# **Protecting the Precious Environment**

Housing development has a huge impact on the environment. With a full understanding of such impact, we are not only promoting environmental activities to realize processes and technologies with minimal environmental burden but also engaging in research and technological development.

For more information, please visit ▶

ESG Date ▶









## Material Issues of Protecting the Precious Environment



#### Response to climate change



#### Consideration for biodiversity



#### Pollution prevention and consideration for the local environment

# Response to Climate Change

In accordance with the Haseko Group's climate change response policy, HASEKO ZERO-Emission, formulated in December 2021, the Group has moved forward with initiatives aimed at realizing decarbonization.

For more information, please visit

#### The Haseko Group's climate change response policy, HASEKO ZERO-Emission (overview)

The Haseko Group will strive to respond to climate change with the following as its basic stance.

**Realize the** Corporate

Addressing climate change management issue

**Achieve** carbon neutrality by 2050

Acquisition of an SBT certification (June 2022) Introduction of renewable energy at all construction sites (by December 2025)

Promotion of low-carbon construction

**Expand/create** business opportunities

Analysis of risks and opportunities Transition to net-zero energy housing for for-sale condominiums developed in-house and rental condominiums owned (in

2022 onwards)

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Disclosures based on the TCFD recommendations, and response to Carbon Disclosure Project (CDP)

### Disclosures based on the recommendations of the TCFD\*

The Haseko Group, as a corporate group for housing to create great living, aims "to contribute to society by creating an optimal environment for cities and people." However, in recent years, natural disasters have increased in frequency and intensity due to climate change, which is threatening the safety and security of

Given these conditions, with the belief that addressing climate change is an important management issue, the Haseko Group endorsed the recommendations of the TCFD, as well as developed and announced its policy addressing climate change,



HASEKO ZERO-Emission in December 2021. We will continue to make disclosures in accordance with the recommendations of the TCFD, as well as monitor and appropriately deal with governmental measures and social trends for reducing the effects of climate change and CO<sub>2</sub> and other greenhouse gas emissions, while aiming to realize a sustainable society and improve corporate value.

\*TCFD: Task Force on Climate-related Financial Disclosures. It recommends companies and such to disclose items related to climate change-related risks and opportunities.

#### **Metrics & Targets**

The Haseko Group has set reduction targets with total greenhouse gas (CO<sub>2</sub>) emissions as a metric for assessing and managing the impact of climate issues on our business management. Our targets for 2030 have acquired an SBT certification. \*SBT: Science Based Targets



#### Haseko Group greenhouse gas emissions reduction targets

	Base year	Targets		
Scope		Medium-term (FY2030)	Long-term (FY2050)	
Scope1 + Scope2	FY2020	(42%)	(100%)	
Scope3	F12020	(13%)	(37%)	

#### Haseko Group greenhouse gas emissions results (by Scope)

Metrics	FY2021	FY2022	FY2023	
Scope 1 (t-CO <sub>2</sub> ): Direct emissions (from burning fuel, etc.)	40,487	34,486	52,224	
Scope 2 (t-CO <sub>2</sub> ): Indirect emissions (from the use of electricity, etc.)	24,258	18,302	8,349	
Scope 3 (t-CO <sub>2</sub> ): Supply chain emissions	6,175,367	5,629,382	5,294,469	

#### Governance

The Haseko Group has established the "Sustainability Committee" under the Board of Directors with the aim of achieving sustainability. The committee, chaired by the President and Representative Director, is composed of the officers in charge of each division and the presidents of Group companies.

The Sustainability Committee meets once a year to deliberate and decide on policies and action plans concerning sustainability, including our response to climate change, and to monitor and review sustainability activities. Matters deliberated and reported at the Sustainability Committee are reported to and supervised by the Board of Directors, and significant matters are brought to

the Board of Directors for deliberation and decision-making. The Haseko Group takes into consideration the climate-related management issues addressed at the Sustainability Committee when developing its business strategy, investment strategy, and other management strategies.

As a subordinate body under the Committee, we have the "Sustainability Promotion Conference" and the Committee is working to promote and disseminate CSR activities throughout the Group, including environmental measures such as decarbonization as well as energy and environmental

#### Management system





#### Strategy

#### **Risk and Opportunity Identification Process**

The Haseko Group established a company-wide working group (WG) to address climate change under the Environment Promotion Conference. This working group identified climate-related risks and opportunities, analyzed the level of impact, and studied responses thereto.

The study results are approved by the Sustainability Committee after deliberation on the validity of the analysis and the need for additional response, and then reported to the Board of Directors.

#### Targeted Sectors/Regions and Impact on Financial Plans

As a first step, our analysis targeted the Domestic-construction business. Quantitative calculations were not performed regarding financial impact this time. In the future, we will work to expand the scope of analysis and calculate the quantitative impact.

Explanation of Scenarios and Short-, Medium-, and Long-term

In our analysis, we established the following two scenarios and studied the impact.

Studies were also done from short-term, medium-term (through 2030), and long-term (through 2050) perspectives.

Climate-related Issues That Have a Significant Impact, Resilience

As a result of analysis, we identified as significant risks the increase in construction costs due to the adoption of a carbon tax and tighter regulations in connection with the transition to a decarbonized society, labor shortages due to rising average temperatures in summer, and delays in construction projects due to more frequent and intensified meteorological disasters.

Our analysis also indicates that an increase in demand for ZEH (Net-Zero Energy Houses) and disaster-resistant houses may lead to an increase in opportunities to receive orders for new construction and renovations.

Based on these analytical results, we checked the current state of initiatives addressing these risks and opportunities and studied their adequacy and the need for additional measures. As a result, we confirmed that the current direction of our initiatives is appropriate and that further acceleration is required for several measures, such as decarbonization technology for concrete and steel, which comprise the greater part of  $CO_2$  emissions from construction materials, and energy-saving technology for houses and buildings. Going forward, we will specify actions to accelerate these measures and move forward with further initiatives. Please see the chart below for details on significant risks and opportunities, their impact, and our response.

\*Integrated into the Sustainability Promotion Conference in FY2024

1.5–2°C scenario

Time Horizons

A scenario in which rigorous measures to mitigate climate change are taken and temperatures as of 2100 are no more than  $1.5-2^{\circ}$ C warmer than the level before the Industrial Revolution. (References: SDS\*1 of the IEA,\*2 RCP 2.6\*3 of the IPCC,\*4 etc.)

4°C scenario

A scenario in which rigorous measures to mitigate climate change are not taken and temperatures as of 2100 are around 4°C warmer than the level before the Industrial Revolution. (References: STEPS's of the IEA, RCP 8.5°6 of the IPCC, etc.)

- \*1 SDS: Sustainable Development Scenario
- \*4 IPCC: Intergovernmental Panel on Climate Change \*5 STEPS: Stated Policy Scenario
- \*2 IEA: International Energy Agency \*3 RCP 2.6: 2°C scenario
- \*6 RCP 8.5: 4°C scenario

#### **Risks and Opportunities**

\*"Impact" means the impact as of 2030.

Catago	<b>.</b>	ltem	Description	Impact		Timeframe
Catego	ıy	item	Description		4°C	
Impact of the	Risk	Adoption of carbon taxes	If carbon taxes are adopted, materials with high CO <sub>2</sub> emissions intensity and transport costs may rise.	Medium	Low	Medium term
transition to a decarbonized	Risk	Tighter regulations	If the Building Energy Efficiency Act is applied more broadly, energy saving standards are increased/ mandated, or regulations are otherwise tightened, construction costs may increase.	Medium	Low	Medium term
society	Opportunity	Increased demand for energy-efficient buildings	Demand for ZEH may increase in new constructions and this could give us a competitive advantage. Demand for energy-efficient renovations of existing buildings may also increase and this could lead to more business opportunities for the Company.	High	Medium	Medium term
	Risk	Rising average temperatures in summer	If average summer temperatures rise, the risk of heat stroke among construction site workers and the tendency to avoid outdoor work will increase, which may lead to labor shortages.	High	High	Short term
Physical effects	Risk	More frequent and Intensified meteorological disasters	Due to an increase in the frequency of typhoons and intensified torrential downpours, there may be an increased risk of work interruptions and harm to nearby third parties due to damage to buildings under construction and construction delays from difficulties in procuring materials and labor as a result of damage to suppliers.	Medium	Medium	Short term
	Opportunity	Increase in disaster prevention and mitigation demand	Due to more frequent and intensified meteorological disasters, the demand for disaster- resistant housing may increase, and as a result, opportunities to receive orders for new construction and renovation may also increase.	High	High	Medium term

#### Countermeasures

Adoption of carbon taxes Tighter regulations Increased demand for energy-efficient buildings

Rising average temperatures in summer

Increase in disaster prevention and mitigation demand

- $\bullet$  Promote the reduction of  $CO_2$  emissions during construction  $\bullet$  Promote the use of materials with low greenhouse gas emissions
- Further improve the work environment at construction sites, and promote higher work efficiency by automation and other means
- Establish construction methods not affected by Weather
- Promote the development of technologies responding to the growing demand for energy efficient buildings
- Strengthen relationships with cooperating companies and suppliers
- Promote the development of technologies responding to the growing demand for disaster resistant condominiums

#### **Risk Management**

We have established a company-wide working group to sort out climate change risks and analyze their impact on business. For details on other climate change-related risk management systems, please access the information to the right.

For more information, please visit

We have formulated a transition plan as follows, by turning the "countermeasures" in the "risks and opportunities" section on the previous page (P. 86) into concrete actions.

# The Haseko Group CO<sub>2</sub> emissions reduction plan (transition plan)

For more information, please visit

The Haseko Group is working to reduce CO<sub>2</sub> emissions in accordance with the following plan in order to contribute to the prevention of global warming, mitigate the risks associated with the transition to a decarbonized society, and pursue opportunities.

#### 1. The plan up to FY2030

## (1) Scope 1 and 2 (FY2030 target: -42% compared to FY2020) (1) Scope 1

As mentioned below, we will prioritize reducing Scope 2 emissions for the time being, but we will also work to reduce Scope 1 emissions as outlined below in order to achieve our FY2030 targets.

#### a. Construction sites

Scope 1 emissions from construction sites come from the combustion of fossil fuels in heavy machinery and transportation vehicles. In addition to thoroughly implementing the energy-saving activities we have been working on for some time, such as idling stop systems, proper maintenance of heavy machinery and vehicles, and reducing the number of transportation vehicles by using soil excavated from construction sites on-site, we are also promoting the introduction of low-carbon fuels and electric forklifts with the aim of further reducing emissions. There has been little progress in the commercialization of electric models of large heavy machinery such as backhoes, so at present they are still in the trial stage, but we will aim to introduce them on a full scale in the second half of the 2020s while monitoring their spread.

#### b. Offices, etc.

Scope 1 emissions from offices, etc., come from the combustion of fossil fuels used in the vehicles for sales activities of each Group company, the vehicles used to transport customers in the senior business, and the cooking and hot water supply facilities at facilities for seniors. In addition to thoroughly implementing the energy-saving activities we have been working on, such as idling stop systems and the proper maintenance of vehicles, we are also promoting the introduction of hybrid and electric vehicles with the aim of further reducing emissions, and we aim for the full-scale adoption of EVs in the second half of the 2020s.

#### 2 Scope 2

For the time being, we will prioritize efforts to reduce Scope 2 emissions as follows, with the aim of reducing Scope 2 emissions to zero by FY2026. Scope 2 accounted for 36% of Scope 1 and 2 in FY2020, so reducing Scope 2 to zero would be a major step forward in achieving the FY2030 Scope 1 and 2 reduction target (-42% compared to FY2020).

#### a. Construction sites

In December 2021, along with the formulation of the Haseko Group's climate change response policy: HASEKO ZERO-Emission, the company announced its target of converting to 100% renewable energy for electricity used at construction sites by the end of 2025. Our efforts to achieve this target are progressing smoothly, and as of May 2023, we have achieved 100% renewable energy at Haseko Corporation's construction sites. We will continue to implement measures at the construction sites of each Group company, as we work towards achieving our targets.

#### b. Offices, etc.

We are also moving forward with the conversion to renewable energy for the offices used by each of the Group companies and the rental properties they own, etc., starting with the main facilities. We will lower emissions in stages, including through the purchase of Non-Fossil Certificates to make virtual conversions to renewable energy for facilities in leased properties where it is difficult to convert to renewable energy, and aim to reduce Scope 2 to zero by FY2026.

#### (2) Scope 3 (FY2030 target: -13% compared to FY2020)

The majority of Haseko Group's Scope 3 emissions are from activities up to the manufacturing process of the construction

materials, etc. we purchase (Category 1) and from the electricity and gas that the occupants of the buildings we construct and develop consume in their daily lives (Category 11). We are taking the following measures to reduce these emissions.

#### 1 Category 1

In addition to promoting the adoption of our proprietary environmentally friendly H-BA Concrete in properties developed by Group companies, we are also stepping up our efforts to propose its use by all of the project owner companies, with the aim of achieving an adoption proposal rate of 80% by fiscal 2030. We are also promoting the use of wooden construction. In order to reduce emissions in Category 1, it is important to work together with suppliers of construction materials and project owners. We will therefore continue to strengthen our partnerships and proposals, with the aim of reducing emissions.

#### ② Category 11

We are engaged in the promotion of ZEH-M. In particular, all newly built condominium buildings (both those for sale and rent) in which our Group has been the main developer and on which the design work began in FY2022 or later shall meet the ZEH-M Oriented standard. We are also intensifying our efforts to encourage project owners to adopt specifications that meet the ZEH-M standard. In order to reduce emissions in Category 11, it is important to work together with the project owners. We will therefore continue to strengthen our partnerships and proposals, with the aim of reducing emissions. \*ZEH-M is an abbreviation of Net Zero Energy House Mansion. These condominiums are built with features that reduce energy consumption, such as improved insulation performance around the exterior, the adoption of high-efficiency equipment, and the use of renewable energy. Out of these features, ZEH-M Oriented condominiums meet certain standards for thermal insulation performance and energy consumption.

makes up 60%. Combined, the two categories accounted for 93% of Scope 3

#### 2. Achieving the targets for FY2050

We believe that in order to achieve the FY2050 reduction targets, it is essential to utilize the advanced technologies that are currently being researched and developed (or will be researched and developed in the future) around the world. In addition, in order to implement them as a business, the reduction measures must align with the interests of end users such as condominium residents. In this respect, we believe that the policy trends of various support measures by the government and other organizations will be an important factor. In addition to promoting research and development within our Group and collaboration and cooperation with our stakeholder companies, we will also consider specific reduction measures while keeping a close eye on these external trends.

#### 3. Promotion and management systems of the plans

This CO<sub>2</sub> reduction plan is being formulated and promoted by a working group set up under the Sustainability Promotion Conference that includes members from across the entire Group. The Haseko Corporation Board of Directors has received reports on the details of the plan and approved it. In addition, the Board of Directors regularly receives reports on the progress of the plan. Furthermore, the content of the plan will be reviewed as necessary based on changes in the internal and external environment, etc., subject to the same procedures.