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About the Cover

The YKK Group aims to contribute to the development of society through engagement with the community in order to work together towards the resolution of challenges, thereby creating a prosperous society for the next generation.

This belief has been reflected in the image of children drawing the future of the world, which represents the borderless ties that the YKK Group creates through its business.



Printed in Japan

YKK®

YKK Group Social & Environmental Report 2016

Seeking health and prosperity for humankind in harmony with the environment

Social & Environmental Report 2016



YKK PHILOSOPHY

CYCLE OF GOODNESS

“No one prospers without rendering benefit to others.”



An enterprise is an important member of society, and as such, it must coexist with other elements of society. Its value will be recognized by the benefits it shares with society. Tadao Yoshida, YKK's founder, carefully considered this need for mutual prosperity as he planned his business endeavors. He determined that contributions to society could best be achieved by the continual creation of value through innovative ideas and inventions. The resulting business expansion would bring prosperity to consumers and trading partners, thus benefiting all of society. For example, if a more efficient machine can be developed, productivity will be enhanced; or, if the material loss rate can be reduced, lower cost in the final product will be attained while making the best use of limited resources. Also, Tadao Yoshida felt strongly that the fruits of these innovative ideas must not be retained by any individual. Instead, they should be distributed widely to society, thereby circulating the benefit. In this way, one can prosper while making a contribution to the enrichment of all humankind. Tadao Yoshida called this the “Cycle of Goodness,” and he made this idea his fundamental philosophy of business. We retain this concept as the ongoing business philosophy of YKK.

YKK MANAGEMENT PRINCIPLE

“YKK seeks corporate value of higher significance.”



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

YKK Group companies seek to delight our customers, earn the high regard of society and make our employees happy and proud. We are improving the quality of our products, technology, and management as the means to achieve this.

We make fairness the fundamental standard for all YKK Group business operations, and this is the basis for our management decisions.

YKK CORE VALUES

Do not fear failure; experience builds success. / Create opportunities for employees.

Insist on quality in everything.

Build trust, transparency and respect.

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Editorial Policy

As we wish to have as many people as possible read this report and learn about the YKK Group, we are publishing both a printed edition, presenting our fundamental ideas, and a web edition that presents more detailed information. The URL for the web edition is <http://www.ykk.com/english/corporate/csr/eco/report/index.html>

Extent of Coverage

YKK Group companies (YKK Corporation, YKK AP Inc., and others)

Period Covered

April 1, 2015 to March 31, 2016
Published in September 2016. The next report will be published in September 2017.

Place of Distribution: Reception area of YKK 50 Building (Kurobe Manufacturing Center) and YKK AP showrooms. Requests for shipment may also be submitted to the Internet eco-hotline. <http://www.ecohotline.com/> (Japanese only)
Printed by YKK Rokko Corporation (the Group's special-purpose printing business subsidiary)

Value Created by YKK Group

The YKK Group values the words left to us by the company's founder Tadao Yoshida and the sayings based upon his words. In this section, "Value Created by YKK Group," we present a selection of these words, together with data which represents them in action.

Do not fear failure;
experience builds success /
Create opportunities for employees

Zipper production volume
8.76 billion units
(As of March 31, 2016)

Start of overseas operations
(New Zealand)
1959

Insist on quality in everything

The YKK80 Building obtained
LEED-CS Certification (Platinum)
91 points ^{*1}

Proportion of eco-friendly
products developed (YKK AP)
100%
(April 2013 to March 2016)

Registration of Japan's first
firewall testing center
(Machinery & Engineering Group
Analysis Center Laboratory)
2011 ^{*2}

Become a local

Global Network
71 countries/regions

114 companies
(24 companies in Japan and 90 overseas companies as of
March 31, 2016)

Group employees
44,250
(As of March 31, 2016)

Forest management

Build trust,
transparency and respect

Environmental Management
Survey ranking
4th place ^{*3}

Ranking of Most Desirable Architectural Products
and Equipment (Residential Window Frame
Section and Commercial Building Aluminum
Window Frame and Curtain Wall Section)
1st place ^{*4}

^{*1} The YKK80 Building (YKK/YKK AP headquarters) was the first office building in Japan to gain Platinum Certification under LEED-CS, a global evaluation index for the environmental performance of buildings, with a score of 91/110 (see Topic on page 16)
^{*2} First testing laboratory in Japan to be registered by the U.S. Consumer Product Safety Commission (CPSC) for analysis and certification of lead content in products
^{*3} Overall ranking for Manufacturing Industry in the 19th Nikkei Environmental Management Survey (Organizer: Nikkei Shimbun)
^{*4} 2015 Ranking of Most Desirable Architectural Products and Equipment (Residential Window Frame Section and Commercial Building Aluminum Window Frame and Curtain Wall Section) (Organizer: Nikkei Architecture)

Striving to Create Social Value

YKK Group Business Activities as Seen in the "Cycle of Goodness"

Professor Philip Kotler—known as the father of modern marketing—is an intellectual giant who has constructed a foundation of marketing theory, and still remains active on the front-line. In this section, we introduce part of a discussion held in October 2015 between Professor Kotler and Chairman & CEO Tadahiro Yoshida. During the talk, Yoshida, who attended Professor Kotler's lectures while studying in the United States, explained the YKK philosophy of the "Cycle of Goodness," to which the professor responded with various suggestions.



Tadahiro Yoshida

Chairman & CEO, YKK Corporation and YKK AP Inc.

Born in Toyama Prefecture in 1947, he graduated from Keio University (Faculty of Law). In 1972, he completed his MBA at the Kellogg School of Management at Northwestern University and joined YKK Corporation (then known as Yoshida Kogyo K.K.). He became president of YKK AP Inc. in 1990 and president of YKK Corporation in 1993. He became Chairman & CEO of YKK Corporation and YKK AP Inc. in 2011, a role he still plays today.

Philip Kotler

Professor, Kellogg School of Management, Northwestern University

Professor Kotler is a leading expert who has built the foundation for marketing theories and is an internationally-respected authority who is also known as the "father of modern marketing." He earned his master's degree at the University of Chicago and PhD at Massachusetts Institute of Technology, both in economics. He is also active in applying marketing theories to "solve social, economic, and political challenges."

The Ultimate Challenge of Marketing Is Creating a Better Society

Yoshida: Thank you very much for your time today. It has already been more than 40 years since I enrolled in the Kellogg School of Management at Northwestern University in the United States, where you time and time again taught us through your marketing theories about the significance of meeting different needs of different customers. I still remember it vividly.

Kotler: Indeed, I also remember it well. It brings back memories.

Yoshida: You always mentioned the importance of customer satisfaction and that companies should practice business from the customers' perspective based on the idea of "one-to-

one marketing." What impressed me the most was, that even in the 1970s, "creating a better society through marketing" was one of your research themes.

Kotler: People tend to think marketing applies only to the commercial world, but essentially, its principles can be applied to any field. In my attempts to prove this, I have constantly expanded my areas of research, studying its effectiveness across countless fields. Be it vitalization of a community, NPO activities, or administration of an art or other museum, marketing can be very effective. And in the process of my research, I hit upon the notion of "creating a better society through marketing." I suppose you could also call it "searching for a new kind of capitalism." My research continues to this day.

Similarity between Professor Kotler's Theories and the "Cycle of Goodness"

Yoshida: Back in those days, I could easily relate to your marketing lectures.

Kotler: In what way?

Yoshida: Actually, I found an idea that was similar to yours in the YKK Group's corporate philosophy, the "Cycle of Goodness."

Kotler: Goodness... That is very interesting. Is this about YKK's corporate philosophy or about its system of business?

Yoshida: I think it is both. It serves as a corporate philosophy, but it doubles as a system that acts as the cornerstone of our business.

Kotler: Very interesting, indeed. Please explain in more detail.

Yoshida: The "Cycle of Goodness" was coined by Tadao Yoshida, the founder of YKK, to express the company's philosophy in a single phrase. He was inspired as a youngster after reading a biography of the American steel magnate Andrew Carnegie. Discovering the idea that "no one prospers without rendering benefits to others" in the book and adapting it as his motto, he kept accumulating ideas that later led to the "Cycle of Goodness."

Kotler: So he had such an idea even before he started his business.

Yoshida: Yes, that is correct. In the process of developing his business, he arrived at the concept of the "Cycle of Goodness" by believing that "if we plant seeds of goodness and devote ourselves to doing good, the goodness will invariably be rewarded and the cycle of goodness will repeat itself endlessly." He was very particular about developing a business based on the "Cycle of Goodness" in the field of *monozukuri**.

Growing and Prospering Together by Sharing

Kotler: Please elaborate on the idea of the "Cycle of Goodness."

Yoshida: Yes. Concerning what a company should be, founder Tadao Yoshida held a strong belief that "businesses belong to society." "An enterprise is an important member of society, and as such, it must coexist with other elements of society. Its value will be measured by the benefits it shares with society." We have carefully considered this need for mutual prosperity as we planned our business endeavors. We determined that contributions to society could best be achieved by the continual creation of value through innovative ideas and inventions. The resulting business expansion would bring prosperity to consumers and business partners, thus benefiting society.

Kotler: It means that the sharing of

product quality and cost effectiveness, as well as profit, can contribute to the growth of society. Please explain it from the perspective of a business system.

Yoshida: Yes. Beforehand, I'd like to point out that Professor Keinosuke Ono, who studies Business Administration, conducted an interesting analysis that is worth sharing. Please take a look at the Chart of YKK Philosophy "CYCLE OF GOODNESS" (at the bottom of this page). According to Professor Ono, the "Cycle of Goodness" is centered on "saving," "employees as shareholders," and "three-party sharing." First about saving: at YKK (in Japan), part of an employee's salary and bonus are saved internally. Through the employee stock ownership plan, that part of the salary is accumulated in the form of stock ownership. That is, this business system starts with its employees.

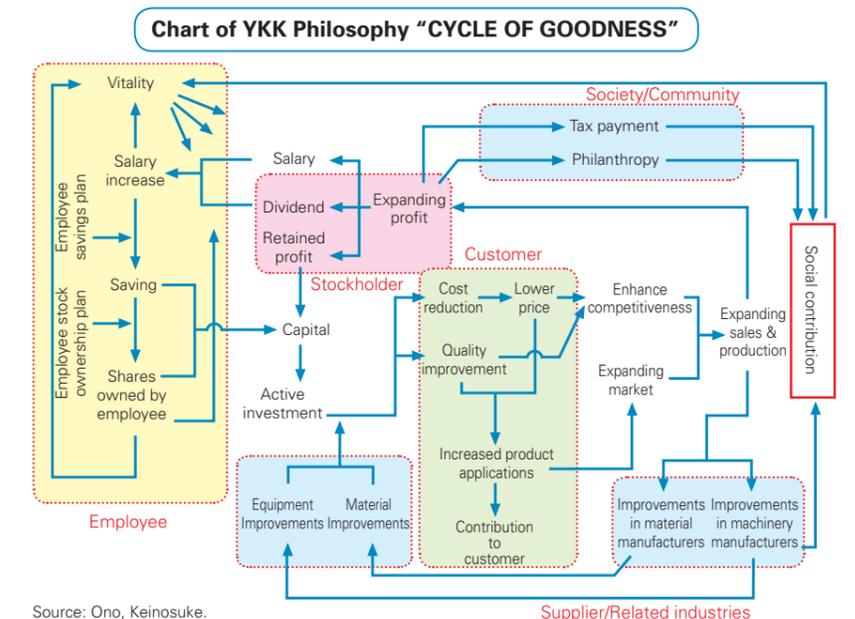
Kotler: Normally, a business system starts from the top, but your business starts with the employees. It is interesting that by acquiring shares of their company, employees become the shareholders—part-owners if you like.

Yoshida: That is correct. Professor Ono also mentioned that it is one of the unique aspects of the "Cycle of

Goodness." It came from Tadao Yoshida's concept that dividends on stock "should be provided only to those who contribute their brain and sweat to their work." At the same time, he also believed that "stock is a certificate for participating in business," which should foremost be owned by the employees. We believe that employees' earnings through the dividends, as well as their salary, are important. Another very important notion is that even if an employee is a member of a wealthy family, he or she can buy stocks only within the scope of his/her salary and bonus, so that every employee is equal.

Kotler: I see. That is very fair. Dividends seem an effective means to turn a company's performance into employee motivation. How is the accumulated capital used?

Yoshida: We actually use this money for active capital investment. Even if



Source: Ono, Keinosuke. *Misshon Keiei no Susume: Toward Mission-driven Management*

* The art, science and craft of making things.

an excellent idea is developed in the company, if we do not have enough money to allocate to it, there would be no viable business. Investment that serves as a springboard to make great strides is very important. Part of that fund is covered by the employee-owned stocks.

Kotler: So the employees are investing in growing their own company.

Yoshida: Yes. With that investment, we can improve product quality and cut costs to lower prices. This could lead to new applications for our products. Furthermore, it spurs the growth of related equipment and materials manufacturers. Lower costs directly result in higher profit and bring about increases in taxes paid and other social contributions.

Kotler: Are you open about where the money goes?

Yoshida: Of course we are open, and we maintain high levels of transparency. We conduct briefing sessions on our business plans and results for our employees, who are also our shareholders. Our management team members are busy traveling all over Japan giving briefings during the briefing season.

Kotler: This is definitely a model that makes employees happy, suppliers happy and the community happy. Since happy employees are more productive, your products get better and your market share gets better. You could also call it the cycle of "prosperity," or of "collective prosperity" —where everyone gains. It fits what I said; capitalism must do things to save itself by enjoying and sharing all of these good skills. It sounds to me that YKK is a company with purpose and passion.

Yoshida: I see. Thank you very much.

Kotler: Taking it further, how would you describe "three-party sharing"?

Yoshida: It is an idea that symbolizes the "Cycle of Goodness." It means to divide the added value stemming from

corporate activities among three parties: customers, business partners, and our company, which consists of management and employees. Customers are provided with better quality products at stable prices, while business partners receive business transactions that bring growth to them. The intention is to flourish together with stakeholders by sharing profit. Tadao Yoshida firmly believed that, by repeating this business cycle endlessly, a company can grow and prosper in an upward spiral.

Kotler: I see. Corporate activities require management, labor, suppliers and the like, but the old idea was you can make the most money by paying the least to workers, suppliers, and distributors, leaving you a bigger pot of money. The problem with that is the workers do not work so hard as they are not motivated, and they are not the best employees because you did not offer enough. And if you do not trust suppliers, changing them every year and not making enough payment, why should they build any relationship with you? In that respect, I was really impressed by the idea of the "Cycle of Goodness." They will work harder because it is like being on a team. Watch a rugby team for example; I think it can induce a sport-like, "fighting spirit" feeling.

Yoshida: That is correct. There seems a sense of unity, like you might find in a sports team.

Kotler: Further, YKK's management style can be described as "win-win-win-win." Many stakeholders including management, employees, suppliers and communities are tied in win-win relationships. It is very interesting. The business model of YKK is exciting to me too, as I continue searching for a new path for capitalism. Its approach is very unique and it seems the "Cycle of Goodness" incorporates so many clues for companies to deal with and solve the social challenges they face.

Create New Value by Facing Social Challenges

Kotler: Please tell us about any value that you think should be created at the present moment, if there is any.

Yoshida: What are the roles we should play for the betterment of our society and to bring happiness to this world as a manufacturer of components that relate to people's day-to-day lives, as world population is set to increase to over 10 billion? Going back again to the "Cycle of Goodness," I think we should aim at becoming a business that can make people happy. For example, we provide people with simple, but good products, products of value to them. We not only manufacture expensive products, but also create items that make life for regular folks much more comfortable, healthier, and richer in spirit. I am convinced that we are expected to execute *monozukuri* that can only be achieved by YKK, who looks after the entire world and society with a broad vision and flexible mindset.

Kotler: I understand very well. We have known each other for years, but we talked about YKK's business philosophy to this extent for the first time. I should have asked you about this earlier, and so, before closing, let me give you one piece of advice. You should spread what you told me today to others outside your company. You may be able to shake them up.

Yoshida: Thank you for your insightful advice. Let me keep it in mind. Thank you very much for your time today.



To Our Stakeholders

Creating New Value and Contributing to a Sustainable Society

—"Creating new value" and "contributing to the sustainable development of society" as a manufacturing company.

In our corporate operations, we endeavor to link these two concepts in an ideal manner based on the YKK Philosophy of the "Cycle of Goodness." Our founder, Tadao Yoshida, believed that "an enterprise is an important member of society," and knew that creating new value and returning this to society was necessary for mutual development and prosperity. Since 1959, we have been expanding our business around the world based upon these beliefs, taking the approach of entrusting operations to local offices, and proactively reinvesting profits locally, to give back to the community.

With operations in 71 countries/regions around the world, we aim to ensure thorough environmental compliance in each country and region through the development of communication networks and responsibility systems.

Furthermore, recently there has been a growing demand in the apparel industry for attention towards the environment and safe workplaces. Consequently, we actively endeavor to provide products made using safe materials and sound processes. We are also working toward certification throughout our supply chains in the areas of environment, health and safety, and resource conservation. Moreover, we are striving to reduce our burden on the environment through the use of natural energy sources that leverage local geographical advantages and through the construction of plants and headquarters that use advanced energy- and resource-efficient systems, in order to significantly reduce our energy usage.

In the future, with the growing need for environmental management on a global scale and resolution of societal challenges, the YKK Group will continue to create new value by increasing our product appeal and proposal capabilities, and the technological capability which underpins them, aiming for the creation of a sustainable society.



June 2016
Masayuki Sarumaru
President, YKK Corporation
YKK Corporation Environmental Policy Board Committee Chairman

Creating New Value through Products and *Monozukuri*

YKK AP Inc. creates business value suited to each age through a range of architectural products, such as windows and doors, which create comfortable living spaces, and building facades, which create beautiful cityscapes. We thereby aim to be a company that offers advanced comfort in both living and urban spaces.

Now as we are faced with electricity supply issues, greater importance is being placed upon energy-efficiency in our living environments. Windows and doors are points of significant heat loss, and therefore play an important role in energy-efficiency. One of our essential characteristics is our commitment to a user-centric approach to the art of manufacturing. Consequently, we are actively engaged in the development of high-performance, energy-efficient products that contribute to reduced energy use in homes and offices by blocking heat, providing thermal insulation, and regulating ventilation.

In our production processes, we are improving efficiency on production lines and making efforts toward earthquake-resistance and energy-efficiency within our plants, along with improving the efficiency of our distribution operations and launching "zero-emissions" initiatives. These efforts contribute to the goal of a low-carbon emission, recycling-oriented society, and we aim for manufacturing that is in harmony with the natural environment. We are striving toward the goal of comfortable living environments that are also friendly to our global environment through realization of improved energy efficiency in our products and reduction of CO₂ emissions across their life cycles, the value of which we are promoting widely throughout society.

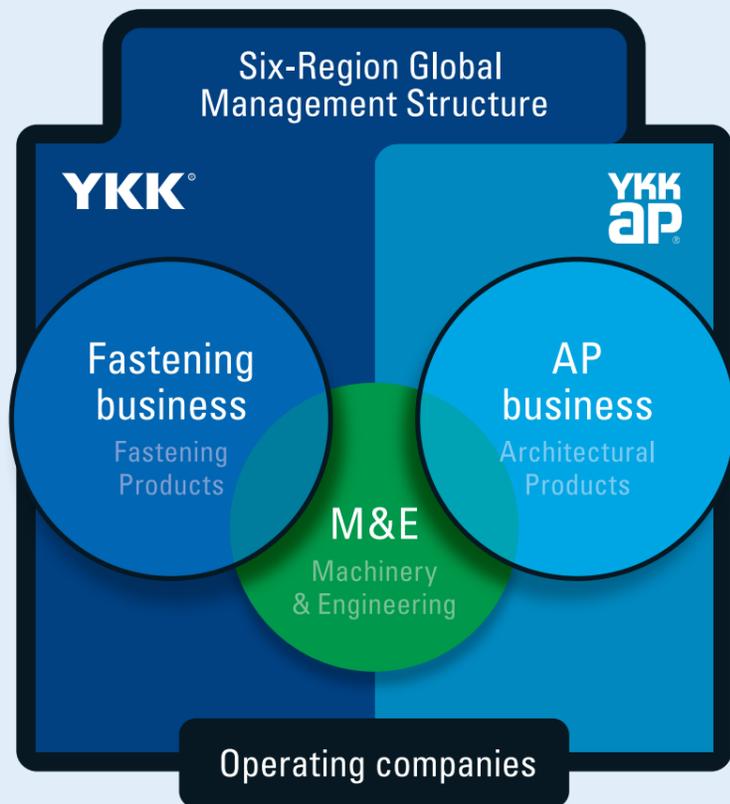
As a company committed to our products, quality, and manufacturing, we will continue to create new value and contribute to the goal of a more comfortable, sustainable society through the provision of products which lead to the improvement of our living environments.



June 2016
Hidemitsu Hori
President, YKK AP Inc.
YKK AP Inc. Environmental Policy Board Committee Chairman

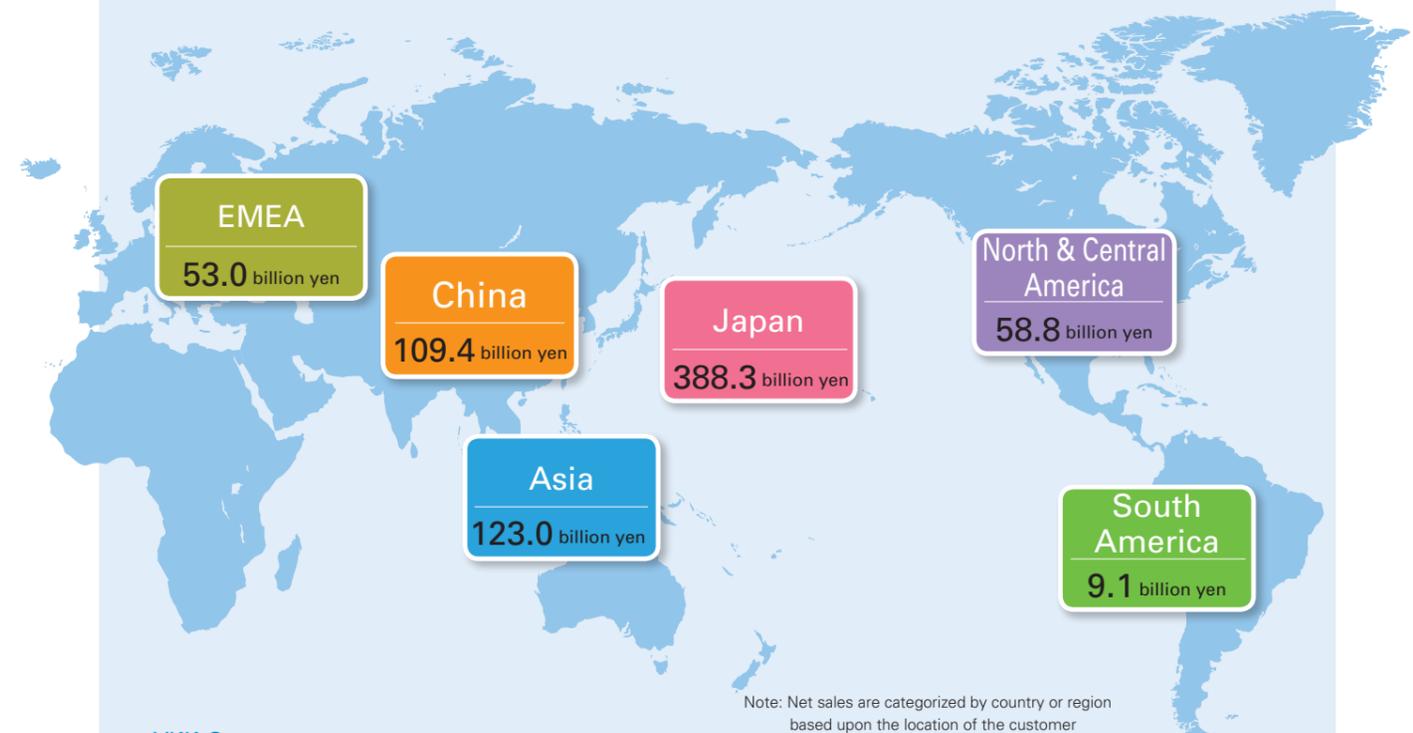
A global business management structure, with the Fastening and Architectural Products businesses as core operations

The YKK Group global management matrix consists of: The two core operations—the Fastening Business and the Architectural Products (AP) Business—supported by the Machinery & Engineering Group, which provides the two core operations with an integrated system of production; and a six-region global management structure which conducts regional business.



Conducting business under a six-region global management structure

The YKK Group is currently engaged in business in 71 countries/regions around the world. Our management system divides the world into six regional bases: North and Central America; South America; Europe, the Middle East & Africa (EMEA); China; Asia; and Japan. The global business is carried out with YKK Group companies of each region playing a leading role and making the most of their respective regional characteristics.

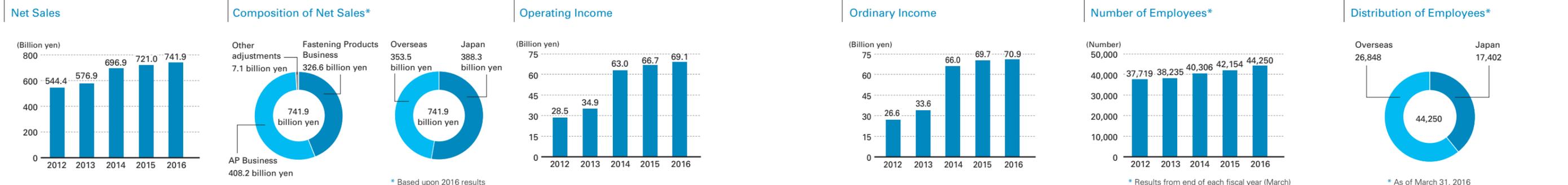


YKK Group

- **Principal businesses:** Manufacture and sale of fastening products; architectural products; and precision machinery, equipment, and molds
- **Global structure:** 114 companies in 71 countries/regions (Japan: 24 companies; Overseas: 90 companies)
* As of March 31, 2016
- **Number of employees:** 44,250 (Japan: 17,402; Overseas: 26,848) * As of March 31, 2016

Consolidated Financial Indicators For years ended March 31

For detailed financial data on the YKK Group, please refer to the company's website. <http://www.ykk.com/english/corporate/financial/index.html>



Since its foundation, the YKK Group has been committed to *monozukuri* and endeavored to offer better products based upon an integrated production system.

As we expand our business, we are constantly creating new value through *monozukuri* based upon an awareness of regional and societal issues which is considerate of society and the environment, and through our work we contribute to the creation of a sustainable society.

YKK Group Management Philosophy Research Committee

The YKK Group Management Philosophy Research Committee, launched in 2008, conducts studies to clarify the nature of the YKK philosophy with the aim of ensuring that all YKK Group employees understand and pass on these philosophies. The diagram below, created by members of the 2015 committee selected from across the globe, organizes regional and societal issues together with the philosophy and business operations of the YKK Group.



Resolution of Regional and Societal Issues through *Monozukuri**

Providing familiar products (clothing, bags, etc.) with safety and reliability

Low energy and comfortable living



YKK Group Businesses

Selling 10 billion zippers each year

Driving the switch to vinyl windows
(Aiming for 30% of windows in Japan to be vinyl windows)



Delivering safety and reliability through our materials and products



Delivering lower energy usage and healthy living

Protecting the environment through zippers

Providing zippers that eliminate environmentally restricted substances



NATULON® product line made from recycled materials (lead-free)

Brand protection through zippers

Brand protection through collaboration with customers



Deployment of publicity for educating about brand protection

Saving energy with vinyl windows

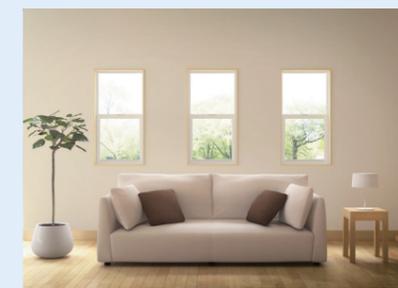
High thermal insulation performance that contributes to reduction of CO₂ emissions



"APW430", with world-leading thermal insulation performance

Healthy living with vinyl windows

Maintains a stable temperature at home to prevent heat shock



Standard "APW330" vinyl windows suitable across Japan

* The art, science and craft of making things

The YKK Group is promoting initiatives for the realization of a sustainable society through its core businesses.

► **Fundamental Approach**

Ever since YKK's founding, the spiritual pillar of all YKK Group business operations has been the "Cycle of Goodness," YKK Philosophy which embodies our belief that no one prospers without rendering benefit to others. An enterprise is an important member of society, and as such it must co-exist with other elements of society. The value of its existence will be recognized by the benefits it shares with society. In pursuing our business, YKK has devoted great attention to the way in which we can realize such mutual prosperity—that this can be best achieved by the continual creation of new value through innovative ideas and inventions. This would result in business expansion for the YKK Group, which in turn would bring prosperity to consumers and trading partners, and thus benefit all of society. All of the YKK Group companies based in 71 countries/regions around the world share the "Cycle of Goodness" philosophy and the management principle "YKK seeks corporate value of higher significance." "Fairness" is the standard on which we base our conduct.

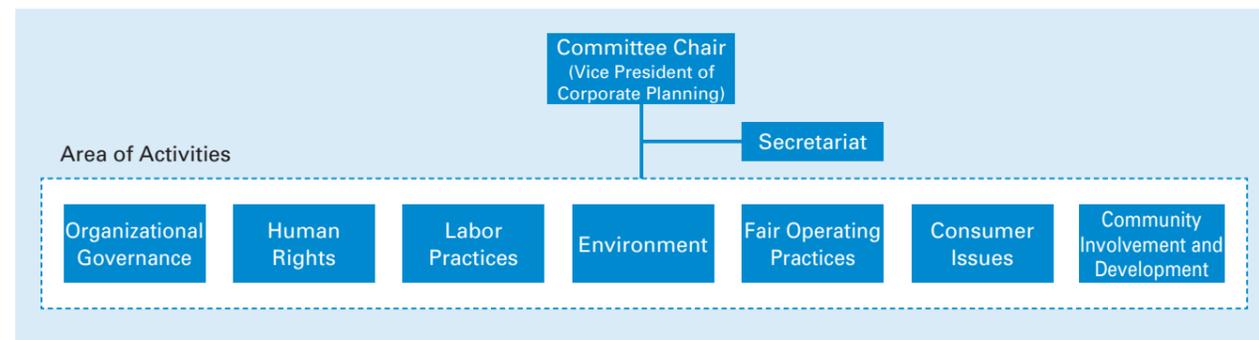
YKK Group's Corporate Social Responsibility

We do not take lightly our responsibilities as a good corporate citizen, not only towards society but also in the execution of fair business management. Significant changes are taking place in the environments that surround the YKK Group. Whether in Japan or abroad, it is our duty to respect diversity—of cultures, customs, and viewpoints—and play a role in the development of society through our business operations. The YKK Group is committed to helping build a more sustainable society through its main businesses. The YKK Group promotes initiatives aimed at realization of a sustainable society through its core businesses by implementation of the YKK Philosophy "Cycle of Goodness," and its Management Principle "YKK seeks corporate value of higher significance."

► **Promotion Structure**

The YKK Group supports the activities of responsible divisions in each region with a Group-wide perspective in the light of the seven core subjects of ISO 26000. We established an Investigation Committee in April 2014 to be able to grasp Group-wide activities in more detail.

Structure of the Investigation Committee



Message from Committee Chairman



Satoshi Honda
Investigation Committee Chairman
Vice President
Corporation Planning
YKK Corporation

Since its launch in 2014, the committee has met five times to discuss how the entire YKK Group can fulfill its social responsibilities and the kind of value that the Group can bring to society.

What we have realized is that, while we already have foundational strength in the YKK Philosophy "Cycle of Goodness," as we expand globally, we must consider what action to take in response to the issues of the respective markets and regions and to the various expectations of stakeholders.

Moving forward, we believe that must leverage this strength to help reform our actions, while also linking this to the resolution of society's problems through our core businesses and the provision of new value to society.

For further details, please see <http://www.ykk.com/english/corporate/csr/index.html>

► **Activity Aims and Results**

We established key themes and measures for each core subjects of ISO 26000, and are driving activities with goals set for this year. Below, we introduce notable activities for 2015 together with future goals.

Notable Activities in 2015 and Goals for 2016

Core Subjects	Key Themes and Measures	Notable Activities in 2015	Goals for 2016
Organizational Governance	Establishment of management structure	Meeting of the Investigation Committee (3 times/year)	Continued meeting of the Investigation Committee (3 times/year)
Human Rights	Establishment of the YKK Group Human Rights Policy and deployment throughout group companies	<ul style="list-style-type: none"> Established the YKK Group Human Rights Policy Posted the policy on the company website for communicating to external parties Shared the policy with YKK Group employees worldwide 	Application of the Human Rights Policy to the operational level at each company (102 YKK Group companies in Japan and overseas)
Labor Practices	Non-discriminatory provision of opportunities for nurturing human resources and understanding the current situation at YKK Group companies	Shared current situations and challenges at global meeting of personnel management officers	Quarterly monitoring of situations (102 YKK Group companies in Japan and overseas)
	Continuous efforts to improve safety and hygiene, and provision of an information-gathering system	<ul style="list-style-type: none"> Established a medium-term YKK Group Safety and Hygiene Policy Revised the YKK Group Industrial Health and Safety Standards Established a global information-gathering system 	<ul style="list-style-type: none"> Utilization of Group information regarding occupational accidents Designation of Workplace Ruled by Special Safety Guidance for all overseas businesses Communication and reinforcement of YKK Group Industrial Health and Safety Standards overseas (all Group companies) Establishment of a system to check safety and hygiene efforts overseas
Environment	Continued performance and enhancement of environmental management auditing	Performed environmental management auditing overseas (15 YKK Group companies)	Continued performance of environmental management auditing overseas (15 YKK Group companies)
	Sustainable procurement; listing up adaptations to and risks of climate change	Revised assessment of related risks at each business	Revision of assessment of related risks throughout the Group (all Group companies)
Fair Operating Practices	Enhancement of CSR procurement; understanding of situations at suppliers and instructions for improvements (YKK)	Performed supplier survey in Japan (106 companies) Performed supplier survey in China (55 companies)	Perform supplier survey in Japan (105 companies) <ul style="list-style-type: none"> Perform supplier audit in China based upon results of supplier survey Commencement of supplier survey at businesses in the Asia region (P.T. YKK ZIPCO Indonesia; YKK Taiwan Co., Ltd.)
	Drive compliance based upon YKK Group Compliance Standards	Completed YKK Group company assessment in Japan and overseas (92 companies)	Completion of YKK Group company assessment in Japan and overseas (102 companies)
Consumer Issues	Improvement of traceability	Confirmed and revised validity of traceability for inspection data for materials received at businesses in the Asia region (10 companies) (YKK)	<ul style="list-style-type: none"> Revision in the Asia region (ongoing) (YKK) Confirmation of validity of traceability for inspection data for materials received at businesses in China (4 companies) (YKK)
		Launched working group to investigate the improvement of traceability (YKK AP)	Inquiry into creation of information management system related to traceability (YKK AP)
	Promotion of elimination of harmful substances (YKK)	Enhanced points of contact with consumers in coordination with administrative policy (4 cases) (YKK AP)	Enhancement of points of contact with consumers in coordination with administrative policy (YKK AP)
		Distributed information through industry groups (2 cases) (YKK AP)	Information distribution through industry groups (ongoing) (YKK AP)
Creation of a system to protect consumer rights (YKK AP)	<ul style="list-style-type: none"> Completed switch-over from four targeted materials (7 items) APEO (1 item), organotin compound (1 item), naphthalene (4 items), fluorine-containing water repellent (1 item) 	<ul style="list-style-type: none"> Promotion of switch-over from two targeted materials (3 items) Organotin compounds (2 items), naphthalene (1 item) 	
	Revised use and care guidebooks for vinyl window products (2 books)	Revision of use and care guidebooks (as required)	
	Provided information on the use and care of "APW430" and "APW431" through QR codes	Provision of use and care information via QR codes (5 items)	
	Published safety information regarding product accidents on the company website (2 cases)	Publication of safety information on the company website (as required)	
Development and popularization of products that consider the entire life-cycle and the three R's (YKK AP)	Organized information related to electrical components	Enhancement of electrical components	
	100% eco-friendly products developed	100% eco-friendly products developed	
Community Involvement and Development	Completed calculation of contribution to CO ₂ reduction through product life-cycles	Promote the results of CO ₂ reduction (energy efficiency) through product life-cycles to customers	
	Enhancement of stakeholder dialogue	Implemented management dialogue (1 time) Implemented regional community dialogue (Kurobe City, Toyama Prefecture) (1 time)	Implementation of management dialogue (1 time) Implementation of regional community dialogue (Kurobe City, Toyama Prefecture) (1 time)

2015
Notable
Initiatives

Use of natural energy at the slide fastener machine parts plant

"Open Louver" by YKK AP received the Chairman's Award (Excellence Award) at the Eco Products Awards

Opening of the Tampopo Child Center within the plant

JAPAN

Net Sales Trends by Region



Background

Companies engaged in *monozukuri* (craftsmanship, manufacturing) have a responsibility to convey its interest and appeal to the younger generation for them to continue these traditions. Furthermore, we believe that contributing to the vitality of local communities through such activities is one of the important social responsibilities of a company.

Communicating the Appeal of *Monozukuri* to the Young People Who Will Lead Tomorrow

"Craft Lab by YKK," opened in September 2015, is a venue that was established for community events, where various people can freely interact and exchange information in relation to *monozukuri*.

The aim of opening this venue is to convey the excitement and wonder of Japanese *monozukuri* to many people, especially children and young people, through zippers, buttons, and other familiar objects used in daily life. Displays enable anybody to learn about the mechanism, history, and latest developments of zippers and other fasteners. In addition, we host events such as craft workshops using YKK zippers and buttons in the workshop area, and make spaces available for

outside groups to hold a diverse range of events and workshops related to *monozukuri*.

We also hope that the Craft Lab can support young creators engaged in *monozukuri* in the local "Kachikura" area (Okachimachi, Kuramae, and Asakusabashi) in order to contribute to the development of the local community. We support local creators by hosting fashion-related seminars and exchange meetings, and through participation in the Monomachi event held each year in Kachikura to communicate the appeal of the area and of *monozukuri*. We are expanding initiatives which contribute to the vitality of the community in collaboration with these creators.



Workshop space for experiencing *monozukuri*



Craft Lab by YKK



The Creative Lounge is open for use by designers and creators

Background

In recent years, the Japanese construction industry has experienced a chronic ongoing shortage of builders due to aging and a fall in new recruits. With the expected rapid growth in construction demand in the lead up to the 2020 Tokyo Olympic and Paralympic Games, it is imperative that we transfer skills and nurture young construction technicians in order to secure sufficient human resources.

The Construction Skills Training Academy for Young Technicians

As a manufacturer of architectural products, YKK AP develops and manufactures products for construction such as windows and window frames. However, if there are no construction technicians capable of fitting them correctly, construction cannot go ahead. YKK AP and the YKK AP Group Construction Cooperative, a network of companies that cooperate to support construction technicians, therefore established the Construction Skills Training Academy in 2013 and are endeavoring to nurture young technicians.

The Training Academy aims to shorten the period for window frame and curtain wall construction technicians to achieve full training, usually considered to require at least 10 years, down to six. The initiative aims to ensure enhancement of the technical skills of

participants as they gain practical experience. The students receive intensive training across three levels lasting two years each—novice, intermediate, and advanced.

YKK AP Group Construction Cooperative members teach the classes at the Academy in order to train the YKK AP standard of construction. Under the assumption that participants will learn more detailed techniques in their regular workplace, the curriculum is designed to thoroughly teach fundamental skills and theory. It also provides a rare opportunity for participants to interact with colleagues of their own age, and to compete with and encourage one another. Many have commented that it gave them the courage to persevere until they attain the skills to work independently.



Participants at the Academy



Teaching practical skills

As of February 2016, there are already over 100 graduates of the Academy working across Japan. We hope that in the future some of these graduates will also go on to become teachers at the Academy. Moving forward, we will continue to collaborate with the Construction Cooperative to address skill transfer and human resource training, which are issues facing the entire construction industry.

TOPIC

The YKK80 Building Is the First Office Building in Japan to Obtain LEED-CS Platinum Certification

The YKK80 Building (Chiyoda-ku, Tokyo) gained Platinum Certification under LEED-CS*, a global evaluation index for the environmental performance of buildings. In line with our belief in sustainable corporate activities, it is essential that our headquarters has a high level of environmental performance. Through the use of seismic isolation construction designed for a 120-year life span and advanced energy- and resource-saving systems, we aim to reduce energy consumption by 60% compared with regular office buildings.



Exterior of YKK80 Building

* Leadership in Energy & Environmental Design (LEED) is a system developed and operated by the U.S. Green Building Council (USGBC) for the certification of green buildings and area development. Under the system, projects earn one of four rating levels—Certified, Silver, Gold, or Platinum—based on points earned. Certification standards vary depending upon the use of the building, with the Core & Shell (CS) rating system applying to the structure and building-level systems of newly constructed tenant buildings.

NORTH & CENTRAL AMERICA

**2015
Notable
Initiatives**

- YKK (U.S.A.) Inc. installed solar power system on plant roof
- Tape Craft Corporation received Safety Award from Alabama (U.S.)
- YKK El Salvador S.A. DE C.V. implemented dengue fever countermeasures for employees

NORTH & CENTRAL AMERICA

● Net Sales Trends by Region



Background

Reducing impact on the environment is a significant issue for all companies. The apparel industry, which makes many everyday products, also creates many environmental issues during the manufacturing process. The industry faces challenges including reduction of energy used during product processing and water used in washing processes.

Reducing Our Environmental Impact and Achieving *Monozukuri* That Our Customers Will Choose

Through regular revision of manufacturing processes, YKK (U.S.A.) Inc. has worked to not only improve product quality but also to reduce its environmental impact. For example, with the special ELEMENTS finish used to produce buttons for jeans, we have achieved a reduction in our environmental impact that was not possible with the previous product. Processing, which typically uses an electroplating treatment, was revised to a process that does not use this treatment, enabling the maximum reduction in chemicals used, and minimization of water and electricity usage.

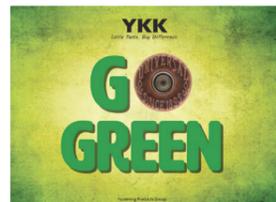
Innovations were also made to reduce industrial waste output by the use of a detergent-free bio-clean process in the de-greasing conducted prior to plating,

and the use of a medium made of crushed walnut shells as a substitute for the artificial silica sand generally used in equipment for later filtration and purification of waste water.

The result of such initiatives in manufacturing and processing has been the achievement of a 75% average reduction of water usage and 90% average reduction of electricity usage. These innovations, which minimize environmental impact in manufacturing and processing, along with our commitment to *monozukuri*, have earned the approval of a wide range of customers. Moving forward, YKK (U.S.A.) Inc. will continue to drive initiatives from the scene of *monozukuri* to reduce its environmental impact.



ELEMENTS sample



Slogan for environmental impact reduction being promoted at YKK (U.S.A.) Inc.



Bio-cleaning process

Background

Hurricanes frequently cause widespread destruction on the U.S. mainland. A cause for the total destruction of many homes is debris carried by the strong winds that destroy windows, doors, and glass, resulting in the penetration of wind, which blows out the walls and roof from the inside. For this reason, improvement of the performance of windows and doors is an issue facing the region.

Minimizing Destruction Caused by Strong Winds through High Technological and Product Development Capabilities

YKK AP America Inc. sells ProTek® and other products designed to minimize damage caused by strong winds such as those caused by hurricanes for public facilities, homes, and commercial premises, mainly in North America. In developing this product, exhaustive research was conducted in various fields to achieve the highest level of strength in the U.S., while also providing thermal insulation and air-tightness. One example is the implementation of repeated strength testing during actual hurricanes in Miami-Dade County and Broward County, Florida, where standards are especially stringent due to the frequent occurrence of destructive hurricanes. As a result, ProTek® has achieved enough strength to withstand

winds from the most powerful hurricanes to have hit the U.S. mainland over the last 15 years. It has gained high acclaim for fulfilling strict standards, and has passed the highest industry standards internationally as well as U.S. building regulations and codes.

Such standards for construction and architectural products have been frequently revised to increase stringency in order to address the challenge of preparing for natural disasters. YKK AP America Inc. is working to ensure that it has a research and development structure in place, never failing to gather the latest information, and speedily transferring it into technological and product development.



Application of ProTek®



A high school which uses ProTek®



Quality testing of ProTek® in the field

YKK AP America Inc. will continue to leverage its high technological and product development capabilities, garnered through ProTek® and other products designed to withstand hurricanes, in order to contribute to the minimization of damage caused by natural disasters on the U.S. mainland.

TOPIC

Eradication of Mosquitoes to Hold Back the Spread of the Zika and Chikungunya Viruses

In Honduras, controlling the *Aedes aegypti* mosquito, which spreads the Zika and Chikungunya viruses, has become a major challenge. The symptoms of Zika and Chikungunya are similar, including fever, joint pain, headache, muscle fatigue, and rash, and at present there are no vaccines to prevent them. In order to protect children, who are particularly vulnerable, YKK Honduras S.A. is engaged in mosquito extermination in places such as kindergartens and elementary schools around its production plants.



A YKK employee works to exterminate mosquitoes at a kindergarten

**2015
Notable
Initiatives**

YKK do Brasil Ltda. formed a volunteer team for emergency response

YKK do Brasil Ltda. and YKK Argentina S.A. conducted employee health initiatives including efforts against dengue fever

Industria YKK (Chile) Ltda. implemented regular evacuation drills in anticipation of a major earthquake

SOUTH AMERICA

Background

Brazil is one of the BRICs countries, which have experienced strong economic growth since the 2000s. However, in 1972, when YKK established its zipper business here, inflation was rising sharply following the first oil crisis and poverty was rapidly increasing. The country was in need of economic growth.

Linking Japan and Brazil through Food

YKK, which entered Brazil in 1972 with its zipper business, launched a coffee business in 1985 in order to contribute to Brazilian society by reinvesting profit earned locally. Underpinning this is the belief of YKK's founder Tadao Yoshida, who proposed that advancement into the fields of clothing, housing, and food is the foundation of business management.

YKK is growing not only coffee beans but also beef cattle, pigs, and dairy cows on agricultural land acquired in Bonfinópolis in the state of Minas Gerais. This has contributed to local economic development, with particular focus on the areas of food and agricultural technology, by employing local residents and nurturing human resources through vocational training and the transfer of skills.

In January 2016, YKK opened Café Bonfino in Sumida, Tokyo, directly importing coffee beans from YKK's farm and roasting them in-store. This is a clear example of YKK's integrated production system being put into action in an effort to tackle both ingredients and manufacturing facilities for the purpose of better *monozukuri*.

In addition, we are involved in various initiatives to build ties between Japan and Brazil through food. One example is a festival, Festa e Exposição do Kaki Fuyu, which has been held since 15 years ago by the Japanese community which resides in the São Paulo suburb of Piedade. It is held to promote the Fuyu persimmon (*kaki* in Japanese) which has been a renowned product of the district since the 1950s, and YKK do Brasil Ltda. has supported the event since it began.



Local employees with harvested coffee beans



Interior of Café Bonfino



Award winners at the Festa e Exposição do Kaki Fuyu

Net Sales Trends by Region



Background

Brazil, with the largest land area in the South American continent, has suffered from environmental destruction including illegal logging and desertification in the Amazon basin. Environmental Education and Education for Sustainable Development (ESD) are measures that must be implemented for the region's future.

Protecting Brazil's Natural Environment through Continuous Education

YKK do Brasil Ltda. is actively implementing an ESD program for children including the families of its employees. Since 2014, the company has supported the environmental education project "Naturando" hosted by the local authorities in Sorocaba, São Paulo, where the company's plant is located, holding social studies lessons on the environment for children aged from 7 to 11 years old with the theme "Coopera Mundo" (Cooperate with the World). The company also supports the industrial waste recycling program designed by the city with an environmental theme, providing a portion of waste from the plant for making playground equipment. Materials recycled under this program are reused in a way

such that children can learn about the importance of resources as they play.

Other initiatives include an environmental awareness week, during which the company holds events including tree-planting, an art contest, a plastic bottle-recycling craft workshop, and an exercise class, all targeting the children of employees. During the latter half of the program, the children bring toys that they no longer use to an event where they can exchange them with one another. The children are happy to receive the toys that belonged to someone else, and it also provides an opportunity for them to learn the importance of giving things away that they do not need as well as the importance of waste reduction and the value of resources.



Plastic bottle-recycling craft workshop



Exercise class

Through environmental education, YKK do Brasil Ltda. will continue to offer opportunities for children to think about considerate use of our limited resources, and will contribute to the nurturing of children who will protect the future of Brazil's natural environment.

TOPIC

Initiatives in Argentina to Promote Reuse

YKK Argentina S.A. undertakes initiatives to promote reuse by supplying free-of-charge reusable waste and materials from the plant to those who need them. For example, cardboard boxes used for transporting goods are not disposed of, but are instead donated to Fundación Reciduca, an organization that supports the education and independence of Argentinian children. In the same way, waste nylon, plastic chips, and paper are donated, helping to break down barriers both inside and outside of the company to expand the promotion of reuse.



Separation of waste materials at the plant

EMEA
(Europe, the Middle East and Africa)

**2015
Notable
Initiatives**

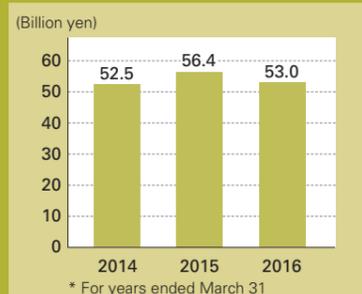
YKK France SARL improved its work environment for employees with disabilities

YKK España S.A. made donations for diabetes research

YKK Southern Africa (Pty) Ltd. donated old PCs to a charity organization

EMEA

● Net Sales Trends by Region



Background

One issue facing the fashion industry, with its fast-moving trends, is the training of talented young people with new ideas. However, one limitation on this is that there are few opportunities for those studying fashion to secure funds and come into contact with new materials for designing imaginatively.

Contributing to the Training of Talented Youth in Communities at the Forefront of Fashion

In Europe, a source of trends in the fashion industry, there are different social needs for the YKK Group to fulfill from other regions.

The YKK London Showroom was opened in London in December 2015 by YKK Europe Ltd., YKK Group's local European subsidiary. It targets buyers in Britain and others involved in the European fashion industry, acting as an information source and exchange forum, while also playing a role as a base to support the next generation for the future of the industry.

Since 2005, YKK has been backing International Talent Support (ITS), a fashion design competition for students. We also endeavor to create an environment where talented students,

who will be the future of the fashion industry, can explore their ideas without restrictions. We provide students with funds for purchasing materials and opportunities to get in contact with the latest materials. In addition, we are supporting fashion shows in countries such as Poland and Turkey where art and fashion students are able to showcase their creations. We are deploying a wide-range of support activities for the development of the fashion industry overall throughout the EMEA region.



Inside the London Showroom



Seminar for young designers in Turkey



Winner of the ITS 2015 YKK Award

Background

In Egypt, which is suffering from high unemployment and inflation, approximately 40% of the population is living in poverty. In areas with a large proportion of desert, such as Nubia in the south, there is almost no industry aside from tourism, and, for cultural reasons, the issue of economic independence for women is a pressing challenge.

Support for the Economic Independence of Women in Egypt

YKK, which operates its business in 71 countries/regions worldwide, has also advanced into many regions facing economic problems and is striving to help resolve these issues through its products.

Since 2011, YKK Egypt S.A.E. has supported Japan Overseas Cooperation Volunteers of the Japan International Cooperation Agency (JICA), providing zippers free of charge to women living in the Nubia region in southern Egypt to assist them in achieving economic independence.

Until now, women living in the Nubia region, where the main industry is tourism, have received support from the government and from overseas, and have produced hand-made tote-bags and pouches using materials procured

locally, selling them to tourists as souvenirs. With this support, a system was established to the point that they could sell their products. However, they had recently faced problems when their goods had not sold as well as hoped. Locally-procured zippers are fragile, and consequently the goods were not popular with Westerners, who are their main customers.

Upon learning this from the Japan Overseas Cooperation Volunteers, YKK Egypt S.A.E. leveraged the know-how garnered through past operations, and was able to supply the women with the most suitable zippers from among its products after consideration of the actual target consumers, in regards to zipper size and the style and frequency of usage. Through this, the quality of



A woman making pouches



Finished bags



Zippers used

the handcrafted goods made by these women improved dramatically, and they came to be prized among tourists.

YKK will continue in its commitment to product quality, contributing to the resolution of problems arising around the world.

TOPIC

Cultivation of Vegetables in Swaziland

YKK Southern Africa (Pty) Ltd. provides technical support and progress tracking for communities through its Swaziland regional support activities team to assist them in cultivating vegetables using sustainable agricultural methods. Under the condition of chronic drought and water shortages, it has been undertaking these efforts since 2013, having expanded over time to produce 46 rows of crop. Through this technical support, YKK will continue to contribute to the development of Swaziland society, helping to fulfill basic food and health needs.



Field where a variety of vegetables are grown

2015
Notable
Initiatives

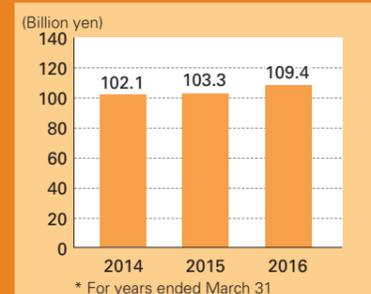
Shanghai YKK Zipper Co., Ltd. awarded as an "Energy-Efficient Company with Advanced Emissions Reduction," and "Environmentally-Friendly Company" by Shanghai's Minhang District for the second year running

YKK Zipper (Shenzhen) Co., Ltd. installed large-scale solar power system on plant roof

YKK AP (Suzhou) Co., Ltd. implemented rubbish collection at Jinji Lake and other environmental conservation activities

CHINA

Net Sales Trends by Region



Background

Recently, harm caused by counterfeit and pirated goods has spread worldwide, and the resultant damage is said to be worth 80 trillion yen globally each year. Such counterfeit and pirated goods not only damage the value of brands which have been built up over many years, but are also deemed to be a potential source of funding for criminal organizations.

Initiatives to Combat Counterfeit Goods in China

YKK undertakes various measures to eradicate counterfeit YKK zippers and the products which use them.

The aim in this is not only to prevent deterioration of YKK's brand image caused by the circulation of counterfeit YKK zippers, but also to protect brand reliability for customers who use our zippers. Because imitations of our customers' brands often also use counterfeit YKK zippers, the eradication of such zippers can also assist in the elimination of counterfeits of our customers' brands.

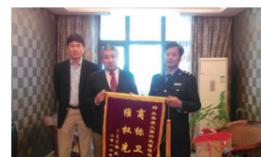
Of course, the initiatives of just one company are not enough to advance effective countermeasures. YKK is driving the Brand Protection Partnership (B.P.P.) for the protection of brands in collaboration with our customers and other related companies. This initiative deploys brand-protection efforts

under the slogan "Protect Together," while also striving to build relationships with the relevant government authorities, including customs, to assist in the smooth operation of crackdowns against plants that manufacture counterfeit goods and seizure of these goods in customs.

YKK is also making initiatives in China, where there are many damages reported due to counterfeit goods. These initiatives include assisting in crackdowns against businesses that manufacture and sell counterfeit YKK zippers, and assisting customs in preventing the export of counterfeit goods from China. In addition, because there has recently been an increase of on-line sale of counterfeit goods, YKK is also bolstering measures aimed at the elimination of counterfeits in cooperation with e-commerce operators.



Publicity to educate consumers about brand protection



YKK employees visiting a government agency



Seminar for customs officers

Background

The Chinese manufacturing industry, which has seen rapid growth, has many businesses with inadequate employee training systems, and issues of disparity in quality are leading to a lack of safety in goods produced. The industry is faced with the challenge of securing reliability in the safety and quality of its goods.

Offering Training Programs for Partner Businesses

The YKK Group places high priority on the provision of training programs to support the improvement of technical skills for employees at partner businesses in order to boost product quality.

One example of this is in YKK AP subsidiaries which have bases across China. These subsidiaries are conducting training for partner firms on the installation and manufacturing of windows, their main product. In this training, participants gain fundamental knowledge to ensure the quality of finished products, such as the names and vocabulary related to parts and the compliance rules for manufacturing and installation. The training also reviews the standard procedures and rules established by YKK AP in order to ensure thorough uniformity of processes and methods,

which had previously varied between companies, and to prevent variances in quality. The program consists not only of lectures and practical training at the training center, but also involves follow-up workplace training for participants in an effort to raise the standard of technical capabilities.

In 2015, training was conducted 30 times, with a total of 115 participants from 36 partner firms. We believe that such cooperation with partner firms leads to the improvement of product quality and also differentiation from other companies.

Furthermore, we believe that it is important to raise the level of awareness of each employee in order to enhance the workplace environment, such as health and safety. The training conducted by



Classroom training for partner firms



Practical training at the installation training center



Follow-up training

the YKK Group strives to cover not only technical aspects, but also workplace health and safety. We hope that efforts to increase knowledge of employees at partner firms regarding health and safety can help us to eliminate workplace accidents and disasters.

TOPIC

Information Session on Energy-Conserving Vinyl Windows

Dalian YKK AP Co., Ltd. held an information session on energy-conserving vinyl windows to enable more people to understand the environmental and health benefits of vinyl windows. The participants, numbering 240, were not only from business partners, customers, and installation companies but also included environmental experts from the Dalian City Energy-Saving Building Association and elsewhere. In the future, we plan to hold similar sessions, using our products to facilitate communication with all of our stakeholders.



The information session

2015
Notable
Initiatives

Programs to support education through soccer

YKK India Pvt. Ltd.'s work training center conducts initiatives to support women's independence

PT. YKK AP (Indonesia) awarded first place Top Product Property 2016 (Aluminum architectural goods division) for second consecutive year

ASIA

Net Sales Trends by Region



Background

Fastening products, used in both clothing and bags, come into direct contact with the skin. In countries and regions where laws pertaining to product safety are not well-developed, there are many products which contain harmful substances such as lead, creating serious concerns as a cause for health problems.

Education on the Risks of Harmful Substances by Replacing Zippers

In some parts of Asia, including the Philippines, there are many cases where children's everyday uniforms and school bags have zippers which contain harmful substances such as lead. YKK Philippines Inc. considers this to be a social concern, and with the cooperation of the NGO Eco Waste Coalition, implemented a program to replace such zippers with safer ones. Through this initiative, over 200 zippers containing harmful substances were replaced with safe YKK products that are free of such substances.

This innovative initiative gained much attention locally and was widely reported in the media. As a result, more people became aware of lead as a harmful substance and about the health risks

of prolonged exposure. In addition, it provided the opportunity to inform citizens that, in some cases, poor quality clothing and other everyday items can contain harmful substances. Moving forward, YKK Philippines Inc. will continue to provide products that are free of harmful substances, and will contribute to the reduction of health risks, particularly for children, by providing accurate information in relation to health risks.



Group photo of campaign staff



YKK employees replacing zippers



Children wishing to replace their zippers

Background

Asia has a large diversity of climates across different regions, such as those with tropical or humid climates, those with distinct wet and dry seasons, and areas affected by powerful typhoons. As a consequence, products must be developed for each living environment, factoring in health implications and potential large-scale damage from wind and water. There are a diverse range of requirements in terms of a healthy and safe residential living environment.

Improving Residential Living Environment through Our Technical Capabilities

YKK AP is striving to develop core window and door products suited to the needs unique to the hot and humid climate of the Asian region.

In Taiwan, which suffers significant wind and rain damage from frequent major typhoons, there is a need for products which can withstand strong winds and heavy rains. YKK AP has developed products which are high water penetration resistant based upon these needs, and has deployed them as the YRB-A series. The quality and technical capability of the Architectural Products division of YKK Taiwan Co., Ltd. is recognized by local consumers, particularly in the field of high-end residential complexes. In addition, those related to the construction industry have lauded the contribution made by YKK's outstanding serviceability and stylish exteriors to the development

of Taiwan's beautiful architectural environment, leading to YKK Taiwan Co., Ltd.'s selection as the number one "Manufacturer of the most desirable architectural products and facilities for use in an ideal home" for the fourth consecutive year.

The company is also deploying its NEXSTA series in Southeast Asian countries such as Indonesia, Malaysia, Thailand, and Vietnam. This series ensures reliable performance, which is an important fundamental element for doors and windows, and also takes into consideration ease-of-use, safety, and security. YKK has also gained popularity among many consumers for its large doorways over three meters in height, which were highly sought-after in the region, and for its consideration of energy-efficiency, which will be needed in the future.



YRB-A on display in the showroom



One of the NEXSTA products



One of the NEXSTA products

Moving forward, YKK AP aims to continue responding to the differing climates of various countries and regions, and to meet the diverse needs and expectations of our customers. We will continue to leverage our high technological and product development capabilities to create high value-added products, and to contribute to the improvement of residential living environments and safe homes in the Asian region.

* "Manufacturer of the most desirable architectural products and facilities for use in an ideal home" for four consecutive years (2012-2015) in the window frame division (sponsor: Taiwan Building Aesthetics Cultural and Economic Association; an incorporated association)

TOPIC

Health Classes by Doctors for Local Residents and Schools

Indonesian life is greatly affected by the living environment, including infrastructure elements such as water supply, and by the hot and humid climate. There is a need to improve health and hygiene awareness and knowledge throughout the region. For this reason, P.T. YKK Zipper Indonesia is working in collaboration with local doctors to conduct health classes for local residents. This initiative is useful for the health and hygiene of residents, covering basic areas such as correct handwashing and teeth brushing techniques.



A health class sponsored by YKK

Guided by the YKK Group Environmental Pledge, formulated in September 1994, we are engaged in environmental activities in all areas of our business operations. Moreover, every four years since 2001, we have drawn up mid-term environmental management principles and policies. The Fourth Mid-Term Environmental Management Principles, launched in 2013, set out environmental policies centered on initiatives under the four priority themes of corporate governance, green innovation, creating shared value (CSV), and sustainability.

Fourth Mid-Term Environmental Management Principles

Contributing to a Sustainable Society Pursuing a Low-Energy Consumption, Energy-Saving Approach

In line with its environmental pledge, the YKK Group pursues environmentally-friendly operations and leverages its technological capabilities to create new value and to help develop a sustainable society.

Four Priority Themes

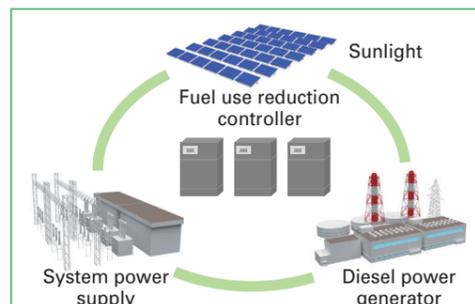


Initiatives to Tackle Climate Change

The YKK Group continues to implement CSR initiatives, and has set itself a target of 30% reduction in CO₂ emissions by 2030 (compared with 2013 levels) in order to further expand these. In addition to conventional initiatives for saving electricity, the Group also implements measures that leverage its technological capabilities, including a highly efficient manufacturing system, energy-saving technology, and facility development, based upon the key concept of "pursuing a low-energy consumption, energy-saving approach." Specifically, the company is proactively engaged in efforts including the introduction of an internal consumption-model solar power system that does not use the feed-in tariff (FIT) system, and the expansion of an air-conditioning system that uses groundwater heat, based on a policy of increasing adoption of renewable energy.

Introduction of Solar Power Systems

YKK Bangladesh Pte. Ltd. has introduced hybrid power generation combining solar and diesel systems, thereby reducing annual fuel consumption by 90,000 liters and CO₂ emissions by 265 tons. This new power generation system was implemented through the use of a Joint Crediting Mechanism (JCM), whereby a portion of CO₂ emission reduction achieved through technology introduced and systems popularized in developing countries is counted towards emissions reduction in Japan.



Introduction of Air-Conditioning Using Groundwater Heat

Each YKK Group base in Kurobe, Toyama Prefecture, is introducing a high-efficiency air-conditioning system that uses the stable heat from groundwater in the alluvial fan of the Kurobe River. Following confirmation of the high efficacy of the groundwater heat air-conditioning system introduced in 2012, the system was introduced in six locations in 2015, including the slide fastener machine parts plant. We will continue to expand introduction of the system in consideration of the impact on regional environments.

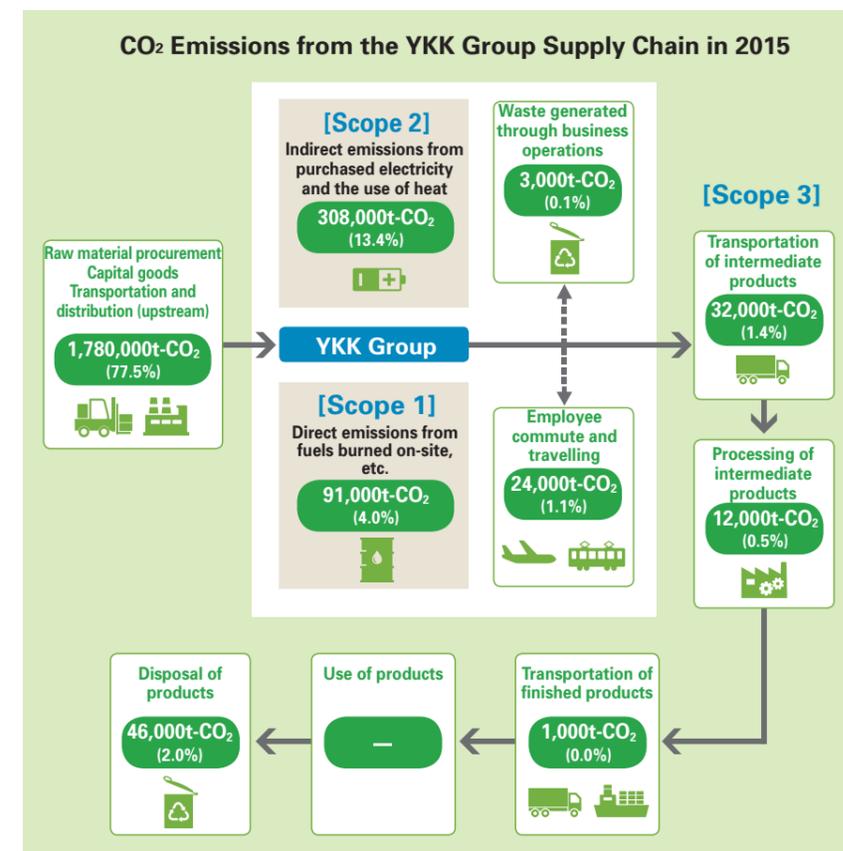
Detailed information about activities is available at <http://www.ykk.com/english/corporate/csr/eco/report/index.html>

Control of CO₂ Emissions throughout the Supply Chain

The YKK Group has been assessing Scope 3 emissions, or indirect emissions of greenhouse gases along its value chain, in line with the internationally recognized Greenhouse Gas Protocol. In addition to direct emissions (Scope 1) and indirect emissions attributable to purchased electricity and the use of heat (Scope 2), the Scope 3 calculation includes emissions from the procurement of raw materials and capital goods, the manufacture and transport of intermediate products, and the use and disposal of finished products. Our calculations revealed that the procurement of raw materials and capital goods accounted for more than 75% of the Group's entire emissions.

Drawing on these results, from 2014 onward we have been promoting greenhouse gas reduction initiatives in each business segment, with particular focus on our procurement practices.

In addition, the YKK Group is contributing to the reduction of CO₂ emissions through the provision of high-insulation window products that curb the need for air conditioning in housing or offices and thereby reduce energy consumption.



Note: For more details about the calculation method, please visit the Green Value Chain Platform website operated by Japan's Ministry of the Environment. YKK and YKK AP's initiatives are posted under the title "Individual corporations' accounting information." (http://www.env.go.jp/earth/ondanka/supply_chain/gvc/en/accounting_information.html#2015)

Response to Water Risks

As the YKK Group conducts its manufacturing business globally, it is also promoting conservation activities to protect vital fresh-water resources. The Group is undertaking reduction of water usage in manufacturing processes and water recycling, while also using rain water and conserving groundwater depending on regional characteristics.

Conservation of Groundwater in the Alluvial Fan of the Kurobe River

Each YKK Group base in Kurobe, Toyama Prefecture, makes use of the abundant groundwater in the alluvial fan of the Kurobe River. The Group is undertaking survey and conservation effort with the cooperation of Toyama Prefectural University for the sustainable use of this groundwater resource. Through surveys conducted to date, we have started to understand the water balance, underground structure, flow, and age of the Kurobe River alluvial fan, and have built a 3-D model simulation based upon this. We have also made a video about the hydrology of the Kurobe River based upon survey information. Moving forward, we will strive to understand the impact upon the groundwater from changes in rainfall due to climate change, and will also strive to appropriately manage the use of groundwater.



Educational video about the hydrology of the Kurobe River

Thinking Together—Regional Communities and the YKK Group



The YKK Group has hosted stakeholder dialogues annually since 2010 to provide a forum for the exchange of opinions. At the seventh dialogue (held April 21, 2016), we welcomed Professor Noriyasu Kunori to act as facilitator following on from the previous year. Participants from various stakeholder groups attended—representing business partners, consumers, local communities, environmental groups, and students. During the morning, they visited Passive Town in Kurobe, Toyama Prefecture, currently under construction on the site of old YKK company housing. In the afternoon, participants were able to exchange opinions with YKK Group employees in workshop-format discussions.



Participants with the cherry blossom trees they planted at YKK Center Park

Participants

- Naturalist: Kikuyo Matsuki (Vice Chairperson, Kurobe Gorge Naturalist Society)
- Consumer representative: Rika Inagaki (Promoter of global warming prevention efforts in Toyama)
- Local government representative: Michiko Takamoto (Assistant Manager in charge of Environmental Affairs, Living Environment Section, Citizen Affairs Department, Kurobe City)
- Nature conservation group representative: Atsushi Sano (Manager of Interaction & Cooperation Promotion Department, Toyama Environment Foundation)
- Local resident: Hisao Daijogo (Chairman, Muratsubaki Promotion Society)
- Business partner: Akira Hirano (President & CEO, Hirano Komuten K.K.)
- Student: Naoto Oishi (Second year student, Environmental Engineering, Graduate School of Engineering, Toyama Prefectural University)
- International student: Song Xiaojing (First year student, Environmental Engineering, Graduate School of Engineering, Toyama Prefectural University)

session 01 | Tour of the Passive Town

The Passive Town, currently under construction for the YKK Group, is a residential development that uses natural energy. We plan to build approximately 250 homes in this mixed-use rental residential complex by 2025. On this occasion, the group toured Block No. 1, which has been completed, where they experienced first-hand the lifestyle that the YKK Group hopes to offer in the future.



View of the Passive Town Block No. 1. The panels visible near the top of the outer walls collect solar heat for water heating.

What Is the Passive Town?

Concept

- A low-energy town and homes suitable for a 21st-century sustainable society
- Comfortable living that is also environmentally friendly, actively incorporating the use of groundwater and natural energy
- An attractive landscape that takes advantage of Kurobe's climate and natural environment
- An open town that co-exists with nearby communities and encourages communication
- A town that helps residents to realize their desired work-life balance

Experiencing a Lifestyle That Uses Natural Energy



Tampopo Child Center, established within the Passive Town. Built to provide a comfortable work environment for employees.



The Passive Town's Commercial Wing. The construction allows the passage of the wind of the region (*ai-no-kaze*) through the entire town.



The interior of a model room. All rooms are south-facing and spacious, capturing sunlight during winter to provide greater warmth.



The veranda of a model room. Awnings that effectively control wind and light are fitted as a measure against the strong summer sunlight.



Underground parking garage. Water storage facilities are installed beneath, allowing heat from groundwater to be used in air-conditioning.

While touring the Passive Town, the participants were able to experience for themselves the year-round comfortable living it offers. They expressed surprise at the extent to which natural energy could be harnessed, and praised the design ingenuity

which made effective use of wind and sunlight. In addition, there is a biomass boiler, fueled by wood chips from unneeded lumber from thinning within the prefecture, which aims to achieve greater fuel self-sufficiency for the region.

session 02 | Low-Carbon City-Planning

In the afternoon, the participants separated into three groups and exchanged opinions with YKK Group employees in workshop-format discussions on the topic of "Low-carbon city-planning in Kurobe for 2050."

Expansion of the Concept of Passive Architecture and Creation of a Cooperative Sharing Society

We hope to transform all of Kurobe into a passive town by 2050. We also thought that the town should share what it can with nearby communities wherever possible in order to achieve a low-carbon society, and that it needs to create systems that leverage the natural resources of the region. An example is the use of natural energy through the addition of car-sharing to the transport system, using electric vehicles powered through small-scale hydroelectric generation from rivers in Kurobe. Other possibilities include reusing driftwood in dams and lumber from thinning as resources.



We hope to combine the region's resources and the knowledge of residents through the cooperation of the YKK Group to realize this society in Kurobe in the future.

A Lifestyle That Takes Advantage of Kurobe's Unique Qualities

We realized that we must adjust our lifestyles in order to achieve a low-carbon society in Kurobe in the future. Options include riding bicycles instead of using cars, and a circulating shared transport network which anybody can access anywhere. It would also be interesting to create an experimental area where people can experience homes and towns which do not use electricity and gas needlessly, but which instead leverage Kurobe's abundant natural blessings, such as the sea, mountains, and rivers. The ideal is that Kurobe residents can have healthy and active lives without over-dependence



upon energy. It may be difficult under current circumstances; however, we hope that the YKK Group will achieve this through the advancement of the Passive Town.

Roadmap for a Zero-Emission Community

Our group imagined how Kurobe should look like in 2050, and thought of a roadmap to achieve this. In 2050, we envisage the transformation of all areas in Kurobe into passive towns and the realization of emission-free communities. Kurobe will be a low-carbon city with a completely recycling-based society, where kitchen waste will be used to generate power which can fuel electric cars. To this end, by 2020, we need to further expand car sharing and the Passive Town itself.

Low-carbon society could begin in Kurobe. We hope that the YKK Group will continue with the expansion of passive towns.



Holding Stakeholder Dialogues

This was the seventh of our stakeholder dialogues, which have been held since 2010. It is not easy to incorporate the opinions of stakeholders into corporate management. I greatly admire the continuation of dialogue and the company's sincere attitude. In this year, against the backdrop of the Paris Agreement, an international measure against global warming, the three groups cooperated in talks aimed at the realization of a low-carbon city in Kurobe, where Kurobe Manufacturing Center is based. Many ambitious opinions were raised regarding creation of a cooperative, sharing relationship between business and community for a low-carbon lifestyle unique to Kurobe. On the basis of these opinions, I hope that the YKK Group will take action starting with those which it can implement.



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