

# Mid-Term Management Plan of Shimizu Group

〈2019-2023〉



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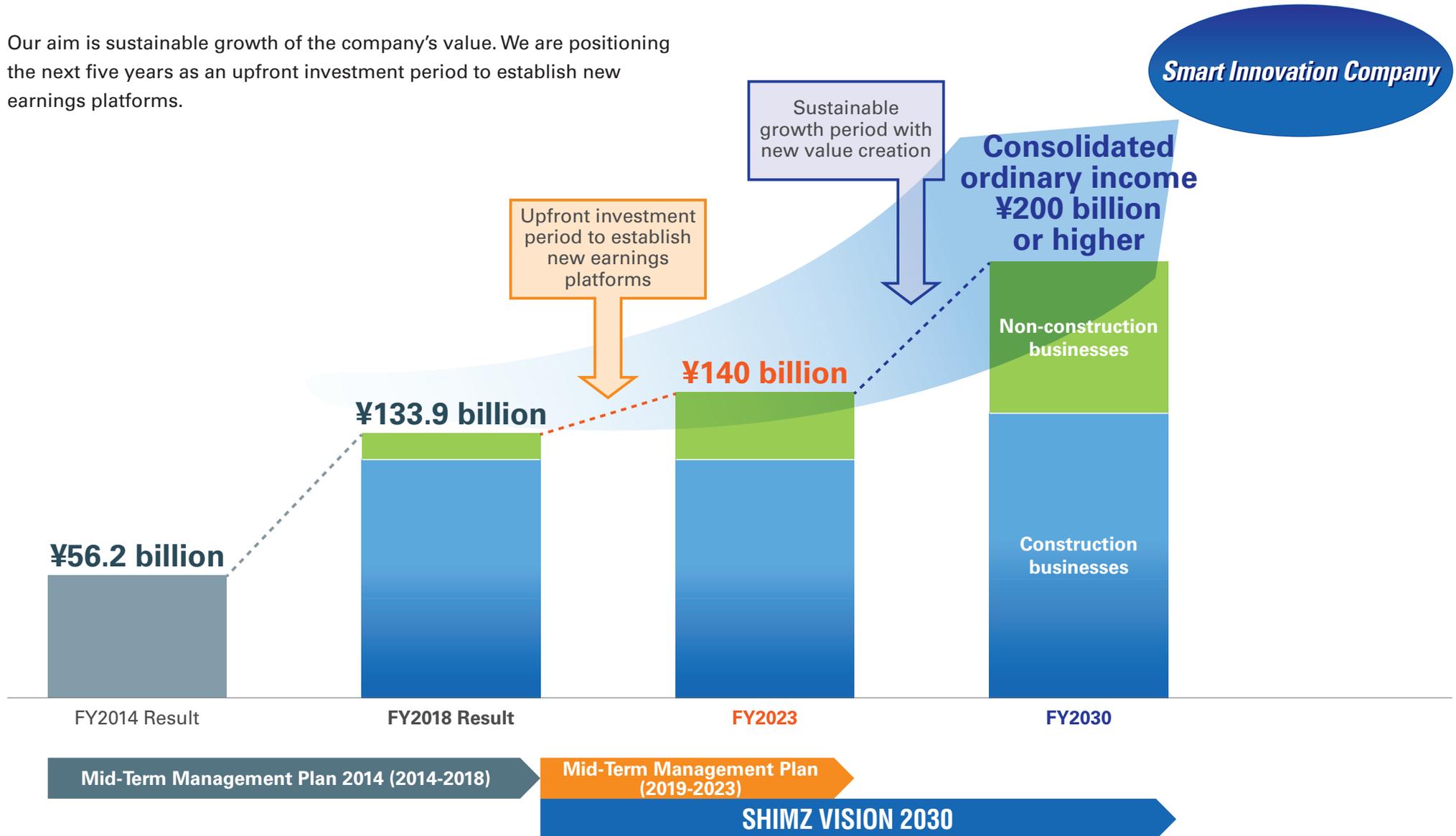
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# 1 Positioning of the Mid-Term Management Plan (2019-2023)

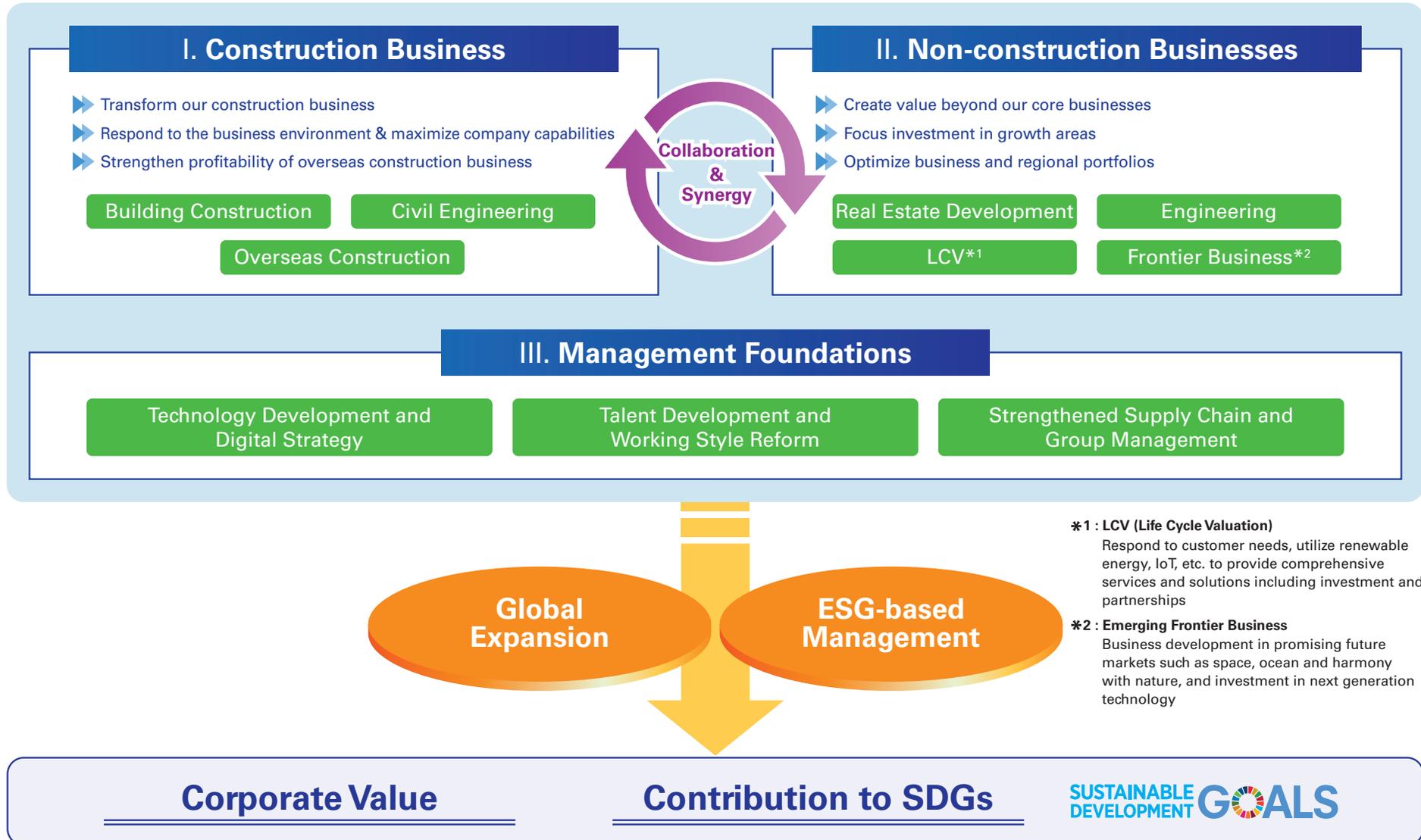
## Towards the Realization of SHIMZ VISION 2030

Our aim is sustainable growth of the company's value. We are positioning the next five years as an upfront investment period to establish new earnings platforms.



## 2 Basic Policy

▶▶ Our company's basic policy is to enhance the corporate value of Shimizu Group and contribute to the achievement of SDGs.



### 3 Management Financial Goals (consolidated base)

▶ In order to achieve sustained growth, we plan to maintain the construction business while steadily investing in and improving profitability of non-construction businesses.

(Billions of Yen)	Mid-Term Management Plan 2014	FY2018 Results	Mid-Term Management Plan (2019-2023)		Financial KPI
	FY2018 Target		FY2023 Target		
<b>Total net sales</b>	<b>1,630.0</b>	<b>1,664.9</b>	<b>1,880.0</b>		<ul style="list-style-type: none"> <li>■ ROE <b>10% or higher</b></li> <li>■ Equity ratio <b>40% or higher</b></li> <li>■ Debt to equity ratio <b>0.7 times or less</b></li> <li>■ Dividend payout ratio <b>Approx. 30%</b></li> </ul>
Construction business	1,490.0	1,504.6	1,550.0		
Non-construction businesses (Development & others)	140.0	160.3	330.0		
<b>Gross profit</b>	<b>175.0</b>	<b>216.6</b>	<b>235.0</b>		
Construction business	156.0	196.8	185.0		
Non-construction businesses (Development & others)	19.0	19.8	50.0		
<b>Ordinary income</b>	<b>102.0</b>	<b>133.9</b>	<b>140.0</b>		

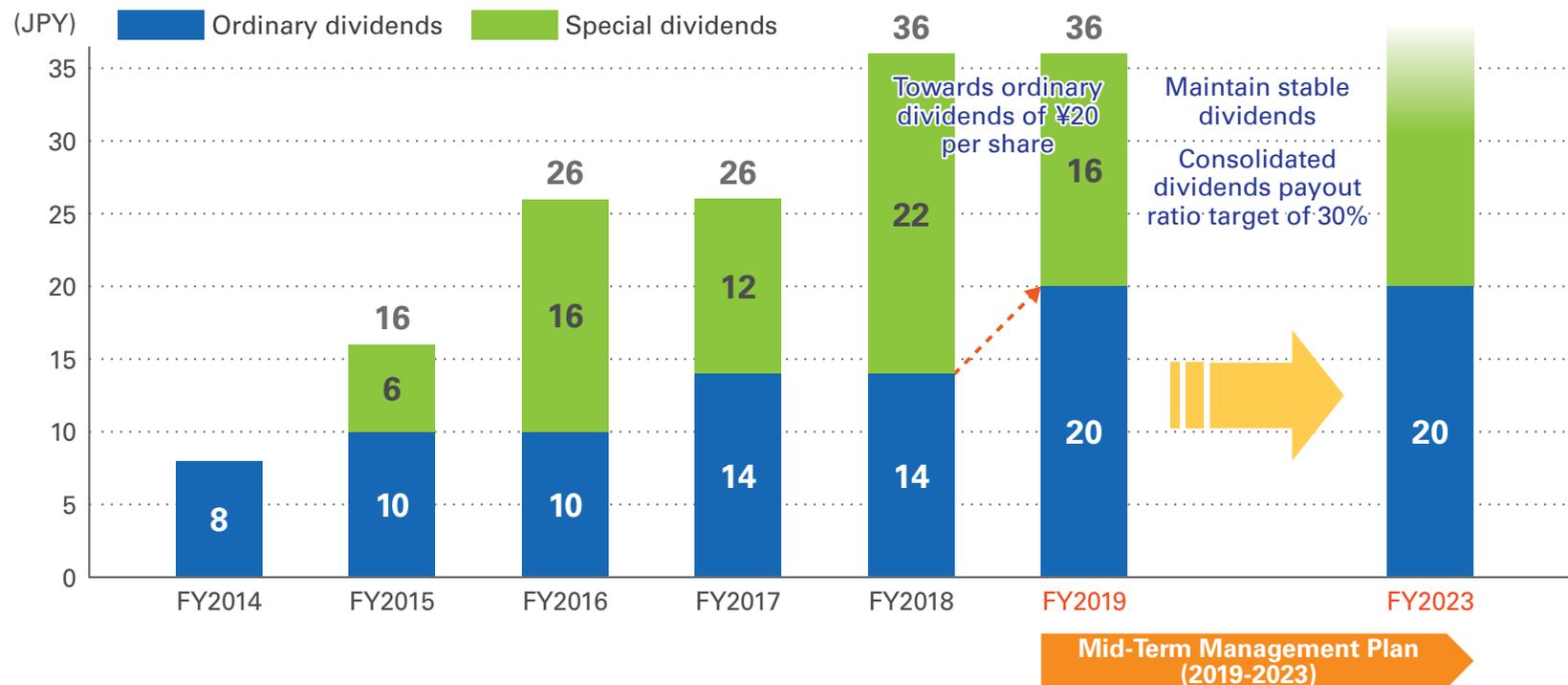
## 4 Capital Management Policy

### Reduction of Securities Holdings

▶ Gradually reduce securities holdings and use part of the proceeds to implement share buybacks.

### Increase Shareholder Returns

▶ While maintaining a basic policy of building a foundation for long-term growth by strengthening our financial position and maintaining stable dividends (ordinary dividends), we will return profits earned through growth with a consolidated payout ratio target of 30%.



## 5 Investment Plan (FY2019-FY2023)

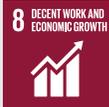
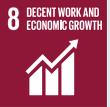
▶ In order to achieve the 10-year Plan and establish new revenue bases, we will invest ¥750 billion over the next five years.

	Investment Amount (5 years)							
Productivity improvement & R&D	¥100 billion	<ul style="list-style-type: none"> <li>Innovate the building production systems (robots, etc.)</li> <li>Establish new research facilities</li> <li>Investment in digital-related and other areas</li> </ul>						
Real estate development business	¥500 billion	<ul style="list-style-type: none"> <li>Expand the domestic real estate development business and increase both assets for sale and lease</li> <li>Expand the overseas business (ASEAN, North America, etc.)</li> </ul> <table border="0"> <tr> <td>New investments</td> <td>500</td> </tr> <tr> <td>Proceeds from sale</td> <td>-100</td> </tr> <tr> <td>Net investment expenditure</td> <td>400</td> </tr> </table>	New investments	500	Proceeds from sale	-100	Net investment expenditure	400
New investments	500							
Proceeds from sale	-100							
Net investment expenditure	400							
Infrastructure, renewable energy, new businesses (frontier business, etc.)	¥130 billion	<ul style="list-style-type: none"> <li>Infrastructure operations &amp; BSP* business</li> <li>Renewable energy-related business</li> <li>Space, overseas, and harmony with nature business</li> <li>Investment in next-generation ventures etc.</li> </ul>						
Talent development	¥20 billion	<ul style="list-style-type: none"> <li>Hire and develop highly skilled talent</li> <li>Accelerate globalization and upgrade talent systems etc.</li> </ul>						
<b>Total investment over 5 years</b>	<b>¥750 billion</b>							

\*Building Service Provider

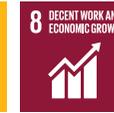
## 6 Non-financial KPI

- ▶ Improve labor productivity in the construction business, work to enhance corporate value from an ESG perspective, and contribute to the achievement of SDGs.

Main KPIs (Key Performance Indicators)		FY2023 Target	Related SDGs
Improve productivity	Improve productivity in the construction business (vs. FY2016)	20% or higher	 
Environmental (E)	Reduce CO <sub>2</sub> emissions in the construction business (vs. FY2017) * <sup>1</sup>	10% or higher	  
Social (S)	Improve employee satisfaction scores* <sup>2</sup>	4.0 or higher	   
Governance (G)	Number of legal violations	0	

\*1 : Targets for Shimizu Ecology Mission 2030-2050 activities

\*2 : Scores from the Shimizu Japan employee awareness survey (average of 5-level ratings)



# 7 Key Strategies: Building Construction

▶ Respond to a changing market with new technologies

## 1. Improve productivity and sales capabilities

- Innovate our building production systems to improve productivity, save labor and increase cost competitiveness
- Segment strategically at the regional level, enhance upstream business development capabilities, and strengthen the PFI function

## 2. Leverage technology to respond to customers' changing needs

- Innovate building construction operations through increased use of AI, BIM, digitalization and other advanced technology-based machines and construction methods
- Continue focused activities for nuclear power-related facilities, including plant decommissioning and next-generation power plants

## 3. Expand renovations and enter new businesses

- Leverage our extensive track record and expertise in construction to expand our business in building renovation, particularly large-scale interior renovation projects using BCP, ZEB/WELL, etc.
- Identify and pursue opportunities for new business in building construction-related domains



Large scale redevelopment plan in Toranomon (Tokyo)  
(City planning image)



Robo-Buddy (Multi-skilled robot for interior finish work)



# 7 Key Strategies: Civil Engineering

## ▶ Strengthen capacity and capabilities

### 1. Strengthen organizational capabilities

- Increase the number of civil engineers, develop technically skilled talent for design and construction and renewable energy engineering, implement training to consistently transfer and embed expertise
- Develop sales personnel with advanced customer response and communication skills

### 2. Improve productivity through technology and innovation

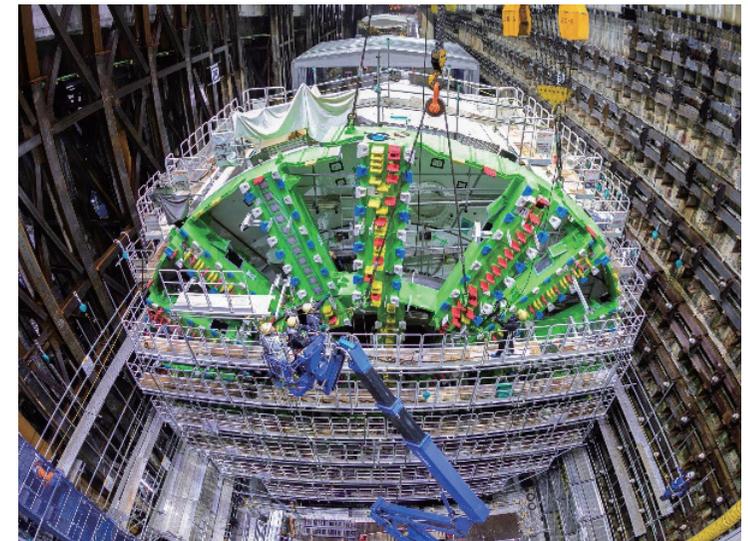
- Full-scale implementation of i-Construction and CIM (Construction Information Modeling/Management); innovate production and management systems
- Develop differentiating technologies in key areas including infrastructure renovation, disaster prevention and mitigation, and energy

### 3. Expand businesses

- Grow the maintenance management and consulting businesses
- Expand upstream and downstream business by strengthening design and technology core competencies



Yamba Dam (Gunma Prefecture)



Tokyo Outer Ring Road Main route tunnel (southbound)  
Oizumi-minami (Tokyo)

# 7 Key Strategies: Overseas Construction



▶ Construct a new model for a viable and thriving overseas business

## 1. Improve profitability of projects

- Establish competitive advantage for projects requiring advanced technology and expertise
- Increase Design and Build projects in new markets

## 2. Build organizational capabilities

- Retain and develop more global talent to deliver highly complex projects, grow related businesses, and increase resiliency
- Strengthen proposal skills through greater internal collaboration (process engineering for production facilities, BCP, and renovation)

## 3. Expand and broaden global presence

- Build global alliances with leading companies in construction-related fields, IT, real estate development, smart cities, and renewable energy
- Grow the PPP, infrastructure operations, construction management and consulting businesses



ASTRA Tower (Indonesia)



Binh Khanh Bridge (Vietnam)  
(Courtesy of Viet Nam Expressway Corporation)



Jakarta Mass Rapid Transit system (Indonesia)



# 7 Key Strategies: Real Estate Development

▶ Create new value in office buildings and increase our global presence through a portfolio optimized for growth

## 1. Expand asset portfolio

- Increase the amount of assets for sale and lease
- Expand the logistics facility business and develop other growth markets

## 2. Create new value through all facets of urban development

- Create new value in office buildings through ecoBCP, renovation, and innovations in sustainability
- Increase activities in regionally focused community development and large scale urban planning and development

## 3. Optimize overseas portfolio

- Diversify the countries targeted for investment based on growth potential and risk profile
  - i : Singapore: New development and leasing of offices and other buildings, and redevelopment of former company sites
  - ii : ASEAN: Housing development lots, development and leasing of offices and other buildings
  - iii : U.S.: Renovation and development to increase the value of existing properties, and new development of rental housing and industrial properties
- Strengthen alliances



MM21-54 Block Project: Yokohama Grangate (Kanagawa Prefecture)



S.LOGI Niiza Project (Saitama Prefecture)



Robinson Road Office Project (Singapore)



Toyosu Area Blocks 4-2 and 4-3 Project (Tokyo)



# 7 Key Strategies: Engineering

▶ Leverage our EPC expertise and focus efforts in alternative energy, environmental remediation, life sciences, and digital



Oborayama Wind Farm (Kochi Prefecture)

## 1. Expand the EPC business in the four core areas of energy, environment, production plants, and information technology

- Increase Shimizu`s share of large onshore and offshore wind farm projects
- Broaden environmental decontamination engineering capabilities building on existing soil decontamination technologies
- Increase orders of efficient plant turnkey operations by automating advanced production facilities
- Expand ICT systems projects



Soil decontamination plant

## 2. Enter new markets and diversify our revenue base

- Break into new areas such as next-generation energy, life sciences, advanced digital technology, and marine resource development; pursue alliances with venture firms and cross-industry players
- Move into advanced facility operation and management



Antibody purification facility



Integrated cell culture control system



# 7 Key Strategies: LCV (Life Cycle Valuation)

▶ Increase value and improvements in user satisfaction over the life cycle of buildings, infrastructure, and residential areas by providing a variety of services including energy, management, and operations

## 1. Expand service businesses

- Become a one-stop Building Service Provider (BSP) through facility operations based on equipment servicing and further expand Facilities Management, Property Management, and Building Management businesses with group alliances and advanced technology
- Provide health and well-being to users through the WELL (wellness) service business

## 2. Expand power and concession businesses

- Expand power generation and supply of renewable energy sources
- Strengthen infrastructure concessions business for airports and roads

## 3. Leverage advanced technology to promote services business and create smart cities

- Create an infrastructure and facilities database, participate in new businesses using IoT and AI for cutting edge community development (voice navigation service, location information service, etc.)
- Create smart cities by building an urban OS (Operating System)



Medical facility management (Tama Medical PFI)



Mega solar power plant in Ako City (Hyogo Prefecture)



WELL service business (Shanghai office, Shimizu Corporation China)



Universally designed voice navigation service



# 7 Key Strategies: Frontier Business

▶ Expand the sphere of human activities from “onshore” to “offshore,” and from “earth” to “space,” while contributing to environmental protection and the revitalization of local communities

## 1. Expand ocean and space businesses

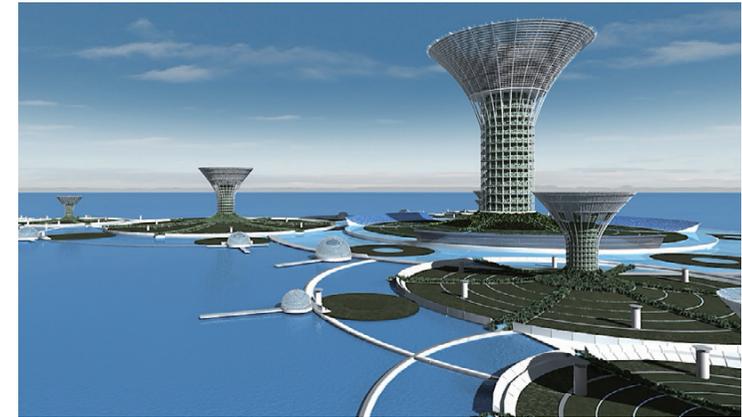
- Create a new market for “ocean cities of the future” and establish a one-stop business model for design, construction, and facility management
- Enter the small rocket launching business, develop businesses that utilize satellite data, and pursue R&D on use of lunar resources, construction of lunar structures, and other uses of the moon

## 2. Launch environmentally innovative agri-businesses

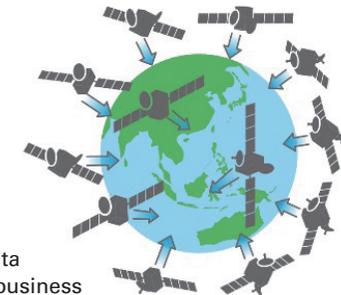
- Further development of plant factory business with a closed farming system
- Production of microalgae, a highly efficient method of producing non-animal proteins and fats, bioplastics (new materials derived from wood), and other forms of petrochemical-free materials
- Utilize agricultural crop residues and revitalize local agriculture

## 3. Invest in next-generation construction technology and global-scale solutions

- Enter new businesses by investing in promising venture firms and cultivating current collaborations



GREEN FLOAT, Environmental Concept of the Future



Satellite data utilization business



Sustainable community planning

# 7 Key Strategies: Technology Development and Digital Strategy

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## □ Technology Development

▶ Establish new research facilities and external alliances to accelerate the development of innovative technologies across Group businesses

### 1. Create innovative production and quality management systems

- Plan and design production technology in areas of future growth (smart cities, transportation infrastructure, etc.)
- Respond to demographic shifts and productivity needs by pursuing automation, robotics, the use of AI, IoT, and other cutting-edge technologies in our construction businesses

### 2. Provide safe, secure, and livable communities

- Further develop technology innovations to mitigate and respond to natural disasters, including earthquakes and major typhoons
- Contribute to healthy and livable communities through technology for sports-related facilities

### 3. Strengthen the foundations for technological innovation and development

- Deepen networks with departments overseas and recruit more experts in advanced IT specialty fields
- Create a more effective intellectual property strategy to increase patent registration
- Leverage the Silicon Valley Innovation Center to promote open innovation

## □ Digital Strategy

▶ Founded earlier this year, the Digital Strategy office will implement and use digital platforms to transform internal business models and working styles throughout the entire Group

### 1. Grow existing businesses and accelerate creation of new businesses by utilizing the latest information and communications technology to respond flexibly and swiftly to changes in the external environment

### 2. Establish a global digital platform using the latest technology to accommodate diversity in lifestyles and working styles

## **7** Key Strategies: Talent Development and Working Style Reform

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- ▶ Hire and develop talent for the future of the global Shimizu Group, and create a workplace environment that accommodates diverse and flexible work styles and leads to higher employee satisfaction

### **1. Implement a global talent strategy**

- Upgrade the Human Resource Management System and increase HR professionals to align with business expansion
- Implement a global strategy to hire and develop globally-capable talent with deep expertise to support each country and region, develop more entrepreneurial management, and enable flexible workforce planning across the Group

### **2. Improve employee satisfaction**

- Design a vision for increasing job satisfaction, retention, and a vibrant workplace and launch targeted improvement initiatives
- Develop a career planning strategy with 100 year lifespan in mind

### **3. Roll out inclusive talent systems**

- Roll out further measures to promote diversity and standardize highly flexible and efficient working styles
- Improve health management by promoting individual physical and mental health

# 7 Key Strategies: Strengthening the Supply Chain and Group Management

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- ▶ Strengthen and expand the construction supply chain to reinforce reliability, expand alliances and implement a Group management structure that will enable diversification and global expansion

## 1. Strengthen construction supply chain

- Optimize production for the entire company
- Strengthen subcontractor alliances

## 2. Enter into new alliances

- Diversify company alliances in real estate and other business areas in Japan
- Increase competitiveness by expanding alliances with companies and suppliers that possess new construction methods and advanced technologies
- Support global expansion by strengthening the supply chain at the local level while establishing a global procurement network

## 3. Agile group management for new business and global expansion

- Implement a Group growth strategy that includes domestic and global partners (M&A, capital partnerships, and alliances) and a strengthened Group management structure
- Strengthen governance and promote growth through fair and transparent systems
- Move towards independent management of each region

# 8 Accelerating Global Expansion

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- ▶ Identify key strategic areas and establish a robust and thriving global operation by building partnerships suited for each market environment

## 1. Construction Business

- a. Update the overseas strategy and implement a clear business plan for each region
  - Focus on promising markets with growth potential
  - Utilize Shimizu's technical capabilities, expertise in design, construction and non-construction businesses to access new customer segments
  - Diversify and expand revenue sources by pursuing synergies with real estate development, engineering and other Shimizu businesses at the local level
  - Build the infrastructure to further develop the overseas civil engineering business

## 2. Real Estate Development and Other Businesses

- a. Diversify the non-construction portfolio and pursue external alliance
  - Expand Real Estate geographic areas by focusing on targeted areas of investment and property diversification
  - Engage in strategic regional development for engineering that utilizes our competitive advantages in each EPC business
  - Enter new markets such as renewable energy, environmental decontamination, and infrastructure PPP

# 9 Advancing ESG-based Management

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- ▶ Fulfilling corporate social responsibilities through business activities to obtain stakeholder trust and achieve continuous increases in corporate value

## 1. E (Environment): Contribute to a sustainable global environment

- Steady promotion of the mid and long-term CO<sub>2</sub> reduction target "Ecology Mission 2030-2050"
- Conservation and indexing of biodiversity within our businesses
- Efforts for waste reduction and effective use of limited global resources

## 2. S (Society): Coexistence with all our Stakeholders

- Response to natural disasters with our supply chain to provide customers and society with safety and security
- Value that surpasses the expectations of our customers
- Consistent respect for Human Rights and implementing "Working Style Reform" for our entire workforce, including employees of our supply chain
- Coexisting with the local community as a good corporate citizen, contributing to the resolution of social issues

## 3. G (Governance): Strict Compliance & Strengthened Risk Management

- Strictly enforced compliance and strengthened risk management
- Dissemination of corporate ethics based on our company policy of "The Analects and Abacus"
- Comprehensive risk management (including investment risk, geopolitical risk, risk of natural disaster)
- Practice fair and transparent corporate activities
- Improved governance through accurate information disclosure and dialogue with all stakeholders

Today's Work, Tomorrow's Heritage



FIELD FOUR DESIGN OFFICE

Hokuseitochi, Co., Ltd.

MILX MILX CORPORATION

This document contains information on the future plans and strategies, performance forecasts and projections, and other forward-looking information concerning the Shimizu Group. These representations are projections made based on our beliefs and assumptions derived from information available at the time this document was produced, and contain risks and uncertainties relating to economic conditions, market demand, exchange rates, tax systems, and various other systems. Future performance may therefore differ from these projections.