

Osaka University  
**Integrated  
Report**  
**2024**

# Live Locally, Grow Globally

## Citizens

- Public lectures
- Student education
- Healthcare services

## Academic Institutions

- Joint research
- Personnel exchanges

## Students

- Education, support
- High school / university articulation

## NPOs

- Community support
- Collaborative partnerships



OSAKA UNIVERSITY

# Osaka University Integrated Report 2024

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- Interdisciplinary research

## Message from the President

### Building a Resilient and Sustainable Future Society to Empower Life and Living



**NISHIO Shojiro**  
18th President of Osaka University



Kaitokudō  
1724



Monument at original site  
of Kaitokudō

Tekijuku  
1838



Sign for Osaka School of Foreign  
Languages on the gate  
of the Uehachi schoolhouse

Osaka  
Imperial University  
1931

1921

Osaka School  
of Foreign Languages

1944

Osaka College  
of Foreign Affairs

Osaka University  
(new system)  
1949

1949

National University Corporation  
Osaka University of Foreign Studies

1967



Exterior view of Tekijuku

Osaka University,  
National University Corporation  
2004

2004

Osaka University of Foreign Studies,  
National University Corporation



NAGAOKA Hantaro, first president  
of Osaka Imperial University

#### Founding Spirit

— A university founded with passionate support  
from the local community of Osaka—

Osaka University was founded in 1931 as Osaka Imperial University.

Imperial universities were Japan's highest educational and research institutions established pursuant to the 1886 Imperial University Order to nurture competent individuals capable of playing leading roles in society. In those days, Osaka enjoyed greater prosperity than Tokyo as the nation's commercial and industrial center, and against that backdrop, there were calls from the public to establish a national comprehensive university in Osaka. Through the dedicated efforts of the political and business circles and citizens of Osaka, funds to cover the university's founding and three years' administrative expenses were raised and donated to

the national government, which eventually approved the establishment of Osaka Imperial University. Likewise, the Osaka School of Foreign Languages, the predecessor of the Osaka University of Foreign Studies which integrated into Osaka University in 2007, was founded with the financial support of HAYASHI Choko, a successful businesswoman in Osaka who envisioned a school in the city that could nurture internationally-minded individuals.

As a university established through enthusiasm and donations from the public, Osaka University embraces a tradition of partnership with society, with a mission to contribute to society through education and research. The university also inherits the civic spirit of its predecessors, the merchant academy *Kaitokudō* and *Tekijuku*, a private school of Western learning, which were deeply rooted in the Osaka region, and has developed together with society following the motto, "Live Locally, Grow Globally."



## A History of Society-University Co-Creation

With this founding spirit, Osaka University has been promoting a variety of world-class cutting-edge research projects, while keeping its doors wide open to society and working with diverse stakeholders in a broad array of endeavors, ranging from examining issues to be tackled to implementing research results in society. Based on its seamless relationships with industry, the university has produced significant innovations. Early innovations included the high-performance magnetron, which largely contributed to the widespread use of microwave ovens, to the world's first automatic ticket gates, which were developed using research results from the university. The development of Tocilizumab, the first antibody drug produced in Japan, and, more recently, the liquid explosive scanning technology using near-infrared light have also had a huge impact on society. These are just a few of our research results that have been used to enrich people's lives.

Osaka University's contributions to social innovation are widely recognized both locally and globally, as evidenced by having won several awards over five consecutive years at the National Invention Awards presented by the Japan Institute of Invention and Innovation, the highest Prime Minister's Award at the Japan Open Innovation Prize, and that it is ranked first globally in terms of relationships with industry in the prestigious THE World University Rankings.

### Steps to Co-Creation

#### Liquid Explosive Scanning (2018)

Research and development work was conducted at Osaka University on liquid explosive scanning technology using near-infrared light to detect from the outside the presence of liquid explosives in drink containers that passengers bring onto an airplane. Japanese company Kumahira Co., Ltd. has commercialized liquid explosive scanning systems that are now in use at airports around Japan and at some airports outside of Japan, contributing significantly to the deterrence of terrorism and global safety and security.

Recipient of the 2019 National Invention Awards  
(21st Century Invention Award/Contribution Award)  
Awarded the Inoue Harushige Prize in 2020  
for outstanding technology



Integration of Osaka University and  
Osaka University of Foreign Studies

2007

Named as a Designated  
National University  
Corporation

2018

2019

2020

2021

2022

2023

2024

### Steps to Co-Creation

#### World's first automatic ticket gate introduced at Hankyu Kita-senri Station (1967)

The first automatic ticket gates installed at Hankyu Kita-senri Station read commuter passes with holes punched in them like punch cards and regular train tickets with a magnetic (bar code) system. This world-first railroad ticketing examining system was recognized by the Institute of Electrical and Electronics Engineers (IEEE) as an historical achievement, a Milestone, along with the Tokaido Shinkansen (bullet train) and other technological feats.



### Steps to Co-Creation

#### Co-Creation Bureau established (2018)

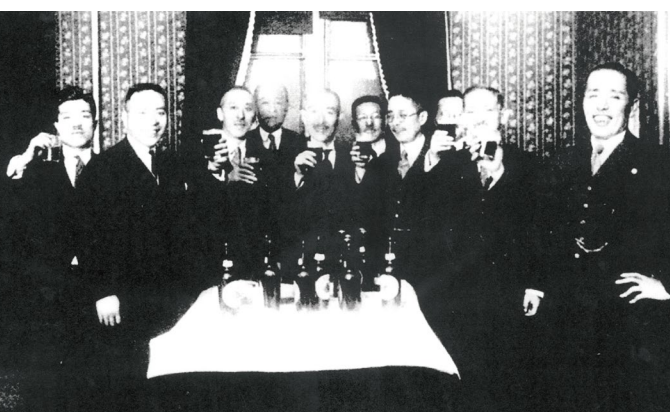
The Co-Creation Bureau, established in January 2018, focuses on collaborative activities between industry and academia (intellectual property and venture incubation), while also working to strengthen community partnerships and its fundraising capabilities. The Bureau is engaged in activities to "co-create" new value by combining the knowledge and proficiencies of society and the university. For details, please refer to p. 18–19.

### Steps to Co-Creation

#### (2019~2023)

For five consecutive years since 2019, the university has won awards for its research achievements, including winning the National Invention Awards.

Scan for more information  
on the history of Osaka University.  
<https://www.osaka-u.ac.jp/en/guide/history.html>



Celebrating the approval  
of the Osaka Imperial University  
Foundation Plan by the House of Peers

## Message from the President

### Creating a Society where Each Member Leads a Meaningful and Fulfilling Life

Through collaborative activities with society, we have discussed the vision of future society and the mission of universities with stakeholders and decided that, given the complex and serious challenges the world now faces, we should pool all of the university's knowledge and wisdom to develop a new social system to create a society where each member leads a meaningful and fulfilling life. With this understanding, we formulated a medium- to long-term management vision, the OU (Osaka University) Master Plan, to guide our efforts.

The OU Master Plan is characterized by vertical strategies supported by underlying horizontal policies in the fields of

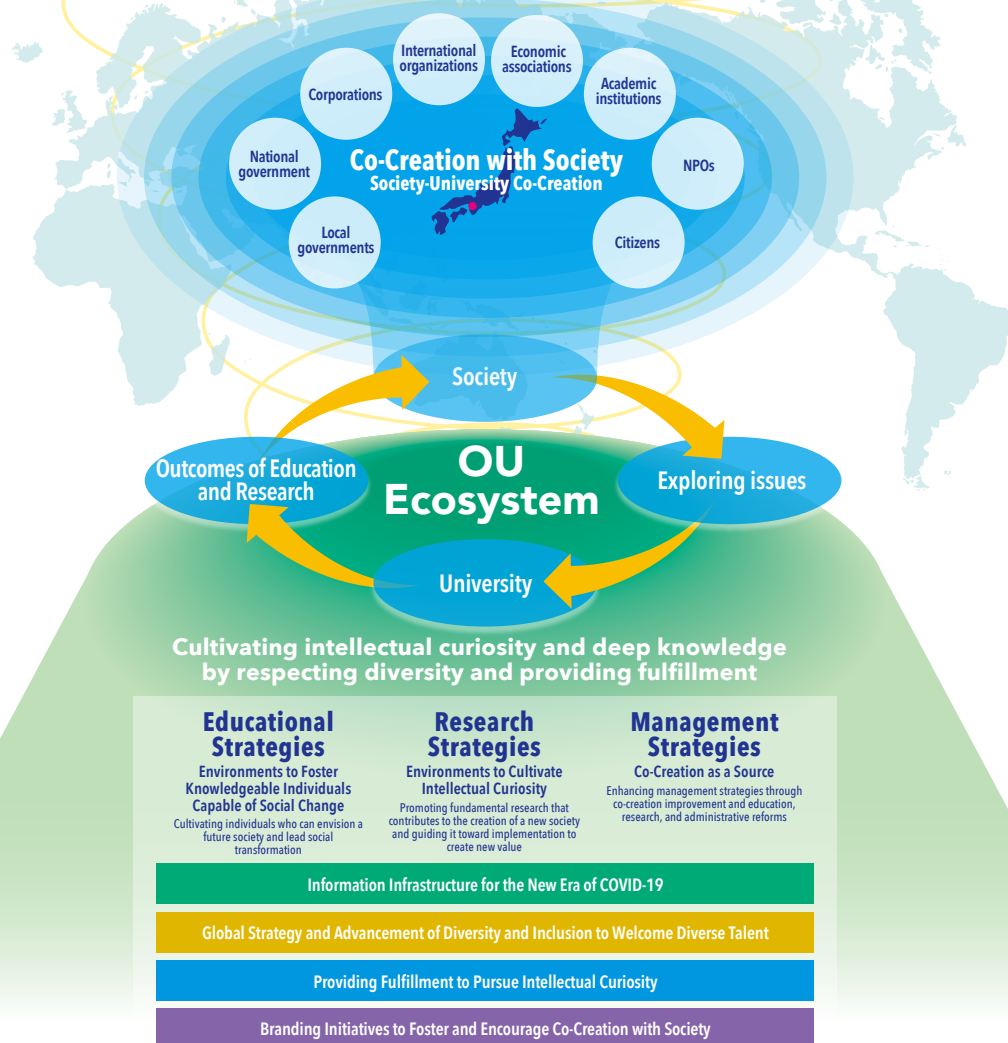
education, research, and management with across-the-board approaches of support for each into a comprehensive and flexible medium- to long-term management plan.

We have developed a fundamental framework, the OU Ecosystem, to implement this plan. This system encourages creative thinking to promote research and cultivate talented individuals, while putting into practice the outcomes of our exceptional education and research in society. Any issues identified in the process are fed back to the university to advance education and research, thereby creating a virtuous cycle of knowledge, talent, and funds.

#### Management Vision of Osaka University "OU Master Plan"

### Creating a Society where Each Member Leads a Meaningful and Fulfilling Life

Become an opinion leader that can create a society where the active lifespan of individuals (social activity) is extended, people of all ages apply their diversity in support of society, and every person enjoys a happy and fulfilling life.



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## ***Building a Resilient and Sustainable Future Society to Empower Life and Living***

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### **Osaka University's Resolve**

In our envisioned society where each member leads a meaningful and fulfilling life, every individual will live a happy and satisfying life, both physically and mentally, and feel that it is worth living through meaningful involvement in society, which will help to extend their social longevity. To realize this vision, we must build a resilient and sustainable future society that empowers life and living by reforming various social systems. And universities, as sources of new knowledge, talent and cutting-edge technologies, are expected to play a leading role in assuring this future. Thus, Osaka University has renewed its resolve to proactively lead the world in social transformation from Asia by creating new value and evolving knowledge, as well as nurturing outstanding talent.



### **A University to Lead Future Society**

It is essential to attract outstanding researchers from around the world and bring together the knowledge, talent, and technology necessary to achieve social transformation to address societal issues. As a comprehensive university, Osaka University is committed to finding practical solutions to societal issues by combining its diverse fields of expertise. Thus, innovative outcomes that impact society, such as the creation of new industries, are produced by promoting the social implementation of research outcomes through co-creation with society.

The university will also strengthen cooperative relationships with the Kansai region and contribute to the development of local communities. At the same time, addressing global issues such as overcoming infectious diseases and building sustainable societies from a global perspective will be another focus. Furthermore, we will nurture talent able to lead social transformation while involving various communities. This will be accomplished by providing students with opportunities to understand diverse cultures and backgrounds, and by attracting outstanding international students from around the world to study and interact in a global environment.

### **Creating "Future Society"**

— Working together —

Our vision is to build a resilient and sustainable future society to empower life and living. For that purpose, it is our commitment to pursue self-innovation and continue to evolve. As a new model of a university, Osaka University will demonstrate leadership in a changing society, and together with our stakeholders, we will create an ideal society through innovation and evolving knowledge for social transformation. We will work together with our partners to achieve our vision. Thank you for your continued support.

# Value Creation Model

Osaka University will create value for society in different forms by collaborating with stakeholders based on our high-value educational and research activities. We aim to build a society where each member leads a meaningful and fulfilling life by applying such newly created value to resolving the major challenges faced by humankind.

## INPUT

### Fostering Diverse Talent and Career Formation

- Creating an Environment that Fosters Knowledgeable Individuals Capable of Social Change [P14](#)
- Promoting Industry on Campus [P19](#)

### Framework for Producing New Knowledge

- Creating Environments to Cultivate Intellectual Curiosity [P16](#)
- Co-Creation Bureau's Activities Bringing Together Government, Industry, and Academia to Co-Create [P18](#)

### Networks that Face Social Issues

- Overseas Centers, Osaka University ASEAN Campuses, and Global Knowledge Partners [P10 / P26](#)

### Financial Foundation for Implementing Strategies

- External Funding Record [P22](#)

### Proactive Investment in the Education and Research Environment

- Student Life-Cycle Support (SLiCS) System [P15](#)
- Enhancement of Research Management Structures [P17](#)

### Energy-Saving and Initiatives to Achieve Carbon Neutrality

- Carbon Neutral and Sustainable Campus Initiatives [P20](#)
- Material Balance, Energy Usage [P21](#)

## OU Master Plan Strategies

## Management Strategies

### Education

#### An Environment to Foster Knowledgeable Individuals Capable of Social Change

Building an Educational Environment that Fosters Individuals Capable of Creating the Future Together with Society

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### Research

#### Environments to Cultivate Intellectual Curiosity

Producing Innovative Research Results Essential for Social Transformation and Promoting Innovation Through Collaboration

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### Co-Creation

#### Co-Creation as a Source

Enhancing Co-Creation: Strengthening Management Strategies by Expanding Local Open Innovation Globally

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# OUTCOME

**Creating a Society where Each Member  
Leads a Meaningful and Fulfilling Life**

## Well-being

People's  
connections  
with society

Extending  
the lifespan  
of social activity

## Solving the major challenges facing humanity

Achieving a resilient  
society that can  
overcome threats to  
humanity

Improving people's  
adaptability to a  
drastically changing  
world

Diverse people  
getting involved in  
society through new  
industries

## Co-Creation with Society

Rich intellect  
and  
spirit

Technological  
innovations

Lifelong  
learning

Mental and  
physical  
well-being

Sustainable  
society

Diversity and  
harmonious  
coexistence



## University Management Structure

As of 1 September, 2024

### NISHIO Shojiro President

He earned a Ph.D. in Engineering from Kyoto University after completing the doctoral program at the Graduate School of Engineering in 1980. Before becoming the 18th President of Osaka University in 2015, he held several key positions at the university, including Director of the Cybermedia Center, Dean of the Graduate School of Information Science and Technology, and Executive Vice President, while serving as Science Advisor for the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and as a member of numerous MEXT committees including the Council for Science and Technology. After assuming the present post, he also served as a Member of the Board of the Japan Association of National Universities. As President of Osaka University, he has been consistently promoting university reform based on the concept of "Co-Creation" and demonstrating leadership skills by balancing top-down and bottom-up approaches under the OU Vision 2021. Today, he is leading the university's initiatives under the OU Master Plan 2027 to improve and implement sustainable strategies tailored to education, research, and management to create a society where each member leads a meaningful and fulfilling life.

### KANEDA Yasufumi Executive Vice President

Senior Executive Vice President of University Management and Planning of OU Vision (Executive Vice President in charge of Co-Creation, International Affairs (Co-Creation), and Hospital Management)

He earned a Ph.D. in Medicine from Osaka University after completing the doctoral program at the Graduate School of Medicine in 1984. After serving as Dean of the Faculty/Graduate School of Medicine, Osaka University, and Executive Advisor to the President, he assumed the present position in 2019. As Osaka University's version of Provost, he is currently in charge of university management and planning of the OU Vision. During his tenure as Dean of the Graduate School of Medicine, he proposed the concept of an R&D Ecosystem and developed it university-wide as the "OU Ecosystem" through the Co-Creation Bureau, an organization unique to the university, leading to the further development of the Bureau. Building on the OU Ecosystem, he is currently working to create an Ecosystem for the Creation of New Value.

### TANAKA Toshihiro Executive Vice President

Senior Executive Vice President of Education and Research and Internal Control (Executive Vice President in charge of Education, Entrance Examinations, and Student Support)

He earned a Ph.D. in Metallurgical Engineering from Osaka University after completing the doctoral program at the Graduate School of Engineering in 1985. After serving as Dean of the School/Graduate School of Engineering, Osaka University, and Executive Advisor to the President, he assumed the present position in 2019. As Osaka University's version of Provost, he is currently in charge of education, research, and internal control, promoting drastic reforms based on opinions collected from academic staff to implement educational systems, such as SLICS, to support students in elementary, junior high, and high schools to post-graduation. As an active member of the faculty, he also teaches the course titled "A Door to Academia" (nicknamed "Machikane Seminars"), which is designed to encourage proactive and creative learning, thus leading the university toward its new educational vision.



## ONOE Takao

### Executive Vice President

Research, International Affairs (Research),  
Information Promotion, and Libraries

He completed the master's program in Electronic Engineering at the Graduate School of Engineering, Osaka University, in 1993 and later earned a Ph.D. in Engineering from Osaka University. Before assuming the present position in 2019, he served as Dean of the Graduate School of Information Science and Technology and Executive Advisor to the President. He is currently responsible for the university's research strategies, support for young researchers, development of information infrastructure, enhancement of information services, and international research.

## TANAKA Manabu

### Executive Vice President

Facilities and International Affairs (Organizations)

He completed the master's program in Welding Engineering at the Graduate School of Engineering, Osaka University, in 1992, and later earned a Ph.D. in Engineering from Osaka University. After serving in key positions at the university including Director of the Joining and Welding Research Institute, he assumed the present position in 2023. He oversees the management of the university's facilities, sustainable campus initiatives, and international organizations.

## YAMAMOTO Beverley Anne

### Executive Vice President

International Affairs (Education)

She completed her doctorate at the University of Sheffield's Faculty of Social Sciences in the UK and earned a Ph.D. in East Asian Studies (Japanese studies) in 2000. After working as Deputy Director of the International College at Osaka University, she assumed the present position in 2023 and has since been responsible for the university's international education and support for international students.

## INOUE Keiji

### Executive Vice President

Diversity and Inclusion, Public Relations, Risk Management,  
and Office Administration

After working for MEXT and the Cabinet Office, he assumed the present position in 2023, taking charge of the university's diversity & inclusion initiatives and public relations strategies, while promoting risk management, administration improvement and workstyle reform.

## IZUTANI Yachiyo

### Executive Director (Part-time)

Academic Community Outreach and University Branding

She graduated from the School of Human Sciences, Osaka University, in 1981. After serving as Director of the Announcer's Office, NHK, and President of the NHK Culture Center, she assumed the present position in 2023, taking charge of the university's outreach and branding activities.

## YAMAURA Miki

### Auditor (Part-time)

She is a lawyer affiliated with the Osaka Bar Association. As a legal expert, she has overseen the university's internal control since assuming the present position in 2024.

## FUKUTA Yuichi

### Executive Vice President

Finance, Quality Assurance Promotion and SDGs

He completed the master's program at the Graduate School of Economics, Osaka University, in 1991 and later earned a Ph.D. in Economics from Osaka University. He served as Dean of the School/Graduate School of Economics and Executive Advisor to the President before assuming the present position in 2023. He is now responsible for quality assurance, planning and evaluation of objectives, reinforcement of financial strategies, and Osaka University's SDGs initiatives.

## MIZUSHIMA Ikuko

### Executive Vice President

Personnel and Labor and Harassment Prevention

She withdrew from the doctoral program in Human and Environmental Studies at the Graduate School of Human and Environmental Studies, Kyoto University, with Research Guidance Approval in 1997. At Osaka University, she served as Senior Advisor to the President before assuming the present position in 2021. She is now responsible for the university's personnel and labor affairs, harassment prevention, health and consultation support, and human rights issues.

## FUKASE Koichi

### Executive Vice President

Global Engagement and Expo 2025

He completed his doctorate in Organic Chemistry at the Graduate School of Science, Osaka University in 1987 and earned a Ph.D. in Science from Osaka University. He assumed the present position in 2024 after serving as Director of the International College at Osaka University, Dean of the School/Graduate School of Science, and Senior Advisor to the President. He is responsible for the university's international exchange and cooperation programs and overseas centers.

## TAKEUCHI Noriko

### Executive Director (Part-time)

Managerial Reform

She graduated from the School of Human Sciences, Osaka University, in 1986. In 1990, she joined Congrès Inc. as a founding member, where she held the posts of Director, Managing Director, and Representative Director before becoming President in 2013. She assumed the present position in 2022. As an active business executive, she oversees promoting the university's managerial reform.

## KINOSHITA Takehisa

### Auditor

Before assuming the present position in 2020, he worked for Panasonic Corporation where he held various key positions, including Director of the Government & External Relations Department and Chief of the Tokyo Office. With his solid business background, he supervises the university's internal control.



Osaka University List of Trustees

<https://www.osaka-u.ac.jp/en/guide/president/trustees.html>

# Osaka University ASEAN Campus Project

— Fostering capable internationally-minded individuals and contributing to solving social issues through industry-university-government partnerships in the ASEAN region —

Since the 1970s, Osaka University has been building educational and research exchanges and cooperative relationships with universities and academic institutions in the ASEAN region. Based on these relationships, the ASEAN Campus Project was launched in 2017, with the aim of creating ASEAN hubs that promote exchanges among researchers and students through co-creation activities at educational and research institutions, government agencies, and companies among others, foster capable internationally-minded individuals with the ability to take the initiative toward solving social issues affecting the ASEAN region as well as tackle Global Challenges and implement research results for the benefit of society.

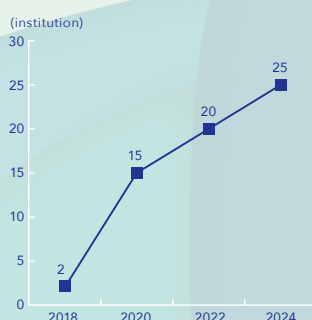
Currently, the university has seven ASEAN Campuses in the five countries listed below. By opening joint offices and joint labs on these campuses, Osaka University shares educational and research resources with its ASEAN partners to conduct a diverse range of educational and research activities. The number of educational and research institutions participating in the ASEAN Campus Project has grown to 25.

## Partner universities hosting ASEAN Campuses (as of the end of July 2024)

- Thailand** : Mahidol University
- Vietnam** : Vietnam Academy of Science and Technology
- Malaysia** : Universiti Sains Malaysia
- Indonesia** : Institut Teknologi Bandung
- Brunei** : Universiti Brunei Darussalam  
Sultan Sharif Ali Islamic University  
Universiti Teknologi Brunei



## Educational and research institutions participating in the ASEAN Campus Project (as of the end of July 2024)



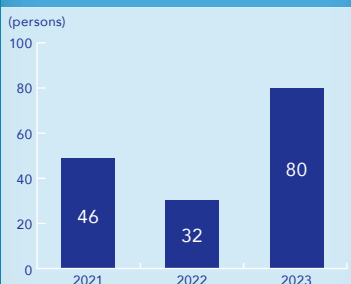
Above: an ASEAN Campus office  
Below: students studying at the campus

The ASEAN Campus Project is designed to foster capable internationally-minded individuals who can serve as a bridge connecting ASEAN countries with Japan and the world to contribute to the solution of social issues under the university's motto, "Live Locally, Grow Globally." The achievements of the ASEAN Campus Project, and the project's talent development programs and vision are shown below, focusing on the following three major initiatives:

### International Hybrid Learning Programs (OUICP\* / OUICP-S)

Osaka University offers OUICP and OUICP-S, a hybrid learning program for students of ASEAN Campus partner universities and Osaka University to study through online lectures and overseas practical training courses which include studies on SDGs and laboratory work. In this program, students of ASEAN Campus partner universities are sent to Osaka University and assigned to the university's research laboratories where they engage in laboratory work with the university's students and Academic Staff as well as participate in corporate internships, while Osaka University students are sent to one of the ASEAN Campuses to pursue issues relating to the SDGs together with students and researchers of the host university.

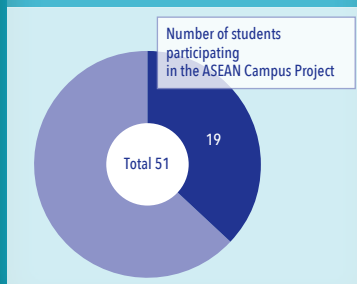
#### Number of students accepted/sent by Osaka University under OUICP and OUICP-S



### Support for the Double Degree Program (DDP)

Osaka University supports students from ASEAN Campus partner universities participating in the DDP through the implementation of various types of support, such as by setting up laboratory equipment at ASEAN Campuses to allow those students to study in the same environment as Osaka University students, shortening the period of study in Japan. If students who have completed the OUICP or OUICP-S wish to enroll in a regular program of Osaka University, including the DDP, the university's staff provide support tailored precisely to the individual needs of students by matching students to the university's research laboratories and offering advice on the enrollment process, and other relevant issues.

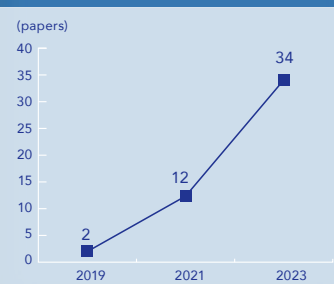
#### Number of students enrolled in the DDP at Osaka University (from FY2019 to FY2023)



### Establishment of the Osaka University ASEAN Campus SDGs Co-Creation Forum

This is a network established to contribute to solving social issues and achieving sustainable development in ASEAN countries. Support for symposiums and other initiatives between Osaka University and the stakeholders participating in the ASEAN Campus Project, including governments, companies, NPOs, and students, is implemented through this network. Eight symposiums have been held so far, providing opportunities for education and co-creation, and a cumulative total of 34 international papers have been co-authored with researchers from ASEAN Campus partner institutions.

#### Number of international papers co-authored with researchers at institutions participating in the ASEAN Campus Project (cumulative total)





## FUKASE Koichi

Executive Vice President for Global Engagement Director / Center for Global Initiatives Osaka University

## The Vision for the ASEAN Campus Project

Educational and research activities conducted under the ASEAN Campus Project have helped promote the creation of research outcomes and talent development, which can contribute to solving regional issues of ASEAN countries as well as global social issues. At the same time, emerging social issues and new educational and research seeds have been identified in this process and fed back into the basic research at Osaka University, accelerating the global expansion of the OU Ecosystem.

We will involve a broader range of stakeholders around the world in the virtuous cycle created by the OU Ecosystem to facilitate international joint research, international industry-university co-creation, and the social implementation of research outcomes.



## Voices of Students Participating in OUICP and OUICP-S



### NURABIYAH BINTI MOHAMAD

Universiti Sains Malaysia

Participated in OUICP (Introduction to Computational Materials Design) in FY2022 and enrolled in a doctoral program at the Graduate School of Engineering as a DDP student after completing the program

At Osaka University, you can not only pursue your academic interests but also enjoy cultural experiences and study in a lively environment. During my days as an OUICP student, I took part in cutting-edge research, discovered the beautiful tradition of Osaka, and had valuable experiences that cannot be learned from textbooks. Osaka University offers students great opportunities for growth and self-discovery, with its outstanding researchers and world-class research facilities, as well as a culture that embraces diversity. The university keeps its doors wide open to future students and researchers. Unlimited possibilities await you here.



### TRAN CONG HUAN

Hanoi University of Science and Technology

Participated in OUICP-S (Frontier Engineering) in FY2024

While in Japan, I studied biomass plastics technology and had the opportunity to intern at a company for 10 days. As my goal is to work in Japan, the technical knowledge I acquired at the laboratory and the work experience gained through my internship greatly helped me explore my future career. Interactions with instructors and students also served as valuable opportunities for me to understand Japanese culture. After working at a Japanese company for a few years in the future, I will consider returning to Osaka University to study for a master's degree.



### IKEDA Kodai

Third-Year Student School of Economics Osaka University

Participated in the OUICP-S Career Advance English Program in Brunei in FY2023

During my stay in Brunei, I was supported by UBD Student Buddies, a student group at Universiti Brunei Darussalam which hosts this program. It was a very meaningful experience to discuss the importance of environmental preservation and challenges to be tackled to achieve economic development in English and organize my thoughts for the final presentation. In order to study finance, which is my major, I think it is essential to understand the movement of people and economic trends from the viewpoints of different cultures and customs of the world. I am confident this experience will help me pursue my studies from diverse perspectives and explore more career options in the future.

## Training Young Researchers in ASEAN Countries

The ASEAN Campus Project is also designed to offer research guidance to young researchers of educational and research institutions participating in the project. To be specific, a young researcher from Sultan Sharif Ali Islamic University in Brunei who receives research guidance from Professor ARAI Masayoshi of the Graduate School of Pharmaceutical Sciences, Osaka University, was awarded a research grant from the Brunei Government for international collaborative research. Osaka University will continue to provide research support and encourage research exchanges utilizing joint laboratories and other research resources.



Your support will help us in our efforts to foster capable internationally-minded individuals and contribute to solving social issues in the ASEAN region. If you are interested, please visit the website: <https://www.miraikikin.osaka-u.ac.jp/en>



For more information on the Osaka University ASEAN Campus Project, please visit: <https://www.osaka-u.ac.jp/en/international/action/asean>

## Osaka University Staff in Charge of the ASEAN Campus Project



### FUJITA Kiyoshi

Director, Campus Innovation Unit/Regional Director, ASEAN Center for Academic Initiatives, Center for Global Initiatives, Osaka University

To build partnerships with ASEAN countries, it is essential to appreciate and respect the culture and understand the social issues of each country. The Osaka University ASEAN Campus Project team consists of administrative and academic staff working in cooperation and acting as coordinators between ASEAN countries and Osaka University with an understanding of the project's mission and the specialty and role of each of the team members.



\* OUICP...Osaka University International Certificate Program

## Building an Educational Environment that Fosters Individuals Capable of Creating the Future Together with Society

As an outstanding educational institution, Osaka University is striving to create an educational environment in response to the expectations of society that is conducive to fostering capable individuals who possess the skills to address social issues, pursue their individual dreams to realize their own potential regardless of how society changes, and dynamically and confidently play active roles in society.

To be specific, we aim to develop world-class researchers, successful leaders in industry, and innovators in social transformation, namely, individuals with specialized knowledge as a core strength and new ideas who can be active in the global community.

We have engaged in dialogues with diverse stakeholders in industry and wider society regarding the development of talented individuals to enhance our educational system comprehensively by leveraging the university's exceptional research environment to the fullest.

One of Osaka University's unique initiatives is the support system to help students realize their dreams, linking elementary-, junior-, and high schools through to undergraduate, graduate, and recurrent education. We will further promote this initiative through the Student Life-Cycle Support (SLiCS) system, which provides continuous learning support optimized for individual student's needs based on the data for each student's life stage from pre-enrollment through to post-graduation, assuring the quality of education.

In our doctoral programs in particular, we are rolling out a new recurrent education project through Industry on Campus (with corporate researchers and laboratories stationed on campus), a program built on our successful track record of industry-university co-creation, as well as making effective use of the five overseas campuses in the ASEAN region. In doing so, we are building a framework to support students conducting advanced research in the areas in which the university excels internationally while collaborating with scholars and industrial professionals in a highly diverse environment.



**Education**  
>>> P14

## Producing Innovative Research Results Essential for Social Transformation and Promoting Innovation Through Collaboration

As a leading research institution, Osaka University is striving to build an environment that enables all researchers to devote themselves to research founded on intellectual curiosity and unleash their creativity to the fullest, thereby encouraging the creation of disruptive and innovative research results.

By building frameworks that foster collaboration between different scientific disciplines derived from research results, we aim to pursue innovation from broader perspectives and enable the continuous generation of innovation, transcending the limits of individual disciplines. This includes encouraging interdisciplinary research at the Institute for Open and Transdisciplinary Research Initiatives (OTRI) and the incubation of research initiatives at institutions within our university such as the International Advanced Research Institute, an institute which oversees multiple cutting-edge research centers, including those selected under the World Premier International Research Center Initiative (WPI). We will also globally develop our original framework, the OU Ecosystem, to solve social issues and expand social implementation initiatives through our world-renowned research results.

To realize this vision and allow all researchers to pursue basic research that accords with their intellectual curiosity and inquisitiveness, we have continued to reinforce our research resources, including personnel expenses, basic expenditures, research locations, and staff specialized in research promotion, while strengthening the university's research capabilities through support for young researchers and international research activities.

Additionally, we encourage open science practices to enable researchers to access both historical and cutting-edge data at all times, supporting research activities rooted in intellectual curiosity and profound thinking. Moreover, we are facilitating the sharing of advanced research and laboratory equipment to create a research environment that allows anyone to promptly utilize equipment and analytical methods for their research whenever necessary.



**Research**  
>>> P16



## Enhancing Co-Creation: Strengthening Management Strategies by Expanding Local Open Innovation Globally

Osaka University is the only national university in Japan that was established with strong and enthusiastic support from political and business circles as well as the citizens of Osaka, inheriting the civic spirit of its predecessors, *Kaitokudō* and *Tekijuku*. The university boasts a successful track record of industry-university co-creation as well as organizational capability, centered on our Co-Creation Bureau.

The Co-Creation Bureau was launched in January 2018 as a core institution bringing together internal and external stakeholders to support the OU Ecosystem and promote co-creation activities involving industry, academia, government and citizens.

Taking full advantage of our strength in industry-university co-creation of which we are proud, the Co-Creation Bureau leads our organization-wide efforts to develop new industries by seamlessly implementing diverse research results in society and creating value from intellectual assets by carrying out well-planned intellectual property strategies, earning revenue for technology transfers and incubating startups.

The Co-Creation Bureau is working in unison with local governments, businesses, overseas venture capitals, and accelerators to reinforce support for startups to create new industries of the future. Under this framework, we will establish the Startup Ecosystem, which will facilitate bold investment decisions and keen insight for international expansion.



**Co-Creation**  
>>> P18

## Financial and Management Reform to Develop the OU Ecosystem on a Global Scale

Unique to Osaka University, we have been working to innovate the university's management by establishing Strategic Meetings, which organize the university's departments into three groups and serve as new platforms for communication and collaboration, and appointing two Senior Executive Vice Presidents (Osaka University's version of Provost), who implement swift policy decisions by formulating specific strategies and measures following the President's vision.

Within this new management structure, we have been promoting the university's activities by consistently acquiring competitive funds and investments from companies (such as for joint research and commissioned research) as well as management expense grants from the national government. However, to expand the OU Ecosystem on a global scale, it is imperative to embark on reform beyond the framework of the conventional financial and management structure.

With this understanding, we welcomed KIRITANI Shigeki, former Chief Executive Officer of Goldman Sachs Asset Management Co., Ltd., as Management Consultant in April 2024. With a wealth of knowledge and experience, he has helped us strengthen the financial base to realize our future vision and accelerate educational and research activities on a university-wide basis. We have also embarked on a radical reform of the management system for the Co-Creation Bureau and Osaka University Venture Capital (OUVC) with his advice on financial and administrative issues.

From FY2025, we will further expand this endeavor to establish a structure in which the Chief Investment Officer (CIO), Executive Vice President in charge of co-creation, and researchers in addition to the three key officials of the university: the President, Provosts, and Chief Financial Officer (CFO), can closely collaborate on challenging and ambitious projects together with all students, researchers, and staff.

In so doing, we aim to dynamically promote one of our university's strengths: our new ecosystem focusing on co-creation, while strengthening our financial base to maintain financial stability without relying solely on specific sources.



**Management  
Strategies**

## Developing Dynamic Individuals Boldly Taking up the Challenge to Solve Social Issues in the Future

Osaka University's integrated education system from undergraduate through graduate school is comprised of three pillars: the Academic Major, Liberal Arts, and Global Literacy, to help students acquire the ability to address a broad range of social issues in the future, realize their own potential, and develop into confident and dynamic individuals capable of playing an active role in society. To cultivate the ability to address social issues, in particular, we implemented the Internship on Campus program through our Joint Research Chairs and Research Alliance Laboratories, offering students opportunities to learn about the perceptions, needs, and business strategies of industry while understanding real-world trends in society.

We are also committed to education for those unenrolled in the university, including elementary, junior high, and high school students, as well as recurrent education for non-traditional students in cooperation with industry.

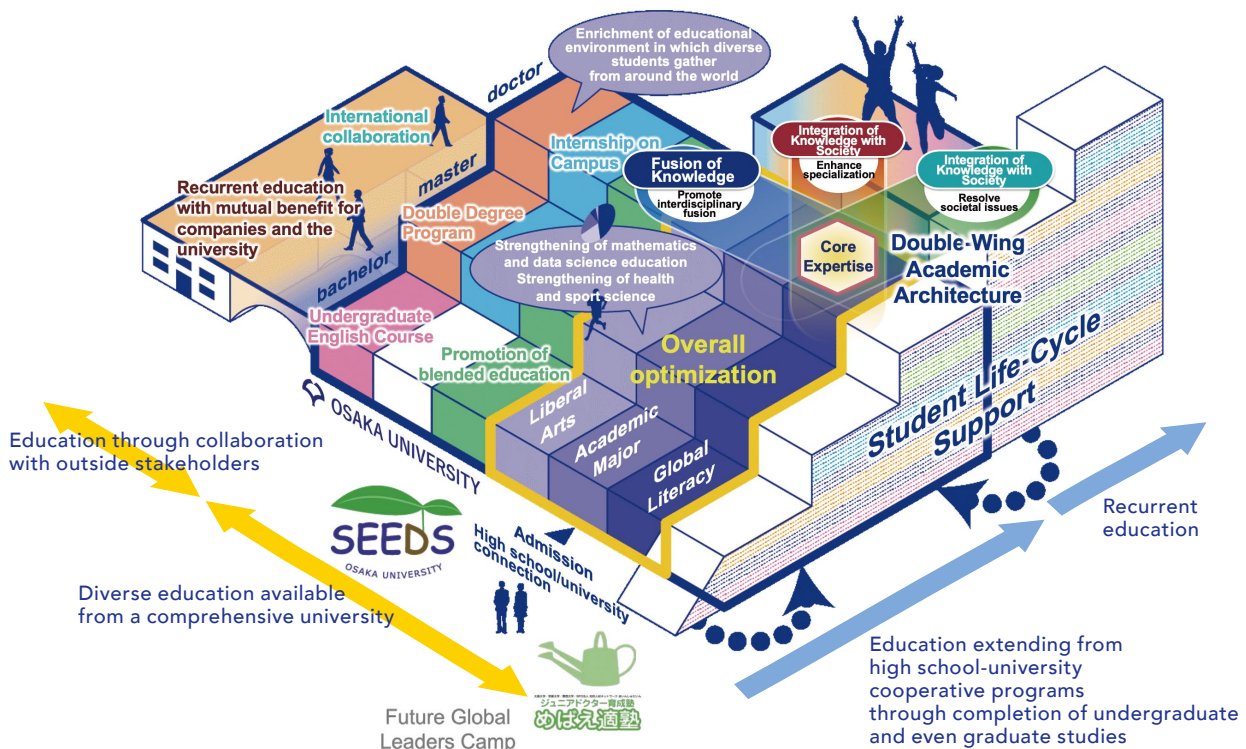
For example, Mebae Tekijuku, the university's educational program mainly for elementary and junior high school students, is designed to foster curiosity and love for learning by offering students opportunities to engage in laboratory work, such as in physics, chemistry, and engineering labs, or pursue independent topics of their own interest in a research lab.

Osaka University SEEDS Program lets high school students engage in group discussions and interactions with international students while giving them opportunities to pursue their respective academic interests at the university's labs and learn about research activities first-hand.

In promoting education for employees, we offer recurrent education through our Joint Research Chairs and Research Alliance Laboratories. Especially, the REACH Project, conducted jointly between Osaka University and industry, is beneficial for both parties, as it admits individuals who entered the company after completing a master's program at Osaka University to the university's doctoral program, allowing them to continue to study for a Ph.D. while remaining employed by the company.

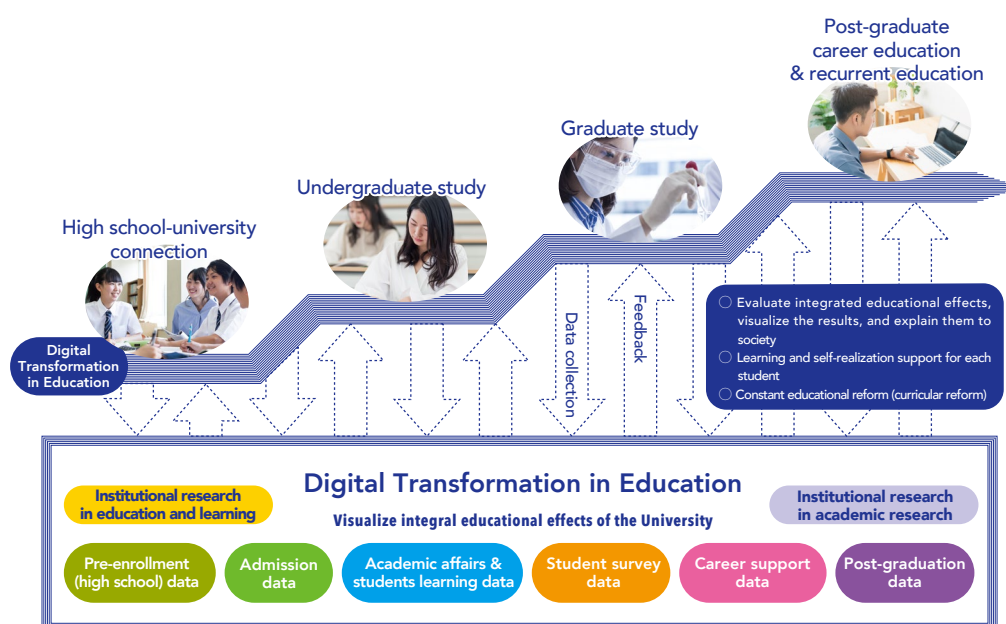
Centering on these initiatives, we will continue to roll out educational programs to develop individuals who can strive to realize their own potential regardless of how society changes and fulfill an active role in society dynamically and confidently.

### Overview of Osaka University's Educational Reforms





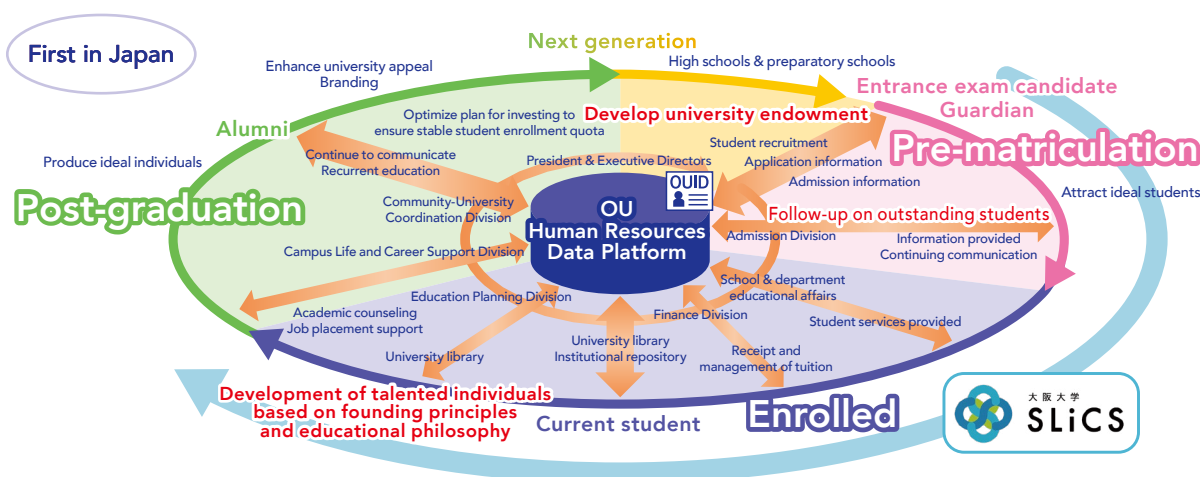
## Student Life-Cycle Support (SLiCS) System



Osaka University aims to provide optimal academic and student support through each student's stage of life, from pre-enrollment through to graduation and beyond, by collecting and analyzing student data. The Student Life-Cycle Support (SLiCS) Center is designed to provide students with optimal personalized support for their learning, research, and career path from pre-enrollment through to post-graduation, helping them realize their respective aspirations. To that end, and as part of the digital transformation efforts at our university, we are building the SLiCS system to provide lifelong support to students after graduation and enable them to remain connected with the university on a platform linked to OUID\*.

We also aim to clarify how university education can contribute to society through data-driven visualization techniques focusing on educational outcomes. To be specific, we will collect big data on each student covering the entire process of their education from pre-enrollment to graduation and beyond through the SLiCS system and analyze the data utilizing AI to visualize the medium- and long-term educational outcomes, which we will share with society.

We remain committed to supporting the growth of each student and nurturing outstanding individuals who can lead social transformation. We hope by using data-driven visualization and making our educational outcomes and contribution to society public using evidence-based data, we can garner greater understanding and support from society for university education.



\* OUID...An ID that uniquely identifies each member of Osaka University

## Promoting International Research Exchange

In today's post-COVID-19 world, the value of in-person international cooperation and exchange is gaining renewed recognition, resulting in growing calls for the creation of an environment that fosters disruptive and innovative ideas by encouraging international research exchanges face-to-face.

For Osaka University to thrive as a world-class academic institution, it is necessary to strategically disseminate its outstanding research outcomes globally. For this reason, we are striving to acquire major international research grants, such as the Funds for the Promotion of Joint International Research (International Leading Research) offered in the Grants-in-Aid for Scientific Research program of the Japan Society for the Promotion of Science (JSPS); the Adopting Sustainable Partnerships for Innovative Research Ecosystem (ASPIRE) program hosted jointly by the Japan Science and Technology Agency (JST); and the Japan Agency for Medical Research and Development (AMED), which will allow us to conduct joint research with leading universities and research institutions in Europe and the US that constitute the core of an international research network, thereby encouraging international researcher mobility. These grants are used not only to promote cutting-edge international joint research but also to nurture future leaders in the international research community by encouraging the participation of postdoctoral fellows and graduate students in international research.

To help young researchers develop their careers, we offer support for medium- to long-term stays at overseas institutions to conduct research in an environment different from that of Japan.

Launched in FY2022, the Support Program for Sending Young Researchers Abroad is designed mainly for Osaka University's young full-time researchers up to 40 years of age. More than ten researchers have been accepted for the program so far. International research exchanges through this program have resulted in an increase in the number of international papers co-authored with overseas researchers and applications for competitive funds, creating greater momentum for international joint research.

The Researcher Exchange Program for Future Global Leaders, established in FY2024, aims to foster next-generation researchers by offering support to postdoctoral fellows and doctoral students. Prospective researchers in a broad range of areas from the humanities and social sciences to information and life sciences were accepted as inaugural members of the program and are engaging in their own research in new and unfamiliar research environments overseas to enhance their research skills.

Professor

Associate professor

Associate professor  
(Lecturer)

Assistant professor

Postdoctoral fellow

Ph.D. eaned



Kickoff meeting for the Researcher Exchange Program for Future Global Leaders

## Enhancement of Research Management Structures

To implement a diverse range of research activities fundamental to academic institutions, Osaka University is working to enhance its research management organization to build a stable research base, while promoting personnel training to develop managerial skills.

### Office of Management and Planning

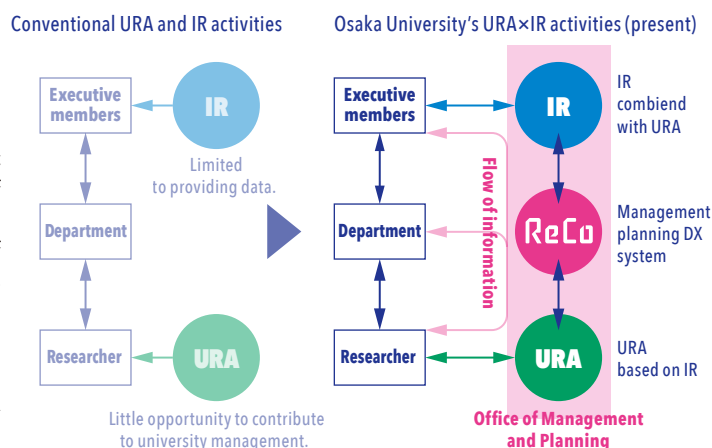
#### - URA×IR activities

Under the leadership of the Senior Executive Vice President in charge of university management and the Executive Vice President in charge of research, the Office of Management and Planning is working on the systematic combination of University Research Administrator (URA) activities and Institutional Research (IR) activities (URA×IR activities) utilizing “ReCo,” a digital transformation (DX) system for management planning developed independently by the university. The URA activities operate alongside researchers to provide support that suits the researchers’ capabilities, while IR activities conduct evidence-based analyses of the strengths and weaknesses of the university. Through the URA×IR activities, the Office of Management and Planning helps to make data-based decisions and develop cross-disciplinary research projects that aim to solve social issues.

#### - Program to train administrative staff in charge of the URA×IR tasks

Osaka University assigns administrative staff selected through an internal application process to the Office of Management and Planning for an OJT-based skill development program in which a URA acts as a mentor. The “ReCo” system mentioned above resulted from faculty-staff collaboration in which the administrative staff accepted for this program contributed to the planning process.

We remain firmly committed to developing individuals with outstanding managerial skills to help them build career paths.



## Core Facility Center

In April 2023, Osaka University established the Core Facility Center by integrating the Center for Scientific Instrument Renovation and Manufacturing Support, the Low Temperature Center, and the Core Facility Office. Under the leadership of the Director (Executive Vice President in charge of research), the Core Facility Center is working on the university-wide enhancement of the research environment, which includes laboratory equipment and facilities, and the reinforcement of support systems while promoting research projects such as the Project for Promoting Public Utilization of Advanced Research Infrastructure (Core Facility Construction Support Program) funded by MEXT.

<Main functions of the Core Facility Center >

#### (1) University-wide, industry-university, and community-university partnerships via research equipment

- Reinforcing the “Osaka University Solution Method” to utilize the personal network of the staff in charge of university-wide sharing of research equipment to provide advanced and multifaceted research solutions.
- Developing cutting-edge research equipment and nurturing capable individuals through the Joint Research Chairs and Research Alliance Laboratories set up in collaboration with companies.
- Promoting the local recycling of liquid helium used for research through the Hanna Equipment Sharing Network joined by Osaka University, University Public Corporation Osaka, and the National Institute of Technology, Nara College.

#### (2) Utilization of research data and digital transformation in research

- Developing an infrastructure for the seamless distribution, use, and application of measurable research data generated from shared equipment via an end-to-end network.
- Building a structure and system for research data management in collaboration with the University Libraries.

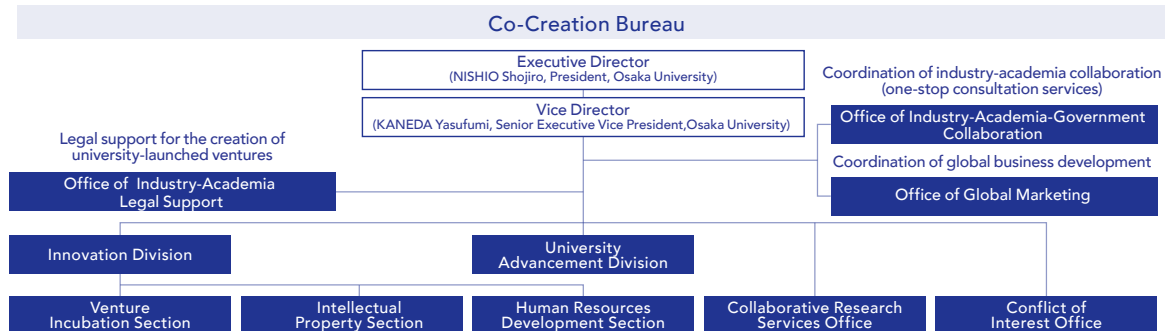
#### (3) Development programs

- Launching a variety of training and support programs for technical staff to help them acquire skills in a second specialty and enhance team management skills.

## Organization for the Social Implementation of Research Results

Osaka University established the OU Ecosystem to create a virtuous cycle of knowledge, talent, and funds, with the aim of expanding its endeavors globally.

### OU Ecosystem, a Virtuous Cycle of Knowledge, Talent, and Funds



To support the OU Ecosystem, we launched the Co-Creation Bureau in January 2018 as a core institution bringing together internal and external stakeholders, and have since been promoting co-creation activities involving industry, academia, government and citizens. The Bureau focuses on industry-university collaborative activities (intellectual property enhancement and venture incubation), while also working to strengthen community partnerships and fundraising capabilities, thereby promoting the initiative to “co-create” new value by combining the knowledge and resources of society and the university.

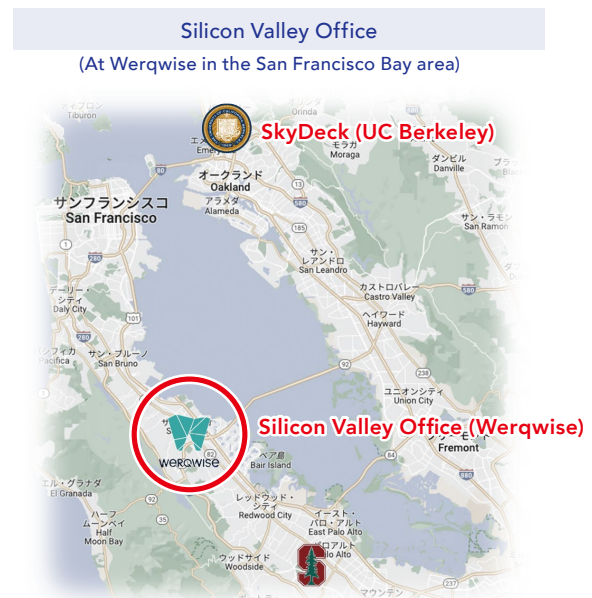
Currently, activities of the Co-Creation Bureau are administered within a framework comprising two offices, two divisions, and three sections. The Office of Industry-Academia-Government Collaboration provides one-stop consultation services for external stakeholders. The Innovation Division is responsible for reviewing intellectual property strategies to promote technology transfer and support commercialization through the incubation of Osaka University-initiated startups, and for developing innovation-oriented individuals through entrepreneurship education. The University Advancement Division serves as the point of contact to accept donations, including those to the Osaka University Foundation for the Future. The Collaborative Research Services Office is a multi-service office handling agreements concerning joint research and other endeavors and is responsible for verifying contract procedures, conditions, terms, and other aspects so that joint research and other efforts may proceed smoothly. The Conflict of Interest Office oversees managing conflicts of interest involving industry-university collaboration activities as well as handling consultations, education and training, and other relevant concerns. In April 2024, the university opened the Office of Global Marketing responsible for business development in the global market, and the Office of Industry-Academia Legal Support to manage legal and intellectual property issues involving the incubation of Osaka University-initiated startups.

The Collaborative Research Services Office, the Intellectual Property Section, the Venture Incubation Section, the Conflict of Interest Office, the Office of Global Marketing, and the Office of Industry-Academia Legal Support leverage the framework of faculty-staff collaboration to promote activities that make use of the respective backgrounds of each group. In this manner, the Co-Creation Bureau becomes a hub for consolidating the university’s strength to create a virtuous cycle of knowledge, talent, and funds.

### International Development of Industry-University Collaborative Activities

#### —Overseas collaboration hub established in Silicon Valley—

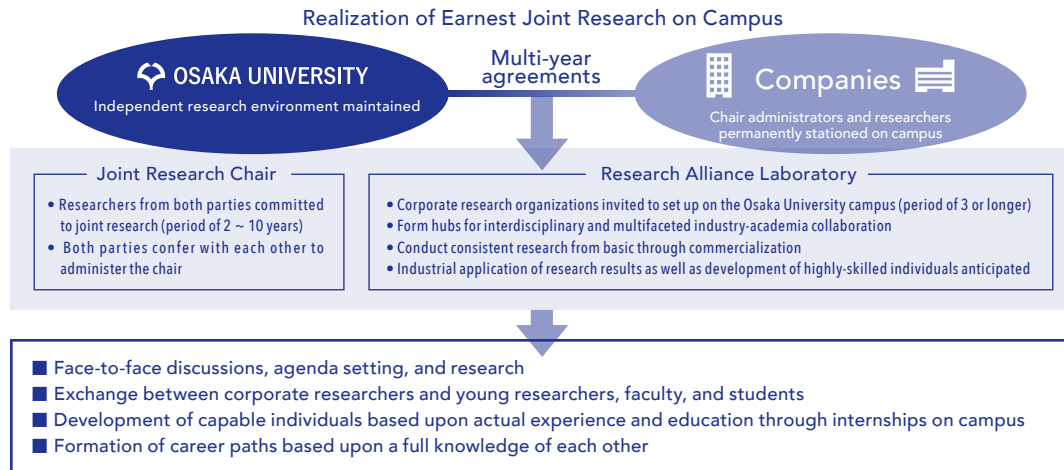
To enhance support for students aspiring to start their own businesses and assist Osaka University-initiated startups with global expansion, the Osaka University Co-Creation Bureau/OUVC Silicon Valley Office was opened in Silicon Valley in June 2023. The office is working to strengthen collaboration with overseas venture capital firms, while providing local support to the university’s students, researchers, and personnel engaged in Osaka University-initiated startups when they participate in internships at US venture capital firms or the Innovation Partners Program offered by Berkeley SkyDeck, a globally recognized startup accelerator of the University of California, Berkeley (UC Berkeley). In so doing, the office aims to incubate startups that can deliver outstanding value to Japan and the world.



## Promoting Industry on Campus

Osaka University is promoting organization-to-organization collaboration between industry and academia to further expand co-creation between the two parties toward the aim of constructing the OU Ecosystem.

### Joint Research Chair & Research Alliance Laboratory Concept



## Increasing Joint Research Chairs and Research Alliance Laboratories

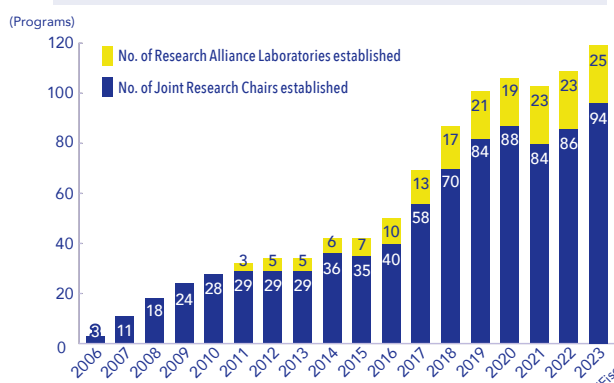
In FY2006, Osaka University created the Joint Research Chair program to set up new research organizations in collaboration with companies (Industry on Campus), and in FY2011, introduced the Research Alliance Laboratory program to attract corporate research institutions to its campus to facilitate a broader range of research activities and nurture capable individuals.

The Joint Research Chair program is designed for the university and partner companies to administer chairs on an equal footing, transcending the conventional boundaries of specific joint research projects, with a focus placed on the utilization of intellectual property. This program allows researchers from both the university and companies to devote themselves to research on issues put forth by industry. On the other hand, the Research Alliance Laboratories form hubs for interdisciplinary and multifaceted industry-university collaboration through close cooperation between companies and multiple departments of the university. These laboratories engage in research activities across the entire process from basic research through to commercialization with the aim of promoting the industrial application of research results and the development of highly-skilled individuals. In FY2023, a record-high 119 Joint Research Chairs and Research Alliance Laboratories were operating, achieving significant results through industry-university co-creation.

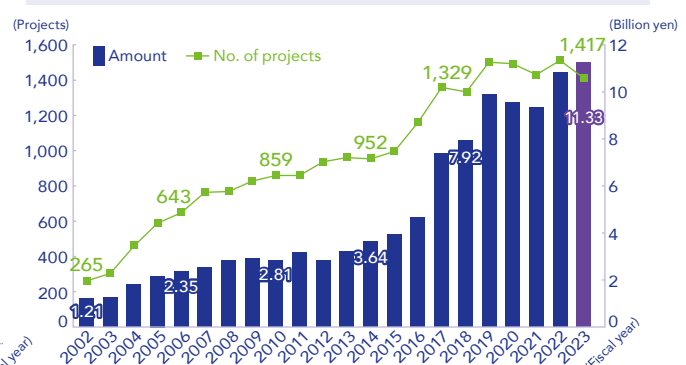
## Promoting Large-Scale Industry-University Collaboration: The Amount of Joint Research Expenses Received Marked a Record High for the Second Consecutive Year

In FY2016, Osaka University launched a new organization-to-organization large-scale industry-university collaboration framework based on comprehensive partnership agreements with companies by further deepening alliances under the Joint Research Chair and Research Alliance Laboratory programs. Through this new framework, the amount of joint research expenses received by Osaka University in FY2023 increased to 11.33 billion yen, exceeding the previous record amount of 10.79 billion yen received in FY2022.

**Growth in the Number of Joint Research Chairs & Research Alliance Laboratories Established**



**Change in Amount of Joint Research Expenses Received**





## Carbon Neutral and Sustainable Campus Initiatives

### Unique Initiatives by Osaka University to Adopt the Net Zero Energy Building (ZEB) Standards for New Construction and Renovation Projects

Osaka University is aiming to reduce greenhouse gas emissions by 55% or more by FY2030 compared to the FY2013 level under the Mid-Term Goals and Basic Policies in Energy Management at Osaka University, with the ultimate goal of achieving carbon neutrality by FY2050. In the effort to achieve this goal through facility management, the university has made it a basic policy to apply "ZEB Ready" or higher standards to all buildings of the university to be newly constructed, expanded, renovated or significantly remodeled, and formulated the ZEB Design Guidelines to steadily implement the policy. These guidelines embody the concept of achieving ZEB goals within the standard cost of construction, or "ZEB awareness." By last year, three of the university's buildings met ZEB standards: the Toyonaka Co-Creation Building B on Toyonaka Campus, the MA-T Co-Creation Center (Anzu no Mori) on Suita Campus, and the Research and Education Hub on the Minoh Campus. We are continuing our ZEB efforts with other facilities currently in the planning and/or design stages.

The Osaka University and Nippon Foundation Center for Infectious Disease Education and Research, which is currently under construction on Suita Campus and scheduled to be completed in February 2025, has been certified as ZEB Ready, making Osaka University the first national university in Japan to have a newly constructed ZEB Ready building with a total area exceeding 10,000 m<sup>2</sup>. We will apply this expertise not just for new constructions and major renovations, but also to extend the service life of existing facilities. By managing the energy consumption of buildings university-wide, we are seeking to achieve the ZEB level of energy conservation performance on a stock average basis by FY2050. In addition, our goal is to help Japan achieve carbon neutrality by returning the knowledge gained from these initiatives to society.



CG render of the University of Osaka and Nippon Foundation Center for Infectious Disease Education and Research and its BELS label

Basic design and design supervision: Tadao Ando Architect & Associates  
Basic Plan: Osaka University, Meiho Facility Works Ltd.  
Design and construction: Joint Construction Consortium between Taisei Corporation and Nikken Sekkei Ltd. (Design-Build)  
\*Reproducing the above graphic is prohibited.

### Pilot Project for Demand Response Implemented under the Comprehensive Cooperation Agreement with Daikin Industries, Ltd.

Osaka University and Daikin Industries, Ltd. have been conducting a pilot project for demand response for air conditioning control since July 2023 in the joint research framework based on the comprehensive cooperation agreement signed in June 2017. This is the first pilot project of this kind ever conducted in university facilities.

In this project, demand response refers to a system to adjust the electricity consumption of air conditioners in response to the fluctuations of the Japan Electric Power Exchange (JEPX) electricity price to maintain a supply-demand balance.

The project has been implemented in eight buildings on the university's Suita, Toyonaka, and Minoh campuses, where air conditioning is controlled to the extent that does not inconvenience users of the facilities. The aim of the project is to verify the effectiveness of the demand response system in balancing electricity supply and demand and evaluate the comfort in those facilities. In the future, the university will expand the scope of the pilot project beyond the eight buildings, with the ultimate goal of implementing the results of the project in society.

### Cooperation Agreement Signed with Osaka Prefecture and Daikin Industries, Ltd., to Promote the Net Zero Energy Building (ZEB) Effort in Osaka Prefecture

On 10 November 2023, Osaka University signed a cooperation agreement with Osaka Prefecture and Daikin Industries, Ltd. to facilitate the ZEB effort within Osaka Prefecture with the aim of promoting decarbonization in the prefecture and contributing to the achievement of carbon neutrality by 2050.

Using respective resources and expertise, the parties to this agreement are working to transform public facilities and office buildings in Osaka Prefecture into ZEBs, thus accelerating the shift to a decarbonized society.

Under this cooperation agreement, the parties are leveraging the experience and know-how gained from a track record of taking progressive approaches to ZEB to promote decarbonization in Osaka Prefecture by means of: (1) ZEB promotion; (2) demand response; and (3) other projects conducive to the purpose of this agreement.

#### Immediate approaches under the agreement to promote the Net Zero Energy Building (ZEB) effort in Osaka Prefecture

##### 1. ZEB promotion

- Investigating methods to achieve ZEB for newly constructed prefectural buildings (including reconstruction)
- Enhancing the energy management of prefectural buildings
- Holding ZEB workshops for relevant offices in Osaka Prefecture and supporting private companies

##### 2. Demand response

- Exchanging information to promote balancing the electricity supply and demand of prefectural buildings

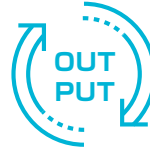
##### 3. Other projects conducive to the purpose of this agreement



## Material Balance

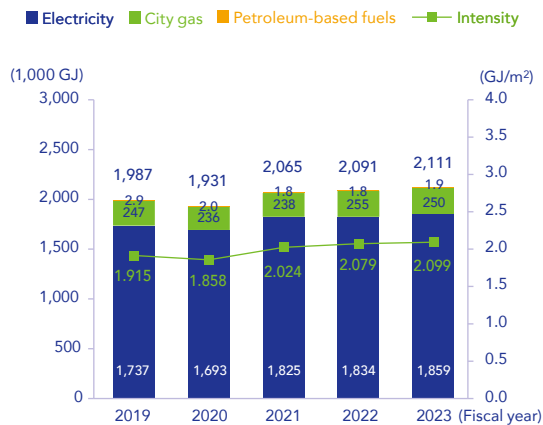


Total energy inputs	2,111,000 GJ
·Electricity usage	191,233,000 kWh
·City gas usage	5,547,000 m³
City water usage	417,000 m³
Well water usage	440,000 m³
Paper usage	272 t
PRTR substances	38 t

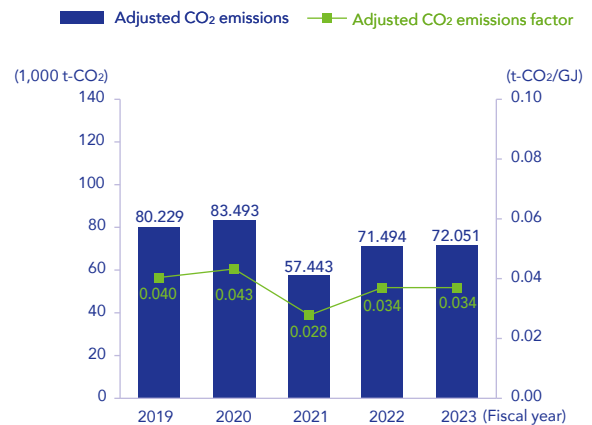


CO <sub>2</sub> emissions	72,051 t-CO <sub>2</sub>
General business activity waste	2,190 t
Industrial waste	8,399 t
Specially-controlled industrial waste	2,094 t
Wastewater	763,000 m³
PRTR substances	38 t
CFC leakage	510 t-CO <sub>2</sub>

## Primary Energy Usage

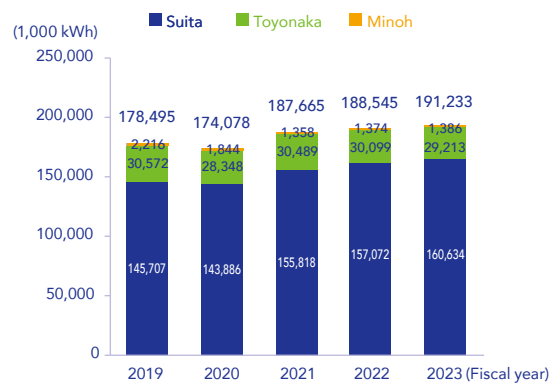


## CO<sub>2</sub> Emissions

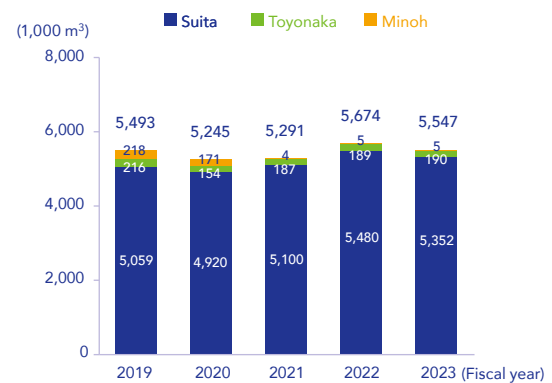


Note: The adjusted CO<sub>2</sub> emissions factor is the value obtained by dividing total emissions by total heat.

## Electricity Usage



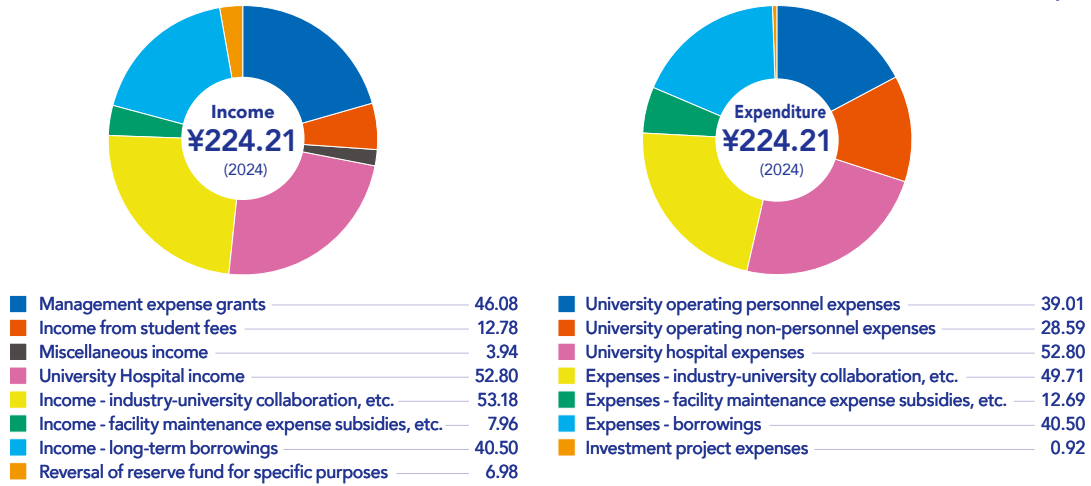
## City Gas Usage



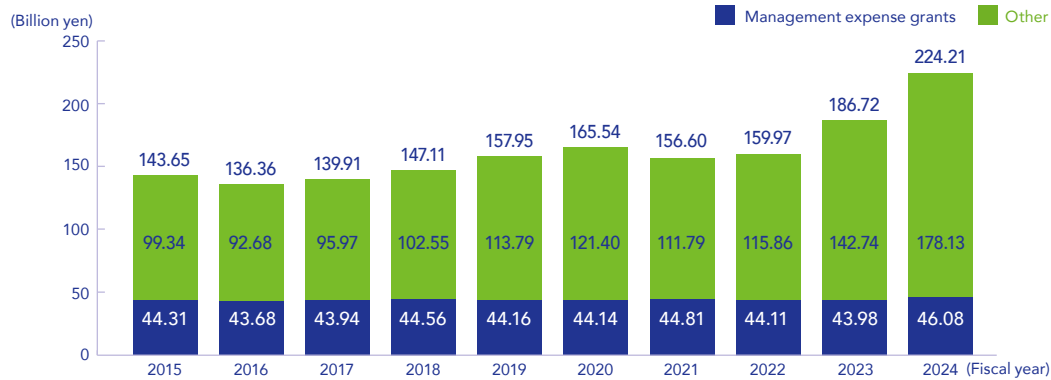
# Financial Highlights

## Budget

(Unit: Billion yen)



Note: Total amounts given in the above charts may not add up correctly due to figures having been rounded off.



## Research Projects Selected for Grants-in-Aid for Scientific Research



Note: Total amounts given in the above charts may not add up correctly due to figures having been rounded off.

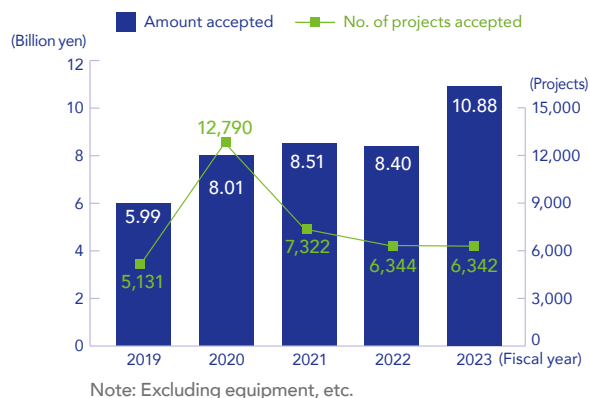


## External Funds

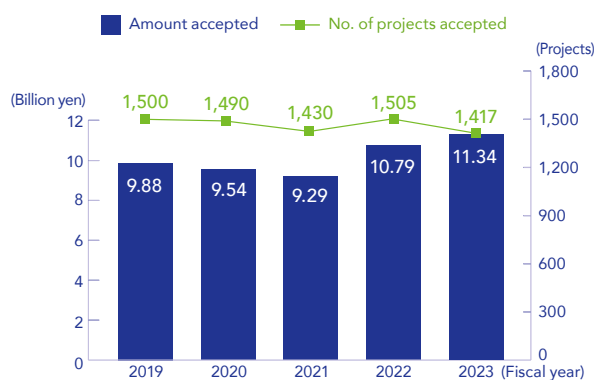
### Change in Commissioned Research Accepted



### Change in Donations for Research Accepted



### Change in Joint Research Accepted



### Industry-University-Government Partnership Promotion Expenses

Apart from the direct expenses that are unreservedly necessary for pursuing joint research that the university engages in, Osaka University also receives a 30% defrayment of these directly expenses in the form of Industry-University-Government Partnership promotion expenses. These promotion expenses contribute to maintaining and developing collaboration among industry, university and government. They are utilized for intellectual property patent filings, maintenance and management, joint research consultations and agreements, as well as other activities promoting partnerships between industry and academia. The expenses also help maintain a research environment forming the infrastructure for joint research and other collaborations.

### Principal Uses of Industry-University-Government Partnership Promotion Expenses (FY2023)

(Unit: 100 million yen)

Amount received	21.9	Breakdown of expenditures		
Expenditures	18.8			
Balance carried over to the next fiscal year	3.1			
		Operating and business expenses	4.7	<ul style="list-style-type: none"><li>• Co-Creation Bureau and Department of Co-Creation Promotion operations</li><li>• Co-Creation Bureau office operation</li><li>• Collection and preparation of research seeds</li><li>• Umeda and Tokyo office operations</li><li>• Supercomputer maintenance and management</li></ul>
		Personnel expenses	4.3	<ul style="list-style-type: none"><li>• Coordination of industry-university-government partnerships</li><li>• Intellectual property management</li><li>• Management and operation of joint research agreements and industry-university-government partnerships</li></ul>
		Utility expenses	2.7	<ul style="list-style-type: none"><li>• Electricity, gas, and water charges required for maintaining research environment</li></ul>
		Application maintenance expenses	2.3	<ul style="list-style-type: none"><li>• Intellectual property application, maintenance, and management</li></ul>
		Research environment enhancement expenses	2.1	<ul style="list-style-type: none"><li>• Maintenance and improvement of facilities and equipment that contribute to the research environment.</li></ul>
		Miscellaneous expenses	2.6	<ul style="list-style-type: none"><li>• Support for the construction of joint research frameworks for large-scale comprehensive collaboration</li><li>• Electronic journal use</li></ul>
		Total	18.8	

Note: The balance carried over to the next fiscal year is scheduled to be used to maintain and develop a research environment that produces joint research and other collaborative outcomes.

Note: Figures in the table have been rounded off.

## Non-Financial Highlights (1)

### Organization

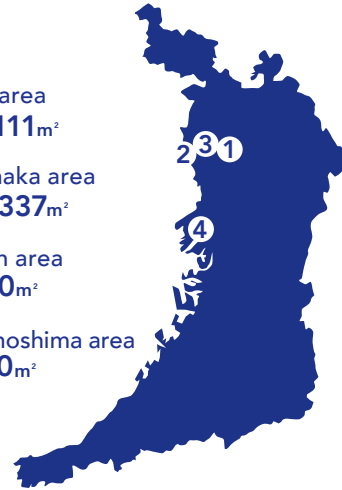
(As of 1 May, 2024)

<b>11</b> Undergraduate Schools	<b>10</b> Graduate Schools	<b>5</b> Independent Graduate Schools
<b>6</b> Research Institutes	<b>2</b> National Joint-Use Facilities	<b>10</b> Joint-Use Facilities
<b>4</b> University Libraries	<b>2</b> University Hospitals	<b>3</b> International Advanced Research Institutes
Other (Center for Education in Liberal Arts and Sciences, etc.)		
<b>34</b> Endowed Chairs and Endowed Research Divisions	<b>88</b> Joint Research Chairs & Joint Research Divisions	<b>24</b> Research Alliance Laboratories

### Campus

(As of 1 May, 2024)

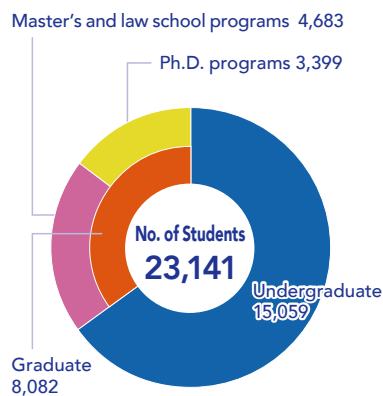
- 1 Suita area  
997,111m<sup>2</sup>
- 2 Toyonaka area  
440,337m<sup>2</sup>
- 3 Minoh area  
8,000m<sup>2</sup>
- 4 Nakanoshima area  
1,000m<sup>2</sup>



### No. of Students

(As of 1 May, 2024)

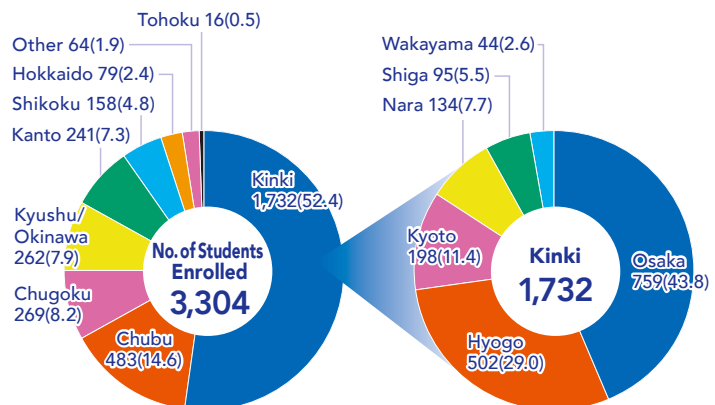
(Unit: Persons)



### No. of Students Enrolled According to Location of High School, etc. (Undergraduate)

(Enrolled April 2024)

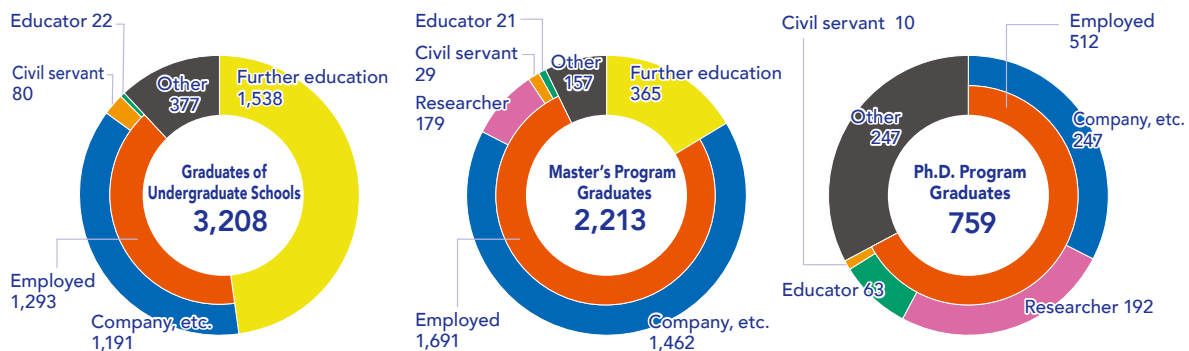
(Unit: Persons (%))



### No. of Graduates (Undergraduate & Graduate School)

(Graduating Class of 2023)

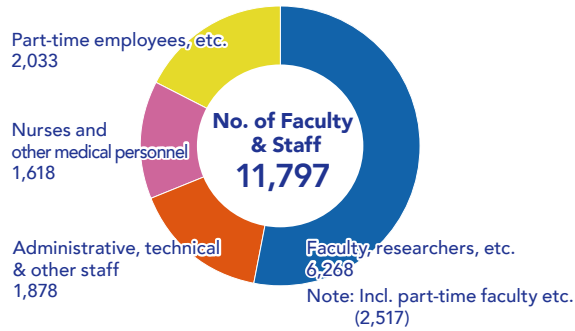
(Unit: Persons)



## No. of Faculty & Staff

(As of 1 May, 2024)

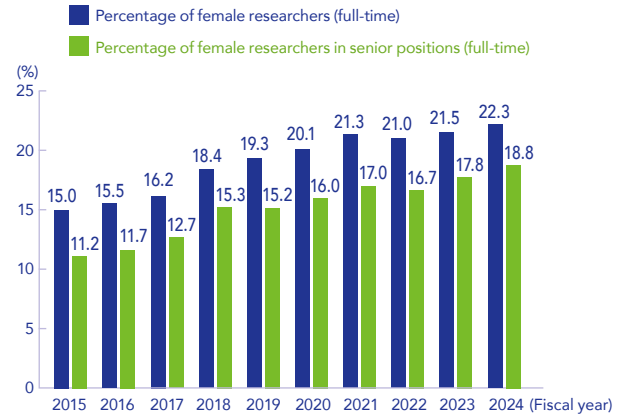
(Unit: Persons)



\*Exclude temporary staff, employees on leave, and those on childcare leave.

## Percentage of Female Researchers and Female Researchers in Senior Positions (Full-Time)

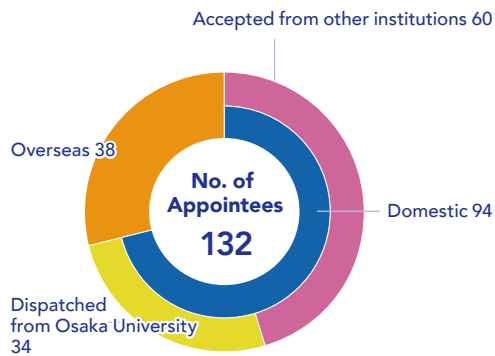
(Annually as of 1 May)



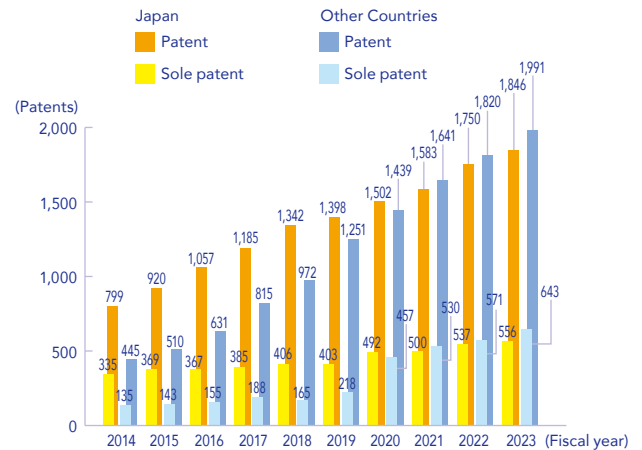
## Cross Appointments

(As of 1 March, 2024)

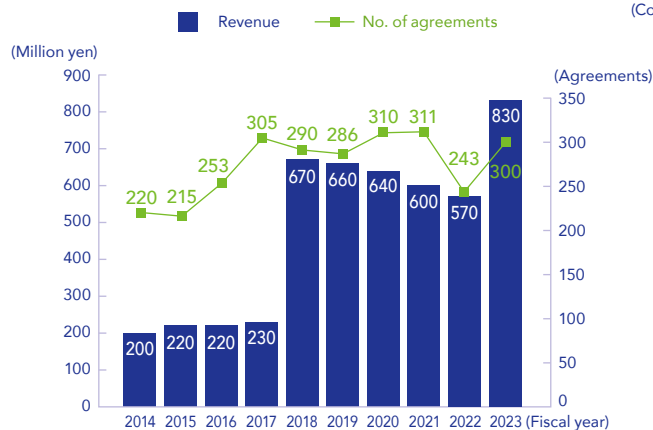
(Unit: Persons)



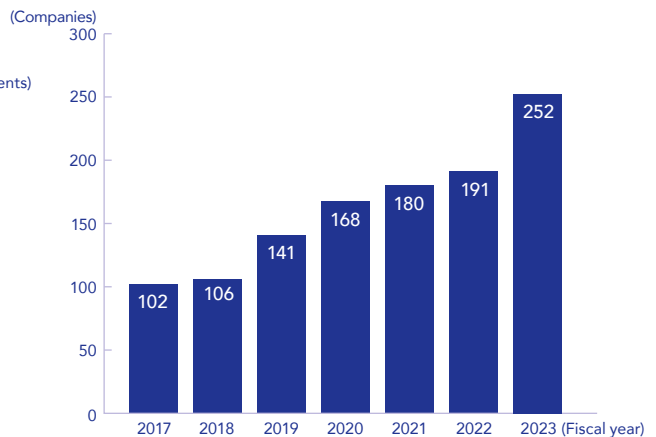
## Change in No. of Patents Held



## Change in Technology Transfer Revenue



## Change in No. of Osaka University-Initiated Venture Companies



Source: Published responses to the "Fact-finding questionnaire on Osaka University-initiated startups" (大学発ベンチャー実態等調査) conducted by the Ministry of Economy, Trade and Industry

## Non-Financial Highlights (2)

### Overseas Centers, Osaka University ASEAN Campuses, and Global Knowledge Partners

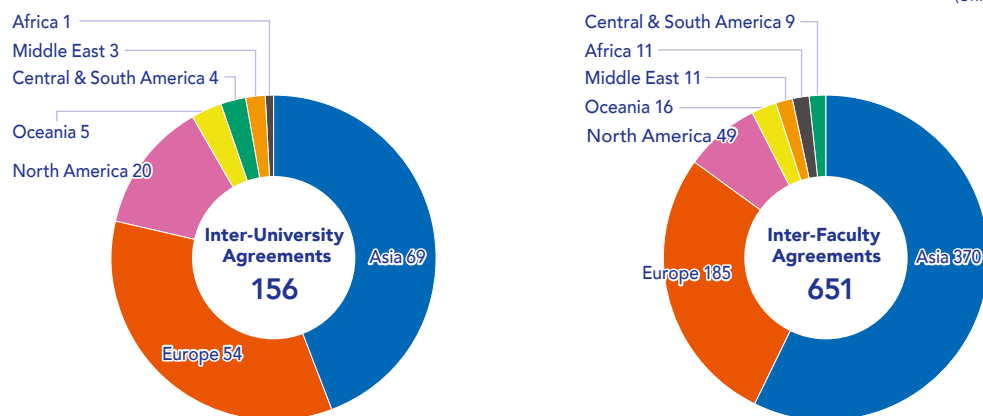
(As of 1 May, 2024)



### Academic Exchange Agreements

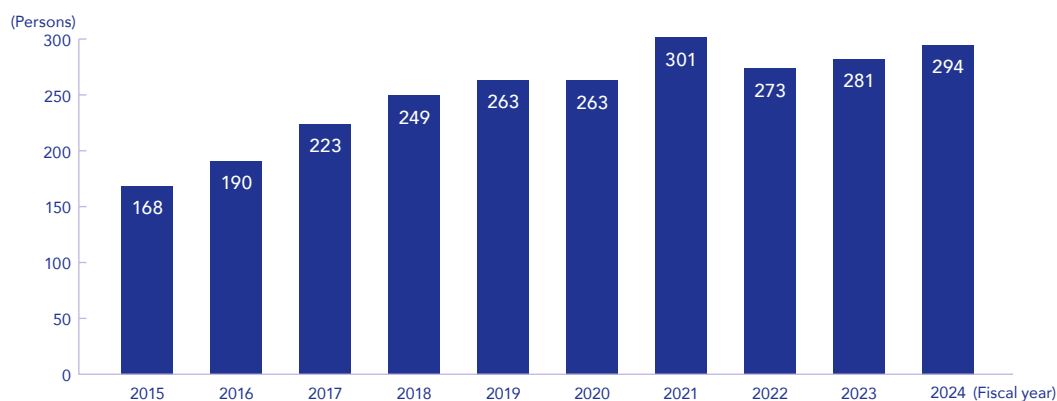
(As of 1 May, 2024)

(Unit: Agreements)



### Change in No. of International Academic Staff

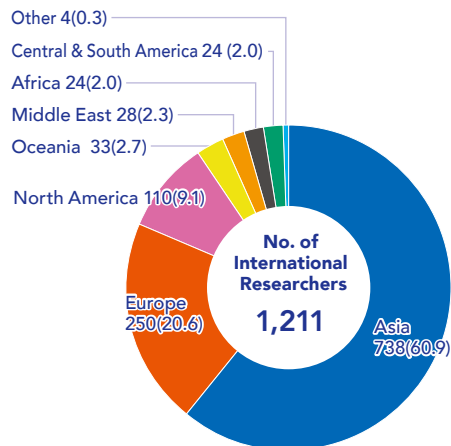
(As of 1 May of each fiscal year)





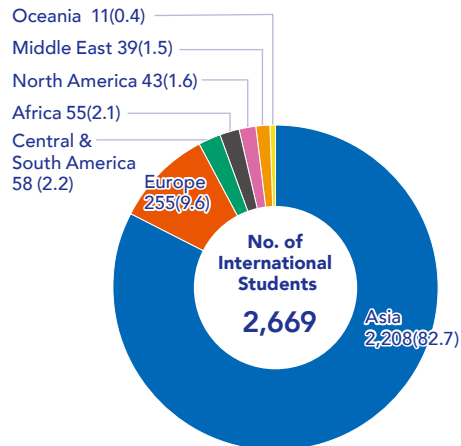
### Breakdown of International Researchers Accepted by Osaka University by Region (FY2023)

(Unit: Persons (%))



### Breakdown of International Students Accepted by Osaka University by Region (As of 1 May, 2024)

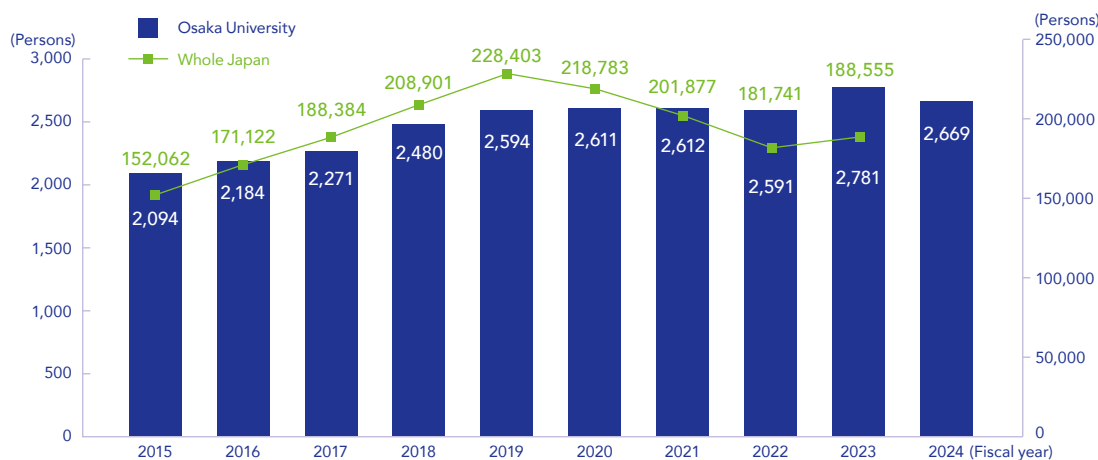
(Unit: Persons (%))



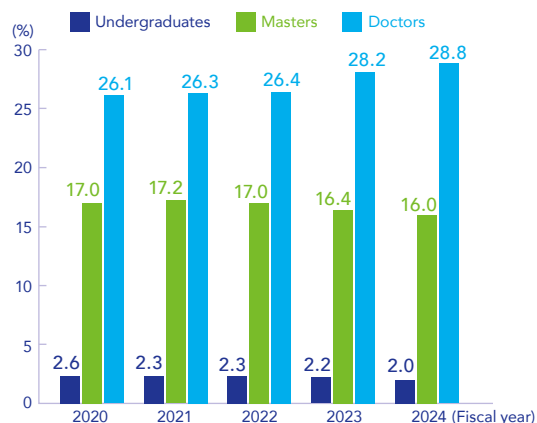
\*International students with a student visa status.

### Change in No. of International Students

(As of 1 May of each fiscal year)

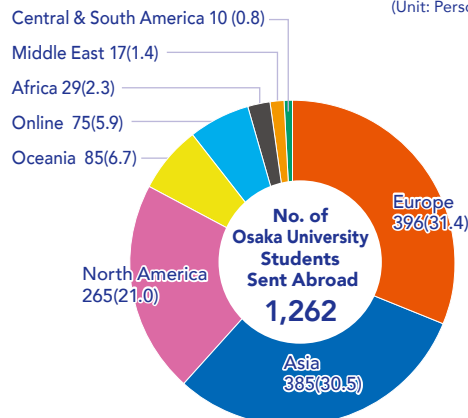


### Ratio of International Students to Total Students by Course (As of 1 May of each fiscal year)



### No. of Osaka University Students Sent Abroad (FY2023)

(Unit: Persons (%))



# Governance Structures

Through a combination of Osaka University's unique system of two Senior Executive Vice Presidents and three Strategic Meetings, we have created a governance structure that facilitates rapid, optimal decision-making with an emphasis on communication between the central administration and the frontlines of teaching and research.

In accordance with the National University Corporation Act, Osaka University has established a Board of Directors, Administrative Council, and Education and Research Council as the bodies that deliberate on important matters, plus a Council of Deans and Directors, following internal university regulations. Additionally, since 2017 we have had in place two Senior Executive Vice Presidents and three strategic committees under the leadership of the President to ensure prompt decision-making and optimized university management—a system that is unique to Osaka University.

As stipulated by the National University Corporation Act, the President is appointed by the Minister of Education, Culture, Sports, Science and Technology upon the request of the university after being vetted by the Presidential Selection and Scrutiny Committee.

Executive Vice Presidents and Executive Directors, including those who are not trustees or employees of the university, are selected and appointed by the President under certain conditions. The President appoints the Senior Executive Vice Presidents who oversee matters that require university-wide coordination from among the Executive Vice Presidents.

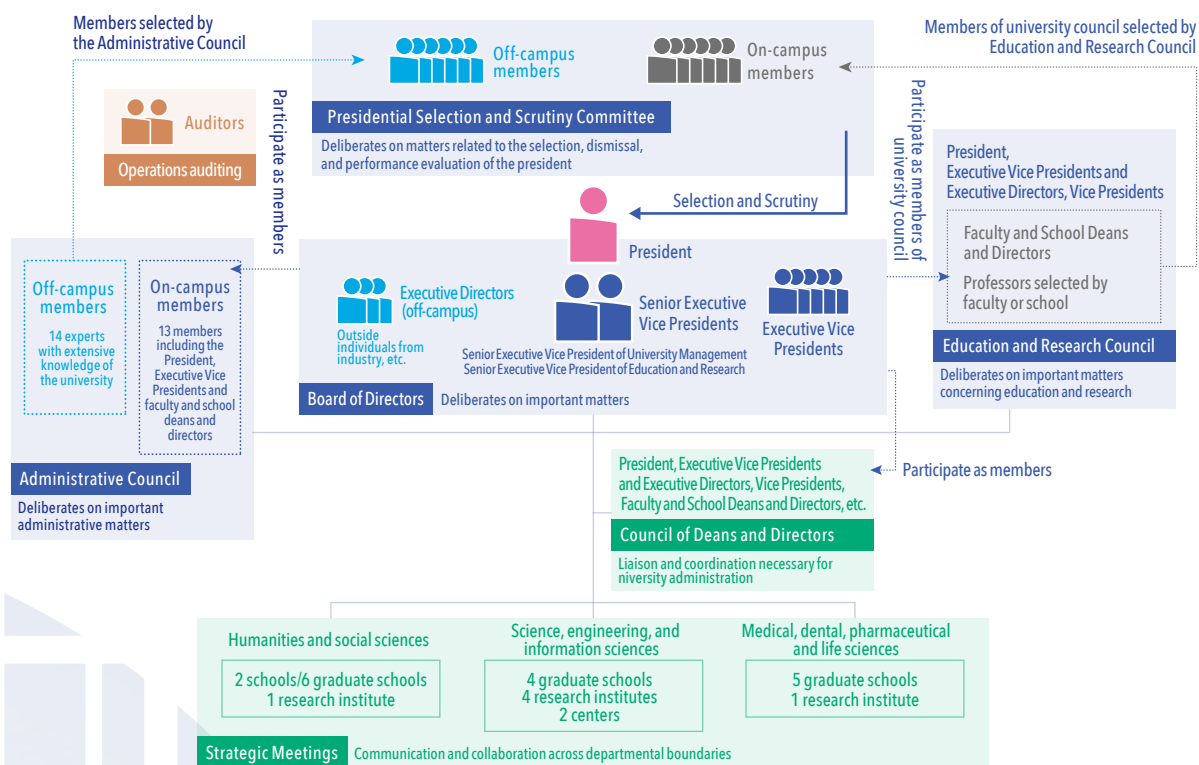
The Board of Directors, consisting of the President and 11 Executive Vice Presidents and Executive Directors, deliberates on important matters such as views to be presented to the Minister of Education, Culture, Sports, Science and Technology on medium-term goals and the preparation of budgets.

The Administrative Council is the body that deliberates on important matters related to university management. It consists of the President, Executive Vice Presidents appointed by the President, faculty and school deans and directors, and off-campus members appointed by the President as experts with extensive knowledge of the university.

The Education and Research Council consists of the President, Executive Vice Presidents and Executive Directors, Vice Presidents, faculty and school deans and directors, etc., as well as professors selected by their faculty or school, and it deliberates on important matters related to education and research.

The Council of Deans and Directors consists of the President, Executive Vice Presidents and Executive Directors, Vice Presidents, and faculty and school deans and directors, etc., and it provides liaison and coordination functions necessary for the smooth operation of the university.

## Governance Structures As of 1 September, 2024



## A System Unique to Osaka University

### Senior Executive Vice President

This position is equivalent to that of provost at Osaka University. The university has two—the Senior Executive Vice President of University Management, who implements strategic resource allocation and assessment based on medium- to long-term management strategies, and the Senior Executive Vice President of Education and Research, who plans and manages education, research, and international strategies for the entire university. The two formulate specific strategies and policies following the President's fundamental vision while fostering the lateral cooperation of the Executive Vice Presidents and Executive Directors to enable swift decision-making.

### Strategic Meetings

Three meetings that organize the university's faculties and schools into three groups—humanities and social sciences; science, engineering, and information sciences; and medical, dental, pharmaceutical and life sciences—based on commonalities in educational and research fields. As new forums for communication and collaboration that transcend existing academic divisions, the meetings formulate strategies and action plans to optimize overall management (including personnel, education, research, etc.).

## Editorial Policy

We are pleased to publish the Osaka University Integrated Report 2024. The report was put together to present our achievements and financial information to stakeholders, particularly in education and research, and to communicate our stance and strategies for bringing about social transformation, which focus on creating new value and producing exceptional talent.

This integrated report introduces our initiatives based on the OU Master Plan, which outlines our medium-to long-term vision, hoping to stimulate a dialogue that leads to further co-creative endeavors with stakeholders to fulfill our aspiration as a university, "Creating a Society where Each Member Leads a Meaningful and Fulfilling Life."

For more information on each initiative, please refer to the Osaka University website.

Scope of report: Osaka University, National University Corporation

Reporting period: 1 April, 2023 – 1 March, 2024

Note: The report includes some content more recent than April 2024

Reference guidelines: International Integrated Reporting Framework, part of the International Integrated Reporting Council (IIRC)

Osaka University Integrated Report 2024

Published: November 2024

Produced by: Osaka University Integrated Report 2024

Editorial Team

Address: 1-1 Yamadaoka, Suita, Osaka 565-0871 Japan

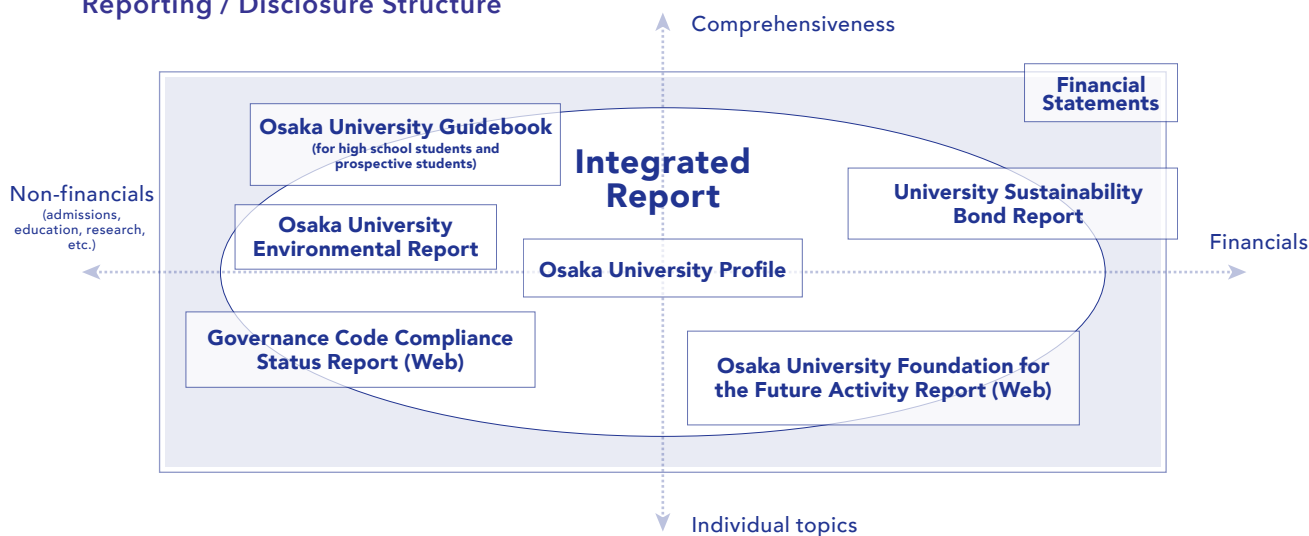
Email: ou-tougou-houkoku@ml.office.osaka-u.ac.jp



Please take our survey

We are conducting a Web-based survey to improve the Integrated Report going forward. This is a short survey, so please share your impressions with us.

### Reporting / Disclosure Structure



### Cover Concept

Osaka University's predecessor, *Tekijuku*, a contributor to the formation of modern Japan that sent many talented individuals into society in such fields as medicine, politics, and education, is the source and spiritual origin of our aspiration "Creating a Society where Each Member Leads a Meaningful and Fulfilling Life." For the cover of this report, we chose as a motif the round window of the study used by OGATA Koan, the founder and headmaster of *Tekijuku*.

As the link between indoors and outdoors, the window represents the connection between the university as an organization and the society in which it operates. It symbolizes how Koan took in students, nurtured them, and sent them out into the world throughout his life. The light from the window expresses the myriad colors of the future that awaits Osaka University.





[www.osaka-u.ac.jp/en](http://www.osaka-u.ac.jp/en)

 OSAKA UNIVERSITY