only the short and medium-term but also the long-term impact (up to about 2030).

4. Metrics and Targets

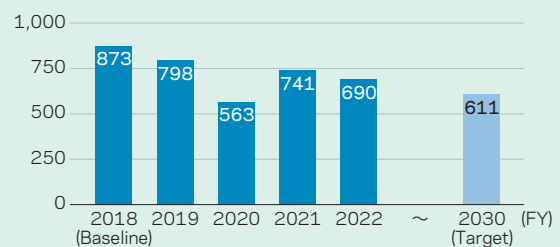
Our businesses aim to become climate neutral (net-zero emissions) by 2050. Therefore, we have set targets to reduce CO₂ and other greenhouse gas emissions from our company and supply chain. In addition, these targets have been certified by the Science Based Targets initiative (SBTi).

Metric	Target
Scope 1 and 2	50% reduction by FY2030 (compared to FY2018)
Scope 3	30% reduction by FY2030 (compared to FY2018)

<GHG emissions: Scope 1 and 2>
(1,000 t CO₂)



<GHG emissions: Scope 3>
(1,000 t CO₂)



See "This is YKK 2023 Data Book" for more detailed disclosure.

Initiatives Toward Achievement of the YKK Sustainability Vision 2050

climate change



46.9%
reduction
Scope 1 and 2
GHG emissions
(from FY2018
baseline)

In FY2022, the YKK Group reduced its GHG emissions (Scope 1 and 2) by 46.9%, which far surpassed its 16.8% reduction target compared to FY2018. This is largely thanks to measures that include broader adoption of energy-saving production equipment and plant infrastructure as well as the installation of solar power generation systems. As a result of actively introducing renewable energy, we were able to increase the number of sites that have shifted purchased power to 100% renewable energy in FY2022 by 20 locations compared to FY2021. YKK now has 31 locations only using renewable energy worldwide. We are also pushing to reduce GHG emissions by purchasing renewable energy certificates. In FY2022, the renewable energy ratio of all power consumption was 46.1% (including renewable energy certificates).

In addition, by promoting the use of recycled polyester materials through a shift to and increase in sales of the NATULON® series products and other means, we expect

to reduce GHG emissions by about 15,935t (against FY2018), compared to using virgin materials. In the future, we will also work to reduce Scope 3 emissions by shifting to recycled materials for the main materials used in our fastening products.



Solar power generation system
(Shanghai YKK Zipper Co., Ltd. Lingang factory)



Selected as a Supplier Engagement Leader in the FY2022 CDP Supplier Engagement Rating

material resources



NATULON®
cumulative sales
account for waste
recycling of

about 340 million*
plastic bottles

*As of the end of March 2023.

Based on 29 g/bottle (500 ml size)

26%

Proportion of sustainable materials
(Total meters)
(FY2022 results)

87.3%

Waste recycling rate

Sustainable Materials for Fastening Products

Since full-fledged efforts to switch to recycled zippers began, the FY2022 unit sales of the NATULON® series have increased 176% year-on-year. We are now also dramatically expanding the NATULON Plus® zipper line, with a high ratio of recycled materials, and the ratio of products using sustainable materials has reached 26% of all product sales. Going forward, we set a target in FY2023 to increase the ratio of products using sustainable materials by 41%. This includes measures to encourage a shift to the NATULON® line while expanding product variations.

Switch to Sustainable Packaging Materials

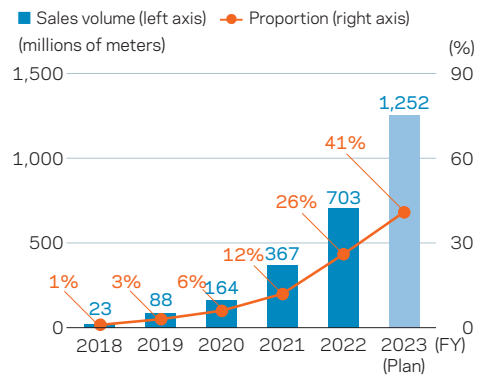
In FY2022, YKK JAPAN Company (Kurobe Manufacturing Center) completed the switch to biomass materials for the main inner packaging of fastening products. Moreover, we are also looking into returnable boxes and other measures that will reduce the amount of plastic packaging materials that YKK uses.

Waste Reduction/Waste Recycling

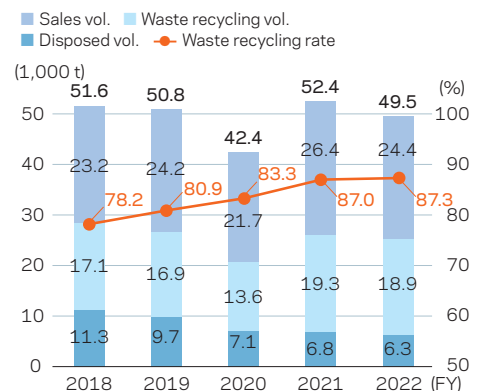
In FY2022, thoroughly separating waste materials and strengthening reuse at each of our operating companies and improved waste processing technology in the Asia Region, and other factors, combined to result in a recycling rate of 87.3%, exceeding the target. The amount of waste was also

reduced 96% compared to FY2018. YKK is moving forward with efforts to recycle and reuse resources and reduce waste.

Volume and Proportion of Sustainable Materials Sales



Changes in Waste Emissions/Waste Recycling Rates



water resources



11.7%
reduction

Reduction rate of
water intake
(From a FY2018
baseline)

At local manufacturing sites where water resource issues are a concern, YKK will reduce our water intake through efficient usage, the development of new water saving production methods, and the increased recycling of wastewater. Our activities promote a target to strictly manage wastewater at all manufacturing sites in accordance with government regulations and YKK in-house standards established based on industry standards such as Zero Discharge of Hazardous Chemicals (ZDHC).

In FY2022, we furthered the introduction of production and water recycling equipment that uses water more efficiently but were only able to reduce our water consumption 11.7% (compared to FY2018) against the 14% target. We have continued to evaluate and identify water risks in each country and region and verified progress has been made to combat these risks. In wastewater management, we will

continue to implement wastewater processing diagnosis and technology guidance at each location to further improve the technology of wastewater processing. YKK will revise its rules on wastewater management methods with reference to the ZDHC Wastewater Guideline and Higg Index as the wastewater management standards of the garment industry.



Wastewater processing and diagnosis setup at YKK (Thailand) Co., Ltd.

chemical management



New AcroPlating®
technology
to eliminate
100%
of hazardous
substances

In FY2022, we revised the YKK Restricted Substance List (YKK RSL) to the FY2023 version, taking into account laws, regulations, and industry standards for chemical substances related to fastening products. Based on customer requests, we added the AFIRM Restricted Substances List and polyfluoroalkyl substances (PFAS) as statutory compliance and we launched a survey of suppliers. This survey evaluates the level of compliance with the Manufacturing Restricted Substances List (ZDHC MRSL) to not only reduce the use of hazardous chemical substances that have the potential to be used in fastening products but also the hazardous chemical substances with the potential to be used in production processes or emitted into the environment.

These activities promote a switch to safer chemical substances but also work to reduce the impact on the natural environment and people. In terms of new manufacturing technology to eliminate hazardous substances, we have expanded our lineup of products made with the AcroPlating® technology, a new plating technology for brass that eliminates 100% of hazardous substances such as cyanide, chromium, and selenium. The ratio of products produced using AcroPlating® technology for sale as brass sliders increased two points year on year to 18% in FY2022.



AcroPlating™

respect people



Building
structures for
**respecting
human rights**
based on international
standards

In FY2022, we performed YGCC self-checks at all applicable locations and identified the level of CSR carried out by our suppliers and other business partners in an effort to continually reduce the risk of human rights violations. YKK is responding to and amending any issues identified at companies in each country and region to reduce human rights risks.

The YKK Group Human Rights Policy has also been updated to better suit modern times and reaffirm the YKK approach to respecting people as well as identifying and rectifying any human rights risks. To more clearly identify potential human rights risks, we also regularly review the YGCC audit items and scope as well as the CSR procurement questionnaire.

Going forward, we will also continue to identify and evaluate human rights risks through YGCC implementation and CSR procurement, continue to promote the building of relief systems, and work to transition to structures that conform to UNGP and due diligence laws that will be enacted in the future in Europe.



YKK Group Human Rights Policy
<https://www.ykk.co.jp/english/corporate/csr/humanrights.html>

Medium-term Direction

Strengthening Product Planning and Development

Continuous Launches of Added-Value Products

YKK can provide a “one-to-one” response – that is, understanding the needs of customers and markets of various locations, applying them to product development, and delivering the products to customers on a timely basis. This is YKK’s strength as a company that conducts business globally. YKK is not only focused on strengthening its core products but will also place its focus on upgrading and expanding products that are appealing to customers who seek high functionality that is not found in core products. At the same time, we are also focused on uncovering the needs of customers and society and developing products that will provide new value.

Major achievements in FY2022 include the

development of a low-friction coil zipper that smoothly opens and closes as well as a zipper that prevents fabric snags during use. At our manufacturing facilities, we endeavored in equipment and line development to strengthen the cost competitiveness of core products.

Going forward, YKK aims to strengthen product planning and development capabilities, act with greater speed, further expand eco-friendly products, and build optimal manufacturing lines suitable to each region to realize the right time, right material, and right amount, which are all key points of future business execution. We will also strive to use digital technologies to solve customer issues and realize employee work-style reforms.

Product Planning and Development Policy According to Market

Market	Main Type of Customer	Policy of the Initiative
Value Conscious	<ul style="list-style-type: none"> High-end brands High-function sports apparel Automobile interiors, etc. 	<ul style="list-style-type: none"> Strengthening the development of green products Continuous launches of added-value products
Standard	<ul style="list-style-type: none"> Casual apparel customers European and American mass retailers, and e-commerce 	<ul style="list-style-type: none"> Thorough pursuit of cost competitiveness

Product Development Policies Tailored for Business Regions



Development locations/personnel

FY2023 (plan): 39 locations/ 997 employees

(38 locations/927 employees as of the end of FY2022)

Product and Technology Development Example

The YKK Digital Showroom introduces many examples of customer voices and product development stories. P.40

VISLON® Nylon, Mono-plastic Material



VISLON® Nylon is a product that is expected to help shift garments to mono-plastic materials highly anticipated by the fashion industry. Due to the almost entirely polyamide (nylon) structure, this new zipper can be easily recycled together with the nylon garment on which it is sewn, without the need for removal. YKK ITALIA S.p.A. has been manufacturing and selling VISLON® Nylon as of March 2023.



Employee Voices

Mauro Grandis
YKK ITALIA S.p.A.
Variation Item Development

This product, most of its parts are made of nylon, illustrates a new direction in the use of raw materials in industry. A zipper made using a mono-plastic material that can be recycled expands the possibilities for customers to create sustainable products. Our goal is to realize a sustainable future together with these customers.

AcroPlating® Technology



We developed AcroPlating® as a new plating technology for brass materials that uses no conventional plating chemicals and eliminates the use of harmful substances such as cyanide, chromium, and selenium. This new finishing technology not only reduces GHG gas emissions from manufacturing processes but also saves water and power, which dramatically reduces the environmental impact of those manufacturing processes*. YKK will broaden the number of fastening

*Source: Life Cycle Assessment: https://www.ykk.com/english/corporate/csr/c_news/2021/20210622e.html

products that take advantage of this technology in the future.



Employee Voices

Masayuki Iimori
Development & Engineering
Department, Snap & Button
Business Division

The full removal of cyanide, chromium, and selenium which have adverse effects on the health of humans and other living organisms helps to improve the working environment in the manufacturing process. YKK has achieved an in-house integrated production system that encompasses materials, manufacturing equipment, and products.

Reducing the environmental impact of the dyeing process with the cooperation of business partners

YKK Vietnam Co., LTD. Ha Nam Plant has teamed up with Patagonia, a US outdoor company, and ERCA SPA, an Italian pharmaceutical manufacturing company, to implement the innovative REVECOL®*1 dyeing auxiliary developed by ERCA into dyeing arrangement processes of the zipper tape and elements. REVECOL® is a highly functional and extremely safe dyeing auxiliary derived by upcycling exhausted vegetable cooking oil. The shift to this dyeing auxiliary is estimated to reduce the carbon footprint of products (CFP) by 72%*2, while reducing the annual use of dyeing auxiliary by 20% to 30%.



*1 REVECOL is a registered trademark of E.R.C.A. Esperienze Ricerche Chimiche Applicate S.p.A.
*2 These figures are from the bluesign® Product Carbon Footprint report, which compares REVECOL® to the conventional dyeing agents manufactured by ERCA. Bluesign is a registered trademark of bluesign technologies ag.



Left to right: Matt Swartz (Patagonia), Fabio Locatelli (ERCA), and Mike Maekawa (YKK Vietnam)

“This partnership has shown me once again how important a lot of little steps like the shift to an alternative dyeing agent can lead to something like this partnership. I will not only further these efforts toward the realization of a sustainable society but also do everything I can to raise more awareness throughout the entire fashion industry as well as with consumers.”

Medium-term Direction

Thorough Pursuit of Cost Competitiveness

Thoroughly Strengthen Cost Competitiveness of Core Products

The market environment has changed to an unprecedented degree due to the COVID-19 pandemic. Regarding strengthening cost competitiveness, which is recognized as a priority issue in the 6th Mid-term Business Plan, and in preparation for anticipated fierce competition ahead of us, we are making a thorough review of both the core products that satisfy a wide range of customers and regions, and *monozukuri* itself, including the machinery and equipment for making the products. We are building production lines of differing specifications

that match the business environments in each region. Through organizational restructuring, engineers in zipper and machinery manufacturing have been brought together and resources concentrated on high-priority development themes. This makes it possible to significantly reduce machinery and facilities development times. From FY2023 and on, this machinery and equipment will be introduced in turn into overseas sites to further strengthen our cost competitiveness.

Vision

- **Construct optimal manufacturing lines** for business environments in each region
- By reorganizing and integrating YKK HQ functions, **boost development speeds and concurrently work on several development themes**
- Work to **further reduce machinery prices**

Progress on Initiatives

- **Develop machinery and facilities tailored for market characteristics** throughout China and Asia (Customer requests (responding to diversification), manufacturing labor costs, etc.)
- Prioritize themes, concentrate resources, and link overseas operating companies to **reduce machinery and facilities development times**

➔ **From FY2023 and on, we will introduce machinery and equipment in turn into overseas companies to strengthen the onsite cost competitiveness of core products**

Strengthening Global Production and Engineering Functions and Training Local Human Assets

To achieve the thorough pursuit of cost competitiveness that is set out as a goal in the 6th Mid-term Plan, we are sending out production engineers from Kurobe in phases to overseas locations. The goal is to speed up the introduction of local equipment and products and strengthen cost competitiveness by expanding the scope of discretion for local manufacturing bases. As well, we are focusing on the training of local production engineers in technologies that meet the needs and characteristics of local markets in each region and bolstering quality assurance systems at these locations by running certification programs for certified quality measurements instructors and facilities maintenance technicians.



characteristics of local markets in each region and bolstering quality assurance systems at these locations by running certification programs for certified quality measurements instructors and facilities maintenance technicians.



Employee Voices

Xu Jian
Head of Maintenance,
LIN GANG FACTORY,
Shanghai YKK Zipper Co., Ltd.

Guided by production engineers from Japan, I have learned knowledge and skills relating to monofilament manufacturing. As an onsite engineer, I understand that my most important role is the production of high-quality products. I aim to build on the experience I've gained so far to study new technologies, pass on YKK technology and skills by training the next generation, and move forward with the times. I want to respond to the major changes in customer requests while having our work contribute to a sustainable society through sustainability initiatives and other means.

Medium-term Direction

Strengthening the Use of Digital Technologies

Making Smart Factories a Reality



Building non-stop/unmanned production lines

→ Establishing the foundation to make smart factories a reality

Responding to the shrinking workforce

Increase the quality of work and raise productivity by automating simple tasks

Ensuring reliable quality

Stabilize quality by expanding the scope of AI image inspection

Utilizing digital technology

Improve customer service by connecting the client to the production site and making use of the data

Contributing to sustainability

Reduce energy consumption and CO₂ emissions through automation and labor-saving. Operating at 100% with zero defects and zero waste

We have listed strengthening the *monozukuri* of standard category items and smart factories as manufacturing and engineering policies in the 6th Mid-term Business Plan. YKK founder Tadao Yoshida aimed for a “dark factory,” or a factory that did not need to be lit because it was fully automated and unmanned. To achieve this goal, we are engaged in the use of cutting-edge technologies, such as robotics, AI, and sensors to achieve a fault-tolerant, unmanned production line that can operate continuously for long hours without the intervention of people.

As manufacturing becomes increasingly automated, we believe that continuous improvement, upgrades, and evolution is supported by human assets who correctly understand and practice basic principles, and for this reason we have incorporated quality engineering into our training since 2011. In 2022, we were awarded the Best Paper in the Robust Quality Engineering Society*. In terms of practical development, we are leveraging facilities and machinery development for sustainability themes and contributing to a reduction in CO₂ emissions.

*Sponsored by the Precise Measurement Technology Promotion Foundation.

Investment in Digitalization (capital investment)

¥1.5 billion (FY2023 plan)

Pursuing a Stress-free Environment Through the Use of Digital Technology

In response to the accelerating use of digital technology in the garment industry, we are promoting digitalization in all value chains, from marketing to product planning, development, manufacturing, and sales. These efforts are led by our Digital Operation Planning Department, established in FY2021.

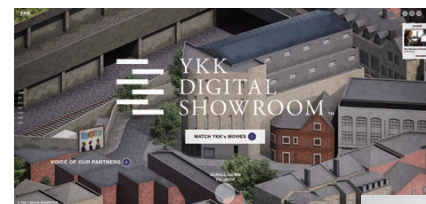
For customers, we are working to link data by digitizing product information and respond to demand for “right time, right material, and right amount.” At the same time, we are making active use of the YKK Digital Showroom, a venue for showcasing products and communicating with customers. In April 2023, we released YKK Trim Creator, a new tool that instantly outputs 3D models of zippers and product codes. The intuitive interface enables customers to select the desired zipper size, color, and slider combination and create a simulation on the spot. This reduces the actual sample production process, which also helps to reduce the environmental impacts.

Also, in order to improve efficiency in internal operations, we are working to standardize and automate global business operations by introducing workflows and linking core systems. As well, we are building platforms to enable true data driven management that uses BI and AI* to make decisions based on data analysis.

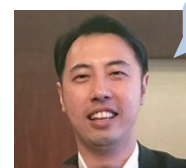
*BI: Business Intelligence; AI: Artificial Intelligence



YKK Digital Showroom (available in Japanese, Chinese, and English)
<https://ykkdigitalshowroom.com/en/>



YKK Trim Creator:
https://ykkdigitalshowroom.com/en/gf/digitalization/ykk_trim_creator/admission



Employee Voices

Alson Ng

YKK Holding Asia Pte. Ltd.
Global Marketing Group

YKK Trim Creator enables designers to visualize in a more concrete way the colors and design of the zipper they want. Plus, it can give them inspiration for new trim ideas and instantly share their ideas with others.

Community Activities: Be a Native

As a member of the community in which we operate, YKK provides a variety of value through its business. It includes giving consideration to society and the environment, and contributing to the resolution of challenges faced by the community. The following is a sampling of our recent initiatives in various countries and regions.

ASAO Supporting the Healthy Growth of Children through Football

The YKK ASAO Kid's Football Clinic (AKFC) has been sponsored by YKK in the ASAO region* since 2007. Run in cooperation with the Real Madrid Foundation and other organizations, the clinic promotes children's healthy growth through football. More than 7,000 children have participated in the program. The clinic was suspended during the coronavirus pandemic but was resumed in Bangkok, Thailand, in 2022 for the first time in three years. 284 children, including refugees, receive training from professional coaches. We will continue to bring smiles to children's faces by supporting their healthy growth in the future.

*ASAO: ASEAN/South Asia/Oceania



Children who participated in the clinic



Employee Voices

Suraphong Tangphakphienkit
YKK (THAILAND) CO., LTD.

We had to temporarily suspend the program due to the effects of the coronavirus disease (COVID-19), but fortunately we are able to run it again. Watching the kids enjoy themselves so much made us feel great, too.

The Philippines Contributing to a Foundation for the Disabled, Aiming for a Coexistence Society

At YKK Philippines Inc. we are practicing the Cycle of Goodness®, respecting employees and the local environment, and working to improve our corporate activities. As part of these efforts, in November 2022, we donated wheelchairs, walking aids, four-legged canes, and other welfare equipment to the Create a Job for Disabled Association Inc., an organization that supports the disabled in the Philippines. The organization works to promote social inclusion for people with disabilities, and the donated items will help to support people with disabilities in their day-to-day lives. YKK Philippines Inc. received an acknowledgment of gratitude from the organization.



With users of the welfare equipment



Employee Voices

Annalyn Vinuya
YKK Philippines, Inc.

When the people who received and use the welfare equipment tell us how happy they are with it, it really gives us a boost, too. In the future, I want us to continue with activities that help local people.

China Linking with Designers on the Concept of Sustainability

YKK strives to contribute to a sustainable society. We work together with garment companies and designers who share this commitment to develop a range of eco-friendly products and technologies. At the 2022 Shanghai Fashion Week, YKK held a digital fashion show in a collaboration with Rico Lee, the Chinese clothing designer. Four lines were presented, which were created around the concept of "Nature" and using YKK fastening products such as NATULON Plus® zipper. They conveyed to customers the idea of environmental conservation and the experience of comfortable clothing.



Garment creations based on the concept of Nature



Employee Voices

Hou Ruizhen
YKK (China) Investment Co., Ltd.

Through these activities, we want to encourage the younger generation to use YKK fastening products, and join us in thinking about sustainability in the fashion industry.

El Salvador

Supporting Learning Spaces for Local Children

As a member of the local community, YKK El Salvador S.A. de C.V. is providing ongoing support to a school (Tecpan School) located near the YKK plant. Tecpan School is a local school that caters to students from kindergarten to 9th grade. However, the physical learning environment is inadequate, with some students attending classes in a thin-walled classroom with no windows. Learning of this situation, the company supported the building of a new brick-walled classroom that met government standards. Our hope is that the improved environment will help promote local children's education.

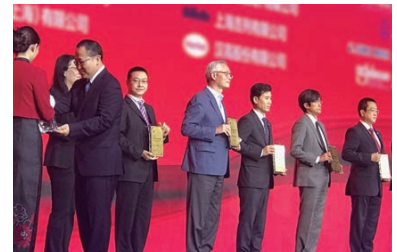


Children in the new classroom

China

Promoting Regional Development, Growing with the Local Community

Since establishing a representative office in Beijing, China, in 1989, YKK has been conducting business with the aim of developing together with communities throughout China. In 2022, Shanghai YKK Zipper Co., Ltd. was recognized for the eighth year in row as a company that makes economic contributions to the Shanghai Pudong New Area, while YKK (China) Investment Co., Ltd. received the Economic Outstanding Contribution Award. As well, YKK Zipper (Shenzhen) Co., Ltd. was selected as one of the 2022 Shenzhen Top 500 Enterprises, sponsored by the Federation of Shenzhen Industries and other organizations. Based on the YKK Philosophy of the Cycle of Goodness, we will continue to undertake business activities rooted in local communities.



The award ceremony

Italy

Individual Participation Office Environmental Activities

YKK Mediterraneo S.P.A. is working to reduce plastic waste produced in its offices and raise employee awareness of environmental conservation. In the break rooms, for example, the company has switched to coffee cups and stirrers made of compostable material and entirely produced in Italy, reducing both the annual use of plastic in vending machines by around 400 kg and CO₂ emissions from transport. We are preserving our important natural environment through a series of small-scale initiatives, such as installing water dispensers in the factory and distributing water bottles to all employees, to get everyone thinking about what actions they can take to protect the environment.



Newly introduced bio-degradable cups

Japan

Contributing to Local Revitalization through Town Development

A ceremony was held in March 2023 to celebrate the completion of the first phase (consisting of 94 units) of the employee dormitory, I-TOWN. The dormitory is being developed by YKK Real Estate Co., Ltd. as part of a larger town development project around Ikuji Station on the Ainokaze Toyama Railway, which is close to the Kurobe Manufacturing Center in Kurobe City, Toyama Prefecture. As part of the plan, YKK Group has joined the Council for Promoting the Revitalization of the Ikuji Station Area, and has been working with Kurobe City to study area revitalization through industry, government, and private sector cooperation. We are planning to complete approximately 270 units by 2024 and contribute to the local area by continuing to work with the community and government in developing the station area.



I-TOWN (Kurobe City, Toyama Prefecture)