

TAKENAKA Corporate Report 2014




We disclose to our stakeholders the details of the projects and activities we are pursuing as a corporate group with the aim of achieving a sustainable society through our corporate reports and Web site.

■ Editorial policy


We have compiled this Takenaka Corporate Report 2014 for the purpose of presenting the corporate social responsibility (CSR) vision of the Takenaka Group and describing the projects undertaken by our corporate group as a whole with maximum clarity. Its contents primarily comprise details related to activities conducted by Takenaka Corporation. Contents, case examples and data that cannot be covered in the report due to space constraints will be featured on the Takenaka Corporation Web site. This report integrates our corporate brochure (introductory overview of our businesses) and sustainability report (CSR activity report), which were formerly issued as separate publications. It also seeks to obtain the full understanding of our stakeholders by incorporating our medium-term management plan as well as our principal financial and nonfinancial data in order to present the business operations implemented by our group on a global scale.

Corporate Web site
(Japanese/English)
www.takenaka.co.jp




- Major Works
- Solutions
- Corporate Information
- CSR Activities


Corporate Publications (Japanese/English)



Corporate Report
(Japanese/English)



Major Works Report
(Parallel Japanese/English)



Financial Report
(English)

Financial and nonfinancial information concerning the company is presented in an integrated, compact format. Its business operations and results (works) are introduced in greater detail.
*Separate technology and solutions publications are also available.

Provides detailed coverage of financial and nonfinancial information across a wide range.

■ Period of coverage

January – December 2013
Activities outside this period are also touched upon to some extent.

■ Scope of coverage

The contents include the activities of the Takenaka Group centered on the activities of Takenaka Corporation.

■ Reference guidelines

The Ministry of the Environment, Environmental Reporting Guidelines, 2012 and the Japan Standards Association's draft translation, ISO26000 (Guidance on Social Responsibility), 1st edition, November 1, 2010, were employed as references in compiling this report.

■ Period of coverage

April 2014 (next issue April 2015).
We have also published the report on our Web site to make it available to larger numbers of readers.

■ Inquiries

Public Relations Department,
Tel: 03-6810-5140

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Seeking Realization of a Sustainable Society

Three years have passed since the Great East Japan Earthquake, but many people in the areas impacted by the disaster are still forced to live under extremely severe conditions. Our mission is to work steadily to implement restoration and recovery activities in order to protect people's lives and economic activities from natural threats, such as earthquakes, tsunamis, typhoons and localized torrential rainfall, and to realize a sustainable society whose people can all lead happy and rewarding lives.

We take pride in the craftsmanship we bring to every process in our architectural projects, and we refer to buildings we have participated in as our "works of art." Since our foundation, we have been providing the architectural structures required by society in each passing era in accordance with our Management Philosophy, "Contribute to society by passing on the best works to future generations," and our Company Policy, which begins with the words, "Take the path of truth, keep good faith and be steadfast." We will naturally direct our best efforts to restoration and recovery from the great earthquake disaster. At the same time, we will continue to fulfill our corporate social responsibility by providing the best technologies possible for urban creation that is in harmony with the environment and where people can live in peace and safety.

April 2014
Chairman and CEO



Secure "Urban Creation" with Prosperity

Society's expectations of us in our role as a construction company are undergoing significant changes today. We are expected to make full use of our capabilities to provide solutions for social issues ranging from disaster recovery to energy and environmental challenges while conducting city and infrastructure construction around the world and promoting business development.

As cities continue to grow in sophistication, we are required to build and manage towns and cities with environments that provide their people with safe, secure and rewarding lives, and that encourage the formation of local communities. At a time when interest in realizing a sustainable society is burgeoning as well, buildings must provide increasingly diversified and complex functions stressing both consideration for the environment and "consideration for people" in terms of safety, durability, sustainability and comfort.

As of this year, we have established the "Takenaka Group CSR Vision" and the "Takenaka Group Message." We intend to intensify our dialog with stakeholders and promote activities that contribute to the realization of a sustainable society through the concerted efforts of all the members of our group, and in collaboration with society and our customers.

April 2014
President and COO

Working As a Group to Satisfy Customer Expectations in Every Phase of Urban Revitalization

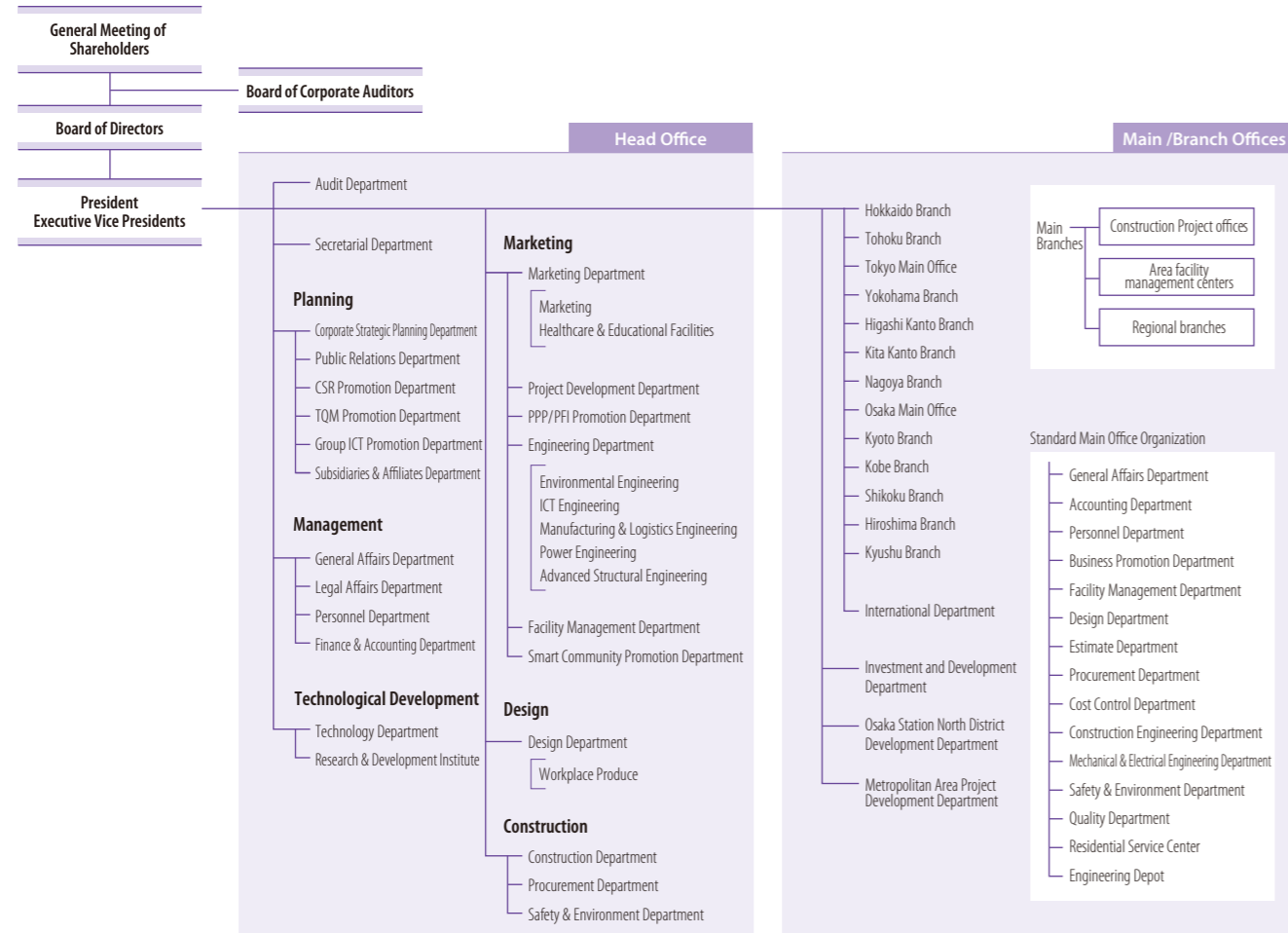
Takenaka Corporation Corporate Data

Company name	Takenaka Corporation
Head office	1-13, 4-chome, Hommachi, Chuo-ku, Osaka, Japan
Capital	¥50 billion (as of March 31, 2014)
Sales	¥1,020.9 billion (consolidated, fiscal 2013)
Construction licenses	Ministry of Land, Infrastructure and Transport Construction License (Special-21, General-21) No. 2744
Employees	7,335 (as of January 1, 2014)
License holders	Licensed first class architects2,551 Licensed first class building works execution managers.....2,276 Licensed professional engineers153 Ph. D. s114 (as of January 1, 2014)

Main Businesses	<ol style="list-style-type: none"> Undertaking, design and supervision of architectural and civil engineering works Studies, research, surveys, planning, evaluation, diagnosis and other engineering and management services for construction, regional and urban development, ocean development, space development, energy supply, environmental preservation and other projects Land preparation and housing construction Sales and purchasing, leasing, transaction mediation, maintenance, management and appraisal of real estate as well as real estate investment management
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Main Banks	Bank of Tokyo Mitsubishi UFJ, Ltd. Sumitomo Mitsui Banking Corporation Mizuho Corporate Bank, Ltd. Resona Bank, Ltd. Mitsubishi UFJ Trust and Banking Corporation Sumitomo Mitsui Trust Bank, Ltd., others
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Corporate Organization (as of April 1, 2014)



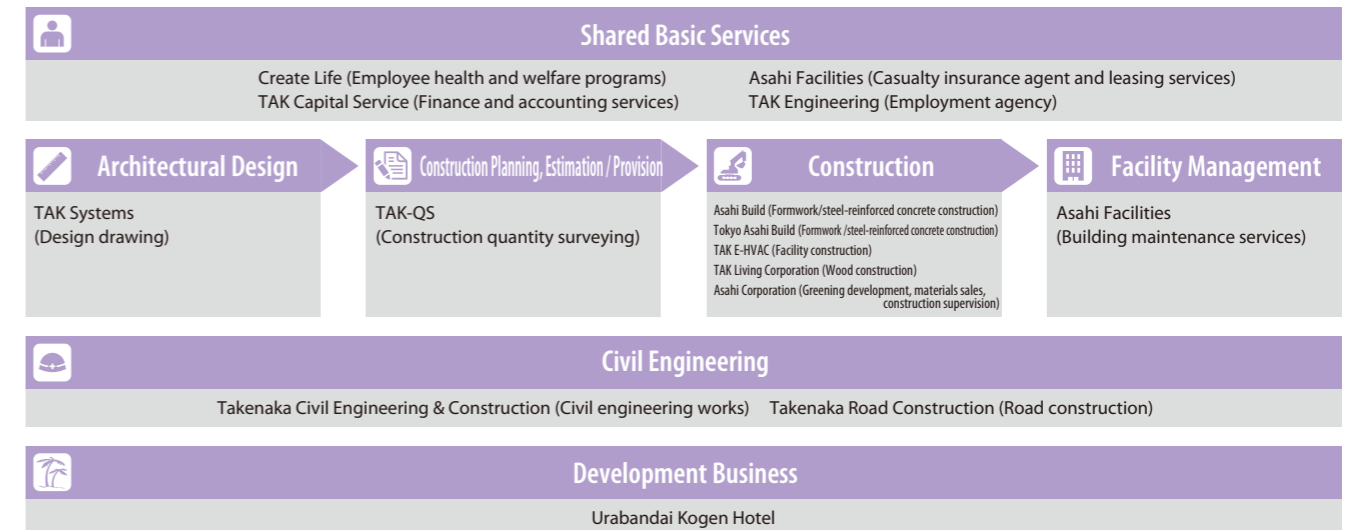
Main Domestic Group Companies and Contents of Business

The Group's main overseas companies' locations are listed on page 24.

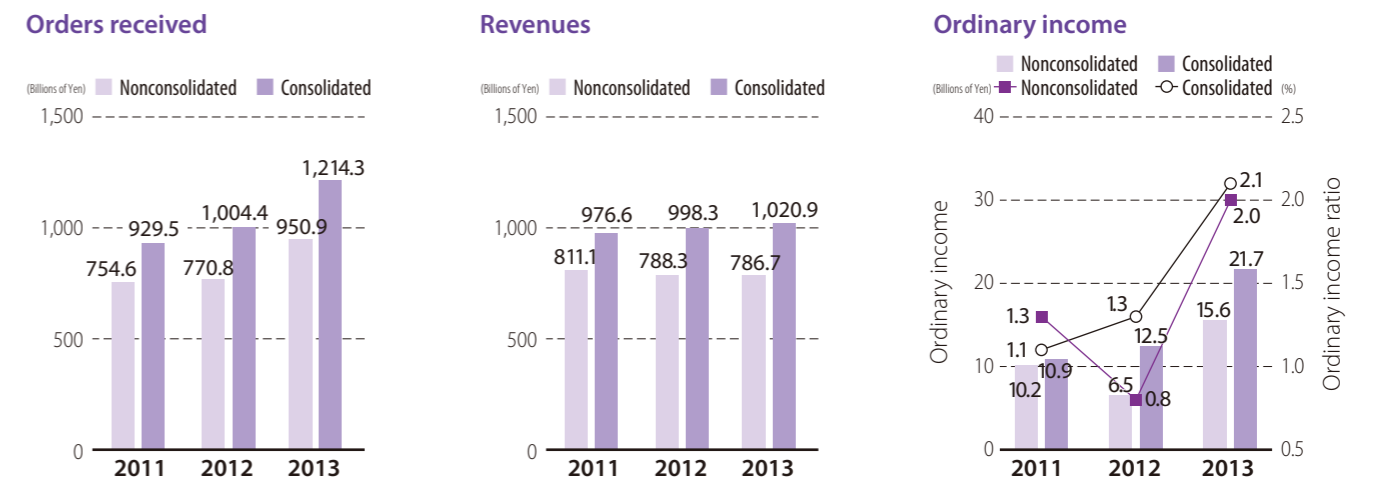
- Construction Business**
 - Takenaka Civil Engineering and Construction Co., Ltd.**
 - General contracting, planning and designing for public works and building construction
 - Takenaka Road Construction Co., Ltd.**
 - Road paving contracting, and manufacturing and sales of pavement materials
 - Asahi Build Corporation**
 - Steel reinforcement construction services and formwork fabrication and assembly services
 - Tokyo Asahi Build Corporation**
 - Steel reinforcement construction services and formwork fabrication and assembly services
 - TAK E-HVAC Corporation**
 - Electrical, plumbing and sanitation, and HVAC construction services
 - TAK Living Corporation**
 - Manufacturing and sales of wooden products, and interior and finishing construction services
 - Asahi Corporation**
 - Construction services centered on interior and exterior finishing, sales of construction materials, landscaping, tree planting, planning and implementation of greening projects, and sales of petroleum products

- Management and Engineering Businesses**
 - Asahi Facilities Inc.**
 - Building maintenance services, casualty insurance agent, and leasing services
 - TAK Systems Corporation**
 - CAD services and consulting related to architectural design and construction
 - TAK Engineering Inc.**
 - Outsourcing services for engineering management related to construction, personnel dispatch services, and personnel introduction services
 - TAK-QS Corporation**
 - Outsourcing services for quantity surveying related to construction
 - Create Life Corporation**
 - Comprehensive outsourcing services related to employee health, welfare and benefits, and general affairs and human resources
 - TAK Capital Service Inc.**
 - Outsourcing factoring services and financial accounting services
- Development Business**
 - Urbandai Kogen Hotel**
 - Resort hotel and ski area operation

Principle Operations of Main Group Companies



Transitions in Performance



Passing Down Tradition and Creating the Future

Founded in 1610 to engage in construction projects, Takenaka Corporation has made a significant contribution to the progress of society by providing it with many architectural landmarks. Architecture's role is to create containers to protect people's lives and possessions, but it also creates social assets that can pass down the culture of an era to future generations. We view this field with such pride that we consider our architectural structures "works of art." We inherited this philosophy from our original founder, Tobei-Masataka Takenaka, a master builder of Shinto shrines, and we have made it our own worldview, putting our customers' wishes first and deploying highly developed technical capabilities as architectural experts. We have participated in major projects with deep meaning for Japan's society, economy and culture, providing the world with numerous works of art, engineering works and technical developments. Going forward, we will continue to create works of the finest quality, and to pursue "urban creation" that lives up to society's trust, encourages its prosperity through advances in architectural methods, from design through construction, and contributes proactively to forwarding the advances in technological development required by each new era.

1610

Tobei-Masataka Takenaka establishes a business in Nagoya to engage in shrine and temple construction.



→ 1900

1900
Mitsui Bank Warehouse completed in Onohama district of Kobe.



1899
14th-generation head of family Touemon Takenaka moves to Kobe and founds the Company within the year.

1897
Mitsui Spinning Mill completed in Nagoya.

1884
Mitsui Bank Nagoya branch completed.

1874
Nagoya Garrison barracks featuring Western-style architecture adapted to the Post-Restoration era completed.

→ 1920

1916
Ferroconcrete **Osaka Mainichi Shimbun Head Office Building** completed.

1912
Takashimaya Kyoto Store completed as Japan's first retail store building.



1909
Unincorporated **Takenaka Construction Company** established with headquarters in Kobe and a branch in Nagoya.

→ 1950

1949
TAK Living Corporation established.

1947
Asahi Build Corporation established.

1943
TAK E-HVAC Corporation established.

1941
Takenaka Civil Engineering & Construction Co., Ltd. established.

1937
Takenaka Corporation established. Capital ¥1,500,000.

1934
MEIJI SEIMEIKAN (Marunouchi, Tokyo) completed.



1927
Hitotsubashi University Kasamatsu Auditorium completed.



→ 1970

1969
Asahi Facilities Inc. established.



1963
Takenaka awarded first prize in **National Theater** Design Competition.

1961
Takenaka Road Construction Co., Ltd. established.

1960
Takenaka & Associates Inc. established in San Francisco.

1958
333-meter high **Tokyo Tower** completed. **Urabandai Kogen Hotel** opened.

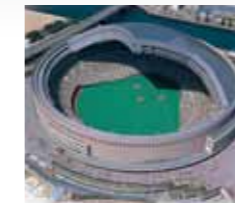
1957
Antarctic Exploration Research Facilities Produced Patent acquired for Takenaka caisson construction method. **Asahi Corporation** established.



→ 2000

1997
Nagoya Dome completed.

1995
Create Life Corporation established.



1993
FUKUOKA YAFUOKU! DOME, Japan's first multipurpose stadium with a retractable roof, completed.

1992
Takenaka awarded the Japan Quality Award.

1990
TAK Systems Corporation established.



1988
Tokyo Dome, Japan's first all-purpose stadium with an air-supported membrane structure, completed. Chairman Renichi Takenaka awarded the Deming Prize. **TAK Engineering Inc.** established.

1987
Yurakucho Marion completed.



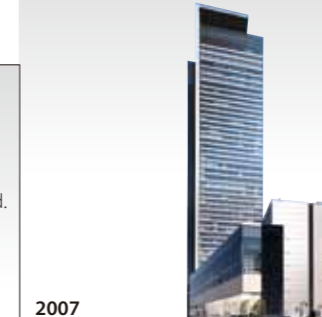
1986
Takenaka awarded Best Design Prize in **2nd National Theater** International Design Competition.

1979
Ashiyahama Seaside Town, proposed by the ASTM Group, of which Takenaka is a member, completed.



1972
Tokyo Asahi Build Corporation established.

→ 2007



2007
Chubu region's tallest skyscraper **Midland Square** completed.

Large-scale integrated **Tokyo Midtown** and **Shin-Marunouchi Building** completed in central Tokyo.



2006
World's tallest super high stratified base-isolation condominium **City Tower Nishi-Umeda** completed.



2003
TAK-QS Corporation established.

2002
TAK Capital Service Inc. established.

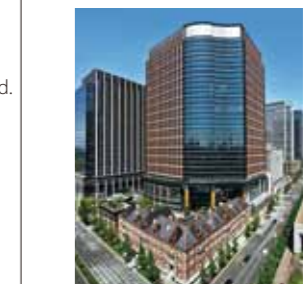
2001
Oita Sports Park **Oita Bank Dome** and **Sapporo Dome** completed.



→ 2013

2013
Grand Front Osaka and **Abeno Harukas** completed.

2012
Super high-rise **Nakanoshima Festival Tower** completed in Osaka.



2009
110th anniversary of company's founding. **Mitsubishi Ichigokan Building** and **Marunouchi Park Building** completed.



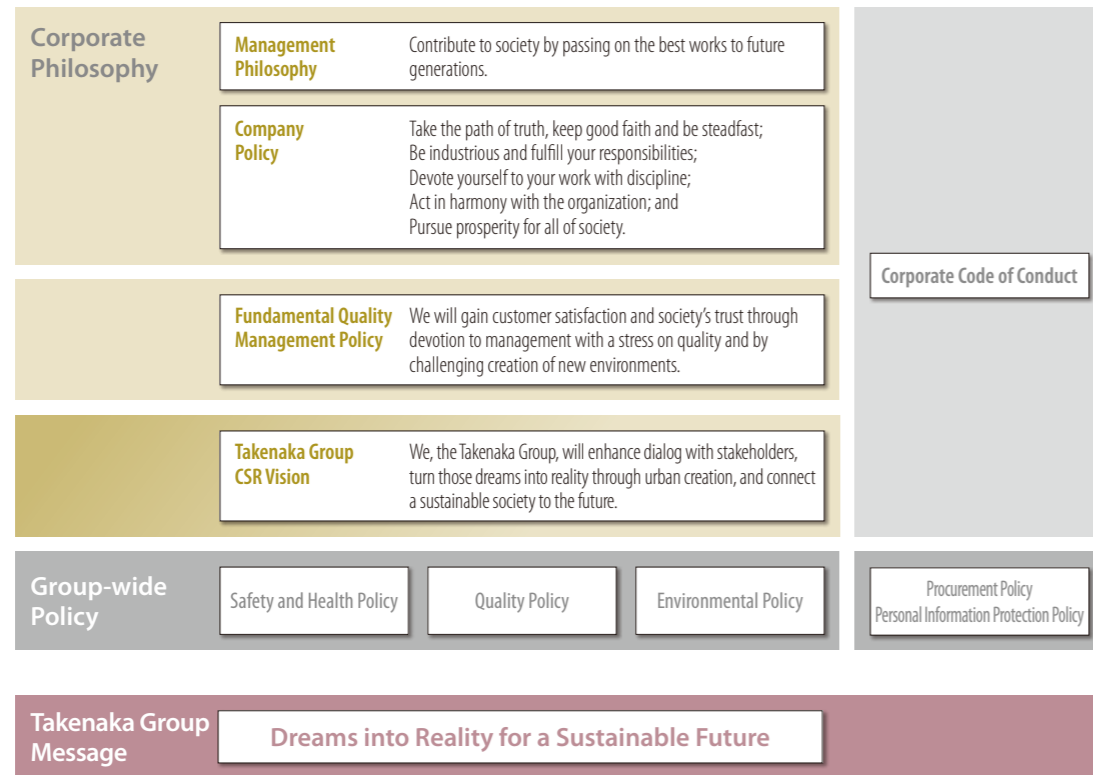
2008
World's first high-rise condominium comprising three interconnected skyscrapers, **Island Tower Sky Club**, completed.

Dreams into Reality for a Sustainable Future

We consider our Management Philosophy, "Contribute to society by passing on the best works to future generations," as our corporate mission. To achieve it we follow our Company Policy and handle every architectural project we undertake with the utmost care. This ensures quality management, earning customer satisfaction and social trust and raising the company's value to society.

We are required to engage in many more activities that share our corporate values with society than ever before as our stakeholders diversify and the functions of architecture change. Moreover, society faces various problems, such as energy environmental issues, increased disaster risk, an aging social infrastructure, and a declining birthrate and aging population. The potential impact of these issues requires today's corporations to shoulder more social responsibility.

We established the Takenaka Group CSR Vision as our approach to deploying our group's concerted efforts and cooperating more closely with stakeholders and society to resolve social issues and realize a sustainable society. We have also expressed our corporate philosophy and our fundamental quality management policy in the Takenaka Group Message, which is the cornerstone of our business. We will take it to heart and promote quality management while abiding by our Corporate Code of Conduct and our CSR Conduct Guidelines in order to realize this vision.



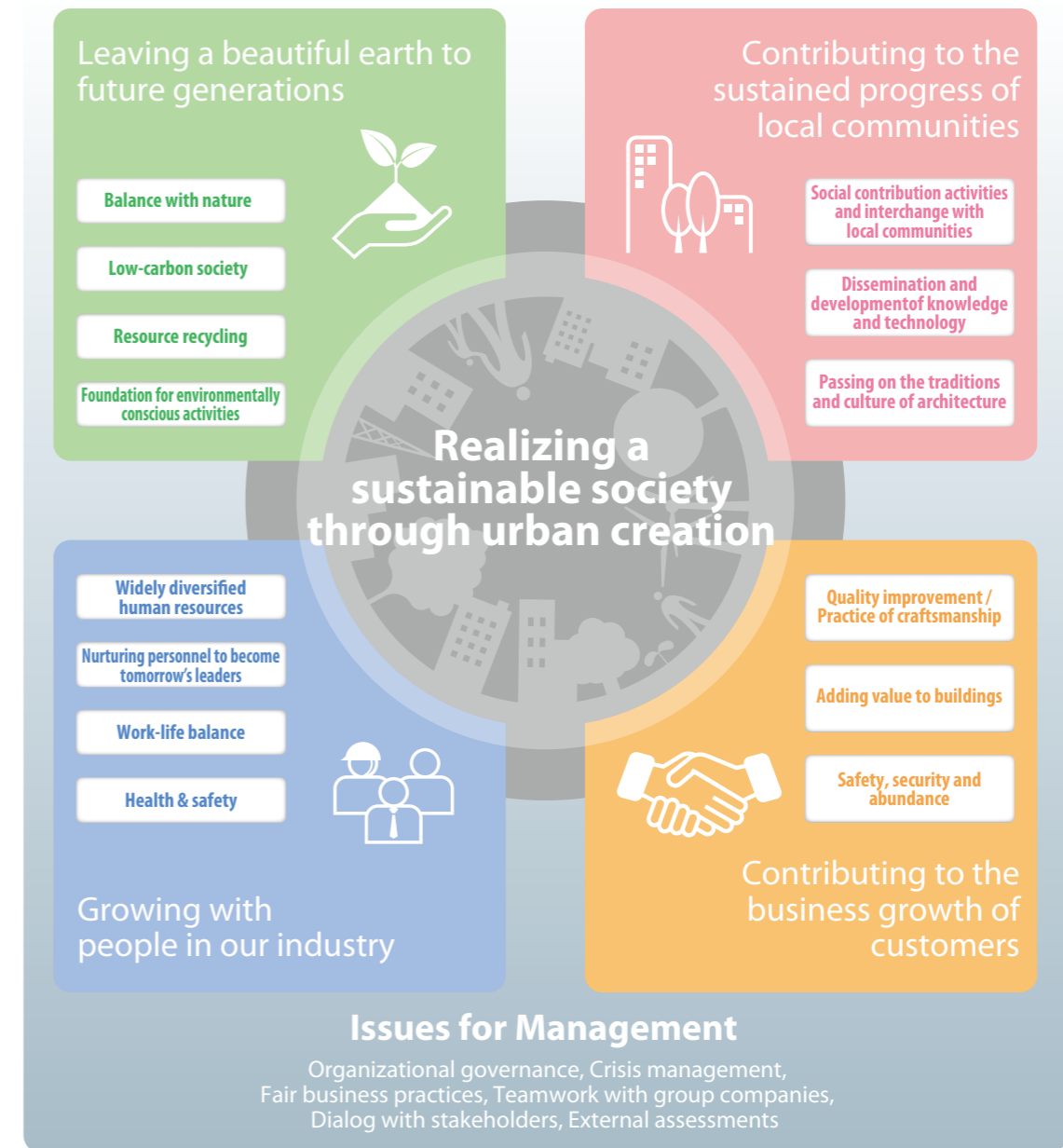
Realizing the Combined Aspirations of the Takenaka Group CSR Vision and Takenaka Group Message

Besides responding to the expectations of our stakeholders, who include the global environment, local communities, customers, employees and cooperating companies in our efforts to realize a sustainable society, we believe that the cities in which they all gather and pursue their various activities must be safe, prosperous and easy to live in both today and tomorrow. To assure this, we will enhance our dialog with stakeholders even further. We will combine the business capabilities of our corporate group in construction, civil engineering, real estate and development, facility management and urban renewal in order to realize the sustainable society of the future through urban creation with new added value.

Activities Implemented with Stakeholders to Realize Our Vision

In order to respond to the aspirations of our stakeholders — who include the global environment, local communities, customers, employees and cooperating companies — we have identified 14 areas of activity in which specific CSR activities are to be promoted. We have, moreover, established management activities to support these efforts in accordance with our Corporate Code of Conduct. Our aim is to contribute to realization of a sustainable society by steadily promoting these activities and resolving challenging social issues.

Management supporting fields of activity in which the aspirations of stakeholders are fulfilled to provide a legacy for the future



We seek to provide the best solutions to our customers' business challenges on a global scale to contribute to realization of a sustainable society through the concerted efforts of our entire group.

President and COO
Masahiro Miyashita

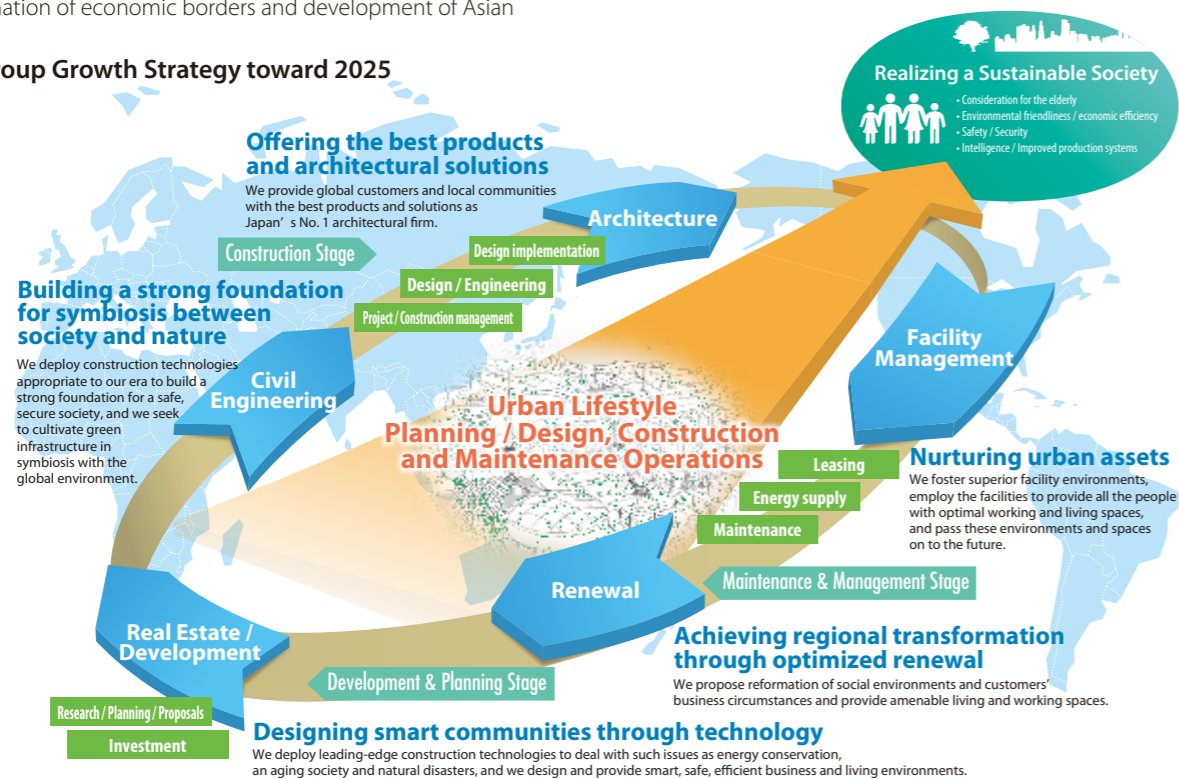


Q What are your thoughts concerning the Takenaka Group's medium- to long-term growth strategy?

A We have an important mission to provide the best technologies and solutions for a variety of issues facing Japanese society today—including the low birthrate and aging population, reorganization of infrastructure, energy issues and requisite natural disaster countermeasures—to enable people to lead prosperous, happy, secure lives. Outside Japan we must continue to respond to changes in the global environment, such as the elimination of economic borders and development of Asian

economies to satisfy customer expectations. This means expanding our group's business domain to encompass the "city," rather than architecture alone, and to contribute throughout the life cycles of cities from planning and architectural design to maintenance and operation. Our growth strategy, looking to the year 2025, calls for tightly knit collaboration among our group companies through "every stage of urban creation" to ensure that we become the best partner for society and our customers.

Group Growth Strategy toward 2025

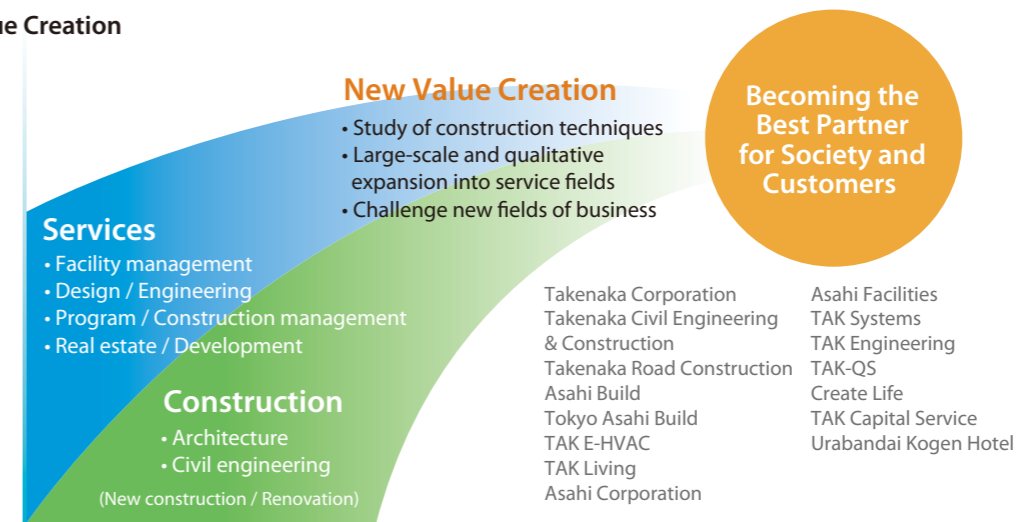


Q What fields and new businesses should be focuses of your efforts in coming years?

A We must maintain close coordination among our group companies in such peripheral fields as maintenance and upgrading of aging social infrastructure and renewal facility management. With respect to business and ordering modes, I am convinced that the role of private enterprise will continue to expand. In addition to Private Finance Initiative (PFI) and Public-Private Partnerships

(PPP), the "concession" approach, in which corporations initiate projects themselves, will gain prominence as a mode of business in the future. Our role in society will no longer be limited to providing architectural structures. We can also expect our business domain to expand in terms of providing services. I want to risk raising new challenges in fields in which we can demonstrate our strengths.

New Value Creation

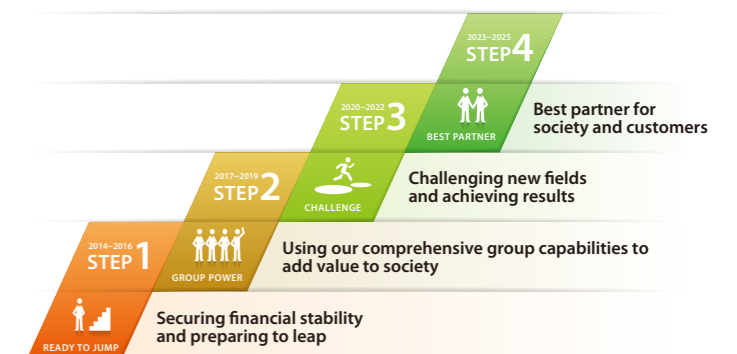


Q A new three-year plan will be introduced this fiscal year. In consideration of the past three years, what do you expect to emphasize over the three years ahead?

A I intend to seek improvement of our revenue base in the coming three years and to establish a foundation for future growth. It is essential that we continue perfecting our design and technical capabilities, areas in which we have consistently exhibited originality, and improve productivity, develop specializations by optimizing allocation of our diverse personnel and enhance our management proficiency. We will then strengthen ties among our group companies' business operations, increase our production capabilities by expanding our alliance partnerships and take the lead in creating new value in city urban creation. In our overseas construction business, we are arranging a responsive structure, and we are aiming for further business growth over the next three years. In human resources as well, we must continuously build a personnel and training system that can attract and foster global

talent who can fully respond to local requirements overseas. Securing safety and quality is also of vital importance for any construction business. Thus, We will act to assure definitive disaster prevention and quality improvement on our work sites which are the front lines of creation.

Steps to Growth



Incorporating Stakeholder Dreams in Our Quest to Be Japan's No.1 in Architecture

—Abeno Harukas: Rising to the Challenge of Ascending 300 meters—

The grand opening of Abeno Harukas, a super skyscraper soaring 300 meters above ground and constructed as part of Osaka's new multi purpose Abenobashi Terminal Building complex, was held in March 2014. Standing proudly as Japan's tallest building in a new complex encompassing a railway station, a department store, a museum, offices, a hotel and an observatory, this new Osaka landmark is bringing prosperity to the Tennoji-Abeno district and dramatically elevating its profile.



VOICE

"Dreams into Reality" From Jack and the beanstalk and castles in the sky to the Tower of Babel, people have always employed fables and allegories to express their longings and impossible dreams of reaching the heavens. Still, they tend to perceive vertical cities as somehow alien compared with cities that spread out horizontally because of the vertical cities' apparent "opposition to gravity." But Takenaka Corporation has created a stacked-up city by drawing on the support of technology and science. This must be the meaning of "Dreams into Reality." Instead of boulevards, bypasses and networks of narrow streets, the city has elevators, escalators and stairs arranged optimally in terms of flow and visual appeal. The various groups of facilities and rooftop gardens that come into view during an ascent up the building, accompanied by the changes in the Osaka cityscape occurring with altitude, offer not only a sequence of concrete structures but also a synergy of processes resulting from the convergence of diversified urban functions. We can forget about the "compact city," since the transition to multiple layers is inevitable, and this is where new prosperity is finally being sought.



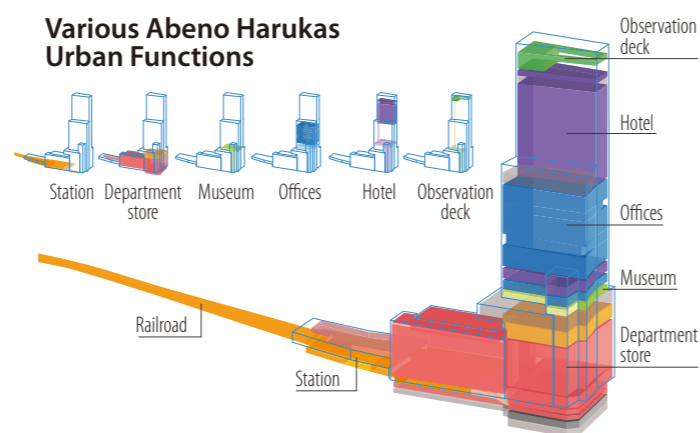
Takenaka Corporation
Senior Executive Managing Officer
Naoki Amano

An "Energy-efficient Vertical City" Incorporating Diverse Urban Functions

Representative of Osaka culture, the Tennoji-Abeno district is rich in historical sites, parks, museums and diverse urban functions. Takenaka's long history of conducting development projects here includes its recent participation in the Abeno Hoop, Abeno Cues Town and Kishimoto Building projects. With the opening of Abeno Harukas, achieved with our participation from beginning to end, the district has acquired enhanced status as a gateway to Osaka. A 3D stack of urban functions, Abeno Harukas comprises three layers: a department store on the lower floors, offices in the middle and a hotel on top. The column spans and ceiling heights

are designed to suit the functions of each space, and an interconnecting framework of trusses extends throughout the edifice. Various dampers incorporated into the structure reduce swinging due to earthquakes and wind, and truss floors connecting sections between layers serve as both firewalls and ecovoids to admit ventilation and natural light. Most external surfaces employ aluminum walls and floating laminate glass, producing a translucence that unifies the building with the city.

Various Abeno Harukas Urban Functions



Technologies and Construction Methods Supporting Energy-Efficient Vertical City Building

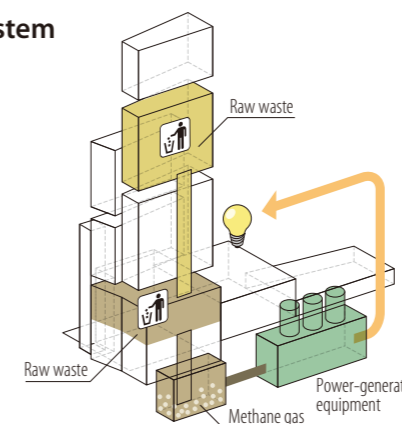
Key environmental technologies include strategically located ecovoids and a double-skin glass façade with thermal-insulating roll screens between panes. An energy management system controls energy throughout by making it "transparent," and an innovative urban biogas system produces biogas fuel from food scraps to generate power and heat water. This latter technology earned Takenaka the 2013 Environment Minister's Award for Global Warming Prevention Activity. We adopted a

"slide cover" construction method, in which the curing frame is slid upward as construction progresses, and a "3D yard" system, in which flat surfaces are installed at about 100 and 200 meters above ground for storing materials in order to maintain safety during the six years of high-rise construction in a busy urban district. Both the existing railway station and department store operated safely throughout.



Slide cover construction

Urban Biogas System Concept



Abeno Harukas Web site www.abeno.project-takenaka.com/abeno_e

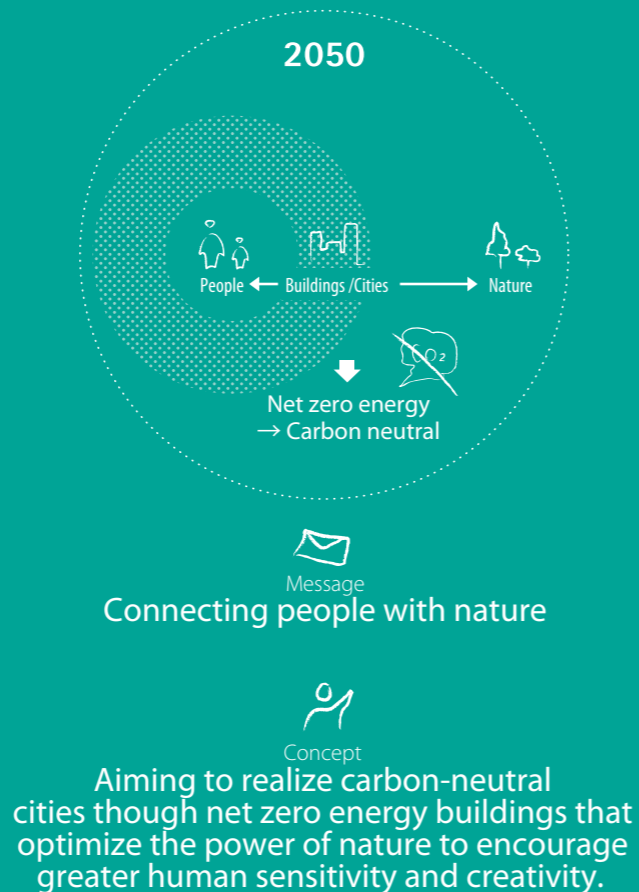
Abeno Harukas Information

Owner	Kintetsu Corporation
Design and supervision	Takenaka Corporation
Skin design	Takenaka Corporation, Pelli Clarke Pelli Architects
Construction	Takenaka Corporation (joint venture)
Structure	Steel frame-reinforced concrete, steel frame
Floors	60 Fl. above, 5 Fl. below ground
Total floor space	306,000 m ² (Tower: 212,000 m ²)

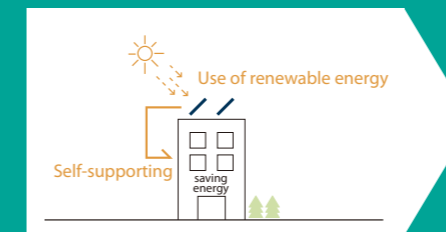
Environmental Activities Towards 2050

— Revision of the Environmental Concept —

We have been creating environmentally harmonious architectural structures based on our "Green in Design" slogan since 1971, and on our Environmental Message, "Connecting People with Nature," since 2010. The greatest contribution we can make toward realizing the worldwide goal of carbon-neutral cities is to reduce energy consumption by buildings. We are targeting the ultimate goal, the "net zero energy building." Our environmental concept formulated in 2010 clarifies this objective and sets long-term targets leading up to 2050. We envision a 2050 society in which people live in health and comfort and participate energetically in activities with their sensibilities and creativity stimulated, giving birth to a diversified culture. It will also be a society in which buildings and cities have a minimal impact on the environment and greenhouse gas emissions are minimized in order to achieve this ideal society. We intend to realize net zero energy buildings and net plus energy buildings, while pursuing smart communities.

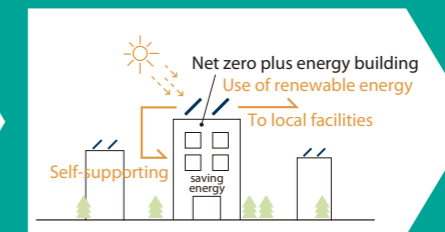


We are pursuing construction of net zero energy and net plus energy stand-alone buildings. From a global perspective, moreover, we are targeting construction of smart communities and smart cities as a means of achieving an energy-efficient, low carbon global society that offers a more abundant environment and greater convenience for people's lives.

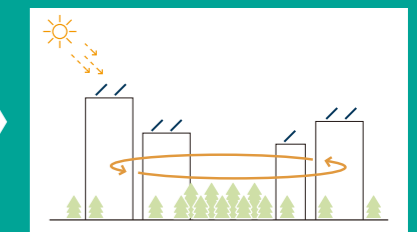


Net zero energy building
The building is not only energy efficient, but it produces energy itself to meet its consumption needs and achieve energy self-sufficiency.

Net zero plus energy building
The building is self supporting and in addition produces sufficient surplus energy to play a role in supplying energy to neighboring buildings.



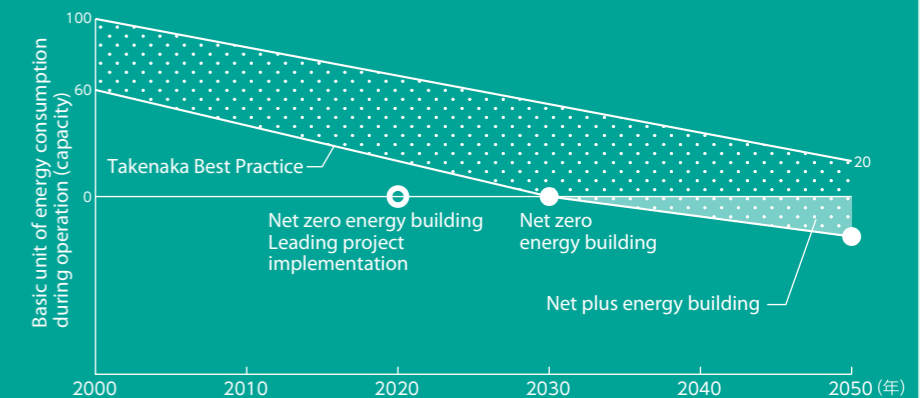
Smart communities
These communities employ energy conservation and renewable energy to meet supply and demand needs and offer flexible energy use, seeking at the same time to provide enhanced local prosperity and living convenience.



Carbon neutral cities
Planning is underway for achieving carbon neutral communities and cities through means including the use of renewable energy, with prosperous compact urban environments as the objective.

Long-Term Targets

Our objective is to lead the way by implementing a net zero energy project in 2020, achieving the net zero energy building in 2030 and pursuing the net plus energy building in the years beyond 2030.



4 Considerations

We have developed our Environmental Concept and Environmental Message and determined four considerations for achieving objectives toward their realization:

- 1) Consider architectural environments in terms of people's comfort;
- 2) Aim for net zero energy buildings that coexist in harmony with nature;
- 3) Create value with new buildings;
- 4) Consider the global environment as a whole. Realizing the importance of each, we wish to advance our efforts toward realization of our objectives with these considerations always in mind.

1

Consider architectural environments in terms of people's comfort.

Consider the environment surrounding people inside buildings.

We will create buildings and spaces that prioritize physical comfort and human sensitivities.



Pool Gakuin Jr. High / High School
A biotope in the environs of the school entrance plays a part in students' science and environmental education and contributes to raising their environmental consciousness.

2

Build net zero energy buildings that coexist in harmony with nature.

Consider the linkage between building exteriors and interiors.

Building exteriors must coexist harmoniously with nature (in everything from airtight thermal insulation performance to regulation and design of the internal climate). Giving full consideration to these factors, we will seek to achieve net zero energy buildings that coexist harmoniously with nature and draw energy primarily from natural sources.



Takenako Corporation Tokyo Main Office
The new main office pursues self reliance as a zero energy building through such means as capturing natural light, harnessing wind for use in air conditioning and solar power generation.

3

Create value with new buildings.

Consider the value of buildings as assets for society and the economy.

We will participate with customers in activities aimed at raising buildings' social and economic value. Together we will create innovative ways of using buildings and enhance their business feasibility, asset value, convenience and business continuity. We will seek, at the same time, to introduce innovations in the areas of materials and production, including construction methods and building information modeling (BIM).



TOYOTA Commemorative Museum of Industry and Technology
The old factory has been reborn as an exhibition facility while retaining its historical brick exterior.

4

Consider the global environment as a whole. Think of construction projects as extending out through cities and communities.

We will consider how we should deal with energy issues facing communities as a whole while at the same time seeking to improve environmental quality for entire areas and to enhance stability and operational collaboration. We will offer proposals and achieve results from this perspective.



Osaka Business Park
Along with the renovation, plans include improving energy efficiency through development of an integrated local energy management system.

Details concerning our Environmental Concept Book are available on the Corporate Web site.

Japanese only

The Takenaka Group's diversified know-how and resources, including personnel, design, engineering and technical development, are in high demand by the construction, civil engineering, development and other business fields. They are contributing to realization of a sustainable society through the creation of prosperous cities that are safe and secure.

Architecture



Overview

The requirements for modern architecture extend beyond providing of comfortable, efficient working and living facilities to consideration of local cultures and urban environments. Our role is to design buildings that are in harmony with the surrounding environment as well as to regenerate and create value for buildings, which are important assets for society. We provide customers with assistance in materializing their dreams, which include contributing to the global environment and society through architecture

Contents

- Sustainable Works®
- Design born of integrated strengths
- Attractive Renewal®

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International



Over half a century has passed since we began making inroads into the U.S. market in 1960, and, today, our network extends around the world, with bases established in 27 principal locations in Europe, North America and Asia. Our operations encompass airports, high-rise office buildings, hotels, manufacturing plants, museums and many others as well as participation in a wide variety of projects in capacities ranging from design and construction to technical guidance, consulting services and materials procurement. Our business activities extending across a diverse range are strategically determined to support global implementation for our customers.

- Europe
- Asia / China
- United States
- Airports
- Major works

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Development



We are involved in a large number of design and construction projects organized to build complexes of office buildings, hotels, and commercial and entertainment facilities to serve as the cores of major redevelopment and other efforts by major Japanese cities. We also participate proactively in urban redevelopment and PPP and PFI projects as well as in overseas resort development projects, thus proudly contributing to urban and regional community regeneration in addition to urban creation.

- Urban redevelopment projects
- PPP / PFI projects
- Overseas development projects
- Development projects

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Engineering



We support ongoing business operation by offering proposals for implementing restructuring, aseismic measures and seismic isolation modifications for manufacturing facilities; undertaking activities to realize low-carbon cities through energy management systems; developing timber and wood building materials appropriate to a sustainable society; and participating in a project to realize a revolutionarily advanced cancer radiation therapy facility. These are among the ways in which we respond to the needs of society and our customers with leading-edge engineering solutions.

- Activities for manufacturing and logistics facilities
- Business continuity management
- Smart communities
- Moen-Wood®
- Particle beam cancer treatment system / PET diagnosis

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Corporate Group

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Technological Development

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www.takenaka.co.jp/takenaka_e/services/research/

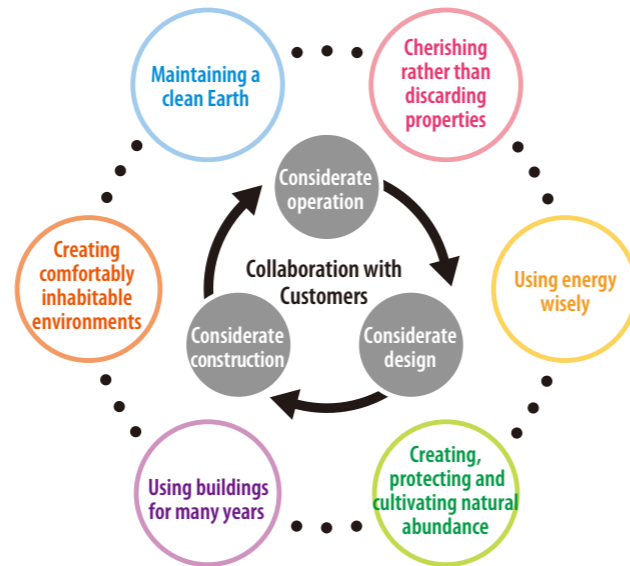
Customer Dreams into Reality

The functions required of buildings today are becoming increasingly sophisticated and diversified. Consideration of the environment is of course essential but facilities must also offer safety and security as well as durability. We also stress our own perspective of "consideration for people" in taking up the challenge of creating new value for architecture.

Sustainable Works

Our advocacy of "sustainable works" refers to "activities aimed at creating architectural spaces that are in harmony with the environment in collaboration with our customers." We have adopted this approach to architecture in order

to pass on a sustainable society to future generations and as a means of helping customers realize their dream of contributing to the global environment and society. We have devised a varied range of methods for "considering the Earth's welfare (design)" in order to "create structures in consideration of the Earth (construction)" to enable customers to use their buildings in "ways that are considerate of the Earth (operation)." We assess every aspect of our activities with respect to design, construction and operation from the six perspectives described on the right in close communication with our customers.



lino Building — A superior quality office building incorporating environmental performance and business continuity —

The lino Building ranks as a cutting-edge model for constructing large-scale building complexes in urban settings as "sustainable works." Aiming to realize the ideal sustainable high-rise rental office building, we gave full consideration to the local culture and urban environment and achieved excellent environmental performance by reducing energy consumption in the office segment by half and conducting multilateral studies of employee comfort, workplace efficiency and business continuity.

Achieving a highly functional office building of superior quality

The office section in the upper level is clad in a double-skin exterior wall structure comprising rocks and glass to create a new expressiveness combining remarkable elegance with environmental performance. Common areas feature ecovoids and rooftop greenery that enable occupants to enjoy daylight and breezes under highly agreeable circumstances.



Considering and contributing to the urban environment

An open space was created facing Hibiya Park on the northern perimeter and linked to neighboring buildings above and below ground on the eastern perimeter to extend the local community's pedestrian network that connects with the subway station.



Revitalizing the local culture and inheriting traditions

Commercial facilities that contribute to the bustling atmosphere of the local community, a new incarnation of the traditional lino Hall that encourages revitalization of the local culture and a conference center have been established on the lower level.



Design and construction: Takenaka Corporation

This image includes CG graphics of completes.

Using energy wisely



LED-based office illumination

Power consumption is significantly reduced in comparison to offices lighted with fluorescent lamps by installing system ceilings with LED lights, adopting illumination control that uses daylight regulated by brightness sensors, and deploying an occupancy sensing lighting control system employing motion sensors.

Creating, preserving and cultivating appealing scenery



Open space with considerations for the urban environment

The open space facing Hibiya Park (Phase II construction area) and large pilot space connecting with the surrounding open area allow configuration of a pedestrian network and serve as the origin of abundant greenery extending out from Hibiya Park in the direction of Mount Atago.

Using buildings for many years



Systematically assuring high aseismic performance

Core earthquake-resistant components such as Takenaka H-shaped steel-buckling stiffening braces and viscous dampers (seismic control wall) secure high aseismic performance of the upper levels exceeding conventional skyscrapers (story drift angle below 1/125).

Creating comfortable residential environments



"Breathable skin" double-skin exterior wall offering natural ventilation

A double skin external wall enclosing the upper-level office floors controls heat load. Natural ventilation draws outside air into the building while air is isolated between the double skin layers to realize an external wall suited to four seasons.

Maintaining a clean Earth



Exterior curtain wall for reducing the environmental burden

The environmental burden associated with the curtain wall was reduced by manufacturing components in shipping-container-sized units, delivering them without transshipment and creating protruding precast concrete with integrated end beams and attached fasteners to save labor for fireproofing protection and other purposes.

Cherishing rather than discarding properties



Restoration of a work of art from the old lino Hall

A relief created by the artist Masanari Murai was removed and stored during lino Hall's reconstruction. After surface treatment by specialists, the relief was reinstalled in the new lino Hall in memory of its predecessor.

Design born of comprehensive capabilities

Dai-ichi Life Insurance's new Ohi Office Building exemplifies architectural design generated by our comprehensive capabilities. The office and distribution center in Kanagawa Prefecture require high levels of security and operational control for insurance

certificate management. The design concept for Dai-ichi Life's old Ohi Office Building, "Realize and pass along an office full of humanity," was observed by integrating the new building into the surrounding environment. We chose to establish a landscape that blends seamlessly with the lush greenery surrounding the site, which would also be our customer's workplace. The intrusiveness of large-scale facilities surrounded by high security fences was eliminated in consideration of the residences, elementary school and employee dormitory in the neighborhood. The steady wind off Sagami Bay was also incorporated into the air conditioning, to reduce CO₂ emissions. A workplace comprising a lush green extension of the suburban environment and integrating the wind, scenery and ambiance was thus completed.



Indoors and outdoors unified by a design adopting a wide extended balcony and overhanging eaves.



Open environment extending out to courtyard. Unification with nature, liberating the spirit.

The New Ohi Office Building of The Dai-ichi Life Insurance Company Limited

— Land excavation and integrated architecture —

Design: Takenaka Corporation
Construction: Takenaka Corporation (joint venture)



Recapturing faded charm

Essentially vessels that protect our lives and possessions, buildings are transformed into social assets over time. Our concept of "recapturing faded charm" refers not only to recovering the functionality and beauty characterizing architectural structures at the time of their original construction, but it also extends to adding new functions to raise their asset value and improve their business operability. At the same time, another concept, "from scrap and build to stock utilization," which was formulated from the perspective of environmental conservation and sustainability, is becoming increasingly pervasive today. The functions sought in architecture are also diversifying and growing in sophistication. This means going beyond improvement of basic building functions and performance that no longer meet the needs of the times to include preserving buildings of historical significance while employing them efficiently by implementing changes in their functions (conversion) that create new value.



Restoration of Dendo-in of Nishi Hongwanji Temple
Constructed by Takenaka in 1912, Dendo-in Nishi Hongwanji Temple's was restored for the 750th Great Annual Memorial Service for the Buddhist monk Shinran. Its seismic performance was enhanced without damaging the external walls, and its character of a century ago was resurrected. Recipient: 22nd BELCA Award. Restoration design and construction: Takenaka Corporation



This aging building was regenerated as a new Fukuoka PARCO department store with aseismic retrofitting, interior renovation, exterior refurbishment and LED staging illumination to brighten the city. Recipient: 21st BELCA Award. Renovation design and construction: Takenaka Corporation

Fukuoka PARCO



The Geihinkan State Guesthouse, constructed in 1909 as Japan's first palace employing Western architecture, celebrated its 100th anniversary with a comprehensive refurbishment. Renovation design: Ministry of Land, Infrastructure, Transport and Tourism; Renovation construction: Takenaka Corporation (joint venture)

State Guest House, Akasaka Palace



Horinouchi Myohoji Temple Hondo (Main Hall)
The Main Hall of Myohoji Temple at Horinouchi, constructed in 1819, was restored to extend its service for many more years. Aseismic reinforcement was installed using a "zinc aluminum damper" with superplastic capacity. The restoration, including interior and exterior renovation, landscaping design, roof retiling, and air-conditioning and lighting system installation, was conducted while maintaining the hall's character to the greatest extent possible, thus recapturing the charm of this ancient temple. Renovation design and construction: Takenaka Corporation

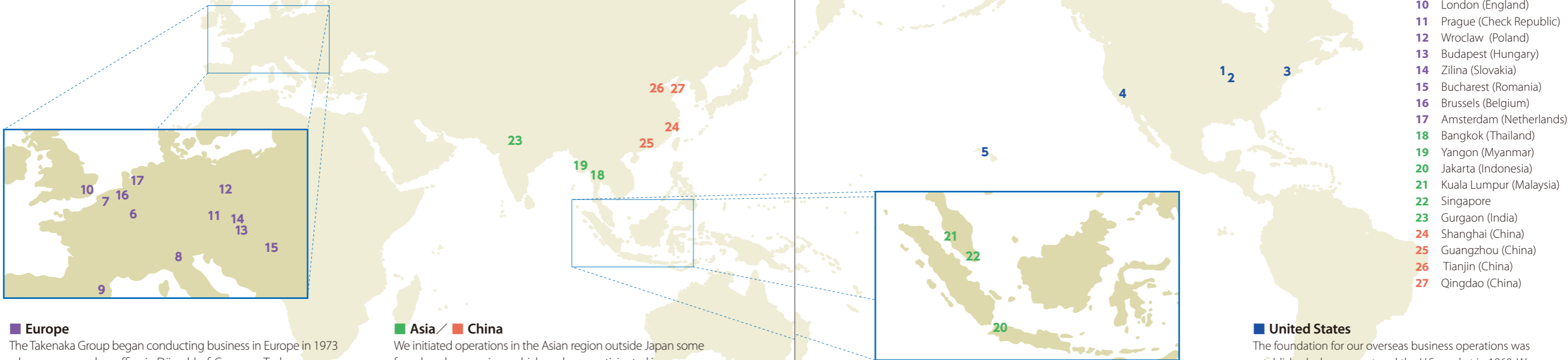
Hotel Wellseason Hamanako

The top 11 floors of the 40-year-old hotel's high-rise wing were demolished, and the first and second floors were restored as a hot springs facility with a new low-rise guest wing sharing the site. Recipient: 22nd BELCA Award. Renovation design and construction: Takenaka Corporation



Supporting Customers' Global Expansion

Our international operations with their long history dating back to the prewar era began in earnest with our entry into the U.S. market in 1960. Our network now spreads around the world. We have participated in a diverse range of projects in support of customers. This includes Japanese businesses launching overseas operations and public institutions in various countries as well as local business enterprises developing projects across the range from airports to high-rise office buildings, hotels, manufacturing plants and museums. Our activities also span a diverse range comprising not only architectural design and construction works but also technical guidance and consultation services as well as materials procurement.



Main Overseas Locations

- 1 Chicago (U.S.A.)
- 2 Indianapolis (U.S.A.)
- 3 New York (U.S.A.)
- 4 San Francisco (U.S.A.)
- 5 Honolulu (U.S.A.)
- 6 Düsseldorf (Germany)
- 7 Valenciennes (France)
- 8 Milan (Italy)
- 9 Barcelona (Spain)
- 10 London (England)
- 11 Prague (Czech Republic)
- 12 Wrocław (Poland)
- 13 Budapest (Hungary)
- 14 Zilina (Slovakia)
- 15 Bucharest (Romania)
- 16 Brussels (Belgium)
- 17 Amsterdam (Netherlands)
- 18 Bangkok (Thailand)
- 19 Yangon (Myanmar)
- 20 Jakarta (Indonesia)
- 21 Kuala Lumpur (Malaysia)
- 22 Singapore
- 23 Gurgaon (India)
- 24 Shanghai (China)
- 25 Guangzhou (China)
- 26 Tianjin (China)
- 27 Qingdao (China)

■ Europe
The Takenaka Group began conducting business in Europe in 1973 when we opened an office in Düsseldorf, Germany. Today our locations in 12 countries have a history of participation in over 1,500 overseas projects, primarily for Japanese partners. They coordinate their efforts to offer timely information to customers who are considering expanding their operations to include more countries.

■ Asia / ■ China
We initiated operations in the Asian region outside Japan some four decades ago, since which we have participated in over 1,500 construction projects. In 2014 we are celebrating our 40th year of operation in Thailand, Singapore and Malaysia. Some 250 employees dispatched from Japan are currently working in the Asian region, including China, along with about 1,550 local staff.

■ United States
The foundation for our overseas business operations was established when we entered the U.S. market in 1960. We are currently conducting energetic service activities in the states of Illinois, Indiana, Ohio and Kentucky with a focus on Japanese customers.



GC Europe Head Office Building (Belgium, 2013)



Changi Airport, Terminal 4 (Singapore, completion scheduled for 2017)



PT. Sanko Gosei Technology Indonesia Factory (Indonesia, 2012)



Amada Solution Center in Schaumburg, IL (U.S.A., 2008)

■ Airports



Kuala Lumpur International Airport Satellite Building (Malaysia, 1998)



Bangkok International Suvarnabhumi Airport (Thailand, 2006)



Dubai International Airport (Dubai, 2008)



Changi International Airport Terminal 1 Building Upgrade (Singapore, 2011)



Hamad International Airport Emiri (Royal) Terminal (Qatar, 2013)

■ Major works



Kia Motors European Headquarters & Design Center (Germany, 2007)



Yamazaki Mazak CE, Poland Technology Center (Poland, 2011)



Makita Belgium Headquarters and Logistic Centre (Belgium, 2012)



Aisin AI (Thailand) No. 3 Factory 2 (Thailand, 2013)



Toyota Motor Engineering & Manufacturing (China) Phase 1 (China, 2013)

Urban and Regional Regeneration

Recent architectural design and construction work in major urban and regional regeneration projects has included participation in projects in the Marunouchi, Nihonbashi, Akasaka, Roppongi and Shinagawa districts of central Tokyo, construction of the tallest high-rise office building in central Japan across from Nagoya Station and redevelopment projects in the Umeda, Nakanoshima and Abeno districts of Osaka. We are also proactively involved in many other urban redevelopment projects, PPP and PFI projects as well as new development projects. We are proud of our contributions to the regeneration of cities and communities as well as to urban creation.

Urban redevelopment projects

Meguro Station District Urban Redevelopment Project

We were selected to participate in this joint venture urban redevelopment project encompassing some 180,000 square meters around Tokyo's Meguro Station in 2008 based on our proposal for a complex comprising an office and commercial building, a residential building and a "wooded area" for recreation and relaxation. Administrative staff assigned to the project gained a consensus among the 130 landowners and conducted administrative negotiations leading to our selection in 2012 as specified (joint venture) agent for the design and construction work. Completion is scheduled for 2017.



Rendering of the full project



Rendering of the office building

PPP and PFI projects

Osaka Medical Center for Cancer and Cardiovascular Diseases

Osaka Medical Center for Cancer and Cardiovascular Diseases This PT project will establish, maintain and operate an advanced hospital to provide highly specialized treatment for cancer and circulatory organ patients. Construction will begin in summer 2014, and the hospital will open in spring 2017. A group led by Takenaka was selected through a public tender by the Osaka Prefecture Hospital Organization. This representative PFI project requires us to conduct statistical process control (SPC) management and general coordination over the approximately 20 years of the project period in addition to the original design and construction work.



Rendering of the planned building

Design: Nihon Sekkei / Takenaka Corporation (joint design project)
Construction: Takenaka Corporation

Overseas development projects

Grand Hyatt Kauai Resort and Spa

Takenaka has handled everything from development to construction and operation of the Grand Hyatt Kauai Resort and Spa on Kauai, a Hawaiian island renowned for its abundant natural environment. Since opening in 1991, the Hyatt has ranked among the top ten resorts in Hawaii every year. Built on a 103-hectare site, it features such facilities as restaurants serving various international cuisines, a spa and a PGA golf course. Business activities rooted in the local community over many years have established significant credibility for Takenaka Corporation among Kauai residents.



Design: Wimberly Allison Tong and Goo
Construction: Takenaka Corporation (U.S.A.)



Rendering

Nihonbashi Diamond Building

Designated in 2007 as one of Tokyo's Selected Historical Buildings, this 1930 structure is being preserved and regenerated as a value-added contemporary office building with consideration for the environment. Public areas will pass on the local community's history, and the project as a whole will contribute to revitalization of the economy and culture of the Nihonbashi district. (Completion is scheduled for 2014)

Design: Mitsubishi Jisho Sekkei Inc. and Takenaka Corporation
Construction: Takenaka Corporation



Rendering

Shinjuku Toho Building

This redevelopment project will integrate the old Shinjuku Koma Theater into the surrounding community. The site will be reborn as a facility complex featuring an urban hotel with 1,000 guest rooms, a multiplex cinema with 12 screens, retail stores and amusement facilities. This combined with its symbolic exterior design is expected to touch off a series of redevelopment projects in the Shinjuku Kabukicho entertainment district. (Completion scheduled for 2015)

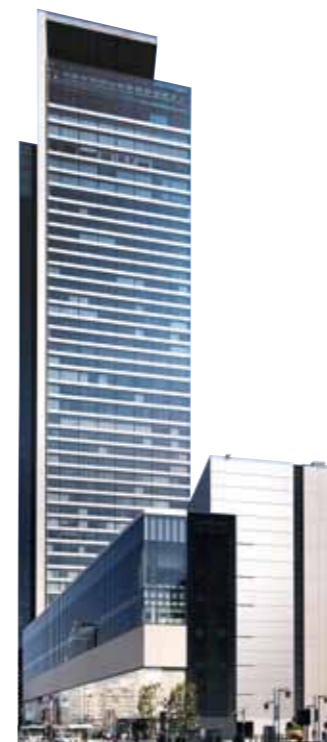
Design and construction: Takenaka Corporation



Grand Front Osaka

This large-scale urban development project involves a total floor area of some 570,000 square meters in a district spread over approximately seven hectares that is designated as a special urban regeneration area. Takenaka Corporation is not only participating in planning, design and construction but also acting as a partner in the project.

Basic design: Nikken Sekkei Ltd., Mitsubishi Jisho Sekkei Inc., NTT Facilities, Inc.;
Construction design: Nikken Sekkei Ltd., Mitsubishi Jisho Sekkei Inc., NTT Facilities, Inc.,
Takenaka Corporation, Obayashi Corporation;
Construction: Takenaka Corporation (joint venture)



Midland Square

This project concerned redevelopment and integration of the Toyota and Asahi buildings. We were also consigned the planning production and leasing operation for the renovated building, Central Japan's tallest, located in a primarily commercial urban regeneration zone.

Design and construction:
Takenaka Corporation (joint venture)



Otemachi Center Building

This is a development project in which we participated in Tokyo's Otemachi financial district. The major renovation created a comfortable business environment on the site with its optimal location.

Design and construction: Takenaka Corporation



Crystal Tower

This office building, we took part in building, is located within the Osaka Business Park surrounded by an abundance of nature. Office windows look out on a stunning panoramic view of Osaka Castle.

Design and construction: Takenaka Corporation



One Fleet Place

The Takenaka Group participated in construction of this London office building in September of 2013 as part of efforts to expand our overseas real estate business. Many global corporations have established their European locations in the same district.

The scales of the photographs and actual buildings differ.

Solutions on the Leading Edge

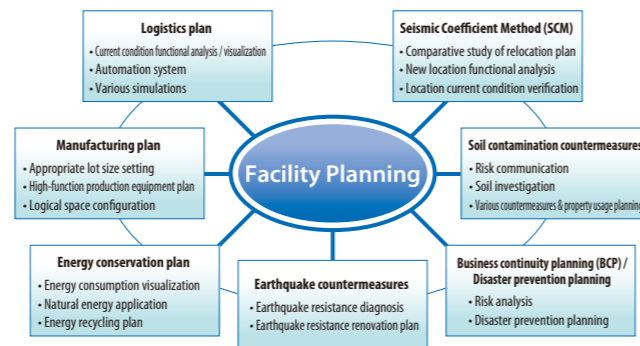
Our business requires speedy responses to maintain pace with changes in the market, increasingly sophisticated building environments, and advances in provision of safety and providing security. We cater to our customers' needs with total engineering that extends from the project planning stage through building plan development, design and construction and on to after-sales service.

Activities for manufacturing and logistics facilities

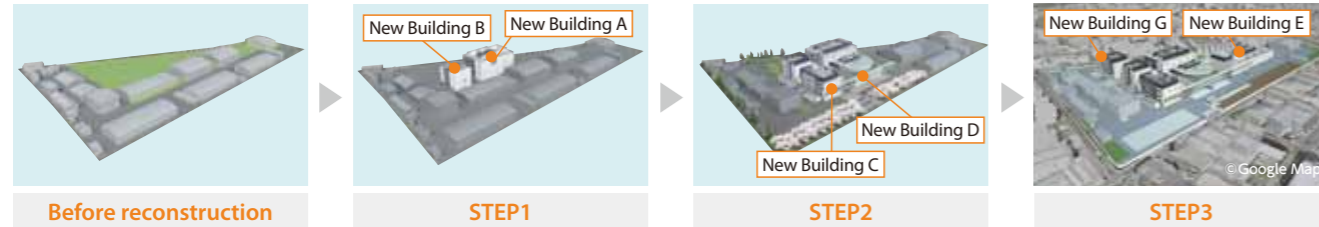
Restructuring plans for manufacturing plants

We support the continuous progress of our customers' business operations by formulating plans for restructuring manufacturing facilities that match their business plans, including production capacity enhancement, measures responding to building aging and effective utilization of the sites. We achieve restructuring of production plants with "zero opportunity loss" by proposing comprehensive facility plans extending beyond simply building new facilities to include reconstruction as well as relocation and startup of production facilities.

ISHIFUKU Metal Industry Kusaka Plant Reconstruction



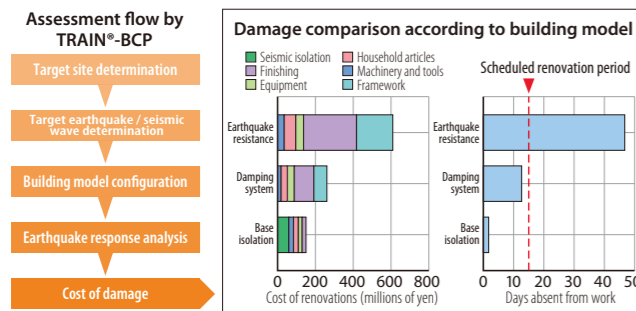
Steps in reconstruction



Business Continuity Management

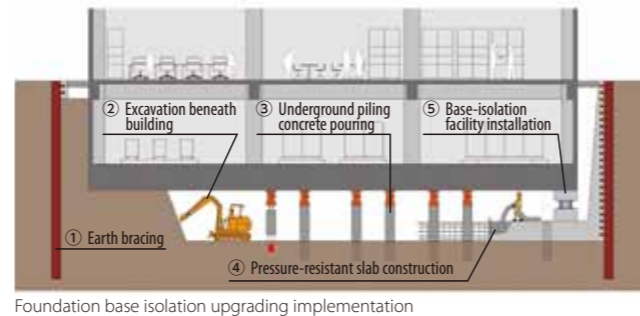
Earthquake Damage Assessment System

The TRAIN®-BCP earthquake damage assessment system employs earthquake scenarios to predict damage to buildings and provide data for formulating countermeasures in business continuity planning (BCP). It can determine the potential costs of damage by comparing current structures with countermeasures such as seismic isolation and vibration control and assess the efficacy of countermeasures in terms of restoration work periods and days of suspended operation. It can also assess damage resulting from long-period earthquake ground motion.



Seismic isolation retrofitting of occupied buildings

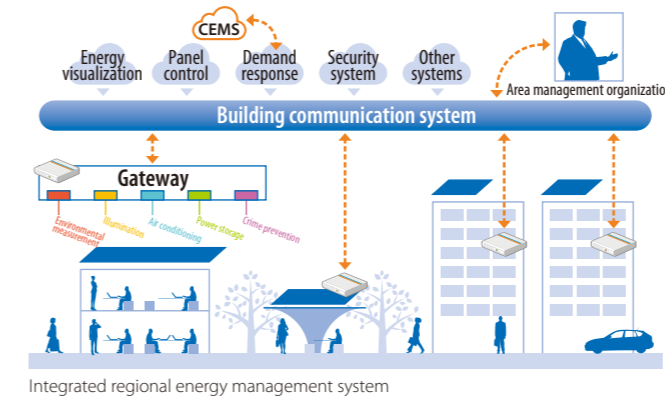
Seismic isolation retrofitting, which can greatly reduce shaking when a major earthquake strikes, contributes significantly to BCP, both by enhancing the earthquake resistance of existing structures and by preventing damage to furnishings and fixtures, production equipment and servers. Buildings can remain in operation, moreover, even while the retrofitting work is under way. We have accumulated many case examples of the technology's implementation for structures such as office buildings, research facilities, department stores and government buildings.



Smart communities

Fusion of building facilities with ICT

Our efforts to realize smart communities have included conducting trial fusion of buildings and urban functions with information systems. In the process, we developed the "Building Communication System" as a platform for sharing information on the environments inside and outside buildings with building facilities and their residents and management. This has enabled us to transfer facility systems to a cloud-computing environment and employ large-volume data for both building interiors and exteriors.



Smart innovation of existing city blocks

We are conducting a renovation project designed to rebrand the city blocks occupied by the Osaka Business Park, where we have been continuously involved in urban creation since 1960. Beginning with formulation of a renovation policy aimed at realizing a low-carbon city in 2011, we formulated a plan for an information platform to optimize energy management on the city blocks and proposed a low-carbon work style involving space sharing as well as a power supply system involving corporate-owned electric and plug-in hybrid vehicles, for which technical validation has been initiated. Activities such as these are improving environmental and disaster prevention performance, thus contributing to sustained regional progress, and the technologies and expertise fostered through these efforts can be applied to various city blocks in other locations.



Moen-Wood®

Wooden structures are receiving growing attention today, both for their ability to contribute to a sustainable society and their CO₂ reduction effects. A newly developed Takenaka technology called Moen-Wood® produces highly fire-resistant timber columns and beams. Recently certified fire resistant for one year by the Ministry of Land, Infrastructure, Transport and Tourism, the technology can be used to build four-story wooden structures, regardless of the building site, application or area, or to add four wooden stories to the top of a building. The technology has already been applied in projects for the Osaka Mokuzaei Nakagai Kaikan (Osaka Prefecture), Southwood (Kanagawa Prefecture) and Aeon Town Shinfunabashi (Chiba Prefecture).



Osaka Mokuzaei Nakagai Kaikan

Particle beam cancer treatment system / PET diagnosis

Positron emission tomography laboratories, which have proven capable of early cancer detection, require highly reliable radiation protection technologies. We have earned the top ranking for designing and constructing these facilities in Japan. Drawing on our abundant experience with high-energy accelerator facilities, we are actively developing heavy particle and proton therapy facilities to provide state-of-the-art cancer radiotherapy. We have realized treatment rooms with a free, open environment prioritizing patient comfort at the Heavy Ion Medical Accelerator in Chiba (HIMAC), which we constructed in collaboration with equipment makers at the National Institute of Radiological Sciences.



Heavy particle radiotherapy room



HIMAC Research Center of Charged Particle Therapy

Principal Domestic Takenaka Group Companies

Companies in the corporate group headed by Takenaka Corporation respond to the varied needs of customers through every stage of a building's life cycle.

■ Takenaka Civil Engineering and Construction Co., Ltd.

Crafting civil works in consideration of people and the environment

Takenaka Civil Engineering and Construction is the Takenaka Group member company responsible for civil engineering works. Its role is to promote social progress and affluent lives for people by establishing social infrastructure in accordance with the Group's Management Philosophy, "Contribute to society by passing on the best works to future generations." It also engages in corporate activities with a focus on "consideration for people" aimed at responding accurately to such needs as environmental protection, energy conservation and urban regeneration based on an Environmental Policy of "Striving to build social infrastructure that coexists harmoniously with the environment and contributes to the sustainable development of society." The Environmental Message defining the company's mission, "Connecting people with nature," guides all its employees as they walk alongside their customers in an effort to create agreeable future living environments.



Daishi Junction on the Kawasaki section of the Tokyo Metropolitan Expressway

■ TAK Living Corporation

Bringing the warmth of wood into living environments with dependable craftsmanship

TAK Living has a proud history of 65 years of operation as a construction company specializing in fixture and furniture woodworking. Designers with mastery of the processes and fine points of woodworking employ the latest CAD systems to conduct detailed design from the project planning stage onward, and skilled technicians perform careful examinations of the lumber procured both in Japan and overseas in order to craft products under strict quality control in our own manufacturing plants. This company provides people with more comfortable lives by responding to the needs of its customers with dependable craftsmanship, including construction work conducted to build traditional timber structures.



A manufacturing process at a Takenaka factory

■ TAK E-HVAC Corporation

Providing total engineering for building facilities

TAK E-HVAC is a comprehensive facilities provision company that creates superior architectural environments through total engineering of electrical, water supply and drainage and air-conditioning facilities. The company provides facilities to satisfy a wide variety of needs by deploying its comprehensive, highly advanced engineering capabilities for tasks encompassing everything from project proposal to construction work and after-sales service. It also seeks to help build a sustainable society, by contributing to environmental quality improvement through responses to needs across a wide range, from construction of mega solar power generation systems to energy conservation diagnostics.



Mega solar power plant construction

■ Asahi Facilities Inc.

Protecting property values and customer safety

Since its establishment in 1969, Asahi Facilities has handled building operation and maintenance for the Takenaka Group during the operational stage of buildings life cycles. Buildings become superior assets when they continue to function over extended lifetimes. Asahi Facilities seeks to establish itself as its customers' best partner by helping them derive greater value from their buildings, offering superior, more attentive services designed to protect their property value, including operation and maintenance services, security services and building management services that optimize care for the buildings in conducting cleaning and other tasks as well as insurance agency services that cover risk management.



A training session at a Takenaka technical training center

Technological development by the Takenaka Corporate Group

The Takenaka Research and Development Institute is the group's principle supplier of the leading-edge technologies that society requires in the areas of environmental preservation, safety and security as well as of production innovations and research and development of innovative proprietary seed technologies. It is contributing to achievement of a sustainable society by providing the world with industry-leading technologies and solutions in every aspect of urban creation.

Takenaka Research and Development Institute

Established in Tokyo in 1953 and relocated to Chiba New Town in 1993, the Takenaka Research and Development Institute provides value to customer satisfaction by creating and serving as a proving ground for new technologies to meet tomorrow's needs. Specialists in a varied range of fields related to construction gather here to perform research at the world's highest level in collaboration with other research institutions in Japan and overseas. An exhibition hall in which visitors experience cutting-edge technologies firsthand offers customers hints for discovering solutions and creating new businesses, and plays a role in disseminating information that can uncover potential needs. The institute develops technologies for future urban development in the four domains of technology contributing to the global environment, technology supporting safety, security and comfort, technology creating leading-edge architectural environments and technology enabling advanced construction.

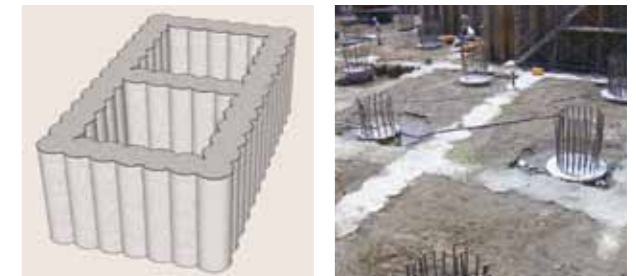


Exterior view of the Takenaka Research and Development Institute

www.takenaka.co.jp/takenaka_e/services/research/

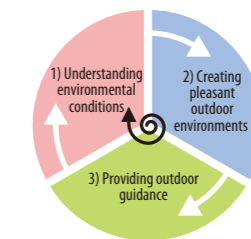
Safe, secure and practical fire prevention technologies

Among its proactive efforts to improve fire prevention technologies in terms of both expertise and equipment, the company established Japan's largest fire-resistance laboratory on the premises of its Research and Development Institute in 2009. Able to handle up to 30 MN (meganewtons) of load and heating for eight hours, the facility conducts full-scale experiments to collect detailed data on fire disasters. Takenaka leads the way in incorporating performance design, serving the needs for safety and economy simultaneously while facilitating rapid responses to customer needs. Fire-resistant coverings are incorporated in fire-resistance designs, for example, after verifying their safety in fire disaster simulations. Safe evacuation in the event of fire can also be verified accurately by indicating the evacuation and smoke descent times with high-precision simulation technologies. In addition, an advanced examination technology developed in 2007 has significantly shortened the time required to convert tenant buildings to different uses which formerly took considerable time.



Groundwork and foundation technologies for earthquake disaster prevention

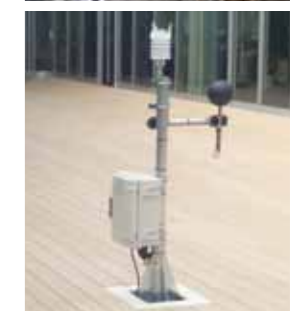
Successes in developing and applying groundwork and foundation technologies include a proprietary technology for piled raft foundations that support buildings through combined use of a direct foundation and subsidence-reducing piles. This is accompanied by a liquefaction-prevention technology employing the TOFT construction method and soil-optimization components arranged in a grid formation.



Fireproofing experimentation building



Outdoor office



Measurement / Results display equipment

"Smart" cities offering "lively, creative work styles"

Our proprietary Sotowork index® technology assesses outdoor working comfort levels based on temperature, wind velocity and sunlight data, and distributes the information to smartphones and other devices. Employees' health and creativity are promoted by encouraging them to leave their desks when possible and work outdoors while experiencing with nature ("Sotowork" means "outdoor work").

We will contribute to the realization of a sustainable society in the future by enhancing dialog with stakeholders including the global environment, local communities, customers, employees and cooperating companies, and by striving to ascertain and solve social issues through our business activities.

Page

Global Environment

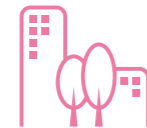
Leaving a beautiful Earth to future generations



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Local Communities

Contributing to the sustained progress of local communities



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Customers

Contributing to the business growth of customers



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Employees and Cooperating Companies

Growing with people in our industry



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Main Activities Planned for 2013

Areas of Activity with Stakeholders		Main Activity Plans	Key Activity Results / Concrete Examples
Global Environment	Balance with nature	<ul style="list-style-type: none"> Expansion of biodiversity-conscious projects and full assessment of company-owned lands Expansion of sensitivity value assessments 	<ul style="list-style-type: none"> Expansion of biodiversity-conscious projects and full assessment of company-owned lands Verification of comfort levels, intellectual productivity
	Low-carbon society	<ul style="list-style-type: none"> Increased numbers of environmental enhancement and energy conservation improvement projects Reduction of CO₂ emissions in the construction stage 	<ul style="list-style-type: none"> Project expansion through environmentally friendly design and environmental technology development Continued efforts to reduce CO₂ emissions in the construction stage
	Resource recycling	<ul style="list-style-type: none"> Reduction of final disposal volume through recycling of construction by-products and reduced by-product generation Resource-saving technology and construction method development 	<ul style="list-style-type: none"> Advancement of 3R activities through improvements in the distribution stage and adoption of new construction methods Technological development for practical use of biogas systems, etc., in building interiors
	Foundation for environmentally conscious activities	<ul style="list-style-type: none"> Continuation of educational and learning activities and information transmission outside the company 	<ul style="list-style-type: none"> Holding of environmental competitions and symposia and observance of Environment Month Minister of the Environment's Award for efforts to combat global warming through environmental-awareness activities
Local Communities	Social contribution activities and interchange with local communities	<ul style="list-style-type: none"> Continued support for community contribution activities by individual group business entities Support for activities initiated by employees 	<ul style="list-style-type: none"> Cooperation with Kodomo no Machi Ishinomaki ("Ishinomaki, City of Children") project and continuation of community contribution activities such as increased use of wood in urban area construction
	Dissemination and development of knowledge and technology	<ul style="list-style-type: none"> Stepped-up activities to pass on construction know-how to the next generation Publicizing of the educational precedents set by employees with high levels of expertise and of the company's masterworks 	<ul style="list-style-type: none"> Implementation of "Naniwa Demaejuku" private enterprise training and personal experience classes for employees Realization of training of next-generation human resources by the company's training centers
	Passing on the traditions and culture of architecture	<ul style="list-style-type: none"> Continued activities and reinforced collaboration with three aid organizations 	<ul style="list-style-type: none"> Activities with aid organizations and issuance of the <i>Approach</i> quarterly public relations magazine
Customers	Quality improvement / Practice of craftsmanship	<ul style="list-style-type: none"> Improvement of quality elaboration and processes based on quality assurance system Improvements from the basic planning stage to production precision with customer agreements as a basis, and unified quality elaboration with companies 	<ul style="list-style-type: none"> Quality assurance system-based unified quality elaboration with customers and cooperating companies Increased accuracy of construction plans created using 3D modeling
	Adding value to buildings	<ul style="list-style-type: none"> Proposals for energy conservation, and safety and security solutions Conservation and regeneration of historical structures making the best use of accumulated design and construction technologies 	<ul style="list-style-type: none"> Proposals for renewal and offering of solutions in consideration of natural, regional, societal and functional characteristics based on customer needs
	Safety, security and abundance	<ul style="list-style-type: none"> Offering high value-added buildings and technologies with safety and security secured through base isolation / earthquake resistance, liquefaction countermeasures, tsunami countermeasures 	<ul style="list-style-type: none"> Development and introduction of safe, secure technologies through such efforts as more effective safety mesh construction and 3D simulations of tsunamis and flooding Implementation of base isolation renovations with tenants in place
Employees and Cooperating Companies	Widely diversified human resources	<ul style="list-style-type: none"> Promotion of diversity management 	<ul style="list-style-type: none"> Stronger emphasis on employment of diversified human resources Promotion of positive action
	Nurturing personnel to become tomorrow's leaders	<ul style="list-style-type: none"> Continued maintenance of promotion systems supporting independent career formation and capability development by employees 	<ul style="list-style-type: none"> Strengthening of human resources training to expand the aptitude of individual employees who can create plans and respond to globalization. Continued reinforcement of takenaka excellent leadership system to cultivate construction expertise among young employees
	Work-life balance	<ul style="list-style-type: none"> Forwarding work-life balance promotion planning and continued efforts to reduce time spent on general labor 	<ul style="list-style-type: none"> Perfection of employee support systems and reinforcement of their implementation
	Health and safety	<ul style="list-style-type: none"> Thorough risk assessment and implementation of health and safety management with respect to actual locations, objects and times based on the assessment results Continued promotion of successful policies such as mental and physical health examinations 	<ul style="list-style-type: none"> Prevention of falling accidents through application of labor health and safety management systems Implementation of various medical examinations, and care programs concerning mental and physical health
Management	Organizational governance	<ul style="list-style-type: none"> Increasingly high CSR and compliance consciousness 	<ul style="list-style-type: none"> Implementation of education activities related to CSR and compliance
	Crisis management	<ul style="list-style-type: none"> Support for information security consciousness enhancement and security countermeasures for group and cooperating companies Improved BCP assuming a major earthquake 	<ul style="list-style-type: none"> Implementation of e-learning concerning information security and training, and security patrols for group and cooperating companies Conducting comprehensive earthquake disaster training assuming occurrence of a powerful earthquake along the Nankai Trough
	Fair business practices	<ul style="list-style-type: none"> Promotion of procurement policy penetration and dissemination Continued education and learning activities to assure compliance with rules and regulations 	<ul style="list-style-type: none"> Conducting explanation meetings for subcontractors concerning the company's procurement policies and action guidelines Continued instruction and guidance of subcontractors concerning the issue of failure to enroll in social insurance programs Continued activities to assure compliance with construction industry regulations and deal with antisocial forces
	Group companies	<ul style="list-style-type: none"> Revision of group companies' corporate ethics statements, including those of overseas affiliated companies, and maintaining a foundation for promoting CSR 	<ul style="list-style-type: none"> Completion of revision of codes of corporate behavior for group companies and development of CSR and compliance enlightenment education
	Dialog with stakeholders	<ul style="list-style-type: none"> Understanding society's evaluation of the company through dialog with stakeholders and applying the results to operations 	<ul style="list-style-type: none"> Conducting dialog with stakeholders and deploying countermeasures in response to results

Leaving a beautiful Earth to future generations

We promote activities aimed at creation of a low-carbon, resources recycling society that coexists harmoniously with nature. We revised our Environmental Policy in 2012 to formulate a shared, uniform policy for our group as a whole. We also established biodiversity activity guidelines to expand our environmentally conscious activities. For the long term, we formulated an Environmental Message, "Connecting People with Nature," in 2010 that defines our target images for architecture and cities looking ahead to 2050, and we prepared a road map for achieving these objectives. For the near term, meanwhile, we have formulated a three-year Environmental Plan that sets target values for key objectives to be achieved each fiscal year.

Balance with nature

Activities targeting biodiversity

A project conducted by the Japan Business Initiative for Biodiversity (JBIB) under the direction of researchers from the company led to development of a tool for assessing the status of land use from the perspective of biodiversity by investigating the distribution of plants and animals. The tool is currently being deployed in planning and designing buildings as well as in evaluating corporate lands. It was used in planning the reconstruction of the Shiseido Building in Ginza, for example, for which we conducted a survey of animals living in the surrounding area. Wishing to attract wildlife to the rooftop garden from ponds and woods of various sizes in such natural habitats in the building's vicinity as Hibiya Park, we determined which creatures we wished to attract and selected trees and foliage for the garden accordingly. Shiseido, our customer for this project, cultivates plants as raw ingredients for cosmetic products, one of its major lines of business. Thus, the rooftop garden inspires employees with its changes through the four seasons, but it also serves as a place of learning, where employees gain awareness through emotional experience that their business is founded on a blessing of the Earth.



Thick growth of plants for use as cosmetics raw materials achieved in cooperation with a customer (Shiseido Ginza Building roof garden)



Environmentally conscious Taiwan Hakka Cultural Development Center constructed in subtropical hill country

Low-carbon society

Promotion of environmentally conscious design

We pursue environmentally conscious design in our efforts to realize net zero energy buildings by 2020. Every aspect of the buildings we design is subjected to a meticulous in-house environmental performance assessment in accordance with CASBEE. * We have also implemented a diverse range of evaluation methods, including LEED* in recent years. The building heat load in the Taiwan Hakka Cultural Development Center, a Taiwanese national cultural museum completed in 2012, was significantly reduced despite its subtropical location by proactive use of natural winds and the light shining on the surrounding hills and waters, and reuse of rainwater. We were awarded a Gold Medal from the Taiwan Green Building certification program for environmentally conscious architecture in Taiwan. More than a year since the construction was completed, the fast-growing tropical trees have come to dominate the hillside scenery (photo shows the scenery of the site about half a year after the completion of construction).

Notes: CASBEE and LEED are environmental performance certification programs for architecture developed and applied in Japan and the United States.

Comfort and environmental performance

We design buildings with a stress on both people's comfort and satisfaction, and environmental performance. We collect data in collaboration with our customers on the mentalities and activities of people who work in the indoor environments we create, as exemplified by our current examination of the effects of the new wing of the Shionogi Pharmaceutical Research Center we completed in 2011. The examination has shown that the new wing's energy consumption was reduced by more than 10 percent as compared with the existing wings while the satisfaction of its users with the thermal environment was also improved. Communication frequency, an indicator of intellectual productivity, has also been increased through effective use of space.

VOICE

VOICE

The new wing of the Shionogi Pharmaceutical Research Center (SPRC4) was designed and constructed by Takenaka Corporation based on five key concepts: revitalizing creative communications on the first floor; realizing an efficient, flexible research environment on the second floor; installing a secure, reliable enterprise platform system on the third floor; establishing an environmentally friendly facility on the fourth floor; and creating a superior research institute on the fifth floor. I

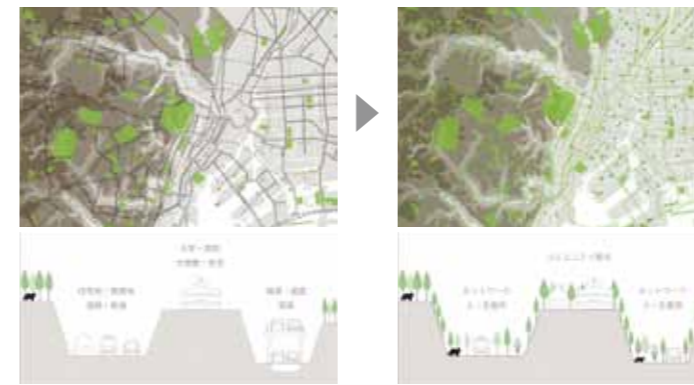
know, based on monitoring of conditions at the new wing, how actively the researchers we have gathered here from four other institutions are exchanging information and collaborating with each other day in and day out to develop new medicines. Studies conducted at SPRC4 to create new drugs will certainly contribute in significant ways to realizing our organization's policy of "supplying the best possible medicines to protect the health and well-being of the patients we serve."



SPRC4 construction project
Construction manager
Shionogi General Service Co., Ltd.
R&D Support Department
Kunio Fujimori



Special casing for exterior glass curtain wall installation (reusable container)



Environmental competition award-winning proposal (interconnection of hills and valleys)

Resource recycling

Activities for dual use

– Umeda Kita Yard Block B (Takenaka Corporation / Obayashi Gumi joint venture) –
A thorough separation of industrial waste materials resulted in a high degree of recycling on this site. In the future, we will treat efforts to reduce waste (and prevent its occurrence to begin with) as a particularly important issue among the 3R's (reduction, reuse and recycling).

Conducted on a mammoth scale, this project covered a total area of 295,000 square meters. Since this would ordinarily have produced an enormous volume of waste materials, we directed particular effort to waste reduction. The use of a special additive in our earth retaining work reduced the volume of construction sludge by some 30 percent. The installation of air fencing reduced concrete leakage through concrete placement joints and the volume of cement cuttings (cut scraps). The various other 3R activities implemented included replacing wooden pallets for transporting materials to the work site with reusable plastic pallets, preparing steel frames to bring exterior materials to the work site and reduced use of wood chips and packing materials. Our efforts earned us the Minister of Land, Infrastructure, Transport and Tourism Award for Promotion of 3R Activities.

Foundation for environmentally conscious activities

Continuation of awareness-building activities

– Takenaka Environment Symposium: Environmental Month –
The Company has held a symposium annually since 2009 featuring an internal competition accompanied by public reviews as well as guest lecturers and other invited guests. In 2013, the participants competed on the topic of "Imagining the Smart Cities of 2050 and Proposing Their Ideal Architecture and Means to Realization." Held at the company's Tokyo Main Office, the symposium featured a keynote lecture by the architect Hiroshi Naito, presentations of the competing proposals and a final examination of each, and finally a panel discussion in which opinions were exchanged on such issues as visions of the near future. "Environmental Month," an internal awareness building activity observed every June since 2006, was extended to other Takenaka Group companies in Japan in 2012 and to our overseas offices as well in 2013. Employees throughout the Takenaka Group put up posters, wear badges and participate in a lighting reduction campaign during the month.

WEB WEB publication contents

www.takenaka.co.jp/enviro/vision/ex

Environmental policy / Activities targeting biodiversity

Balance with nature

- Successful natural harmony planning

Low-carbon society

- Case examples of environmentally friendly design

Resource recycling

- Biogas utilization

Foundation for environmentally conscious activities

- Environmentally friendly equipment dissemination activities

Contributing to the sustained progress of local communities

Takenaka Corporation deploys the "spirit of craftsmanship, knowledge and skill" nurtured through its business operations to benefit society in innumerable areas. We are contributing to fostering human resources for the next generation and to the progress of regional communities by passing on architectural traditions and culture through the activities of corporate foundations and seasonal public relations periodicals, making the services of our personnel available to academic societies and educational institutions, opening corporate educational facilities and promoting the use of these facilities to disseminate knowledge and technologies

Social contribution activities and interchange with local communities

Cooperation with the second round of the Kodomo no Machi Ishinomaki ("Ishinomaki, City of Children") earthquake disaster restoration event

Takenaka Corporation has been commissioned by the Japan Committee for UNICEF to implement a curriculum entitled Kodomo to Kizuku Fukko Machizukuri ("city building with children") in cooperation with Yamagata University to support the development of children in the earthquake and tsunami disaster area. In one program conducted by our employees, local governments and volunteers in 2013, Kodomo no Machi Ishinomaki, an entire shopping district in Ishinomaki City, Miyagi Prefecture, was leased to simulate the mechanisms of a local economy, with children seeking employment, performing jobs and purchasing goods with their pay. In another, Future Urban Development of Nanago, children from Nanasato Elementary School in Sendai, Miyagi Prefecture planned cities as they envisioned them 10 or 15 years in the future through activities such as constructing models. We intend to continue to pursue activities that support restoration of disaster-struck areas with a primary focus on the children who represent the future.



A shopping street transformed into an educational playground



Earning concentration on the job at hand



Simulated personal experience at the Takenaka Practical Technology Training Center



Practical training at the Takenaka Carpentry Tools Museum



Resonance experiment using inverted pendulums



Comparison of bracing systems effectiveness

VOICE

Dissemination and development of knowledge and technology

Private Sector Business Seminar for Teachers

In summer 2013, we hosted a three-day seminar for 35 elementary and junior high school teachers from Takasaki and Osaka cities as part of the Private Sector Business Seminar program for Teachers program sponsored by the Japan Institute for Social and Economic Affairs. The first day began with lectures at our Takumi and Omoi training centers, followed by virtual experience in building construction using the Multiple Dwelling Housing RC Mock-Up. The second day opened with a presentation on building structures by a volunteer group of Takenaka employees and continued with a tour of the 300-meter Abeno Harukas skyscraper construction site. Day three featured a tour of the Takenaka Carpentry Tools Museum, followed by a discussion concerning ways in which the participants could apply their seminar experience to educating children. We place a high value on dialog with teachers of the children who will bear responsibility for the society of the future.

"Naniwa Demae Juku" (Naniwa Training on Wheels) experiential lecture opens a new lecture series at a junior high school Tondabayashi

Our Osaka Main Office has conducted a series of lectures in connection with its "Naniwa Demae Juku" training on wheels program for the past three years with the 2013 sessions held at Hatsushiba Tondabayashi Junior High School in Tondabayashi, Osaka Prefecture. Lessons for 120 students on the topic "structures you can feel" included resonance experiments using hand made models and experiments with reinforced braces. Students acquired a better understanding of building structures and earthquake preparedness in an enjoyable context. The school principal has asked us back next year, and we plan to provide services of this type proactively into the future.

VOICE

My experience with Takenaka Corporation dates back to May 2011 when the Association for Children's Environment conducted the International Competition for the Disaster Recovery Plan after the Great East Japan Earthquake. Takenaka's proposal to let children play the lead role in the restoration process was exactly what we were looking for. It is never easy to conduct programs led by children, but I have clear memories of children in Iwate, Miyagi and Fukushima prefectures talking exuberantly about their future. I believe this became possible only because Takenaka Corporation played a central role and acquired a consensus, organized information and worked out details in a theoretical manner while consistently considering the feelings of everyone involved. I feel deeply grateful for Takenaka's contribution and remain hopeful that it will continue its invaluable collaboration.



Japan Committee for UNICEF Executive Director
Ken Hayamizu



51st Takenaka Educational Society graduation celebration



Exhibit showing the atmosphere of Kengo Usui's carpenter's plane workshop



Hands-on experience class in making your first knife



Actual large-scale model of a restored "summer house"



A get together at the "summer house"

Passing on the traditions and culture of architecture

Activities of public foundations

We contribute to society through CSR activities aimed at connecting the past, present and future by building on three pillars: "passing on traditional techniques to the present and future generations;" "transmitting modern architectural culture to society;" and "nurturing personnel to be tomorrow's leaders."

• Takenaka Ikueikai Public Foundation:

The Takenaka Ikueikai is now entering the 52nd year since its founding. During these years, the foundation has been conducting activities intended to nurture and educate the young, based on the philosophy of the company's founder and the foundation's first president, Tobei Takenaka: "Take the path of truth, keep good faith and be steadfast; Be industrious and fulfill your responsibilities; Devote yourself to your work with discipline; Act in harmony with the organization; and Pursue prosperity for all of society." The scholarship program at the core of these activities provides scholarships for about 180 students each year as well as financial assistance for overseas studies. The Foundation will continue to provide assistance to architectural researchers who demonstrate potential as well as support for people in the fields of culture and art.

• Takenaka Carpentry Tools Museum (Hyogo Prefecture):

The Takenaka Carpentry Tools Museum was opened in 1984 to display carpentry tools that have been collected and preserved as part of Japan's cultural legacy and to pass on the skills and spirit of carpentry to future generations through research and exhibits. The only museum of carpentry tools registered in Japan, it serves the community proactively through regular and special exhibits, hands-on classes and other programs. The museum is planning an exhibition entitled "The Plane Smith Kengo Usui" to instruct visitors on the making of a "plane" and present a scientific analysis of the artisan skills employed in the tool's use as part of a retrospective on the life of master plane smith Kengo Usui, in whose footsteps many who came after him have walked. <http://www.dougukan.jp/contents-en/>

• Gallery A Quad (Tokyo):

This gallery at our Tokyo Main Office holds exhibits with architectural themes. A 2013 exhibition entitled "Summer House of Tove Jansson: The Story of Moomin and Life on Klovharu Island" introduced the lifestyle and daily life of the author of the Moomin books. It included a full-scale model of her cabin on the small island on which she and her brother spent 30 years.



WEB publication contents

Social contribution activities and interchange with local communities

- Regional exchange in the workplace
- Promoting woodification of urban areas

Dissemination and development of knowledge and technology

- Cooperation in educational programs for students
- Conducting special lectures at schools

Passing on the traditions and culture of architecture

- Issuance of the *approach* quarterly public relations magazine

www.takenaka.co.jp/enviro/vision/ex

Contributing to the business growth of customers

We will continue to create "safe, secure and attractive works of art" that satisfy our customers and to enhance our credibility in society by developing and refining leading-edge technologies while assuring quality and adding value to buildings throughout their life cycles. We reorganized our Quality Control Department as the Quality Department in 2013. Moreover, this by enhanced our "actual location, objects and time" workplace management structure and consolidated our quality control responsibilities to further raise the quality of our construction.

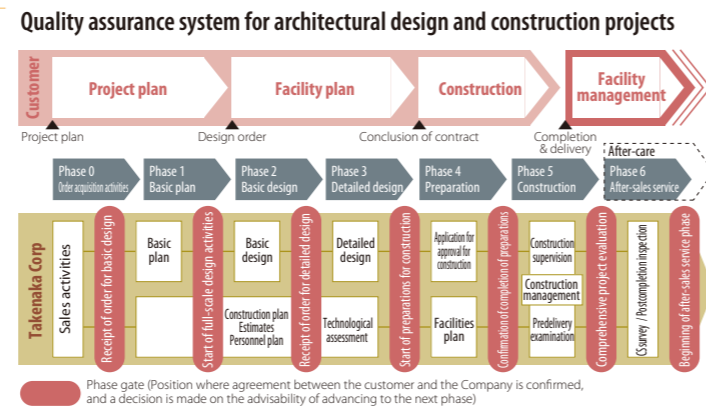
Quality improvement / Practice of craftsmanship

Quality assurance system-based activities

In our efforts to transmit customers' diverse expectations into concrete form and achieve high-quality results, we are striving to implement further improvements based on our quality assurance system, which standardizes the flow of a project's quality assurance process. Areas of improvement include built-in quality in the design and construction stages and quality inspections and feedback from customer satisfaction surveys in connection with after-sales services.

Designing in collaboration with customers

- Shiseido Ginza Building -
We invited the customer to participate in the design process for this project, which was organized to rebuild Shiseido's aging headquarters building in Tokyo's Ginza district into an advanced new building. High aseismic performance was achieved, and the latest ecological technologies were deployed. The exterior and interior were finished in meticulous detail in the spirit of the *banbutu shisei*, the source of the Shiseido name, and universal and natural materials were employed throughout and embellished with innovative design motifs. The key design adopts camellia and arabesque patterns, both symbols of Shiseido, and stresses the value placed on beauty by Shiseido's Advertising Creation Department. An original "arabesque of the future" design is employed for the imaginative aluminum shade that provides an integrated covering for the building exterior. The interior is an environment of flowing scenery with the flow directing the natural light and the movement of people's eyes. This site, on which the business was originally founded, will function as a new "base for value creation" and the origin of abundant creativity into the future.



Designing in collaboration with customers - Asahi TV Ex Tower and Ex Theater in Roppongi -

Three-dimensional models were crafted during the production stage and used throughout the construction, an approach that proved effective in contributing to rapid decision making by the personnel responsible for various aspects of the project by enabling them to examine complex details and conduct early compatibility verification of drawings as well as to formulate construction plans with a high degree of accuracy. The 3D models were applied to steel reinforcement work involving complex shapes. The structural engineers, personnel responsible for equipment, workshop staff and steel reinforcement

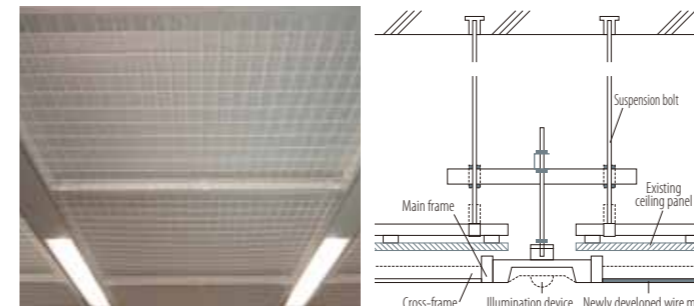
manufacturers all shared the 3D models, which enabled them to verify in advance how structural members might interfere with each other from a variety of angles, make improvements in consideration of workability that would have been difficult to achieve from drawings alone and improve the construction quality as a result. Since a single master model was used to prepare, modify and check the general drawings, detailed drawings and manufacturing drawings, thereby the conditions of all the components were centrally managed, enhancing consistency among the drawings.

VOICE

I became involved with Takenaka Corporation as a member of Shiseido's Advertising Creation Department when we were invited to participate in the design development of the Shiseido Ginza Building, and I feel grateful for the opportunity this presented. We worked with a variety of designs, exploring through trial and error, and were able in the end to implement a traditional style of architectural design in an innovative manner. Light flows in freely through the "future arabesque," projecting soft shades in beautiful patterns, and this space with its bright, open atmosphere has proved popular with our female employees as well. We never thought we would be working in a building we had helped to design, but we look forward to disseminating Shiseido's creativity around the world from this building while savoring the atmosphere of Ginza, the place of our business's original founding.



Chief Creative Director, Creation Group, Advertising & Design Department
Yoji Nobuto



Construction using the safety mesh construction method

Adding value to buildings

Renovation of an attractive urban campus

- Kagurazaka Campus of Tokyo University of Science -
We provide customers with support throughout the life cycles of their buildings' life cycles and offer proposals for adding the value buildings require based on awareness of the changes occurring in the social environment as well as contributing to solving issues facing customers. This project involved seven principal buildings that had deteriorated over the years. Major issues included uneven distribution of use among the buildings and a resulting congestion in certain areas while fences and ditches along the perimeter of the premises created a closed-in atmosphere. The solutions included redrawing the lines of flow and redistributing the uses of the buildings, establishing a new information kiosk for accessing school-related information and locating the common student areas in the lower level of each building to inhibit congestion. Thus an integrated campus with close coordination among all the university buildings was realized. An unfenced open quadrangle with a lawn fronting on the main street was created, and relaxation terraces open to the general public were located there. "Through passages" connecting historical alleyways with lanes on the campus were established to restructure the campus as an environment that is integrated into and open to the local community.

Safety, security and abundance

Safety mesh construction method

A survey we conducted following the Great East Japan Earthquake indicated that damage to ceilings presented a grave danger that would clearly be a major issue for business continuity planning (BCP) as well. The Ministry of Land, Infrastructure, Transport and Tourism has established technical standards for new ceilings exceeding certain dimensions, and action is being taken in the public and private sectors in response. Modification of existing ceilings must be performed without interrupting the building tenants' day-to-day operations, and the work must be completed quickly. We responded to these requirements and eliminated the danger of falling objects over extensive areas by developing the safety mesh construction method (joint patent pending with KK Okuji). Wire mesh installed under existing ceilings prevents damaged ceiling parts as well as heavy facility equipment from falling, thus securing the safety of people below. The existing ceiling can be dismantled without substantial construction work, and installation of the new ceiling can be completed in a short time.

WEB publication contents

Quality improvement / Practice of craftsmanship

- Efforts in design stage
- Efforts in production preparation and construction stages

Adding value to buildings

- Life cycle support

Safety, security and abundance

- Responsiveness to earthquakes / tsunamis / plagues, others
- Improved disaster area restoration

Growing with people in our industry

We strive, in accordance with a key precept of our Company Policy, "Devote yourself to your work with discipline," to create new value with all our employees aspiring to improve and gain foresight. We not only assure protection of human rights in the workplace, but we also encourage inclusion of a diverse range of individuals with highly varied characters while securing a safe, worker-friendly environment in our pursuit of greater autonomy and rewarding lives.

Widely diversified human resources

Creating workplaces in which a rich mix of people can thrive

It takes a wide variety of personnel, all performing at their best, to construct buildings that respond to diversified demands. We promote diversity management to realize a positive workplace environment for everyone, from women and foreign nationals to the elderly and physically or mentally challenged. We began to conduct hiring from this perspective in recent years, and we will continue to enhance these employment policies. We make it a priority to take positive action to expand opportunities for women in particular, and women account for a larger proportion of our new recruits each year. We also moved to secure employment for older people, who retain their sophisticated knowledge and advanced expertise even after age forces them into retirement, by implementing a rehiring program in 2004, which occurred before the introduction of regulations concerning continuing employment. Our recruitment rate for people with disabilities is 2.01 percent, exceeding the legal requirement of 2.0 percent.

VOICE



Leadership training for female employees



Leadership training for female employees



A seminar on foreign employee acceptance



A meeting of new employees in their dormitory

Nurturing personnel to become tomorrow's leaders

Devoting a year to training recruits

Since 1952 we have considered a full year as an appropriate training period for new "comprehensive career recruits" after they join the company to ensure their development as earnest employees instilled with wide-ranging knowledge and Takenaka's traditional spirit. During this period, the new employees reside in a company dormitory in Kobe, the city of Takenaka's origin. They participate in informal gatherings with management members once a month, receiving advice drawn from experience and learning about the company's management philosophy and policies as well as about the spirit exhibited by successive executives of the past and the importance of craftsmanship. They are assigned to various departments where they perform everyday duties under the guidance of mentors who provide personalized on-the-job training to give them broad-based experience in the mechanisms of architectural production and processes. Selected employees have also been dispatched to overseas affiliates since 2011 when we launched our "New Recruit Cross-Cultural Experience Training." We will continue to seek further improvements in a flexible manner in response to the changing management strategies and training needs of today's increasingly complex and diversifying social environment.



Training new recruits through personal experience of different cultures



A Chikuwakai joint new employee training seminar

Chikuwakai Joint New Recruit Training Seminars (basic etiquette and safety)

With the number of young technicians entering the construction industry contracting, the Chikuwakai recruiting and training organization has deployed its Young Personnel Training Committee to recruit them. The organization conducted joint seminars in 2013 with new recruits from every Takenaka Group member company, which participated as a step toward fostering their development as leaders of tomorrow's construction industry. The seminars presented clear educational contents in an engaging manner through basic etiquette sessions comprising lectures that combined "laughter with tension." We will continue proactive efforts of this kind to recruit and nurture young construction technicians.

VOICE

I came to Japan from Algeria to study in 1999 and have worked in the Structural Department of the Takenaka Research and Development Institute for about eight years since receiving my doctorate. Along the way I have participated in various R&D projects centered on development of aseismic reinforcement technologies. I have ample opportunities to perform structural experiments with my colleagues, and I enjoy conducting research while exchanging ideas in a wonderful work environment. I was honored with a Technical

Development Award from the Prestressed Concrete Engineering Association in 2012. I look forward to continuing my research and helping to develop valuable technologies that can meet a variety of needs for people in Japan and around the world. I also plan to continue to enjoy my hobbies of sports and travel as I work, maintaining an awareness of the need for an appropriate balance of work and life.



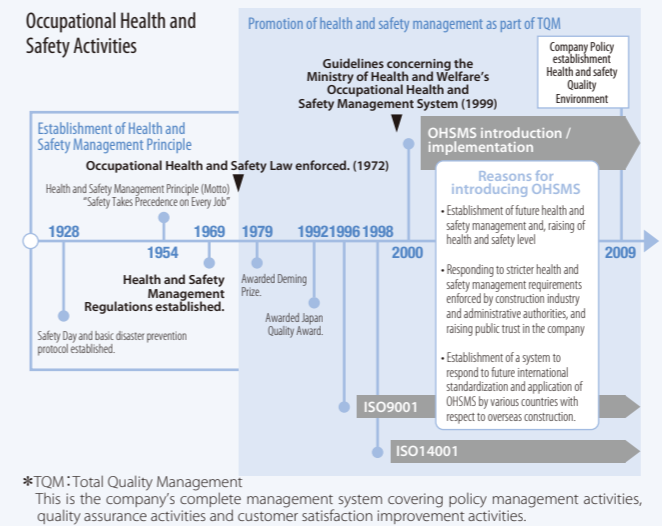
Structural Engineering Department, Takenaka Research and Development Institute, Structural Concrete Engineering Group
Hassane Ousalem

Wide-ranging support systems exceeding legal requirements (main contents)

	System	Contents
Disasters	Disaster relief donation system	Support in the event of natural disasters, etc.
	Short workday	Application possible up to the start of the fourth grade of elementary school.
Childcare	Exemption from work outside fixed hours	Application possible up to the start of the fourth grade of elementary school.
	Forward or backward adjustment of scheduled starting or finishing time	Application possible up to entry into junior high school.
	Restriction on work outside working hours	Application possible up to entry into junior high school.
	Restriction on late-night hours	Application possible up to entry into junior high school.
Nursing care	Nursing leave	Available in half-day units.
	Short workday	Application possible for 1 person in the employee's family per year. (Note)
	Flexitime	Application possible 1 time per year with no limit on the number of times. (Note)
Nursing care / sick or injured employee	Nursing care leave	Available in half-day units.
	Sick leave (expired annual paid vacation reserve system)	A maximum of 30 days of expired annual leave can be used for nursing care for a sick or injured employee or family member (paid leave service).

(Note) Period of nursing care leave not included in total.

Occupational Health and Safety Activities



*TQM: Total Quality Management
This is the company's complete management system covering policy management activities, quality assurance activities and customer satisfaction improvement activities.

www.takenaka.co.jp/enviro/vision/ex

WEB publication contents

- Widely diversified human resources**
 - Current state of female employee activity promotion
- Nurturing personnel to become tomorrow's leaders**
 - Cultivation systems
 - Current stage of global talent cultivation
 - Continued strengthening of Takenaka superior foreman system
- Work-life balance**
 - Current state of next-generation cultivation activities
 - Efforts to shorten working hours
- Health and safety**
 - Health care systems
 - Thorough labor accident prevention countermeasures

Work-life balance

Assessment of employee support programs and enhancement of their implementation

We have established an extensive range of support programs to ensure employees' ability to strike a balance between work and life so that they can concentrate on their work with peace of mind and mental latitude. These programs employ a diverse range of approaches to help employees achieve these qualities in their lives. They include a bereavement fund program for disaster-afflicted personnel, paid vacations and special work arrangements for childcare and nursing care, a sick leave program to respond to long-term illnesses and nursing care requirements, special vacations, programs for job reassignment and continuous service, and other programs to deal with eventualities in workers' lives. These programs were established and extended in response to employees' requests, and many of the support features they offer exceed the legal requirements. Substantiation of their operational functionality is also pursued proactively through such efforts as company-wide implementation every year of Childcare Leave Acquisition Promotion and Working Hour Reduction programs.

Health and safety

Activities to ensure safety

As early as January 1928, the company introduced a monthly Safety Day and published a "Disaster Prevention Guide," with the president himself making a "pledge of work safety" and a promise to "strive to eliminate all disasters from work sites forever." Since 1954, the president has delivered a message at the beginning of each year, which we publish during National Safety Week to express our commitment to safety management. We implemented the Occupational Health and Safety Management System (OHSMS) in 2000 and continue to operate in accordance with the system, conducting activities aimed at actualizing the aims of "eliminating disasters and accidents and realizing a safe and comfortable workplace." In implementing our management policies, we treat Total Quality Management (TQM) as the basis for our management activities and OHSMS as the basis for our health and safety activities, which are conducted as part of TQM in a manner similar to our ISO9001 quality management and ISO14001 environmental management. Specific examples of current undertakings include activities organized to prevent serious disasters with falling accident prevention as our highest priority.

We implement "quality management" based on our corporate philosophy of gaining customer satisfaction and society's trust and raising the company's value to society while fulfilling our social responsibilities as a corporation. To achieve these objectives, we conduct business fairly and efficiently, communicate with a broad range of stakeholders and implement a framework for periodic assessments to improve the status of our activities.

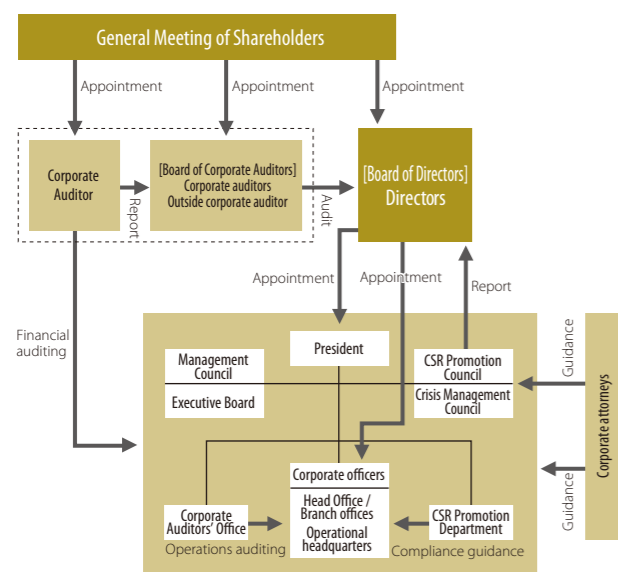
Organizational governance

Improvement of management quality and confirmation of governance for rapid, accurate decision making

The board of directors meets once a month or more often as needed in its capacity as a supervisory body for making decisions concerning corporate management and business administration. The Corporate Officer System was also adopted in 2010 to accelerate the management decision making process and enhance business administration and supervisory functions. In addition, the board is subject to fair, unbiased auditing by an accounting and auditing firm acting as an independent auditor. We have also established the Audit Office as an internal auditing organization to verify the accuracy and legitimacy of the company's operational, accounting and financial conditions.

As for corporate governance, we have developed a corporate organization framework and implemented awareness-building activities and training such as promotion of CSR activities including compliance, introduced disaster prevention and reduction activities to respond appropriately when matters involving risk arise, and promoted crisis management activities to be conducted under ordinary circumstances. Moreover, group companies are required to establish corporate codes of conduct that comply with our own, in order to improve their management organization.

Corporate Governance Organization



Establishment of framework for CSR and compliance, and introduction of awareness-development activities

We established the CSR Promotion Council headed by the executive officer responsible for CSR promotion. Then, a Compliance Advisory Committee headed by the executive officer in charge of compliance was organized to serve as a subordinate organization, and a CSR Compliance Committee was established at each branch to serve as a framework for sustaining and improving CSR and compliance. The CSR Promotion Department was established at the headquarters, and a CSR and compliance leader was appointed at each business location to promote training and awareness development. Additional means of improving CSR awareness, and sustaining and reinforcing our mechanisms for thoroughly implementing compliance include establishing multiple consultation and reporting contacts for people in the company as well as in our group companies and cooperating companies. Specific training and awareness-development activities concerning CSR and compliance include the "CSR and Compliance News," a publication dealing with CSR and compliance issues inside and outside the company. It has been issued roughly once a month since 2009 and distributed to all employees. "Compliance Month," implemented in November every year, was renamed "CSR and Compliance Month" in 2013. The newly renamed month featured a concentrated schedule of varied events, including transmission of a message from the president. Other notable activities included a CSR Executive Seminar presented by an external lecturer, implementation of a self-monitoring program through an "e-Quiz" featuring 50 questions concerning compliance, "e-learning" education about sexual harassment, production of dramatic sketches and a CSR and Compliance meeting as well as various consultation and reporting programs extending outside the company. Activities of this kind will be repeated and implemented by the companies in our corporate group and throughout our supply chain to deepen knowledge and awareness of CSR, including compliance, as well as to extend their reach.



A CSR executive seminar

A CSR / compliance meeting

Crisis management

Sustained promotion of information security measures

We have introduced information security measures to protect customers' valuable information assets. In fiscal 2013, we implemented an e-learning program for employees specifically to raise awareness concerning the need to observe information security regulations. We inspect security measures at our in-house and operations center locations, and we conduct group training and security patrols to raise awareness in our group companies as well as among our business partners. We will continue to promote information security measures while seeking their further enhancement in fiscal 2014.



Ongoing BCP-based activities for minimizing damage by natural disasters

Our BCP assumes major earthquakes striking the Tokyo area, the Tokai region and the Tonankai and Nankai regions. It involves such Group wide activities as verification of the safety of employees and their families, verification of disaster damage to our offices and corporate facilities as well as to customers buildings, and emergency restoration activities. An emergency headquarters established at each main and branch office will oversee these responses. We conducted joint earthquake disaster training in November 2013 assuming a powerful earthquake in the Nankai Trough, which could be expected to cause substantial damage over a wide area. Some 11,000 personnel from 16 group companies engaged in exercises such as verifying the safety of employees and their families and responding to tsunami disasters. They received training in getting home on foot, determining disaster damage at our corporate facilities and customer buildings, and implementing initial restoration activities. We plan to improve the effectiveness of our BCP in an upward spiral by continuing to conduct training programs that assume severe conditions in hopes they will prepare employees for practical action in emergencies.



Joint earthquake disaster training in progress

Fair business practices

Communicating full awareness of the details of changes to relevant laws and ordinances while continuing to conduct activities to support observation of the Construction Contractors Law

We pursue ongoing efforts to assure employee awareness of changes and administration trends concerning the various relevant laws and ordinances to ensure that corporate activities are conducted properly and legally. We continued to raise awareness among subcontractors and others of the issue of failure to enroll in social insurance programs in 2013. We provided instruction for companies that were not enrolled in social insurance, based on guidelines received from the Ministry of Land, Infrastructure, Transport and Tourism as well as from the Japan Federation of Construction Contractors. In association with "Fair Construction Transaction Promotion Month" (November) designated by the Japanese government, we take time to ensure that the Construction Contractors Law is followed at our business locations and that proper follow-up is conducted on such issues as contractors' social insurance enrollment status and issues involving undocumented workers.

Activities to achieve fair procurement and effective countermeasures to antisocial forces

To achieve our CSR, we will work with our business partners to promote procurement that responds to the needs of society and our customers. We will also explain our "Procurement Policy" and "Activity Guidelines" to cooperating companies, and we will continue to engage in activities based on clear policies in the field of procurement. As regards antisocial forces, in addition to maintaining countermeasure councils at our business locations, we sign memoranda on provisions for exclusion of criminal syndicates, not only with business partners involved in construction work but also with other cost- and expense-related business parties. We also participate in horizontal dissemination of information by sharing information with a broad range of parties as a further barrier against relationships with antisocial forces.



Region wide Chikuwakai conference on procurement policy / activity guideline review (February 2013)

Takenaka Group companies in Japan and overseas are pursuing ongoing efforts to promote CSR following formulation of a Corporate Code of Conduct to realize the Group's CSR Vision. The overseas group member companies promote activities with the culture and customs of the countries and regions in which they operate taken fully into account.

Domestic Group Company Activities

Asahi Corporation

Global environment

● Optimal greening promotion

Asahi Corporation promotes greening suited to individual building locations by combining its proprietary greening technologies and extensive knowledge of products and construction technologies. It raised its profile by displaying a tree planting panel on a greening system wall (Vertical Forest®) at an environmental exhibition in Tokyo in 2012. It subsequently installed Japan's largest wall greening panel at Ajinomoto Stadium during its renovation. Following these successes, it adorned the 2013 National Athletic Meet in Tokyo with a greenery panel, and panels are being adopted with increasing frequency nationwide. Capable of accommodating various trees of low to medium height, the panels contribute to reducing buildings' CO₂ emissions, while presenting artistic displays of greenery that change with the season.



Wall greening of the Mido Building

Urabandai Kogen Hotel

Local community

● Interaction with a local community

The Urabandai Kogen Hotel holds events throughout the year to strengthen ties with the community. In March 2013, it hosted an event entitled "Exhibition of Snow Crystals: Ukichiro Nakaya and Rokuro Yoshida." Invited to lecture on the "wonder and attractiveness of snow crystals," Kenzo Kanda, Director of the Nakaya Ukichiro Museum of Snow and Ice, reviewed the research conducted by Dr. Ukichiro Nakaya and conducted an experiment that gave participants firsthand experience in the process of snow crystal formation. In May, the hotel held an exhibition of photographs by Ikuo Nakamura entitled "Mystery of Goshikinuma." Mr. Nakamura delivered a lecture on the "mystery," including anecdotes concerning events he experienced while shooting underwater photographs in the serene and mysterious Goshikinuma lakes as well as observations on the enigmatic ecology of the lake plants. The large number of visitors, including local children, who gathered to attend the lectures contributed to meaningful exchanges.



View of Mt. Bandai from the hotel

Tokyo Asahi Build

Local community Employees

● Earthquake disaster reconstruction assistance effort

Tokyo Asahi Build joined Professor. Ando and his students in the Department of Architecture and Civil Engineering of Chiba University in earthquake disaster reconstruction assistance activities. The company built a fishermen's lodge, making efficient use of scrap wood obtained from formwork, and donated it to fishermen engaged in *wakame* seaweed farming in the Karakuwa district of Kesen numa City, Miyagi Prefecture. A second lodge it provided later featured various improvements, including the addition of a door in consideration of the severely cold winters in the Tohoku region. This project made a beneficial contribution to people in the disaster area by converting wood recovered from formwork, which would normally have been scrapped, into structures that meet real needs of the local community.

● Unique human resources cultivation programs with a hands-on approach

Tokyo Asahi Build employees participate in a career development program involving up to 12 years of hands-on OJT training that encourages certification acquisition and upgrading of knowledge and skills.



Training session for mid-level employees

Asahi Facilities

Global environment Customers

● Contributions to building value enhancement

Asahi Facilities engages in energy-saving activities by acquiring a statistical grasp of the energy usage status of buildings it manages for customers nationwide, accumulating know-how on energy management for various building uses, and incorporating this know-how into daily management operations. With respect to school facilities, the company works with customers to advance concerted energy-saving efforts from the time the school opens. It has responded to demand for energy efficiency since the earthquake disaster of 2011 by employing its management know-how to implement energy-saving plans that do not compromise the comfort of facility users. As for museums, meanwhile, which require sophisticated temperature and humidity control to preserve the objects on exhibit, Asahi Facilities draws on its proprietary expertise in interior climate control to optimize exhibition environments while reducing energy consumption.



Support for harmonious coexistence of buildings and the environment

VOICE

Letter of appreciation from the government of Indonesia

Indonesia experienced major earthquake and tsunami disasters in both 2004 and 2005. The company undertook renovation construction of six damaged bridges on Nias Island (about 125 km west of Sumatra). A series of landslides had blocked the arterial roads leading to the sites, necessitating transport of materials by sea from Jakarta. After we had succeeded in completing the work without incident, our efforts were recognized in a letter of appreciation from the Commissioner of the Bureau of Roads of Indonesia's Ministry of Public Works.

Takenaka Civil Engineering and Construction Co., Ltd. Current assignment, the President of PT. Takenaka Doboku Indonesia

Masamichi Takagi



Overseas Group Company Activities

Indonesia

Local community

● Factory work experience education for students

PT. Takenaka Indonesia conducted a work experience program for the second consecutive year at a workshop in the Honda Karawang No. 2 Plant outside Jakarta with four second-year middle school students from the Jakarta Japanese School invited to participate. After hearing about the work performed at the workshop, the students observed construction work in progress and then gained firsthand experience in performing such tasks as tying reinforcement rods and pouring concrete with workers' guidance. The company will continue efforts to give students insight into the sense of fulfillment provided by construction work to assist them in choosing a career path or occupation.



Experience in tying reinforcement rods

Thailand

Local community

● Regional contribution activities in Thailand

Since 2008, Thai Takenaka International Ltd. has expressed its aspirations of becoming a community-based company by conducting regional and environmental contribution activities at the time of its annual company retreat. In 2013, the company participated in a volunteer program organized to improve the educational environment at an elementary school in Ang Thong, a province near Ayutthaya that experiences flooding nearly every year. The volunteers cleaned and straightened the school building, repainted the walls and playground equipment, and planted greenery with the students. After a lunch of Thai dishes provided by the students' parents, they spent the afternoon enjoying a mini-athletic-meet with the children. All the participating employees had a delightful time, energized by the bright smiles and lively voices of the children.



An experience in repainting



Excitement of the mini-athletic-meet

Germany

Local community Global environment

● Green construction efforts

Germany has taken the lead in tightening the standards for mandatory energy savings by buildings in Europe, which adopted them ahead of Japan. The Energy Conservation Law, which has become progressively stricter with the addition of new amendments every two or three years since its enforcement in 2002, requires that buildings' energy efficiency be proven. Then, the German Renewable Energy Act, coming into effect in 2009, mandates that a certain percentage of energy be obtained from renewable or alternative sources. Every building designed and constructed by Takenaka Europe in recent years meets these stringent requirements. In order to promote further advances in environmental consideration, the company works with Werner Sobek Engineering and Design and DS-Plan, two of Germany's leading engineering companies in the field of environmental construction in an effort to create one-step-ahead works that contribute to society and the environment.



Full view of the Amada Technical Center Landshut

Hawaii, U.S.A.

Local community Global environment

● Donation for environmental preservation and local community growth—Poipu Bay Resort

The company's Poipu Bay Resort on the Hawaiian island of Kauai made a donation to the National Tropical Botanical Garden (NTBG), an NPO engaged in research, preservation and education of ecosystem of tropical plants in the U.S. The donation was intended to help protect the island's natural environment while contributing to the growth of local communities through enrichment of Kauai's tourism resources. NTBG currently maintains five botanical gardens and three special nature preserves in Hawaii and on the U.S. mainland where it protects and grows 60,000 plant species on lands totaling some 2,000 acres. The donation will help to support these activities, and the resort plans to continue to cooperate with NTBG in promoting environmental preservation and local community growth into the future.



A botanical garden, ideal for introspection and self-discovery

As part of our efforts to realize a sustainable society, we have been engaging in dialog with stakeholders on such themes as the global environment, local communities, customers, employees and cooperating companies. Treating social issues that are intertwined with the company's business as themes, and inviting outside experts who are providing leadership in various fields, we conduct discussions aimed at solving the problems. The contents of the discussions conducted in this dialog is reported to the CSR Promotion Council and fed back to our management and businesses.

Theme **The attractive construction industry of the future**
 —As seen from the perspective of skilled construction workers
 July 8, 2013, Tokyo Head Office

In 2013, we invited Professor Hirotake Kanisawa of the Architecture and Building Engineering Department of Shibaura Institute of Technology's college of Engineering to join us as an outside expert in a discussion on the theme of "The attractive construction industry of the future—As seen from the perspective of skilled construction workers." He exchanged views with the chairman of Chikuwakai, an association of the company's business partners, and representatives of the young entrepreneurs in Chikuwakai. We spent the morning touring several workplaces in Tokyo to acquire a shared grasp of some of the challenging issues and then returned to the Tokyo Main Office to hold discussions. The dialog began with a lecture by Professor Kanisawa concerning current issues and overseas case studies related to skilled construction workers, followed by lively discussions of the actions required to make the construction industry of the future more attractive. Topics included such issues as ways to develop sustainable human resources in the face of a shortage of skilled workers among our business partners due to aging and a decrease in the number of new employees entering the business as well as ways to increase their annual incomes and enroll them in health insurance programs to secure their livelihoods.



Theme **Diversity** — As seen from the perspective of promoting active participation by female employees
 January 29, 2014, Tokyo Main Office

The first dialog of 2014 focused on "promoting active participation by female employees" among our diversification efforts. Two guests invited as outside experts, Professor Hiroshi Kitani of Reitaku University's Faculty of Economics and Business Administration, and Noriko Hidaka, Head of Diversity Development, Human Resources Development and Recruiting Department, Teijin Limited, exchanged views with stakeholders comprising six female and one male employee of the Company. The dialog began with the participants sharing their views of present efforts to promote active participation by female employees in the company. They then listened to lectures entitled "Strategy models for female employees in enterprises" and "Efforts for promoting active participation of women in the Teijin Group" delivered by Professor Kitani and Ms. Hidaka, respectively. In the second half of the day's dialog, we asked the participating employees to submit issues and problems they had encountered in the course of business. A lively exchange of opinions ensued with all the participants submitting directions, keywords and suggestions for considering specific measures aimed at solving the issues.



Last year, I was requested to contribute a third-party perspective on the Takenaka Sustainability Report. This year, the corporate profile and sustainability report have been combined into this unified Corporate Report. The relationship between two formerly separate factors, the sustainability of the business and the sustainability of society enabled by the business, have become intertwined. Four centuries since its founding, Takenaka Corporation is being called upon to enable society to secure its own sustainability as a means of sustaining the company's business for another 400 years.

The new Takenaka Corporation Group Message is "Dreams into Reality for a Sustainable Future." The Group's CSR Vision also prioritizes assuring the possibility of sustainability. The road to concrete realization of sustainability is outlined in the Environmental Concept considering the years toward 2050. It describes the long-range objectives of "initiating a project leading to net zero buildings in 2020, achieving net zero buildings in 2030, and targeting net zero plus buildings in the years after 2030." Generally speaking, the best we can do now is to combine expensive solar panels with storage batteries to achieve net zero energy with an approximately two-story house, but it would certainly represent a momentous breakthrough if large-scale buildings were to become net energy producers in the future. Then, if whole cities were able to produce energy, a renewable energy-based economy would become a reality.

Concrete efforts to realize this concept are also being promoted at Takenaka Corporation. In 2013, for example, it won two Environmental Agency funding competitions, installed solar panels as external surfacing material for walls, and pursued development efforts in DC power supply to building interiors as well as development of systems to guide office workers in saving energy by doing some of their work outdoors (page 30). I expect efforts like these to bear fruit in the form of net zero energy buildings.

Takenaka Corporation's report serves as a communications publication that informs stakeholders of the results of the company's various activities. Readers of this report and related materials on the Web site will realize that Takenaka Corporation really is providing society with accomplishments from various perspectives and not only in the financial realm. On the other hand, this type of writing has the weakness in the end of making it difficult for readers to identify objectives the group was unable to achieve and issues that remain to be solved.

Appreciation of the External Perspective

I would like to express my heartfelt gratitude to Professor Kurasaka for presenting us again this year with his evaluation and valuable advice concerning our efforts to realize a sustainable society. As he suggests, we will do our best to improve our use of this report as a tool to inform stakeholders not only of the results of our activities, but also of the objectives we were unable to achieve and our challenges for the future in an easily understandable manner to increase their confidence in us. With the aim of enhancing dialog with our stakeholders, our corporate group has established the Takenaka Group CSR Vision as a guideline for solving social

Mr. Hidefumi Kurasaka

Professor, Graduate School of Humanities and Social Sciences, Chiba University. Professor Kurasaka was born in 1964 in Iga City, Mie Prefecture. After graduation from the University of Tokyo Department of Economics, he served from 1987 to 1998 in Japan's Environmental Agency. He returned to Chiba University in 1998 and has held his current position, teaching and researching environmental economics and policy since 2011. Professor Kurasaka is the author of several books on these and related subjects.



in the future. I consider it essential that failures as well as successes be revealed in order to increase the credibility of the report.

I was pleased to note that this latest report reflects my advice of last year that a fixed perspective is necessary by including highlights of financial and nonfinancial affairs (page 50) and describing the changes from past years in the number of women in positions of responsibility, the ratio of injuries resulting in four or more days absence from work, levels of CO₂ emissions output from construction, the ratio of final disposal of materials from demolished buildings, and the number and ratio of CASBEE S-rank and A-rank buildings. It is reported on the Web site that various training programs have been implemented due to an increase in the ratio of injuries resulting in four or more days absence from work in 2013. It might be best to include mention of these kinds of efforts in the report as well. Additionally, targets are determined for the three-year period of the Environmental Management System's application. It seems to me that informing stakeholders in the report and on the Web site of the results of efforts to achieve these short- and medium-term objectives, including issues that could not be solved, would further enhance understanding.

At Takenaka Corporation, the keywords put forward as links to its medium-term growth strategy for the years to 2025 are urban life cycle design, planning, construction and maintenance operations. Not limited to new buildings, the construction industry's function of maintaining existing buildings and structures will expand greatly in the future. Construction of stable, decentralized energy supply systems is another pressing issue. From now on the construction industry will act as a total urban planner, including maintenance management and energy supply, and I am convinced that this will provide a key for moving closer to a sustainable society. I fully expect that Takenaka Corporation will demonstrate its capabilities as a leading planner in this environment.

issues to realize a sustainable society, and this has been applied since January 2014. With the addition of our revised Environmental Concept, we will endeavor to realize our vision more concretely going forward. In closing, we have posted a questionnaire on our Web site to gather feedback for use as a reference in producing future reports. We would be pleased to hear from the readers of this report concerning their frank opinions and requests.

Tsuneto Sato, General Manager
 CSR Promotion Department

Initiatives for wood construction that contribute to the realization of a sustainable society such as development of fire-resistant wooden materials



22nd Grand Prize for the Global Environment Award Minister of Land, Infrastructure and Transportation Award (2013)

The New Ohi Office Building of The Dai-ichi Life Insurance Company Limited



54th BCS Award (2013)
5th Sustainable Construction Award (2014)
14th JIA Sustainable Architecture Award, Excellence Award (2013)
Good Design Award (2012)

Kobe Shoin Women's University



23rd BELCA Award, Long-Life Category (2014)

Chorinji Temple 'Zazen' Hall



53rd BCS Award (2012)
Architectural Institute of Japan Architectural Design Commendation (2013)
Good Design Award (2013)
Japan Association of Architectural Firms Architecture Award, Excellence Award (2013)
10th Ashihara Yoshinobu Award, Excellence Award (2011)

Activation of forest cycles and CO₂ reduction through increased wooden construction
Development and commercialization of an urban-style biogas system



Minister of the Environment Award for Global Warming Prevention, Technological Development and Manufacturing Category (2013)

Takeda Pharmaceutical Company Shonan Research Center



54th BCS Award (2013)
Good Lighting Award (2012)
Engineering Distinguished Service Award (2012)

Urabandai Kogen Hotel



23rd BELCA Award, Best Reform Category (2014)
Good Lighting Award (2012)

Yagoto Holy Spirit Convent Arnold Wing



27th Society of Heating, Air-Conditioning and Sanitary Engineers of Japan Promotion Award, Technology Promotion Award (2013)
Good Lighting Award, Excellent Facility Award (2012)

Umeda Kita Yard Project B Block



Cultural Merit Commendation for 3R Advancement Minister of Land, Infrastructure and Transportation Award (2013)

Teikyo University Elementary School



54th BSC Award (2013)
14th JIA Sustainable Architecture Award (2013)

Tokyo University of Science Kagurazaka Campus



23rd BELCA Award, Best Reform Category (2014)

Umeda Center Building



1st Society of Heating, Air-Conditioning and Sanitary Engineers of Japan Special Award, Renewal Award (2013)

Plans for the years 2014 to 2016 are as shown below.

Areas of Activity with Stakeholders	Main Activities Planned for 2014-2016
Collaboration with Stakeholders	Understanding social issues through stakeholder dialog and promotion of business activities for their solutions
Global Environment Balance with nature Low-carbon society Resource recycling Foundation for environmentally conscious activities	<ul style="list-style-type: none"> Securing of a wide range of choices through component technology development and realization of smart communities through coordinated group efforts Realization of zero emission buildings through energy conservation planning and efforts to adopt renewable energy combined with component technology development Reinforcement of a basis for sustainable operation through proactive efforts toward regional and global environmental burden reduction
Local Communities Social contribution activities and interchange with local communities Dissemination and development of knowledge and technology Passing on the traditions and culture of architecture	<ul style="list-style-type: none"> Expansion of and support for regional social contribution activities by every business entity on the axes of "transmitting and passing down of architectural culture" and "dissemination of knowledge and technology" Continued support for activities of aid organizations and strengthened coordination with company activities Promotion of understanding and solution of social issues involving cities and towns with the aim of achieving sustainable urban creation
Customers Quality improvement / Practice of craftsmanship Adding value to buildings Safety, security and abundance	<ul style="list-style-type: none"> Creating and offering optimal solutions for customer business operations Quality enhancement through integrated quality elaboration with cooperating companies on the front line of craftsmanship Support for development and deployment of technologies responding to the need to assure the business safety and security of buildings and customers and the need for coordinated BCP formulation
Employees and Cooperating Companies Widely diversified human resources Nurturing personnel to become tomorrow's leaders Work-life balance Health and safety	<ul style="list-style-type: none"> Promotion of diversified human resources education and activities to encourage active participation by female employees Strengthened backing for support staff offering reemployment assistance for retired and reemployed workers Support for realization of employee career formation and skills development and education of young technicians through concept-based training by construction technicians Promotion of enrollment in social insurance programs and completion of the Takenaka superior foreman system as well as development of policies aimed at realizing a more attractive construction industry through such means as improving production Promotion of a work-life balance for healthy, rewarding lives Continued strengthening of safety and health management and promotion of responses to mental health and harassment issues
Management Organizational governance Crisis management Fair business practices	<ul style="list-style-type: none"> Continued reinforcement of internal control Improvement of group wide CSR and compliance knowledge and awareness through implementation of education and learning activities, and guidance responding to the group companies of circumstances Observance of the information security policy and the security level compliance standard and implementation of measures, also covering the supply chain, to maintain compliance as well as learning through education of responsible personnel Continued maintenance and strengthening of in-house systems for responding at times of disaster Prevention of legal risk through implementation of training in timely responsiveness to changes in laws and ordinances
Group Companies	<ul style="list-style-type: none"> Strengthened coordination among businesses as a means of offering added value to society through results of group synergies Promotion of employee development, creation of an environment conducive to energetic work activities and improvement the work-life balance of employees

Income Statement and Balance Sheet (Consolidated)

(Millions of yen)

	72nd term 2009	73rd term 2010	74th term 2011	75th term 2012	76th term 2013
Orders received	1,053,100	825,084	929,542	1,004,492	1,214,335
Revenues	1,175,915	1,055,498	976,612	998,381	1,020,956
Operating income	14,792	21,884	11,106	Δ1,369	11,525
Operating margin (%)	1.3	2.1	1.1	Δ0.1	1.1
Ordinary income	18,408	22,632	10,962	12,595	21,709
Net income	11,845	5,354	2,273	6,122	7,162
Net assets	334,521	328,092	308,135	350,884	438,468
Total assets	1,086,407	939,712	899,718	977,735	1,105,029

Other Financial Data (Consolidated)

(Millions of yen)

	72nd term 2009	73rd term 2010	74th term 2011	75th term 2012	76th term 2013
Research and development expenses	7,510	7,341	7,131	6,472	5,502
Capital investment	10,400	9,600	5,500	9,900	26,300
Return on equity (ROE) (%)	3.6	1.6	0.7	1.9	1.8
Cash flow from operating activities	58,934	87,968	55,933	Δ10,610	Δ929
Cash flow from investing activities	Δ18,711	Δ11,733	Δ14,082	Δ9,275	Δ18,646
Cash flow from financing activities	Δ51,318	Δ62,873	Δ7,262	Δ5,792	8,294

Revenues by Business (Consolidated)

(Millions of yen)

	72nd term 2009	73rd term 2010	74th term 2011	75th term 2012	76th term 2013
Construction business	1,107,435	992,097	910,646	921,188	939,100
Development business	36,580	31,701	32,627	42,206	45,929
Others	31,900	31,700	33,338	34,986	35,926

Revenues by Region (Consolidated)

(Millions of yen)

	72nd term 2009	73rd term 2010	74th term 2011	75th term 2012	76th term 2013
Japan	1,076,937	974,940	856,868	861,700	872,155
Asia	47,240	41,652	63,462	91,575	90,399
Europe	25,552	20,363	14,662	17,274	25,260
North America	15,037	10,213	11,995	17,493	23,289
Others	11,147	8,328	29,623	10,337	9,851

Nonfinancial Data (Nonconsolidated)

	72nd term 2009	73rd term 2010	74th term 2011	75th term 2012	76th term 2013
Number of employees (Consolidated)	8,065 (12,525)	7,829 (12,176)	7,623 (12,016)	7,443 (11,854)	7,365 (11,941)
Average age of employees	45.1	44.7	44.6	44.6	44.5
Average length of continuous employment (years)	21.2	20.6	20.5	20.4	19.5
Number of women in managerial positions	22	25	36	49	53
Accident frequency rate (Accidents followed by absence of four days or more from work)*1	0.96	0.83	0.75	0.62	0.75
CO ₂ emissions intensity during construction work (t/100 million yen)*2	10.3	10.9	10.0	10.4	10.3
Rate of final disposal of construction waste (Wt. %)*3	4.6	9.1	3.4	4.2	3.9
Rate of number of CASBEE S- and A-rank projects*4	54.4	64.3	56.0	60.9	69.0

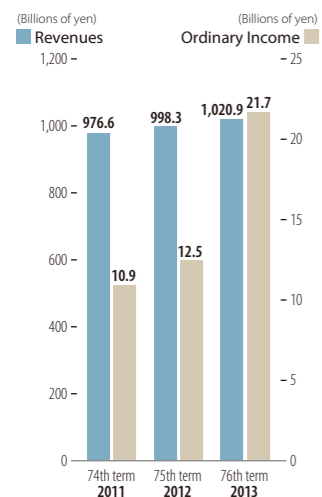
*1 Percentage of the number of occupational injuries caused by industrial accidents accompanied by an absence of four days or more from work for every million man hours of labor

*2 Per value of completed work

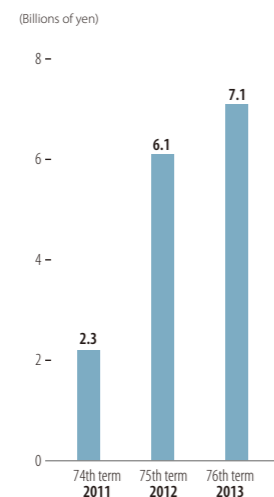
*3 Does not include construction sludge and specially controlled industrial waste.

*4 Total number of S-rank and A-rank projects among the Company's design projects.

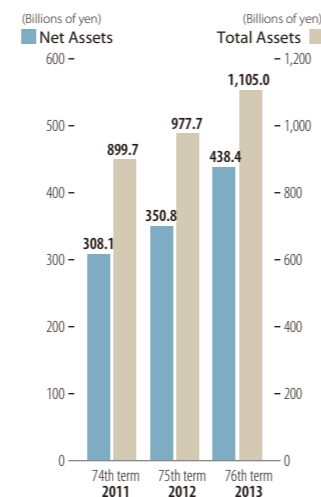
Revenues/Ordinary Income (Consolidated)



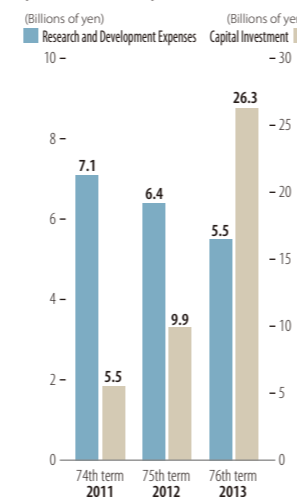
Net Income (Consolidated)



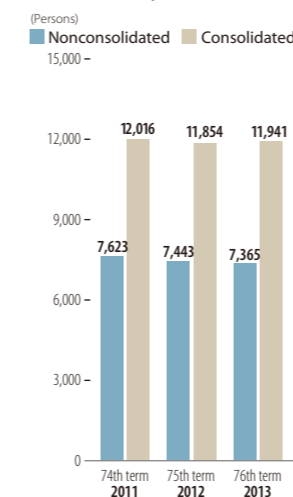
Net Assets/Total Assets (Consolidated)



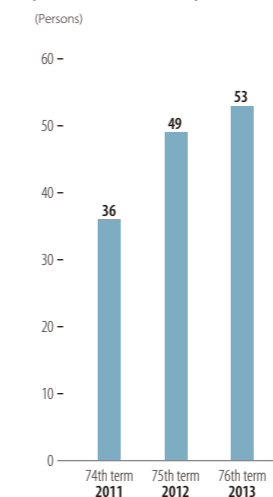
Research and Development Expenses/Capital Investment (Consolidated)



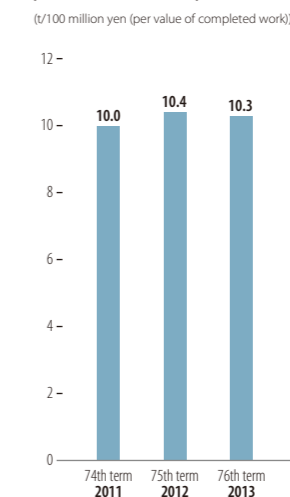
Number of Employees (Nonconsolidated and Consolidated)



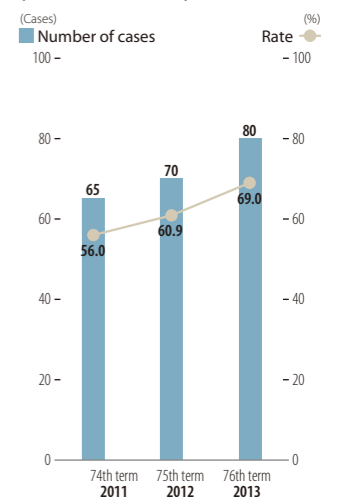
Number of Women in Managerial Positions (Nonconsolidated)



CO₂ Emissions Intensity During Construction Work (Nonconsolidated)



Number of CASBEE S- and A-Rank Projects/Rate (Nonconsolidated)



Dreams into Reality for a Sustainable Future



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