

Technological Development

The Taisei Group has identified “Promoting the technical development to solve environmental and social issues through open innovation” as a key initiative in its Medium-Term Business Plan (2021–2023). As part of its strategic priorities, the Group is strategically allocating resources to “technological development that contributes to industries anticipated to grow from a harmonious balance between the economy and the environment” and “technological development that offers a competitive edge.”

Page P.49 Solving Sustainability Issues in Society
Taisei Group's Growth Strategy

Page P.77 Technical Development for Realizing a Sustainable Society
Sustainability Section

Web Q Securities report [Research and development]

DX

1. Vision (How We Want to Be in 2030):

By 2030, we aspire to realize high-quality and efficient construction by bolstering and broadening our internal and external ties. Furthermore, we aim to manifest new value that positively impacts society at large, such as managing smart city projects on both city and urban scales.

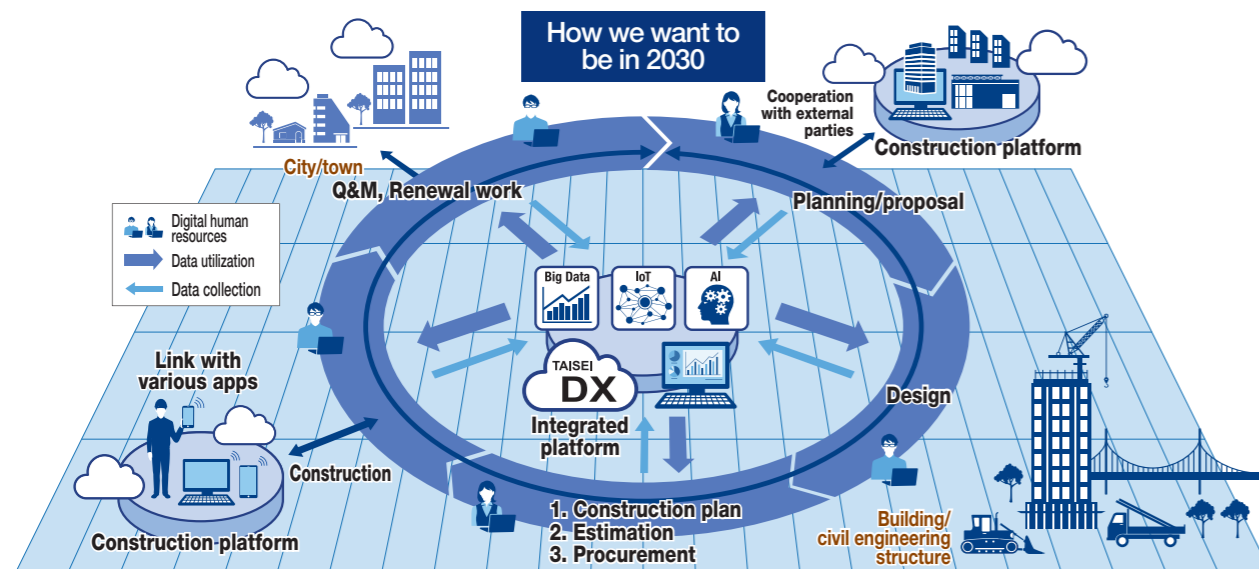


illustration by Hideki Tanaka

The Taisei Group's DX endeavors to enhance corporate value and make a societal contribution by addressing the challenges faced by society, clients, and employees.

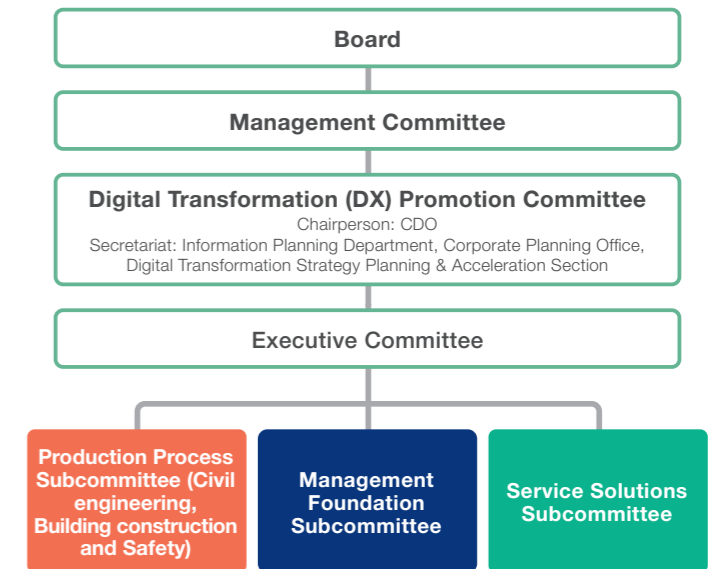
Social	Clients	Employees
Achieving sustainable and optimal cities and buildings, considering various aspects such as the natural environment and lifestyles.	Offering consistent support to ensure the safety and security of buildings and civil structures.	Providing an attractive work environment where diverse talents can thrive in “manufacturing” roles.
<ul style="list-style-type: none"> Implementation of environmentally friendly construction and operations management. Collaborating with local governments to address sustainability challenges and develop new projects. 	<ul style="list-style-type: none"> Delivering extensive value to building owners, tenants, and users even post-handover. Establishing a continuous sales and support framework that maintains a connection with clients. 	<ul style="list-style-type: none"> Utilizing “remote inspections” to support on-site QCDS (Quality, Cost, Delivery Time, Safety, and Environment). Enhancing management efficiency by centralizing information across the head offices, branches, and worksites through an integrated platform.

2. Promotion Structure

In 2020, the Taisei Group established its Digital Transformation (DX) Policy and DX Strategy in line with the Ministry of Economy, Trade and Industry's Digital Governance Code. It then set up the cross-functional “Digital Transformation (DX) Promotion Committee” and took a pioneering step in the construction industry by appointing a Chief Digital Officer (CDO).

The Digital Transformation (DX) Promotion Committee is responsible for developing and planning DX promotion measures and monitoring their execution. Subcommittees under the committee, composed of IT managers from various departments and external experts, work on addressing challenges.

From FY2022 onwards, the “Digital Transformation Strategy Planning & Acceleration Section” was inaugurated within the Corporate Planning Office to enhance the promotional framework. This step was aimed at bolstering the acceleration and monitoring of various DX initiatives, facilitating collaboration across departments, and amplifying support for the CDO.



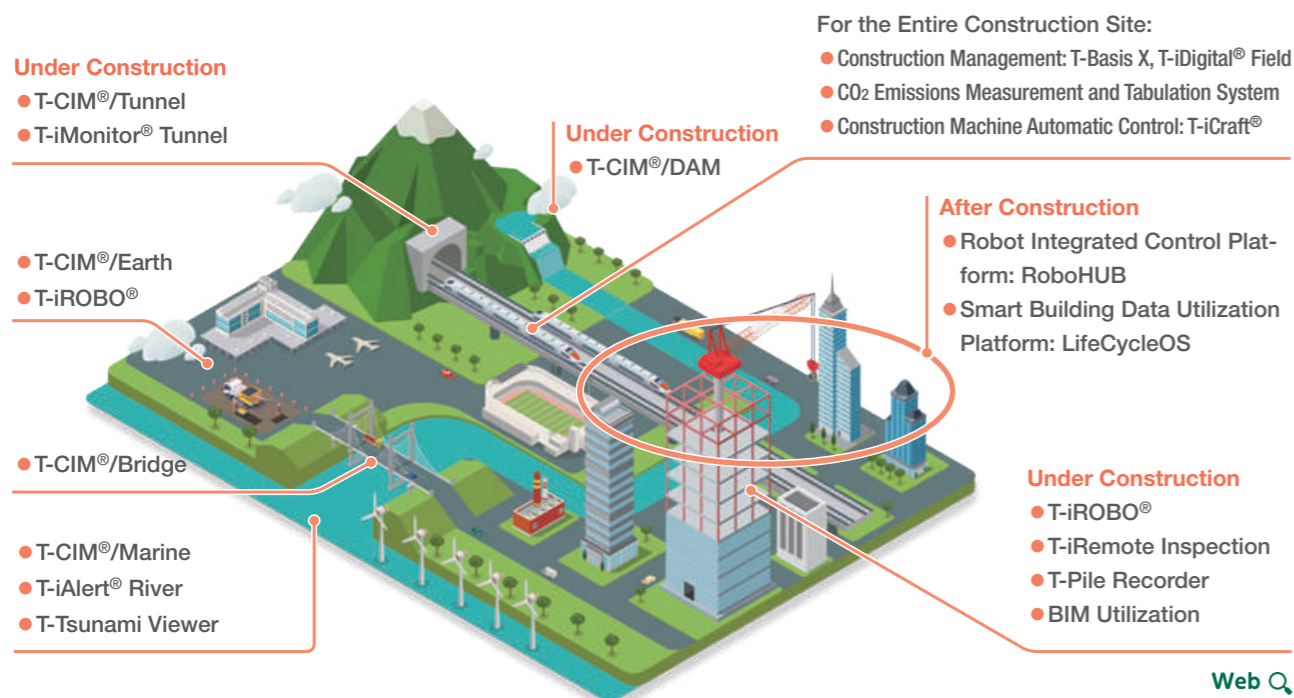
3. Initiatives and Progress

Key Initiative: Realize a transformation in the production system and work style through DX

	Core DX-Related Initiatives	Progress
DX in Production Process	<ol style="list-style-type: none"> Building digital twins via BIM/CIM design and construction cloud integration. Enhancement of the procurement-related information system. Streamlining and making the production processes transparent using advanced digital technologies. 	<p>Incremental roll-out of digital solutions to enhance productivity, safety (with methods for efficiency and manpower reduction), and quality.</p> <ul style="list-style-type: none"> Also pushing forward initiatives like monitoring CO₂ emissions.
DX in Management Foundation	<ol style="list-style-type: none"> Establishment of an integrated platform. Securing digital talents and introducing a rotation system. 	<p>Progression in sophisticated management and business operations using data, facilitated by an “integrated platform” system that allows various departments and worksites to extract and utilize data as required.</p> <ul style="list-style-type: none"> Launched the integrated platform, allowing effective use of data stored across different in-house systems. Accelerating data usage in managerial decision-making processes with the deployment of business intelligence tools tailored for managerial metrics overview. Full-scale roll-out of DX Academia: Initiated digital literacy training tailored for experts skilled in both digital realms and the DX operations of each division. Plans to introduce training for all employees are also in the pipeline. Proposals to introduce digital mechanisms that bolster autonomous learning are also on the table.
DX in Services & Solutions	<ol style="list-style-type: none"> Monetizing the O&M domain. Transitioning to a sales approach based on timely proposals, informed by data analytics. 	<p>Launching the digital facility management (DFM) initiative, embodying the concept of a “go-to doctor for buildings,” offering continued support through the building's life cycle.</p> <ul style="list-style-type: none"> Developed “LifecycleOS,” a platform optimized for data utilization in smart buildings. Continual development, execution, and maintenance of digital service solutions tailored to cater to the diverse needs of all stakeholders in the building domain.

4. Details of the Initiative

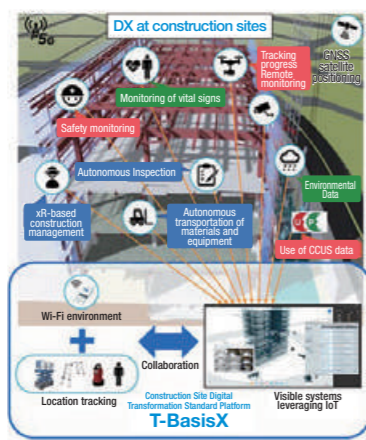
Examples of DX Items in the Construction Production Process



Web Q

The T-BasisX is a DX standard platform integrating the Wi-Fi environment with AI & IoT. It seeks to transform production processes by enhancing collaborations with various DX systems.

Data collection and analysis from the commencement of construction to its completion within the site have been made easier, with the deployment of remote-controlled robots. Collaboration with systems like the T-iRemote Inspection is expected to further optimize construction progress and enhance management efficiency.



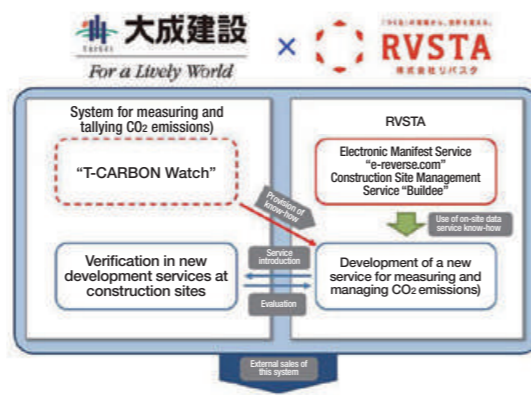
Value Proposition

- Effortless and comprehensive deployment of internet infrastructure, fundamental for digital technology applications in the field.
- Operational automation and labor saving on-site via real-time data collection sensor and robot deployment.

Web Q

Initiated the development of a CO2 emission measurement and management service for construction sites, aiming for widespread adoption in the construction industry.

A dedicated CO2 emission measurement and collection system has been developed for construction sites. Leveraging image recognition and other technologies, this system automates the tracking of CO2 emissions. Moving forward, our objective is to minimize user inconvenience, ensuring the system is user-friendly and aiming for its widespread adoption within the construction industry.



Value Proposition

- Significantly reduces manual data entry by automating the capture of various metrics like construction machinery and vehicle numbers, fuel consumption, etc.

Web Q

Civil Engineering

DX in Production Process

Ensure quality and enhance productivity and safety with applications that feature the T-iDigital Field, a worksite management system that utilizes data.

As a platform for civil engineering DX, it's deployed in approximately 30 different construction projects.

Value Proposition

- Assist in the quality, cost, delivery time, safety, and environment (QCDSE) management of construction, enhancing productivity and safety while contributing to CO2 reduction.
- By collecting and formalizing data from various types of construction, we aim to preserve technical expertise and further the automation of construction management and processes through AI.

Web Q

Civil Engineering

DX in Production Process

T-iCraft®: A Coordinated Control System for Construction Machinery. Introduced at dam construction sites, it emphasizes the expansion of unmanned and labor-saving operations.

The T-iCraft system controls the coordinated operation of various types and models of construction machinery, integrating different control systems and multiple units of autonomous construction equipment. By coordinating operations with the T-iROBO series of construction machinery, a notable enhancement in productivity has been achieved. In 2022, it was utilized during the construction of the Namma Dam's primary structure.

Value Proposition

- Controls the coordinated operation of various types of automatic construction machines.
- Achieving PF with a high degree of freedom in applicable construction equipment.
- The HOG system can be used to coordinate with manned construction equipment.

Value Proposition

- Boosting productivity and quality via the collaborative efforts of humans, construction machinery, and robots.
- Amplifying on-site safety through unmanned construction methodologies

Web Q

Building Construction

DX in Production Process

LifeCycleOS: A data utilization platform for smart buildings. Supporting the transition to advanced facility management grounded in data.

LifeCycleOS aggregates data from facilities, users, energy, and more, enabling data utilization and analysis. As of July 2023, the system is implemented at Taisei Advanced Center of Technology, Kansai Branch, Yokohama Branch, and Kawagoe Factory of Taisei U-LEC Co., Ltd. In conjunction with solution services tailored for each application, we aim to deliver digital facility management "DFM" that aspires to be an "ever-evolving smart building."

LifeCycleOS

Building data platform as a basis for building data

- Flexibly and easily connectable
- Sustainably evolving
- Human-centric and user-friendly

Value Proposition

- Delivering diverse value to all stakeholders during the facility's operational phase:
 - For clients: Enhancing facility asset value
 - For managers: Cutting down on maintenance expenses and energy usage, aiding in the transition to carbon neutrality
 - For users: Ensuring safety and comfort, boosting convenience

Web Q

Taisei Group's Growth Strategy **Topic 1** Solving Sustainability Issues in Society

Taisei Group's Solution Technology

The Taisei Group has developed numerous solution technologies over the years that have contributed to addressing various societal challenges.

This page provides an overview of some of these technologies. In the PDF version, each item links to a release on our company website for more details. (Japanese only)



Decarbonized Society

ZEB and Supporting Technologies

- T-ZCB (Zero Carbon Building): Launching the construction of the next-generation technology research center aiming for the first zero carbon building in Japan.
- Green Renewal® ZEB transformation for three facilities owned by the Group.
- ZEF: Evaluate energy balance across the entire plant (excluding production facilities).
- Acquisition of ZEB Oriented Certification for large commercial establishments.
- Demonstration project for a Renewed ZEB model aimed at constructing a "Regional Circular and Ecological Sphere": Selected for the Ministry of Environment's "FY2022 Regional Co-creation and Sector-crossing Carbon Neutral Technology Development and Demonstration Project."
- T-Green® Multi Solar: Multi-functional solar power system integrated with glass railings for balconies.
- Efforts for a model project showcasing renewable energy visibility at Tokyo Metropolitan Government-owned facilities using T-Green® Multi Solar.

Promotion of Clean Energy

- Solar power plant: Began commercial operations in Watarai-cho, Mie.
- Biomass power plant exclusively using wood: Initiation of development in Ishikari, Hokkaido.
- Demonstration project initiated for building a hydrogen supply chain in Muroran, Hokkaido.
- Basic agreement concluded on decarbonizing construction material plants using P2G (Power-to-Gas) system in Yamanashi.
- Development and demonstration of a power supply system capable of storing and utilizing renewable energy.
- Achieved to create microalgae that produce "oil," a fuel substance, outside the cells, contributing to the broader adoption of algae-based biofuels.
- T-iPower Road: A wireless power transmission road that can be installed on highways.

CO2 Reduction in Material and Construction Phases

- T-CARBON® Navios: CO2 emission prediction system during material manufacturing and construction stages.
- Efforts towards Zero Carbon Construction, aiming for near-zero CO2 emissions during construction.
- T-CARBON® E-Site: Real-time monitoring and recording of CO2 emissions derived from electricity.
- T-CARBON® SoilReme: A method to compute and display CO2 emissions based on soil purification techniques.
- T-Carbon® Mixing: Technique to spray and bind CO2 during concrete mixing.
- Application of "T-eConcrete®/Carbon-Recycle" to client structures.
- Collaboration with ITOCHU Corporation and Mineral Carbonation International for the implementation of T-eConcrete®.
- Technical certification secured for the "T-EAGLE® Piling Method" that utilizes T-eConcrete®.
- Worksite demonstration of "Carbon-Recycled Concrete Reinforcement Blocks."
- Development of environmentally friendly concrete suitable for 3D printing in construction.
- Utilization of the Green Innovation Fund: Production of synthetic limestone for cement through carbonation techniques.

Recycling-Oriented Society

Promoting the Circular Economy

- Zero-Water Building: Technology demonstration in the Human and Space Lab (ZEB Demonstration Building).
- Construction byproduct patrol and collection system
- Zero Carbon Steel Initiative: Efforts towards decarbonizing steel and recycling resources.

Promoting Sustainable Timber Use

- Saitama Forest Creation Agreement: Afforestation in areas where timber for building is sourced.
- Semi-fire-resistant steel column members that are fire-resistant coated only with wood
- Wood-related technologies: T-WOOD® TAIKA, Flame-Resistant Wood Coating, T-WOOD® Silent Wall.

Environmental Regeneration Technology

- T-SoilReme HeatBio: Ground heating microbial purification technology.
- T-SoilReme-Biobarrier: Prevention of VOC-contaminated groundwater spread.
- T-Quick Dorai: Material that rapidly absorbs soil moisture.
- High activity photocatalyst: Rapid decomposition and removal of airborne chemicals.

Productivity & Comfort

Digitizing Facility Management

- LifeCycleOS: Integrated management of BIM and building operation data.
- LCMC: Building lifecycle management service via subscription.

Enhancing Production Efficiency

- RoboHUB: Integrated platform connecting robots to building facilities.
- T-GreenVegeunit: Radiant plant cultivation unit enhancing indoor plant quality and efficiency.
- SLAM autonomous driving for lunar conditions: Chosen for the "Unmanned Space Construction Innovative Technology Development Project" by the Ministry of Land, Infrastructure, Transport, and Tourism.

Pursuit of Comfort & Emotional Enrichment

- T-Optimus® Noise: AI-driven optimal noise reduction system for machinery.
- T-Optimus® TMD: AI-driven floor vibration-damping device design system.
- T-Optimus® Control System: Optimal HVAC control for clean rooms.
- T-Clean Skylight: Blue sky lighting solution for clean rooms.
- T-Silent® Wind Noise: Component to reduce wind-induced vibrations.
- T-Silent® CFRP Frame: Vibration-dampening and soundproofing structural frame.
- Indoor positioning system: Uses building's magnetic field distribution to enhance user convenience and safety.

Safety and Disaster Prevention

Improving Construction Safety

- Remote Safety Management Application KIZUKIAI: Monitor, verify, and enhance safety at construction sites from distant locations.
- T-iSafety® Truck: An AI-driven system to prevent collisions between vehicles and workers.
- Tunnel face-related technology: T-KIRIHA VR, TN-Monitor®, T-Quick Shot, T-iROBO® Remote Shotcreting.
- T-iAlert® River: Enhancement of the flood warning system for river construction projects. Uses AI to predict river levels 24 hours in advance.

Improving Safety for Building Users

- TASS Rack®-Pallet: A simplified earthquake isolation system designed specifically for flat pallets.
- T-Flexible Cleanroom Membrane: Cleanroom system using fabric ducts.
- Hot exhaust gas diffusion prediction technology.

Regional Cooperation

Co-creation and Coexistence of Eco and Community

- Comprehensive collaboration for boosting tourism and strengthening disaster resilience (Unzen-shi, Nagasaki).
- Comprehensive partnership agreement to promote the creation of attractive communities (Okazaki-shi, Aichi).
- Vortex City: A town designed for innovative resource recycling (Kamakura-shi, Kanagawa).
- Comprehensive collaboration towards achieving carbon neutrality (Muroran-shi, Hokkaido).

Nature Co-Existing Society

Enhancing Biodiversity

- T-GI Rain Garden: A technology that utilizes planting base materials that both absorb and retain rainwater, facilitating the landscaping creation.
- Monitoring the aquatic presence of rare amphibians using environmental DNA analysis technology.
- Development of a new conservation method for the rare Kinran orchid.
- Mizube Concierge: A conservation planning tool for rare flora and fauna.
- Ikimono Concierge: A simplified tool for assessing biodiversity.
- Mori Concierge: A planning tool for designing green spaces with consideration to local character.

Page **P.69** Taisei Group's ZEB Sustainability Section

Learn more about Green Renewal ZEB and ZEF initiatives here.

Web **Q** Technology & Solutions (Japanese only)

The solution technology of the Taisei Group is described in detail on the website "Technology & Solutions."

Web **Q** TAISEI Green Target (Japanese only)

We have created the TAISEI Green Target (FY2023 edition) environmental pamphlet, which summarizes our various initiatives aimed at solving our client's environmental problems.

Taisei Group's Growth Strategy **Topic2** Management of Human Capital

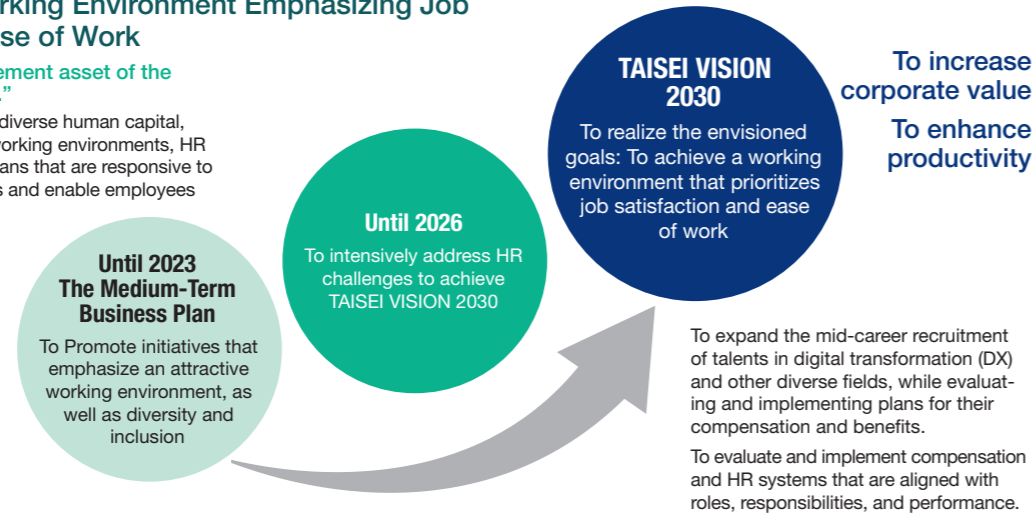
Approach to Human Resources and Human Capital

In line with the TAISEI VISION 2030, which represents the Taisei Group's medium- to long-term vision, one of our key priorities is to promote diversity and inclusion to create an attractive working environment. By fully leveraging the abilities of our diverse workforce and by establishing working styles and environments where every employee can excel while experiencing job satisfaction and ease of work, we aim to improve productivity and, thereby, enhance corporate value.

Realization of a Working Environment Emphasizing Job Satisfaction and Ease of Work

The most valuable management asset of the Taisei Group is its "people."

We aim to recruit and develop diverse human capital, and to establish comfortable working environments, HR systems, and compensation plans that are responsive to the evolving needs of the times and enable employees to fully utilize their abilities.



[Personnel policy]

Basic policy Personnel Policy that Contributes to the Creation of Corporate Value and Sustainable Growth

Concept of the organization to be aimed at

Organization with high engagement focusing on job satisfaction and ease of work

Concept of human capital to be aimed at

Professionals with cheerfulness, enthusiasm, integrity, and discipline as a business person

[Medium- to long-term external environment and structural changes]

- IX** Growing pressure for industry restructuring
- SX** Moving towards addressing environmental and social challenges through business
- DX** Entering an era where DX dictates competitiveness

[Medium- to long-term personnel issues]

- Recruitment and development of human capital**
 - To strengthen the recruitment of talent in civil engineering and building construction
 - To recruit human capital and build new HR systems to facilitate expansion into new business areas
 - To enhance development of human capital
- Diversity, equity, and inclusion**
 - To create an environment where talent with diverse perspectives can thrive
- Workstyle reform**
 - To promote flexible work arrangements tailored to the unique constraints on work location and hours in the construction industry

Job Satisfaction

- To Strengthen Recruitment of Diverse Human Capital**
 - To enhance the recruitment of professionals and talents in new domains, in addition to maintaining a stable workforce in existing areas (Year-round recruitment, promotion of reemployment for early retirees through "Job Return")
- Development and Strategic Placement of Talent**
 - To maximize abilities and growth through the establishment of comprehensive training programs and strategic placement
- To Enhance Personnel Assessments to Increase Motivation and Job Satisfaction**
 - To clarify individual employee goals based on the TAISEI VISION 2030, and strengthen reward mechanisms for high-performing employees
 - To award recognition to employees and business locations within the Taisei Group that have contributed to the realization of the TAISEI VISION 2030.

Ease of Work

- To Embed Diversity, Equity & Inclusion**
 - To develop flexible work environments that allow diverse human capital like female, elderly employees and non-Japanese employees to excel as they navigate through different life stages.
- Realization of Workstyle Reform**
 - To implement flexible workstyles tailored to the unique needs of the construction industry (staggered work hours, flextime for childcare, visibility of work hours through a monitoring system).
- Advancement of Health Management**
 - To continue to offer preventive measures and information to improve both mental and physical well-being. This includes the promotion of Femtech, subsidizing gynecological cancer screening costs, expanding infertility treatment support, pre-conception care, and mental health initiatives.
- Support for Life Planning**
 - To continue to offer seminars on asset building and planning for a second life phase.

Initiatives to Develop Human Capital

Enhancement of "Human Skills" and "Specialization"

We are advancing training programs focused on "human skills" to help individuals develop a well-rounded set of capabilities—encompassing mind, skill, and body—in a balanced manner. Through these programs, we aim to instill a broad perspective and cultivate individuals who are not just technically proficient but also socially and culturally informed.

To Boost Productivity through Online and On-Demand Training

We have implemented online and on-demand training modules that can be accessed at the convenience of the employees.

Promotion of Action Learning

We are focused on translating classroom learning into actionable insights in the workplace. Through a cycle of experiential learning that includes experience, introspection, conceptualization, and application, we aim to convert acquired knowledge into meaningful behavioral changes.



Development of Digital Human Capital through DX Academia

DX Academia is a systematized form of digital education that aims to develop human capital who uses digital technologies and data to improve productivity and create new value. We will provide a comprehensive learning environment for purposes ranging from improving the literacy of all employees to developing human capital who promotes DX.

"Wellness-Oriented" Training Centers

We have integrated biophilic design elements into our training spaces to create an environment that not only lowers stress but also enhances focus and well-being through interaction with natural elements.



Classroom: "T-Light Blinds" for natural indoor lighting
Common conversation space: Designed with wood and plants

Support for Professional Certification

To cultivate employees with high levels of expertise, we support the acquisition of various professional certifications, such as First-Class Architect and First-Class Civil Engineering Construction Management Engineer. We provide financial assistance for the necessary costs of these certifications and offer additional incentives to encourage skill enhancement.

Executive-Employee Interviews

To ensure the well-being of employees stationed at remote worksites, promote interactions between employees and executives, and boost employee morale, our executives engage in one-on-one interviews with team members.

Meister System

Aimed at preserving and passing down technical know-how, we have instituted a "Meister System." Under this system, individuals with robust experience and demonstrable technical aptitude are appointed as "Meisters," who then provide hands-on coaching at worksites.

Column 1

Promotion of Understanding of SDGs

In June 2023, we held a workshop for employees of Taisei Corporation to experience "The Action!—SDGs Card Game"—developed by SOMPO JAPAN Insurance Inc. It is a game in which all participants are divided into teams to start, in a setting where they live in the same area, use cards (time, money, projects) they receive, and work together to achieve SDGs that the teams set.

They deepened their understanding of SDGs and learned that it was important for each individual to take action.



Column 2

Improvement of Sustainability Literacy

We published the TAISEI Sustainability Handbook in August 2022 to share the awareness of sustainability as a fundamental part of our corporate activities among all Group officers and employees and lead it to their own action. Based on that, executives from the Sustainability Division (Integrated) visited more than 30 divisions, branches, and group companies individually, and held the Sustainability Management Briefing twice.

The first briefing session (September and October 2022) focused on basic approaches to sustainability and social trends, and the second briefing session (February and March 2023) provided explanations and opinion exchanges focusing on specific initiatives implemented by executives and employees.

The TAISEI Sustainability Handbook will be revised accordingly and will continue to be used for induction training after this fiscal year.

Taisei Group's Growth Strategy **Topic2** Management of Human Capital

Advancing Diversity, Equity, and Inclusion

To fulfill the Taisei Group Philosophy of “to create a vibrant environment for all members of society,” it is essential to first establish a work environment where every employee can flourish. In 2006, ahead of other companies, we initiated diversity promotion measures with an eye towards the challenges of a declining population and the need for new value creation. Through ongoing evaluation and adaptation of these initiatives, our focus on diversity has evolved into a broader commitment to diversity, equity, and inclusion, with an enhanced emphasis on “job satisfaction” and “ease of work.” Moreover, recognizing the male-dominated nature of the construction industry, we are placing special emphasis on strategies that actively “engage men” in these efforts.

“100% Male Childcare Leave Adoption” – A Continuous Effort since FY2017

To ensure that everyone feels secure in taking leave, we have made the days off paid, sent encouraging emails to target employees and their supervisors, and showcased examples of those who have taken leave. As of March 2023, more than 1,550 employees have benefited from this, translating to one in five male employees. We are committed to enhancing this environment further to allow leaves of over 14 days for all.

“Leadership Training for Male Managers” – Transitioning from D&I to DEIB

For everyone to fully utilize their unique attributes (D: Diversity) and thrive, it is essential to establish a psychologically safe workplace that embodies fairness (E: Equity), acceptance and respect (I: Inclusion), and a sense of belonging (B: Belonging). Primarily aimed at male managers, our training focuses on building awareness and introducing management practices that contribute to such an environment.

“Support for Balancing Childcare with Career” – Creating a Space for Couples to Strategically Plan Together

Mutual understanding and cooperation are essential for both partners to be able to raise children and have fulfilling careers. In order to achieve this, we conduct “Seminars Joined by Both Partners for Achieving Work and Life Balance” to support the creation of a support system that avoids losing opportunities for growth at work, such as reviewing the division of daily childcare and housework, and sharing a medium- to long-term career vision, including the meaning of work.

Medium- to Long-Term Goals

[Recruitment]

01 Percentage of female employees in the recruitment of new graduates: At least 25% by 2024 and at least 30% by 2030
22% in FY2023 (21% in FY2022).

[Women's participation and advancement in the workplace]

02 More than 10 times more female managers by FY2025 than the level in FY2015
The number increased eight times from 39 in FY2015 to 314 in FY2022. (The target for FY2023 is 330)

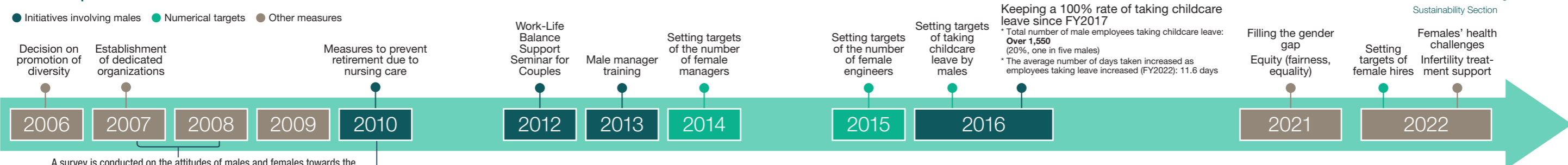
03 Percentage of female engineers: At least 15% by 2030
809 employees or 10.6% in FY2022 (767 or 10.2% in FY2021) Of these, the number of female employees working at our worksites increased from 110 in FY2015 to 170 in FY2022.

[Childcare support for males]

04 Rate of taking childcare leave by males: 100%
We have achieved 100% continuously since FY2017.

05 The average number of childcare leave days taken by males: At least 14 days
11.6 days in FY2022

Taisei Corporation's initiatives for DE&I



A survey is conducted on the attitudes of males and females towards the promotion of women's participation and advancement in the workplace

We recognize that “nursing care” initiatives are effective in raising awareness of work-life balance among males as well as females

Initiating specific measures

2

In order to promote women's participation and advancement in the workplace, organizations where male employees account for 80% must establish accessible systems and environments, as well as change males themselves.

8

- To increase people in leadership roles**
- 1 To increase female employees in key positions
 - 2 To expand the scope of work
 - 3 To support for capacity development
 - 4 To support for continued employment
 - 5 To reform corporate culture (awareness)

To focus on initiatives involving males

- 1 Supervisor (male manager) training**
 - To address unconscious bias
 - To learn how to build an organization to ensure psychological safety
- 2 Outreach to families**
 - To gain the understanding and cooperation of spouses for work-life balance
 - To support the creation of a system for sharing roles within the household
- 3 Childcare support for males**
 - To gain the understanding and cooperation for employees balancing work with life
 - To promote male employees' 100% rate of taking childcare leave
- 4 Prevention of retirement due to nursing care**
 - To gain the understanding and cooperation for employees balancing work with life
 - To establish systems and environments where employees can use easily with a wide variety of options



Promotion of Health and Productivity Management

Taisei Corporation acknowledges that the well-being of its employees is not only essential for cultivating a vibrant work environment but also for ensuring the happiness and welfare of both the employees and their families. With this understanding, we provide comprehensive support for the physical and mental health of our staff. Specifically, we emphasize post-health checkup interventions and personalized consultations based on the levels of physical and mental fatigue, with the aim of reducing health-related issues. Moreover, we have introduced an educational pension benefit system that provides educational support for families in the event that an employee becomes unable to work due to death, injury, or illness and has to retire.

For mental well-being, we have established an Employee Assistance Program (EAP) consultation room, where employees can easily seek advice. We offer consultation services, including face-to-face meetings with external counselors as well as phone and email consultations that are available to both employees and their families. Especially for our younger staff, we regularly administer health awareness surveys and encourage consultations with counselors if they are experiencing stress or anxiety. Moving forward, we will continue to advance our health management initiatives, focusing on engaging with younger employees, raising awareness of mental health, and providing support to balance medical treatments with work commitments.

Improvement of Employee Engagement

To achieve the goals of TAISEI VISION 2030, further enhancement in productivity is essential. We believe that it is crucial for each individual employee to maintain high levels of engagement, built upon a foundation of psychological safety in the workplace.

In FY2022, we conducted an engagement survey using Motivation Cloud, a service provided by Link and Motivation Inc., targeting employees of Taisei Corporation and its major Group companies. Based on the issues identified, we have been implementing incremental improvements. We have also established the TAISEI Next-Generation VISION Proposal Working Group to consider immediate challenges, their solutions, and strategic actions for the medium-to-long-term.

Starting from FY2023, we plan to increase the frequency of engagement surveys to twice a year. We will periodically monitor improvements and integrate the findings into various management initiatives, aiming for a continuous improvement in engagement scores.



TAISEI Next-Generation VISION Proposal Working Group
A scene in a meeting

Page P.81 **Materiality**
Realization of an attractive working environment that is good to work in
Sustainability Section

Taisei Group's Growth Strategy **Topic3** Human Rights Due Diligence Initiatives

Approach to Respecting Human Rights

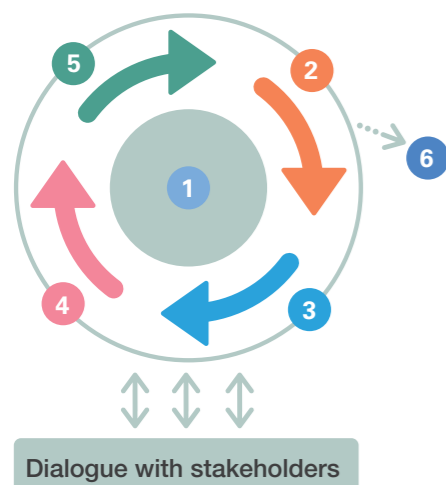
The Taisei Group's fundamental attitude towards respecting human rights is to contribute to the realization of an inclusive society by fulfilling our corporate responsibilities voluntarily, positively, and proactively so as not to cause adverse impacts on human rights in relation to our business activities.

Based on the recognition that respecting human rights is fundamental to sustainability management, which seeks to achieve both social and corporate sustainability, we will play our role as a good corporate citizen by promoting human rights due diligence initiatives and other measures to respect human rights.

Human Rights Due Diligence Initiatives

In order to prevent and mitigate the adverse impact of our business activities on human rights, we have established and continue to implement a human rights due diligence system based on the United Nations Guiding Principles on Business and Human Rights (the Guiding Principles) and other principles. When operating the system, we review and improve it as necessary to deepen our efforts to respect human rights.

Flow of Conducting Human Rights Due Diligence



- 1** Guiding Principle 16
Maintain a commitment to meet the responsibility to respect human rights
- 2** Guiding Principle 18
Identify and assess adverse impacts on human rights
- 3** Guiding Principle 19
Prevent and mitigate adverse impacts
- 4** Guiding Principle 20
Assess the effectiveness of activities
- 5** Guiding Principle 21
Provide explanations and disclose information
- 6** Guiding Principle 22
Remediation

1 Maintain a Commitment to Meet the Responsibility to Respect Human Rights

In April 2022, we revised our Human Rights Policy to internally and externally clarify the Group's commitment to fulfilling our responsibility to respect human rights, and launched human rights due diligence initiatives.

[Web Q](#)
Human Rights Policy

2 Identify and Assess Adverse Impacts on Human Rights

Under the guidance and advice of SOMPO Risk Management Inc., an external expert, we extracted human rights risks related to the Group's business based on international guidance on human rights (the Human Rights Guidance Tool of the United Nations Environment Programme Finance Initiative). The human rights risks identified were quantitatively analyzed and evaluated with respect to two aspects: "Impact on human rights (severity, number of people affected, possibility of remedy, and likelihood of occurrence)" and "connection with the Company." Based on them, we identified human rights issues to be addressed as priority after deliberation by the Sustainability Committee and the Board.

[Web Q](#)
Human Rights Risk Map

3 Prevent and Mitigate Adverse Impacts

With regard to the identified human rights issues to be addressed as priority, the Divisions in charge of each issue take the lead in implementing various measures to prevent and mitigate adverse impacts.

[Web Q](#)
Prevention and mitigation of adverse impacts

4 Assess the Effectiveness of Activities

We regularly assess the effectiveness of activities to prevent and mitigate adverse impacts and improve them as necessary. In particular, we are focusing on the following activities for respecting human rights in the supply chain.

[Web Q](#)
Management and Assessment of Supply Chain management Risks

Human rights issues to be addressed as priority and key responses (specialized contractors and suppliers)

	P Priority human rights issues	D Major prevention and mitigation activities	C Assessment of the effectiveness of major activities
Specialized contractor workers	Health and safety (occupational accidents)	<ul style="list-style-type: none"> ● Thorough safety management ● Order at the right price, right construction period, and right delivery time ● Embed the Taisei Group Sustainable Procurement Guidelines ● Provision of various education and training 	<ul style="list-style-type: none"> ● Statistical violation analysis ● Sustainable procurement questionnaire surveys and interviews ● Questionnaires of employers of foreign technical interns ● Interviews with foreign technical interns ● Visit surveys of overseas subcontractors and suppliers
	Working conditions (wages / long working hours)		
	Discrimination and harassment		
	Migrant labor (foreign workers)		
	Forced labor (overseas)		
Child labor (overseas)			
Supplier workers	Working conditions (wages / long working hours)	<ul style="list-style-type: none"> ● Thorough safety management ● Order at the right price, right construction period, and right delivery time ● Embed the Taisei Group Sustainable Procurement Guidelines ● Provision of various education and training 	<ul style="list-style-type: none"> ● Statistical violation analysis ● Sustainable procurement questionnaire surveys and interviews ● Questionnaires of employers of foreign technical interns ● Interviews with foreign technical interns ● Visit surveys of overseas subcontractors and suppliers
	Migrant labor (foreign workers)		
	Forced labor (overseas)		
	Child labor (overseas)		

5 Provide Explanations and Disclose Information

The status of human rights due diligence is regularly reported to the Management Committee, the Sustainability Committee, and the Board, and disclosed in a timely and appropriate manner on the Company's website.

[Web Q](#)
Human rights due diligence

6 Remediation

We have established various consultation contacts regarding violation of human rights, and accept consultation from all internal and external stakeholders, including foreign workers. In the unlikely event that the Taisei Group is found to have caused or facilitated an adverse impact on human rights, we will promptly remedy and correct it by appropriate means in accordance with our Human Rights Policy.

[Web Q](#)
List of human rights due diligence remedy consultation contacts

Dialogue with Stakeholders

Based on the understanding that dialogue with stakeholders is crucial for advancing our efforts to respect human rights, we actively engage in dialogues and discussions with stakeholders as appropriate. In FY2022, we conducted dialogues with external experts and our Chief Sustainability Officer (CSO), as well as discussions with specialized contractors and suppliers both in Japan and overseas, and interviews with foreign technical interns, among other activities. We will utilize the insights gained from these dialogues and discussions in our future activities to respect human rights.



Discussion by CSO (left) and outside expert (lawyer OMURA) (right) regarding SDGs and human rights



Briefing for business partners on the Philippines North-South Commuter Railway Project



Interview with foreign technical interns