



Director, Managing Executive Officer  
Executive General Manager of  
Core Components Business

**Hiroshi Fure**

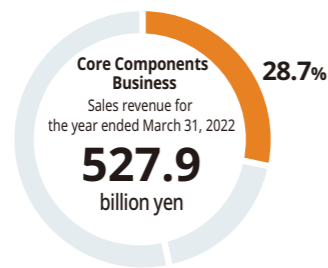
# Core Components Business

We realize the management rational by providing core products of sustainable society and creation of healthy and fulfilling life.

Our Core Components segment comprises seven businesses: fine ceramic components (our founding product line), as well as automotive components, optical components, semiconductor-related components, medical equipment, and jewelry. We aim to expand this segment by focusing on growth markets such as the information communications field, while continuing to strengthen our management foundation through greater collaboration with other businesses. This will involve applying the strengths of each product line across the entire segment, solving common issues through information exchange, and collaborating for growth.

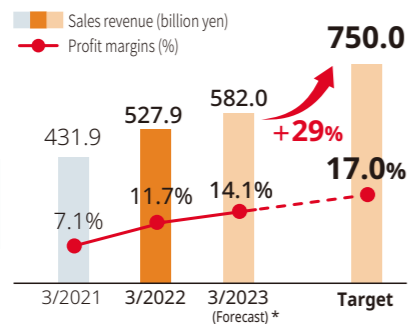
## Business Performance/ Targets

### Sales Revenue by Region



### Core Components Business Targets

Sales revenue **750.0** billion yen  
Profit margins **17.0%**



For the fiscal year ended March 2022, sales totaled 527.9 billion yen, up 22.2% year-on-year, following strong demand for semiconductor components in particular. Profit before income taxes totaled 61.6 billion yen, up 101.8% year-on-year, with a profit ratio of 11.7%. This segment saw a significant increase in sales and profit. These gains were led by fine ceramic components used in semiconductor devices; ceramic packages and organic substrates for communications infrastructure, including 5G; and automotive components. Capital investment helped propel sales of high value-added products, a key factor driving higher margins.

For the fiscal year ended March 2023, we forecast this segment sales of 582 billion yen, profit before income taxes of 82.0 billion yen, and a profit ratio of 14.1%\*. As part of the company's medium-term goal of 3 trillion yen in consolidated sales, this segment is targeting sales of 750 billion yen with a profit ratio of 17.0%. Our challenges include geopolitical instability, supply chain uncertainty and inflation. However, we will strive to achieve our targets through stronger customer relationships in markets for high-performance semiconductors, increased production, and new technology innovations.

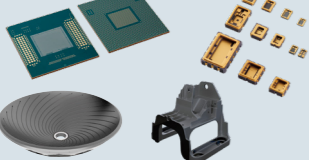
## Value Provided, Main Products and Services

### Information & Communication

Contributing to the realization of an information and communication-based society by supplying foundational parts

#### Main Products and Services

Organic Packaging, Ceramic Multilayer Packages, Semiconductor Processing Components

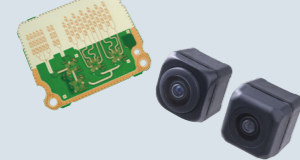


### Automotive

Improving the operability and safety of automobiles and reducing their environmental burden

#### Main Products and Services

Substrate for Millimeter Wave Radar  
Automotive Camera Modules

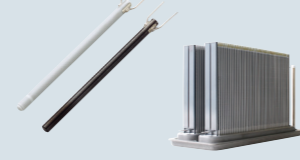


### Environment & Energy

Ceramics and semiconductor technologies that save energy and reduce environmental loads

#### Main Products and Services

Oxygen Sensor Heaters,  
SOFC (Solid Oxide Fuel Cell) Cell Stacks



### Medical & Healthcare

Developing medical products that improve quality of life

#### Main Products and Services

Dental Implants, Knee Implants,  
Hip Implants



## Vision

The vision for the Core Components segment is “We realize the management rational by providing core products of sustainable society and creation of healthy and fulfilling life.” Our components businesses provide the foundation for a broad range of industries and products that promote human well-being. Examples include decarbonization and energy solutions, such as our SOFC cell stacks; our jewelry business, based on ethical, lab-created gemstones; and our medical equipment and applied ceramics businesses, which support healthier, happier lifestyles.

## Cross-Department Collaborations

To strengthen our management foundation and create a springboard for growth, we have launched five cross-departmental projects. Our technology promotion project aims to improve technical capabilities and enhance training. It will set priorities for the segment and assign technical experts from various departments to address them.

The strategic planning project assesses core technologies and development themes. It will explore key strengths and future product concepts to establish new strategies for growth.

In the DX promotion project, we are pursuing smart factory benefits through digital transformation, as well as sales force automation (SFA) and marketing automation (MA). Further, we are enhancing human resource and organizational capabilities while strengthening our platform for growth through projects in human resource development (HRD) and quality management systems (QMS).

Project Name	Main Mission
Technology Promotion	Respond to critical issues, enhance core technological capabilities
Strategic Planning	Establish growth strategies that leverage the total resources of the Company
DX Promotion	Incorporate smart factory solutions, promote SFA / MA
HRD Promotion	Improve career development, employee skills and motivation
QMS Promotion	Business quality improvements: PDCA mechanisms

Five projects for enhancing our management platform

## Increased Production and New Product Development

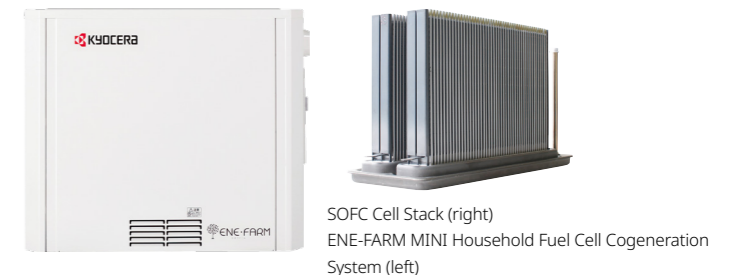
This growing segment focuses on the semiconductor and automotive-related businesses, where demand is expected to boom. Continued expansion in IT and communications is fueling demand for fine ceramic components used in semiconductor manufacturing equipment, along with ceramic packages and organic substrates for semiconductor devices. In response, we are enhancing production capabilities, increasing capital investment and expanding our workforce both in Japan and abroad.

Specifically, we are constructing two new buildings at our Kagoshima Kokubu Plant to increase production of fine ceramic components for semiconductor manufacturing equipment. Production is expected to commence in stages starting in October 2022, with plans to double production at the plant. Our organic packaging business will increase production through capital investments, expanding our Kyoto Ayabe Plant 3 and adding a new manufacturing facility at our Kagoshima Sendai Plant. In the ceramic packaging business as well, we are expanding production in Japan and abroad, including new capital investments for our Vietnam Plant.

In the automotive-related business, we are focusing on products for advanced driver-assistance systems (ADAS). We are raising production capacity by expanding plants in Thailand and elsewhere to fulfill increased demand for in-vehicle components, such as sensors, processors, and camera modules. The core component segment creates new products through the fusion of core technologies. We have applied our proprietary fine ceramics technology to develop and mass produce a ceramic “cell stack” that brings extremely high energy efficiency to solid oxide fuel cells (SOFCs).

In addition, we are building on our track record in semiconductor-related components to serve other technology industries, and leveraging our ability to collect information to create new solutions for emerging fields.

By utilizing such a wide range of material and process technologies, we will strive to create unprecedented products that fulfill societal needs.



Conceptual image: two new buildings at Kagoshima Kokubu Plant



Managing Executive Officer  
Executive General Manager of  
Electronic Components Business

John Sarvis

Director, Managing Executive Officer  
Deputy Executive General Manager  
of Electronic Components Business

Koichi Kano

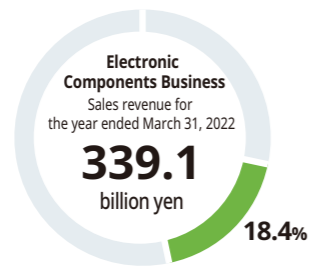
# Electronic Components Business

Creating value-added electronic components to benefit customers and society

The Electronic Components segment represents a fusion between Kyocera's Japan-based electronic components business and U.S. subsidiary KYOCERA AVX Components Corporation (hereafter, KYOCERA AVX). Since launching the new KYOCERA AVX brand, we have been pursuing synergies that leverage mutual strengths to expand this business globally. With full ownership of KYOCERA AVX, we will align the business to increase our share of the global electronic components market, which is expected to see new demand from expanding IoT, 5G, and ADAS applications.

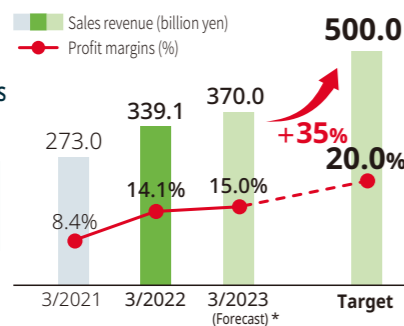
## Business Performance/ Targets

### Sales Revenue by Region



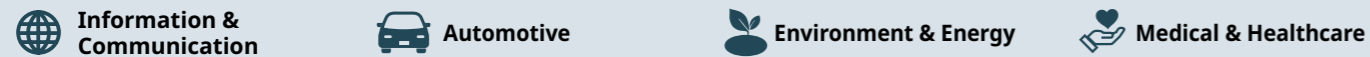
### Electronic Components Business Targets

Sales revenue 500.0 billion yen  
Profit margins 20.0%



\*Published figures as of April 2022

## Value Provided, Main Products and Services



Contributing to various societal needs by supplying foundational parts

### Main Products and Services

Multilayer Ceramic Chip Capacitors, SAW Devices, Crystal Devices, Power Semiconductors, Connectors, Tantalum Capacitors, Polymer Tantalum Capacitors, SuperCapacitors



## Vision

As industry leader, Kyocera aims to remain the first choice of customers seeking unique products and solutions that set us apart from the competition. Kyocera and KYOCERA AVX have worked alongside each other for over 30 years, and have formed a strong bond of trust. While maintaining this valuable position, we will work to deepen our mutual understanding and relationship of trust to achieve new synergies and create greater value for society.

## Synergies between Kyocera's Electronic Components Business and KYOCERA AVX

Both divisions are strong in different markets, regions, and sales channels. We will leverage our comparative strengths to expand cross-selling opportunities on the sales and marketing side. KYOCERA AVX has extensive experience leveraging proprietary IT to efficiently market its products to around 30,000 small and medium-sized enterprises globally. Kyocera will draw upon this know-how to launch new products in automotive, aerospace, and other industries in the U.S. and Europe. At the same time, we will market KYOCERA AVX products in the IT and communications markets of Japan and the rest of Asia. We integrated our marketing organizations serving the U.S., Europe, and Asian regions in 2021, ensuring the efficient use of assets by sales and marketing divisions.

We are now pursuing further synergies in manufacturing and development under the new KYOCERA AVX brand.

From a manufacturing perspective, we are taking steps to implement our proprietary IoT and AI-driven automated production system at KYOCERA AVX's 33 production sites worldwide. Further efforts to build "smart factories" will improve production efficiency and reduce costs.

From a development perspective, we will avoid overlap in electronic components R&D to ensure efficient capital investment, and accelerate product development by integrating the technologies of both divisions.

We are also collaborating in product development with other segments, including KYOCERA SLD Laser, a U.S. manufacturer of gallium nitride (GaN) devices that joined the Group in 2021. Through these efforts to create synergies, we are committed to the further growth and development of our business.

### Synergies with KYOCERA AVX

#### Sales and Marketing

- Leverage the strengths of both companies to expand cross-selling capabilities
- Integrate marketing organizations in the U.S., Europe, and Asia

Kyocera Electronic Components		KYOCERA AVX
Information & Communication	Market	Automotive/Aerospace/Other industries
Asia	Region	U.S. and Europe
Direct sale	Sales channels	Agents

#### Manufacturing

- Implement Kyocera's automated production system at KYOCERA AVX's production plants

#### R&D

- Avoiding overlap in electronic component R&D
- Develop new products by fusing both companies' technologies

## Aggressive Investments in Growth Products

Looking ahead, we will invest aggressively in key product lines, including multilayer ceramic chip capacitors (MLCC), crystal components, and tantalum capacitors.

With regard to MLCC, we will continue to invest in increasing production, constructing a new building at the Kagoshima Kokubu Plant, and increasing production of in-vehicle components at KYOCERA AVX Thailand. In April 2022, we established an organization integrating the management resources relating to the development, production, and sale of MLCC at both divisions. This will accelerate our global expansion under a uniform strategy.

With regard to crystal components, we aim to lead the market for ultra-small crystal oscillators using our advanced photolithography technologies.

KYOCERA Tikitin Oy, a Finland-based development center established in 2019 to produce smaller, lower-profile product designs, is creating next-generation components using silicon micro-electromechanical systems (Si-MEMS) and wafer-level package (WLP) technologies.

With regard to tantalum capacitors, KYOCERA AVX established a new plant in Thailand in December 2021 to expand production of polymer tantalum capacitors, a product line supporting future electronics innovations.



The new KYOCERA AVX Thailand Plant



Director, Managing Executive Officer  
Executive General Manager of  
Solutions Business

Norihiko Ina

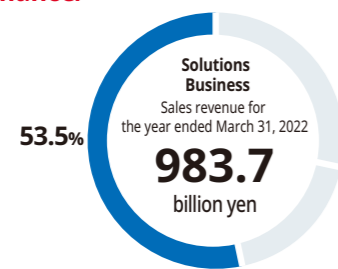
# Solutions Business

We provide solutions for social agendas and challenges facing customer beyond existing (organization) framework

The Solutions segment is comprised of seven product lines: industrial tools, displays, printing devices, smart energy, information equipment, telecommunications equipment, and information & communication services. Along with “horizontal integration” among diverse product lines, we promote innovation through a “vertical integration” that integrates the marketing and R&D departments with each product line.

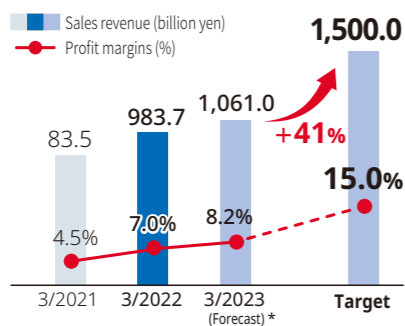
## Business Performance/ Targets

Sales Revenue  
by Region



## Solutions Business Targets

Sales revenue 1,500 billion yen  
Profit margins 15.0%



For the fiscal year ended March 2022, segment sales revenue totaled 983.7 billion yen, up 17.8% year-on-year, and profit before income taxes totaled 68.7 billion yen, up 83.3% year-on-year, with profit ratio rising to 7.0%. Despite the continuing COVID-19 pandemic, parts shortages, price increases, and disruptions in the supply chain, new demand was created through social change and a gradual economic recovery. In particular, the industrial tools and information equipment product lines expanded in key markets. The industrial tools unit saw increased sales of cutting tools, pneumatic tools and power tools, while the information equipment unit achieved rising sales of multi-function peripherals (MFPs), printers, and consumables. Profit margins also increased.

For the fiscal year ended March 2023, we forecast this segment sales revenue of 1.06 trillion yen, profit before income taxes of 87.0 billion yen, and a profit ratio of 8.2%. \* While the business environment is undergoing drastic changes amid Russia’s drawn-out war in Ukraine and the further depreciation of the yen, we will use all tools available in an unwavering effort to meet our targets on schedule. As part of the Kyocera Group’s medium-term goal to reach 3 trillion yen in consolidated sales revenue, this segment is targeting sales of 1.5 trillion yen in sales revenue, with a profit ratio of 15.0%. In addition to expanding our existing product lines, we will cultivate new businesses that fulfill emerging needs facing our customers and society.

\* Published figures as of April 2022

## Value Provided, Main Products and Services

### Information & Communication

Contributing to the development of an information communications-oriented society by providing MFPs, printers, and other office document solutions, telecommunications devices and infrastructure

#### Main Products and Services

MFPs, Printers, Telecommunications Devices, Base Stations, and Local 5G Services



### Automotive

Contributing to the realization of autonomous driving by utilizing communication modules and other communication technologies

#### Main Products and Services

Vehicle-mounted Communications Modules  
HUDs



### Environment & Energy

Contributing to the realization of a carbon-free society through solar power generation technologies and energy management

#### Main Products and Services

Solar Cells, Storage Batteries, Fuel Cells,  
Electric Power Services



### Medical & Healthcare

Providing high-quality products that allow advanced medical care and improve quality of life

#### Main Products and Services

Displays for Medical Applications  
Hospital Information Systems



## Vision

**Make as many people as possible happier and society better**

In addition to high-quality, high-value-added products and services, we provide solutions for social agendas and challenges facing customer and create innovation that contributes to the achievement of society and humankind beyond existing (organization) framework

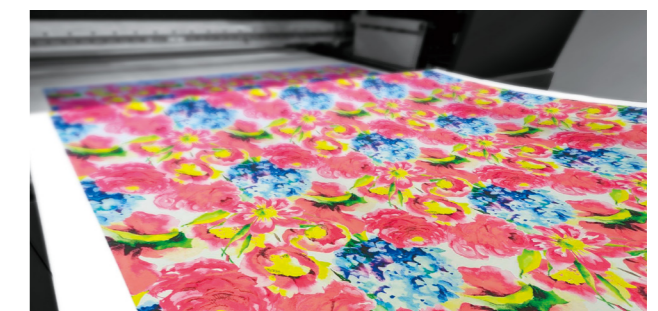
## Drawing upon Diversity in a Broad Range of Businesses to Deliver Synergy

The Solutions Segment is comprised of diverse product lines with their own organizational cultures and business structures. We view this diversity as our strength. By leveraging the strengths and resources of each business, we can achieve a broad range of synergies.

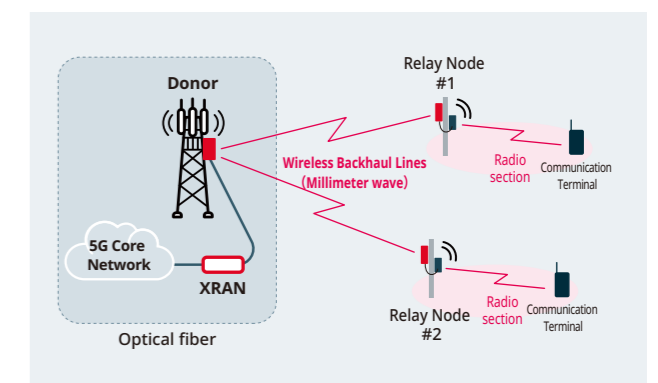
We have three strategies to maximize synergies segment-wide. The first is our approach to horizontal integration between product lines. By sharing business models and functions, we can strengthen each product line. In the information equipment unit, we are expanding our business under the concept of “Put knowledge to work,” enabling customers to turn information into knowledge that can be used more effectively. Our telecommunications equipment unit has adopted “JAPAN MADE” as its strategy for the Japan market. By building a business model in which all processes are completed in Japan, from planning and design to manufacturing, sales and service, we are emphasizing unique solutions for discerning customers. Looking ahead, we hope to create new synergies by sharing these business models with other segments. We are also promoting shared business functions and know-how in development, production, marketing, and sales.

The second strategy is to combine the businesses of individual product lines to provide innovative solutions. For example, we are developing new inkjet printing systems through collaboration between our printing devices and information equipment product lines.

The third strategy involves creating entirely new businesses — not just through horizontal integration between segments, but also through vertical integration with the Group’s marketing and R&D divisions, and through collaborations with third parties. From a marketing standpoint, we are working to support the energy and mobility sectors, while our technical priorities include greater research and development in next-gen telecommunications systems. One example is the 5G millimeter-wave backhaul system jointly developed in collaboration with JMA Wireless. Delays in the roll-out of 5G services often reflect the difficulty in extending optical fiber to remote areas. Our work with JMA has yielded a solution in response to societal demand for 5G services. This provides a model for developing new businesses through internal and external collaboration.



Inkjet printing example



Conceptual diagram of the 5G Millimeter Wave Backhaul System

# New Business Creation

## Developing New Businesses that Contribute to Society

Kyocera focuses on developing new businesses that balance social and economic value as a key strategy for medium-to-long-term growth. We target new businesses to generate sales of 250 billion yen toward our total mid-term goal of 3 trillion yen in consolidated sales revenue.

New business development may be divided into three stages: 1) Opportunity identification, 2) Business development, and 3) Commercialization. We are currently expanding applications for our high-efficiency GaN lasers, which are now in the commercialization stage, and we expect to see new products hit the market in the current fiscal year. For inkjet textile printing systems, we hope to move from business development to early commercialization in the not-distant future. Looking ahead, we will convert these initiatives into top-line results at the earliest possible stage. We will also keep investing aggressively in R&D to create new business offering products and services that help fulfill societal needs.

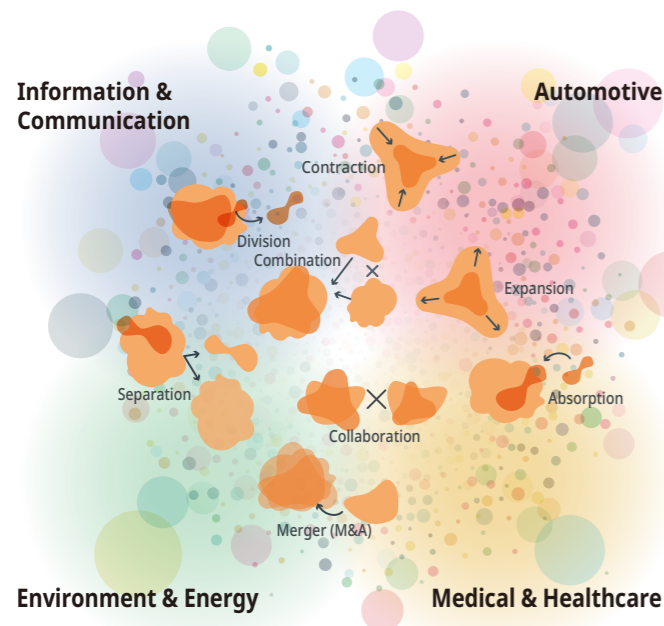
## Steps in Business Development

### Opportunity Identification

Opportunity identification uses two approaches to uncover prospective new businesses.

The first is a marketing approach that strives to anticipate the future needs of society and industry. We identify emerging human needs and Kyocera's unique solutions, based on our understanding of the changing times. The second is a technology approach to create superior products and services using Kyocera's wide portfolio of advanced technologies.

Through the interplay of these two approaches, we conceive new businesses that help fulfill societal needs.



## Business Development

### Inkjet Printing Systems

▶ P.10, 11, 17

**Societal needs**

- Huge Volumes of Waste Water Generated by Industry
- Inventories Wasted due to Overproduction

Our inkjet printing systems combine proprietary pigment inks with inkjet printhead technology to realize a water-free concept that greatly reduces industrial wastewater. These printing systems easily support small-lot, short-turnaround print jobs, optimizing production to minimize excess inventory. Kyocera's inkjet technology thus offers significant benefits in reducing waste and alleviating the environmental impact of the apparel industry.

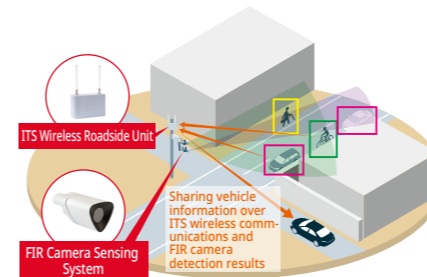


### Cooperative Vehicle-Highway System

**Societal needs**

**Traffic Accidents**

To improve safety at intersections that lack traffic signals, Kyocera is developing wireless roadside units for Intelligent Transportation Systems (ITS) and automotive cameras employing Far-Infrared (FIR) Sensing. These innovations combine technologies developed for the wireless communication and automotive industries. With these infrastructure systems, we hope to help drive the development of "cooperative vehicle-highway systems" to enable autonomous vehicles and safe driving support systems.



Cooperation between infrastructure and vehicles using roadside units (image)

### Regenerative Medicine for Knee Osteoarthritis

**Societal needs**

**Promoting Quality of Life for the Elderly**

Kyocera has entered a technical collaboration and licensing agreement with Australia-based Regeneus Ltd. to develop a cell preparation therapy using stem cell technology. Our objective is to improve the quality of life for a wide range of patients suffering from joint pain in the knees and elsewhere by expanding our regenerative medicine technology.



Administering a cell preparation by intra-articular injection in the knee joint (image)

## Commercialization

### AI Collaborative Robot System

**Societal needs**

**Labor Shortages**

We are working to help solve labor shortages by providing solutions using collaborative robots in processes where conventional robots cannot be deployed, including multi-product, low-volume production. Our systems employ proprietary AI technology to drive robot learning and continually improve work processes.



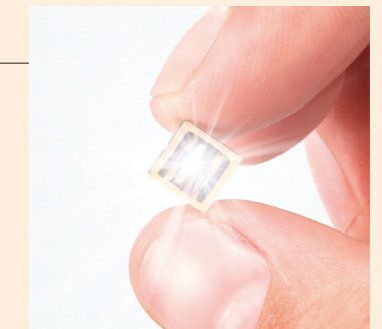
AI Collaborative Robot System

### High Efficiency GaN Laser

**Societal needs**

**Climate Change**

Gallium nitride (GaN), a next-generation material, is attracting global attention as a means to enable high-power, high-efficiency laser devices that require minimal operating power. We believe GaN devices offer great potential for creating a low-carbon society. Kyocera plans to develop a wide range of new applications, including ultra-high-speed wireless communications systems, using this material. Another promising application for GaN technology involves optical wireless power transmission, which enables electricity to be transmitted between two points using laser light instead of copper wires.



The revolutionary semipolar GaN laser diode

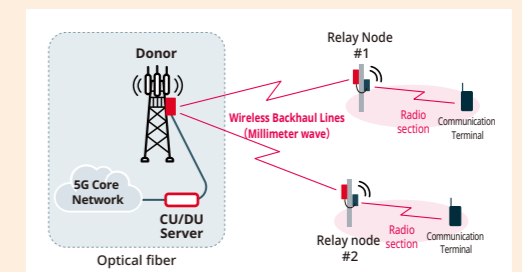
### 5G Millimeter-wave Backhaul System

▶ P.10, 17

**Societal needs**

**Disparity in 5G Network Coverage by Region (area)**

We deliver products that facilitate quick, inexpensive 5G network installation in rural and suburban areas where 5G services have been slow to spread due to issues with topography and other factors. We will strive to eliminate a "digital divide" and promote regional revitalization by extending 5G infrastructure while reducing construction times and costs.



Conceptual diagram of the 5G millimeter-wave backhaul system