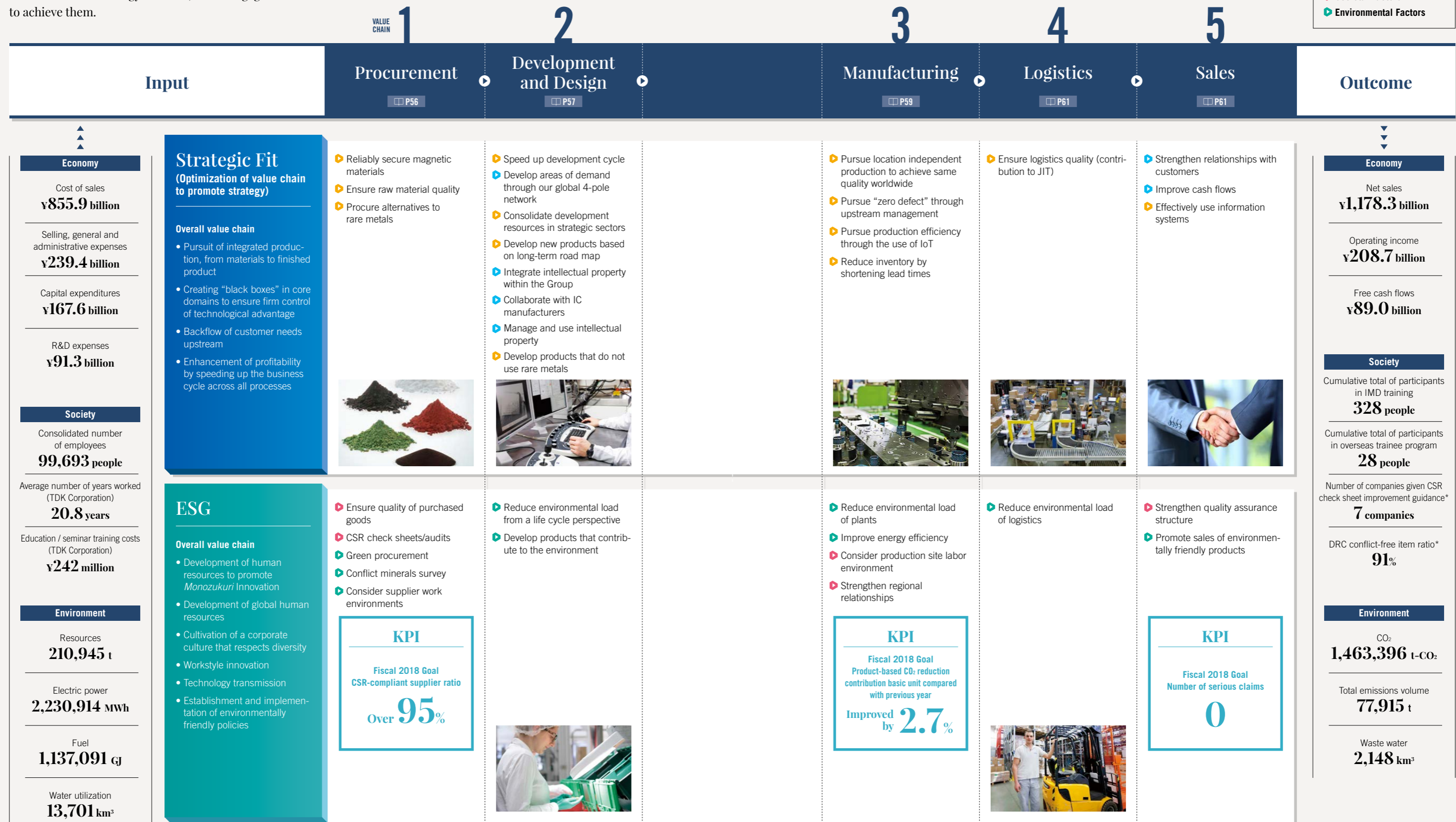


# Business Model Continuity as Seen through the Value Chain

Across the entire value chain, from raw material procurement to development, design, manufacturing, logistics, and sales, TDK has established what it considers important themes, in terms of both strategy and ESG, and is engaged in efforts to achieve them.

- ▶ Overall Strategy
- ▶ Monozukuri (manufacturing excellence) Innovation
- ▶ Societal Factors
- ▶ Environmental Factors



\*Targeting suppliers of TDK Corporation

# 1 Procurement

Strategic Fit	ESG
<ul style="list-style-type: none"> <li>Reliably secure magnetic materials</li> <li>Ensure raw material quality</li> <li>Procure alternatives to rare metals</li> </ul>	<ul style="list-style-type: none"> <li>Ensure quality of purchased goods</li> <li>CSR check sheets/audits</li> <li>Green procurement</li> <li>Conflict minerals survey</li> <li>Consider supplier work environments</li> </ul>

## Specific Initiatives

### Strategic Fit

#### Global Partnership Purchasing to Rapidly Provide High Quality Products

TDK seeks to build solid partnerships with its suppliers and maintain a relationship that benefits both, guided by our “global partnership purchasing principles.” Global partnership purchasing refers to the practice of local procurement of materials consumed overseas to ensure rapid product development, essential to a company such as TDK with manufacturing bases in Japan, Asia, North America, and Europe. Global partnership purchasing also emphasizes the crucial importance of close collaboration with our suppliers to TDK product quality and to raising customer satisfaction. TDK has established the TDK purchasing policies to put this principle into practice.

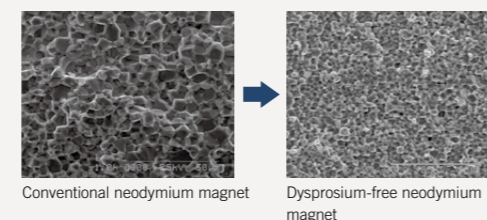
### Strategic Fit

#### Assurance of Stable Supply

In unforeseen circumstances, such as the outbreak of a large-scale natural disaster, TDK, as a member of the supply chain, has a duty to share social responsibility with suppliers in meeting demand so as to ensure the stable supply of products required by customers. Recognizing that the securing of stable supplies is an important responsibility, TDK addresses this issue in three main ways: BCP/BCM surveys of suppliers; advance collection and organization of information for use in an emergency; and timely communication using the Supplier Partnership System.

With regard to rare minerals and other raw materials for which stable procurement carries risks associated with restrictions set by the producing countries, TDK also works to develop new production methods that reduce the use of such materials.

Development of neodymium magnet without dysprosium, a rare earth metal



### ESG

#### Promotion of CSR Procurement

TDK treats CSR as a key component of its purchasing policy while striving to earn understanding from suppliers of the importance of CSR and encouraging increased awareness in that area. We incorporate provisions into contractual agreements keyed to specific conditions at each of our Group companies while continuously engaging in evaluations based on CSR check sheets, CSR audits, and other efforts. When problems are found in the details, individual requests for improvements are issued.

TDK also implements CSR audits with the aim of gaining an objective understanding of the situation, selecting targeted suppliers in consideration of such factors as their degree of importance and our dependence on them in delivering to our customers.

# 2 Development and Design

Strategic Fit	ESG
<ul style="list-style-type: none"> <li>Speed up development cycle</li> <li>Develop areas of demand through our global 4-pole network</li> <li>Consolidate development resources in strategic sectors</li> <li>Develop new products based on long-term road map</li> <li>Integrate intellectual property within the Group</li> <li>Collaborate with IC manufacturers</li> <li>Manage and use intellectual property</li> <li>Develop products that do not use rare metals</li> </ul>	<ul style="list-style-type: none"> <li>Reduce environmental load from a life cycle perspective</li> <li>Develop products that contribute to the environment</li> </ul>

## Specific Initiatives

### Strategic Fit

#### Acceleration of Development Speed through M&As and Business Tie-Ups

In the rapidly changing electronics industry, speed has become an increasingly important factor in anticipating needs and quickly delivering products, and recently TDK has been actively accelerating the speed of its business through M&As and business tie-ups.

We expect that the ability of fabless developer InvenSense to provide solutions, and the total value chain we have built through our collaboration with Qualcomm and our acquisition of ICsense, will contribute significantly to reducing prototype development lead times, and the Group as a whole is pushing strongly ahead toward the realization of a “First-to-Market” approach.

### Strategic Fit

#### Provision of Rapid Response to Diverse Needs via Global 4-Pole Network

With an overseas sales ratio in excess of 90%, the TDK Group is expanding its R&D activities globally, with a network centered in Japan and connected to sites in Asia, the U.S., and Europe. By moving to transfer authority locally, and by conducting R&D close to areas of demand, we are able to quickly provide products in accordance with customer needs. At the same time, leveraging the significance each field of business has in those respective regions, we acquire the knowledge and technology to respond to the leading-edge needs of the times.

In addition, R&D and sales and marketing move as one to allow us to quickly catch up on the needs of our customers.



### ESG

#### Development of Products Contributing to the Environment

In 1997, TDK introduced product assessment to evaluate the environmental impact of products throughout their entire life cycle. Only products approved through this screening are commercialized and distributed in the market. In addition, TDK focuses on the contribution of products and expertise to the reduction of CO<sub>2</sub> emissions. TDK began working to establish computing criteria for quantifying this environmental contribution in fiscal 2012, and in fiscal 2016, we formulated a set of guidelines for calculating of product contributions that reflect those results. By means of continued product assessment activities, we aim to promote the reduction of CO<sub>2</sub> emissions through products.

2 Development and Design

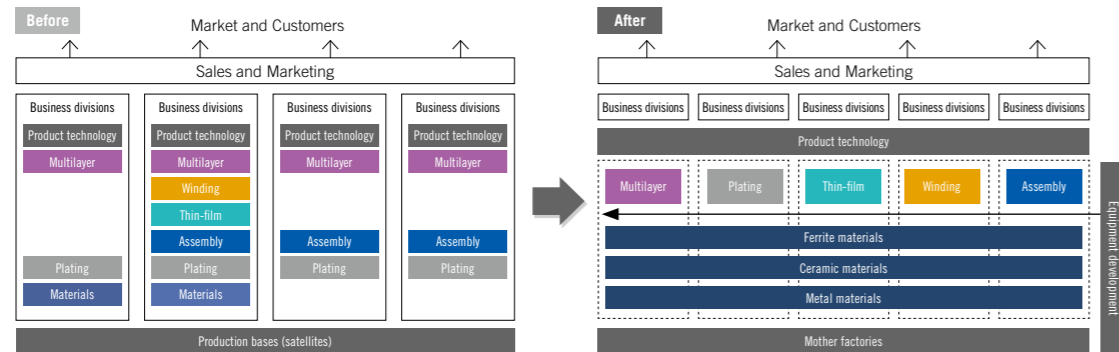
# The Akita Future Project

Column

The Akita region is the birthplace of TDK. Beyond being where the passive components business is deeply rooted, the region also continues to be at the leading edge of *Monozukuri*. The Akita Future project, currently underway, was conceived with the goal of achieving sustainable growth based on the vision of our Medium-Term Plan. Under the project, TDK will create world-leading technologies and products, expanding a new *Monozukuri* worldwide.

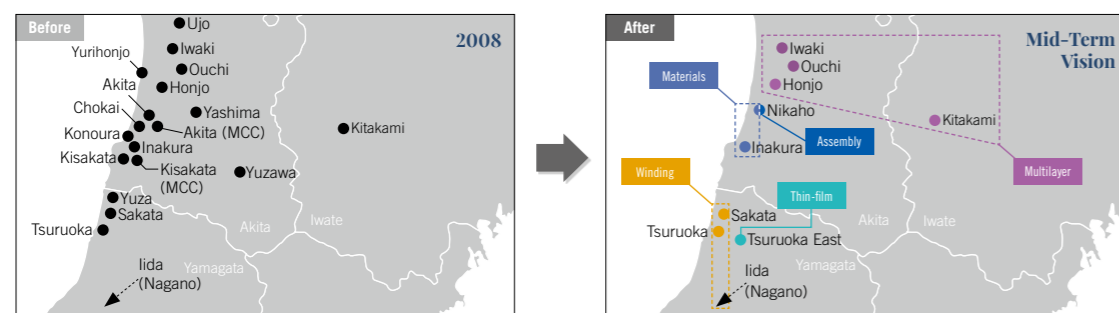
## Creation of New Products around Elemental Technologies

TDK will surmount the business division structure previously organized vertically around products, create a structure centered on elemental technologies, and swiftly respond to market changes. New product development will also be accelerated.



## Production Base Reorganization

Reorganization of production bases around individual elemental technologies for passive components will lead to strengthened *Monozukuri* capabilities. TDK will be responsible for materials and assembly, TDK Akita for multilayering, and TDK Shonai primarily for thin-film and winding.



## TDK Museum

The museum introduces how TDK's products and technologies, centered on our strengths in ferrite and magnetism, have played a role in the evolution of society, and how TDK will be involved in the society of the future, all in an easy-to-understand, enjoyable, and hands-on manner. The goal of the museum is to introduce the history of TDK and electronics, and a vision for the future, while also contributing to making the Akita region a more attractive destination.



# 3 Manufacturing



- Strategic Fit**
- Pursue location independent production to achieve same quality worldwide
  - Pursue "zero defect" through upstream management
  - Pursue production efficiency through the use of IoT
  - Reduce inventory by shortening lead times

- ESG**
- Reduce environmental load of plants
  - Improve energy efficiency
  - Consider production site labor environment
  - Strengthen regional relationships

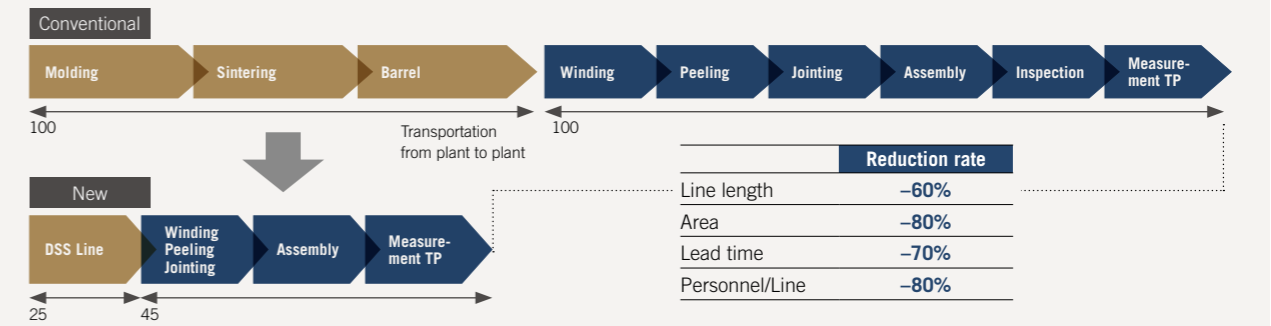
## Specific Initiatives

Strategic Fit

### Acceleration of Cycle Times across All Divisions

TDK is engaged in a variety of measures intended to reduce cycle times in the manufacturing process. These include changes in manufacturing processes; a shift to location independent production and automation through the use of robots; reduction of inventory in downstream processes; and setup improvements utilizing IoT and big data. In addition to pursuing greater efficiency on the front lines of production, TDK is actively engaged in measures designed to speed up the entire business cycle. This includes, for example, considering "business lead time" not as the time between the factory receiving orders and shipping products, the conventional approach, but as the time between sales receiving orders from customers and products actually being delivered. This will encourage a broader range of divisions to reduce "non-value-added time" and accelerate cycle times.

### Integrated Production and Location Independent



ESG

### Factories Designed to Improve Energy Efficiency

TDK's new factories in Akita Prefecture are designed with the goal of improving energy efficiency, including taking advantage of the winter weather to store accumulated snowfall, which is then used to assist in cold energy recovery. Solar panels installed on the roof of the Honjo Factory East Site have the capacity to supply up to 70% of the total lighting power consumed across the entire factory. Workplace environments are designed to be employee-friendly; parking lots, for instance, are installed with snow-melting equipment and in-factory arcades. The new factories are expected to serve as next-generation models for environmentally adaptive factory design.



Honjo Factory East Site

3 Manufacturing

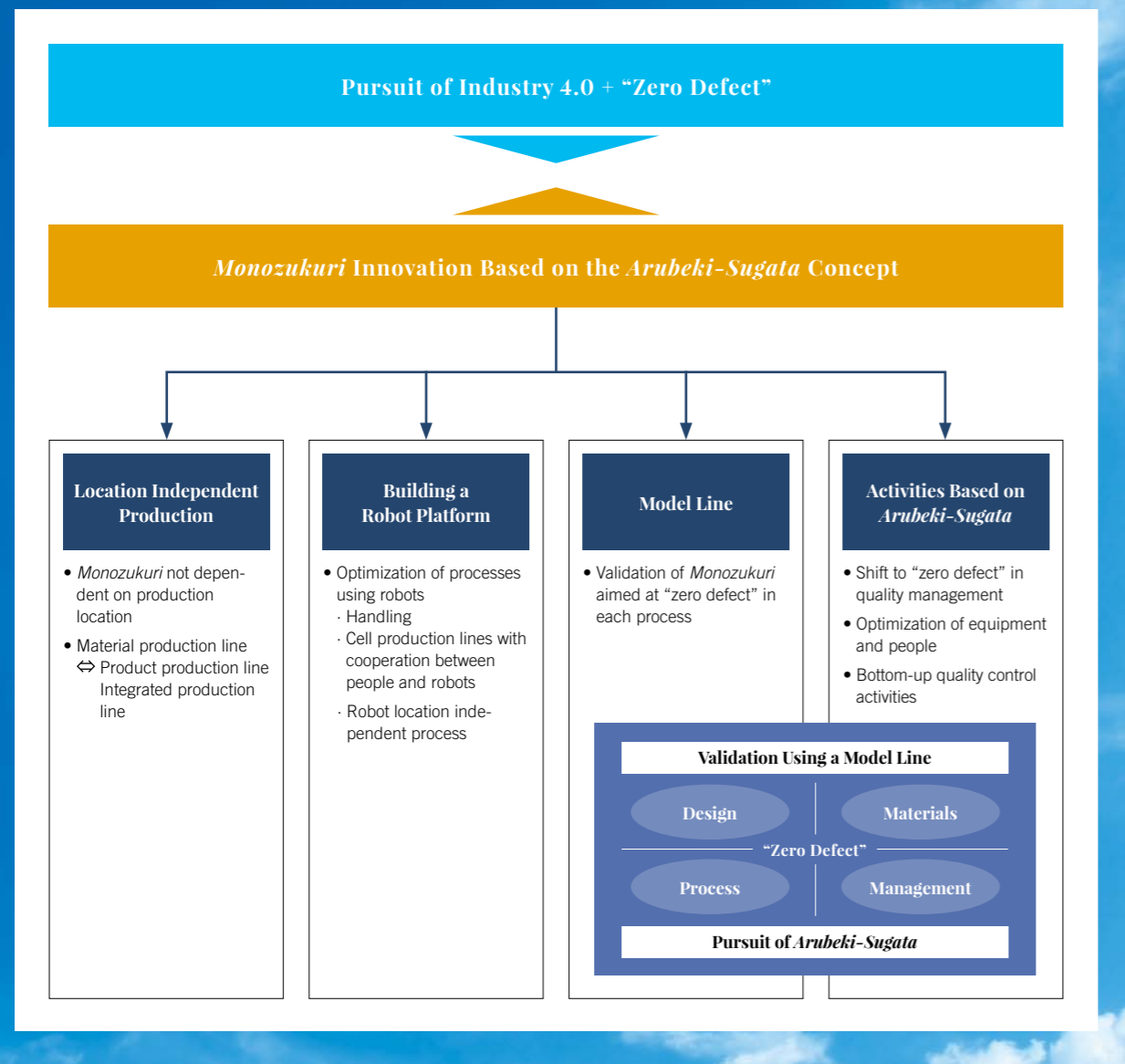
## Pursuing “Zero Defect” through Upstream Management and Building an Innovative *Monozukuri* Framework

Column

The pursuit of “zero defect” quality is the basic philosophy behind *Monozukuri* at TDK.

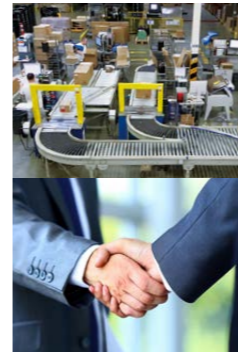
TDK is working to firmly establish a quality-oriented process to ensure product quality by creating 100% conforming products. This means ensuring product quality not by removing defective products during the final inspection process, but by working to improve quality across every process, from product design, to process design, to facility development.

In addition, TDK is working to build an innovative *Monozukuri* framework to support its new business model with a framework centered on four pillars: location independent production that ensures the same quality regardless of where production takes place worldwide; construction of a robot platform in pursuit of optimal cooperation between people and robots; validation of a model production line aimed at “zero defect”; and bottom-up *Arubeki-Sugata* (ideal process) quality control activities.



4 Logistics

5 Sales



Strategic Fit

- Ensure logistics quality (contribution to JIT)
- Strengthen relationships with customers
- Improve cash flows
- Effectively use information systems

ESG

- Reduce environmental load of logistics
- Strengthen quality assurance structure
- Promote sales of environmentally friendly products

Specific Initiatives

ESG

### Reduction of the Environmental Load of Logistics

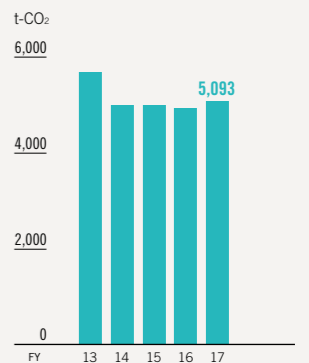
TDK is tackling the reduction of CO<sub>2</sub> emissions from logistics with the aims of contributing to the control of global warming, improving transportation efficiency, and reducing transportation costs.

In Japan, TDK set up a committee to improve energy conservation in distribution in fiscal 2007, when the revised Energy Conservation Act went into effect, and is making efforts to reduce logistics-related energy. TDK will expand its survey of CO<sub>2</sub> emissions from logistics to overseas sites and endeavor to promote their reduction in the TDK Group as a whole.

Concrete Activities

- Modal shift
- Improved loading efficiency through reduced delivery frequency
- Better efficiency of inter-plant transportation through the concentration of production sites
- Shortening of domestic land transport distances through the effective use of local ports
- Switch of means of transporting imported cargo from subsidiaries from air to boat

Trend of CO<sub>2</sub> Emissions from Logistics (Japan)



ESG

### Activities for Improving Customer Satisfaction

For customers who purchase its mainstay electronic components, TDK assesses customer satisfaction levels using the following three methods. By offering comprehensive customer satisfaction from the perspectives of quality, delivery, cost, technologies, and services, TDK aims to become a highly trusted company.

- Supplier evaluation information, whereby our business customers evaluate TDK products
- Product-related complaint information from our customers
- Customer satisfaction evaluation, whereby sales staff members evaluate TDK products from a customer’s point of view

Also, at the Huawei Technologies Co., Ltd.’s Suppliers Conference held in Shenzhen, China, in September 2017, TDK received the Excellent Supplier 2017 H1 Award in the Storage Cards Division. This award recognizes suppliers with outstanding quality, supply, technological capacities, and prices, and that have met standards determined by Huawei Technologies.



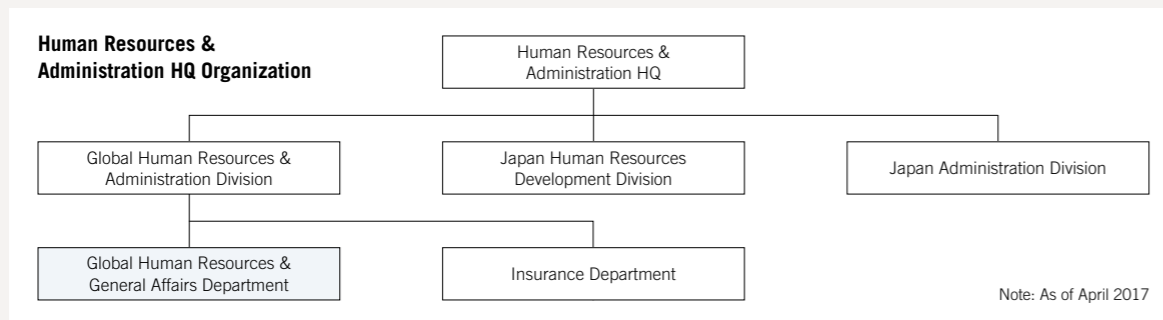
# Human Resource Strategy



**Andreas Keller**  
General Manager, Human Resources & Administration HQ

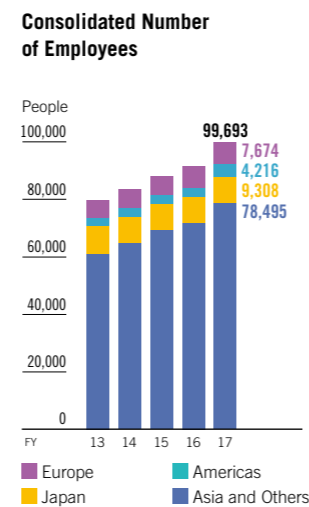
I have interacted with a great many employees to date, and it is never easy for people of diverse corporate cultures and cultural backgrounds to convey their thoughts to one another constructively. To create a sense of group solidarity, we are focusing on improving communication, and the most important elements in doing that are transparency and trust.

At TDK, we have established a Global Human Resources & General Affairs Department within the Human Resources & Administration HQ, and with the goal of improving transparency and trust, we are working to put in place a common Group global human resource management system, develop successors to important positions, and establish global systems for positions, evaluations, incentives, and communication training in English. Further, by making human resource information more visible and promoting the sharing of good practices within the Group, we will make more effective use of the capabilities of outstanding human resources worldwide, which in turn will strengthen the competitive power of the TDK Group.



## A Global-Scale Human Resource Base to Support Sustainable Growth

Approximately 90% of the TDK Group's employees on a consolidated basis are non-Japanese, and our human resource policy calls for HR systems that are rational and which have a sense of fairness, with an emphasis on a merit-based approach and equal opportunity. We strive to increase corporate value by placing and working to develop outstanding human resources in optimal positions regardless of nationality, race, gender, or other attributes.

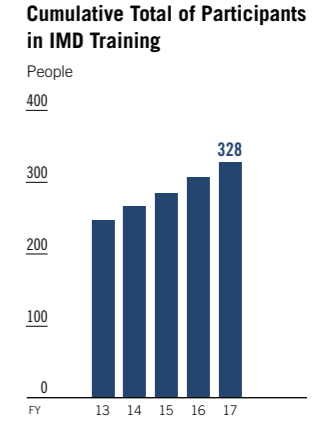


## International Management Development (IMD) Training to Foster Global Leaders

IMD training seminars, which have been held since 1997, are held to help our internal leaders acquire truly global skills and develop strong, borderless solidarity within the Group. The training is for candidates for managerial positions at the TDK Group affiliates overseas. The seminars take the form of a week-long residential training course with lectures and workshops. The participants gain a deeper understanding of TDK's corporate philosophy, acquire a broader, more managerial perspective, and establish bonds that help build global personal networks. Some participants who have completed the IMD training have gone on to become presidents of overseas affiliates, playing a vital role in human resource development within the TDK Group.



IMD training



## Securing and Fostering Human Resources with Strong Potential and Expertise

In the electronics industry, which is experiencing rapid changes in the business environment, it is necessary to have a high degree of specialization and to develop and provide products that society and customers want in a timely manner. TDK hires recent graduates with high potential and drive and actively recruits mid-career personnel with high levels of specialization. TDK believes that the ideal is to enable each employee who makes up an organization to work autonomously. Our human resource development target is to produce numerous autonomous personnel with the ability to think things through on their own, undertake new challenges with courage, persevere to optimize change, and see things through to the finish.

To achieve this target, TDK's skills development and educational programs, which are designed to progressively teach employees how to work autonomously from the earliest stages of their careers, comprise four categories: "training programs on different levels," "selective training programs," "specialized education programs," and "skill development support programs," the latter two of which are offered for those who need a higher level of professional training.

