

カワる、
サキへ。
Changing forward

FY 2023

Sustainability Meeting

January 24, 2024

Kawasaki Heavy Industries, Ltd.

Introduction

Contents and Explainer of today's explanation

Introduction

Kawasaki Heavy Industries, Ltd.
Senior Corporate Executive Officer and Representative Director
Katsuya Yamamoto

The Origins and Current status of our solution to Social Issues

Executive Officer
Group Manager, Corporate Communication Group
Takashi Trii

Realizing a sustainable decarbonized society ~ Environment ~

Executive
Senior Manager, Sustainability Department
Keiko Omori

Human resources to sustainably providing new value ~ Social ~

Executive
Deputy General Manager, Human Resources Division
Takaaki Kitabayashi

Core functions of achieving sustainable growth ~ Governance ~

Senior Corporate Executive Officer and Representative Director
Katsuya Yamamoto

at the end

Senior Corporate Executive Officer and Representative Director
Katsuya Yamamoto

1. The Origins and Current status of our solution to Social Issues

Our continuously solution to Social Issues



Founder / **Shozo Kawasaki**

Opened Kawasaki Tsukiji Shipyard in 1978.

Japanese-type ships were structurally weak structure and were prone to many maritime accidents. (He had also lost twice.)



Pursued the construction of more reliable Western-type ships out of strong sense of social mission.

Our continuously solution to Social Issues



First President **Kojiro Matsukata**

Established Kawasaki Dockyard ,Ltd. in 1896.

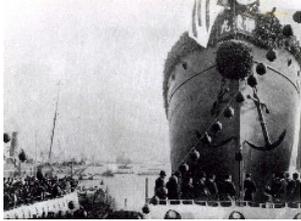
Thought that Domestic production of industrial machinery was essence.

» **Expanded beyond shipbuilding, to rolling stock, aircraft, steel industry and shipping business.**

labor disputes caused by the postwar depression

» **The first person to introduce eight-hour working system in Japan**

Our continuously solution to Social Issues



Iyomaru (the first ship of Kawasaki Dockyard) was launched.

1897



Kawasaki's first aircraft (Type I reconnaissance aircraft) completed

1922



Develops GPS200 gas turbine generator

1976



Excavation on the Tokyo Bay Aqua-line completed by world's largest shield machines.

1996

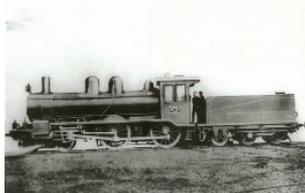


Rollout of the first prototype of the next fixed-wing patrol aircraft (XP-1) and transport aircraft (XC-2)

2007

1911

Kawasaki completed Japan's first steam locomotive



1969

Japan's first industrial robot "Kawasaki Unimate 2000" was launched



1981

Delivers the first LNG carrier built in Japan.



2004

Ships first 700T trainset to Taiwan High Speed Rail Corporation

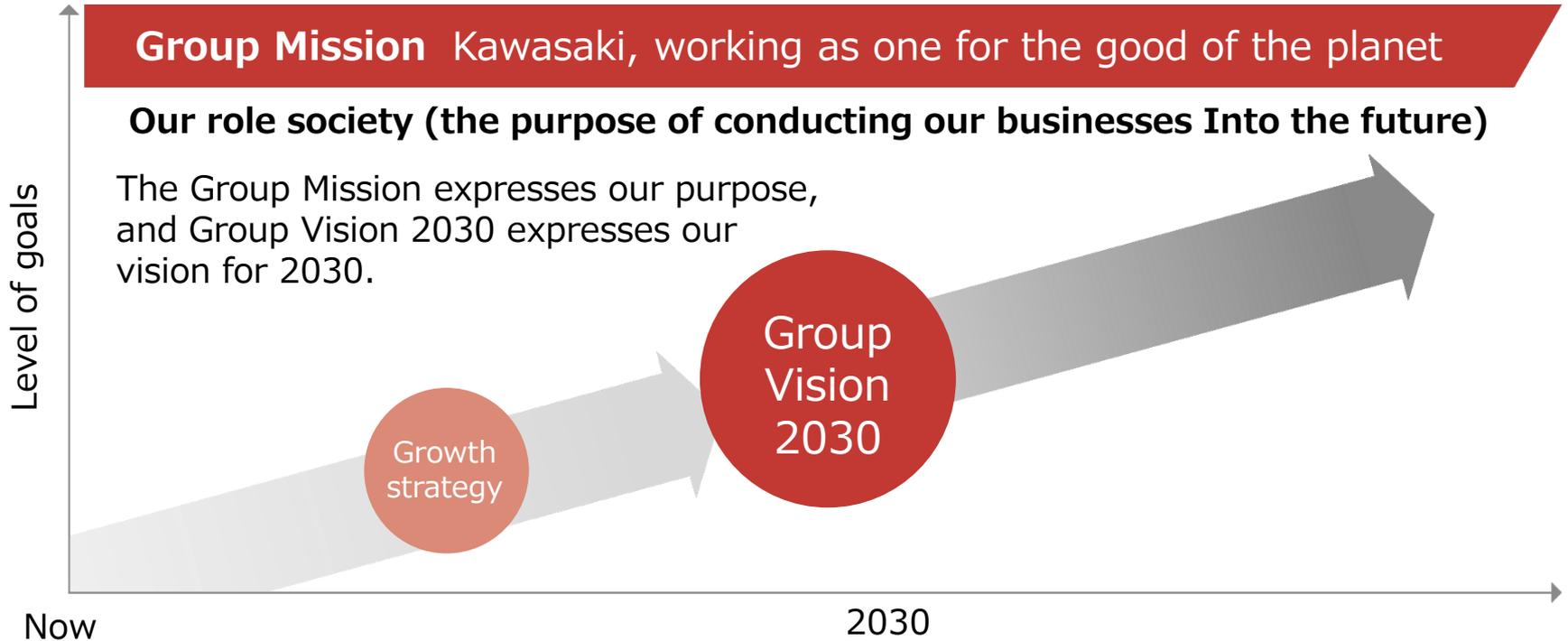


2019

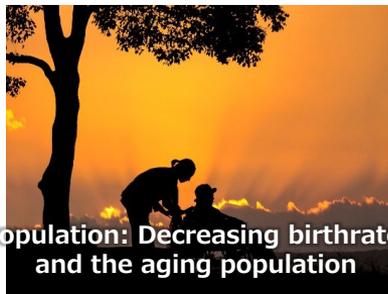
World's First Liquefied Hydrogen Carrier SUIISO FRONTIER Launches.



The Group Mission and Group Vision 2030



Group Vision 2030



A safe and secure Remotely-Connected society

Near-Future Mobility

Energy and Environmental solutions

In three focus fields: Aim for growth by providing solutions to society

A safe and secure
remotely connected society

**“New value creation
using remote
Technology”**

Create a society that is rich,
safe, and secure for all with
remote technology



example

Robotic-assisted surgical system “hinotori™”



- Accumulated technology and achievements as pioneer of industrial robots, and extensive sales system
- Remote robotics technology



Reducing burden on healthcare workers
Correcting regional disparities

In three focus fields: Aim for growth by providing solutions to society

Near future mobility

“Transforming the movement of people and freight”

Create a society where people and freight move safely, quickly, and efficiently using new forms of mobility



Example

Unmanned VTOL aircraft “K-RACER”



- Safety and reliability as one of Japan's leading aircraft manufacturers
- Autonomous and self-driving

Resolution of labor shortages in logistics
Transportation of goods in times of disaster and in harsh environments such as mountain villages

In three focus fields: Aim for growth by providing solutions to society

Energy and environmental solutions

“Working toward the stable generation of clean energy”

Quickly achieve a stably powered carbon-neutral society at low cost



Example

Pilot liquefied hydrogen carrier "SUISO FRONTIER"



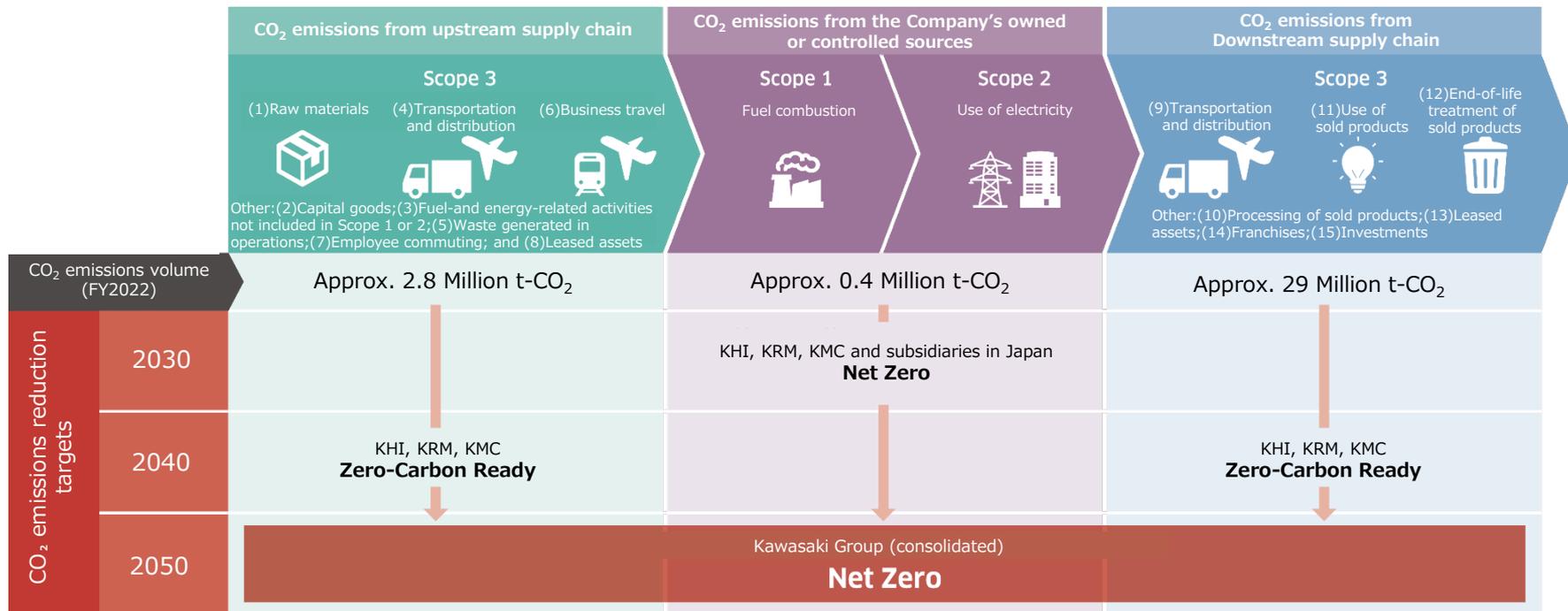
- Contributing to energy supply through the shipbuilding for many years.
- Have been developing technologies to use hydrogen as next-generation energy since 2010(liquefaction, storage, transportation, and combustion).



Reducing CO2 emissions and enhancing energy security

2. Environment

Carbon Neutral Targets (Overall Picture)



KHI: Kawasaki Heavy Industries (non-consolidated), KRM: Kawasaki Rail Car, KMC: Kawasaki Motors

Carbon Neutral Target (Scope 1, 2)

By introducing in-house hydrogen-fueled power generation facilities and combining it with power generation from waste and renewable energy, Kawasaki will achieve independent carbon neutrality in Japan by 2030.

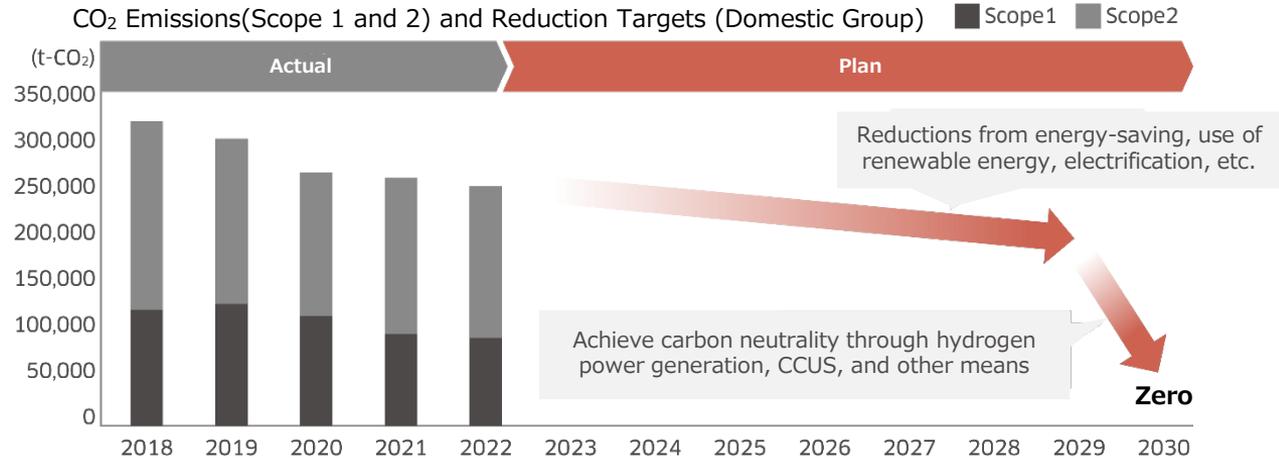
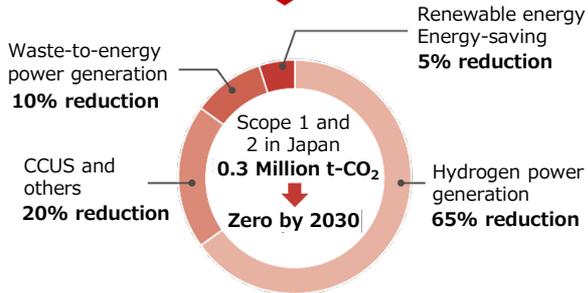
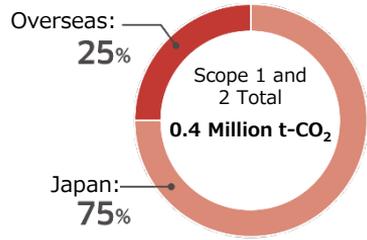
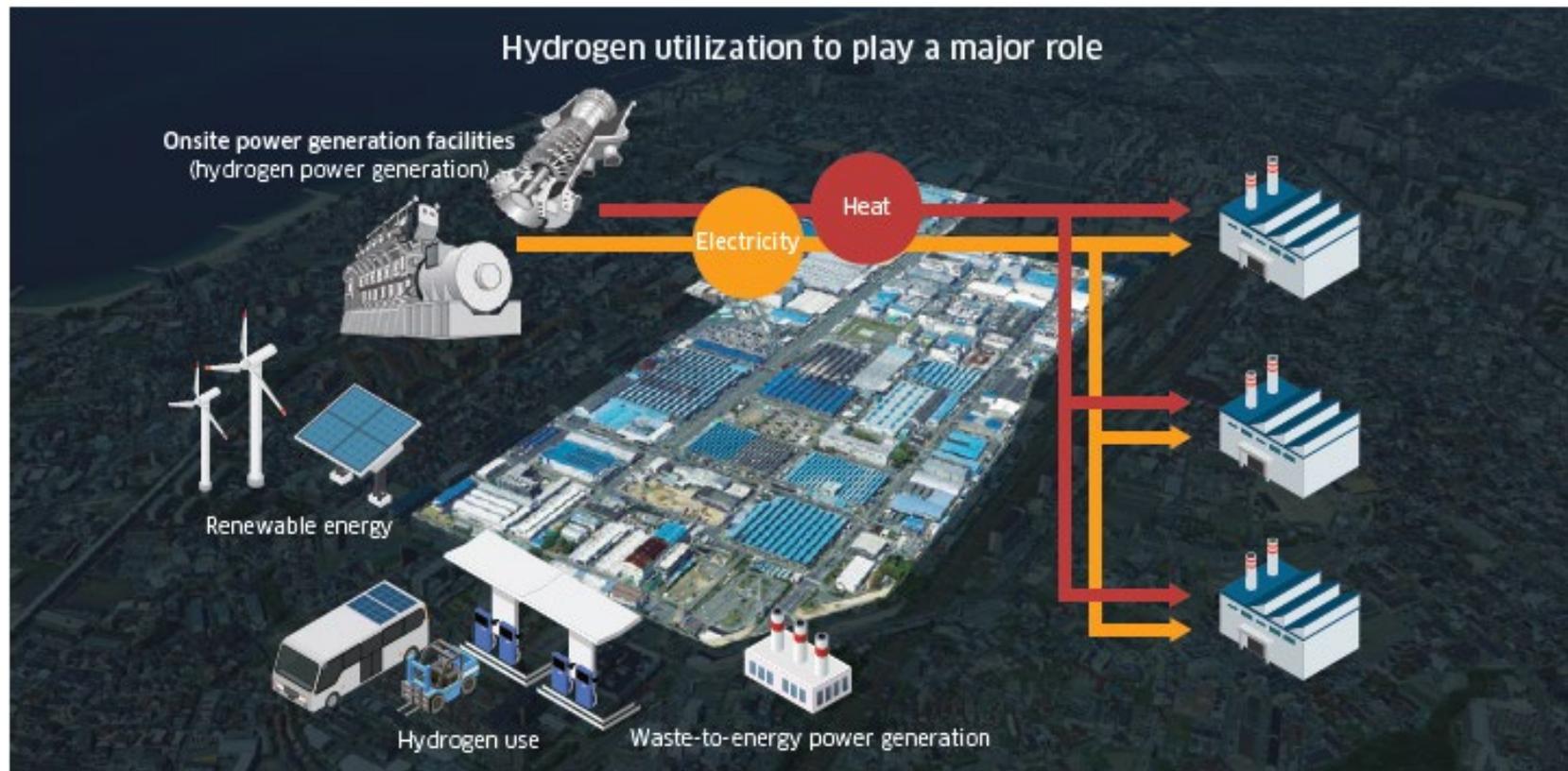


Image of the Zero-emission Plants



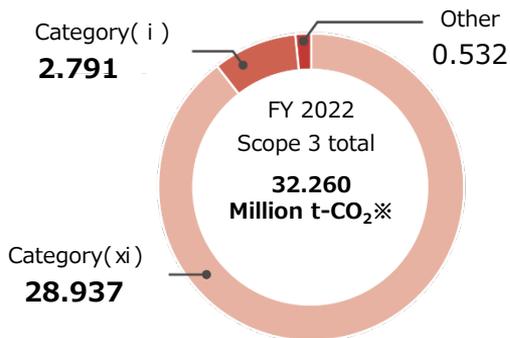
Carbon Neutral Target (Scope 3)

Zero-Carbon Ready in 2040 (KHI, KMC, KRM)

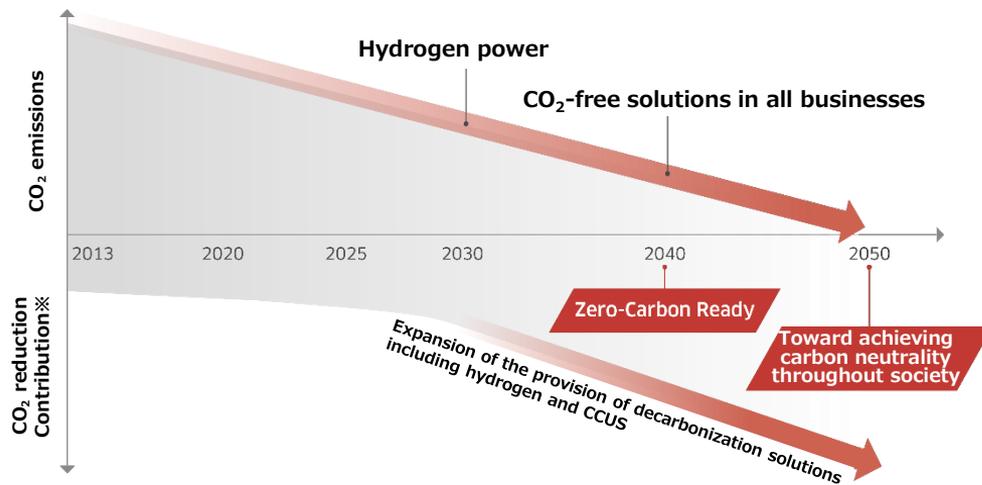
Reduce CO2 at least 100% in real terms by engaging in the CCUS business.

- Category (i): 80% reduction (compared with FY2021)
- Category (xi): Develop a lineup of CO2-free solutions and facilitate global CO2 reductions

Scope 3 Breakdown by Categories
(Unit: Million t-CO2)



※Category (xi) is the total for the Kawasaki Group.
Other is the total for Kawasaki Heavy Industries (Non-consolidated),
Kawasaki Motors, and Kawasaki Railcar Manufacturing.



※CO2 reduction contribution: Equal to the difference between greenhouse gas emissions volumes of earlier products and services and new products and services. A quantification of the contribution to the mitigation (impact) of climate change throughout society as a whole through the provision of products and services.

Our DAC business

Larger CO₂ capture technology

Applying technology to capture CO₂ in submarines cultivated through years of submarine development



Achieve efficient CO₂ capture by increasing the size

(Approx.500,000-1 million t-CO₂ / year)



DAC image of 1 million t - CO₂ / year

Started around 2025, aiming for a business scale of approximately **50 billion** yen in 2030

Disclosure in Line with TCFD Recommendations

Financial Impact ★: Less than ¥10 billion
 ★★: ¥10 billion or more, less than ¥100 billion
 ★★★: ¥100 billion or more

2030 Target: 1.5°C Scenario		Energy Solution & Marine Engineering Segment	Aerospace Systems Segment	Powersports & Engine Segment	Precision machinery & Robot Segment	Rolling Stock Segment
opportunities		●Hydrogen-related ●CCUS and alternative fuels ●Electrification				
Risks		●Demand for LNG Power generation facilities, aircraft, gasoline-powered vehicles, and diesel construction machinery will decline. ●R&D and capital investments will increase.				
Financial Impact	Net sales	●Carbon neutrality-related net sales, including hydrogen: ¥600 billion (FY2030)				
		★★★ Sales of hydrogen-related products will rise	★ Creation of hydrogen aircraft will come around 2040 or later	★★★ Move first with the shift from gasoline-powered vehicles to EV/HEV, and shift to e-fuel and hydrogen will progress	★★	★
	Investment amounts	Carbon neutrality-related investments: ¥350 billion (FY2020–FY2030)				
		★★★ Including use of Green Innovation Fund	★★ Including use of GI Fund with respect to the development of hydrogen aircraft	★★★ Investment of ¥150 billion for the period FY2023–FY2027	★★	★
2030 Target: 4°C Scenario		Energy Solution & Marine Engineering Segment	Aerospace Systems Segment	Powersports & Engine Segment	Precision machinery & Robot Segment	Rolling Stock Segment
Financial Impact		<ul style="list-style-type: none"> ●Opportunity for ¥600 billion in carbon neutrality-related net sales including hydrogen as hypothesized in the 1.5°C scenario is lost ●Recovery of investments will be delayed (R&D and capital investments related to hydrogen projects, hydrogen aircraft development, and EV/HEV motorcycles) ●Physical losses: Based on our estimates, minimum losses will be ¥4 billion for damages at production sites (loss of fixed assets) and ¥24 billion for damages from a halt in operations due to supply chain disruptions (sales decrease) ●Food risks, water risks, economic instability, supply chain chaos, and other factors produced by temperature rise will have an enormous impact on operations 				

*Physical losses: Hypothesized cost of damage at high-risk sites based on damage reports x growth rate of damage to the GDP

External Evaluation



Selected for the first time as an A-list company
in the CDP Climate Change Survey 2022



Changes in Kawasaki Evaluation

2022	2021	2020	2019
A	B	B-	B

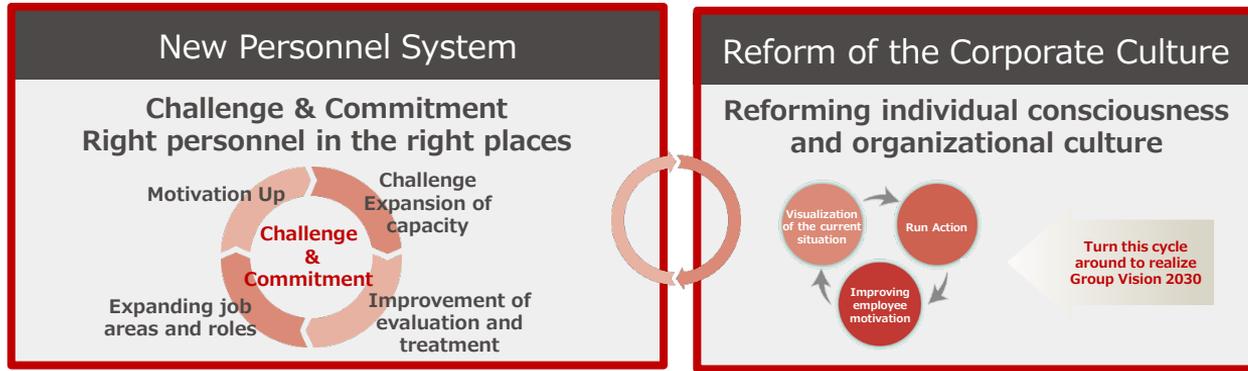
Points for the Improvement

- Setting CO₂ emission reduction targets by scope
- Expansion of TCFD Disclosure
- Progress of hydrogen business

3 . Society

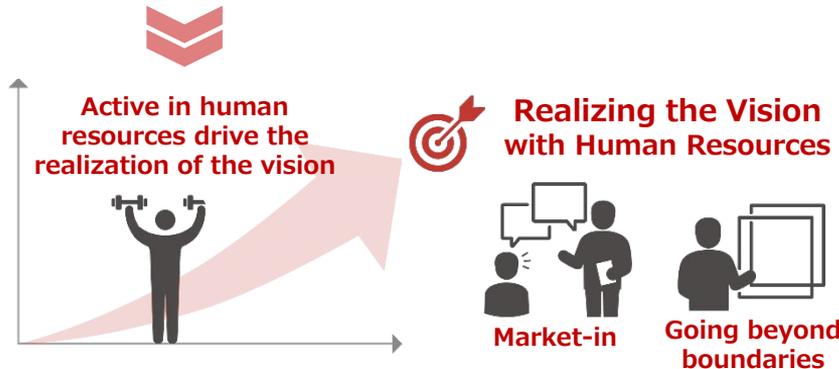
Foundation for solving social issues ~Human Resources~

Advance realization of vision by **creating environment where our talents can thrive as foundation for transformation.**



Human resources are the foundation of change

- ① Ourselves need to change in line with social changes(Intensification and exploration)
- ② Human resources will lead change. Individual challenges and activities are essential for this purpose.



Foundation for the success of human resources

- ① New HR System to Support Challenges
- ② Transformation through visualization of corporate culture and continuous action

(1) New HR System – The revisions to our personnel system (1)

Under the concept of "Challenge and Commitment",
Highly evaluate raising their hands and challenging.

Challenge & commitment sheet

Designing to include **challenging targets** as well as routine tasks as goal management.
The aim was to raise the results of organization and grow employees themselves by setting higher goals and **taking bold challenges**.



Bonus System

《To further clarify reflection in performance assessment》
1) Reflect target achievement directly in bonuses through absolute evaluation
2) Increase portion paid in accordance with the degree of target achievement.

Abolishing the seniority factor

Abolished seniority-based treatment, promoted younger employee to executive, managerial positions, and adopted external talent recruitment based on merit after the introduction of the new system in FY 2021.

(1) New HR System – The revisions to our personnel system (2)

Advancing organizational design and staffing based on idea of "right personnel in the right places" rather than "the right places for right personnel".(To senior staff)

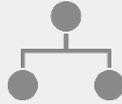
"Right personnel in the right places" for realizing Group Vision 2030

Business plans



- Strategic plans for business reform
- Intensification and exploration

Right places



- Consideration of necessary organizational functions
- Design of organizational systems

Right personnel



- Consideration of human resource requirements
- Assignment of the "right personnel" to the "right places"

Motivation



- Promotion of challenges
- Vitalization of entire company
- Pay for mission

Establishment of suitable locations

- Reveal expectations for each job by considering necessary organization and functions on basis of ideal management and business strategy.
- Determine the size of job to use world-standard job assessment tool.

Appropriate placement of human resources

- It is important to assign human resources who can play a role in each duties by seeing through based on objective factors.
- Conduct competency-based management capability evaluations and 360-degree surveys from subordinates and colleagues.

(2) Corporate culture reform – Implementation of the Engagement Survey (WinDEX)

Visualization of individual mindsets and organizational climate through Engagement Survey (WinDEX)

Analyzing issues from company-wide perspective, identify specific challenges in each of approaching our approximately 800 departments, and implementing measures.

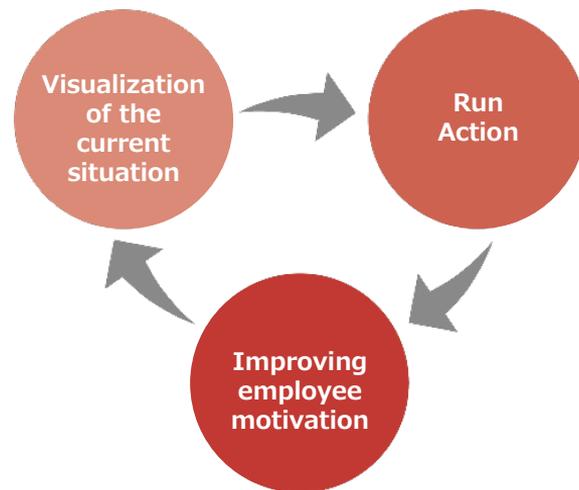
High proportion of employee who perceive “supportive environment” and “employee engagement” is KPI for corporate culture reform.

Aim to exceed 50% by FY 2030(the result in fiscal 2023 was 30%).

Engagement Survey Results

	Unit	2020	2021	2022	2023
Response rate	%	80	83	89	88
Supportive environment	%	52	52	52	53
Employee engagement	%	59	56	55	55
high levels for “supportive environment” and “employee engagement” on a consolidated basis	%	29	28	29	30

We turn this cycle to realize Group Vision 2030



(2) Corporate culture reform – Our company’s “Key Driver”

The Key Drivers are “Trust in management” and “Employee career development.”
Have identified these as important themes and are implementing various actions

Trust in management

- Shared vision
- Opportunities for two-way communication between management and employees



Dialogue between Management and Employees:
A View of meetings in a circle (from FY 2022)

Employee career development

- Various Career Development Support Policies (Career seminars by generation, career challenge system, etc.)



4. Governance

Governance Reform

The separation of management oversight and business execution

2015

Nomination Advisory Committee and a Compensation Advisory Corporate Governance System Committee were established (Institutionalization of an objective viewpoint)

2017

Review of matters resolved by the Board of Directors (Expanding the Scope of transfer of Authority to Executive Officers)

2018

Review the management structure to clearly separate the roles of Directors and Executive Officers
Directors with foreign nationality elected for the first time

2020

Transition to Company with Audit & Supervisory Committee

2021

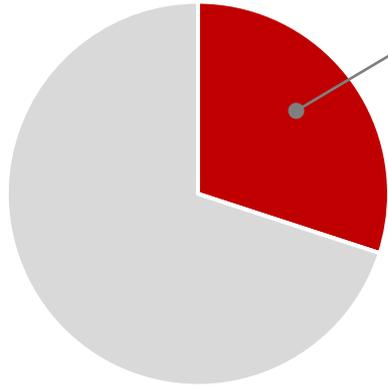
Review of the remuneration system for Director, Member of the Board

2023

Majority of Outside Directors

Diversity and Balance of the board

Medium- to long-term deliberations for sustainable corporate growth



20~30% of all meeting time to deliberate for non-statutory matters.

Concentrate discussion on themes that are difficult to discuss individually from a long-term and birds-eye perspective.

- Business reform
- Policies to reinforcing compliance
- Leadership succession plan
- Securing the diversity of the Board of Directors
- DX strategies
- Sustainability
- Risk Management
- Quality control
- etc. important management issues

(FY 2022 Results)

Views on the balance and Diversity of the Board of Directors

Qualifications Expected of Directors

Fields of supervision necessary to realize Group Vision 2030

Vision, Strategic thinking,
and Governance to increase
enterprise value

Business
structure
transformation

Growth initiatives
related to infrastructure
development



Expected Area

Required Experience

Skill matrix of each Directors

(Reference) Skill Matrix

氏名	Attribute	Expected Area							Required Experience			
		Business Strategy	Governance	Financial/Accounting	Human Resource/Organizational Management	Manufacturing	Sales/Marketing	IT/DX/Security	Corporate Management	Global	Legal Affairs/Governance	Finance/Research Institutions
Yoshinori Kanehana		●	●			●	●		●	●		
Yasuhiko Hashimoto	Representative	●	●		●	●	●	●	●	●		
Katsuya Yamamoto	Representative	●	●	●	●				●	●		
Hiroshi Nakatani	Representative	●	●			●		●	●			●
Jenifer Rogers	Outside Director Female foreign nationality	●	●	●					●	●	●	●
Hideo Tsujimura	Outside Director	●	●		●	●	●		●	●		
Katsuhiko Yoshida	Outside Director	●	●				●		●			
Melanie Brock	Outside Director Female foreign nationality	●	●				●		●	●		
Audit and Supervisory Committee Member Akio Nekoshima		●	●	●					●	●		●
Audit and Supervisory Committee Member Nobuhisa Kato		●	●	●					●	●		
Audit and Supervisory Committee Member Atsuko Ishii	Outside Director Female	●	●		●				●		●	
Audit and Supervisory Committee Member Ryoichi Saito	Outside Director	●	●	●	●				●	●		
Audit and Supervisory Committee Member Susumu Tsukui	Outside Director	●	●						●		●	

Diversity and Balance of the board



Improving objectivity and transparency of the Board

	Nomination Advisory Committee	Compensation Advisory Committee
Chair	Outside Director	Outside Director
Configuration	2 internal directors 3 Outside Directors	2 internal directors 3 Outside Directors
Number of times	12 times	7 times

(FY 2022 Results)

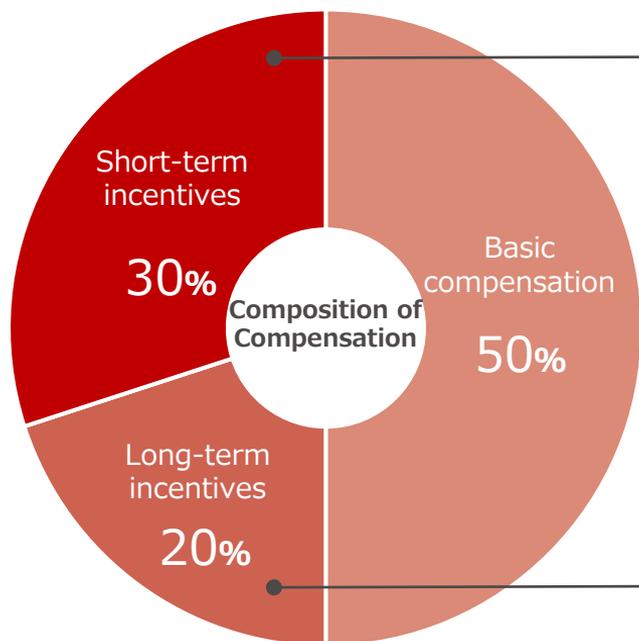
Each advisory committee reports its deliberations to the Board of Directors twice a year.

Continuing substantive deliberations without reducing the system to mere formalities

Director remuneration

Realization of
Group Vision 2030

Pay for mission



[Money]

Performance-linked remuneration based on the Group's consolidated results^{※1} and the achievement of each director's targets

[Stock benefit trust]

Fixed points granted to Directors in line with their periods of service, and performance-based points granted for their accomplishments vis-à-vis individual performance targets^{※2}

※1 Group's consolidated results

Net income to encourage steady achievement of single-year targets and value sharing with shareholders

※2 performance targets

financial indicator

- Efforts to Achieve SDGs
- Initiatives to Improve Employee Engagement
- etc.

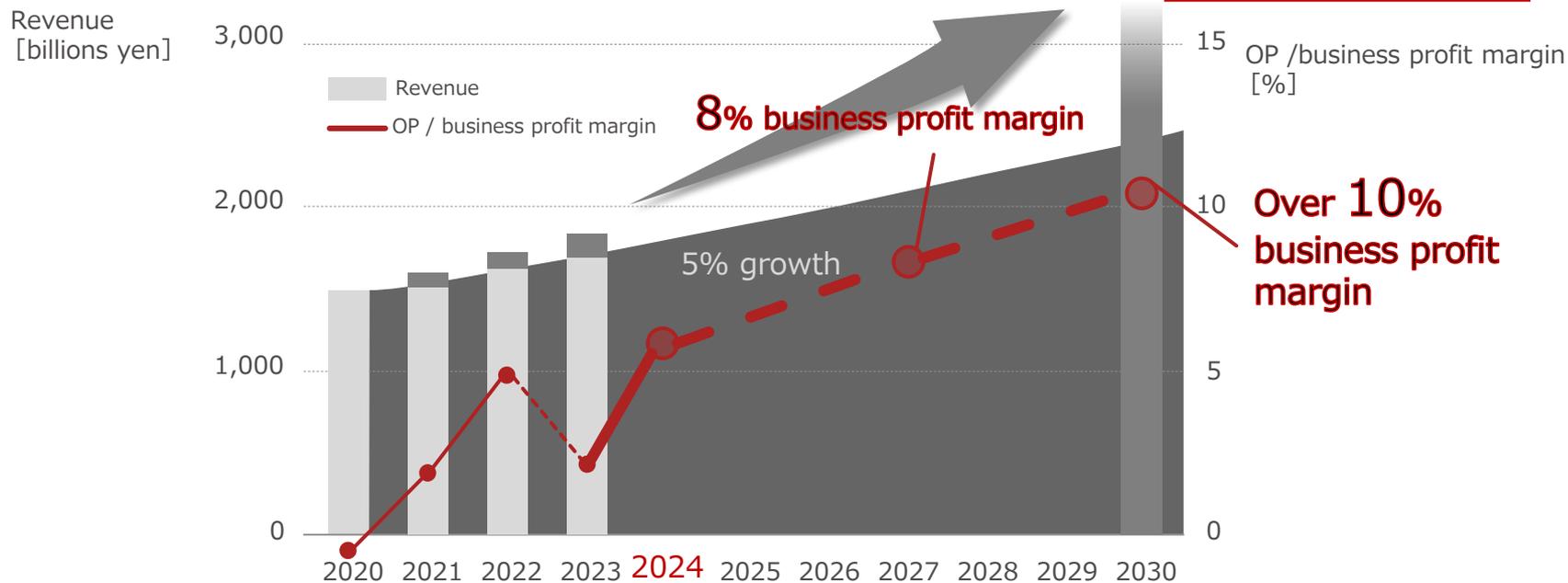
5. at the end

Medium- and long-term management goals and achievement status

Achieve business growth of Approx. 7~8%, exceeding the target of 5% set for 2020

In fiscal 2024, our business will return to a growth path.

Achieve a business profit margin of 8% by 2027 and over 10% by 2030



at the end





Powering your potential