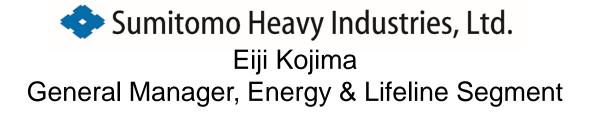
## "Medium-Term Management Plan 2026" (Energy & Lifeline Segment)

2024/4/17



Copyright © Sumitomo Heavy Industries, Ltd. All Rights Reserved.

#### INDEX

## <sup>01</sup> Outline of Energy & Lifeline Segment

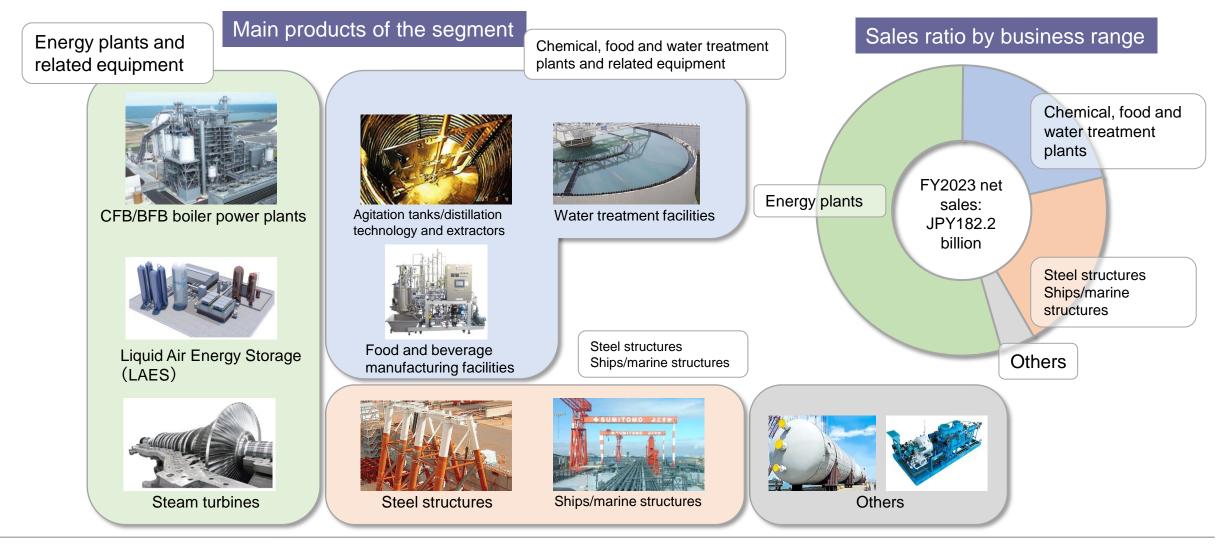
## <sup>02</sup> Ideal State, Target Portfolio

### <sup>03</sup> "Medium-Term Management Plan 2026" (MTMP26)

2024/4/17

# 01 Outline of Energy & Lifeline Segment

#### Outline of Energy & Lifeline Segment

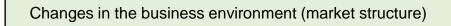


2024/4/17

## 02 Ideal State, Target Portfolio

We aim to become a solution provider in the fields of "decarbonized energy" and "resource recycling"

#### Response to changes in external environments



Growing demand for reducing CO<sub>2</sub> emissions Changes in industrial structure due to promotion of fuel conversion

#### Shift to capture new business opportunities

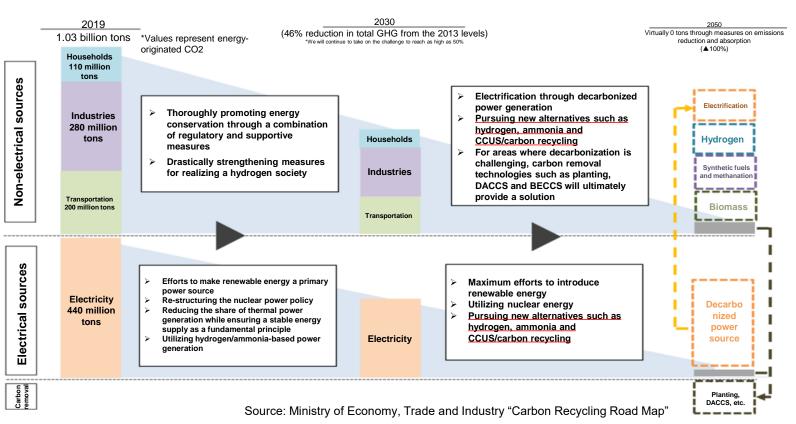
We aim to transform our business with "decarbonized energy" and "resource recycling" as the key pillars, and to further strengthen and expand in this direction

#### Major issues

 Establishing and commercializing carbon recycling (recovery and reuse) technologies in the CO<sub>2</sub> emission field

- Expanding the renewable energy promotion business by taking advantage of energy storage facilities, offshore wind power generation, etc.

#### The role of carbon recycling to achieve carbon neutrality

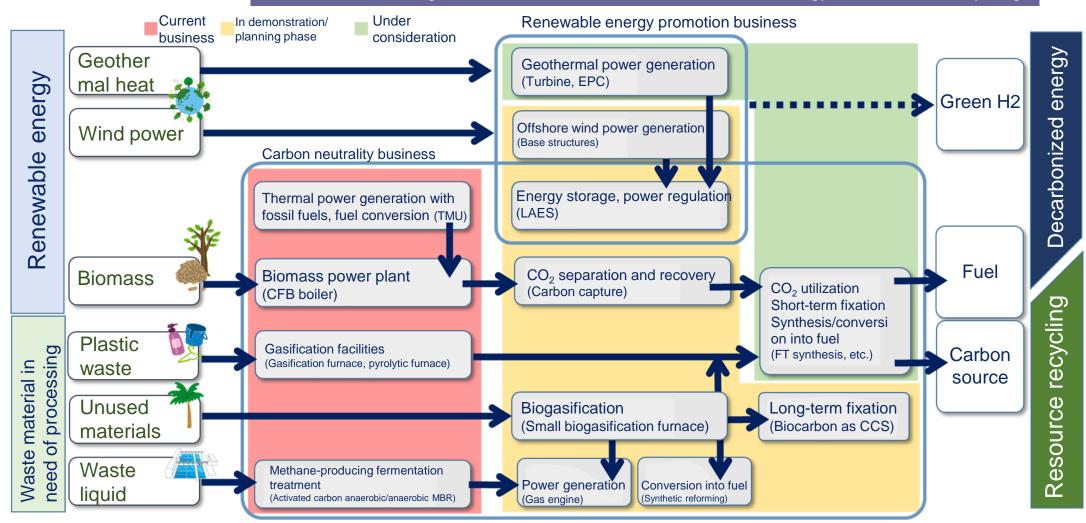


Key options for carbon neutrality are decarbonization of electricity and recycling of CO2

#### 02 Ideal State, Target Portfolio

Overview of commercialization strategy

- Direction of creating a business in the fields of decarbonized energy and resource recycling



Business direction towards 2030 and related issues

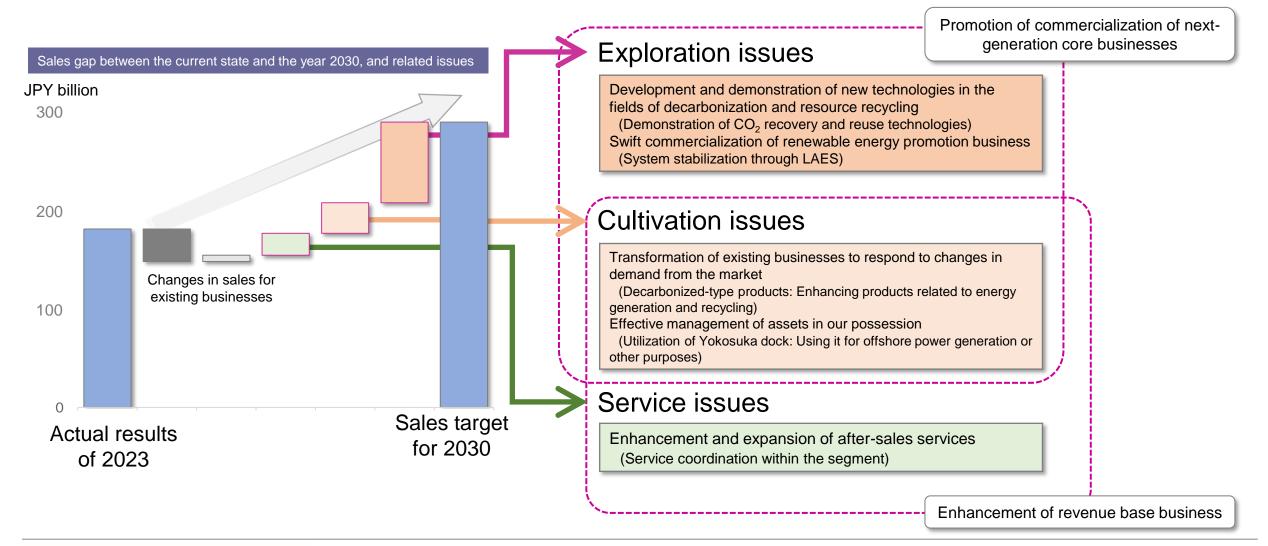
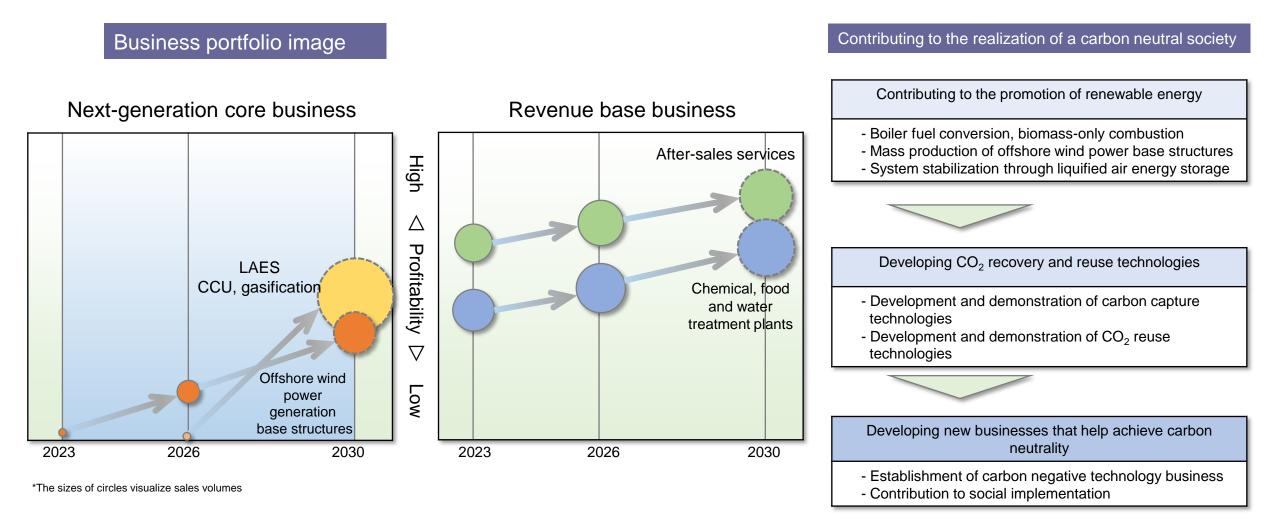


Image of the segment's businesses for 2030

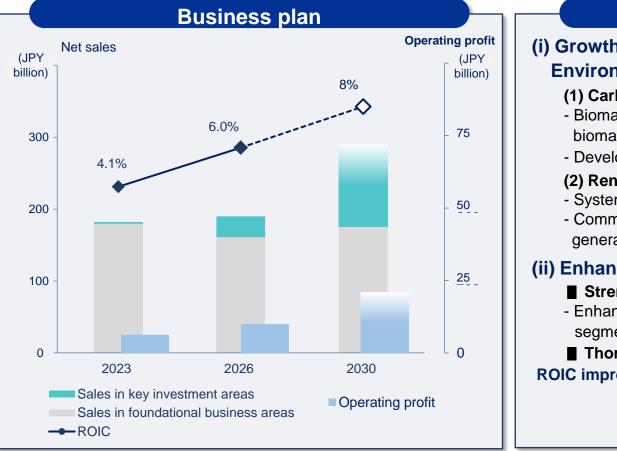


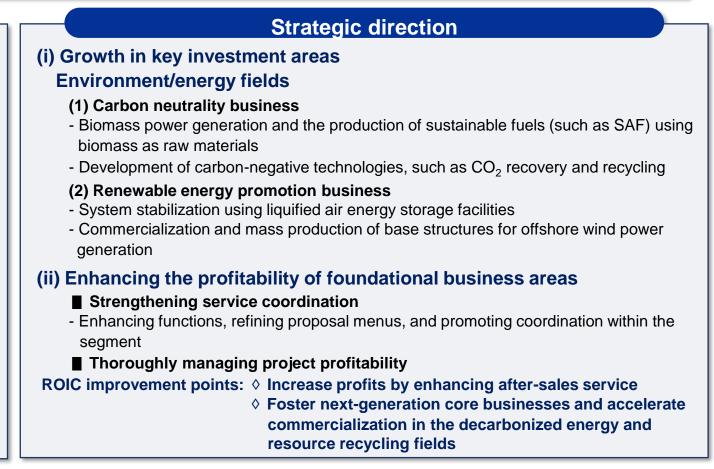
2024/4/17

# 03 "Medium-Term Management Plan 2026"

#### Ideal state in 2030

Solution provider in the decarbonized energy and resource recycling fields, built on the foundations of (1) carbon neutrality business (2) renewable energy business



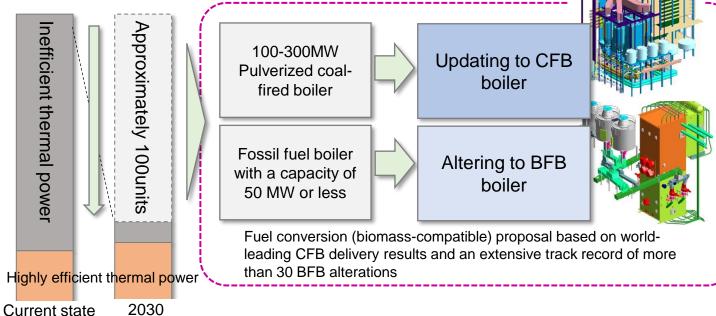


#### TMU: Technology Modernization & Upgrades

A customer owning fossil fuel boilers successfully decarbonized their business in line with our proposal for fuel conversion

We make optimal proposals based on the world's top-performing biomass boiler technology

Decarbonization proposal for the inefficient, phasing-out thermal power industry in Japan



#### Service coordination

#### Promote service coordination within the segment

Targeted allocation of management resources (personnel reinforcement, base enhancement) Expansion of service menus (such as proposal for boosting efficiency) Supply chain improvement DX introduction (plant management, predictive maintenance and management system, etc.) Synergy creation Integration of competencies Expansion and enhancement of after-sales services 2023 2030

Service sales ratio

#### Sustainable fuel production technology (gasification, CCU, FT synthesis)

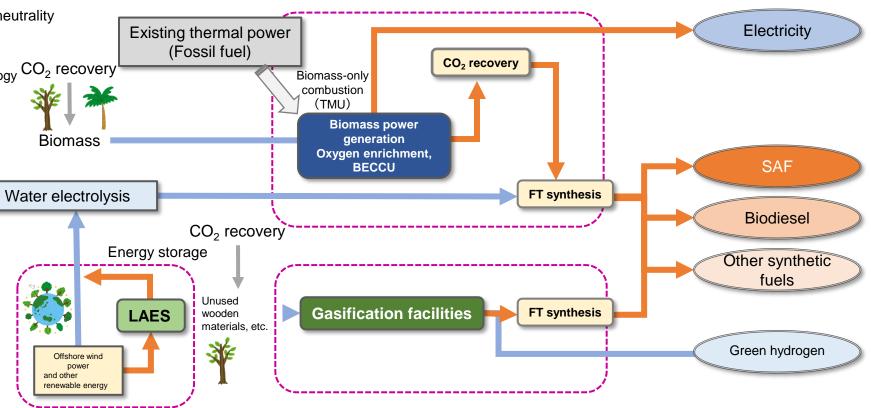
### Establishing technology for transitioning to sustainable fuel production based on green $CO_2$ derived from biomass

Option for decarbonization technology to achieve carbon neutrality

Transition from combustion technology to fuel production technology  $CO_2$  re

Establish "CO<sub>2</sub> recovery, gasification and FT synthesis technologies" to transform energy from biomass-derived green carbon to SAF and other green fuels

Plan the development of technologies and the implementation of various demonstration operations Strive to promote social implementation and commercialization

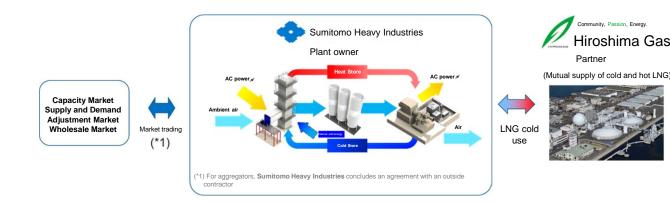


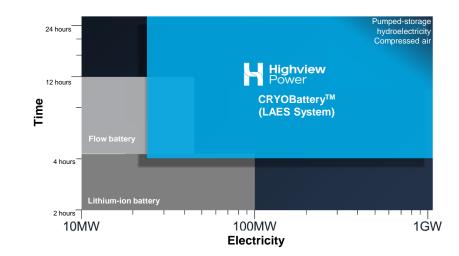
#### LAES: Liquid Air Energy Storage

We have commenced the construction of a commercial demonstration plant This will mark a new step towards the social implementation of initiatives aimed at making renewable energy a primary power source

Technology that stores electric energy in the form of liquid air and retrieves that energy when needed. Air is compressed, cooled and liquefied using off-peak electricity and surplus power, and then stored in a tank. The liquid air is re-vaporized as necessary, and expansion energy is used to supply electricity via a turbine generator. We are building an "LAES commercial demonstration plant" within the premises of Hatsukaichi Factory of Hiroshima Gas. The cold energy produced by liquefied natural gas (LNG) at the factory is utilized in the process of air liquefaction. Our plan is to start commercial operation in 2025.

We will promote the utilization and commercialization of this technology, targeting the capacity market, the supply-der adjustment market and the wholesale power market.







150

100

50

n

'24~'26

#### Offshore wind power generation facilities Base structures business

Competences are integrated within the segment to create synergy We have established an organization to move forward with the renewable energy promotion business and are proceeding with commercialization

Strength

- Integration of technologies in our possession that can be applied to both seabed mounted-type and floating-type base structures

Copyright © Sumitomo Heavy Industries, Ltd. All Rights Reserved.

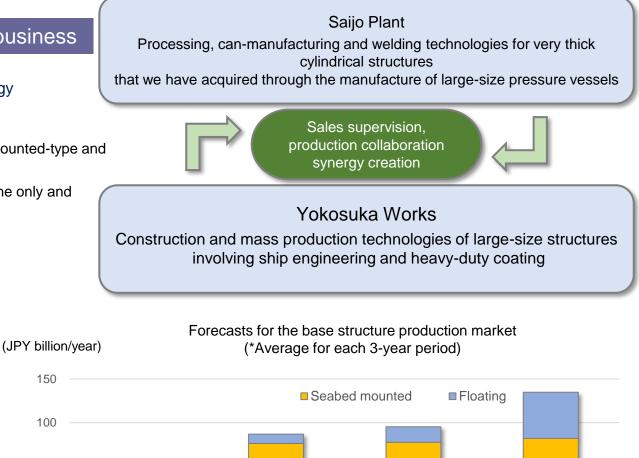
- Large capacity to meet mass production demands and a locational advantage as the only and largest facility in East Japan

#### Targets

Sumitomo Heavy Industries, Ltd.

Commence the mass production of seabed mounted-type base structures in 2026 Commence the mass production of floating-type base structures in 2029





'27~'29

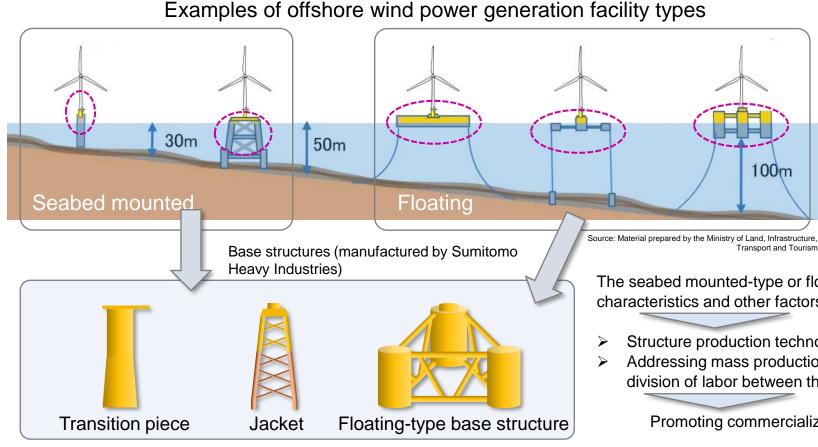
Trial calculation using GWEC Market Intelligence' data

 $'30 \sim '32$ 

'33~'35

### Offshore wind power generation facilities Base structures business

#### Outline of base structures





#### Saijo Plant



Yokosuka Works

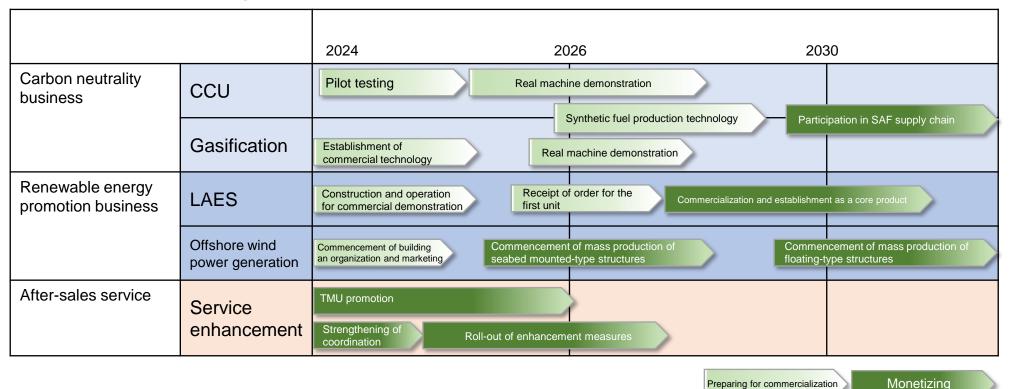
The seabed mounted-type or floating-type is adopted based on the marine characteristics and other factors

- Structure production technology that can be applied to both types
- Addressing mass production needs by establishing a system of collaboration and division of labor between the factories in Saijo and Yokosuka

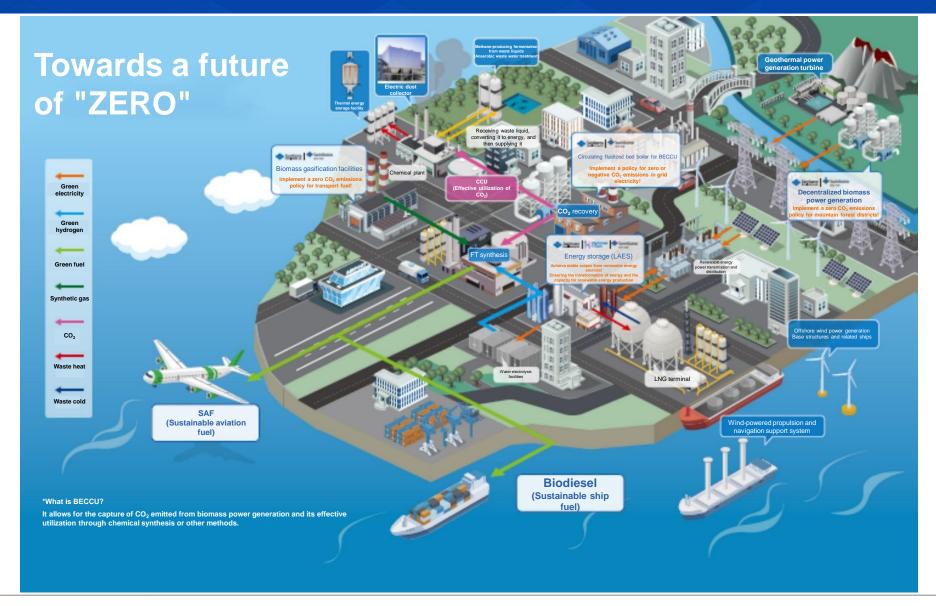
Promoting commercialization

#### Road map for the segment's key issues

Aiming to establish the carbon neutrality business and the renewable energy promotion business range as the core businesses, we will endeavor to promote various development and demonstration activities and strengthen our production system.



#### - Create new relationships with resources and attain prosperity without harming the environment -





All forward-looking statements regarding the company's future performance are based on information currently available to Sumitomo Heavy Industries and determined subjectively. Future performance is not guaranteed and all information related to future performance contained herein is subject to changes in business environments.