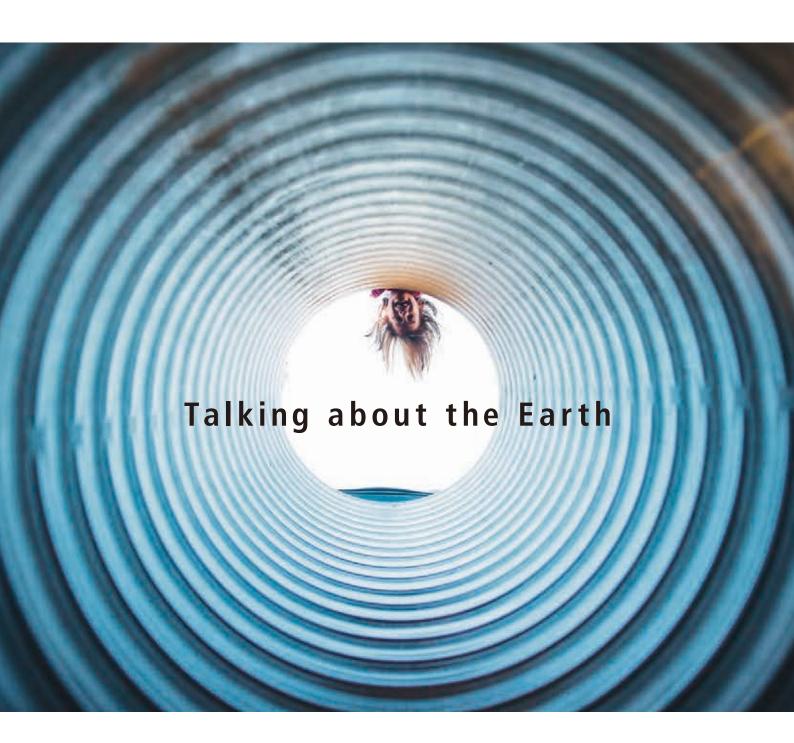
## Corporate Report $2^{\text{(ISSUE)}}$





## Corporate Report Contents On the contents

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#### Reporting coverage

Period Fiscal year ended 2018 (fiscal 2018)

(January 1, 2018 to December 31, 2018)
\*Certain information is for the periods other than the above.

Organization OYO Corporation and its group of companies

\*Note on forward-looking statements

Forward-looking statements presented in this report, including projected figures and measures for the future, are calculated on the basis of judgments and assumptions presently deemed reasonable by the Company based on currently available information. As such, actual operating results may differ significantly from the described forward-looking statements due to various material factors including economic conditions of major markets in and outside Japan and currency fluctuations.

#### Cover image



OYO Corporation is aiming to create new value and cultivate the market by establishing three-dimensional ground information technology. Conventionally only understood by experts, three-dimensional ground information technology will unveil information about the ground to ordinary people, and within this is the potential to give rise to new businesses, not only for the world of engineering and construction, but also for various other markets.

The image on the front cover depicts a child filled with curiosity, who is peering at what is beneath the ground. This image symbolizes the future possibilities that arise from the ability to visualize the ground three-dimensionally. As such, it was decided that the image would be used on the cover of this corporate report.

#### Corporate Philosophy



Engineer a Harmony between Human Society and the Natural Environment,
Sustain Safety and Security of Society from an Engineering Approach and Achieve Social Contributions through Development of the Company's Business



Contribute to Local Communities as
a Comprehensive Consultant of Geo-Science
Create New Markets with
Unique and Innovative Technologies



#### Corporate History

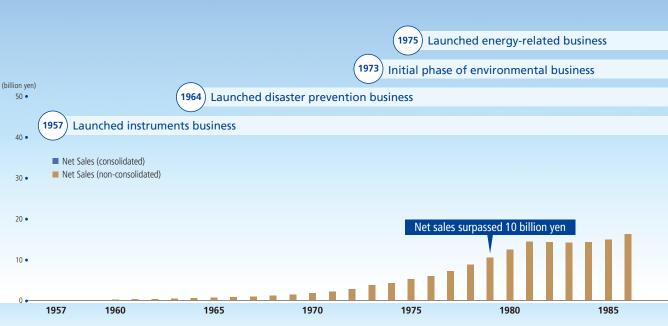




1970

### Period from inauguration to establishment of business foundation

#### **Period of growth**





1957 Developed seismic survey equipment using vacuum tubes



1959 Investigated ground subsidence in Niigata



**1965** Conducted investigation for Honshu-Shikoku Bridge



1982 Conducted soil investigation for Kansai International Airport



1958 Investigated geological reconnaissance of Chuo Expressway



1964 Niigata Earthquake



1972 Developed Elastmeter 200,



**1986** Designed and managed construction of Oyama Dairi Tunnel

- 1954 Established Fukada Geological Institute (predecessor of OYO)
- **1957** Established OYO Geological Survey Office under the slogan of "Creating Geological Engineering"
- **1958** Started applying geophysical exploration methods in the resources field to civil engineering
- 1963 Construction of Urawa Laboratory completed as the "base of creation"
- 1964 Dispatched the Company's first disaster research team upon occurrence of Niigata Earthquake
- 1971 Dispatched research team upon occurrence of San Fernando Earthquake – the Company's first such team sent abroad
- **1972** Held the first in-house technological workshop
- **1974** Held the first geological investigation instruments exhibition (present OYO Fair)
- 1976 Started investigation of damages caused by bank collapse of Nagaragawa River as well as by wind and flood
- 1979 Introduced OYO 2000, the Company's first long-term vision
- **1979** Established the Chemical and Environment Laboratory to "explore the domains between civil engineering and chemistry"
- 1980 Started overseas businesses on a full scale
- 1985 Changed the corporate name to "OYO Corporation"

1998 2010

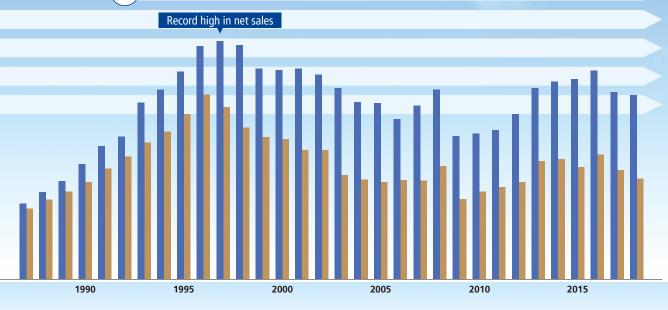
#### **Period of transformation**

**Period of** regrowth



(2010) Launched information service business

(1992) Initial phase of infrastructure maintenance and management business





1994 Worked on measures for industrial waste at Teshima Island, Kagawa Prefecture (Photo: The Yomiuri Shimbun/Aflo)



2006 Microzoning in Istanbul



2011 The Great East Japan Earthquake



2016 Kumamoto Earthquake



1995 The Great Hanshin Earthquake





2007 Construction Management Work

2015 Worked upon the Kanto-Tohoku Heavy Rainfall Disaster (Photo: The Yomiuri Shimbun/Aflo)

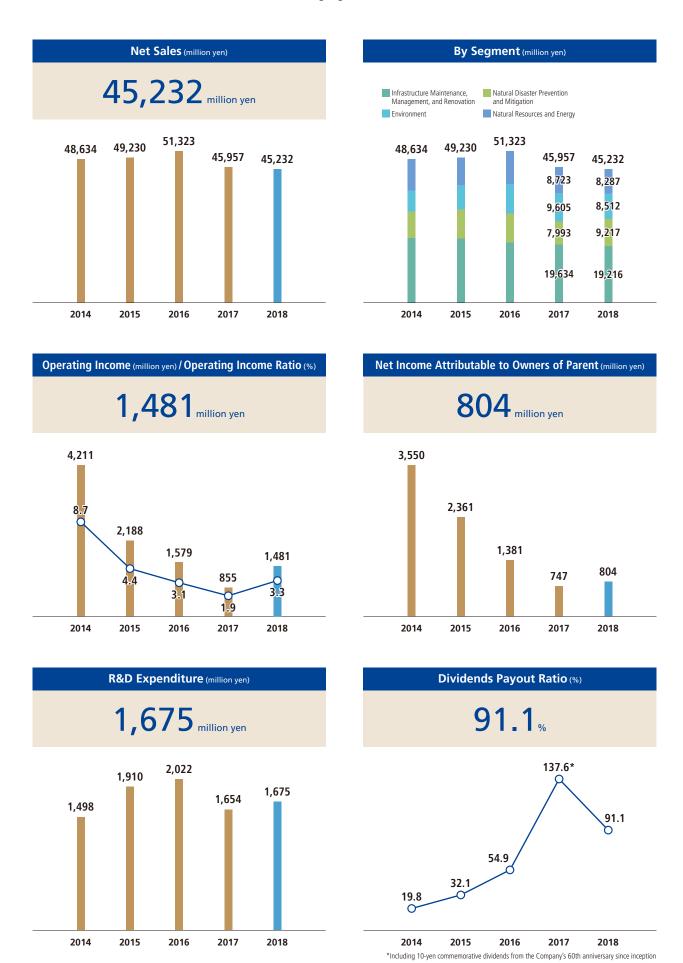


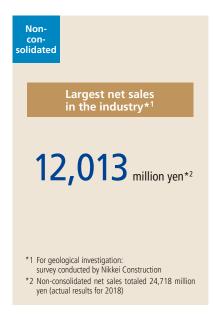
2018 Heavy Rain Event of July 2018 (Photo: Aflo)

- 1992 Established "Core Laboratory," a comprehensive testing and research center for rocks, soil and water (one of the largest facilities in the private sector)
- 1995 Listed on the 1st section of Tokyo Stock Exchange
- 1995 Worked upon the Great Hanshin Earthquake (mobilized 4,000 people in total)
- 1998 Established OYO Biological Engineering Laboratory with an aim to fuse civil engineering and ecological science
- 2000 Adopted the Executive Officer System
- 2004 Renewed Management Philosophy and Management Vision
- 2006 Prepared the OYO Compliance Manual

- 2009 Established OYO2020, the long-term management vision of the OYO Group
- 2010 Established OYO Hop 10, the medium-term management plan
- 2011 Worked upon the Great East Japan Earthquake
- 2014 Established OYO Step 14, the medium-term management plan
- 2014 Prepared the Guiding Principle for CSR
- 2016 Started endeavors for work-life balance
- 2018 Established medium-term management plan "OYO Jump 18"
- 2018 Changed business segments

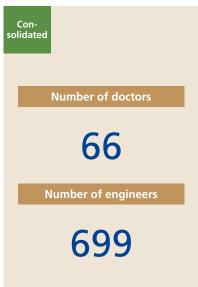
OYO at Present: Consolidated Financial Highlights and Non-Financial Information







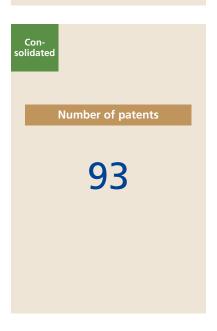






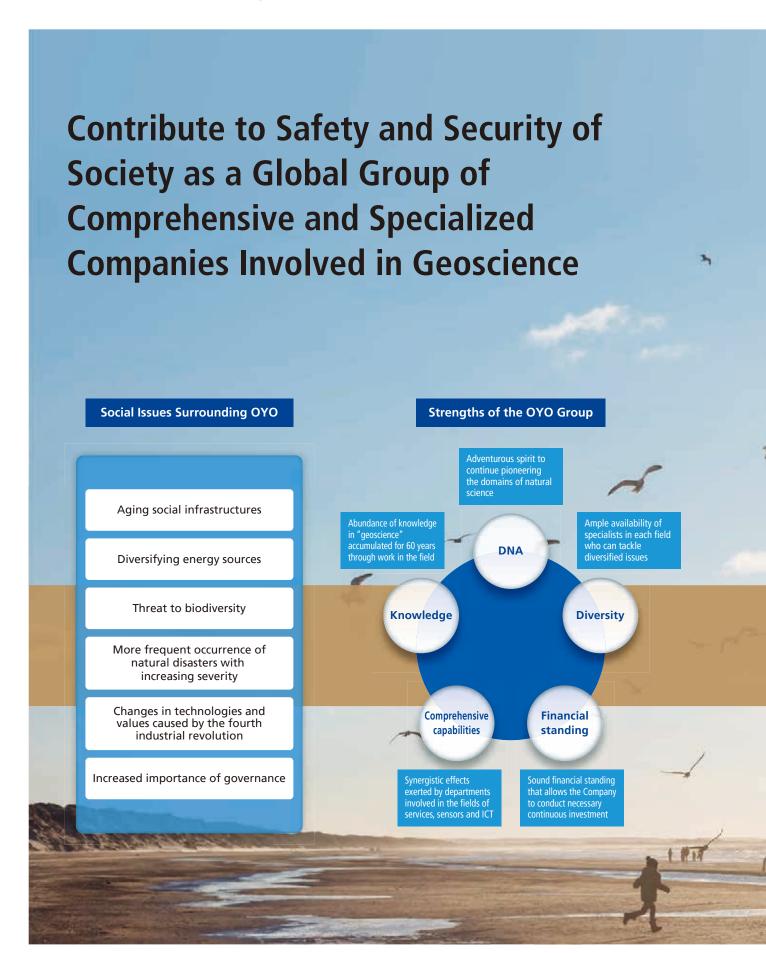




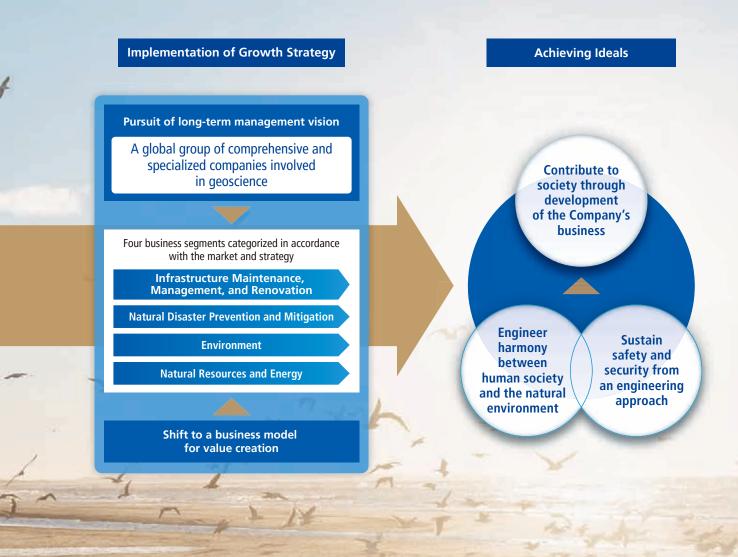




Value Creation Process (1) Big Picture



Nowadays, we are witnessing changes occurring at unprecedented speed. Explosive progress in information and communication technologies has spurred economic and social globalization and caused the industrial structure to change significantly. Not only the economy but also our values and lifestyles are being transformed by a variety of technological innovations called the fourth industrial revolution. On the other hand, development of the world economy and population growth have caused such negative impacts as depletion of natural resources and threats to biodiversity on a global scale, and climate change in association with global warming has provoked various natural disasters around the world. As such, new values and problems are created every day and become entangled with increasing complexity. Given the situation, the OYO Group endeavors to support and provide safety and security, which are unchanged values of mankind, through its proprietary technologies in an effort to contribute to building a sustainable society.



Value Creation Process (2) Business Model

Fusing cutting-edge knowledge, technologies and sensing related to geoscience to create safety and security in society across four business domains

Source of competitiveness

Fusion of cutting-edge knowledge, technologies and sensing related to geoscience

Ever since starting operations under the slogan, "Creating Geological Engineering," OYO Corporation has expanded beyond the field of geological surveying into the fields of social infrastructure construction and maintenance, natural disaster prevention and mitigation, the environment, and natural resources and energy, and it has formed a group of specialized companies. These four areas related to geoscience are also directly connected to the safety and security of some of the world's issues that need to be solved on a global scale. OYO Group has the strength of generating comprehensive solutions as it can seek out optimal solutions to composite issues through the fusion of its unique sensing technologies, enabling mutual cooperation in these four areas.

#### Four business domains

#### Segment

#### Infrastructure Maintenance, Management, and Renovation

Investigation on aging infrastructures, building infrastructure maintenance and management systems Investigation, design and measuring services for establishing disaster-resilient infrastructure

Development and sale of non-destructive test equipment, etc.



#### **Natural Disaster Prevention and Mitigation**

Support for national and local government in preparing disaster prevention plans and predicting damages from earthquake, tsunami, fire and other disasters

Investigations, loss estimations and consultations on countermeasures regarding natural disaster risk

Development, installation, and renewal of monitoring systems



#### **Environment**

Natural environment, centering on preservation of biodiversity

Living environment,

covering soil and groundwater contamination and waste

One-stop service for asbestos analysis and removal



#### **Natural Resources and Energy**

 $\label{thm:level geological consultation on the location of power plants, etc. \\$ 

Research and development on methane hydrate, support for the commercialization of renewable energy Development of systems for natural resource exploration, three-dimensional subsea investigation service, etc.

Value provided and social background

Population problems

## Support maintenance and management

(enhancement and replacement)
of social infrastructure and
various facilities

Infrastructure deterioration and renovation demand

Climate change

### Support societal resilience against natural disasters

Increasing intensity and frequency of natural disasters

Various environmental issues

Increasing concern with biodiversity

Support environmental preservation (load reduction)

ESG investment

Support development, preservation, and effective use of natural resources and energy

Increasing

demand for

resources

Expansion of renewable energy

#### Value Creation Process (3) Source of Competitiveness

OYO Group launched its geological survey business as a starting point, and has since expanded into the areas of infrastructure maintenance, management, and renovation, natural disaster prevention and mitigation, environment, and natural resources and energy. By fusing these four areas, it has formulated a unique position within the market. OYO Group's strength is that it possesses departments for investigation, analysis, and consulting, in addition to sensing, as well as system development, and its ability to provide soft and hard comprehensive solutions to important societal issues related to safety and security. Moreover, ever since the 1964 Niigata Earthquake, OYO Group has dispatched its own disaster research teams for major natural disasters both within Japan and overseas, compiling knowledge about natural disaster prevention and mitigation through the analysis of damages and the disaster's mechanisms. In addition, OYO Group operates its own research facilities related to soil and rock mechanics as well as ecology. In these ways, it has engaged in initiatives that secure further predominance in the business.

Included expert
corporations involved in
various fields of geoscience
into the Group



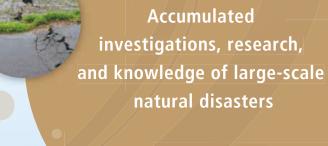


Geological database compiled since the founding of OYO Corporation













Original research facilities for ground and ecology







Message from Management (Interview)

# Solve social issues through market-creation initiatives

President

Masaru Narita



The medium-term management plan OYO Jump 18 was in its first year in 2018. What kind of results did you see?

Initiatives to clarify markets and products and create new markets contributed profit.

While consolidated performance in 2018 saw a 1.6% decline in sales compared to the previous period, operating income increased substantially by 73.2% compared to the previous period.

Among the many factors that contributed to this increase, we believe one reason is that, as a result of engaging in our previous medium-term management plan OYO Step 14 (2014-2017), that is, "shifting to a new business style" (freeing ourselves from the successful experience in the past), we are beginning to see gradual fruit from clarifying markets and products and creating new markets.

For example, in the Infrastructure Maintenance,

Management, and Renovation business, Geophysical Survey Systems, Inc. (GSSI), which is our overseas group company and holds the world's top share in ground penetrating radar exploration equipment, identified the sector as a core business area and promoted a growth strategy to expand the target market from the narrow researcher and expert market to the wider private sector maintenance and management market. As a result of this strategy, GSSI recorded its highest sales and profit in 2018. In the Natural Disaster Prevention and Mitigation business, the segment's division proactively engaged in meeting client needs through coordination with branch offices during heavy rains in western Japan in July 2018. As a result, orders and sales increased significantly. In the Environment business, markets such as disposal of disaster waste planning have expanded through unique know-how in disposal of disaster waste obtained performing reconstruction work after the Great East Japan Earthquake and due to our original services that have fused OYO Corporation's technological advantages in the field of earthquake disaster prevention. In the Natural Resources and Energy business, the Energy Business



Division has taken the lead in initiatives aiming to newly cultivate the renewable energy market with an eye towards the contraction of the nuclear business. In particular, in 2018, we pushed for the development of new seafloor surveying technologies which could be used for the offshore wind energy market that is expected to expand in the future, in addition to executing new capital investments into marine scaffolding which is experiencing a shortage on the market. Through these measures, we hope to obtain new proceeds from the next term.

In 2018, we put an end to the coexistence of the Division System and the Branch System

While OYO Corporation itself was shifting to a business management style based on "Divisions" comprising markets and business fields, in consideration of sudden changes and their impacts on the market, our conventional "Branch System" also existed in our organization-

al system. However, at its basic level, the Branch System is an organizational system based on successful experiences in the past, which was suitable to "awaiting" regional public works. At times, the continuation of this passive business style resulted in putting the brakes on our growth strategy led by Divisions which conduct their business around Japan in coordination with regions amidst changes in society and the market, in addition to the competition around public works intensifying each year.

Alongside the acute realization of how difficult it will be to free ourselves from our success in the past, we have also realized how important it is to completely switch to the Division System as soon as possible. In this sense, we could say that this year was a fruitful year.

#### Message from Management (Interview)





What are the important points that will help you realize the "jump" aimed for with OYO Jump 18?

We believe that it is essential to keep pushing for the clarification of markets and products and the transformation of organization and awareness.

In order to realize the "jump" aimed for with the medium-term management plan OYO Jump 18, the entire Group must "shift to a new business style" in the future. To do so, we believe that it is essential to keep pushing for the clarification of markets and products and the transformation of organization and awareness.

Clarifying markets and products means first targeting markets and recognizing our core technologies and resources, and then providing clear solutions that anyone can understand. As many of our divisions and Group companies have not clarified their markets and products in this way, we will spread success cases like the one mentioned above to the entire Group.

As for organizational transformation, we are tackling OYO Corporation itself, as dependence on success experiences is most deeply rooted there. From January 2019, we have completely changed to the Division System. We have completely abolished "branches," and upon renaming them "offices," dramatically reduced their authority and responsibility. Technical staff working at these offices belong to certain divisions, and employees that handle general affairs, purchase and management belong to the headquarters. In this way, we changed the basis of management from a regional basis to a business basis. As a result, in this new system, all employees now engage in market development under the leadership of each Division Head, and each Division has clarified their markets and products. Moreover, we also established two new divisions in order to accelerate market development by divisions. Those divisions are the "Regional and Global Aqua Engineering Business Division" (established January 2018) belonging to the Infrastructure Maintenance, Management, and Renovation Segment, and the "Earthquake Risk Management Division" (established January 2019) which will enhance the Natural Disaster Prevention and Mitigation Segment. In particular, the demands among private enterprises for business continuation plans (BCP) and risk countermeasures are increasing in the field of earthquake disaster prevention against a backdrop of apprehensions of a massive earthquake with a seismic center in the Nankai Trough or the Sagami Trough. In response to this increasing demand, we have developed and provided various services related to earthquake disas-

#### Progress on management reforms

Increased cooperation with other companies
(2018)

Started erecting an ICT platform (2018)

Mostly completed business clarification for group companies (two companies left)

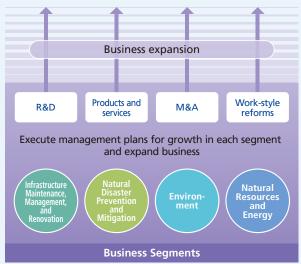
(2018)

Finished replacing the core system (2018)

Completely switched to the Division System
(January 2019)

Established IT Innovation Planning Headquarters
(January 2019)





ter prevention, and this has steadily led to the establishment and expansion of the market. In other words, this is a good example where a new division was created because of engagement in market creation.

As for transformation of awareness, we will engage in "thorough employee education." With the change to the new organizational system, the Division System, we must transform our employees' awareness, which is stuck in the old organization formation. That is, awareness and work methods must be changed to meet the Division System. To do this, we believe educational training is particularly important. In the future, we will fundamentally reexamine our system for employee career development, salary and the role of management to ensure they are optimized for the Division System.



Specifically speaking, what kind of initiatives are you undertaking for future business expansion?

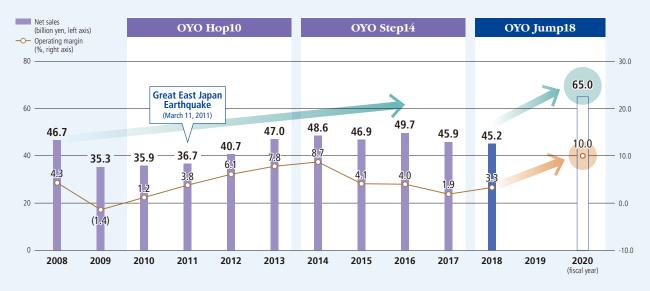
We are pressing for proactive management reforms in various areas such as R&D, work-style reforms, etc.

At OYO Group, proactive R&D as well as capital investment for the establishment of the technology base for

the next generation are conducted with the aim of utilizing these to create new business. Particular attention is paid to three terms: "information and communication technology (ICT)," "three-dimensionalization," and "artificial intelligence (AI)." Currently, we are establishing the Ground Information ICT Platform, as a next-generation technology base that will help OYO Group create new businesses and improve operational efficiency. In 2018, this was the focus of capital investment. Other important R&D investments include the development of 3D exploration geophysics (technology and products), which enables the visualization of the ground, and the development of services that utilize AI. As for the latter, through our alliances with external companies which excel in AI technology and knowledge, we have started to develop technologies implementing AI within our 3D ground models and our models that extract disaster danger zones. Furthermore, we are also working on R&D from an even longer-term perspective. For example, in the disaster prevention and mitigation field, we have started joint industry-government-academia R&D activities. As for inter-industry cooperation, we have started to make considerations for developing a next-generation disaster prevention and mitigation service through the partnership of KDDI CORPORATION, Toyota Motor Corporation, and OYO Corporation. As for cooperation with the government and academia, we submitted two proj-

#### Message from Management (Interview)

#### Progress in Long-Term Business Plan and Targets for Final Fiscal Year



ects to the second phase of the national project established by the Cabinet Office aimed at realizing technological innovation, the Enhancement of Societal Resiliency against Natural Disasters phase of the Cross-ministerial Strategic Innovation Promotion Program (SIP), and as both these projects were accepted, we have conducted joint research since. Furthermore, as for cooperation with academia, in order to conduct cutting-edge disaster prevention research, we have continually participated in privately funded courses at the Disaster Mitigation Research Center at Nagoya University, in addition to cooperating with Hokkaido University on their research on biomass for cyclical waste treatment through contributions.

In order to globalize our operations, we are also proactively engaging in the M&A of excellent overseas companies. In 2018, we decided to acquire the stock of two Singaporean companies, Fong Consult Pte. Ltd. and FC Inspection Pte Ltd., to enhance our overseas infrastructure maintenance, management, and renovation operations, and in January 2019, we made both of them subsidiaries. In the future, we will continue to expand our business into the overseas infrastructure maintenance and management market by demonstrating synergy with those overseas subsidiaries.

We are also continuing with creation of a comfortable working environment and implementing work-style

reforms aimed at improving productivity. OYO Corporation has completely transitioned to the Division System from the beginning of 2019, and the work-style reforms are progressing alongside the transition. With our conventional Branch System, we used to begin operations once a request was received from clients. However, this was inefficient, and regional differences would sometimes occur in terms of the quality of products and services. On the other hand, with the Division System, each division will be able to develop their own products and services, which enables us to provide multiple products and services to our clients while maintaining the same quality. As divisions would plan business schemes beforehand to optimize operations and shorten and improve business processes, we anticipate increased productivity and shortened working hours. Moreover, the Division System has reduced personnel transfer with relocation. Utilizing ICT and streamlining tools will enable people able to work from outside of offices. We are currently developing various measures to create a comfortable working environment such as implementing a telecommuting system and utilizing satellite offices.

Creating a comfortable working environment will not only be implemented at OYO Corporation, but will also be proactively implemented in the group companies. Moreover, progress and examples of success will be shared with group companies through OYO Group's



President meetings, and OYO Group will work as one to realize favorable working environments.



Finally, could you tell us the medium-term outlook of OYO Group?

We will incorporate the SDGs into our next medium-term plan, so that we will be able to push for operations that start from social challenges.

In the future, each division and domestic and overseas company will conduct marketing and develop products and services in four business segments, and will promote the business model that cultivates markets. Through this, we hope to capture new needs, not only from conventional markets, but also from various countries and industries. We are also aiming to establish and penetrate the OYO brand. As mentioned above, these initiatives are starting to produce results in some areas.

Almost all business that OYO Group handles contributes to the safety and security of society. It is for this reason that we are convinced that OYO, as a member of society, has to commit to the Sustainable Development Goals (SDGs) adopted at the United Nations General As-

sembly, and to pursue business that starts from social challenges. In 2019, we will consider SDGs and identify some goals that pose the most important challenges for OYO and reflect them in our next medium-term plan.

We will face the major changes of this era and press on towards our next growth stage.

Amidst a massive industrial innovation known as the fourth industrial revolution, even in Japan, we can see market reorganization and structural changes in the market in various industries. In order to survive in this colossal change, we believe that it is important for us to change proactively. OYO Group will have to predict the future market situation beyond this change and press on towards our next growth stage.

I am deeply appreciative of our stakeholders' expectations and support for the OYO Group's business, and request their continued patronage.

#### Medium- to Long-term Business Plan

Overview of Long-Term Business Plan

Long-Term Management Vision of the OYO Group

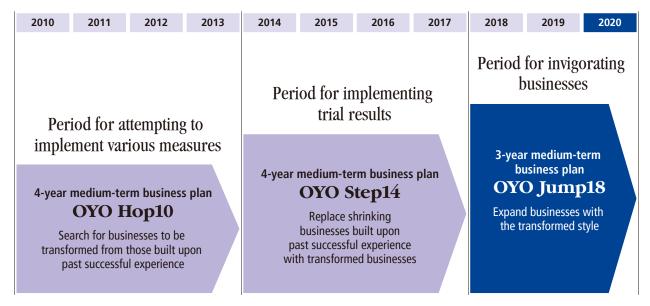
## OYO 2020

What it Aims to Be (long-term management vision)

## A global group of comprehensive and specialized companies involved in geoscience

 Step away from shrinking businesses built upon a style of past successful experience, and aim to expand businesses with a shift in style –

#### Roadmap for Realizing the Vision



### Implement endeavors to achieve OYO 2020, the long-term management vision, based on the road map prepared in 2009

OYO 2020 is the Company's long-term management vision prepared in January 2009. It clearly details the vision which the OYO Group should seek to realize toward 2020 by stepping away from our successful experience in the past, as well as the basic policy for realizing this vision. In order to contribute to realizing a sustainable society for Japan and the world, we aim to become a comprehensive and specialized group that provides solutions full of ideas in various fields involved in geoscience.

The activity period under OYO 2020 is divided into four phases: Plan: Approach, Trial: Hop, Develop: Step and Evolve: Jump.

Under OYO Hop 10, the Company is set to explore and attempt to implement businesses replacing those built on the successful experience of the OYO Group in the past. With OYO Step 14 that follows, conventional businesses, or businesses built upon successful experience, are to be replaced with businesses that have the potential to grow. OYO Jump 18, the final medium-term business plan, is designed to grow the businesses replacing conventional ones.



## OYO Jump18

Basic Policy

Aim to achieve continuous growth by expanding from the results of the previous medium-term business plan OYO Step 14 and providing solution services to solve social issues

- Basic Strategy
  - 1 Growth strategy

Establish the OYO brand in the business fields expanded under OYO Step 14

Promote business expansion in the domains covered by OYO Step 14, broken down into the following four segments:

(Classification of segments changed in fiscal 2018)

Infrastructure Maintenance, Management, and Renovation Natural Disaster Prevention and Mitigation

Environment Natural Resources and Energy

2 Technology strategy

Create new value and cultivate the market by establishing three-dimensional ground information technology

**3** Global strategy

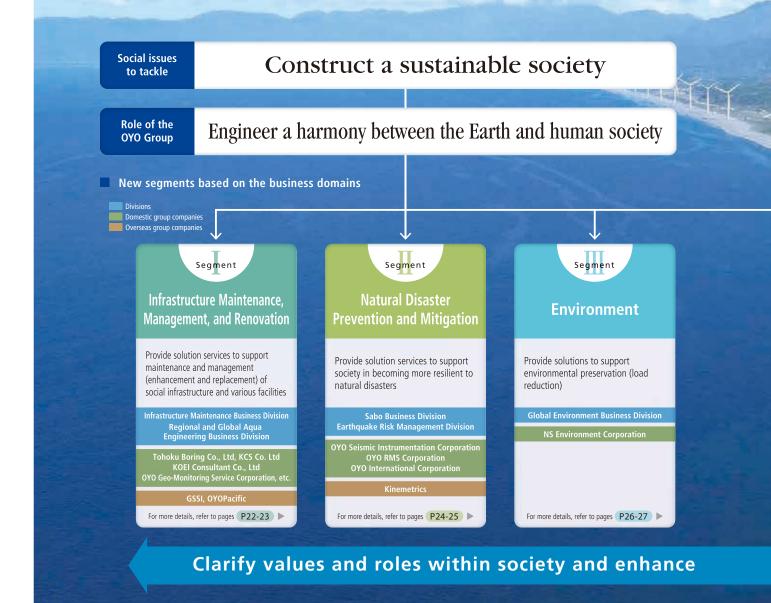
Conduct M&As to accelerate the business expansion strategy, and launch solution systems into overseas markets

4 Governance

Reinforce corporate governance, including enhancement of QOL of employees

Four Business Segments

Aim to be a company whose social values are easily understood by society, by differentiating our segments in line with the business market



Under our previous medium-term business plan OYO Step 14, OYO Corporation determined business fields to pursue, considering the issues that the world must address in order to construct a sustainable society. Based on this, from 2018, which is the first year of the current medium-term business plan OYO Jump 18, we are conducting our business in four segments: Infrastructure Maintenance, Management, and Renovation, Natural Disaster Prevention and Mitigation, Environment, and Natural Resources and Energy.

By increasing the presence of our groups in each market, we will clearly define OYO Group's values and roles within society, and aim to enhance our corporate value.



Chapter 3 Strategy by Segment



Aim to expand the Infrastructure Maintenance, Management, and Renovation business globally by achieving group

Seni Infrastructure

Synergistic effect

Senior Executive Officer and Head of Infrastructure Maintenance Business Division OYO Corporation

Toshihiko Tanaka

Both in Japan and abroad, demands for countermeasures against infrastructure aging and for replacement of them are expanding. Especially in Japan according to estimates made by the Ministry of Land, Infrastructure, Transport and Tourism, total costs for maintenance, management, and replacement of infrastructure over the next thirty years will be approximately 195 trillion yen. The average cost per year is about 6.5 trillion yen, and it is a huge market equivalent to one year's public works expenditure budget. In 2018, OYO Corporation received orders reaching approximately 5 billion yen for tunnels, roads, and slopes. Moreover, in this period, we engaged in mounting Al on our vehicle equipment that looks for cavities beneath the surface of roads, conducted R&D to make 3D maps of underground facilities, and developed ground transformation monitoring technology with highly accurate and wide-ranging analysis by utilizing satellite images.

As for our overseas operations, Geophysical Survey Systems, Inc. (GSSI) has been performing well, mainly in Asia, and it achieved record-high performance through the sales of products for internal scanning of structures. Furthermore, in this segment, we newly acquired two Singaporean companies. In the future, we hope to increase the sales of the products and services both of OYO Corporation and GSSI by using the Singaporean subsidiaries as a gateway for Asia. Moreover, we hope to expand this segment globally by maximizing our group's synergetic effect.

#### **Major Services**

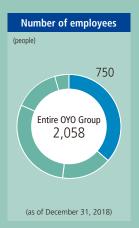
- Investigation on aging infrastructures, building infrastructure maintenance and management systems
- Investigation, design and measuring services for establishing disaster-resilient infrastructure
- Development and sale of non-destructive test equipment, etc.

and others

#### **Major Customers**

 Wide-ranging infrastructure managers (National government agencies, local governments, private-sector companies)





Cases of Endeavors in the Infrastructure Maintenance, Management, and Renovation Segment

### Radar survey instruments for inspecting various infrastructure

Thanks to an increase in global renovation demand, especially in Asia, GSSI, a U.S. subsidiary that manufactures ground-penetrating radar systems, recorded its highest performance. Although it had a product lineup that varied by radar frequency in the past, GSSI has secured a strong market presence with a merchandise strategy clarifying the target and purpose of these radars by use, such as for buried pipes, bridges, and road pavement degradation diagnosis.



Scanning equipment for underground utility pipes



Scanning equipment for evaluating roads and brides

### Cavity exploration service beneath road surfaces using Al

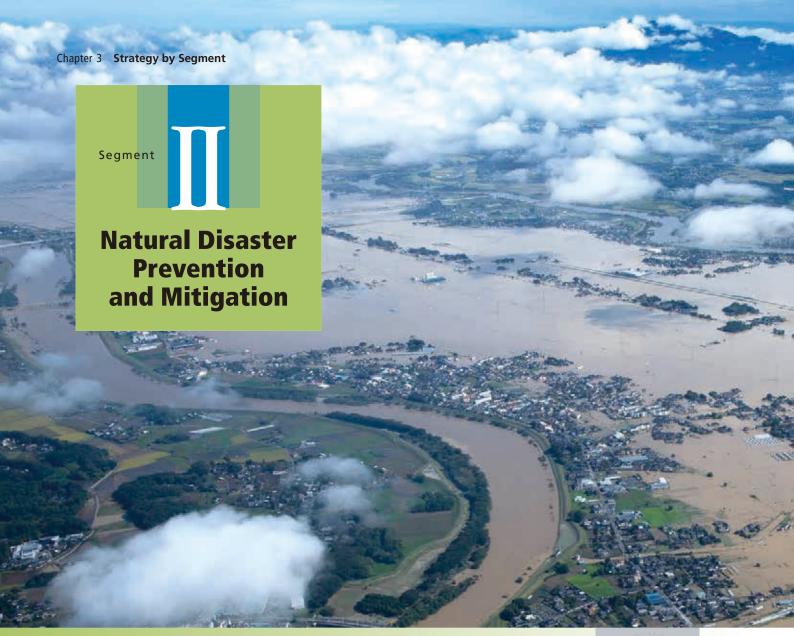
For our cavity exploration service conducted beneath the surface of roads, we started utilizing Al. With Al, the cavity analysis time was shortened significantly, enabling the early reduction of road cave-in risk and contributing to the prevention of accidents.



## High-accuracy ground-transformation monitoring service utilizing satellite images

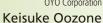
With deterioration and impacts from their surroundings, infrastructure such as roads, railways, airports, and seaports could be distorted or changed. Those distortions or changes may lead to large-scale accidents in the future. However, inspecting such enormous infrastructure located in wide areas requires an extremely large amount of time, labor, and cost. The high-accuracy ground-transformation monitoring service can analyze ground deformation at the milliunit across a wide area, and can pinpoint areas with abnormalities. It is a new infrastructure monitoring service that realizes early and efficient countermeasures.





Market opportunities are expanding due to increased natural disaster prevention and mitigation awareness and large-scale National Resilience Budget

Executive Officer and Head of Sabo Business Division OYO Corporation





Given the trends of the increasing frequency and intensity of natural disasters in recent years, natural disaster prevention and mitigation awareness is increasing in Japan and abroad. In 2018, large-scale disasters, such as the northern Osaka earthquake, the Heavy Rain Event of July 2018, and the 2018 Hokkaido Eastern Iburi Earthquake, occurred in quick succession. Amidst this situation, it seems that the societal expectation for OYO Corporation and our segment is growing year by year, because we mainly handle business about natural disaster prevention and mitigation. As background to this, both revenue and profit of our segment increased in this period.

Considering issues such as an aging society and the financial difficulties our society is facing, it is believed that software solutions, such as utilization of ICT to share disaster information, predict damages, or evacuation guidance, will be essential for natural disaster prevention and mitigation. Last

year, we developed an evacuation guidance timeline system as a countermeasure against the evacuation guidance issues raised during the Heavy Rain Event of July, 2018, and we also started to develop the "disaster countermeasure information support system for local governments" together with KDDI CORPORATION and Toyota Motor Corporation. Kinemetrics, Inc., a subsidiary in the U.S., has developed OASISPlus, a building diagnostic and evacuation guidance system developed based on a seismometer system, and expanding sales to high-rise buildings and hospitals.

Having been allocated a large portion of the National Resilience Budget, our segment's business is growing. By providing solutions to the societal issues of natural disaster prevention and mitigation, we would like to contribute to realizing a safe and secure society and to increasing OYO Group's corporate value.

#### **Major Services**

- Support for national and local government in preparing disaster prevention plans and predicting damages from earthquake, tsunami, fire and other disasters
- Investigations, loss estimations and consultations on countermeasures regarding natural disaster risk
- Development, installation, and renewal of monitoring systems

#### **Major Customers**

- National and local governments throughout Japan
- National research institutions (National Research Institute for Earth Science and Disaster Resilience, U.S. Geological Survey etc.)
- Private enterprises (manufacturers, real estate companies, financial institutions, etc.)





#### Cases of Endeavors in the Natural Disaster Prevention and Mitigation Segment

### Landslide disaster evacuation guidance timeline system

In order to respond to the increasing frequency and intensity of heavy rainfall disasters, Japan has revised a portion of its Flood Protection Act, and is constructing a disaster mitigation system that uses both hard and soft measures aiming for "Zero Delayed Evacuation." At OYO Corporation, an evacuation guidance timeline system has been developed and optimized for the initiative "Zero Delayed Evacuation." This system supports both local government and local residents in maximizing mitigation efforts with closely sharing various information such as early warnings, evacuation guidance, and recovery activities by using meteorological and hazard information, and various sensor information. It also supports collection of disaster victims' real-time demand for relief supplies and sharing the information with related parties.

Graphic image of landslide disaster evacuation guidance timeline system (Photo from heavy rainfall in northern Kyushu)



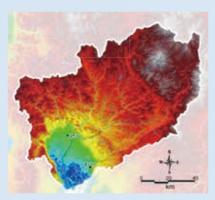
## Information support system for the government and local administrations as a measure against disasters

Together with KDDI CORPORATION and Toyota Motor Corporation, we are developing with the aim of commercializing an "information support system as a measure against disasters" using cutting-edge technologies in IoT and big data analysis. This system will detect the occurrence of disasters and abnormities of infrastructure in real time and extensively using various data from disaster monitoring sensors, demographic movement data, and probe data obtained through cars. It will boost the accuracy and speed of decision-making in issuing evacuation warnings and enable further disaster prevention and mitigation in local areas.



## Participating in the Cross-Ministerial Strategic Innovation Promotion Program

The Cross-Ministerial Strategic Innovation Promotion Program (SIP) is a national project established by the Cabinet Office aiming at realizing scientific and technical innovation reaching beyond the boundaries of the field. Together with joint research institutions, OYO Corporation applied to the "Enhancement of Societal Resiliency against Natural Disasters" section, and the following two themes were selected: "Development of groundwater use systems for disasters," and "Development of disaster countermeasure integration system for cities, towns, and villages."





The Nobi Plain is used as the model region for the development of groundwater use systems for disasters

Chapter 3 Strategy by Segment



Developing solutions for global environmental issues such as microplastics pollution

Executive officer and Head of Global Environment Business Division OYO Corporation

Shinichi Iwashita



Market opportunities for this segment are continually increasing due to increasing global environmental awareness as symbolized by the issue of microplastics pollution as well as expansion of ESG investment. The unique and key element of this segment are our disaster recovery solutions in the environmental field.

In the Heavy Rain Event of July 2018, the management of massive disaster waste was highlighted as one of the important issues in areas affected by the disaster. OYO Corporation has established its own know-how through the processing of disaster waste caused by tsunami after the Great East Japan Earthquake, and we are a leading company in the market for disaster waste processing plans and early processing support. Moreover, for the reconstruction project in Fukushima, we have conducted comprehensive client business support combining our various expertise, such as transportation management of radioactive contaminated soil, radiation monitoring, and

groundwater measures, and those business have contributed significantly to the sales of this segment.

Outside of disaster recovery, energy diagnoses against the backdrop of social demand for environmental management as well as assessments for wind power generation which coincided with the expansion of the renewable energy market have increased the number of orders received in recent years.

As a new future initiative, we hope to engage in business related to setting the strategy for plastic resource circulation. Given the issue of microplastics pollution, the Basic Policy on the Comprehensive and Effective Promotion of Measures Against Articles that Drift Ashore was recently revised, and we see this as another market opportunity for our segment and we are currently drafting solutions.

#### **Major Services**

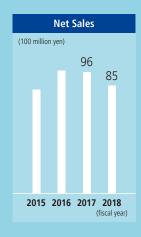
- Natural environment, centering on preservation of biodiversity
- · Living environment, covering soil and groundwater contamination and waste
- One-stop service for asbestos analysis and removal

and others

#### **Major Customers**

- Ministry of the Environment (waste and resource recycling)
- Ministry of Land, Infrastructure, Transport and Tourism
- Local governments throughout Japan
- Private-sector companies (real estate-related companies, trading companies and manufacturers, etc.)

and others





#### Cases of Endeavors in the Environment Segment

## Disaster waste processing plans and early processing support services

We are developing and providing a waste processing plan support system under the premise of the occurrence of large-scale disasters. Based on information of ground models, topography, and buildings that have been stored in a database, we predict buildings that might be fully or partially destroyed and estimate the quantity of waste. We

then immediately calculate the optimal plan for transportation of materials to temporary waste sites. Through this service, we contribute to establishing a crisis management system that aims for the shortest possible recovery.





Disaster waste processing plan support system



## Fukushima environmental regeneration support service, disaster waste-related services

In Fukushima, the establishment of intermediate treatment facilities that will segregate and store decontaminated soil and waste, as well as the transportation of these items from temporary waste sites to the intermediate treatment facilities, is currently underway. OYO Group unrolls a diverse set of support services that help businesses safely operate and aid recovery, such as construction management for soil transportation and process work, groundwater measures at storage facilities, volume reduction considerations for waste, and air-dose measurement.

## One-stop service for asbestos analysis and removal

With older buildings requiring replacement, the scattering of asbestos due to demolition work has become an issue. The peak of demolition of buildings that used asbestos is said to be between 2020 and 2040. OYO Group is working to minimize health hazards to residents due to asbestos through a unified service that offers analysis and removal.

Asbestos analysis (NS Environment Corporation)



Chapter 3 Strategy by Segment





## Strengthening solutions corresponding to new energy policies

Executive Officer and Head of Energy Business Division OYO Corporation

Masahiro Oshima



The market environment of 2018 for this segment was extremely difficult. In Japan, we experienced a slowdown of business related to earthquake resistance conducted for nuclear facilities since the Great East Japan Earthquake. Overseas, the natural resource exploration market did not recover as much as we had expected. Amidst this, renewable energy has been a glimmer of hope, specifically the large movements seen in the domestic offshore wind energy business. In order to make this a new business pillar of this segment, we newly established an expert organization in 2018, developed new seafloor surveying technologies, and conducted new capital investments. Through these measures, we anticipate major increases in market share for 2019.

On the other hand, in the field of nuclear energy, we are carefully watching social movements surrounding the issue of nuclear waste disposal aimed at decommissioning reactors as a

potential new business opportunity.

While resource prices in the overseas market are still unstable and bearish, movements of new offshore oil-field developments have been seen in 2019. Group companies abroad are proactively engaging in management reform and new client development in response to this long-lasting resource slump. Meanwhile, proceeds have continued a steady recovery, even amidst the harsh economic environment.

#### **Major Services**

- High-level geological consultation on the location of power plants, etc.
- Research and development on methane hydrate, support for the commercialization of renewable energy
- Development of systems for natural resource exploration, three-dimensional subsea investigation service, etc.

and others

#### **Major Customers**

- Power companies
- Oil companies
- Natural resource developers
- Construction companies
- · Government agencies and national research institutions

and others





#### Cases of Endeavors in the Natural Resources and Energy Segment

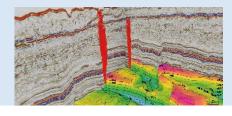


#### **Offshore** wind energy services

With the rapid expansion of the offshore wind energy market in Japan, OYO Corporation has newly made capital investments into marine scaffolding for exploration where demand has increased. In addition, we have developed a new seabed examination technology that helps earthquake-resistant design conform to the Building Standards Act. In addition to examining the geology of the seabed, OYO Group offers various technological one-stop services from business evaluations to environmental services for supporting the smooth business operations of its clients.

#### Three-dimensional offshore oil reservoir exploration service

Our three-dimensional offshore oil reservoir exploration system, P-Cable, visualizes geological structures at a high resolution and in three dimensions, and has received high evaluation on the market as a solution that reduces oil-well drilling risks. While the market of this service has been limited to Northern Europe and the U.S. until now, in 2019, we anticipate a market expansion to Southeast Asia and Africa.



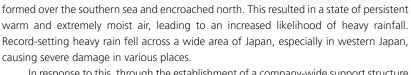


Feature Story 1: Measures against increasing intensity and frequency of natural disasters

2018 Heavy Rain Event of July 2018 (Mabicho, Kurashiki-shi, Okayama, Japan) (Photo: Aflo)







In July 2018, a seasonal rain front remained stationary near Japan while Typhoon No. 7

In response to this, through the establishment of a company-wide support structure led by divisions, OYO Corporation conducted various support operations aimed at early recovery such as examination of damage for various infrastructure facilities, design of countermeasure construction, and disaster assessment support.



#### ■ Main damage caused by the Heavy Rain Event of July 2018

Name	<b>Total precipitation</b> Number within brackets indicates amount of rainfall per area	Casualties Fatalities and missing persons	Damage to residences Fully or partially destroyed
Heavy Rain Event of July 2018	208,035.5 mm (215.4 mm)	245 people	18,010 buildings
Heavy rainfall in northern Kyushu, July 2017	90,880.5 mm (94.1 mm)	43 people	1,412 buildings
Heavy rainfall in Kanto and Tohoku, September 2015	132,956.5 mm (137.6 mm)	8 people	7,125 buildings
Heavy rainfall in August 2014	174,047.0 mm (180.2 mm)	8 people	164 buildings



- Sources "Total precipitation" (the total precipitation recorded at 966 comparable AMeDAS locations in Japan) is from "Primary Factors behind the Heavy Rain Event of July 2018 and the Subsequent Heatwave in Japan from Mid-July Onward" from Japan Meteorological Agency
  - "Fatalities and missing persons" and "Fully or partially destroyed" are from the "Cabinet Office of Japan, Damage of the Heavy Rain Event of July 2018: as of 17:00 January 9, 2019"
  - "Fatalities and missing persons" and "Fully or partially destroyed" of the Heavy Rain Event of July 2017 in northern Kyushu, the heavy rainfall in Kanto and Tohoku, September 2015, and the heavy rainfall in August 2014 are from "White Paper on Fire Service" by Fire and Disaster Management Agency

#### Timely Client Support through Company-Wide Support Structure Led by Divisions

Since around July 6 when Japan Meteorological Agency issued an emergency warning for heavy rains to 11 prefectures, national institutes and local governments starting requesting OYO Corporation to inspect road slopes, conduct emergency examination of landslides, etc. At the time, OYO Corporation's Kansai Branch set up a local emergency management headquarters, and in addition to disseminating information to all our companies, it established a company-wide support structure led by divisions in order to meet the requests coming in from various places in succession. Through the daily reporting of this disaster by the media, we learned about the emergence of enormous disaster waste that hampered relief efforts, the difficulty that local governments face in issuing evacuation warnings at the right time, as well as problems created by delayed decision-making on evacuation by residents. OYO Corporation develops and offers services that act as solutions to these types of problems, some of which are listed below.

Overview of support operations conducted by OYO Corporation during this disaster

Disaster prevention	Disaster prevention diagnosis of debris and landslide sites, emergency site inspection, preliminary design of countermeasure construction     Surveillance sensor installation to areas in danger of collapsing, ground investigation
Environment	Administrative support related to the acceptance, calculation, and disposal of disaster waste
Infrastructure maintenance	Emergency inspection of road slopes, fillings, and tunnels, and the design of countermeasure construction     Investigation of residential and factory sites change, countermeasure considerations     Revetment damage investigation of rivers     Inundation and flooding investigations

Issue 1

Enormous disaster waste

Solution 1 Disaster waste processing plans and early processing support services

#### Accelerated recovery with speedy processing and recycling of disaster waste

Upon receiving a request from the Ministry of the Environment, OYO Corporation immediately visited the disaster sites. In addition to speedily calculating the quantity of disaster waste using drones, we also supported the early processing of disaster waste for local governments of Hiroshima Prefecture, etc.





Evacuation notice by local governments

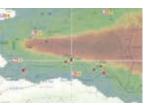


Solution 2 Flood and landslide timeline system

#### Predicting hazards to issue appropriate evacuation notices and guide independent evacuations of citizens

In addition to coordinating with weather and hazard information and various sensors, we gather disaster information from various locations in real time. By sharing this information with both local governments and residents, we support the issuance of evacuation notices at the appropriate timing and guidance for the independent evacuations of residents. This is an ICT solution aimed at achieving "Zero Delayed Evacuation".





Issue 3

Enormous damage caused by debris avalanche



Deterioration and soundness investigation of erosion control facilities and simulation of landslides and driftwood

#### Protecting local residents' lives and assets from debris avalanches

We investigate existing erosion control facilities for damage and degradation, and propose repair measures for prolongation. In addition, in light of the recent increase in heavy rainfall disasters and their intensification, we calculate the amount of driftwood and earth that cause debris avalanches, strengthen our erosion control facilities, and evaluate the adequateness of placement.





Feature Story 2: Technology Strategy for Creating Markets in the Future

Large-scale sinkhole in front of Hakata Station (Photo: Aflo)



#### Minimizing the risks of underground work through the visualization of ground information

Accidents caused by problems in the ground often occurred such as Yokohama's apartment tilting problem and large-scale sinkhole in front of Hakata Station.

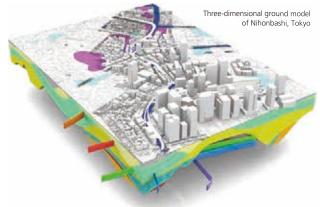
Why do these types of accidents occur? Simply put, it is because our eyes cannot see the situation underground. Therefore, when we conduct underground work, we usually estimate the geological structure based on information of the ground obtained through boring investigations, as an effort to reduce the risk of construction accidents. However, with only an "estimate" based

on limited information, hidden risks such as a sudden change of geological structure are often overlooked.

OYO Corporation's three-dimensional ground modeling technology and in-development three-dimensional geophysical exploration technology visualize structures and geophysical qualities within the ground in three dimensions as opposed to expressing information in the form of dots and lines. For this reason, even if one does not rely on expert estimates, anyone will be able to clearly tell what problems exist underground.

#### Anticipating use for redevelopment projects in large cities

Various structures such as sewage systems, underground conduits, and subways exist underground. Failing to accurately understand their positioning upon conducting excavation work could lead to large accidents. With the increase of foreign tourists given the Tokyo Olympic and Paralympic Games in 2020, many areas are planning to improve urban convenience with infrastructure and redevelopment projects that include large-scale underground work. As a ground-breaking solution that enables these projects to be conducted safely, the three-dimensional ground information technology is highly anticipated by the market.



#### State of R&D 1

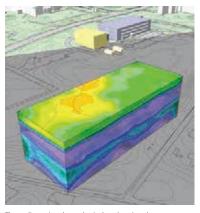
### Development of three-dimensional geophysical exploration technology

In the report, "Establishing Safety Technology regarding the Usage of Underground Spaces" by Japan's Social Infrastructure Improvement Council and Transport Policy Council, suggestions pointing to the need for the advancement of exploration techniques, the establishment of three-dimensional models, and the creation of three-dimensional data for underground facilities, are presented in order to secure the safety of underground construction work. Given these societal demands, OYO Corporation has started to develop three-dimensional geophysical exploration technology and three-dimensional visualization technology of underground facilities on the premise of its office in Tsukuba City, Ibaraki Prefecture.

Three-dimensional geophysical exploration technology visualizes the internal structure of the ground in three dimensions utilizing various physical phenomenon such as electric currents and vibrations. Just as X-rays, CT scans, and MRIs visualize the human body in three-dimensions in the medical field in order to obtain the necessary information for treatment, three-dimensional geophysical exploration will enable us to acquire highly accurate ground information through the visualization of the ground's internal structure in three dimensions.

Currently, we are linking the newest exploration system

developed in our various group companies with analytical software developed by OYO Corporation to conduct field experiments. At this point, we have almost completed the development of a technology that can visualize the ground's surface layers in three dimensions, and within 2019, we hope to complete a three-dimensional visualization technology that can see as far as 30 meters below ground.



Three-dimensional geophysical exploration data from the Tsukuba Research Center

#### State of R&D 2

### Three-dimensional mapping of underground facilities

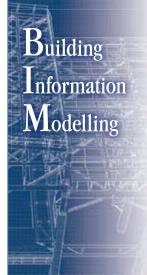
We are also constructing a dedicated test site on the premise of the Tsukuba office for the development of three-dimensional mapping of underground facilities. With completion scheduled for April 2019, we hope to commence operations from May. At the test site we have prepared a road that includes various types of underground facilities, and with the purpose of raising the accuracy of obtained information such as type, materials, and state of these facilities, we will test various exploration conditions and analysis methods to improve our technology.

In cooperation with various industry organizations, we intend for this to be an open facility that can be used widely by various corporations and organizations across multiple industries. We hope to contribute to the development of technologies for Japan's i-Construction and National Resilience initiative.

\* An initiative and policy aimed at improving the productivity of all construction production systems by implementing ICT in all processes including measurement, design, construction, inspection, maintenance, and management, in order to eradicate declining productivity at construction sites due to population aging and the decline of skilled labor.



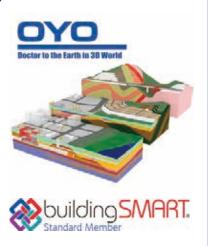
the premise of the Tsukuba Office)



#### Joined an international standardization organization for the BIM market

Building Information Modelling, or BIM, is a type of innovation that aims to optimize the entire construction production system through cooperation and development that shares three-dimensional models at each stage of the engineering and construction process, such as survey, design, construction, maintenance, and management. As its utilization spreads around the world, global initiatives to create international standards and industry foundation classes for BIM are being developed at a rapid pace.

In 2018, OYO Corporation joined an international BIM standardization organization called Building SMART International. Eyeing the market expansion of BIM on a global scale, we aim for the international standardization of ground three-dimensional modelling and the acquisition of markets.



#### Overview of ESG-related Endeavors

## **Pursuing Sustainable Corporate Growth** OYO Group's management philosophy is "Engineer a Harmony between Human Society and the Natural Environment, Sustain Safety and Security of Society from an Engineering Approach and Achieve Social Contributions through Development of the Company's Business." Addressing issues related to "Environment," "Social" and "Governance" (ESG) awareness is directly linked to the business activities of the OYO Group. We will proactively conduct business management with ESG awareness, in an effort to help achieve continuous development of society and growth of the OYO Group.

#### ■ To become a Corporate Group Trusted by Stakeholders

For a company to contribute to society, earn the trust of society and provide a workplace where employees can work with peace of mind, constant change is essential. OYO Corporation established the Guiding Principles for Corporate Social Responsibility in 2014, using ISO 26000 as a reference.

#### ■ Guiding Principles for Corporate Social Responsibility

#### To Customers

#### 1 Provision of safe and secure products and services

We shall constantly provide safe and secure products and services so as to resolve customers' problems.

#### 2 Fair competition and proper contracting

We shall engage ourselves in fair and free competition and provide appropriate information to customers before making contracts.

#### 3 Appropriate management of customers' information

We shall appropriately manage our customers' information whether it is business-related or otherwise.

# Employees

#### 1 Employment without discrimination

We shall preclude any discrimination based on race, skin color, gender, religion, political view, nationality, geographical and social origin, and provide equal opportunity and fair treatment in employment.

#### 2 Respect fundamental human rights and assist employees' growth

We shall respect the fundamental human rights of all our employees. We shall also assist our employees' efforts to improve their technical know-how and abilities, which we believe is necessary for our corporate growth.

#### 3 Create a non-hostile working environment

We shall evaluate employees fairly, ensure a safe and healthy working environment so that each employee is positively motivated. We believe this will also promote a creative and appropriately challenging work environment.

#### 4 Promote the building and sharing of the values of mutual confidence and responsibility

We shall communicate with employees faithfully and positively to build and share values of mutual confidence and responsibility.

#### 5 Code of ethics

We, from the top to bottom of our organization, shall act on a code of ethics insured by training and education and other effective organizational measures.

#### To Business Partners

#### 1 Build mutual confidence

We shall respect our business partners, endeavor to build win-win relationships based on mutual confidence, and together fulfill our social responsibilities

#### 2 Maintain fair business practices

We shall choose our business partners on the basis of fair and comprehensive consideration, and maintain free and fair business practices with them.

#### To Shareholders

#### Enhance corporate value

We shall aim to achieve stable and sure corporate growth by contributing to realize a sustainable society. We shall also aim to enhance our corporate value and provide returns to our shareholders.

#### 2 Appropriate information disclosure

We shall disclose our fiscal and other business information in a timely and appropriate manner to our shareholders and other investors.

#### To Local Communities and Global Society

#### 1 Contribute to the conservation of the natural environment

We shall contribute to the conservation of the natural environment by reducing the environmental burden from our own business operations and by providing products and services of unique and superior value to customers.

#### 2 Contribute to the prevention and mitigation of natural disaster damages

We shall contribute to the prevention and mitigation of natural disaster damages by providing products and services of unique and superior value to customers.

#### 3 Contribute to local communities

We shall build and maintain good relationships with local communities and support their efforts to achieve the safe and secure environment. We shall also promote employees' participation in social action programs.

#### 4 Stance to Anti-Social Forces

We shall face in resolute manners anti-social forces which threaten social order and safety and shall not conduct any business with them.

#### 5 Conduct business activities recognizing social and cultural differences

We shall respect the history, cultures, and customs of the countries and regions in which we operate, and preclude discriminatory actions and comply with global standards, thereby, sincerely contributing to the development of such countries and regions.

#### 6 Maintain equitable relationship with government agencies and other customers (Anti-Bribery Anti-Corruption)

We shall not engage in bribery and corrupt practices with government agencies and other customers in the countries and regions where we operate. We shall neither accept nor offer any bribes whether directly or indirectly. We shall provide products and services in a fair business manner, and maintain an equitable relationship with government agencies and other customers.

Business Management in Pursuit of Sustainable Development Goals to Improve Corporate Value

# Becoming a company whose value is easily understood by society through business management that finds its origins in social issues



Business segment and Relevance with SDGs (Corresponding goals)



# Infrastructure Maintenance, Management, and Renovation

Establishment, maintenance and management, replacement and other activities for social infrastructure



### **Natural Disaster Prevention** and Mitigation

Disasters by earthquake, volcano, storm, flood, soil, fire and other causes



#### **Environment**

Purification of soil contamination, conservation of living environment, waste processing, conservation of natural environment, etc.



#### **Natural** Resources and Energy

Mining exploration, oil development, renewable energy development, and establishment and replacement of power generation facilities

#### Social Contribution **Activities**

Support to natural disaster prevention for developing countries, support to comprehensive learning in local communities, development of workplace environment friendly to women, thorough implementation of compliance, support to disaster prevention by local communities, etc.







































# SUSTAINABLE DEVELOPMENT G 17 GOALS TO TRANSFORM OUR WORLD



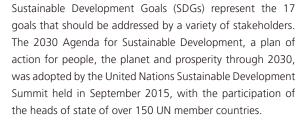


























# Corporate Governance

Pursuant to the Companies Act in Japan, OYO Corporation has established a board of corporate auditors and adopted an executive officer system. The Company works to enhance management transparency, clarify responsibilities and quicken decision-making by separating and securing decision-making and supervisory functions on management by the Board of Directors, monitoring of management by the Board of Corporate Auditors, and execution of duties by executive officers, respectively.

#### Basic concept

OYO Corporation endeavors to enhance its corporate governance, positioning it as an important theme of management in order to achieve continuous growth and enhance corporate value over the medium to long term as it aims to become a "company that is trusted by society and contributes to constructing a sustainable society with security and safety" while maintaining an appropriate relationship with stakeholders including shareholders, investors, customers, employees, business partners and local communities.

	Fiscal 2017 (61st fiscal year)	Fiscal 2018 (62nd fiscal year)	Fiscal 2019 (63rd fiscal year)	
Directors (term of office: one year)	7 (including 2 outside directors)	8 (including 3 outside directors)	8 (including 3 outside directors)	
Corporate auditors (term of office: 4 years)	4 (including 2 outside corporate auditors)	4 (including 2 outside corporate auditors)	3 (including 2 outside corporate auditors)	

<sup>\*</sup> All of the outside officers were designated as independent officers.

#### Activities and initiatives

#### Board of Directors

In order to maintain and enhance management efficiency, OYO Corporation has established the Board of Directors comprised of five directors who are well-versed in OYO Corporation's businesses, three outside directors who are independent and pose no danger of generating conflicts of interest with general shareholders, in addition to one full-time corporate auditor and two outside corporate auditors who are independent officers. Ordinary meetings of the Board of Directors are held at least once every three months, while extraordinary meetings of the Board of Directors are held when necessary, and in addition to supervising the execution of duties by directors, the board makes decisions on important matters concerning OYO Corporation's management policies, etc. In fiscal 2018, a total of 13 meetings were held. Public meetings with outside directors are held as separate voluntary meetings, and we endeavor to maximize the abundant experience of outside directors for OYO Corporation's management. Receiving supervision and advice about management from an external objective perspective is an important opportunity for governance, so we added one independent outside director starting in fiscal 2018. As of March 27, 2019, there are eight directors (three of which are independent outside directors).

#### ■ Board of Executive Officers

OYO Corporation has implemented a system of the Board of Executive Officers with the aim to specialize functions, accelerate decision-making, and enhance supervision and supervisory functions. The Board of Executive Officers is comprised of five directors (all of whom serve concurrently as executive officers) and seventeen executive officers (as of April 1, 2019). With regard to execution of operations, meetings of the Board of Executive Officers are held at least once a month as a rule, separate from meetings of the Board of Directors, to discuss overall management issues and to deliberate the execution of material operations following the policies decided by the Board of Directors.

#### Board of Corporate Auditors

The Board of Corporate Auditors is comprised of three corporate auditors, two of whom are independent outside corporate auditors (as of March 27, 2019). The Board of Corporate Auditors holds regular meetings once a month as a rule. Corporate auditors also attend all meetings of the Board of Directors as a rule, and its system is such that the corporate auditors monitor the management and the execution of duties by directors for adequacy and appropriateness.

#### Separate voluntary meetings

As a separate initiative, we have created space for voluntary meetings such as "Management Strategy Meetings," where management issues are freely discussed, and "Division Briefing Sessions," which are meant to help deepen OYO Corporation's business with outside directors. We are endeavoring to establish a corporate governance structure that supports the decision-making functions and the supervisory functions of the Board of Directors.

#### Internal control system

#### Status of Preparation of Internal Control System

OYO Corporation passed a resolution for a basic policy on internal control at a meeting of the Board of Directors held on May 12, 2006, and is working to reinforce the risk management structure, ensure thorough compliance-based management, and reinforce the OYO Group business management structure based on said policy. In addition, at the May 8, 2015 meeting of the Board of Directors, OYO Corporation passed a resolution for revision of the basic policy on internal control regarding reinforcement of auditing by corporate auditors and operation of the internal control system of the entire corporate group.

#### Status of Preparation of Risk Management System

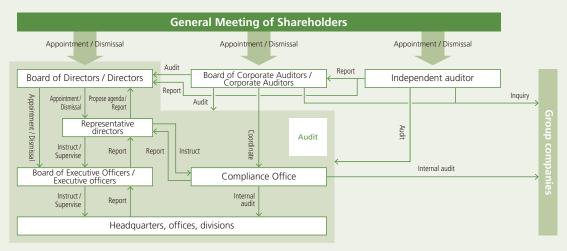
OYO Corporation conducts risk management in each division by extracting and analyzing risks, as well as studying and periodically reviewing countermeasures, and its management status is deliberated at regular management meetings. In addition, the OYO Corporate Behavior Guidelines have been established as a code of conduct to be observed by all employees and officers of the OYO Group. Based on these guidelines, a Compliance Manual has been prepared as a specific code of conduct to ensure fully informed compliance-based management. (see P44-45 for details)

#### Status of Internal Audits and Auditing by Corporate Auditors

The internal audit team led by the Compliance Office conducts audits in accordance with an internal audit program to verify/assess that activities related to business operations and accounting operations are conducted legally and rationally and to improve the situation. The internal audit team comprises multiple members, primarily composed of the Compliance Office, with relevant departments added as needed.

The internal audit team and corporate auditors regularly exchange information and opinions on audit plans and audit results, and mutually coordinate as the internal audit team is present for some of the audit reports undertaken by accountants for the corporate auditors. Furthermore, the full-time corporate auditors conduct audits of operations of each department of the head office, divisions and regional offices as needed.

#### Corporate governance structure





# Corporate Governance

#### Officer compensation

The Company's compensation system for officers has been designed for the purpose of heightening their willingness to contribute to better performance over a medium to long term as well as the short term in order to allow continuous enhancement of the OYO Group's corporate value. Compensation for directors excluding outside directors comprises fixed compensation as consideration for their execution of duties, as well as officer bonuses linked to the consolidated performance of the relevant fiscal year. The fixed compensation and officer bonuses are determined based on the compensation standards for officers which are resolved by the Board of Directors. Remuneration of outside directors is fixed compensation not linked to performance and determined through proposal by the representative director, taking into account social standards and other factors, with an aim to secure diversified and excellent human resources.

To determine the compensation of top management and directors, the Board of Directors has set the regulations for officer compensation and established the Nomination and Compensation Advisory Committee, a discretionary advisory body for the Board of Directors, in order to enhance appropriateness and transparency in determining compensation. Starting in fiscal 2018 (the 62nd fiscal year), the Board of Directors has resolved director compensation in reference to the response from the Nomination and Compensation Advisory Committee regarding the compensation proposal made by the Board of Directors to the committee based on the regulations for officer compensation, etc.

Moreover, based on the resolution by the General Meeting of Shareholders, the Company has introduced the compensation system for its directors (excluding outside directors) using the stock granting trust scheme, in which the compensation varies in accordance with the achievement level of the medium-term business plan. The system is aimed at enhancing their willingness to contribute to achieving the medium-term business plan and enhancing the Company's corporate value over a medium to long term by clarifying the link between the directors' compensation and the OYO Group's consolidated performance and stock value and having directors share with shareholders the risk of stock price fluctuation. Furthermore, as a rule, the Company's directors will receive stock under the scheme upon resigning the office of director.

#### Independence of outside directors

At the 62nd Annual General Meeting of Shareholders on March 27, 2019, OYO Corporation selected five outside officers comprised of three outside directors and two outside corporate auditors. The standards of independence used when selecting outside directors are declared in our basic policy on corporate governance available at our Japanese website (https://www.oyo.co.jp/). Moreover, the five outside directors of OYO Corporation have been notified to the Tokyo Stock Exchange as independent officers defined by the Tokyo Stock Exchange.

OYO Corporation believes that the joint participation in management between directors who are well-versed in OYO Corporation's business and three independent outside directors who have held important posts in government and other companies is effective at increasing the adequacy and efficiency of management without causing conflicts of interest with general shareholders. Moreover, in addition to these outside directors, OYO Corporation has further enhanced its auditing structure by having two outside corporate auditors (independent officers) who also have experience and knowledge in financial institutions or as attorneys audit its management in terms of compliance with laws and ordinances from an objective and neutral point of view.

#### Reason for selection of outside directors

Name	Reason for selection				
Kaoru Nakamura	Mr. Kaoru Nakamura has held leadership positions mainly at the Ministry of Economy, Trade and Industry and has a proven track record as a corporate auditor and president of other companies on top of being chairman of a foundation. In addition, he also has knowledge in OYO Corporation's fields such as resources and energy. OYO Corporation deems his past experience in public administration and his external perspective from business management to be effective in further strengthening OYO Corporation's management structure and contributing to the enhancement of the Company's corporate governance. (Period served as Outside Director of OYO Corporation: four years as of March 27, 2019)  Significant concurrent positions  Chairman (Representative Director) of New Energy Foundation  Outside Auditor of UMC ELECTRONICS CO., LTD.				
Michihiko Ota	Mr. Michihiko Ota has held leadership positions at Marubeni Corporation and has a proven track record as an outside director and an outside corporate auditor of other companies. OYO Corporation deems his external perspective as well as his knowledge of the domestic and overseas business of a trading company and his experience in business management to be effective in further strengthening OYO Corporation's management structure and contributing to the enhancement of OYO Corporation's corporate governance. (Period served as Outside Director of OYO Corporation: one year as of March 27, 2019)  Significant concurrent positions  Outside Director of XEBIO HOLDINGS CO., LTD.  Outside Corporate Auditor of SAISON AUTOMOBILE AND FIRE INSURANCE COMPANY LTD				
Shoji Osaki	Mr. Shoji Osaki has held leadership positions at SAPPORO BREWERIES LIMITED and has a proven track record as a director and a corporate auditor of group companies of SAPPORO HOLDINGS LIMITED. OYO Corporation deems his external perspective based on his past experience to be effective in further strengthening OYO Corporation's management structure and contributing to the enhancement of OYO Corporation's corporate governance. (Period served as Outside Director of OYO Corporation: newly appointed as of March 27, 2019)  Significant concurrent positions  He holds no significant concurrent positions				

# Reason for selection of outside corporate auditors

Name	Reason for selection			
Jun Naito	Mr. Jun Naito has legal expertise and a wealth of experience as an attorney as well as experience as a corporate auditor of other companies. OYO Corporation deems that he will accurately conduct audits with his experience in legal practice and knowledge developed through audit of other companies, which will contribute to the enhancement of OYO Corporation's corporate governance. (Period served as Outside Corporate Auditor of OYO Corporation: four years as of March 27, 2019)			
	Significant concurrent positions  Outside Corporate Auditor of INNOTECH CORPORATION  Outside Corporate Auditor of YAMATANE CORPORATION  Attorney at Nagashima, Ohno & Tsunematsu			
Tadashi Sakai	Mr. Tadashi Sakai has management experience as well as operational management experience in planning and administration departments, etc., at banks and securities companies. He also has a proven track record as an outside corporate auditor of other companies. OYO Corporation deems that he will accurately conduct audits with his extensive experience at financial institutions and knowledge developed through audit of other companies, which will contribute to the enhancement of OYO Corporation's corporate governance. (Period served as Outside Corporate Auditor of OYO Corporation: one year as of march 27, 2019)			
	Significant concurrent positions Statutory Corporate Auditor of TANAKA HOLDINGS Co., Ltd.  Outside Corporate Auditor of DC CO., LTD			

# Directors (as of March 27, 2019)



#### President

# Masaru Narita

#### Born in November 1953

April 1979 Joined the Company

March 2004 Director

April 2005 Senior Managing Executive Officer
September 2005 Head of New Business Planning Office

March 2007 Deputy President

March 2009 President (Current position)



Director & Senior Executive Officer

#### Yuichi Hirashima

Born in November 1959

April 1983 Joined Fuji Bank, Limited (present Mizuho Bank, Ltd.)
April 2009 Head of Americas Credit Division, Mizuho Corporate Bank, Ltd.
(present Mizuho Bank, Ltd.)

(present Mizuho Bank, Ltd.)
April 2011 Head of Internal Audit Division, Mizuho Corporate Bank, Ltd.

August 2013 Joined the Company
August 2014 Executive Officer
April 2015 Senior Executive Officer

April 2015 Acting Head of Administration Headquarters

March 2016 Director of the Company (Current position)

April 2016 Head of Administration Headquarters (Current position)

April 2017 Senior Executive Officer (Current position)



Director & Senior Executive Officer

# Jun Shigenobu

Born in August 1958

April 1983 Joined the Company
April 2005 Executive Officer
April 2005 Head of Shikoku Regional Office

April 2010 Head of Logistics Headquarters (present Head of Production

Management Headquarters (Current position))

April 2012 Deputy Head of Eastern Japan Business Headquarters

April 2014 Senior Executive Officer (Current position)

March 2016 Director (Current position)



Director & Senior Executive Officer **Kenji Sato** 

Born in August 1958

April 1983 Joined the Company
April 2007 Executive Officer
April 2007 Head of Sapporo Regional Office
April 2010 Deputy Head of Engineering Headquarters
April 2014 Head of Tokyo Regional Office
April 2015 Senior Executive Officer (Current position)

April 2015 Senior Executive Officer (Current position)

April 2015 Head of Business Promotion Headquarters (Current position)

March 2016 November 2016 Outside Director of SANYO TECHNO MARINE INC.

(Current position)

November 2016 Outside Director of SANYO TECHNO MARINE INC. (Current position)



Director & Senior Executive Officer **Hirofumi Amano** 

Born in January 1966

April 1990 Joined Tamano Consultants Co., Ltd.

September 2003 Joined KCS Co., Ltd.

June 2004 Head of Chubu Regional Office, KCS Co., Ltd.

August 2005 Director of KCS Co., Ltd.
October 2005 President of KCS Co., Ltd.

March 2017 Director of the Company (Current position)

April 2017 Senior Executive Officer (Current position)

April 2017 Head of IT Innovation Planning Office (Current position)

Director of OYO Resources Management Corporation (Head of IT Innovation Planning Headquarters/current position)



Director\*1 Kaoru Nakamura



April 1972	Joined the Ministry of International Trade and Industry (present Ministry of
	Economy, Trade and Industry)
June 1990	Head of Information Services Industry Division, Machinery and Information
	Industry Bureau, the Ministry of International Trade and Industry
July 1999	Cabinet Councilor, Cabinet Office for Internal Affair of the Cabinet Secretariat
July 2002	Director General of Industrial Science and Technology Policy and Environment
	Bureau, the Ministry of Economy, Trade and Industry
October 2005	Executive Advisor and Statutory Corporate Auditor, IBM Japan, Ltd.
July 2010	President of Japan Electronic Computer Co., Ltd. (present JECC Corporation)
March 2015	Outside Director of the Company (Current position)
June 2016	Chairman (Representative Director) of New Energy Foundation (Current position)
June 2017	Outside Auditor of UMC ELECTRONICS CO., LTD. (Current position)



Director\*1 Shoji Osaki

Born in August 1955

April 1979	Joined SAPPORO BREWERIES LIMITED
March 2005	Director of Wine and Liquor Division and SAPPORO BREWERIES LIMITED; Director of SAPPORO WINES LIMITED
March 2006	President and Representative Director of YEBISU WINEMART CO., LTD. (concurrent)
October 2007	Director of Chu-Shikoku District Headquarters, SAPPORO BREWERIES LIMITED
March 2010	Executive Officer and Director of Tokai Hokuriku District Headquarters, SAPPORO BREWERIES LIMITED
March 2012	Statutory Corporate Auditor of SAPPORO BEVERAGE CO., LTD. and Corporate Auditor of SAPPORO BREW- ERIES LIMITED and Corporate Auditor of SAPPORO GROUP MANAGEMENT CO., LTD. and Corporate Auditor of SAPPORO INTERNATIONAL INC.
March 2013	Statutory Corporate Auditor of POKKA SAPPORO FOOD & BEVERAGE LTD
March 2015	Statutory Corporate Auditor of SAPPORO HOLDINGS LIMITED*3
March 2019	Outside Corporate Director of the Company (Current position)



Corporate Auditor\*2 **Jun Naito** 

Born in January 1956

April 1982	Registered as Attorney
April 1982	Joined Nagashima & Ohno
January 2000	Partner of Nagashima Ohno & Tsunematsu
June 2007	Outside Corporate Auditor of INNOTECH CORPORATION (Current position)
January 2013	Attorney at Nagashima, Ohno & Tsunematsu (Current position)
March 2015	Outside Corporate Auditor of the Company (Current position)
June 2016	Outside Corporate Auditor of YAMATANE CORPORATION (Current position



Director\*1 Michihiko Ota

Born in December 1952

April 1975	Joined Marubeni Corporation
April 2008	Managing Executive Officer and Head of Lifestyle Division, Marubeni Corporation
June 2009	Managing Executive Officer of Marubeni Corporation
April 2010	Senior Managing Executive Officer of Marubeni Corporation
April 2012	Senior Executive Vice President of Marubeni Corporation
April 2013	Senior Executive Vice President, Regional CEO for ASEAN, Regional CEO for East Asia,
	Regional CEO for Southwest Asia, Marubeni Corporation
	Managing Director of Marubeni ASEAN Pte. Ltd
June 2014	Senior Executive Vice President of Marubeni Corporation
April 2015	Vice Chairman of Marubeni Corporation
June 2016	Outside Director of XEBIO HOLDINGS CO., LTD. (Current position)
June 2017	Outside Corporate Auditor of SAISON AUTOMOBILE&FIRE INSURANCE CO., LTD (Current position)
Mar. 2018	Outside Director of the Company (Current position)



Statutory Corporate Auditor Shinichi Kagawa

Born in June 1	957
April 1980	Joined the Company
April 1998	Deputy Head of Finance Department, Administration Headquarters
September 2002	Transferred to NS Environment Corporation, Head of Administration Headquarters
April 2004	Corporate Auditor of NS Environmental Science Consultant Corporation
February 2007	Head of Administration Department, Management Headquarters and Head of Administration
	Center of the Company
April 2011	Head of Accounting Department and Administration Department, Administration Headquarters
February 2013	Corporate Auditor of Tianjin Smart Sensor Technology Co., Ltd.
March 2015	Director of KCS Co., Ltd.
April 2016	Executive Officer of the Company
April 2016	Head of Compliance Office
March 2018	Statutory Corporate Auditor (Current position)



Corporate Auditor\*<sup>2</sup> Tadashi Sakai

Born in August 1956

April 1979	Joined Fuji Bank, Limited (present Mizuho Bank, Ltd.)
April 2002	Senior Manager of International Department, Corporate Planning Group, Mizuho Securities Co., Ltd.
April 2004	Senior Manager of International Department, Corporate Planning Group, Mizuho Securities
	Co., Ltd. and President of Mizuho Bank (Switzerland) Ltd
March 2006	Executive Officer of Mizuho Securities Co., Ltd. and President of Mizuho Bank (Switzerland) Ltd
May 2008	Managing Director of Mizuho Private Wealth Management Co., Ltd.
April 2013	Non-executive Director of Mizuho Private Wealth Management Co., Ltd.
June 2013	Audit & Supervisory Board Member of TANAKA HOLDINGS Co., Ltd. (Current position)
June 2015	Outside Corporate Auditor of DC Co., Ltd. (Current position)
March 2018	Outside Corporate Auditor of the Company (Current position)

<sup>\*1</sup> Outside Director as stipulated in Article 2-15 of the Companies Act \*2 Outside Company Auditor as stipulated in Article 2-16 of the Companies Act \*3 Shoji Osaki retired from the position of standing corporate auditor of Sapporo Holdings Limited as of March 28, 2019.

# Risk Management

When disasters occur, the Company conducts initial investigations for recovery of and support to the damaged areas, based on the requests from administrative bodies, etc. To securely perform this mission, the Company has prepared measures and organizations to analyze various risks and avoid possible problems in advance and established its own risk management system for prompt recovery in the case such disasters should occur.

#### Reinforcement of the System

In preparation for occurrence of large-scale disasters, the Company is working to reinforce its system to provide emergency support to its bases in damaged areas, ability to collect information and back-up functions when risks emerge. Pursuant to its business continuity plan (BCP), the Company will set up a disaster countermeasure headquarters and take action under the guidance of persons in charge of risk management to understand the situation of the damaged areas and provide support to its bases in affected areas. An earthquake emergency alarm system has been installed in its major business offices. As for such risks as legal violations, the Company has reinforced its administration system by thoroughly conducting educational training on compliance throughout the entire OYO Group, led by the Compliance Office, and continuously monitoring the situation.

#### Business continuity plan (BCP)

When large-scale natural disasters occur, the OYO Group will promptly establish a system to secure continuation of its business and conduct support and recovery activities for the damaged areas, recognizing this as its social mission. Depending on the disaster scale, the OYO Group will set up local a disaster countermeasure headquarters and/or a disaster countermeasure headquarters at the head office to address the situation. Outside of times of disaster, meanwhile, the OYO Group conducts internal training based on its BCP.



- Place the utmost priority on securing safety of the employees and their families as well as related persons of cooperating companies, etc.
- Promptly recover its business operation system and make company-wide efforts to work for the safety and recovery of damaged areas in response to the requests from central and local governments.
- Prepare an emergency business continuity manual and conduct training for putting it into practice, while continuously improving its content.

#### ■ Certified as an Organization Contributing to National Resilience (Resilience certification)

We have obtained "Business Continuity and Social Contribution" certification of organizations contributing to national resilience (Resilience Certification) based on the "Guideline for the Certification of Organizations Contributing to National Resilience" published by National Resilience Promotion Office of the Cabinet Secretariat.

Aimed at promoting wide-ranging resilience across society by promoting proactive endeavors for business continuity (BC) at companies, schools, hospitals and other various organizations, the Resilience Certification certifies operators proactively working on BC as an "organization contributing to national resilience." While OYO Corporation was granted Resilience Certification in December 2016, on this occasion,



our business continuity was reevaluated, and we were also certified as "adept" upon being newly examined on social contribution (a system of evaluating and certifying societal contribution activates after large-scale natural disasters, etc.). Ever since the 1964 Niigata Earthquake, we have dispatched our own disaster research teams for major natural disasters both within Japan and overseas, and have shared the knowledge we have obtained online, etc. Moreover, we have also published annual "Recommendations for Natural Disaster Prevention and Mitigation," and conducted public awareness campaigns related to disaster prevention and mitigation. These efforts were evaluated as contribution to society.

#### Endeavors on information security

Information management is one of the most important managerial issues for the Company, which conducts information services as a business domain and often handles information with confidentiality due to the business nature of geological investigation services. The OYO Group has established its basic guidelines for information security and information security policy and works to reinforce management of information including establishment of the latest IT infrastructure. In addition, e-learning and simulated training against targeted e-mail attacks are conducted repeatedly for directors and all employees, in an effort to heighten their awareness of information security.

# Compliance

Thoroughly implementing compliance is indispensable for a company to grow continuously and enhance its corporate value in the medium to long term. Accordingly, the OYO Group has established the OYO Corporation's Code of Conduct and delivered a manual to all group companies, requesting them to maintain ethical values and good sense appropriate for a group member. By doing so, the OYO Group works to secure thorough implementation of compliance.

#### Reinforcement of the Compliance System

At OYO Corporation, the Compliance Office, which covers compliance and directly reports to the president, works to secure thorough implementation of compliance in coordination with the Board of Corporate Auditors and the internal audit team. The Company established a compliance manual in 2006 and revised it in 2015 to make it applicable to all companies within the Group. The manual is delivered to all directors and employees and education is repeatedly conducted through e-learning, lectures and other measures. With these initiatives, the Company endeavors to have the importance of compliance thoroughly understood by every one of its members.

#### Endeavors on education of compliance

Since issuing its Anti-Monopoly Act Compliance Manual in 1994, the Company has revised the manual whenever relevant laws and regulations are amended to thoroughly conduct education and training on compliance.



#### Whistleblowing system

The OYO Group has adopted a whistleblowing system and established a whistleblowing contact (attorney) for outsiders in addition to an internal contact. Periodical reports are made to the Corporate Auditors as to the operational status of the system and the matters informed or consulted by whistleblowers.



Poster of the OYO Group Help Line

#### Reinforcement of education and training

Misconduct by companies has frequently occurred in recent years. Part of the cause is said to be a failure of corporate organizations and culture in responding to changes in the social environment that have become increasingly radical. The OYO Group established the Skills Development Office (currently Corporate Planning Headquarters, Skills Development Department) in 2018 as an organization directly reporting to the president, for the purpose of thorough abidance by new internal measures and rules that match the times and securely removing compliance-related risks, as well as of promoting work-style and mindset reforms in a way better suited for new business developments in accordance with the shift of the Company's business model.

## Work-Life Balance

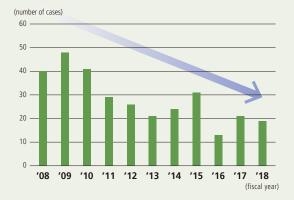
For a company to continuously exist and grow, it must prepare an environment in which its employees can work willingly and with peace of mind. The Company is endeavoring to improve its working environment, considering "work-style reforms" as integral to improving productivity, reforming operations and enhancing performance.

#### Safety and Health

Considerations to safety in corporate activities is a critical societal issue. Car accidents and industrial accidents can have a major impact on business management. The Company holds a health committee meeting every month at each operational office, aimed at improving the work environment, and utilizes "Safety Eye," an automobile safety management system developed by KCS Co. Ltd, an OYO Group company, to

monitor and instruct driving techniques of workers.

With such education on safety conducted repeatedly over time, the number of accidents occurring at or involving the OYO Group has steadily decreased in recent years.



(total of car accidents, damage to underground buried objects, industrial accidents and other accidents)

Comparison of the number of accidents

A scene of training for safety driving administrators

#### Promotion of work-style reform linked to the introduction of the Division System

With the implementation of the Division System, OYO Corporation is promoting its unique work-style reform.

Although the quality and efficiency of our services were different in each region under the Branch System, with the Division System, the same level of quality and efficiency of our products and services can be provided countrywide. With this, we anticipate shortened working hours and increased productivity. As for working conditions, by changing from the Branch System to the Division System, personnel transfers with relocations have been decreased, and the burden on employees and their families have been mitigated. With the introduction of ICT, streamlining tools, telecommuting system, and satellite offices, we hope to further improve working environments and productivity.

Improved productivity, shortened working hours

Quality assurance and efficient original services design provided nationwide with the Division System

Introduction of telecommuting system, setting up satellite offices, minimize personnel transfers with relocation

Changeover from a region-based model to business-based model and introduction of streamlining tools such as ICT

Improving work environments, employees' QOL

# Securing, Fostering and Optimally Allocating Human Resources

The Company fully recognizes that its continuous growth and enhancement of its corporate value over the medium to long term are achieved due to provision of resources and contributions by its employees and other stakeholders. Moreover, it understands that, in association with the globalization of the market and diversification of needs, securing human resources possessing a variety of abilities regardless of their nationality or gender is the key to the future growth and business expansion of the OYO Group. In this regard, the Company is working to establish a variety of systems to support flexible working and employee development, in an effort to further enhance employee satisfaction and reinforce corporate governance.

#### **Securing Human Resources**

OYO Corporation has also received national certification for its initiatives to improve work environments and to promote work-life balance. In addition to being certified as an "Eruboshi" company in the certification system of the Ministry of Health, Labour and Welfare under the Act on Promotion of Women's Participation and Advancement in the Workplace (Women's Active Participation Act in Japan), we have also acquired "Platinum Kurumin," rewarded in recognition of the company's efforts to support employees'

childrearing, based on the Act on Advancement of Measures

33% 67% 4% 96% 2018 2018 to Support Raising Next-Generation Children.

(OYO Corporation alone)

As a result of these types of initiatives, the ratio of women and foreigners hired as new graduates has continued to rise steadily. In 2018, our hiring records show that women were 33% and foreigners were 4% of the total.





#### Career Development

The Company has an education and training system for new entrants as well as for all employees and officers by career course. Moreover, it proactively works to foster human resources that should play a major role in growing the Company for the future, as it supports employees obtaining qualifications in accordance with their career paths, offers programs for employees to study abroad or study at universities in Japan to acquire doctoral degrees, and exchange personnel with external research institutions or other private sector companies, among other endeavors.



Ratio of women and foreigners hired as new graduates

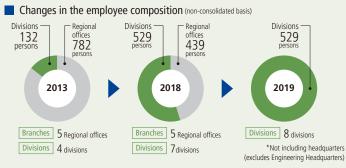
Foreigners

lananese

Delft University of Technology (TU Delft Geoscience department)

#### Optimal Allocation of Human Resources in Response to the Complete Transition to the Division System

Pursuant to its medium- to long-term business plan, OYO Corporation has gradually been promoting a shift from the business operation style based on such "regional bases" as regional offices and branches to the business operation style centering on "divisions" to implement operations for respective markets and business areas. In accordance with the shift, OYO Corporation has been switching the allocation of human resources to the divisions. As we have completed the transition to



the Division System as of January 2019, all our employees now belong to their various divisions. As such, organizational reform is steadily under way. In the future, by pressing for change of employee awareness through the activation of education and training, we will strengthen the organizational and human aspects of the Division System.

# Response to Environmental Issues

We are witnessing various environmental issues arising on a global scale, including expansion of energy consumption in accordance with an increase in world population, an increase in  $CO_2$  emissions, climate change, depletion of natural resources and destruction of ecosystems. The OYO Group works to contribute to realizing a sustainable society through the environmental load reduction services it offers to customers, as well as through environmentally-friendly business management.

Addressing Biodiversity (reduction of impact on ecosystems associated with economic and development activities / rehabilitation of natural environment)

#### Environmental DNA Analysis

With the proliferation of non-native species, the habitats of endemic species have rapidly shrunk and it is feared that this could impact environmental change in water and the fisheries industry. Non-native species often have strong fecundity, and eradicating them comes at a high cost. OYO Corporation collects the water of rivers and lakes, and extracts the DNA of organisms living in the water to rapidly investigate the number and species of organisms living in the area through environmental DNA analysis. Through this, we are researching new management methods for water environments together with the National Research and Development Agency Public Works Research Institute.



Collecting water at a lake

#### Researching greening technology for arid land

The majority of Uzbekistan's territory is flatland turned to desert, and in order to prevent further desertification and environmental pollution through irrigation, the regeneration of forests without irrigation is required. OYO Corporation conducts joint research on the ground with Uzbekistan's Tashkent State Agrarian University in order to establish new greening technology through the nursing block method.



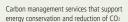
Nursing block:
A silviculture method that guides the taproots of seedlings deep below the ground, enabling efficient absorption of moisture while simultaneously helping the seedlings take strong root in the ground. It is anticipated as a method to prevent landslides and as a greening technology for deserts.



#### Environmental risk countermeasures that protect the security and safety of citizens

#### ■ Environmental management support service

Amidst the trend of global ESG investment, anticipation for environmental management that supports sustainable corporate growth is increasing. OYO Group provides various services that support the environmental management of businesses, such as the whole effluent toxicity (WET) method that utilizes biological response, and carbon management services given rising disclosure needs related to information on climate change.







The WET test is generally used in Western countries

#### ■ Countermeasures against Naturally Derived Heavy Metals

The land of Japan has a wide distribution of strata containing heavy metals (such as arsenic and lead). Because of this, naturally derived heavy metals flowing out at excavation works in large-scale construction projects, etc. may possibly impact the environment. The Company has long focused attention on this issue and provides one-stop solutions, including geological assessment and analysis and disposal of excavated soil.

### Social Contributions

We, as a corporate group specialized in geoscience, shall act to resolve the problems our customers face and thereby contribute to the sustainable development of our society following the Management Philosophy and Code of Conduct of OYO Corporation. Moreover, under appropriate decision-making as an organization, we shall abide by laws and regulations of the countries and regions where we conduct business activities, respect the spirit of the laws and regulations as well as human rights, cultures, customs and history and earnestly conduct business activities bearing ethical value and good sense and with consideration paid to the global environment. In doing so, we shall continue to be a company valued by society. We shall conduct business management that takes all stakeholders into consideration, through internal and external communications in a transparent and fair manner.

#### **Recent Major Activities**

#### Local communities and global society

#### **Supporting GeoHazards International (GHI)**

GeoHazards International (GHI) is a nonprofit organization that helps the world's most vulnerable communities prepare for earthquakes, tsunamis, landslides, heavy rain, and strong winds with the aim of freeing people from preventable death and suffering from natural disasters. OYO Corporation has supported the activities and mission of GHI since the establishment of the organization in 1991. GHI has conducted disaster



risk education, earthquake-resistance safety improvements of school buildings, and program support to raise disaster response measures of regional governments in over 20 countries.

# Working towards earthquake-resistant buildings in developing nations

Similar to Japan, Myanmar is a country that experiences many earthquakes, and has repeatedly suffered damage from large earthquakes in the past. With support from the Ministry of Land, Infrastructure, Transport and Tourism, OYO International Corporation, which is a domestic subsidiary, and Engineering & Risk Services Corporation, which is an affiliate company, along with



Panel discussion after the seminar

various experts from Japan, hosted a seminar for local engineers and administrative personnel that focused on seismic diagnosis of buildings and methods to improve the earthquake resistance of buildings.



During the talk

#### Annual issuance of a brochure

#### "Recommendations for Natural Disaster Prevention and Mitigation"

We issue "Recommendations for Natural Disaster Prevention and Mitigation" each year and publicize it for free on our website so that local communities can use it for their natural disaster prevention, mitigation activities, and disaster prevention training. The brochure explains the phenomena that foreshadow disasters and hidden dangers to the general public, and it has been used on many occasions for business continuity activities of corporations and natural disaster prevention training of regional communities, etc.



Distribution at regional natural disaster prevention training

#### Accepting visits by students to the Company

The Company accepts visits by junior high school and high school students at any time. Visits to companies are a part of career education programs for students where they visit companies through school excursions and other occasions to learn about business activities, the significance of working, the role of working and other matters. The Company has cooperated with this program since 2013. Through such occasions, the Company lets students learn the mechanism of natural disasters, pleasure of geology, and the importance of disaster prevention activities in an effort to enhance the social consciousness of disaster prevention.



[7 core subjects for ISO26000] Community involvement and development (Education and culture)

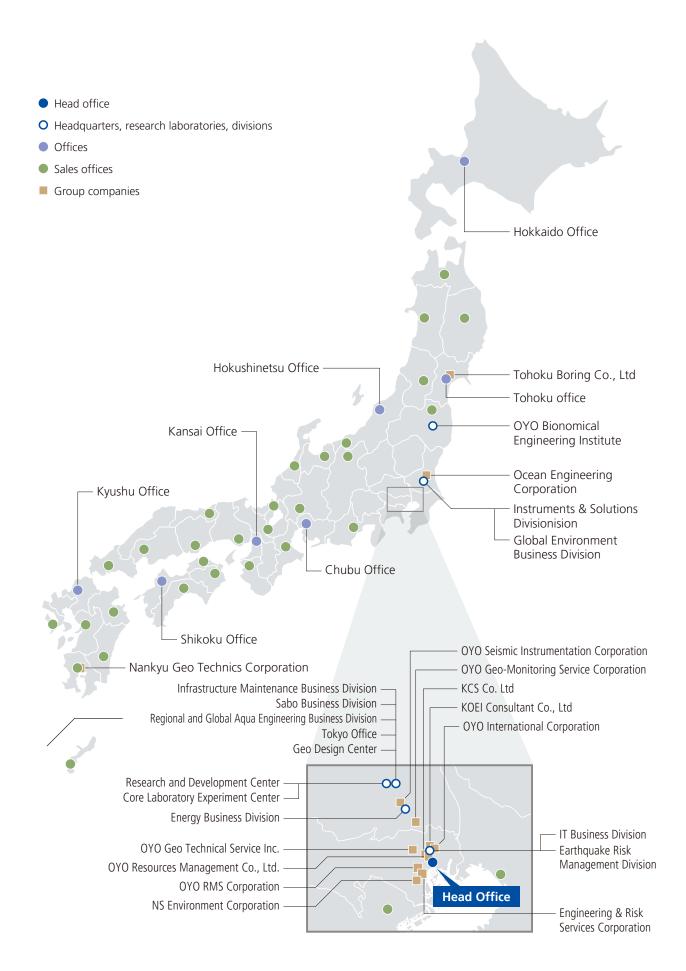
# Main financial data (consolidated)

		2008	2009	2010	
	Sales	46,652	35,260	35,878	
	Operating income (loss)	2,023	(507)	435	
	Net income attributable to owners of parent	1,014	(1,820)	385	
Fiscal year	Free cash flows	3,525	(2,057)	89	
	Capital investment	971	824	663	
	Depreciation	829	905	915	
	R&D expenditure	1,142	1,061	964	
	Total assets	65,456	60,283	57,591	
Fiscal year ands	Shareholders' equity	57,680	55,125	55,041	
Fiscal year ends	Interest-bearing debt	162	553	401	
	Headcount	2,065	2,056	2,027	
	Net income per share (yen)	36.14	(66.13)	13.94	
Per share data	Net assets per share (yen)	1,914.25	1,802.09	1,791.61	
	Cash dividends per share (yen) (interim dividends per share)	12.50 (6.25)	12.50 (6.25)	12.50 (6.25)	
	Operating margin (%)	4.3	(1.4)	1.2	
	Net income ratio (%)	2.2	(5.2)	1.1	
Main in diamen	ROE (%)	1.9	(3.6)	0.8	
Major indicators	ROA (%)	1.6	(3.0)	0.7	
	D/E ratio (times)	0.00	0.01	0.01	
	Dividends payout ratio (%)	34.6	_	89.7	

(Million yen)

							(Million yen)
2011	2012	2013	2014	2015	2016	2017	2018
36,718	40,704	47,033	48,634	49,230	51,323	45,957	45,232
1,396	2,465	3,679	4,211	2,188	1,579	855	1,481
1,076	5,756	2,595	3,550	2,361	1,381	747	804
(744)	4,676	1,354	2,414	6,093	(5,386)	3,487	1,475
500	666	750	2,000	1,607	1,079	1,224	1,124
875	892	931	1,018	1,322	1,306	1,236	1,107
945	1,070	1,295	1,498	1,910	2,022	1,654	1,675
59,060	65,485	75,003	80,367	83,617	85,509	84,731	80,704
55,779	61,220	63,190	66,088	67,668	68,286	68,196	66,881
318	830	1,440	2,385	2,866	2,984	2,772	2,657
1,969	1,962	1,989	2,012	2,028	2,039	2,042	2,058
39.76	212.55	95.85	131.12	87.20	51.02	27.62	30.73
1,796.47	2,008.03	2,219.12	2,410.80	2,529.27	2,530.79	2,531.39	2,522.95
12.50 (6.25)	15.00 (6.25)	21.00 (9.00)	26.00 (12.00)	28.00 (14.00)	28.00 (14.00)	38.00 (24.00)	28.00 (14.00)
3.8	6.1	7.8	8.7	4.4	3.1	1.9	3.3
2.9	14.1	5.5	7.3	4.8	2.7	1.6	1.8
2.2	11.2	4.5	5.7	3.5	2.0	1.1	1.2
1.8	9.2	3.7	4.6	2.9	1.6	0.9	1.0
0.01	0.01	0.02	0.04	0.04	0.04	0.04	0.04
31.4	7.1	21.9	19.8	32.1	54.9	137.6	91.1

# Business Bases (as of January 1, 2019)



# Group Companies (as of January 1, 2019)

# Infrastructure Maintenance, Management, and Renovation

Tohoku Boring Co., Ltd Sendai-shi, Miyagi, Japan/+81-22-288-0321

Ocean Engineering Corporation Tsukuba-shi, Ibaraki, Japan/+81-29-897-3151

KOEI Consultant Co., Ltd Bunkyo-ku, Tokyo, Japan/+81-3-5319-3377

Nankyu Geo Technics Corporation Kagoshima-shi, Kagoshima, Japan/+81-99-837-3330

OYO Geo Technical Service Inc. Toshima-ku, Tokyo, Japan/+81-3-5949-3410

KCS Co. Ltd Bunkyo-ku, Tokyo, Japan/+81-3-6240-0581

OYO Resources Management Co., Ltd. Bunkyo-ku, Tokyo, Japan/+81-3-6240-0411

OYO Geo-Monitoring Service Corporation Kawaguchi-shi, Saitama, Japan/+81-48-285-2133

Engineering & Risk Services Corporation Minato-ku, Tokyo, Japan/+81-3-5786-0090

Geophysical Survey Systems, Inc. Geophysical Survey Systems, Inc. New Hampshire, U.S.A.

OYO Corporation, Pacific OYO Corporation, Pacific Guam, U.S.A.

Fong Consult Pte, Ltd. Singapore

FC Inspection Pte. Ltd. Singapore

#### Natural Disaster Prevention and Mitigation

OYO International Corporation Bunkyo-ku, Tokyo, Japan/+81-3-5840-5155

OYO RMS Corporation Minato-ku, Tokyo, Japan/+81-3-6434-9801

OYO Seismic Instrumentation Corporation Saitama-shi, Saitama, Japan/+81-48-866-1228

Kinemetrics, Inc. Kinemetrics, Inc. California, U.S.A.

Tianjin Smart Sensor Technology Co., Ltd Tianjin, P.R. China

#### Environment

**NS Environment Corporation** Minato-ku, Tokyo, Japan/+81-3-3432-5451

#### Natural Resources and Energy

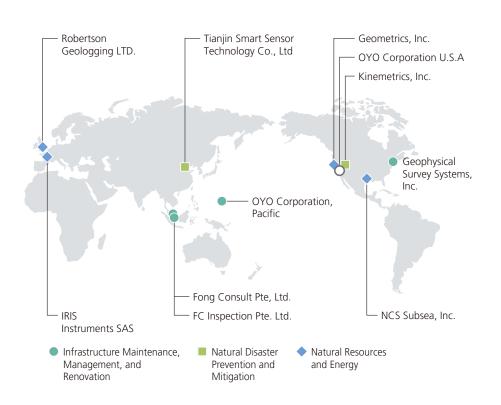
Geometrics, Inc. Geometrics, Inc. California, U.S.A.

Robertson Geologging LTD. Robertson Geologging LTD. U.K.

NCS SubSea, Inc. NCS SubSea, Inc. Texas, U.S.A.

IRIS Instruments SAS IRIS Instruments S.A. France

<sup>\*</sup>Other than the above, OYO Corporation U.S.A. (California, U.S.A.) serves as company to supervise the overseas group companies.



# Qualified Persons / Certifications Acquired (as of December 31, 2018)

#### Qualified persons by major qualification (group-wide)

Doctors (Engineering/ Science/ Arts & Sciences)	66
Professional engineer	699

#### ■ Major qualifications held by engineers and number of qualified persons (group-wide)

Professional engineer (civil engineering)	308
Professional engineer (environmental engineering)	4
Professional engineer (environment)	44
Professional engineer (applied science)	195
Professional engineer (comprehensive management)	129
Certified environmental measurer	100
Soil pollution investigation manager	56

Manager in charge of pollution control	124
Execution management engineer on civil engineering	208
APEC engineer	7
Qualified architect (1st class)	5
Information technology engineer	48

#### ■ Business Registration (OYO Corporation)

Consulting Engineer (No. 26-175, registered with the Ministry of Land, Infrastructure, Transport and Tourism)

Geological Surveyor (No. 29-12, registered with the Ministry of Land, Infrastructure, Transport and Tourism)

Measurement Certification Business (registered)

Certified Survey Firm (No. (14)-1334, registered with the Ministry of Land, Infrastructure, Transport and Tourism)

Special Construction Contractor

((TOKU-29) No. 2181, licensed by Ministry of Land, Infrastructure, Transport and Tourism)

1st-class Registered Architect Office (No. (2) 10113, registered with the government office of Saitama Prefecture)

Designated Investigation Firm pursuant to the Soil Contamination Countermeasures Act (registered with the Ministry of the Environment, No. (Kan) 2003-8-1025)

Specified Worker Dispatching Undertaking (No. (TOKU) 13-305162)

#### ■ Management System Certification (OYO Corporation)

Quality Management System (ISO9001 : 2015)	Applicable office: all offices/ JQA-2772
Environmental Management System (ISO14001 : 2015)	Applicable office: all offices/ JQA-EM6855
Information Security Management System (ISO/IEC 27001 : 2013)	Applicable office: all offices/ JQA-IM1238

#### ■ Certification/Authentication Certification (OYO Corporation)

Obtained certification of organizations contributing to national resilience (Resilience Certification) December 2016/November 2018 (Business Continuity and Social Contribution)

Certified as a second-level "Eruboshi" mark based on the Women's Active Participation Act September 2016

Certified as a "general business entity compliant with standards" pursuant to the Act on Advancement of Measures to Support Raising Next-Generation Children (Obtained the Kurumin mark and Platinum Kurumin mark for special recognition)
January 2018



# Overview of the Company and Its Shares (as of December 31, 2018)

#### Overview of the Company

Name OYO Corporation

Address 7 Kanda-Mitoshiro-cho, Chiyoda-ku, Tokyo 101-8486 JAPAN

**Phone** +81-3-5577-4501

Established 2 May, 1957

Paid-in capital

16,174.6 million yen

**Listing** 1st section of the Tokyo Stock Exchange

Number of employees

2,058 (consolidated) / 1,102 (non-consolidated)

Line of business

Series of engineering works from soil investigation to design/construction management, which are accompanied with construction of civil engineering structures and building structures; Engineering works regarding investigation, analyses, projection, diagnoses, evaluation for landslides, slope failure, earthquake disasters, and storm and flood damage; Engineering works regarding investigation, analyses, projection, diagnoses, evaluation for environmental conservation/risks such as vibrations, noises and water quality, etc.; Gathering, processing and selling information on the earth, such as ground surface, topography, environment, and disasters, etc.; Development, manufacturing, sales, leases, and rental on various measuring equipment, software and systems; and Development, manufacturing, and sales on security related equipment.

#### Overview of shares

Number of authorized shares	120,000,000
Number of shares issued	27,582,573
	(of which, treasury stock counts 1,118,901 shares)
Number of shareholders	7,146

#### ■ Breakdown of shareholders



Individuals and others	30.38%	83,790 units
Financial institutions	22.04%	60,799 units
Other domestic corporations	21.23%	58,560 units
Foreign corporations, etc.	20.74%	57,215 units
Financial instruments business operators	1.55%	4,270 units
■ Treasury stock	4.06%	11,189 units

<sup>\*</sup>Treasury stock does not include the 3,506 units owned by Trust & Custody Services Bank, Ltd. (Trust Account E).





#### Inquiries

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