

CSR REPORT



Obayashi Corporation

2011

Digest



OBAYASHI

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Obayashi CSR Report 2011

Publication of detailed and digest versions

For the 2011 CSR report in Japanese, Obayashi decided to publish two versions: a detailed version in PDF format and a digest version as a booklet. The digest version summarizes actions taken during fiscal 2010 in a clear, easy-to-read manner, focusing on highlights and special topics and giving readers an overview of Obayashi's CSR.

The detailed PDF version comprehensively reports on Obayashi's CSR initiatives following Global Reporting Initiative (GRI) guidelines. This version (in Japanese) is available on the Company's website at www.obayashi.co.jp/uploads/File/csr2011.pdf.

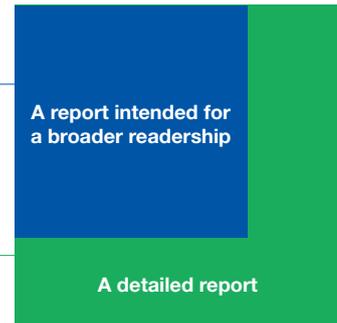
Relationship between the detailed and digest versions

Digest

This report summarizes subjects with high reader interest, focusing on highlights and special topics.

Detailed

This report is meant to give readers a deeper understanding of Obayashi's CSR. (Available only in Japanese)



Editorial Policy

Obayashi has been reporting its environmental initiatives since 1993 and added social aspects to the report beginning in 2004. Since 2008, the Company has been publishing an annual CSR report with the aim of communicating its corporate activities from the perspective of CSR.

The CSR report is edited by the CSR Department, in cooperation with relevant departments. The report's contents are based on action objectives—deliberated upon and approved by management via the CSR Committee—and action achievements, with a focus on socially important issues and initiatives that are important for Obayashi.

The report is divided into chapters corresponding to topics in the “Social Responsibility: Our Unique Approach” section of Obayashi's Vision, Values, and Commitments. It summarizes the Company's initiatives, focusing on non-financial information, in order to give stakeholders a better understanding of Obayashi. In editing the report, attention was paid to universal design with an emphasis on readability.

Organizations covered in this report: Obayashi Corporation (including some group companies)

Period covered: Fiscal 2010 (April 1, 2010 – March 31, 2011)

Scope of activities: Obayashi's social, environmental, and economic activities

References and guidelines: *Sustainability Reporting Guidelines 2006* by Global Reporting Initiative (GRI)

Environmental Report Guidelines 2007 by the Ministry of the Environment of Japan
ISO26000 by Japan Standards Association

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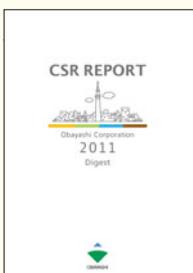
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About the cover

This simple illustration expresses the image of a leading company that is gentle on the Earth, something which Obayashi aspires to be. The colored band represents the topics in the newly established “Social Responsibility: Our Unique Approach” section, where the new EGAO approach is introduced: E for engagement with customers,

G for global perspective, A for amenity and associates, and O for open communication with stakeholders. These commitments are always at the base of Obayashi's business endeavors.

Restructured Set of Principles

“Obayashi’s Vision, Values, and Commitments” Established

The year 2011 is Obayashi’s 120th anniversary. Marking this milestone, the Company established Obayashi’s Vision, Values, and Commitments as a new set of principles. Its intentions are to pass along the technology and integrity that constitute Obayashi’s DNA and to clarify its determination to be one of the world’s most environmentally responsible enterprises. By “environmentally,” Obayashi refers to all the people of the world as well as the global environment itself; “responsible” means being committed to providing safety, reliability, and comfort.

To communicate these feelings to society, the Company established two corporate messages in concise, memorable

language: “Toward a Brighter Future” and “Shaping the Times with Care.”

This set of basic principles expresses Obayashi’s values as it carries out its business endeavors and the fundamental concepts it adheres to in day-to-day actions.

Obayashi’s Vision, Values, and Commitments has been positioned as the backbone shared by all employees. This ensures that each and every person understands the meaning and feelings carried by these principles and proceeds with daily work on the same trajectory. In this way, Obayashi will contribute to the creation of a sustainable world and strive to increase its corporate value.

Obayashi’s Vision, Values, and Commitments

● VISION: Who We Want To Be

The people of Obayashi want to be a part of one of the world’s most successful, environmentally responsible enterprises. Inspired by the principle of sustainability, we pledge to:

- Exercise true craftsmanship and employ superior technologies to make every space as valuable as it can be
- Show concern for the global environment and contribute solutions to social challenges like a good corporate citizen should
- Value everyone we come in contact with in our business

● Social Responsibility: Our Unique Approach

At Obayashi, we think of fulfilling our corporate responsibilities as the best way to bring smiles to people. This is the goal of all of our business activities. As a good corporate citizen, Obayashi strives to meet the expectations and respond to the needs of all stakeholders. The word for “smiles” in Japanese is *egao*. We use the four letters of this word to remind us of our responsibilities to society.

E – Engagement with customers

Our goal is to be the best partner for every customer. To accomplish this, we continually strive to develop state-of-the-art technology, to provide high-quality buildings and structures that fully satisfy customers, and to deliver solutions for customers’ challenges.

G – Global perspective

We offer solutions to environmental and social challenges and actively engage in social contribution activities to help build a sustainable world.

A – Amenity and associates

We create amenable work environments where every one of our associates can work safely and with peace of mind while realizing his or her full potential. We also strive to build trust with all business partners to ensure mutual success.

O – Open communication with stakeholders

We work hard to maintain our reputation as a trustworthy company by pursuing management transparency, communicating broadly with stakeholders, and constantly enhancing our information disclosure.

● VALUES: What We Believe In

Obayashi people strive to practice five fundamental values in everything we do. These are the core values that help us become “who we want to be.”

Ambition We pursue personal growth and continuously reach for our dreams.

Innovation We are proactive in our quest for constant improvement and innovation.

Speed We think creatively and act quickly.

Teamwork We combine our individual strengths to maximize our impact as a team.

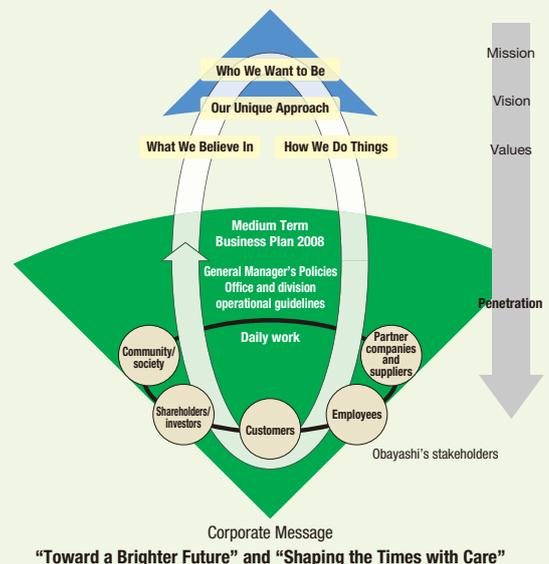
Integrity We act with integrity as responsible citizens of the Earth and all the nations where we live.

● ACTION COMMITMENTS: How We Do Things

Everyone at Obayashi is committed to practicing good corporate ethics, with top management leading the way. We adhere to the following action commitments, which express our determination to ensure ethical conduct at all times.

- We comply with the law and conduct ourselves sensibly.
- We practice fair and free competition.
- We maintain sound relationships with all stakeholders.
- We completely avoid involvement with any organized criminal elements.
- We properly disclose information, always striving for complete transparency in our corporate activities.

Structure of Obayashi’s Set of Principles



President's Message

Toward a Brighter Future for People throughout the World

On behalf of the Obayashi Group, I would like to extend my deepest condolences and heartfelt sympathy to all those affected by the Great East Japan Earthquake that struck northeastern Japan on March 11, 2011.

We would like to express our deep appreciation to all of those who made donations and other contributions to the people of the disaster-stricken area.

Our CSR Stance and Understanding of Current Social Trends

Impacted by the prolonged economic downturn of developed countries throughout the world, coupled with such factors as the continued appreciation in the value of the yen, we have yet to witness a full-fledged revival in business activity. Exacerbated by the recent Great East Japan Earthquake, the cautious stance toward capital investment adopted by the corporate sector, and cutbacks in public works, the business environment in which the Obayashi Group operates remains extremely harsh.

Against this backdrop, we have positioned CSR at the heart of our management and remain committed to contributing to the realization of a sustainable society and to growing as society grows. Recognizing that every facet of our business is inextricably linked to CSR, we will continue to work in unison to ensure CSR remains our priority.

Fiscal 2010 Activity Results

The Obayashi Group designated fiscal 2010—the year ended March 31, 2011—the year for a fresh start with respect to its CSR activities. Taking the lead, the CSR Committee, which I am proud to chair, continues to engage in deep discussions aimed at maintaining all fundamental CSR practices that create value by helping to resolve social issues, thereby earning the trust of society. In embarking on this fresh start, we coined the slogan “*Double Shinka*”—the Japanese word *shinka* has two meanings: “evolution” and “deepening.”

1. Formulating Obayashi's Vision, Values, and Commitments

Since its foundation in 1892, the Company has been grounded in the principles of technology and integrity. With an unwavering commitment to providing its customers with reliable, high-quality construction services, Obayashi celebrated its 120th anniversary in January 2011. Moving forward, we will continue to build on these principles to become an increasingly environmentally conscious leading company. To this end, we reaffirmed our commitment by formulating a renewed Obayashi's Vision, Values, and Commitments.

In “Social Responsibility: Our Unique Approach,” we incorporated the keyword *egao* (the Japanese word for “smile”) into Obayashi's Vision, Values, and Commitments, which guides every facet of our ongoing business activities and development. This keyword, which embraces our stance on CSR, encapsulates our mission and responsibilities toward each and every stakeholder.

Making an acronym of the keyword *egao*, which is our roadmap for fulfilling our established mission, we will place the utmost emphasis on: “engaging” with our customers, listening carefully to their needs and expectations; adopting a “global” perspective in our efforts to secure a sustainable environment and society; acting with “amenity” and in “association” with stakeholders and particularly employees; in an “open” and transparent manner. Through these endeavors, we will work toward bringing a smile (*egao*) to the faces of people throughout the world.



2. Formulating Our Environmental Medium- to Long-Term Vision

The Company has taken steps to draw up the Obayashi Green Vision 2050, its medium- to long-term vision in the environmental field.

This vision sets the direction for ongoing business activities by setting an ideal image of the Group, as it strives to realize its basic philosophy of contributing to a sustainable society. In specific terms, the vision identifies action plans and numerical targets that will help the Company achieve its ideal image in 2050.

Obayashi is deeply involved in contributing to a sustainable society through the environmental performance of its construction methods and buildings. In addition to the development of a low-carbon concrete that reduces the level of CO₂ emissions at the time of material manufacture, the Company will continue to put considerable emphasis on the development and increased use of technologies and materials that minimize the burden placed on the environment. Among a host of initiatives, this includes the URUP method, which entails a shield machine launching at ground level, boring underground, and arriving at the ground level to complete the tunnel in a single process.

3. Securing and Fostering Human Resources

We believe that human resources are our most important management asset and therefore embrace the development of our personnel as a key priority. In an effort to establish a workplace environment in which each and every employee can take full advantage of their individual attributes and capabilities while working with a strong sense of safety and security, we have put in place a broad spectrum of programs.

In addition to reducing the number of hours employees work, the Company continues to enhance and expand its child- and nursing-care programs and to introduce new initiatives aimed at promoting health management in fiscal 2010.

4. Global Development

In developing and other countries where there is a dearth of leading companies in the construction industry, Obayashi recognizes the need for protracted effort in fostering construction business with strength and viability. Thai Obayashi Corporation Limited, the Company's Thai subsidiary established in 1974, has developed deep roots within the local community and is today recognized as a leading general contractor.

For local employees recruited by the Group's overseas companies, Obayashi offers practical training in Japan. On returning to their respective countries, employees harness the experience as well as the safety, security, and advanced technical skills needed to contribute to the development of local construction and industry.

5. Open and Transparent Disclosure

Obayashi places the utmost emphasis on sound and transparent management as well as developing a corporate culture grounded in the highest ethical standards in an effort to earn the trust and confidence of society.

In addition, the Company engages in direct dialogue with a wide range of stakeholders to ensure that its activities meet the needs and expectations of society. Every effort is made to disclose the details of our activities and to obtain stakeholder evaluation and feedback. This information is then reflected in our ongoing activities moving forward.

Reconstruction Initiatives Following the Great East Japan Earthquake

In the immediate aftermath of the earthquake, the Company made it a major priority to confirm the safety of all employees and their families. It also took steps to ensure that its in-house structure and systems were fully operational. Thereafter, we put in place secondary and subsequent measures to prevent damage at projects under construction and commenced efforts to assess the status of damage at completed projects in accordance with our business continuity plan (BCP). In addition to initiating the necessary preparations for the restoration and reconstruction of infrastructure, we commenced deliveries of materials, equipment, fuel, and essential daily items to afflicted areas, dispatched staff to assist in relief efforts, and launched a series of support activities in collaboration with industry associations and local government authorities.

At the request of local government authorities, we worked diligently to ensure the prompt reconstruction of infrastructure, including rail transportation. At the same time, energies were directed toward evaluating the damage caused by the earthquake to customers' buildings and structures and to complete emergency reconstruction. In this manner, the Company strove to help customers return quickly to business levels commensurate with those prior to the disaster.

Reconstruction efforts throughout the Tohoku region have begun proceeding in earnest. As a company charged with the responsibility of contributing to society by helping to restore social infrastructure, we are cognizant of the high expectations held. Rallying to the call to fulfill our mandate, we will push forward the mission of building an environment that is safe, secure, and resilient to disaster.

Beginning with our employees, we will draw on the collective and united strengths and aspirations of all those engaged in construction-related work to fulfill our social responsibility of providing a safe and secure environment.

An Overview of Activity Policies in Fiscal 2011

Obayashi participated as a general contractor in the construction of the Tokyo Sky Tree®. The tower reached a height of 634 meters in March 2011 to become the world's tallest free-standing broadcasting tower.

This particular project, with its numerous challenges, encapsulates the unwavering spirit and the sheer breadth of technological skill possessed by Obayashi. In constructing the world's tallest tower, the Company was, to a certain degree, entering the realm of the unknown. Accordingly, we drew on our existing technologies while overcoming various difficulties.

The Company's core competence, its ability to deliver unique value, is based on its wide-ranging know-how and management capability, a by-product of its ability to consistently overcome challenge. Experience gained through such projects as Tokyo Sky Tree® forms the platform for our design, planning, and proposal capabilities, our management know-how in completing complex projects in a short period of time, and our technical skills that resolve the most difficult of issues.

As construction work on restoring afflicted areas proceeds, we will endeavor to build towns and cities that are not only safe and resilient to disaster but also environmentally friendly. Harnessing its core competence, Obayashi will work to resolve many of society's issues by creating a low-carbon, robust society. The Company will identify and implement specific strategies and contribute to society by resolving issues and creating value.

Obayashi is convinced that in bringing a smile to the faces of people throughout the world, and as a member of society addressing the needs and expectations of stakeholders through its business activities, it will be better positioned to fulfill its CSR. Looking ahead, the Company will deliver safety and security to the broader community, contribute to realizing a sustainable society, and promote ongoing development in concert with fellow stakeholders by actively engaging in construction and peripheral activities.

This CSR report provides an overview of the Group's CSR activities in fiscal 2010 while outlining its direction in fiscal 2011. I would very much appreciate the frank comments and feedback of readers.



Toru Shiraishi
President
Obayashi Corporation
July 2011

Efforts in Response to the Great East Japan Earthquake

The Great East Japan Earthquake inflicted unprecedented damage on Japan. As a construction company that plays a part in building social capital, Obayashi has undertaken a variety of efforts aimed at the country's recovery, starting immediately after the earthquake.

Main Efforts Since the Earthquake Struck

Directly after the earthquake, the Head Office set up an Earthquake-Response Headquarters and immediately started confirming the safety of employees in accordance with Obayashi's business continuity plan (BCP) for earthquakes. It also began initial responses such as taking secondary damage prevention measures at properties under construction, ascertaining the extent of damage at completed buildings and the company's facilities, and transporting needed materials to afflicted areas.

March 11 (Friday)

- 14:46 The earthquake occurs (magnitude 9.0).
- 15:00 Obayashi starts confirming the safety of employees and their families and collecting damage information.
- 16:00 The Earthquake-Response Headquarters is set up in the Head Office. A meeting is held via a Web-conferencing system with the Technical Research Institute Disaster Management Center, Osaka Main Office, and the Yokohama and Nagoya branch offices in order to put a company-wide backup system in place.
- 21:00 The safety of 76% of employees in the Tohoku region, the affected area, is confirmed.

March 12 (Saturday)

- 08:00 The extent of damage suffered by major clients of the Tokyo Main Office and the Yokohama and Hokuriku offices is ascertained.
- 14:00 A survey team arrives at the disaster area via helicopter to confirm from above the extent of damage over the coast, mountains, rivers, and roads. The situation on the ground is confirmed by automobile.
 - Starting on the 12th, Obayashi began transporting temporary toilets and other emergency supplies arranged by the Head Office and branch offices.

March 13 (Sunday)

- 11:45 A meeting is held between the Tohoku Branch Office and the Earthquake-Response Headquarters via Web conferencing, after power is restored to the Tohoku office.
 - From the 12th to the 13th, customers and local authorities were contacted, and Obayashi responded to requests for damage inspections and cooperation in taking emergency measures. The Tohoku office ascertained the extent of damage suffered, excepting the Miyagi Prefecture's coastal region and some restricted areas in Fukushima Prefecture.

March 14 (Monday)

- 09:45 A special team is organized by Head Office to consolidate information relating to materials and equipment.
- 15:30 The extent of damage in each area is reconfirmed in an Earthquake-Response Headquarters meeting. Additional support (material and human) measures are discussed.
- 18:00 The survey team returns from Tohoku and is debriefed. The situation in the afflicted areas is ascertained.
- 21:23 All employees under the jurisdiction of the Tohoku office and in the Tokyo Metropolitan area are confirmed safe.

United Company-Wide Efforts

Numerous relief goods, including temporary toilets collected from around the country, materials and equipment such as generators and fuel, and everyday commodities, were transported from offices nationwide through the Tokyo Machinery Works, a logistics center to the Tohoku office in Sendai, Miyagi Prefecture. Additionally, many employees rushed to the local response headquarters at the Tohoku office and recovery sites where they worked on inspecting buildings and structures, assisting customers, taking emergency measures, and performing restoration work.

Assistance Status (totals, as of May 16)

- Transported materials and equipment, including 540 temporary and portable toilets and 599 generators.
- Dispatched 301 support personnel from the Head Office and other offices. Goods were transported by 233 vehicles and four helicopters in total.

Efforts Aimed at Restoration and Recovery

Regarding properties constructed by Obayashi, although there were no cases of buildings being completely destroyed, there were many instances of damage, such as inside suspended ceilings falling, cracks appearing, pieces of exterior walls falling off, exterior collapsing, production facilities being destroyed, and damage to bank protectors. Immediately after the earthquake Obayashi started its inspection and diagnosis of buildings and structures. The Company carried out emergency restoration work at the request of customers and provided an initial response on about 2,200 properties in the Tohoku and Kanto regions by the end of March.

Obayashi conducted restoration work on overhead wire poles and elevated bridge footings for the Tohoku Shinkansen between Shin-Shirakawa and Koriyama and between Furukawa and Ichinoseki in order to meet society's high expectations for early restoration of lifelines. This led to the entire railway line being reopened on April 29. The company also engaged in restoration work on the thermal power plant and water utilities that were damaged by the tsunami and liquefaction.

Obayashi also made utmost efforts in restoration work on the production facilities of many customers, including electronic components manufacturers, to enable them to restart operations as soon as possible, since the earthquake had caused a major impact on the supply of parts and materials.



Using a road rail crane to replace overhead wire poles, in order to reopen the Tohoku Shinkansen as soon as possible.

Commitment as a Corporate Citizen

Obayashi participated enthusiastically in support efforts for the afflicted areas by providing materials such as temporary toilets, tarpaulin, and gasoline at the request of local authorities.

The company also collected money for the disaster areas and donated it through the Japanese Red Cross Society in order to realize employees' wish to be of even a little assistance to people in the afflicted areas.



Obayashi provides essential supplies for people in afflicted areas.

Toward Recovery

Obayashi will continue to make concerted efforts to move restoration and recovery projects forward in order to return the lives and businesses of the affected people and companies to normal as soon as possible.

Committed to Being a Company that Fulfills Its Social Responsibility

Obayashi included a “Social Responsibility: Our Unique Approach” section in the Vision, Values, and Commitments established in January 2011 in order to maintain and build good relationships with its stakeholders and fulfill its social responsibilities.

Basic Philosophy

Obayashi regards the fulfilling of its corporate responsibilities as the best way to bring smiles to the faces of its customers and members of the wider society. This is the goal of all of the Company's business endeavors. As a concerned corporate citizen, Obayashi strives to meet the expectations and respond to the needs of all its stakeholders.

With a view toward resolving challenges faced by society, Obayashi's unique approach to CSR defines its mission and responsibilities through the acronym EGAO. The word for “smiles” in Japanese is *egao*; Obayashi uses the four letters in this word to make its CSR initiatives easier to relate to: “e” for engagement with customers, “g” for global perspective, “a” for amenity and associates, and “o” for open communication with stakeholders. EGAO also

reminds Obayashi of its responsibilities to society, captured in its corporate message, “Toward a Brighter Future.”

CSR initiatives based on Obayashi's Vision, Values, and Commitments are something that all employees should be aware of in all business situations, for they are the foundation of the Company's business.

Obayashi is committed to securing the trust of society by thoroughly practicing fundamental CSR, centered on compliance and internal controls, and to contributing to the creation of a sustainable world by actively engaging in CSR that creates value by resolving social challenges.

Communication with Stakeholders

Obayashi clearly defines its responsibilities to stakeholders, actively discloses information on its views and activities, and takes numerous opportunities to engage in dialogues with stakeholders in order to fulfill

its social responsibility. Obayashi is committed to meeting society's expectations and demands and will reflect the opinions and requests of stakeholders, obtained through dialogue, in its CSR activities.

◆Connections with Stakeholders

Stakeholders	Obayashi's Responsibilities
Shareholders <ul style="list-style-type: none"> • Shareholders • Investors 	<ul style="list-style-type: none"> • Increasing corporate value • Appropriate profit dividends • Proper and timely information disclosure
Customers <ul style="list-style-type: none"> • Central government, local governments, private businesses, individuals, etc. • Building users 	<ul style="list-style-type: none"> • Providing of high-quality buildings and structures • Improving infrastructure • Providing valuable services • Supporting business-risk reduction • Proper management of customer information
Employees <ul style="list-style-type: none"> • Employees and their families • Seconded staff • Temporary staff 	<ul style="list-style-type: none"> • Maintaining and assuring employment • Utilizing and training human resources • Providing fair evaluations, salary increases and promotions • Providing and supporting diverse work styles • Providing comfortable workplace environments • Protecting personal information
Partner Companies and Suppliers <ul style="list-style-type: none"> • Specialist contractors • Mechanical and electrical contractors • Material and product suppliers, etc. 	<ul style="list-style-type: none"> • Fair business transactions • Cooperating and supporting business activities • Strengthening and improving safety measures

Stakeholders	Obayashi's Responsibilities
<ul style="list-style-type: none"> • Community residents 	<ul style="list-style-type: none"> • Building good relationships • Creating jobs • Preventing accidents • Respecting customs • Offering support in the case of disaster
Communities and Society <ul style="list-style-type: none"> • Public • NPOs and NGOs • Government 	<ul style="list-style-type: none"> • Proactive communication
<ul style="list-style-type: none"> • Society 	<ul style="list-style-type: none"> • Offering social contribution • Contributing to the development of construction culture • Giving consideration to the global environment



Employees and CSR

Employees play leading roles in Obayashi's CSR activities. The Company's employees are the ones who put Obayashi's CSR into practice. Accordingly, Obayashi envisions CSR activities in which all employees firmly grasp the Company's social responsibility, listen to

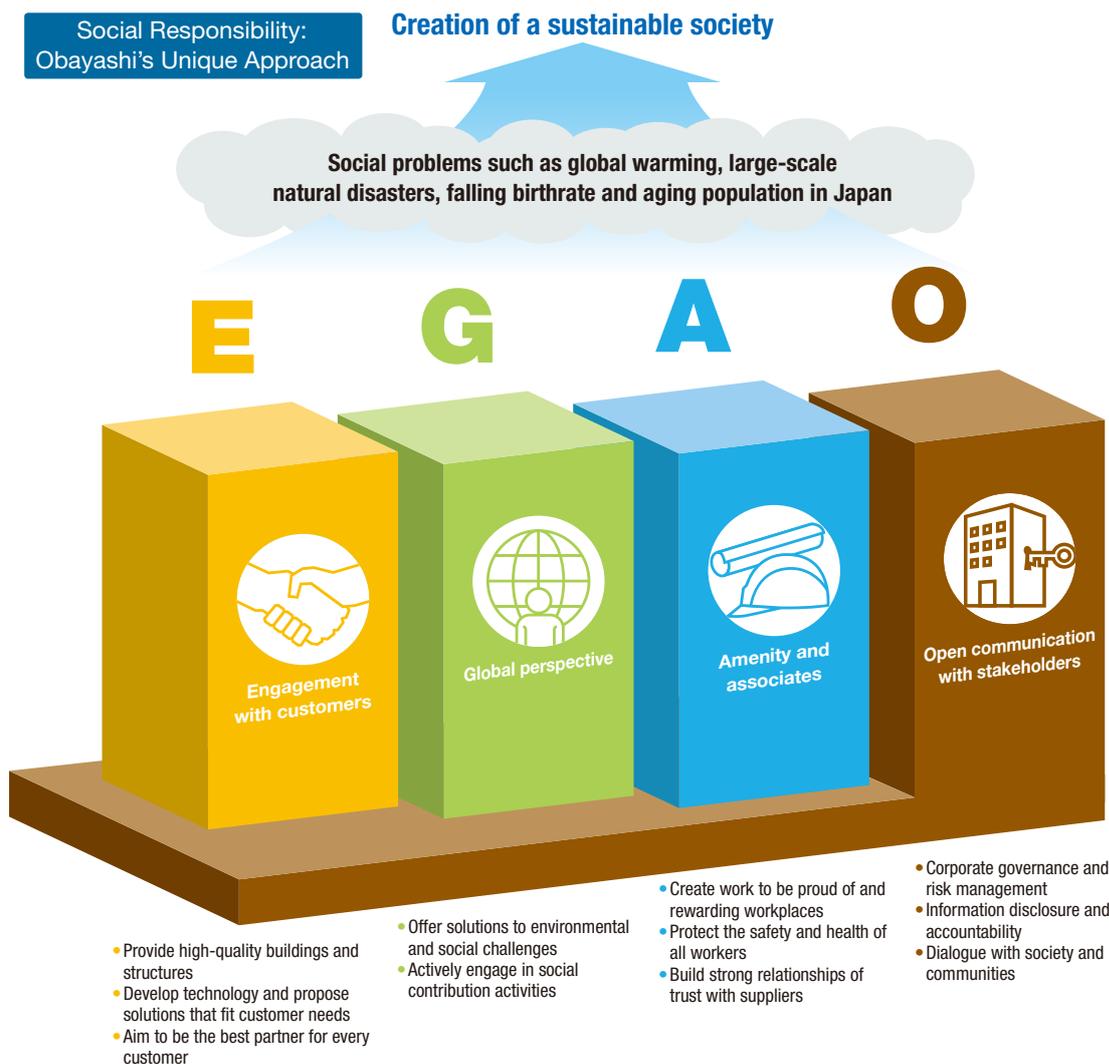
the expectations and requests of society through communication with stakeholders, and respond sincerely in coordination with Company policies.

CSR Fulfillment Promotion—Structure and Operation

Obayashi is undertaking cross-organizational initiatives, with full employee participation. The initiatives are led by the CSR Committee, which is chaired by the Company president. In 2009 the Company established a CSR Department, which serves as secretariat for the CSR Committee and promotes CSR initiatives, including those related to the environment and publicity.

Obayashi uses the plan-do-check-act (PDCA) cycle to fulfill its CSR: In accordance with an annual action plan deliberated and

approved by the CSR Committee (plan), activities are undertaken by all divisions company-wide (do). Referring to opinions and feedback obtained through communication with stakeholders about the performance of those activities, the achievement level of each activity is checked (check), and findings are reflected in the next year's plan and activities (act).



Road to 2050

Obayashi Green Vision 2050

The world's major countries have started working toward the long-term goal of reducing global emissions of carbon dioxide (CO₂) and other greenhouse gases by at least half the current level by 2050. In 2009 Japan announced and is now considering a vision for achieving an 80% reduction, based on its responsibility as a developed country. In response to this international trend, Obayashi—whose vision and values include a commitment to helping create a sustainable society—established a medium- to long-term environmental vision, to be pursued in its business endeavors, and has begun initial efforts. This is the Obayashi Green Vision 2050.



Obayashi's Contributions for the Future

Obayashi Green Vision 2050 lays out a direction for Obayashi's future business endeavors, based on the Company's commitment to helping create a sustainable society. This vision was established using the backcasting method, in which goals and a plan are defined based on envisioned future desired conditions. Aiming to make its vision of society in 2050 a reality, Obayashi will aggressively expand into business fields on the periphery of construction.

Action Plan through 2020

Obayashi established an action plan for initiatives to be taken through 2020, based on its vision of society in 2050. The plan divides three visions of society (a low-carbon society, a recycling-oriented society, and a society in harmony with nature) into three business areas (building and urban construction, infrastructure construction, and services) and sets down concrete details for initiatives.

	Low-Carbon Society	Recycling-Oriented Society	Society in Harmony with Nature
Building & Urban Construction	More advanced energy-saving proposals (ZEB ¹)	Participation in environmentally responsible development projects (smart cities)	
Infrastructure Construction	Low-carbon construction through development of new methods and materials and application of ICT	Participation in resource recycling projects (recycled aggregate concrete, asbestos detoxification)	Participation in projects fostering harmony with nature (large-scale urban greening, nature regeneration)
Services	Participation in renewable energy generation projects (biogas, large-scale solar power, wind power)		

1. A building with net-zero or near-zero primary energy consumption.

Numerical Targets for Creating a Low-Carbon Society

Obayashi has set concrete numerical targets for the urgent issue of creating a low-carbon society and will strive to reduce CO₂ emissions.

<p>Action plan for direct contributions (decreasing the carbon footprint of Obayashi's facilities, using low-carbon construction methods, etc.)</p> <p>70% down by 2020 80% down by 2050</p>		<p>Action plan for indirect contributions (development and popularization of low-carbon technologies and materials, proposal and design of energy-saving buildings)</p> <p>30% down by 2020 50% down by 2050</p>
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Note: The base year is 1990, the same year as for the national government's targets for greenhouse gases.

Commitment to Creating a Low-Carbon Society

Pioneering the Future: All About Obayashi's Techno-Station

Obayashi has been developing outstanding technology that not only contributes to customers' businesses but also to society, by meeting needs for environmental friendliness and the guarantee of safety and reliability. As the chief base in that endeavor, Obayashi's Technical Research Institute has been transformed into a pioneer of the future.



Takashi Shiokawa
General Manager, Technical Research Institute
Executive Officer and Deputy General Manager, Technology Division

New Base for Technology Development Built on Three Key Concepts

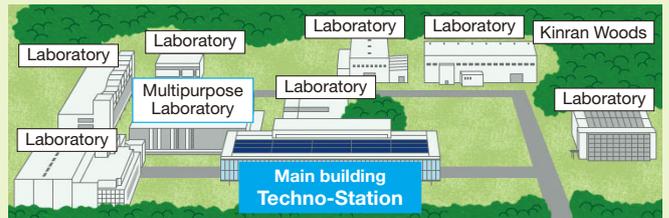
The Technical Research Institute's main building, the Techno-Station, is located in Kiyose-shi, Tokyo, and was planned to commemorate Obayashi's 120th anniversary. It was completed in September 2010. The Techno-Station is tasked with developing and demonstrating technologies. At the same time, the facility itself is equipped with the latest environmental technologies

and is a new symbol that will proclaim to the world Obayashi's technical capabilities.

Obayashi built the Technical Research Institute in 1965. The objective was to merge the Company's research resources in Osaka and Tokyo and to develop cutting-edge technology using Obayashi's own experiment and testing facility. Since then, various research facilities have been added. The Techno-Station is a cross-sectional central office where all the Institute's employees assemble to strengthen collaboration between researchers.

A core facility underpinning Obayashi's technical prowess, the Techno-Station was built as a base for developing technology that would meet diverse needs, employing three key concepts.

First, the space takes advantage of cutting-edge, environmentally appropriate technologies that will help bring the Obayashi Green Vision 2050 to fruition, including state-of-the-art technologies that cut CO₂ emissions by 55%. Next, it functions as a creative workplace where the entire staff can conduct research on the same floor, across departmental boundaries. Creating an environment in which nearly 200 members work face-to-face boosts communication and encourages new ideas and realizations. Ultimately, that translates into improved technical competitiveness. Lastly,



the facility provides unprecedented safety and reliability. The Techno-Station is the first building in the world to use the Super Active Base Isolation System "Laputa 2D." This system uses a force-applying device called an actuator to move the building rapidly, thereby reducing shaking from an earthquake to 1/30 to 1/50. The building is also equipped with the latest hands-free security system using IC tags.

The Techno-Station, which has assembled the best technology, receives many visitation requests from inside and outside Japan. In a way, the entire facility is playing a PR role and getting the wider world to know about Obayashi's latest technology.

The Technical Research Institute's aim is to provide technical innovation, demonstration, and presentation.

The Technical Research Institute and the Obayashi Green Vision 2050

The Technical Research Institute has already achieved some of the visions of society depicted in the Obayashi Green Vision 2050.

Aiming to help create a low-carbon society, the Institute developed offices with the highest standards in energy and CO₂ savings, and made actual use of low-carbon materials. To further the establishment of a recycling-oriented society, it recycled demolished concrete from buildings on the site into new buildings, benches, and other structures. To help foster a society in harmony with nature, it created two types of biotopes on the site; in addition, the Company has worked to preserve and nurture the Kinran Woods, which were a part of the original land the institute was built upon. Visitors to the Technical Research Institute can come into contact with technologies that will lead to Obayashi's vision of society in 2050.

Commitment to Creating a Low-Carbon Society

Creation of a Next-Generation Office That Drastically Reduces Energy Consumption

The Techno Station is the first research facility in Japan to achieve carbon-neutral status.* It reduces CO₂ emissions by 55%, compared to ordinary office buildings, by combining the use of natural energy and cutting-edge technology. Obayashi will enthusiastically propose the new technologies it demonstrates here to customers and society.

*Regarding the balance of CO₂ emissions as zero by offsetting emissions with CO₂ sequestration, use of natural energy, and purchases of carbon credits.



Katsuaki Wada
Manager, Architectural Design Department

Highest Standard of Energy and CO₂ Savings Achieved

Aiming to create ZEBs, which is a key item in the Obayashi Green Vision 2050, the Techno Station is engaged in R&D into various types of energy-saving building construction methods and is carrying out demonstration experiments. For example, the building was the first research facility in Japan to achieve carbon-neutral status, including a 55% reduction in CO₂ emissions

compared to ordinary office buildings, through the use of natural energy and next-generation technologies. It also acquired S rank certification in the Comprehensive Assessment System for Building Environmental Efficiency (CASBEE) and attained a Building Environmental Efficiency (BEE) value of 7.6, which is the highest attainable standard in Japan.

Given its position as a research institute, it would be meaningless to cause a drop in workplace productivity because of the priority on energy-saving performance. Accordingly, we are pursuing both improved workplace productivity and environmental performance through the use of environmentally friendly technology.

In order to achieve carbon-neutral status, radical measures based on the latest technology were adopted for the Techno Station, unlike in conventional office buildings. The building is contributing to a low-carbon society by making use of three systems.

Passive System: Making Maximal Use of Natural Energy

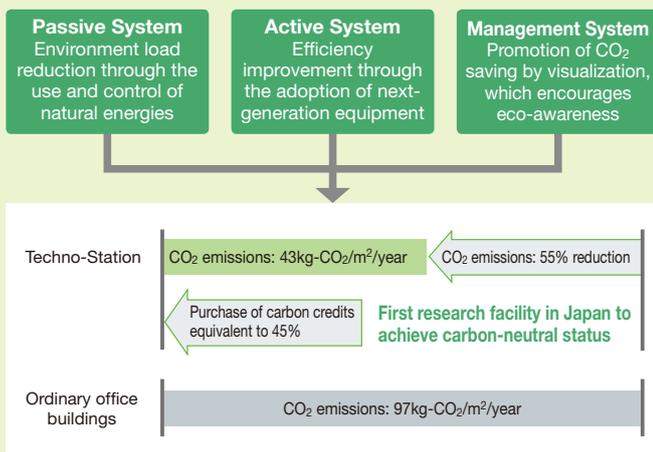
The Passive System maintains a comfortable working environment while reducing the air conditioning load by obstructing skylight. At the same time, it keeps the work floor bright even with the lights off during the daytime by making use of natural light.

Here, “passive” means making skillful use of natural energy. No lights are needed in the workplace during the daytime because natural light is taken in efficiently through skylights in the ceiling. Also, the temperature on the floor is optimized by creating a buffer zone near windows, to adjust light and heat. This means an ideal temperature can be achieved, even though the space is open and has large windows.

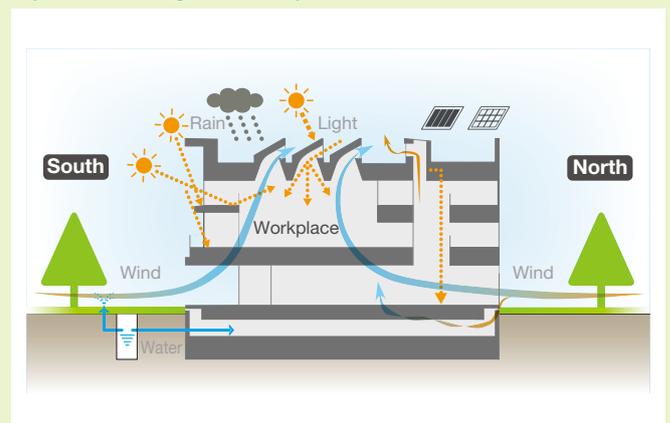
In other words, a comfortable environment is constantly maintained in the workplace without relying on electricity, through the effective use of natural energy. The building’s exterior as well as internal automatic blinds help to stem the air conditioning load by reducing solar radiation. Meeting areas near windows were calculated and established to create a buffer zone. In a sense, a wall of air blocks the effects of outside air, thereby playing a part in maintaining an appropriate temperature.

Another major feature at the site is a moist pavement into which water easily penetrates. Groundwater and rainwater are reused functionally. For example, groundwater is used as an auxiliary heat source for cooling during the summertime and to water green spaces. Rainwater is used to clean toilets. In these ways natural water is used in a cyclical manner.

Additionally, the building’s skylights can open and close to assist ventilation, and solar panels have been installed on the roof. The downpour of sunlight is not wasted but is used to generate electricity.



Use of wind (natural ventilation system) and natural water (rainwater and groundwater)





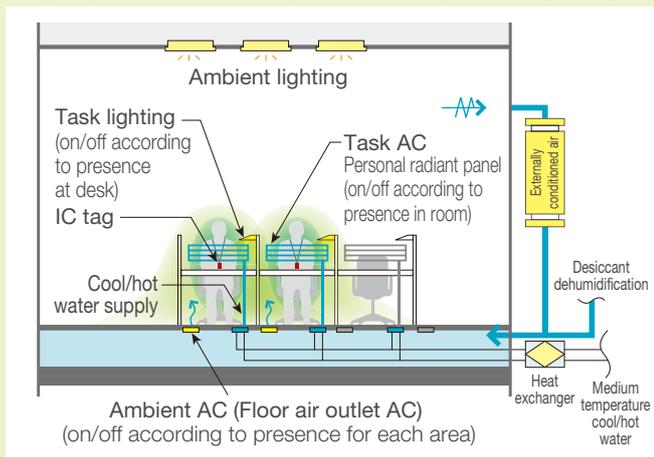
Tsuyoshi Ito
Manager, Facility Design
Department

Active System: Making Active Use of Next-Generation Facilities

The use of lighting and air conditioning cannot be avoided at night nor during the winter, in order to maintain a comfortable work environment. However, it is difficult to reduce energy consumption by manually operating and stopping facilities. In response, the Techno-Station uses the Active System to minimize wasteful use of facilities.

A control system was installed that turns on lighting and air conditioning only in spaces where people are present (staff areas), in order to eliminate waste. The system detects staff members through the IC tag that they carry.

■ Lighting and Air-Conditioning (AC) Control System Using IC Tag



Management System: Encouraging Eco-Awareness through Visualization

In addition to the pursuit of functional performance, efforts are also made at the Techno-Station to encourage eco-awareness among the staff.

An “eco monitor” set up in the building visualizes in real time power consumption, power generated using natural energy, and the reduction rate for CO₂ emissions. This visualization has the effect of increasing the staff’s eco-awareness.

The visualization-based management system includes devices such as showing alongside the reduction rate for CO₂ emissions the equivalent number of trees that would need to be planted, thereby encouraging effective utilization of energy-saving functions.



Energy savings displayed visually using monitored data.

More Smiles!

Aiming for Greater CO₂ Emissions Reductions through Technology Innovation

Obayashi is taking the initiative to develop technology that will contribute to efforts to create a low-carbon society. Going forward, the Company will endeavor to bring its carbon credits ratio close to zero by stepping up its technology innovation and through other efforts.

CleanCrete: Low-Carbon Concrete

A lot of CO₂ is released during the manufacture of concrete, which is a chief material in building structures. Obayashi therefore developed CleanCrete, which features 80% lower CO₂ emissions than conventional concrete, in order to further reduce environmental impact. This reduction in CO₂ emissions is achieved while maintaining construction efficiency and strength by increasing admixtures such as byproducts from the iron-manufacturing process.



Kenichi Ichinose
General Manager, Production
Technology Department,
Technical Research Institute

This low-carbon concrete has already been used in the Technical Research Institute. From here on, further construction experiments will be conducted and commercialization pursued.

Conserving Energy without Compromising Workplace Productivity or Comfort

The Techno-Station features the highest level of environmental performance, and it is highly significant that this does not mean it is a workplace that suffers in terms of workplace productivity and comfort.

Energy-saving efforts in the past at times compelled users to tolerate less-than-ideal circumstances, to a certain extent. However, after work began in the Techno-Station, a questionnaire survey confirmed that many staff members feel satisfied with the workplace’s air quality, space configuration, and especially the ease of communication it provides. I myself feel that this space, with its high ceilings and abundant natural lighting, has a level of comfort that is lacking in conventional offices.

A building is not finished once built; it creates value only by being used for a long time. I expect that the achievement of energy savings along with workplace productivity and comfort will, in combination with the effect of concentrating the staff on the same floor, bring definite rewards to the creation of technology. Even for me, opportunities to have face-to-face meetings have increased as a result of the different departments all being gathered here. I feel that I am enjoying many advantages as a result, such as being able to spend time on other jobs that might otherwise have been set aside, since I can rapidly communicate with others accurately.



Setsuko Yoshino
Associate Chief Researcher,
Environmental Technology
Department, Technical
Research Institute

E



Engagement with customers

Tokyo Sky Tree®—Ensuring the Safety and Quality that Support the World’s Tallest Tower

Obayashi strives to continue providing customers with safety and quality. That commitment remains unchanged on the construction site of the Tokyo Sky Tree®, the tallest self-supporting tower in the world. Below is an overview of Obayashi’s role and mission in creating a world-record structure.



Project Background

Pioneering Challenge:
To Reach the Uncharted Height of 634 meters

The two major propositions of this project are to construct the tallest self-supporting tower in the world and revitalize the surrounding area. Residential buildings fill the area around the construction site and a railroad runs right beside it, creating difficult location conditions. Obayashi is tasked with safely constructing to the end the world’s tallest tower on that site, within a limited timeframe. During that process, many unprecedented requirements had to be overcome.

(Left) Construction of the Tokyo Sky Tree®, as seen from above

A World-Record 634 Meters Achieved!

The Tokyo Sky Tree® (clients: Tobu Railway Co., Ltd., and Tobu Tower SkyTree Co., Ltd.)—and its construction process—is garnering significant attention, as the new symbol of Japan. Obayashi is the builder of this tower, which stretches up as if thrust out of the streets below, where a rich traditional downtown spirit lives on.

Construction began in 2008. The long-term development project is moving forward steadily, including the skirting blocks furnished with a wide range of commercial facilities. On March 1, 2011, the tower surpassed the height of China’s 600-meter-tall Canton Tower, which had been the world’s tallest until that time. That was the day the spire (gaintower), to which terrestrial digital broadcasting antennas will be attached, was lifted up.

Later, when the Great East Japan Earthquake struck, neither employees nor the structure was harmed. This is a testament to Obayashi’s engineering capabilities and day-to-day safety management. Work resumed after a few days of inspections. On March 18, the Tokyo Sky Tree® reached 634 meters at last, attaining its status as the world’s tallest self-supporting tower.

Construction of the Tokyo Sky Tree® is a pioneering venture into uncharted territory and a grand project for which has been assembled the best technology cultivated by Obayashi over its 120-year history.

Nariaki Tabuchi, the project manager of the New Tower Project Office, said, “This is a big project requiring diverse expertise, including the fact that we are going to an unexplored height.

Not only in terms of construction methods and other technical aspects, but just the fact that the surrounding vicinity is a densely populated area means that the points to keep in mind were extremely wide-ranging.”

The tower and surrounding block are scheduled to open next spring.

Expertise Distinct to Obayashi, as It Ventures into Uncharted Territory

Obayashi is using three major engineering methods in the construction of the Tokyo Sky Tree®. The first is the use of *knuckle walls*, developed by Obayashi, in the foundation piles that support the 634-meter tower. Knuckle walls greatly increase the strength carrying the entire structure by creating powerful stress tolerance to the ground with nodule-like protrusions formed on wall-shaped piles. This creates high stability against loads from earthquakes and strong winds.

The *lift-up method* was used to haul up the tower’s uppermost section (the TV antenna tower) with cables, after it was assembled on the ground. This is an uncharted height for all the workers on site. The question of how to



Safety nets on the steel frame are attached on the ground before being hoisted up.

minimize work done high up is a key to ensuring safety on the job. Take the observatories, for example. Each block was completed as much as possible on the ground and then hoisted up and put in place. High-altitude work was reduced by limiting it to things like welding joints and attaching covering panels.



Kazuo Yagi
Managing Executive Officer, Senior Project Manager, New Tower Project Office

At the core of the tower is the *shimbashira* (center column), which functions as a key element in the vibration control system. The *shimbashira* was built using the *slipform method* by which concrete is continuously poured into a form that slips upward as the previously poured concrete hardens behind it. These are all Obayashi's proprietary technologies and keystones for safely constructing and operating the world's tallest tower.

Furthermore, Obayashi is doing everything possible to prevent objects from falling on the rail tracks that pass nearby. Special procedures and scaffolding were devised so that all work can take place inside safety nets, and a large temporary roof was set up to cover the tracks.

Additionally, the work site has multiple levels of safety measures in place—including an alert system with different levels according to wind strength—all of which underpin steady construction progress.

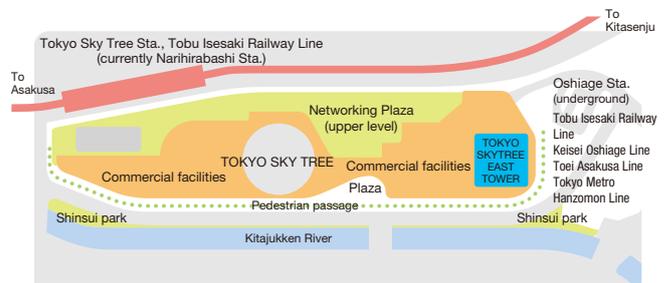
New Community Development Stimulated by Blending of Downtown Culture and High-Tech Tower

The Tokyo Sky Tree® construction project is not just about building a broadcasting tower. It is the starting point of a community-development project focused on the next generation, a project that will drive the flow of people throughout the whole area, by redeveloping the districts around the tower.

There are big expectations that the Tokyo Sky Tree® will trigger revitalization in the surrounding area. It is hoped that scenery and shops imbued with an Edo-period atmosphere will

line the streets in the vicinity. The combination of local Sumida Ward color and a broadcasting tower equipped with cutting-edge technology should ultimately generate great bustle in the future. This project is all about the local government, neighborhood residents, and the project owners working together on the challenge of a new community's development. For that reason, Obayashi has been making efforts to share information by regularly holding briefing sessions in which construction progress is explained and opinions about community development exchanged with local residents and members of 29 surrounding town councils, including Sumida Ward. The vision for this new district centered on the tower is of a future filled with the smiles of many people.

Obayashi is committed to proceeding with construction work down to the last finishing touches while taking every possible precaution in all aspects of this grand project.



More Smiles!

Mission: To Hand over the Tower Safely to the Client

Every day I feel that expectations are being placed on this project not only by Obayashi's stakeholders but also by society at large. As the person responsible for construction, I feel tremendous pressure, but I am endeavoring to run a safe site.

Reaching a height of 634 meters is no more than one milestone. In addition to constructing the *shimbashira* and dismantling the tower cranes, we still have to deal with many other issues related to the tower's height.

It is our mission to safely bring the project to its conclusion. Creating a facility that will be used securely long into the future will, I believe, lead to many smiles. (Kazuo Yagi, Managing Officer, General Manager, New Tower Project Office)

Stakeholder Voices

Koji Kuroda

Construction General Manager, Technology Division, Tobu Tower SkyTree Co., Ltd.



What I have felt throughout the project is the breadth of knowledge and experience of each and every one of Obayashi's employees and their deep passion for construction. I have also felt the strength of expert awareness, including the wealth of human resources engaged in safety and quality management and Obayashi's distinctive engineering methods.

When constructing the Tokyo Sky Tree®, the higher it got, the harsher the natural environment became and the more difficult the construction work. In such conditions, it also went through the Great East Japan Earthquake just before reaching 634 meters. I am confident that the fact that the Tokyo Sky Tree® safely attained a world record height under these conditions is the result of the accumulation of efforts made by the people involved in the project.

I expect Obayashi to strive for high functionality and a level of finish that we can show off to customers around the world and am counting on them to manage safety and coordinate work, including with tenants, as we head toward completion next spring. I would also like to ask Obayashi to provide technology for maintaining safety and high quality over the long term, after the facility opens.

Construction of the New Tower Narihira-bashi-Oshiage Area Development Project, Tokyo, Japan

■ Tokyo Sky Tree®

Location	1-chome Oshiage, Sumida-ku, Tokyo
Site area	Approx. 36,900m ² (tower plus the East and West districts)
Height	634m
Facilities	Observatory (first at 350m, second at 450m)
Structure	Steel, steel-reinforced concrete, and reinforced concrete
Clients	Tobu Railway Co., Ltd. and Tobu Tower SkyTree Co., Ltd.
Architect	Nikken Sekkei Ltd.
Constructor	Obayashi Corporation

■ Multiple districts outline

Location	1-chome Oshiage, Sumida-ku, Tokyo
Site area	Approx. 36,900m ²
Facility size	Building area: approx. 31,600m ² (including tower) Total floor area: approx. 230,000m ² (including tower) Building size: East district – 31 stories above ground, 3 basements West district – 7 stories above ground, 2 basements Parking capacity – approx. 1,000 vehicles
Client	Tobu Railway Co., Ltd.
Builders	East district – joint venture of Obayashi Corporation, Kabuku Co., Ltd., and Tobu Construction Co., Ltd.



Global perspective

The URUP Method: Launching and Arriving at Ground Level—A Globally Unprecedented New Technology

Obayashi regards environmental initiatives as an important management issue for fulfilling its corporate social responsibility. The company developed and has introduced at a variety of construction sites the ultra rapid under pass (URUP) method in order to propose to customers a construction approach that is gentle on the surrounding environment and that generates lower CO₂-emission levels.



Project Background
Adopting a Construction Method that is Gentle on the Surrounding Environment

Many construction projects, to solve traffic congestion in urban areas, have the major problem of causing secondary congestion during the construction period. The question of how much this congestion can be reduced and eased is a big issue. On top of that, there is a need to take neighborhood residents and the environment into consideration, and reduce noise and vibrations from construction work and minimize CO₂ emissions.

(Left) Shield machine beginning tunnel boring at ground level

Problems with Underpass Construction Using the Conventional Construction Method

Easing traffic congestion is an urban problem in pressing need of resolution. For that reason, projects to make major intersections and railway crossings into multilevel crossings are going forward all across urban areas. And there is demand for the construction methods used to be environmentally friendly.

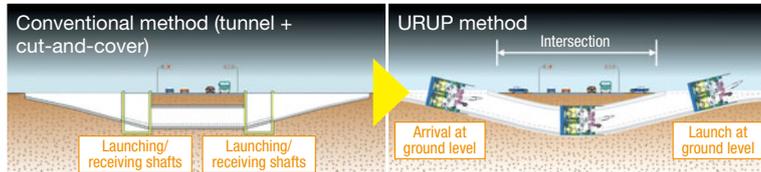
In the conventional method used to construct an underpass under a road or railway track, it was necessary to perform cut-and-cover-type tunnel construction and to excavate launching and receiving shafts. This necessitated construction work that had a major effect on general traffic and the surrounding environment. The time required, the cost, and the environmental impact have been viewed as problematic for a long time. Moreover, traffic congestion is also a problem in terms of reducing CO₂ emissions, while noise and vibrations from construction work were serious problems needing a solution.

Obayashi developed the URUP method to solve these problems and reduce environmental impact.

URUP Method: Significantly Shorter Construction Period and Environmentally Friendly

URUP is a rapid construction method developed to solve the problems of conventional underpass construction in urban areas. The biggest feature is the ability to start tunnel boring at ground level using a shield machine.¹ This eliminates the need for cut-and-cover construction and launching/receiving shafts, greatly reducing the construction time. Moreover, since aboveground work is minimized, the road occupancy area near the intersection is smaller than usual, helping to prevent traffic jams. Another big advantage is the minimal amount of soil displaced by construction.

The URUP method can shorten construction periods to half or one-third that of the conventional method. Reducing work time and limiting work area translate directly into lower CO₂ emissions. Certainly this is a new construction method that pays utmost consideration to aspects of the environment. Further, it enables significant reduction in noise and vibrations from large machinery. The URUP method was first used on the Oi Area Tunnel Construction Project on the Central Circular Shinagawa Route. Later, it was adopted for various applications, including roads and pipe conduits.



1. Boring machine used in shield tunnel excavation. The machine can go forward even in soft ground, and after excavation the tunnel is built in block segments.

The Central Circular Route is the closest to central Tokyo of the three ring roads in the Tokyo metropolitan area. The opening of the entire route has long been anticipated as a project that will resolve Tokyo's serious traffic congestion. The Shinagawa Route forms the southern portion of the circular route. The segment connecting Oi Junction in Shinagawa-ku with Ohashi Junction in Meguro-ku is the final segment to complete on the Central Circular Route.

Obayashi is in charge of a 730-meter underground extension linking the Oi Junction to the new expressway. The objectives of the project are to construct both the expressway and an underground ventilation station. The URUP method is being employed in this work.

In March 2010 the shield machine started excavating the inbound lane to connect the aboveground Bayshore Route to the deep-underground Central Circular Shinagawa Route and safely reached the Oi-kita ventilation station in November. After the shield machine was pushed out at the ventilation station, it was turned around 180 degrees and began excavating the outbound lane toward Oi, some ten meters above the inbound lane. It reached ground level in May 2011.

The earth pressure balance method² was used to limit effects on the peripheral ground during the Oi Tunnel's construction. With an outer diameter of 13.6 meters, the shield machine being used on this project is the largest in Japan, in terms of earth pressure. There are sections along the tunnel route where the shield machine is passed a mere 29 cm below important power

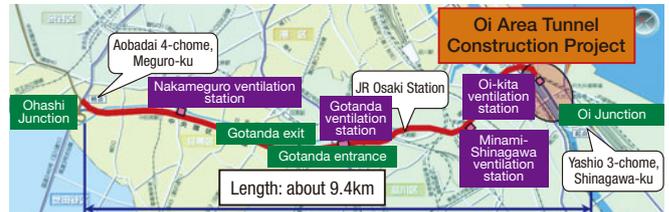
facilities. Another problem that has to be dealt with is segments lifting up from the pressure of groundwater, when the overburden³ is shallow. URUP is a construction



Looking down on the shield machine from ground level. With a diameter of 13.6 meters, it is the largest of its kind in Japan, in terms of mud pressure.



Shield machine finally arriving at ground level



method that also requires extremely minute designs and construction management.

Underpass construction that launches and arrives at ground level is drawing a great deal of interest; so far, more than 4,000 visitors have come to see the Oi Tunnel construction site. These include persons involved in construction, city residents, and even observers from outside Japan.

"Even for me, the URUP method that enabled underpass construction launch and arrival at ground level is an innovative technique that overturned the common sense I had cultivated in my experiences thus far," said Yoshinori Tashiro. "I expect that we can look forward to further development of this technology in the future, with the accumulation of a solid track record starting with Oi Area Tunnel Construction Project."

2. A shielded excavation method that attempts to stabilize the excavation surface (to prevent a collapse) using earth pressure.
3. The depth of soil from the ground surface to the top of the tunnel.



The tunnel entrance is completed after the shield machine passed through.



Yoshimori Tashiro
Project Manager, Obayashi-Seibu-Keiikyū Joint-Venture Project Office

More Smiles!

Urban Development Creating a Richer Living Environment

Obayashi will continue proposing urban development methods that are gentle on the environment. Underlying this commitment is one wish: to contribute to the creation of cities where project owners, neighborhood residents, and all people can smile more.

There are still many technical challenges that need to be pursued, including rational designs and construction techniques on sites with a shallow overburden. That is precisely why gaining practical experience through actual operation will enable the URUP method to become even better. Someday, the URUP method will have a broader field of action in more diverse types of tunnel construction, including tunnels under mountains and the seafloor.

Central Circular Shinagawa Route: Oi Area Tunnel Construction Project

Construction site	Yashio 1-chome, Shinagawa-ku, Tokyo
Construction period	June 25, 2008 – November 30, 2011
Client	Tokyo Metropolitan Government
Builder	Obayashi-Seibu-Keiikyū Joint Venture Office

■ Tunnel: shielded construction method

Type of shield	Earth pressure shielding method
Outside diameter of shield	φ13.6m
Outside diameter of segmental lining (Inside diameter of segmental lining)	φ13.4m (φ12.5m)
Segmental lining ring width	1,700mm
Shield tunneling extension	886m [336m (Oi), 550 (Ohashi)]
Excavated soil	129,000m ³



Global perspective

Thai Obayashi's Initiatives

Community-Based Thai Obayashi

Obayashi Corporation's Bangkok Office opened in 1964. Later, Thai Obayashi Corp., Ltd., was established in 1974 with Obayashi Corporation, CPB Equity, Bangkok Bank, Siam Commercial Bank, and The Metro Group as the major shareholders.



Boromajrathsittaya Maholarn Hall, constructed by Thai Obayashi

Thai Obayashi has grown into a top company in Thailand's construction industry today. Japanese company projects account for 70% of its sales, with 30% coming from non-Japanese projects. The non-Japanese projects include many funded by Thai capital, among which are construction projects ordered by the Bureau of The Royal Household, such as the Boromajrathsittaya Maholarn Hall (Royal Banquet Hall attached to the Grand Palace).

At Thai Obayashi, the Thai national staff moves projects forward as the main actors, with Japanese personnel fulfilling advisory roles. The company's goal is to heighten its presence as a top contractor in Thailand through localization built on the framework of Obayashi's DNA.

Human Development through Internships and Initiatives in Health and Safety Management

Since 1969 Thai Obayashi has sent two to five national staff members every year to Obayashi in Japan as trainees for about a year and a half. The objective is not only to study the Japanese language but also to experience Japan's business culture, the results of which are put to great use when dealing with Japanese customers after trainees return to Thailand.

At present, the majority of manager-level national staff members have gone through training in Japan. Moreover, when employees transferred from Japan to Thailand face the difficulty of work-related communication, in terms of language and business customs, the Thai personnel who have experienced training in Japan and who can understand the thinking of the Japanese staff on a practical level fulfill an important role within Thai Obayashi.



Thai Obayashi national staff member receiving training in Japan

Thai Obayashi's CSR Commitment

Thai Obayashi has prepared materials on corporate ethics in the Thai language and provides all employees with training in corporate ethics. Furthermore, the Human Resources Development Department and the labor union lead efforts to raise employees' abilities, contribute to society, and improve customer satisfaction. The company also established a vice president-headed Human Resources Committee that makes efforts to enhance employee benefits and welfare and improve the wage system.

Main CSR Actions

- Donation given following a tsunami in southern Thailand in October 2010
- Donation given for the victims of the Great East Japan Earthquake of March 2011
- Thai Obayashi's managers gave a lecture at a local university as guest speakers
- Scholarships given to four university students each year
- A library constructed for free and books donated to needy rural elementary schools every year since 2007 (four schools in 2010)



Donation being given for tsunami victims in southern Thailand



Library donated to an elementary school

More Smiles!

Progress of the Thai National Staff Underpins Thai Obayashi's Future

Thai Obayashi is emphasizing employee benefits and welfare and ability development in order to nurture top-caliber Thai national staff who will form the backbone of the company in the future. Specifically, the company is considering new education and skill development programs such as study-abroad and scholarship programs for employees.

In April 2011, Thai Obayashi President Somporn Chintawongvanich was appointed as an executive officer of Obayashi Corporation. This first appointment of a non-Japanese as an officer of Obayashi has boosted the motivation of the national staff. Obayashi believes that the transfer of technology and the delegation of authority to the national staff will lead, in the medium- to long-term, to the growth of Thai Obayashi and Thailand's society.

Establishing Japanese-Style "Safety and Reliability" in Thailand

I spent about two months receiving safety training at Obayashi's head office, at construction sites in the suburbs of Tokyo, and at the Nagoya branch office. I mainly learned about the overall safety management system and safe working procedures in different types of construction work. This included demolition work, factory remodeling work, and dam construction. Some of the work was of a kind that Thai Obayashi had never performed before.

After returning to Thailand I prepared various teaching materials, including a Statement of Thai Obayashi Safety Standards, a CD-ROM for teaching safety, and a manual of safe working procedures for architectural and civil engineering workers, with the aim of improving Thai Obayashi's safety management system. I also

prepared educational posters to raise the safety awareness of employees working on-site and of the staff of suppliers. I also held training sessions, including for suppliers' foremen, and provided instruction to ensure adherence to the safety standards and safety programs.

The results of these efforts appeared two years after I returned to Thailand. Nowadays, we hold a safety conference every two months and a safety awards ceremony every December to heighten employees' morale. Working on safety has produced very big results and has been a valuable experience for myself and, I believe, for the company. Next, we aim to implement the OHSAS 18001:2007 occupational health and safety management system during 2011.



Phattarin Khumthukthit
Senior Manager
Safety Supervision Office,
Thai Obayashi Corp.

Obayashi sets action objectives for different topics and checks their achievement levels every year in order to conduct more efficient and effective CSR initiatives. The following pages highlight some actions taken in fiscal 2010.

◆ Main Achievements in Fiscal 2010

	Action Objectives	Main Achievements in Fiscal 2010	Attainment Level
 Engagement with Customers	Aiming to be our customer's best partner Provide high-quality buildings	<ul style="list-style-type: none"> Used a technology database to propose cutting-edge construction technologies that meet customer needs Improved the efficiency and accuracy of inspections—e.g., for reinforcing bar arrangement, finish, and piping Provided services from maintenance service offices (energy-saving assessments, etc.) Promoted the internal dissemination of information by holding various workshops related to quality and technology Held a workshop on Building Information Modeling (BIM) 	○
	Develop technologies that meet customer needs and propose solutions	<ul style="list-style-type: none"> Completed the Techno Station, the new main building of the Technical Research Institute, in September Developed and used low-carbon concrete Used the URUP method and high-performance Steel Fiber Reinforced Concrete (SFRC) segments Compost Shuttle System won an Environmental Award from the Japan Society of Civil Engineers Made first use of the RCUBIC Mini Soil Remediation System Expanded use of the Dual Frame System (DFS), a high-rise building vibration control structure Developed and commercialized the QB Cutoff method, a demolition method with little noise and vibration 	○
	Execute construction work that ensures customer's safety and security	<ul style="list-style-type: none"> Took the areas surrounding construction sites into consideration when selecting construction methods and technologies 	○
	Support customers in efforts to minimize disaster risk	<ul style="list-style-type: none"> Responded rapidly to the Great East Japan Earthquake Prepared bases in case of another major earthquake in Japan Developed and deployed a system for automatically collecting information on damage to buildings and infrastructure during an earthquake using mobile phones Developed a pandemic emergency center, an emergency hospital unit for H1N1 influenza 	○
 Global Perspective	Solving environmental challenges Create a low-carbon society	<ul style="list-style-type: none"> Reduced CO₂ emissions from construction sites by 57% (base year: fiscal 1990) (target: 55%) Made proposals that reduced CO₂ emissions during use of buildings designed by Obayashi by 25% (compared to standard buildings) (target: 30%) 	○
	Create a recycling-oriented society	<ul style="list-style-type: none"> Zero emissions achievement rate for all construction sites: 81% (target: 86%) Construction sites that use electronic manifest on construction waste disposal: 82% (target: 80%) 	△
	Create a society in harmony with nature	<ul style="list-style-type: none"> Made the Policy on Biodiversity Conservation known throughout the Company Gave consideration to the ecosystem at every stage of each project, including proposal, design, and construction 	○
	Push environmental initiatives forward steadily	<ul style="list-style-type: none"> Established and announced the Obayashi Green Vision 2050, a medium- to long-term environmental vision Environmental law inquiry service used 1,384 times Held 194 environmental training sessions Held second Obayashi Environmental Conference Green procurement rate for construction materials and machinery: 51% (target: 45%) Green procurement rate for office supplies: 82% (target: 82%) 	○
	Practice environmental management at Obayashi's facilities	<ul style="list-style-type: none"> In-office electricity usage, 1,605 kWh/person (target: 1,695 kWh); water usage, 6.8 m³/person (target: 6.8 m³); paper usage, 53 kg/person (target: 54 kg) 	○
	Community and society development Make social contributions	<ul style="list-style-type: none"> Created a space on the company intranet where all employees can share social contribution examples Community contributions: held on-site tours, relocated wildlife on construction sites, etc. Support education and development of the next generation: opened construction site pavilion in KidZania, dispatched lecturers outside the Company, cooperated in training teachers for private companies Promote construction culture and support academic research: supported the Obayashi Foundation, published the Obayashi Quarterly, operated the Obayashi History Museum, etc. Others: sponsored social contribution seats for the Vissel Kobe soccer team home matches, to which Obayashi invites children in foster homes in Hyogo Prefecture; collected bottle caps for the Ecocap Movement; etc. 	○
 Amenity and Associates	Creating rewarding workplaces and work to take pride Utilize diverse human resources	<ul style="list-style-type: none"> Took measures aimed at creating work environments where diverse human resources can succeed (revised the manager system, etc.) Women managers, 165 (2009: 143); reemployment rate, 71.8% (2009: 60.0%); employment rate of disabled persons, 1.98% (statutory employment rate: 1.80%) Provided internship training in Japan for local employees of group companies outside Japan (8 people from 2 countries) Provided training to build human rights awareness 	○
	Promote human resources development	<ul style="list-style-type: none"> Introduced five measures based on a New Training Policy, including business/work field-based training 	○
	Promote work-life balance	<ul style="list-style-type: none"> Average rate for taking paid holiday: 37.5% (2009: 38.8%) Promoted No Overtime Days (ongoing) Took measures in accordance with the Third Action Plan Number of employees who took childcare leave: men, 0; women, 45 (2009: men, 1; women, 32) Started a telephone-based health consultation service for employees working outside Japan 	○
	Protecting the safety and health of all workers Prevent occupational accidents	<ul style="list-style-type: none"> Accidents resulting in more than four days of lost work, 40 (2009: 52); fatal accidents, 0 (2009: 1); frequency rate, 0.47 (2009: 0.56); severity rate, 0.02 (2009: 0.19) Implemented three major campaigns for the prevention of occupational accidents and conducted safety patrols Equipped construction offices with 108 automatic external defibrillators (AEDs) Provided safety training in Vietnam and Indonesia using local language textbooks Introduced safety management efforts carried out in Japan (such as morning meetings, safety patrols, and defect meetings) to Singapore, Vietnam, Indonesia, and other countries 	○
	Train and support partner companies in safety and health management	<ul style="list-style-type: none"> Supported safety and health training implemented by suppliers 	○
	As partners that grow hand-in-hand Strengthen relationships of trust with suppliers	<ul style="list-style-type: none"> Established Obayashi Group CSR procurement guidelines Established the Obayashi Supervisor Approval System to Excellency Provided engineering support to suppliers 	○
 Open Communication with Stakeholders	Corporate governance and risk management Enhance corporate governance	<ul style="list-style-type: none"> Made decisions accurately and swiftly in meetings of the Board of Directors and other management councils Conducted audits on offices outside Japan (21 sites, including subsidiaries), with a focus on risk control 	○
	Ensure thorough compliance	<ul style="list-style-type: none"> Provided corporate-ethics training to approximately 12,000 officers, employees, temporary employees, incoming transferred employees, and part-time employees Established five Action Commitments to be followed when conducting business as part of Obayashi's Vision, Values, and Commitments 	○
	Information disclosure and accountability Proactively disclose information and enhance open communication	<ul style="list-style-type: none"> Held biannual results briefings at the Tokyo Head Office and also via conference calls Held on-site tours for institutional investors and analysts Published an annual report in Japanese and English and sent it to 230 institutional investors in and outside Japan Held stakeholders meetings Created a page on the company's intranet for the president to post direct messages Conducted an employee-satisfaction survey Used e-learning, workshops, and pamphlets to provide training on the prevention of information leaks 	○

Attainment level: ○ exceeded, ○ reached, △ improved, × not reached (or not attempted)



CSR HIGHLIGHT

Engagement with Customers

Our goal is to be the best partner for every customer. To accomplish this, we continually strive to develop state-of-the-art technology, to provide high-quality buildings and structures that fully satisfy customers, and to deliver solutions for customers' challenges.

Aiming to Be Our Customer's Best Partner

Supporting Customers in Efforts to Minimize Disaster Risk

The Great East Japan Earthquake of March 2011 caused damage over a wide area stretching from the Tohoku region to the Tokyo metropolitan area, and was compounded by factors including a tsunami and numerous big aftershocks. Obayashi, however, was able to respond in a timely and appropriate fashion, based on its BCP for earthquakes.

In order to make use of this experience in future large-scale disasters, the company will start reviewing its BCP to ensure its ability to support the business continuity of its customers, including the restoration of infrastructure. This will include rearranging procurement routes for materials and machinery, as a preparation to be taken during normal times, and restructuring a system that mobilizes engineers and suppliers nationwide. At the same time, Obayashi will make suggestions that will help its customers minimize risks and will develop a system for more quickly gathering and sharing accurate information.

Customer Support System in the Case of a Disaster

■ Strengthening the Business Continuity Management Support Service

Obayashi's business continuity management service includes a full range of solutions, from risk assessment to concrete proposals for mitigating risk from disasters. The service estimates the time and cost of restoration work in case of a disaster, and proposes risk mitigation measures that suit each customer's particular situation.

■ Responses Based on Damage Estimates

Following the Great East Japan Earthquake, Obayashi made damage estimates (major, intermediate, or minor damage) based on information in a database of buildings constructed by Obayashi. It then confirmed that nothing was missed in investigations of buildings with a high priority when conducting building damage investigations.

Dorm Upgraded to Emergency Base

Obayashi's Nagoya Branch Office oversees a region concerned about the potential effects of a major earthquake. For this reason, it upgraded a dormitory, completed in fiscal 2010 for employees living alone, to a first-response base during emergencies. The dorm has been outfitted with an emergency office, complete with power generator and communication equipment such as a satellite mobile phone and two-way radios. It has also been supplied with a stockpile of food and other emergency provisions—automatic external defibrillators (AEDs), simple emergency toilets that use manholes, and emergency benches that double as barbecue grills—so that the dorm can also be used by community residents during an earthquake disaster. Water for use during an emergency has also been secured with well water and rainwater harvesting. These preparations are intended to enable the residents, who use the building as a dorm during normal times, to act as first-responders in an earthquake disaster.

Offering Technology and Solutions

■ Expanding the Application of the DFS High-Rise Building Vibration Control Structure System

The Dual Frame System (DFS) is a high-rise building vibration control structure system that reduces shaking by forming one building from two different structures and connecting those two structures, each of which has a different way of vibrating, with a vibration control device. It is also effective against long-period ground motion. The ability to minimize the force on the dwelling unit structure allows posts and beams to be reduced. This, in addition to easing shaking from earthquakes and strong winds enables the creation of comfortable living spaces with improved freedom of room layouts on each floor. The DFS has been applied in four high-rise buildings that began construction in fiscal 2010 and two buildings that have been completed in Osaka.

	Seismic-resistant structure	DFS
Sectional elevation model during deformation		
Framework image		

■ Construction Begun on the Wakkanai City Biomass Energy Center

Obayashi is taking part in the private finance initiative (PFI)¹ for the Wakkanai City Biomass Energy Center sponsored by the city of Wakkanai, Hokkaido. Household raw garbage that is currently buried in a final landfill site, sewage, fisheries waste, and other biomass will be fermented. The gas that is generated will then be used as fuel for generators and garbage trucks, thereby reducing greenhouse gas emissions. Generated electricity will be used on-site with surplus power sold. The volume of residue left after fermentation is smaller than the original input and some will be recycled as a compost supplement. In this way the amount of buried waste will be reduced and the service life of the landfill extended.

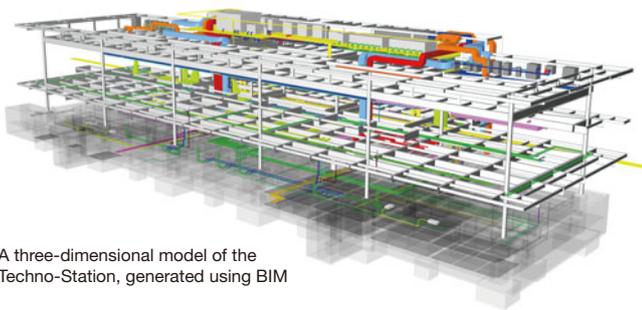
1. A method of providing more efficient, high-quality public services by utilizing private-sector funds, technology, and know-how in the construction, operation, and maintenance of public facilities.



Utilizing Building Information Modeling (BIM)

BIM is the use on a construction project of three-dimensional models that include not only two-dimensional data on building shape, like that of conventional drawings, but also data on specifications such as the type and weight of materials. The ability to visualize all the information and processes, from planning, design, and construction management to maintenance and management, enables clients, architects, and builders to form a consensus at an early stage.

In April 2010, Obayashi established a BIM Promotion Department. It utilized BIM in the construction of the Techno-Station, the main building of Obayashi's Technical Research Institute. In addition, a joint team from Obayashi and Oak Setsubi Corporation, an Obayashi Group company, used BIM to win the top prize in the Build Live Tokyo 2010 virtual design competition, sponsored by the International Alliance for Interoperability Japan Association in October. Going forward, Obayashi will actively promote the adoption of BIM to enhance customer satisfaction.



A three-dimensional model of the Techno-Station, generated using BIM

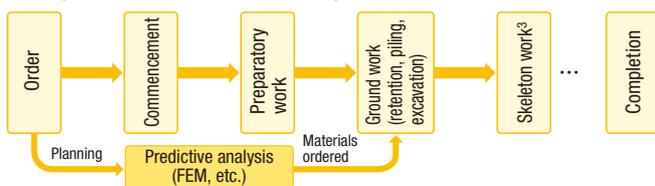
Implementing Safety Measures for Areas Surrounding Construction Sites

Construction in large metropolitan areas has to account for things such as the building's underground structure, underground piping, and adjacent railways. Obayashi carries out work based on elaborate plans to avoid impacting the ground in areas around construction sites.

Particularly at sites surrounded by important structures such as the Tokyo Sky Tree® site, which borders railway tracks, Obayashi uses analysis techniques such as the Finite Element Method (FEM)² when digging deep into the ground to perform predictive analysis of the movement of the ground and nearby structures before construction commences. The analysis results forecast how the ground may deform and to what degree the railway tracks may be affected by excavating the ground along the tracks. Obayashi then chooses each construction method and technology according to the situation before proceeding with construction work.

2. An analysis method that divides an object into a mesh pattern (finite elements) in order to calculate deformations, strains, stress, and other responses in the object when an external force is applied.

◆ Project Flow and Predictive Analysis



3. Constructing a building's primary structure including posts and beams

■ Ground Work for the Tokyo Sky Tree®

● Challenges and counter plan

The main objective was to prevent excavation along the Tobu Iseesaki Line from adversely impacting the tracks, impeding trains through ground settlement, etc.

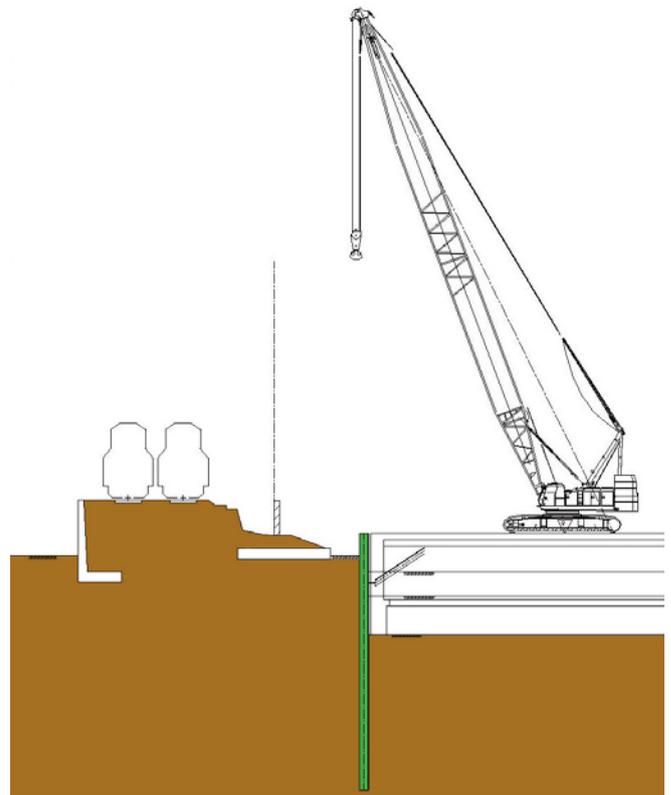
● Ground transformation analysis (FEM analysis)

Displacement of the track surface had to satisfy a criterion value during construction. Safe and reliable construction methods were selected upon more concrete and more accurate predictions of the horizontal displacement and settlement in the track surface of the Tobu Iseesaki Line obtained using deformation analysis of a retaining wall and FEM analysis of the ground.

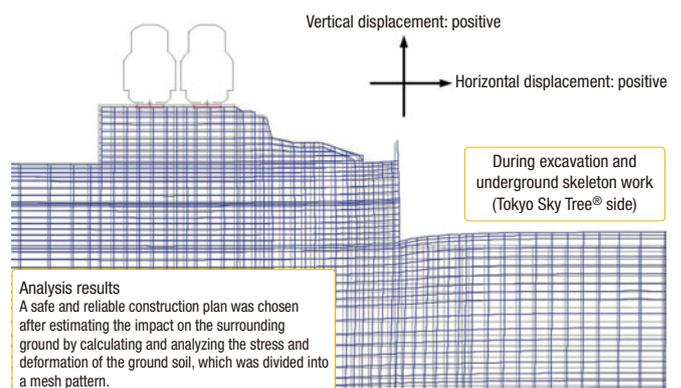
● Implementation management

Construction was carried out while verifying during the work that displacement of the track surface was staying within the criterion value.

◆ Cross-Section of the Tokyo Sky Tree® Ground Work Plan



◆ Impact During Excavation (Predictive Map)





CSR HIGHLIGHT

Global Perspective

We offer solutions to environmental and social challenges and actively engage in social contribution activities to help build a sustainable world.

Resolving Environmental Issues

Construction Work and the Increasing Risk of Natural Disasters

With changes in the global climate and other environmental conditions, the threat of natural disasters is increasing. Obayashi offers construction services ensuring lower costs and satisfactory quality, completed in a short period, so that measures against disaster-related risks can be smoothly implemented. Obayashi undertakes this type of work after ascertaining local ground, climate, wildlife, and other natural environmental conditions.

■ Levee Improvement Work

Obayashi is engaged in construction of levee improvement that was damaged when Hurricane Katrina caused massive damage to the United States in 2005.

Over the span of a year and a half, beginning in January 2010, The Joint Venture Obayashi participates will construct a 12km extension of a 3.5m-high steel-reinforced concrete wall, with foundation piles driven up to 47m into the ground. In order to prevent delay in the construction schedule with concrete wall establishment achieved by the start of 2011 hurricane season, work went ahead straight through the 2010 hurricane season, after preparing hurricane emergency action plan and conducting emergency drills. Attention is also being paid to wildlife in the vicinity, as work proceeds.



Levee improvement work



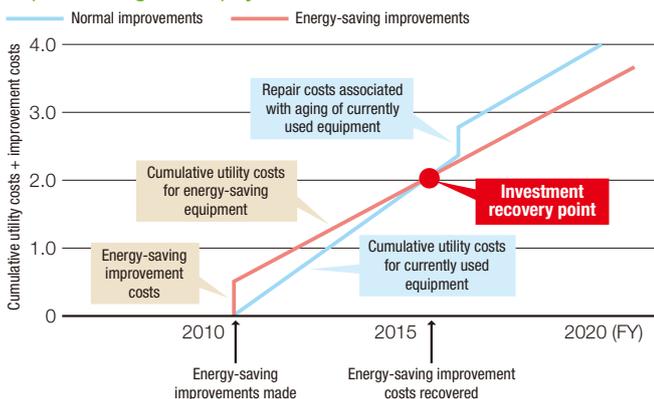
Alligator that appeared at the construction site

Effective Tools for Reducing CO₂ Emissions

Buildings are generally used for longer periods than automobiles and consumer electronics. There is also demand to continue using them even longer, in order to reduce environmental impact.

In addition to reducing the life cycle CO₂ (LCCO₂)¹ emissions of new buildings, making existing buildings more energy efficient is important in order to effectively reduce overall greenhouse gas emissions from buildings toward 2050. For that reason, Obayashi developed a remodeling version for refurbished buildings of its

◆ Image of Examination Results Displayed in the ECO-NAVI (Remodeling Version) System



comprehensive energy-saving building assessment system, ECO-NAVI, which it developed for new buildings. Obayashi hopes to expand energy-saving improvements by making proposals to customers based on accurate forecasts of CO₂-reduction effects and economic potential.

1. A building's CO₂ emissions over its entire lifecycle (from production of materials and machinery through construction, operation, repairs, refurbishment, demolition, recycling, and disposal).

Development of Recycled Materials

Reserves of good-quality natural aggregate, which is a material in concrete, are decreasing year by year. Additionally, buildings constructed in Japan during the country's period of high economic development are reaching the time for upgrading.

Obayashi's Technical Research Institute manufactures high-quality recycled coarse aggregate (gravel) and recycles fine aggregate (sand) by grinding these materials under heated chunks of concrete, which come from demolished buildings on-site. The recycled material is then reused in the structure of a new building, after confirming its quality as recycled aggregate concrete and obtaining ministerial approval. Moreover, powder generated during production of the recycled aggregate is included as a raw material in ceramic tiles, which are also used in the building, demonstrating a model for complete recycling of demolished concrete.



Building with exposed concrete walls made using high-quality recycled aggregate



Ceramic tiles made with powder generated during production of recycled aggregate (used in the floor of the building pictured at the left)

External Award for Construction Site Initiatives

During construction of the Hokuyo Odori Center, a new building in Sapporo, Hokkaido, Obayashi achieved a 97.2% recycling rate for waste from construction work, in contrast to the fiscal 2010 target of 87% set by the Hokkaido government. This achievement is the result of various creative ideas applied to the construction site as well as the establishment of waste processing routes. Obayashi also attempted to spread these initiatives to Hokkaido's construction industry through joint efforts with the government and companies involved in work on this project.

In recognition of these efforts, in October 2010 Obayashi won a fiscal 2010 Ministry of Land, Infrastructure, Transport and Tourism award for distinguished service in promoting "Reduce, Reuse, and Recycle" (3R) activities and a fiscal 2010 Hokkaido Zero Emissions Award grand prize.



Reduced individual packaging by using a custom-made case for transporting fluorescent tubes, of which a large number were used



Remnants of fire-resistant covering material, effectively recycled as filler on each floor



Ascertaining the Effect of Creating Green Spaces

Shinagawa Central Garden, a park developed with a redevelopment project, was originally the site of a railroad. The park is flanked on the east and west by high-rise buildings and an underground parking lot beneath it. About 290 tall trees and other greenery were arranged to turn this 45-meter-wide, 400-meter-long pedestrian space into an urban oasis. The plants have grown in the eight years since construction work was completed in 2003. Surveys of high temperatures, wind, and wildlife that began in fiscal 2009 were continued in fiscal 2010 to ascertain the environmental effects of the green space. The second measurement of trees was conducted in April 2011 in order to calculate absorption of CO₂.

The survey obtained data showing suppression of the heat island phenomenon and better thermal comfort in the summer and winter. Observed wildlife included 11 orders, 67 families, and 133 species of insects and 6 orders, 14 families, and 17 species of birds. The Ebony Jewelwing species of damselfly and *Rhyothemis fuliginosa* species of dragonfly, which are on the fiscal 2010 list of important wildlife species to protect in Tokyo, were also spotted.

Obayashi will make use of these survey results in its future proposals and designs.



Shinagawa Central Garden (Minato-ku, Tokyo)



Ebony Jewelwing spotted in Shinagawa Central Garden

Environmental Communication Using a Retained Forest

Obayashi has retained a nearly 1.8-hectare forest of mixed trees on the site of its Technical Research Institute. Since 1998 the Company has monitored the distribution of various plant life—including the *kinran* and *ginran* orchids—in the forest, so that many of these endangered species in Japan can grow here. The Company has continued to monitor and study the site in order to protect the mixed trees and

kinran. In October 2010, the site was specially certified as one of the 100 Business Sites Greens Helping Biodiversity Conservation.

In May 2010 the Company invited a local nature conservation group to visit and held a *kinran* viewing walk that was attended by about 30 people. Approximately 120 people participated in the walk in May 2011.

From here on Obayashi will continue using the retained forest for environmental communication and will put the biodiversity protection techniques it cultivates to use at construction sites.



Obayashi researcher giving an explanation during a *kinran*-viewing walk (May 2010)

Rokkatei Project Wins Architectural Institute of Japan Prize

In April 2011 the Rokkatei Project—Rokkatei Confectionery Co., Ltd., Nakasatsunai Town, and Obayashi Corporation—won an Architectural Institute of Japan prize in the Specific Contributions Division, which recognizes outstanding achievement in contributing to progress in science, technology, and the arts. The prize recognized the project's contribution to the creation of local culture through the development of cultural facilities rooted in the community and the restoration of local nature, beginning with a plan for the construction of a confectionery factory.

Obayashi has worked together with the client since the planning stage to put the concept for the project together. The project has taken 20 years of effort, including the design of the Nakasatsunai Art Village, which is a group of cultural facilities existing in harmony with a 30-hectare oak forest, and the landscape design of the Rokka Forest, which was a wasteland acquired for the factory site and on which nature was regenerated and considerations made for biodiversity and local scenery.



Rokka Forest, Nakasatsunai, Hokkaido

Considering the Growth of Communities and Society

Community Contribution Efforts

SHIN-TOMEI Inage Construction Office

■ Wildlife-Relocation Project

The Second Tomei Inage Construction Office held a wildlife-relocating operation to transfer creatures living in a section of river—which will be filled in for construction of the new Tomei Expressway—outside the construction site. Local junior high school students helped out, which gave them a chance to learn about the environment.



Relocating river creatures together with local junior high school students

Supporting Education and Development of the Next Generation

■ Obayashi Construction Site Pavilion at KidZania

Obayashi has a construction site pavilion at KidZania Tokyo and KidZania Koshien. KidZania is a child-sized replica of a city that gives children the chance to think about their future profession and role in society while having fun experiencing professions and aspects of society. Obayashi hopes the pavilions will encourage children, who are the rising generation, and contribute to the creation of a bright future where they paint their dreams and goals.



KidZania Tokyo's construction site pavilion



CSR HIGHLIGHT

Amenity and Associates

We create amenable work environments where every one of our associates can work safely and with peace of mind while realizing his or her full potential. We also strive to build trust with all business partners to ensure mutual success.

Rewarding Work and Workplaces

Fair Personnel Evaluations

The foundation of the Obayashi's personnel system is fair pay and benefits based on fair personnel evaluation. Personnel evaluations are conducted every six months, after managers and their staff members thoroughly discuss goals and achievements on an individual basis. Employees are entitled to check the final results of the evaluations to ensure transparency and validity of personnel evaluations. In the Company's personnel system, there is no gender gap in regards to positions and promotions.

The number of women managers is increasing every year; as of the end of March 2011, it had increased by 22 over the previous year to 165 women.

Obayashi's employees actively demonstrate their individual capabilities to the full throughout the world.

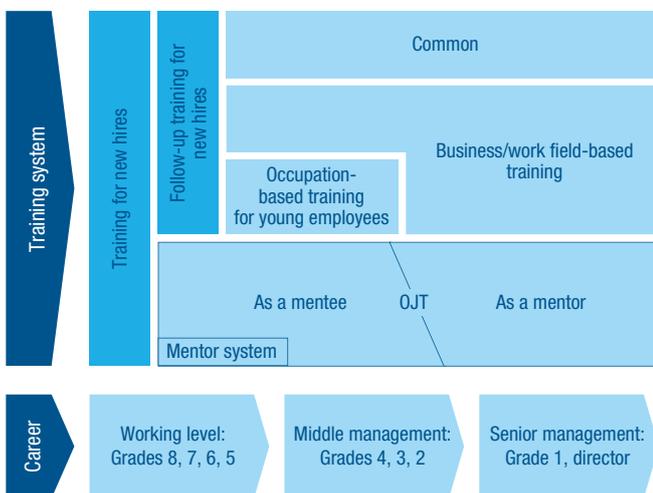
Employee Training Based on New Training Policy

Since fiscal 2010 Obayashi has been implementing business/work field-based training based on a new training policy established with a view toward passing along technology and techniques, and strengthening the business development force. The new training policy calls for improvement of conventional occupation-based training and on-the-job training (OJT) and the provision of training that develops human resources who understand business strategy and can take action.

Business/work field-based training focuses on systematic training in pursuit of clear portraits of the kind of people and skills that are needed in the organizations each person belongs to. A training committee chaired by an executive vice president conducts cross-cutting verifications of the status of training implementation, which are used to help expand efforts, in order to reliably and continuously practice training measures based on the new training policy.

In fiscal 2010, the Company adopted elective training programs, thereby enhancing an environment in which employees can proactively pursue their own development.

Obayashi's Training System



Human Rights Initiatives

Obayashi provides human rights awareness training that takes an active approach to the pertinent problems, focusing on issues associated with different ranks, from executives to new hires. Training sessions address such problems as power harassment and sexual harassment. Besides training sessions, the Company strives to resolve and prevent sexual harassment problems through measures such as publishing guidelines on the Company intranet and establishing a consultation hotline.

Enhancing Childcare and Nursing Care Benefits

Childcare-related Benefits

In an effort to support employees balancing work and childcare, Obayashi has established a variety of benefits and increased opportunities to provide information on those benefits. It also continuously strives to develop a workplace environment where benefits are easy to use.

In fiscal 2010, the Company pursued goals set out in the Third Action Plan and made nursing leave paid leave through the use of accumulated carryover time off (accumulated yearly paid vacation time not taken).

In addition, the Company established eight work patterns in order to flexibly respond to the childcare environment of employees who use shortened work schedules for parental obligations. Established as an effective means of supporting work and childcare, the program has been used by 91 employees as of March 31, 2011.

Nursing Care-related Benefits

In fiscal 2010, Obayashi started offering a nursing care subsidy benefit to support work and family nursing care. This program subsidizes one half of the fee for home care service used by the employee.

Reducing Overall Work Time

Reducing total working hours in the construction industry, especially among on-site workers, has become an urgent issue. In response, Obayashi has been making efforts to encourage its employees to take time off and to reduce overtime work.

Before the start of long consecutive holidays, the Company encouraged employees in all divisions to plan and take vacations. These efforts resulted in an average rate of 37.5% for employees taking annual paid leave in fiscal 2010. Being paid half-day leave, which had previously been available only to employees working at construction sites, was expanded to include all employees beginning in fiscal 2011.

Furthermore, the Company has designated the third Wednesday of every month "No Overtime Day" and calls on employees to leave work on time. It has also designated the fifth Saturday in October a day of no construction site work. Through these and other measures the Company tries to raise employee awareness and reduce overtime work.

The Company has also striven to help manage employee health, including by instructing them to see a physician if their overtime work exceeded 80 hours a month. This now includes employees working outside Japan and in other remote locations with the establishment of a Web-based interview system.



Protecting the Safety and Health of All Workers

Aiming for No Fatal Accidents

As a company that contributes to society by providing safety and security, Obayashi again made no fatal accidents a fiscal goal (as it did the year before) for 2010, implemented the following priority measures, and achieved its goal of zero fatal accidents:

1. Prevent falling accidents

Fully enforce the use of safety belts¹ and check the installation of safety equipment

2. Prevent machinery accidents

Prevent accidents caused by the misuse of slings² and cranes overturning

3. Provide instruction and support to improve suppliers' autonomous safety and health management

4. Create healthy workplace environments

1. Safety belt: A belt with a lifeline attached to prevent accidental falls.
2. Sling work: A series of operations required to carry a load to a specified position by use of a crane and hoisting attachment such as a wire rope.



Poster for Safety Belt Month

As one effort to prevent falling accidents, Obayashi designated April and October Safety Belt Months and worked to ensure the use of safety belts and to eliminate injuries from falling accidents resulting from their not being used.

Safety Patrols

The safety and environment department at each of Obayashi's branch offices led the way in conducting a total of 3,400 safety patrols nationwide. During these patrols, the status of safety and health management was checked to prevent occupational accidents at construction sites. In May and November 2010, Executive Vice President Tadahiko Noguchi, Obayashi's officer in charge of safety and health, conducted special patrols and gave direct instructions on what improvements were to be made.



Special patrol of the Hamamatsu Asahi Itaya Redevelopment Joint Venture Project Office (May 2010)

Safety and Health Training for Suppliers

Obayashi is working with suppliers to improve safety and health, through such methods as safety patrols and safety and health training sessions. The Company also actively provides support to develop and enhance management systems, with the aim of improving suppliers' autonomous safety and health management abilities.

In fiscal 2010, the Company held various health and safety training sessions at locations around Japan and dispatched instructors to special training sessions and workshops organized by suppliers.



Training sessions for site managers and safety and health controllers are held at locations around Japan in accordance with Article 60 of the Industrial Safety and Health Act.

Aiming for Mutual Success

Certify and Appoint Excellent Supervisors

In recent years the construction industry has been faced with the problematic flattening of the hiring and retention rates of young construction technicians while veteran technicians are aging. There are a number of reasons for the stagnation in the hiring and retention rates of young construction technicians, one of which is low wages.

Given this situation, in April 2011 Obayashi decided to certify and appoint especially excellent supervisors who oversee construction technicians as Obayashi Supervisor Approval System to Excellency and raise their incomes³ in order to provide a future goal for young construction technicians.

Through this initiative, Obayashi will contribute to the sustainable development of the construction industry, which underpins all industries and the lives of the people.

3. Raised to a level that will enable achievement of the six-million-yen standard target annual income acknowledged in Recommendation 1 of the *Recommendations Concerning the Securing and Training of Construction Technicians* published by the Japan Federation of Construction Contractors in April 2009.

Promoting CSR Procurement

Obayashi has established green-procurement guidelines and has striven to reduce any procurement-related environmental impact. In June 2011 the Company established CSR procurement guidelines covering nine topics—compliance, corporate ethics, human rights, safety and health, the environment, quality, risk management system during disasters, information security, and social contributions—in order to advance its initiatives further. The guidelines apply to the initiatives of all suppliers (specialist subcontractors, building equipment installers, materials and product suppliers, staffing companies, etc.) of the Obayashi Group, including projects outside Japan, in order for the Company to fulfill its social responsibility throughout its business endeavors.

From here on the Company will make sure relevant parties are familiar with the guidelines in order to promote procurement in line with them and will conduct surveys of suppliers' CSR initiatives.



CLOSE UP Global CSR Initiatives

Taiwan

The Use of Durable and Reusable Plywood for Concrete-Forming Panels⁴

The use of durable 18mm-thick plywood with a damage-resistant coating during construction of a subway station on the Taipei Metro's Xinyi Line enables the concrete-forming panels to be reused 20 times, which doubles the normal usage. This greatly reduces the use of wood and helps lessen environmental impact by protecting forests and reducing waste.

4. A frame for setting ready-mixed concrete into a fixed shape.



Concrete-forming panels made of 18mm-thick plywood

Vietnam

Increasing Safety Awareness by Local Employees

At the project site of Saigon East-West Highway, visual training materials describing accident case studies in Japan with drawings and figures are used to instruct workers on pre-work inspection and hazard prediction. In addition, to keep "Tool Box Meetings"⁵ from becoming one-way lectures, practice using fire extinguishers and other hands-on drills have been incorporated into the meetings in an effort to increase safety awareness.

5. Short meetings are led by site managers to discuss about the day's work, methods, process, and problems and to give instructions on the work.



Using training materials to educate the local employees



Firefighting drill using real fire extinguishers

Singapore

Scholarships for University Students

As a sponsor of the construction industry scholarship program, organized by Singapore's Building & Construction Authority (BCA), Obayashi is providing a two-year scholarship to a student majoring in civil engineering at Nanyang Technological University. This scholarship program began in 1993, and this is the fifth time Obayashi has participated in the program. Obayashi hopes that through this scholarship system, students will become excellent engineers leading the future of the construction industry in Singapore.



2010 scholarship recipient Goh Choon Siong and Senior Minister of State for National Development and Minister of Education Grace Fu at the presentation ceremony

Taiwan

Proposals for Protecting Animals near a Construction Site

The Zhongqiang Park, which is adjacent to the project site of Taipei Metro's Xinyi Line, is a rare habitat of Taipei tree frogs, a protected animal. This area is a rich natural environment and home to many species of frogs. As there is concern that construction could affect the frogs' ecosystem, Obayashi cooperating with forestry researchers from the National Taiwan University, carries out monthly field observations and reports back on proposals to protect the habitat to the Taipei City Government.



Taipei tree frog, a protected animal



Field observation conducted with forestry researchers from local National Taiwan University

Dubai, UAE

Briefing at the Dubai Japanese School about Dubai Metro Construction

Obayashi introduced and explained the Dubai Metro construction project to about 130 people, including third to sixth graders, teachers, and guardians at the Dubai Japanese School in October 2010. A similar briefing was given when construction began in 2006, but this time it was more specific and dynamic, since some train lines have been completed and are operational. The briefing was followed by a very lively Q&A session. The principal expressed his appreciation, saying that it taught them the spirit of Japanese people who are active internationally.

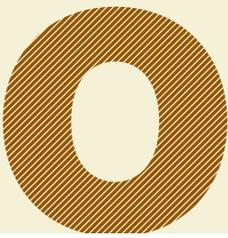


Written impressions by the elementary school students who attended the briefing

USA

Code of Ethical Conduct

Obayashi has prepared a Code of Ethical Conduct, which is a U.S. Federal government requirement for contractors involved in procurement, under the auspices of the U.S. Army Corps of Engineers, at hurricane levee construction sites in New Orleans. The Code of Ethical Conduct is a federal standard and was furnished to all workers, including temporary workers and national staff. Similar to Obayashi's Code of Business Conduct, the Code of Ethical Conduct stipulates matters such as compliance concerning the environment and the prohibition of bid rigging and other acts that inhibit competition.



Open Communication with Stakeholders

We work hard to maintain our reputation as a trustworthy company by pursuing management transparency, communicating broadly with stakeholders, and constantly enhancing our information disclosure.

Corporate Governance and Risk Management

Governance Structure

General Shareholders' Meetings, the Board of Directors, the Auditors' Committee and other bodies are amply fulfilling their legal responsibilities. Additionally, the Company practices accurate and swift decision making through its executive officer system and meetings of the management council, which is composed of members appointed from among the directors and executive officers. Three outside auditors provide impartial and thorough checks, ensuring responsibilities are fulfilled from their accounting and other professional standpoints and rich business experience, thereby raising the effectiveness of corporate governance.

Corporate Ethics Promotion Structure

Obayashi has established a Corporate Ethics Program to ensure thorough adherence to corporate ethics and has developed a structure to continually maintain and improve the level of corporate ethics. Specifically, based on a corporate ethics promotion system in which the president bears supreme responsibility, the Company established and enforces specific rules, such as those in the Antimonopoly Act Compliance Program and the Antisocial Forces Exclusion Program, and conducts training sessions aimed at ensuring thorough observance of corporate ethics.

In fiscal 2010 the Company specified actions that should be taken by individual employees if they were to become involved in bid rigging. It also established a Program of Actions When Faced with Bid Rigging and Similar Acts so that employees can immediately reject and report these acts. It then made the program known to all employees.

Obayashi makes sure to follow each and every measure in these programs, inspects the status of enforcement, and continually makes revisions, aiming thereby to be a company with thorough legal compliance that continuously maintains and raises its high observance of corporate ethics.

Corporate Management Structure



Information Disclosure and Accountability

Enhancing the Disclosure of IR Materials

In light of the fact that the proportion of shares held by non-Japanese investors is increasing, Obayashi discloses financial statements with more detailed information on financial results on both its Japanese and English websites. The Company has also enhanced the contents of its annual report with sections that introduce current projects such as the Tokyo Sky Tree® and Colorado River Bridge at Hoover Dam and highlight Obayashi's environmental technologies, such as those used in the Techno-Station, the main building of its Technical Research Institute.

Information Security

Obayashi provided e-learning programs to all employees (including temporary staff) with the aim of reaffirming and ensuring thorough adherence to rules relating to information security and the protection of personal information. In order to deepen understanding of the rules, each employee conducts self-checks using a checklist,

including reading material on check points, in addition to questions in a test format. The rate of participation in the e-learning programs was 93.7%.

Stakeholders Meeting

In July 2010 Obayashi held a stakeholder meeting at the Head Office to directly exchange opinions with four outside experts who specialize in CSR, environmental management, and urban problems. A total of 23 people, including Director, Senior Managing Executive Officer Akihisa Miwa and Managing Executive Officer Hiroshi Tadokoro, participated and discussed the experts' advice about Obayashi's CSR and future expectations of Obayashi as it proceeds with its CSR.

Company Overview

Business Outline

Company Name: Obayashi Corporation
 Founded: January 1892
 Incorporated: December 1936
 President: Toru Shiraishi
 Head Office: 2-15-2 Konan, Minato-ku, Tokyo
 Capital: 57,752 million Japanese yen
 Employees: 9,246 (as of March 31, 2011)
 Construction Business Permission: Government Permit (Toku/Han-21) 3000
 Real Estate Business License: Government License (12) 791
 Business Activities: Construction work in and outside Japan, regional development, urban development, ocean development, environmental improvement, and other construction-related businesses, including engineering, management, consulting, and real-estate

Major Business Offices

Head Office: 2-15-2 Konan, Minato-ku, Tokyo
 Sapporo Branch, Tohoku Branch (Sendai-shi), Tokyo Main Office (Minato-ku), Yokohama Branch, Hokuriku Branch (Niigata-shi), Nagoya Branch, Osaka Main Office, Kobe Branch, Hiroshima Branch, Shikoku Branch (Takamatsu-shi), Kyushu Branch (Fukuoka-shi), Overseas Business Division (Minato-ku, Tokyo)

Research Institute

Technical Research Institute (Kiyose-shi, Tokyo)

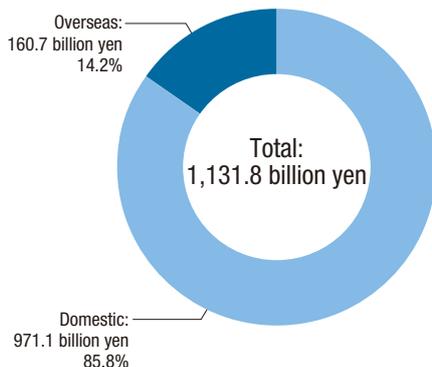
Offices Outside Japan

London, San Francisco, Guam, Taipei, Manila, Jakarta, Hanoi, Singapore, Kuala Lumpur, Bangkok, Dubai

Major Group Companies

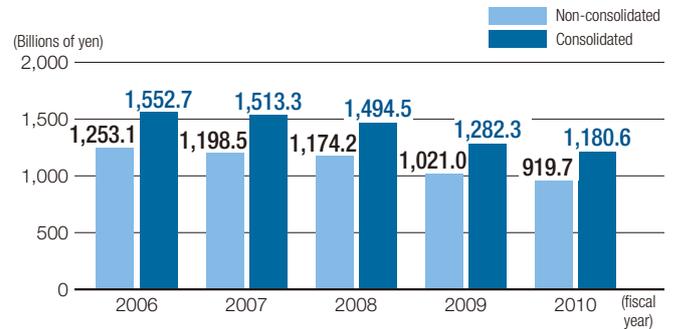
Obayashi Road Corporation (Sumida-ku, Tokyo)
 Naigai Technos Corporation (Shinjuku-ku, Tokyo)
 Obayashi Facilities Corporation (Chiyoda-ku, Tokyo)
 Oak Setsubi Corporation (Chiyoda-ku, Tokyo)
 Obayashi Real Estate Corporation (Chiyoda-ku, Tokyo)
 OC Finance Corporation (Minato-ku, Tokyo)
 Obayashi USA LLC (Los Angeles, USA)
 Thai Obayashi Corporation (Bangkok, Thailand)

Consolidated Net Sales by Region

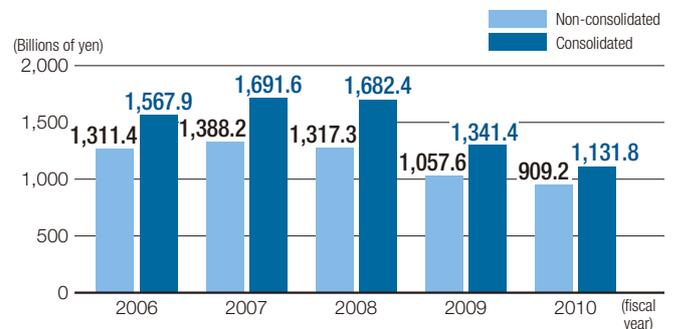


Financial Report

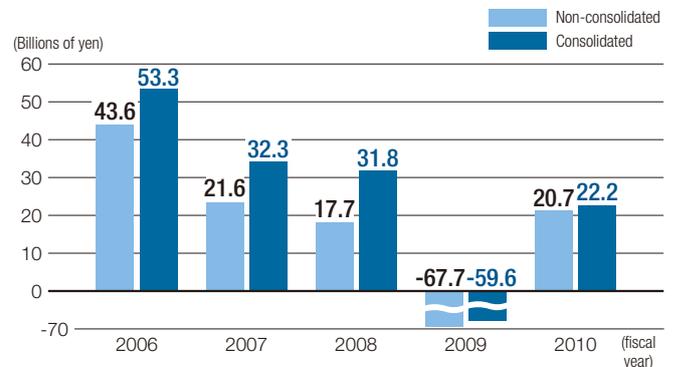
Orders Received



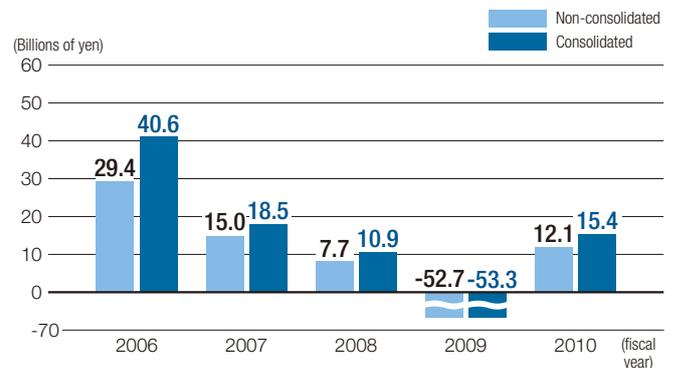
Net Sales



Ordinary Income (Loss)



Net Income (Loss)



Detailed financial information is available on the Company's website at www.obayashi.co.jp/english/ir.

