

KOA Integrated Report

2024

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To protect the livelihood of our hometown, the Ina Valley



Founder

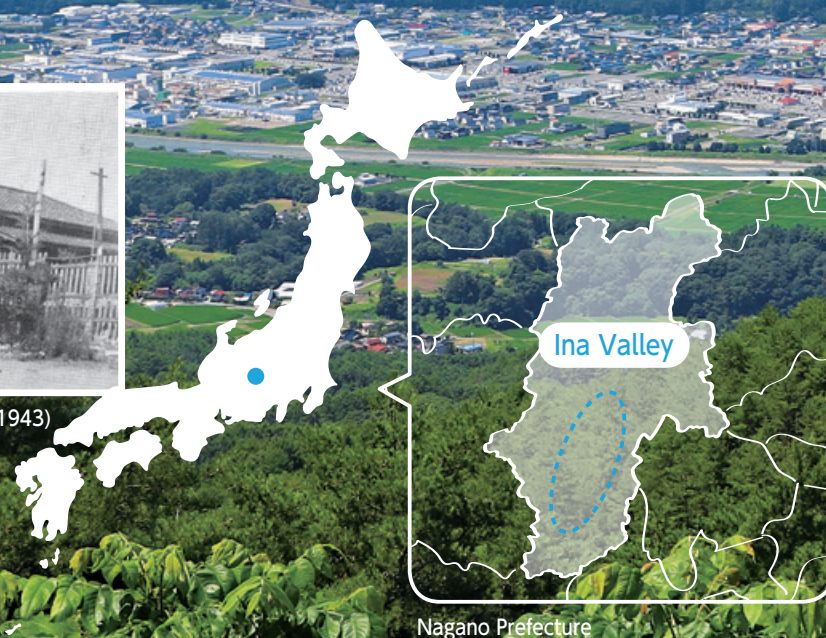
Kazuto Mukaiyama
(1914-1995)

Photo: At the age of 24 (1938)



Ina Factory of the KOA Kogyo-sha (1943)

KOA's founder, Kazuto Mukaiyama, experienced harsh living conditions with his family and other farmers during his impressionable years. This experience led him to decide to foster the seeds of industry in Ina Valley. He came to this resolution by listening carefully to the voices of the times and made it his mission in life to do so. This was how KOA was established. Ever since, KOA has stayed in tune to the voices of the times, analyzing the ideal way forward and identifying social issues to be addressed. KOA has been and will be operating diligently to be a solution to those social issues.



Nagano Prefecture

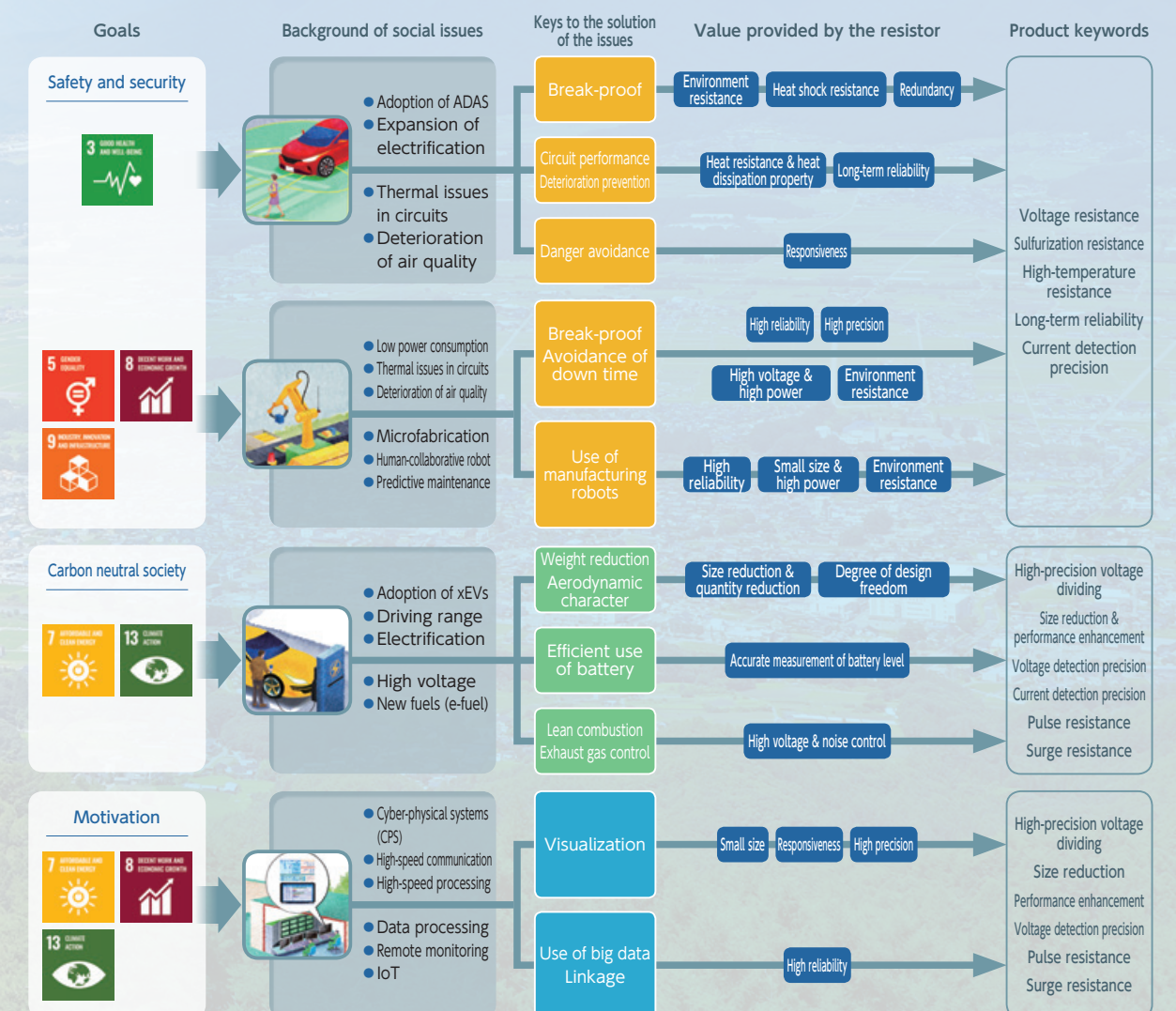
View of Ina Valley from the Kayano Plateau (Minowa Town), with the Central Alps straight ahead

Social issues we have resolved in our pursuit of realizing a sustainable society

	Contributions to Society	Popular electronic devices	Contributions to Customers
From founding to 1950s	Supported our hometown region through the electronic components industry		
1960s	Period of rapid economic growth Contributed to increasing the enrichment of people's lives	Household appliances, CRT televisions	Expanded production capacity to meet demand for electronic components
1980s	Popularization of digital devices Contributed to work optimization and comfortable lifestyles	Personal computers, digital cameras, mobile phones, digital AV equipment	Surface mount components Contributed to device size reductions and productivity improvements
2000s	A ubiquitous society linking people together Contributed to the birth of new services through the internet	Smartphones, tablets	Component size reductions Contributed to size reductions and performance improvements for mobile devices
2010s	Realization of a sustainable society Enabling lifestyles with safety and security	Environmentally friendly vehicles (HEVs, EVs)	Contributed to high-quality, highly reliable devices and infrastructure

We will continue working to resolve social issues and deliver products that contribute to a prosperous future

KOA's products are built into various devices you use, helping address societal challenges through their functions and performance. From the design stage, KOA is dedicated to developing products that enhance daily life and contribute to a sustainable society.



Founding Spirit

“Farming and Manufacturing in Unison”
“Bring Sunshine to the Ina Valley”

In 1940, KOA's founder, Kazuto Mukaiyama, established KOA's predecessor company, KOA Kogyo-sha. He established the company's main manufacturing plant in his hometown the next year. Located in the southern part of Nagano Prefecture, Ina Valley once had a thriving silk cultivation industry that was a valuable source of cash income for farmers. However, raw silk prices plummeted during the Great Depression that began in 1929 and farming villages were devastated. Farming families had no choice but to send their sons, except the eldest, to work in the city. Such conditions ate away the vitality of the community and began to break it apart. Concerned about his hometown, Kazuto Mukaiyama decided to bring manufacturing industry to the community. That way, he tried to build a foundation to provide economic security. Convinced that the future would rely on electricity, he built a resistor factory in the valley to embody his dream “Bring Sunshine to the Ina Valley.” The people of the Ina Valley longed to keep their families together and to maintain their rural way of living. There, Kazuto Mukaiyama tried to create a solution by providing an opportunity for earning income through factory work. This represents his foundational vision “Farming and Manufacturing in Unison.” In practicing the Farming and Manufacturing in Unison concept, KOA has succeeded in building trust in its relationships with its employees and the local community. KOA has been protecting local employment in the Ina Valley and Japan. At the same time, KOA has been valuing the trust established in its relationships with the communities and employees of its overseas operations in Asia, Europe, and the United States. Today, 84 years since its founding, KOA has grown into a top-class electronic component manufacturer with a leading share of the global fixed resistor market.

Initial oven-firing ceremony at the Ina Factory of KOA Kogyo-sha (1942)



Manual process (1959)

KOA's Management Values

“Circulation, Finite, Harmony and Enrichment”

KOA was in the process of establishing a solid position in the resistor market when Japan fell into the recession induced by a strong yen after the Plaza Accord of 1985. This proved a major management challenge and crossroads. This event provided the company an opportunity to thoroughly review its management practices and to undertake management reforms. Koichi Mukaiyama, then president (now director and chairman), explained, “Our's has been a human-centric era in which humanity pursued only convenience, believed that resources were unlimited, and continued to exploit the environment under a policy of constant expansion of the material economy. However, this pursuit of ‘expansion, infinite, conquest, and convenience’ is no longer sustainable and is about to reach a crisis point. From now on, humanity must create a recycling oriented society in which we seek balanced and fulfilled lives. In this new era, humanity must harmonize its activities with both the environment that has long nurtured humanity and all other living things. We must now transform our consciousness. We as KOA must place the Four Values of ‘circulation, finite, harmony and enrichment’ at the heart of our management values.” Since then, KOA has implemented the KOA Profit System (KPS) (⇒ P. 25 KPS Activities for Enhancing CS and ES) in which all employees engage in kaizen practices to eliminate management waste and inefficiencies. Through these practices, emphasizing the Four Values, we have been creating new models for both internal as well as customer-facing management. This was an early precursor to today's megatrends of sustainability and SDGs.

*Since we have undergone significant shifts in management policies during several corporate crises, we refer to these moments as “turning points.”



Mission

Establishing Strong Relationships of Mutual Trust with the Five Groups of Stakeholders

Our business is only possible thanks to the tremendous support and benefits that we receive from our shareholders, customers and business partners, communities, employees and their families, and the natural environment. Our corporate mission is to establish strong relationships of mutual trust with these Five Groups of Stakeholders that have been supporting us. We are eternally grateful for the benefits and support from our stakeholders. And in turn, KOA's mission is to continue to create value for all of them.



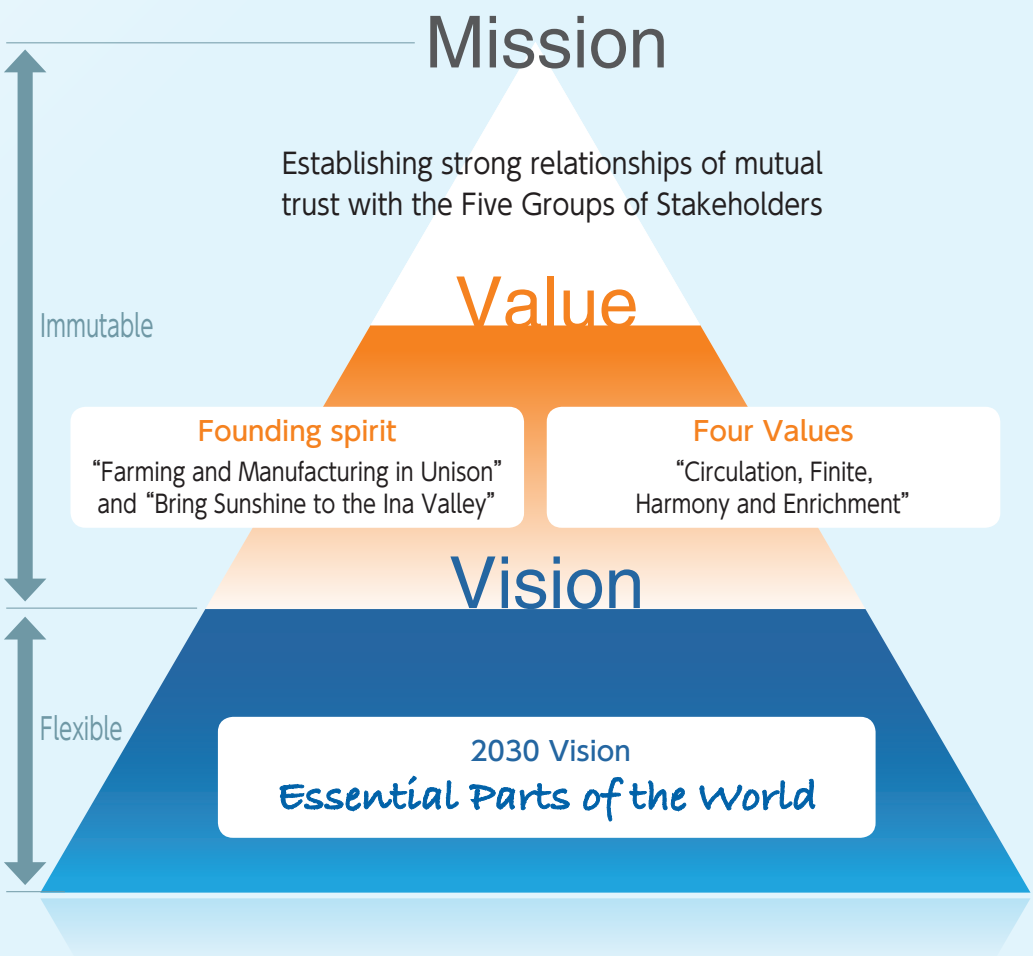
Value Creation Management Process

KOA’s corporate DNA, its immutable corporate philosophy, is embodied in its mission, the reason for our existence, and its values, the management philosophy and standards to be respected by all employees in all activities.

(⇒ P. 3 KOA’s Corporate DNA)

In this time of a dramatically changing global socio-economic environment, KOA has established its “2030 Vision,” anchored by its core corporate philosophy and based on our view of KOA’s desired state in 2030.

We will develop and implement management strategies and plans to realize the 2030 Vision.



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Editorial Policy

Since 2023, KOA has issued an integrated report to promote a better understanding of initiatives aimed at realizing the KOA Philosophy and our 2030 Vision among our Five Stakeholders (customers, business partners, local communities, employees and their families, and the environment). Integrated Report 2024 is centered on our 2030 Vision, which outlines the purpose and value provision KOA aims to achieve by 2030, and our value creation story. The Report features a page structure that is designed to provide an easy to understand look at the activities implemented by KOA to address what we recognize as our core issues.

[Reporting Period]

The fiscal year ended March 31, 2024 (April 1, 2023 to March 31, 2024)
(Note 1) Certain sections include information from April 2024 and later.
(Note 2) All references to FY03/XXXX in this document refer to the financial year ending on March 31, XXXX.

[Scope]

KOA CORPORATION and KOA Group

[Referenced Guidelines]

International Integrated Reporting Framework of the International Financial Reporting Standards Foundation (IFRS Foundation)

[Note Concerning Forward-looking Statements]

The purpose of this Integrated Report is to provide an understanding of KOA’s initiatives, and is not to solicit investments in KOA, including the purchasing or selling of KOA stock. The forward-looking statements included in this Report are made based on information available at the time. This information is subject to unforeseeable factors, including the economic or competitive environment and demand trends. As such, actual results may differ significantly from the forecasts indicated in this Report.



Representative Director,
President & CEO
Tadao Hanagata

Message from our President

Provide a motivating environment for our employees, promote innovation, and increase our global presence

Our founder, Kazuto Mukaiyama, founded KOA in 1940 and chose his hometown Ina Valley as the location to establish KOA's main factory the following year. Guided by the founding spirit of "Bringing Sunshine to the Ina Valley", KOA has since pursued the vision of "Farming and Manufacturing in Unison" as it has expanded business from Ina Valley to all of Japan and onto the global stage.

The concept of "trust" as outlined in our management policy refers to the trust that is related to our business and products at every level, from the trust-based relationships we have with customers and business partners, to the trust we earn from society by improving our performance as a corporation. Furthermore, our mission is to establish strong relationships with our Five Groups of Stakeholders (shareholders, customers and business partners, communities, employees and their families, and the environment).

In 2022, we formulated our 2030 Vision, Essential Parts of the World, through which we declared our commitment to become a component manufacturer that is essential to society. Since then, we have relentlessly embraced that challenge as we head towards 2030.

Last year, we released the KOA Integrated Report 2023, marking the first time we introduced our Vision, growth strategies, and sustainability initiatives as a single comprehensive report. The publication of the Report was well-received among our Five Groups of Stakeholders, who praised the Report for enabling a better understanding of the KOA Group. We also received advice from investors and other stakeholders on how to provide better information disclosure. By publishing the KOA Integrated Report 2023, we gained a renewed awareness of the importance of disseminating information about our approach.

Moving forward, we will continue working to improve our corporate value by engaging in appropriate information disclosure and reflecting the feedback we receive from our Five Groups of Stakeholders into our management and growth strategies.

Focus on building a foundation for solid growth

As we work to achieve our long-term vision, we have positioned the 2024 Medium-Term Management Plan (FY03/2023 to FY03/2025) as Phase 1 of our efforts. During this period, we are focused on building a foundation for solid growth. While we recorded a year-on-

year decline for FY03/2024 earnings (net sales: 64.8 billion yen (down 13.6% YoY), operating profit: 3.3 billion yen (down 67.6% YoY)), we conducted capital investments totaling 19.1 billion yen to expand production capacity and construct a new product development facility. Additionally, we allocated 4.9% of sales to R&D expenses. These investments reflect our commitment to building a growth foundation.

We have made bold capital investments to expand production capacity for high-precision, highly reliable chip resistors, which are projected to see a significant increase in demand from the fiscal year ending March 31, 2025 thanks to growth in electric vehicles. For thick film chip resistors, KASHIMA KOA DENKO CO., LTD. completed production system upgrades for the Tonami-no-Sho Factory in October 2024 and construction of the new factory in Malaysia is scheduled for completion in April 2025. For thin film chip resistors, SANADA KOA CORPORATION launched production at its Sanada-no-Sato Factory in October 2024. Through these investments, we will double our production capacity for thick and thin film chip resistors as we move forward towards 2030. In August 2024, construction was completed on our new product development and manufacturing facility ("SAKURA Wing"). This investment serves to strengthen our R&D functions, and will enable us to increase our R&D efforts moving forward.

Responding to future changes in our business environment

While advancing efforts to build a foundation for steady growth, we will also work to develop sensing elements, sensor modules, and other new products that help address customer problems. We will continue to focus on the automotive and industrial equipment domains, which require particularly high functionality and reliability, as we strive for the realization of a new society in which people can maintain prosperous lifestyles with peace of mind and a sense of security.

In the automotive domain, to achieve carbon neutrality by 2050, manufacturers are focusing on developing battery electric vehicles (BEV) and other environmentally friendly vehicles. As a short-term outlook, stagnant BEV sales have caused manufacturers to strengthen their focus on hybrid and plug-in hybrid electric vehicles (HEV and PHEV). However, as a long-term outlook, we believe there



will be no change in the shift to vehicle electrification. Based on our estimates, we expect the volume of KOA resistors and other products used in BEV, HEV, and PHEV to increase compared to internal combustion engines (ICE). To ensure we take advantage of this opportunity, we are advancing the development of products offering the quality and reliability that will fulfill customer requirements.

In the industrial equipment domain, the declining workforce population is driving technological innovation. Companies are working to increase productivity by incorporating IoT and AI into production facilities and utilizing robots to reduce their dependence on human labor. At the same time, companies are also working to reduce energy consumption.

In the medical domain, accelerating population aging is driving the development of various testing equipment capable of performing rapid, high-precision testing and robotic assisted surgery technology. Technological innovation in these domains depend on various sensors. In response to market demands for new sensor development, the KOA Group is leveraging the core technology we have cultivated through our work on resistors to develop sensing elements and sensor modules.

To further support the development of such products, we are also focused on industry- academia-government collaborations. We are working with research institutions and universities in Japan and overseas to accelerate the development of new materials that will be needed by society in the future. We are also working to build simulation technology that will reduce product development lead times.

Involving all employees in evolving operations and management

Over the years, we have seen countless major changes in our operating environment. Each time, we overcame the challenges we faced by using change as an opportunity to strengthen our corporate structure. In response to sudden yen appreciation triggered by the Plaza Accord in 1985, we established the KPS, KOA Profit System, as a system through which all employees engage in activities to

improve operations and management. Through KPS, we worked to reform management processes to reduce operating costs and to strengthen our profit structure. In the 2000s, we worked towards increasing sales to the automotive industry, which we positioned as a new growth market. Aiming to achieve a new standard of quality to meet the demanding needs of the automotive market, we launched KPS-2, through which we increased the quality of not only our products, but also the quality of work by our employees. As a result of those efforts, in the fiscal year ended March 31, 2024, sales to automotive markets accounted for 51% of total sales.

Currently, we are advancing KPS-3 as we aim to evolve into an R&D-oriented company capable of co-creation of products with our customers. Put simply, this means we must be able to foresee the future. We are striving to anticipate changes in societal needs, formulate hypotheses on the essential products and technologies of the future, and then working with customers to develop and validate such products and technologies. With the core technology cultivated through our work on resistors, together with our customers and other partners, we are creating a roadmap for the future (P.25 KPS Activities for Enhancing CS and ES).

Creating value through speedy trial and error

I believe that speed is the most important factor in conceiving and validating technology and products that will be essential to future society. The best way to creating new value for customers and society is to engage in repeated trial and error without any fear of failure. Even if a project involving multiple departments ends in failure, that failure will serve as knowhow that is certain to be beneficial in the future. Based on this philosophy, we decided to adopt an Innovation Management System (IMS) as the method of challenging ourselves to value creation we outline in our 2030 Vision. IMS as viewed by KOA entails employees proactively outlining their own long-term vision and engaging in trial and error, in other words, challenging themselves, towards achieving that vision. In times where "value" is not easily defined by any one individual and the future not easily foreseeable, we believe this method serves as the best way to creating new value (P.27 Expansion of Business Domains).

Developing our workplace environment is also critical to meeting such a challenge. I believe an important part of my role as president is to take action, not only individually, but by encouraging young employees and creating an environment that enables them to take on challenges in their own areas of interest. I joined KOA from an engineering background and, over the years, was able to gain various experiences through being an engineer, being deployed to an overseas site, being responsible for quality control and being a supervisor of production sites. I believe I have an understanding of some of the things employees think and feel but might not want to voice out loud in their workplace environment. That is why I believe it is my role to encourage employees to undertake challenges.

As president, encouraging employees in such a way requires that I lead by example and undertake challenges of my own. My challenge is to implement the large-scale growth investments outlined in the 2024 Medium-Term Management Plan. These investments are on a scale that is unprecedented for our company, and represent a challenge that can only be undertaken by the company president.

Also important to fostering the spirit of challenge in employees is to

provide an environment that allows employees to make their own decisions and take responsibility for those decisions. When you fail because you were following orders, then the responsibility can be placed on the person who gave the order. However, when you act of your own will, it is your own responsibility to accept the results of those actions, even when the result is failure. When things do not go as planned, we can still learn from the results. This also instills the desire and courage to challenge ourselves again via a different approach. As president, it is my job to create an environment that empowers employees to make their own decisions.

With this in mind, we have promoted initiatives such as the assignment of decision-making authority. I believe KOA has changed into an organization that allows department managers to rapidly make their own decisions on necessary investments.

Creating teams capable of open discussions

Building a strong team is essential in spreading the 2030 Vision throughout the company and making it a reality. KOA's corporate motto is "Let's make our workplace more upbeat and pleasant than anywhere else!" Since adopting this motto, we have implemented management practices that emphasize employee initiatives and teamwork.

A company is a team. Even if you have an ace who stands above the rest, they cannot succeed without others to support them. Leaders making better decisions also requires gathering information from team members. A leader cannot run an organization alone. Teamwork and mutual understanding are essential to a company's ability to function as an organization and act with speed.

To build such a team, you must first build relationships that allow for open discussion. If you can express your thoughts to each other openly, then you will be able to talk about your strengths and weaknesses. This promotes teamwork by creating an environment in which members complement each other's weaknesses. Of course, everyone wants to be seen to be strong by others, so they tend to hide their weaknesses. However, having the strength to show your weaknesses enables you take on challenges you may have thought were beyond your capabilities. Also, even if something is beyond your skillset now, you will approach challenges with a positive mindset. The individual desire to succeed will gradually change the company.

Open discussion also allows employees to combine their strengths. Even if a challenger drives innovation, a business cannot succeed with that person alone. Commercializing, maintaining, and expanding the results of these challenges requires assigning personnel based on their respective capabilities. By creating an environment where employees can talk openly about their strengths, weakness, and desires, the team should be able to bring out the full potential of each individual.

When I was a production site manager, I saw that the true nature of people was revealed when they faced difficult quality issues. From this experience, I came to understand how to combine individuals to form a strong team to deal with such issues. As president, I will use of this experience to build strong organizations within KOA.

Achieving sustainability in collaboration with local communities

Positioning the environment as one of our Five Groups of

Stakeholders, we are also focusing on environmental activities. During our 2024 Medium-Term Management Plan, we are working to reduce greenhouse gas (GHG) emissions by focusing on the adoption of renewable energy and reducing electricity consumption. While the use of renewable energy leads to increased costs, we are working internally to resolve this issue through KPS activities. However, reducing the cost of renewable energy requires promoting adoption and technological innovation throughout society. For this reason, we are working with local governments to popularize and promote activities aimed at GHG emission reductions. From the perspective of carbon fixation, we also have been conducting forest conservation projects through our subsidiaries for some 30 years as part of our efforts to create a system that sustainably utilizes forest resources throughout the region. We plan to continue working with forestry workers, construction companies, lumber companies, and other local businesses to create a virtuous cycle between forest conservation and the local economy (P.29 Reduction of GHG emissions).

Aiming for long-term growth by further strengthening relationships with our Five Groups of Stakeholders

KOA has been implementing well-balanced measures to strengthen relationships with our Five Groups of Stakeholders. Improving employee engagement and diligently addressing the concerns of our customers and business partners are critically important to KOA. For local communities, KOA strives to confront and help resolve local issues in our hometown of Ina Valley and other locations around the world. We are also conscious of promoting a recycling-oriented society and are working on business activities that are in harmony with the natural environment from which we "borrow" space to conduct our business activities. We are confident that these measures will lead to increasing our medium and long-term corporate value, and that we will be able to meet the expectations of our shareholders.

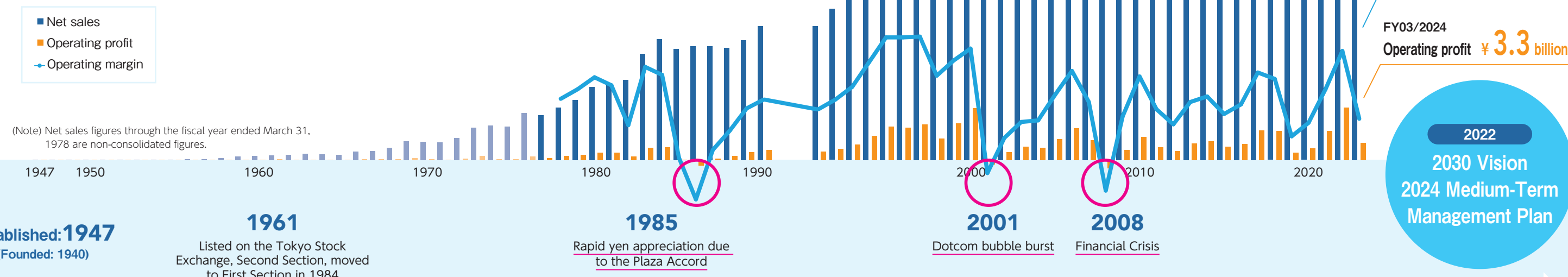
Preparing the KOA Integrated Report provides us an opportunity to reconfirm and recommit ourselves to the meaning of "trust" as outlined in our management policy. Everyone at KOA will continue to apply this policy as we unite towards realizing our 2030 Vision. I want to thank you for taking the time to review the KOA Integrated Report, and I thank you for your continued guidance and support.



History

Growth Trajectory

KOA engages in corporate activities with the goal of increasing corporate value for the benefit of the Five Groups of Stakeholders we identify in our Mission. We achieve this by adopting new management systems to overcome the endless changes we face in our operating environment. We leverage the capabilities we have cultivated over the years to offer value that contributes to the realization of a sustainable society.



Adoption of New Management System
(P. 25: KPS Activities for Enhancing CS and ES)

- KPS-1** (from 1987) Elimination of management inefficiencies, aiming to establish a new management system
- KPS-2** (from 2001) Becoming a company that is sought out by customers
- KPS-3** (from 2010) An R&D-oriented company capable of co-creation

Supporting communities through the electronic components industry

Global manufacturer of mass-produced resistors

Becoming a world-known resistor manufacturer chosen for quality and reliability

Started manufacturing fixed resistors. We expanded business amid post-war inflation.

With rapid economic growth, manufacturing of leaded resistors for use in CRT televisions and home appliances expanded.



Demand for chip resistors grew with digital home appliances and mobile phones.



expanded with the rapid growth of digital home appliances such as PCs, LCD TVs, and mobile phones.

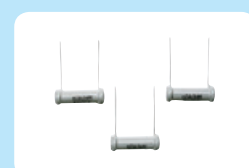


As the market for digital home appliances entered a period of maturity, we explored new resistor markets to pursue further growth. KOA targeted automotive products on expectations of high growth potential. Working to improve quality to meet the demands required for automotive products, we have achieved high quality, high precision, and high durability. Additionally, the proportion of environmentally friendly vehicles in global car sales will increase as society aims to achieve carbon neutrality in 2050. As a result, today automotive applications account for some 50% of our net sales.

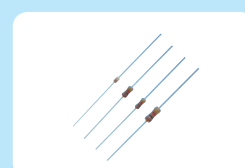


Applications

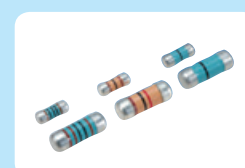
Major products (resistors)



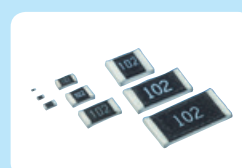
L-shape carbon film resistors



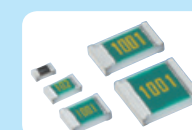
Leaded resistors



MELF type resistors



Thick film chip resistors



Thin film chip resistors



Current sensing chip resistors



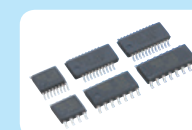
Thin film chip resistors for automotive applications



Cement case resistors for automotive applications



Thin film network resistors for high voltage divider



Thin film network resistors



Metal plate chip resistors



Wide-terminal chip resistors



Chip type power shunt



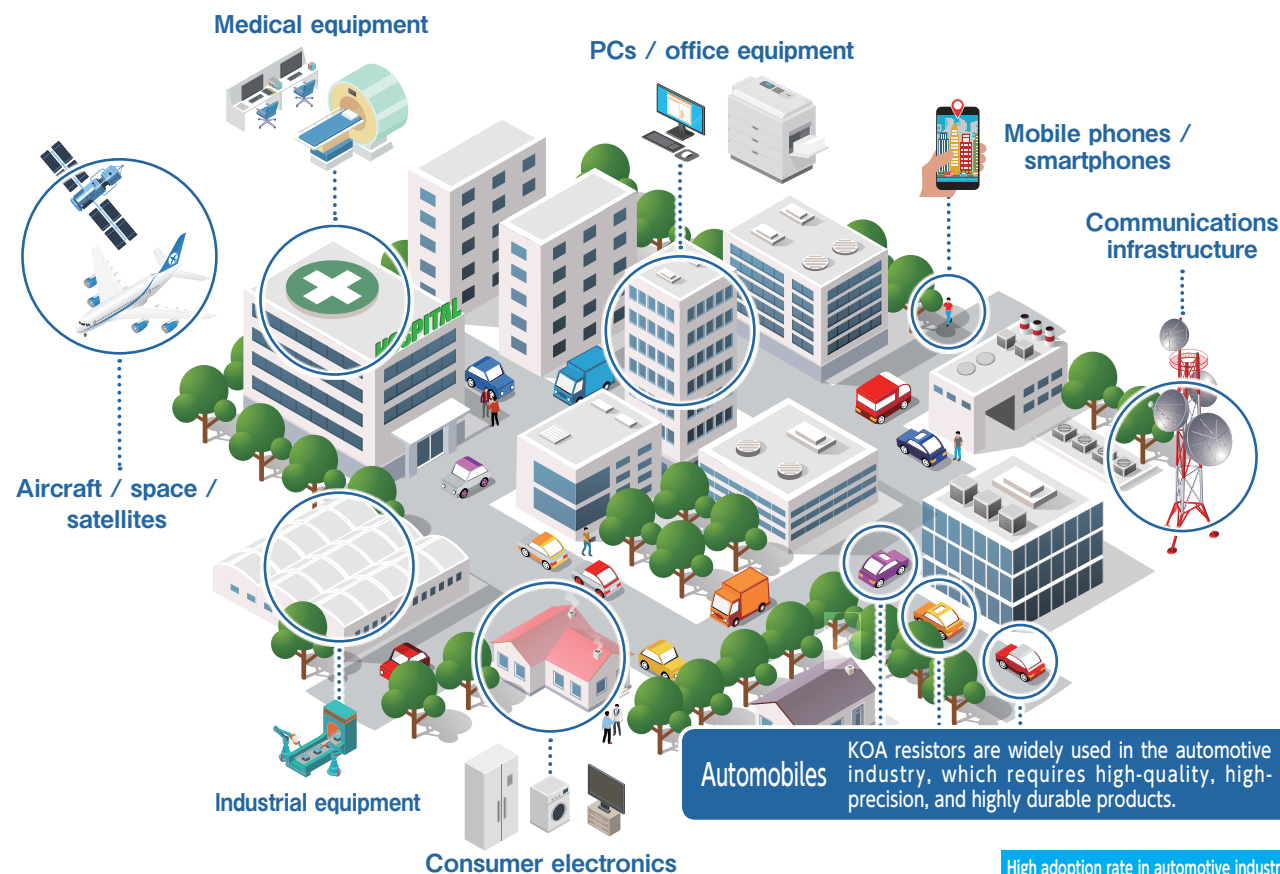
High reliability thick film chip resistors

KOA at a Glance

KOA's Business



Resistors, KOA's main product, are electronic components that restrict the flow of electricity. Restricting and controlling current and voltage works to ensure that electric circuits operate properly, making resistors essential components in products that use electricity. We respond to customer needs and support society by offering a vast selection of components capable of responding to product diversification and miniaturization.



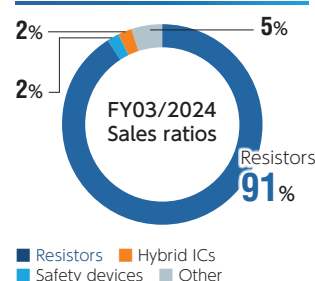
FY03/2024 net sales

¥64.8 billion

Stable provision of numerous products

Production volume
Over 10 billion units per month

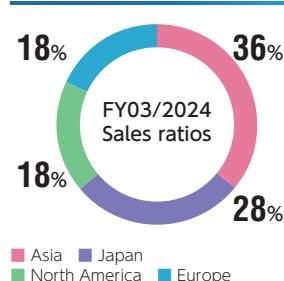
Sales ratios by product



Vast selection of resistance values, sizes, and materials

Product lineup
5.6 million products

Sales ratios by region

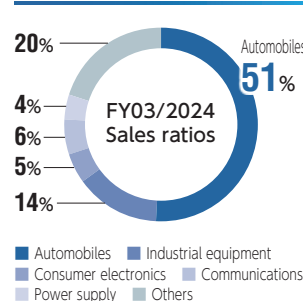


Products among the smallest in the industry

0.25 mm ×
0.125 mm

High adoption rate in automotive industry

Sales ratios by application



Share of thick film chip resistor volume in the automotive market

25%

*KOA estimate

KOA's Strengths



Total service capabilities

KOA is a global company with resistors as our main business. Our strength is in the total service capabilities we offer customers. After component verification by the customer, our customer support provides total support for customers, from product delivery to detailed follow-up services. Our technical support applies expertise related to product functions and design to rapidly address customer technical issues. We achieve problem resolution by ensuring smooth communication to rapidly respond to customer inquiries and quickly address issues. Through our total service approach, KOA has become known as a highly reliable partner to our many customers, and we will continue embracing this commitment to respond to customer needs.

Customer awards received: 14

A testament



Participation in growth markets

As a leading company in growth markets, KOA is aggressively developing business in the following core domains.

Automotive

We provide high-function, high-quality, and highly reliable resistors to contribute to the development of EVs and autonomous vehicles

Electric vehicles (EVs)



Chip resistors per vehicle
(KOA estimate)
7,000 to 8,000 units

Solar power generation power conditioners

We provide products that achieve high-precision sensing to contribute to efficient power generation

Power conditioners



Chip resistors per system
(KOA estimate)
1,200 to 3,500 units

AI servers

We provide products able to withstand a wide range of operating environments that contribute to stable infrastructure development

AI servers



Chip resistors per system
(KOA estimate)
3,500 to 5,500 units



Global sales network

With broad sales channels and a customer base that spans the globe, KOA is a global company that has established a strong presence in various markets. Our strength is in our sales network, which is able to respond to a wide range of customers and markets. This enables us to achieve stable growth and a high rate of customer satisfaction. Through our expansive sales network, we rapidly respond to the needs of each industry and region to achieve stable product supply.

Global network* (as of March 31, 2024)

Japan KOA CORPORATION: 21 sites Domestic Group companies: 17 sites
Nagano Prefecture: 12 sites, Outside Nagano Prefecture: 9 sites

Overseas 14 sites Asia (outside Japan): 11 sites, Europe: 2 sites, United States: 1 site

Employees (As of March 31, 2024)

Nonconsolidated: 1,687 Consolidated: 4,309 Japan: 2,533, Overseas: 1,776
*Includes production sites

KOA's Year in Review

The last year saw a decrease in demand for consumer electronics, industrial equipment, and power supplies among North American distributors as well as in Japan and China. Demand for automotive products increased in North America and Europe, but decreased demand in China had a significant impact on revenue. In response to a difficult operating environment, we made the decision to revise the 2024 Medium-Term Management Plan. Amid such an environment, KOA is working to build a foundation for solid growth as we aim to realize our 2030 Vision. This effort includes building a supply structure and releasing new products to support growth in the EV and mobility markets and industrial equipment market. We are also adopting renewable energy, working to reduce power consumption, and engaging in new governance initiatives.

July 2023

Launched sales of an airflow measurement system that helps visualize movement in airflows

Launched sales of a system that uses sensor technology to easily provide a multi-point visualization of movements in airflow (P.28)



October 2023

Completed construction of "Shin-shin-dou"

Established a site for promoting the physical and mental health of employees and their families (P.56)



2023

August 2023

Standardization of power derating by terminal part temperature

Led revisions of international standards to provide safety and security to users of resistors (P.27)



November 2023

KOA ELECTRONICS (H.K.) LTD. 30th Anniversary

Celebrated the 30th anniversary of the establishment of the KOA Group Hong Kong sales company



November 2023

Held KOA Thanksgiving Festival 2023

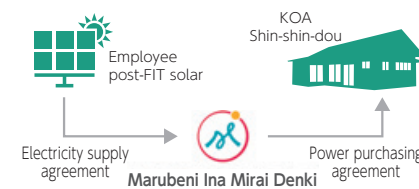
Following COVID-19, this was the first time in four years holding the in-person event used as an opportunity to express our gratitude to the Five Groups of Stakeholders.



January 2024

Started supplying electricity using employee's "post-FIT solar power"

KOA uses surplus electricity from solar power generation at employees' homes (P.30)



February 2024

KOA DENKO (MALAYSIA) SDN. BHD. received award from the Malacca state government

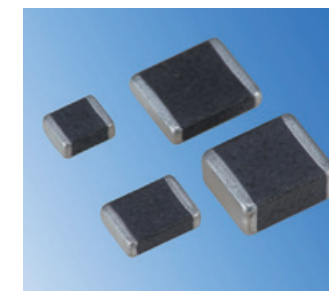
Award for contributing to the stimulation of CSR activities by the Malacca state corporate association (P.57)



May 2024

Released multilayer chip varistors (NV73S series) with surge resistance up to 6,000A

High surge resistance is achieved by using unique ceramic materials and optimizing the product structure



June 2024

Adopted an executive officer system

By separating management decision-making and supervisory functions from business execution functions, and working to strengthen both functions, we will speed up the decision-making process and improve the efficiency of business execution while also strengthening corporate governance (P.40)

2024

November 2023

Launched Shinshu Green Power Supply Expansion Project No. 2

Participated in activities to expand renewable energy power sources that are produced locally for local consumption (P.30)



November 2023

KOA DENKO (MALAYSIA) SDN. BHD. 50th Anniversary

Celebrating the 50th anniversary of the establishment of the KOA Group Malaysia production factory



August 2024

"SAKURA Wing" construction completed

We completed construction of a product development and manufacturing facility equipped with the latest analysis equipment and prototyping equipment. Through this facility, we will pursue cross-departmental co-creation and improve our technological capabilities by bringing together engineers to create new products and new businesses.



Important Megatrends and Business Opportunities

We predicted the business environment that will influence KOA in 2030 by evaluating important megatrends. Through these evaluations, we identify business opportunities based on factors such as the growth potential for KOA's existing businesses, new business possibilities, and consistency with our corporate vision.

Earth
(Environment)

SX*1: Synchronization of corporate and social sustainability

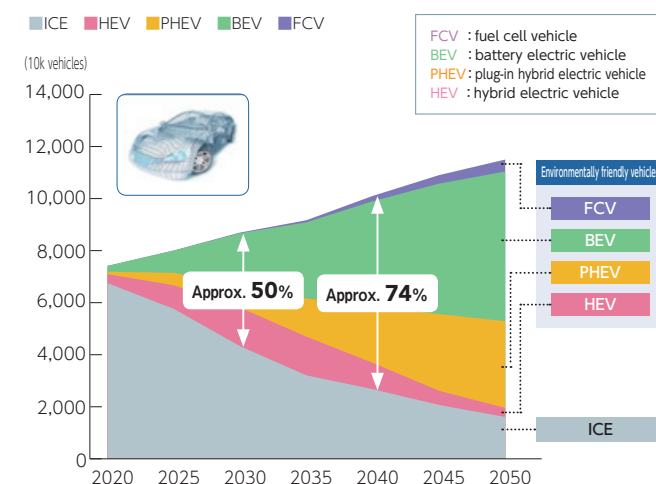
Important Megatrends

General adoption of mobility solutions powered by renewable energy and the expansion of social infrastructure, leading to increased needs for resistors

Corporations are expected to engage in initiatives such as the SDGs to promote social and environmental sustainability. The automotive industry is advancing an electrification strategy towards achieving carbon neutrality by 2050. This is expected to drive the general adoption of EVs and compact mobility solutions that help reduce environmental impact. Compared to ICE vehicles, demand for thick film chip resistors is expected to grow for EVs. Also, advances in CASE-related technology*2 and new energy infrastructure are also expected to drive demand for electronic components. Amid such an environment, resistor manufacturers will be required to meet various demands, including competitive pricing, increased supply capabilities, enhanced functionality, and high reliability. KOA will use our many years of kaizen activities as a foundation to further increase the quality of products for the automotive industry and continue working to build strong relationships in the industry.

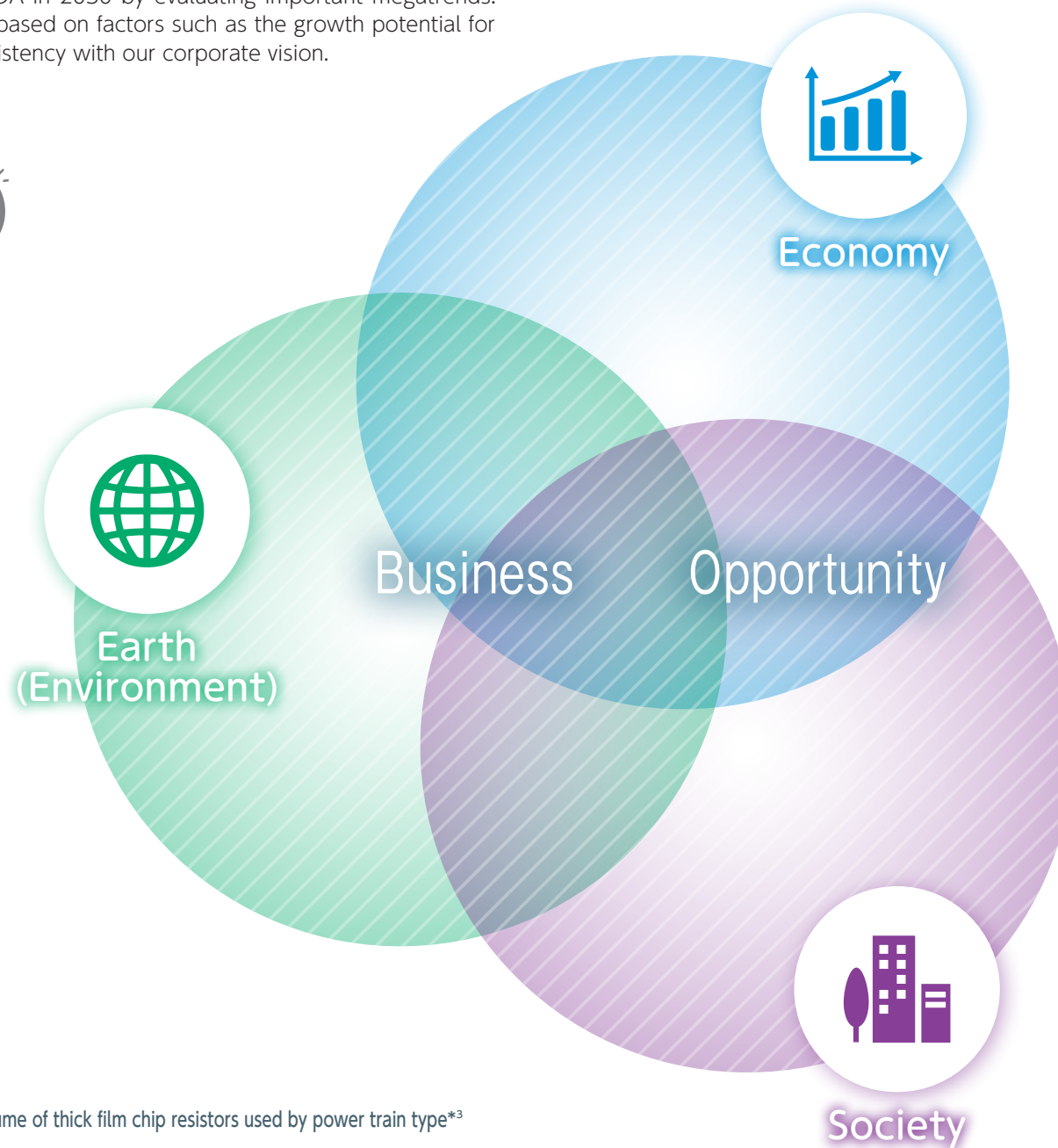
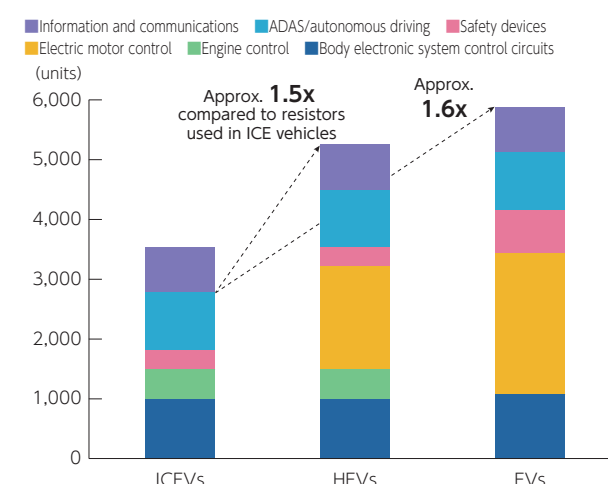
*1. Sustainability transformation
*2. Acronym for Connected, Autonomous, Shared & Services, Electric

Automobile sales projections by vehicle type*3



*3. Figures based on KOA forecasts and calculations

Volume of thick film chip resistors used by power train type*3



Economy

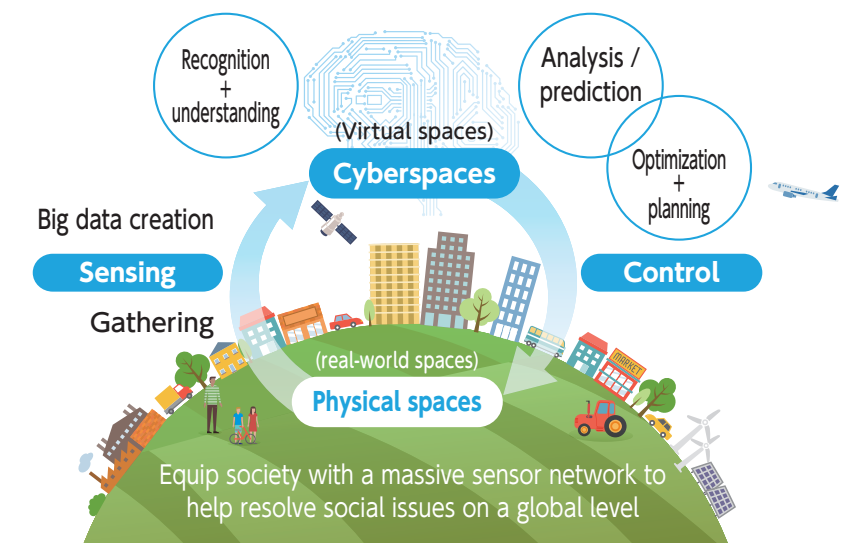
DX: 4th Industrial Revolution

Important Megatrends

The arrival of the “trillion sensor society” drives rapid growth for sensors and sensor modules

Rapid advances in AI and IoT technology are expected to drive the adoption of cyber-physical systems (CPS)** that fuse cyberspaces and physical spaces. We are on the cusp of a “trillion sensor society” in which global sensor demand reaches one trillion units per year. In such an environment, KOA believes that sensors and sensor modules created using advanced technological skills and development capabilities will experience rapid growth. KOA is undertaking R&D for products that will help users to better visualize what they cannot easily see and, thereby, change the future for the better.

*4. Computer systems to read various data that exist in physical spaces and incorporate them into cyberspace, after which big data processing technology is used to analyze that data, and useful information and services are fed back into physical spaces.



Society

Changes in population trends and shifts in values

Important Megatrends

Approaches to resolving regional issues based on a sustainable perspective will be required

Developed nations are projected to face population aging and labor force decline while emerging nations are projected to see growth in the middle class. The issues facing each region are diverse. Since our founding, KOA has worked to resolve social issues through its business activities. This long-held commitment by KOA has been ratified by the emphasis on sustainability issues now being expected of all corporations. We will continue to respond to the changing times and shifts in societal values as we work to meet the needs of each region and market.



Overview of 2030 Vision and Value Creation Story

We strive to provide safety and security to our customers around the world through the stable supply of essential parts we aim to realize a sustainable society. In addition, by allowing the visualization of unseen or hard to detect phenomena we hope to provide new value to the market which will make KOA an "essential part" of innovation. The 2030 Vision expresses the vision of every KOA employee striving to become essential through working to realize

with high quality and high reliability. With this commitment, through the business domain of sensors and sensor modules, their aspirations and goals in cooperation with colleagues.



Earth (Environment)

SX: Synchronization of corporate and social sustainability



Economy

DX: 4th Industrial Revolution



Society

Changes in population trends and shifts in values

Recognized business opportunities

It is expected that the demand for resistors will increase due to expanding social infrastructure and the wide adoption of mobility solutions using renewable energy

It is market sensor

anticipated that the sensor/sensor module will grow with the advent of the "trillion-society"

Companies will be required to adopt the perspective of sustainability in order to solve local issues



2030 Vision

Vision slogan

Vision statement

Essential

We at KOA strive to be an essential parts manufacturer. Through small parts, we create big, world-harmony with nature, KOA shall create new solve social problems and create value generated by the high quality of our products

Parts of the World

manufacturer that supports the world and to work as part of society to create a better world. changing transformations. With the goal of creating a recycling-oriented society that is in value for our customers by discovering the true sources of their problems as they work to for their own customers. Building on continuous improvement and relationships of trust and processes, we will blaze the trail forward through innovative thought and action*1.



KOA's Corporate DNA

Founding Spirit

Trust building with stakeholders and community engagement that carries on the spirit of "Farming and Manufacturing in Unison"



Values

"Circulation, finite, harmony and enrichment"

Corporate Competencies



Manufacturing

JIT*2/Global supply network
Reliable and stable supply, continuous improvement



Quality

Zero Defect Flow*3: "Each item and each piece shall be guaranteed by each employee" as the underlying philosophy



Product Development

Hypothesis building and verification of customer needs; solution proposals



Human Capital Development

Human capital development based on the development of inter-personal skills and character building as well as management skills and expertise



Creating a Model for a Recycling Oriented Society

Community service projects based on job creation, human capital development, and preservation of community values

KOA's Challenge to Realize its Vision



KPS Activities for Enhancing Customer Satisfaction and Employee Satisfaction

Aim to create a "workplace that is more upbeat and pleasant than anywhere else" while improving manufacturing productivity and quality through digitization



Expansion of Business Domains

Expand business domains in terms of markets and applications such as automobiles and industrial equipment as well as in terms of addressing social issues such as energy, social infrastructure and the environment



Reduction of Green House Gas (GHG) Emissions

Reduce GHG emissions throughout the supply chain



Development of Human Capital to Create Our Future

Continue to implement human capital development that enhances capabilities and encourages our employees to take on challenges



Giving Back to Communities

Cooperate with local communities to solve issues at each location

Value to Create



Safety and Security

Provide customers with security and safety through stable production and supply of high-quality products



Ability to visualize the invisible

Develop sensors and sensor modules to help visualize incorporate data to provide solutions to social issues together with our customers



Coexistence with Nature

Contribute to the realization of a carbon-neutral society



Diversity and Motivation

Ensure diverse employees are working proactively as Team KOA and feeling motivated and happy in their jobs



Regional and KOA Development

Continuously implement a virtuous cycle of revitalization of each region and the development of KOA

*1. The concept of each employee understanding the objectives behind their actions and thinking independently while also involving others to work as a team.

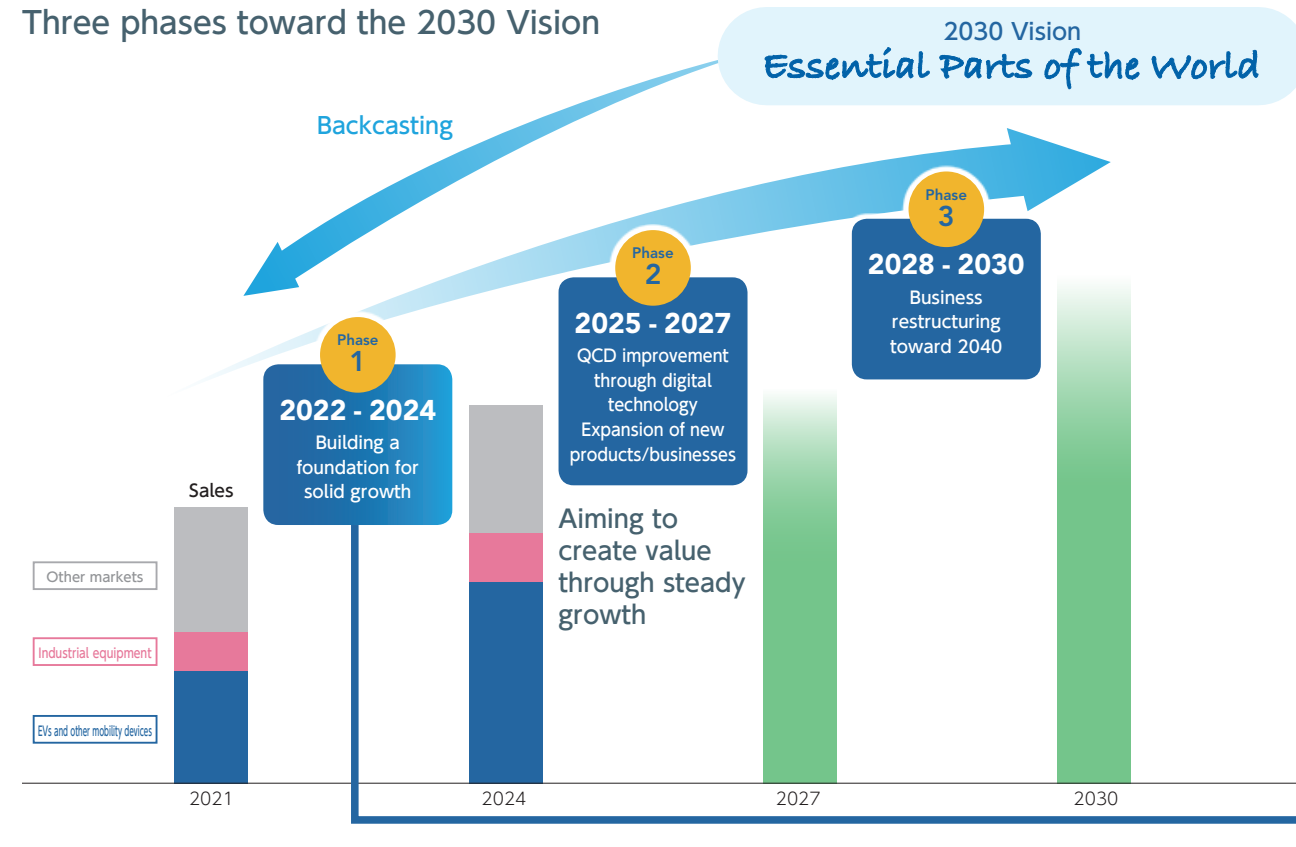
*2. (Just-in-time) A supply scheme based on the concept of delivering the required amount of necessary goods at the right time.

*3. Process that does not create defective products

2024 Medium-Term Management Plan and Progress of Initiatives

We have built our Medium-Term Management Plan, our concrete implementation plan, by backcasting from our 2030 Vision, our desired state for 2030. We will formulate and implement a Medium-Term Management Plan with the aim of creating value through steady growth. In the 2024 Medium-Term Management Plan (2022-2024), which marks the first three years on the way to 2030, we are focusing on building a foundation for solid growth.

Three phases toward the 2030 Vision



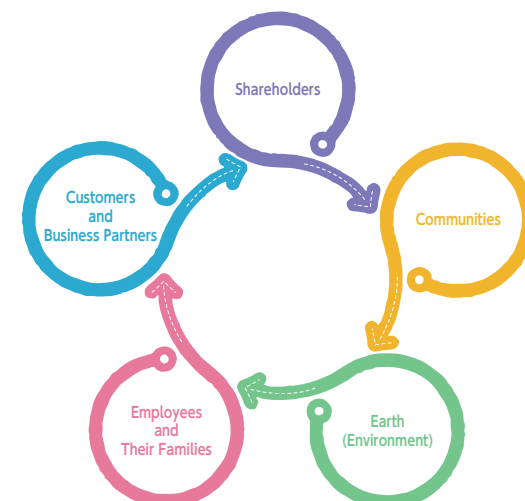
KOA's challenge to realize the 2030 Vision

1. KPS Activities for Enhancing CS and ES ▶ P.25
2. Expansion of Business Domains ▶ P.27
3. Reduction of GHG Emissions ▶ P.29
4. Development of Human Capital to Create Our Future ▶ P.31
5. Giving Back to Communities ▶ P.33

Management Foundations for Value Creation ▶ P.36

Relationship between the five groups of stakeholders and our challenges –

- Customers and Business Partners
- Employees and Their Families
- Communities
- Earth
- Shareholders



Phase 1

Key measures of the 2024 Medium-Term Management Plan

Establishment of a supply system for 2030	Introduction of renewable energy and reduction of electricity consumption
- Thick film and thin film chip resistors - Production increase at plants across the world - Expansion of production facilities - Enhancement of business continuation plan (BCP) through multiple-location production	- Promotion of renewable energy utilization - Reduction of power consumption by improving productivity and adopting the latest energy-saving technologies - Enhancement of the ability to collect and analyze GHG emissions data - Creation of a model for addressing climate change in conjunction with local communities
1. KPS Activities for Enhancing CS and ES	3. Reduction of GHG Emissions
5. Giving Back to Communities	
Evolution of KPS activities	Development of human capital to create our future
- Utilization of digital technology to convert on-site wisdom (tacit knowledge) into processes and technologies (formal knowledge) - Product development that will be appreciated by customers based on future projections and potential requirements - Establishment of supply chain management that maximizes management resources and ensures stable supply and flexible delivery	- Enhancement of communications to nurture employees who take the goals of the company as their own and spontaneously make contributions - Establishment of systems for human capital development and career support to realize the 2030 Vision - Creation of a system which motivates employees to take on challenges
1. KPS Activities for Enhancing CS and ES	4. Development of Human Capital to Create Our Future
2. Expansion of Business Domains	
Introduction of Innovation Management System (IMS)	New governance initiatives
- Establishment of a support system for innovation initiatives by the IMS promotion department. - Implementation of a new value creation process based on the uncertainty of new and existing businesses - Distribution of the medium- to long-term strategies by top management.	- Adoption of a performance-based compensation system for executives - Appointment of at least 1/3 independent outside directors - Establishment of a Nomination and Compensation Committee with a majority of independent outside directors
2. Expansion of Business Domains	

Target Values/KPI

Financial performance	(Reference) FY03/2022	FY03/2023	FY03/2024	FY03/2025 Revised target value ³	FY03/2025 Target value
Sales	¥64.9 billion	¥75.0 billion	¥64.8 billion	¥71.9 billion	¥87.0 billion or more
Operating profit	¥5.7 billion	¥10.2 billion	¥3.3 billion	¥3.9 billion	¥11.0 billion or more
Operating margin	8.8%	13.6%	5.1%	5.4%	13% or higher
ROE	7.4%	10.5%	3.6%	4.1%	11% or higher
Environment	(Reference) FY03/2022	FY03/2023	FY03/2024	—	FY03/2025 Target value
CO ₂ emissions (Scope 1 + 2) reduction compared to FY03/2021 (%)	10% reduction	61% reduction	65% reduction	—	65% reduction
Electricity consumption	APR +8.7%	APR +3.6%	APR +3.3%	—	APR +4.0% or lower
Renewable energy utilization rate	17%	69%	73%	—	70%
Human capital	(Reference) FY03/2022	FY03/2023	FY03/2024	—	FY03/2025 Target value
Employee engagement rating ^{*1}	CCC (47.1)	B (49.7)	B (49.2)	—	BB (52 or higher)
Investment in human capital development/training ^{*2}	100	167	173	—	200

^{*1} Engagement rating based on "Motivation Cloud" by Link and Motivation Inc. Rating is based on an 11-tier scale of AAA to DD (CCC is the 7th highest rating). Rating of all KOA CORPORATION employees (parent company).

^{*2} Comparison based on the fiscal year ended March 31, 2022 as 100.

^{*3} We revised target figures for the fiscal year ending March 31, 2025 to reflect a decline in resistor demand attributed to longer inventory adjustment periods by distributors and other customers of our products such as industrial equipment and home appliance manufacturers seen since the fiscal year ended March 31, 2024. These revisions also reflect the slowdown in the global economic recovery trends triggered by Chinese economic stagnation and changes in projections for global automobile production volume.