

## Challenges by YKK AP Inc. to build Sustainable Business Operations

YKK AP Inc. is a corporate member of JFBS (Japan Forum of Business and Society).

This article is based on the interview\* with Mr. Yoshitaka Tsuji, Vice President, and Mr. Hiroaki Shigezumi, Manager of Environmental Management, Safety and Environment Department, YKK AP Inc., and focuses mainly on its environmental initiatives for products, manufacturing and sustainability education for employees.

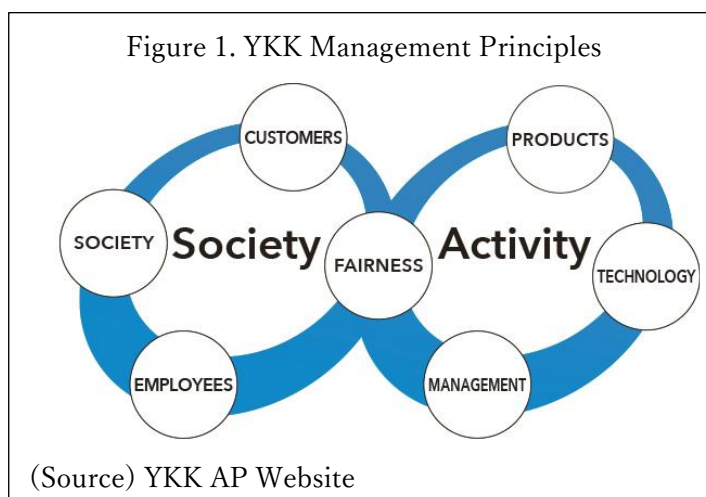


Mr. Yoshitaka Tsuji (left)

Mr. Hiroaki Shigezumi (right)

### ◆YKK philosophy and management principles

YKK philosophy was built up by YKK's Founder, Tadao Yoshida in 1934. The philosophy "Cycle of Goodness" means "no one prospers without rendering benefit to others". Based on the philosophy, the management principles (figure 1) was developed in 1994 when Tadahiro Yoshida took up the post of the first President of YKKAP to have employees understand the philosophy and implement it in business operations.



Customers, Employees and Society in the circle of "Society" represents YKK AP's stakeholders (Society includes community, future generations, environment, government, media, research institutions and NPOs/NGOs). Tadao Yoshida identified the company as an important member of society, and indicated that it survived through coexistence.

When pursuing his business, he recognized the path to lead mutual prosperity and valued the idea that the benefits were to be shared and the company's values were recognized by society. The improvement of the quality of its products, technology, and management in the circle of "Activity" are the means to achieve this.

In April 2019, the YKK group established its Environmental Vision 2050 that is composed of 4 poles 1) responding to climate change, 2) sustainable use of water, 3) symbiosis with nature and 4) utilization of resources. It defines the long-term direction by 2050 for environmental initiatives to realize a higher level of environmental management.



◆ **Current and future initiatives to incorporate social and environmental concerns into business operations and enhance company values**

YKK AP promotes twin aspects of products and manufacturing to achieve zero environmental impact throughout the overall lifecycle of YKK business operations.

(1) Products

YKK AP provides windows, doors, and other architectural products. In the field of residential windows, the APW Vinyl Window Series with high thermal insulation performance (figure 3) are the representative products with energy-efficiency and the sales increase. APW430, for example, reduces air conditioning energy of housing by 32%, and

Figure 3. the APW Vinyl Window Series



(Source) YKK AP Website

reduces CO2 emission by 42% in the entire life cycle of 30 years. 43% of resources are reduced compared to double-glazing window with equivalent thermal insulation performance, and 70% reduction in number of parts. As the result of efforts to penetrate into market, the ratio of the vinyl windows in Japan increased from 9% in 2009 to 24% in 2018.

In the FY 2019 and 2020 in the Fifth Mid-Term Management Plan (FY 2017 – FY 2020), YKK AP utilizes all the technologies it has accumulated in Japan and strengthens supports each of the companies in Asia where the sales are still insufficient. Although it has put focus mainly on ultra high-end products, it decided to tackle the mass market and provide products of a price range that many people in these countries can afford. It established YKK AP R&D Center in Indonesia in 2018 to collect data and develop windows being appropriate to hot and humid climate.

## (2) Manufacturing

In 2017, YKKAP participated in the SBT (Science Based Targets) project for greenhouse gas reduction, which is an international initiative that encourages companies to set their long-term CO2 reduction goals to be in line with the 2° C goal set by the Paris Agreement. YKK AP announced its SBT and got certified in January 2019.

Then it needs to reduce the emission of greenhouse gases by itself and in its supply chain by 30% by FY 2030. It has achieved the reduction by 15% by 2018 already. For the remaining 15%, waste reduction in manufacturing plants, reduction of packaging materials, utilization of renewable/green energy are required.

Regarding the issue of material recycle, the aluminum window sashes are recyclable, but the used vinyl windows as plastic are still difficult to recycle. YKK AP engages in development of recycling technologies in collaboration with universities and business associations of vinyl sashes in order to build out the recycling infrastructure in market in 5-10 years.

Following the Energy Conservation Grand Prize (by the Energy Conservation Center) and Green Purchasing Award (by Green Purchasing Network) in 2017, YKK AP won Green Good Design Award 2019 (by the Chicago Athenaeum: Museum of Architecture and Design) for high performance of its APW vinyl window series, efforts to penetrate the products in Japan, and its environmental initiatives.



### (3) Sustainability Education for employees

YKK AP has implemented environment and compliance education programs to raise awareness of employees. The ratio of employees who practice the “Environmental Action 25” such as “turn off un-used lights” and “go home without overtime work” has approached 80% in the last 5 years. Leadership program members, fortuitously 100% female, who participated by recommendation of each department have developed and standardized disposal procedure manuals. On the other hand, 23% of employees were remained unanswered to environmental e-learning program in 2019 which included issues on SDGs for the first time, and more than half of them were sales persons.

YKK AP utilizes the “challenge sheet” for personal evaluation, which each employee defines his/her own goals and evaluates the progress of achievement at interim and year-end interviews with his/her supervisor. YKK AP now plans to embed sustainability into the personal evaluation system, that is to improve and enrich the e-learning program so that employees understand sustainability, link personal goals to SDGs, and achieve these yearly goals.

Environmentally/SDGs concerned business operations become competitive advantages, Mr. Tsuji pointed out. In fact, sales persons in Osaka are required to understand and explain to their clients how their products/businesses are operated and creating values from the viewpoint of sustainability since they will have Osaka Expo 2025 and need to embed SDGs in preparation and implementation process for the expo. He also mentioned that YKK AP would advance initiatives, e.g. employee education for supply-chain management (human-rights in supply-chain), stakeholder engagement and information disclosure to enhance company values.

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\* The interview was implemented on February 21, 2020, at Headquarters Office of YKK AP Inc. in Tokyo by Noriko Saito and Tomoka Sasamori of JFBS (Japan Forum of Business and Society).