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**Disclosure of Environmental Issues,  
Including Climate Change**  
(In response to the TCFD recommendations)

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June, 2023

**LIXIL**

## Introduction: LIXIL's Impact and Environmental Strategies

At LIXIL, our business operations are not only supporting our corporate growth and sustainable value creation, but also aiming to have a positive impact on the environment and society. This goes beyond meeting our ESG obligations, by ensuring we are truly living our purpose to make better homes a reality for everyone, everywhere. Transforming how we approach environmental issues is a critical part of how we are transforming for impact.

We have determined Water Conservation & Environmental Sustainability as one of the strategic pillars of our Impact Strategy and positioned the six areas detailed below as material issues.

- **Climate Change Mitigation and Adaptation**
- **Water Sustainability**
- **Circular Economy**
- **Environmental Impact of Product Lifecycle**
- **Environmental Management**
- **Conservation of Biodiversity**

The LIXIL Environmental Vision 2050 formulated in FYE2020 declared a commitment to Zero Carbon and Circular Living. We set Climate Change Mitigation and Adaptation, Water Sustainability, and Circular Economy in the above material issues as focus areas for realizing the vision. As a springboard for promoting these focus areas, we have been striving to reduce the environmental burden across the product lifecycle and to strengthen our company-wide environmental management. We are also working to conserve biodiversity which is the common foundation for the three focus areas. By 2050, we aim to achieve net-zero carbon emissions and preserve water and natural resources in operations, housing and lifestyle solutions for future generations.



### CLIMATE CHANGE MITIGATION AND ADAPTATION

Achieve Net-Zero GHG Emissions through Our Business Operations, Products and Services



### WATER SUSTAINABILITY

Enhance the Environmental Value of Water Resources by Saving, Circulating and Purifying Water



### CIRCULAR ECONOMY

Help Transition to a Circular Economy and Preserve Natural Resources for Future Generations

For more information: [Water Conservation & Environmental Sustainability](#)

As a manufacturer of water-related products and housing materials, we believe it is important to help solve environmental issues, such as reducing CO<sub>2</sub> emissions, not just for LIXIL, but for society as a whole.

It is the responsibility of all manufacturers to consider how to minimize the environmental impact associated with their business activities and the use of their products. At LIXIL, we have updated our environmental strategy because we aim to not only fulfill our corporate responsibility but also have a positive impact on the global environment and people's lives as part of our quest to promote sustainability for both the environment and society at large. We present a comprehensive approach across three distinct phases: our operations, our value chain, and expanding our impact, in order to maximize the impact generated in each business domain.

For more information: [Targets and Initiatives](#)

\* "2030" and "2050" in this document refers to our fiscal year, starting in 2030 or 2050.

# Disclosure of Environmental Issues, Including Climate Change (In Response to the TCFD Recommendations)

In March 2019, LIXIL announced our endorsement of the Task Force on Climate-related Financial Disclosures (TCFD) in connection with our focus area in the LIXIL Environmental Vision 2050 of “Climate change mitigation and adaptation”. Based on the TCFD recommendations, LIXIL is working to identify and assess the risks and opportunities posed by climate change, and reflecting them in our environmental strategy after reporting to and approval by the Board of Executive Officers and the Board of Directors.

## 1. Governance

### a. Board’s Oversight

At LIXIL, we are transforming our business operations. This transformation is not only to secure corporate growth and sustainable value creation, but also to enhance the positive impact that we have on society and the environment. It is important that we also have the right governance structure in place to track progress and monitor risks, targets, and metrics for our transformation for impact.

We have established the Environmental Strategy Committee (ESC) chaired by the Chief Environmental Impact Officer, designated by the Board of Executive Officers, as well as a sustainability governance framework with overall oversight by the Board of Directors. The ESC meets at least once a quarter to develop and implement environmental strategies. This includes formulating rules and policies related to environmental governance, deliberating and making decisions on measures to address climate risks and opportunities and other environmental issues, and managing and monitoring environmental targets for the group as a whole. The results of ESC discussions and resolutions are reported to the Board of Executive Officers quarterly through the Impact Strategy Committee. The Board of Executive Officers discusses and approves targets and action plans on environmental issues and other significant matters. The progress is elevated to the Board of Directors twice a year for discussion and oversight. Matters related to climate change and other environmental issues are also reported to and discussed at the Governance Committee. Thus, we regard responding to climate change as an important issue.

In FYE2023, the ESC discussed and determined potential strategy revisions, such as the setting of medium-term targets in the areas of water sustainability and circular economy and establishing a comprehensive approach to help realize our Environmental Vision 2050. We also expanded our material issues to include “Conservation of Biodiversity.” We consider biodiversity to serve as the common foundation for our three focus areas in the environment domain and believe that it is vital to address the issue of biodiversity in order to ensure sustainable LIXIL growth.

#### Environmental management structure



Meeting period	Main ESC agenda
FYE2022	<ul style="list-style-type: none"> <li>• Reorganized the ESC into a body that includes executive officers for the purpose of strengthening environmental governance and building and implementing environmental strategies</li> <li>• Raised our targets for reducing CO<sub>2</sub> emissions in the run up to 2030</li> <li>• Reported on the degree of implementation of the TCFD recommendations</li> </ul>
FYE2023	<ul style="list-style-type: none"> <li>• Formulated an environmental strategy designed to enhance potential social and environmental impact</li> <li>• Determined water and circular economy targets for 2030</li> <li>• Added the conservation of biodiversity as a new material issue</li> </ul>

## b. Roles and Responsibilities of Directors and Executive Officers

Currently, the Board of Executive Officers appoints a chairperson to each committee as follows.

Committee	Chairperson
Environmental Strategy Committee	Senior Vice President, Chief Environmental Impact Officer
Impact Strategy Committee	Director, Representative Executive Officer, Human Resources, Communications, External Affairs, and Impact Strategy, and Chief People Officer

Each chairperson is responsible for implementing the decisions made in their committee and managing progress. More specific business plans are then implemented and monitored by the executive officers in charge of individual business organizations. The Chief Executive Officer is ultimately responsible for management decisions related to environmental issues, including risks and opportunities arising from climate change, through discussions and resolutions of the Board of Executive Officers and their oversight by the Board of Directors.

For more information: [Environmental Management System](#)  [Corporate Governance Structure](#) 

## 2. Strategy

### a. Identifying Climate-related Risks and Opportunities

LIXIL has conducted scenario analyses to identify the risks and opportunities posed by climate change that could significantly impact our business over the short, medium, and long terms as shown below. Risks and opportunities were categorized into transition risks (e.g., policy and legal, and market) and physical risks (e.g., extreme weather events) that could affect our value chain.

Classification	Period	Background
Long-term	10-30 years	Period ending with the 2050 goal to realize LIXIL Environmental Vision 2050
Medium-term	3-10 years	Period ending in 2030, a target year of the Science Based Targets initiative and the SDGs. A medium-term milestone for realizing LIXIL Environmental Vision 2050
Short-term	0-3 years	Period ending in 2025, when environmental initiatives will be promoted in alignment with business plans

Our scenario analysis is based on the following two scenarios, selected from several scenarios published by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC).

Scenario Name	Scenario Overview	Source
1.5°C scenario*	<p><b>Scenario with significant policy transition impacts that aligns with the Paris Agreement's goal of limiting temperature rise to 1.5°C above pre-industrial levels</b></p> <p>Environmental regulations will be tightened and the introduction of carbon taxes and other taxes will cause energy and raw material prices to rise. Energy regulations and expanded subsidy programs will increase the share of Net-Zero Energy Houses (ZEH) among new houses in Japan and will also stimulate remodeling to improve existing housing performance. The impact of this will be an increased demand for products and services that provide high thermal insulation and energy efficiency and generation.</p>	<p>RCP2.6</p> <p>IEA SDS</p> <p>IEA NZE</p> <p>RCP4.5</p> <p>NDCs</p>
4°C scenario	<p><b>Scenario where environmental regulations are not tightened and physical impacts are large</b></p> <p>Environmental regulations will not be tightened, energy efficiency-related subsidies will not be expanded, and the percentage of ZEH will not significantly increase. Physical risks such as damage to manufacturing facilities caused by typhoons, floods, and other extreme weather events will increase. Demand for products and services related to disaster preparation, response, and recovery will increase.</p>	<p>RCP8.5</p>

\* Parameters based on the 2°C scenario were used when parameters based on the 1.5°C scenario were not available.

## b. Impact of Risks and Opportunities Identified in the Scenario Analysis

The following table outlines the risks and opportunities identified in the two scenarios described above that we expect will significantly impact our business. We quantified the financial impact of these risks and opportunities to our business in 2030 to the greatest extent possible. In FYE2023, we started working to establish integrated management of water and resources, recognizing their high correlation with climate change.

	Risks and opportunities relating to climate change and other environment issues	Risk and opportunity category	Impacted stage of value chain	Time horizon	Estimated financial impact	
					1.5°C scenario	4°C scenario
RISKS	1 Increased operating costs due to introduction of carbon taxes	Policy and Legal, Technology	Direct operations	Medium to long	10 billion yen* <sup>1</sup>	No additional tax burden
	2 Increased raw material and component procurement costs due to market changes	Policy and Legal, Technology, Market	Direct operations, Upstream	Medium to long	Financial impact not calculated due to lack of parameters necessary for quantification	
	3 Loss of revenue opportunities due to damage to the company's plants caused by typhoons, floods, etc.	Physical (acute)	Direct operations	Short to long	1.5 billion yen* <sup>2</sup>	
	4 Loss of revenue opportunities due to the suspension of operations at the company's plants caused by drought, etc.	Physical (chronic)	Direct operations	Short to long	Financial impact not calculated due to lack of parameters necessary for quantification	
OPPORTUNITIES	5 Increased demand for energy saving products and services for new ZEH construction and energy-efficiency remodeling	Products and Services, Market, Energy Source	Downstream	Medium to long	20 billion yen* <sup>3</sup>	Maintain current trends
	6 Increased demand for using low-carbon, eco-conscious materials or resources	Products and Services, Markets, Resource Efficiency	Downstream	Medium to long	Financial impact not calculated due to lack of parameters necessary for quantification	
	7 Increased demand for products related to disaster preparation response, and recovery	Products and Services, Markets, Resilience	Downstream	Short to long	Financial impact not calculated due to lack of parameters necessary for quantification	
	8 Increased demand for products that help conserve water or improve water quality	Products and Services, Markets, Resource Efficiency	Downstream	Medium to long	Financial impact not calculated due to lack of parameters necessary for quantification	

\*1 Financial impact calculation is based on the assumption that a carbon tax (using IEA's estimates of carbon prices considered necessary to achieve the 1.5°C target) is imposed on Scope 1 and 2 carbon emissions.

\*2 Average loss is calculated based on the following steps: (1) identified any production sites with flood risks (based solely on production site location; risk mitigation measures set forth in our business continuity plans (BCP) are not incorporated), using the World Resources Institute's (WRI) Aqueduct Floods tool and hazard maps provided by Japanese municipalities; and (2) multiplied two factors: the number of days of stalled operations for sites in each inundation height zone indicated in Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Manual for Economic Evaluation of Flood Control Investment; and the daily production volume of each site.

\*3 Profit is calculated based on the share, price, and profit margin of key products. This calculation assumes an increased ZEH percentage of new and existing housing in 2030 to achieve the Japanese government's 66% reduction target for the residential sector by 2030.

## c. Strategic Response to Risks and Opportunities

By integrating our responses to risks and opportunities identified by the scenario analysis into our environmental strategy, we are working to mitigate risks, achieve sustainable growth, and enhance our resilience as an enterprise.

More specifically, we have set out to improve the profitability of our Japanese business, which is one of our strategic initiatives in the LIXIL Playbook that illustrates our medium-term business direction, and help decarbonize housing through performance enhancements. To do this, we are reorganizing our production systems to reduce fixed costs and switch to platform-based products, adjusting sales prices to increase productivity and profitability of our Japanese business, and rapidly launching new

products, such as a revamped window lineup. Moreover, we are seeking to achieve sustainable growth by continually working on structural reforms and transforming into a more agile organization that responds flexibly to external changes, and by expanding our renovation business. In FYE2022, we completed the transition to platform-based products for the housing technology business and finished revamping all window-series products. In FYE2023, we updated the LIXIL Playbook to strategically prioritize the incorporation of environmental strategies into our business strategies. By doing this, we aim to improve our corporate value while expanding our positive impact on society and the environment.

Key risks and opportunities	Strategic response
<p>1</p> <p>Increased operating costs due to introduction of carbon taxes</p>	<p>To reduce CO<sub>2</sub> emissions from our business sites (especially manufacturing sites), we are working to improve production efficiency, defect rates, and combustion efficiency and upgrade to equipment that meets Japan's Top Runner energy efficiency standards. We are also installing solar photovoltaic systems and increasing procurement of renewable energy when financially feasible, and we are a member of RE100, a global initiative of companies committed to sourcing 100% renewable electricity for their operations. Outside of Japan, we switched all faucet fitting plants and distribution centers (10 locations in total) at LIXIL International, which oversees all our international water-related business, to 100% renewable energy, as well as three plants in Mexico in FYE2023. In Japan, we started using solar power generation equipment installed through Power Purchase Agreement (PPA) on the roofs of the Otani Plant, which manufactures washbasins. The Onomichi Plant, which produces faucets, is also scheduled to switch to solar power in August 2023.</p> <p>Going forward, we will continue to actively consider introducing PPA and other models that offer high additionality as means for procuring renewable energy. Over 80% of our offices, including our sales bases and showrooms in Japan, have already completed the switch to renewable energy. Furthermore, as part of our drive to help realize a carbon-neutral society, we started to consider innovations that incorporate new technologies, such as the conversion to hydrogen fuel and the exploration of CCU technology to separate, capture, and effectively utilize CO<sub>2</sub> emissions. We are also looking to apply new technologies that are currently in the research stage, and are starting studies with a view to putting those technologies into practical application from 2030 onward.</p> <p>In addition, we are consistently verifying manufacturing technologies with a view to switching to hydrogen fuel as part of our business innovation activities. We conducted hydrogen combustion experiments to verify the high-temperature furnaces used for aluminum-melting and firing sanitary ware and tiles, and we ascertained that hydrogen can be used in the same way as conventional natural gas without any issues. We conducted a successful demonstration experiment for mass-produced equipment in LIXIL plants relating to the aluminum aging treatment process, which raises concerns over the potential impact on quality, with a view toward engineering a conversion to hydrogen fuel for aluminum profile manufacturing processes other than high-temperature melting. We are also verifying a more effective internal carbon pricing system to promote more strategic energy-saving investment over the medium to long term.</p> <p>For more information: <a href="#">Climate Change Mitigation and Adaptation &gt; Business Operations</a>   <a href="#">LIXIL Starts Verification of Manufacturing Technology with a View to Switching to Hydrogen Fuel and Pursuing Innovation to Help Achieve Net-zero CO<sub>2</sub> Emissions in its Business Activities (Japanese only)</a>   <a href="#">Introduced LIXIL's first PPA-based solar power generation equipment in Japan at two plants (Japanese only)</a>   <a href="#">Supporting the Climate Change Initiative Message Calling for an Accelerated Introduction of Renewable Energy and an Earlier Adoption of Effective Carbon Pricing (Japanese only)</a> </p>
<p>2</p> <p>Increased raw material and component procurement costs due to market changes</p>	<p>To reduce CO<sub>2</sub> emissions from procurement of raw materials and components, we are switching to low-carbon raw materials and components such as aluminum scraps collected from outside our manufacturing process, making products thinner, and reducing the number of components per product. In FYE2023, we started engaging with suppliers that account for the top 80% of all procurement-related CO<sub>2</sub> emissions to help understand the current situation across our entire value chain and pursue effective CO<sub>2</sub> reduction activities. We conducted a survey of suppliers that are particularly significant in terms of reducing procurement-related CO<sub>2</sub> emissions to help grasp the current situation regarding the aggregation of CO<sub>2</sub> emissions and the setting of CO<sub>2</sub> reduction targets. We will continue to promote communication with suppliers based on the survey results and strengthen our collaboration to reduce procurement-related CO<sub>2</sub> emissions as well as to ensure a stable supply of raw materials and responsible procurement.</p> <p>At LIXIL International's water faucet factories, we carry out alloy smelting in in-house furnaces and, at our plants in Japan, we promote the recycling of aluminum scraps from outside our manufacturing process to help reduce the amount of energy required for the manufacture of aluminum products, such as the refining of new ingots. In terms of plastic resources, we promote the effective use and recycling of resin materials by, for instance, building mechanisms to help recycle scrap materials generated in factories and introducing sorting equipment, which will ultimately enable us to recycle resin windows into new window materials.</p> <p>For more information: <a href="#">Circular Economy &gt; Business Operations</a>   <a href="#">Responsible Supply Chain Management &gt; Conducting and Following Up on Responsible Procurement Survey</a> </p>

Key risks and opportunities	Strategic response
<p>3</p> <p>Loss of revenue opportunities due to damage to the company's plants caused by typhoons, floods, etc.</p>	<p>Anticipating major natural disasters as a risk to our business, we are carrying out business continuity planning (BCP) activities to minimize disaster risks at each factory based on estimated damages in all areas where our headquarters, offices, and factories are located. For example, our TOSTEM THAI plant experienced heavy damage from flooding in 2011. As part of the BCP process for improving the disaster preparedness, the plant has built floodwalls on its perimeter and installed water pumps and other equipment to protect production facilities and shorten recovery time. We are carrying out systematic facility investments and upgrades at other factories as well.</p> <p>As measures related to product supply, we are optimizing supplier selection, ensuring optimal inventory levels, and developing backup production systems, for example. We are also enrolled in insurance programs that cover fixed assets owned, used, or managed by LIXIL and its consolidated subsidiaries in Japan in the event of an unexpected and sudden disaster caused by fire, wind, or water.</p>
<p>4</p> <p>Loss of revenue opportunities due to the suspension of operations at the company's plants caused by drought, etc.</p>	<p>In order to better understand local conditions and introduce appropriate measures to address the problem of increasingly scarce global water resources, LIXIL started conducting surveys in FYE2017 to identify water risks at 77 production sites that use water in their manufacturing processes. Our risk assessment process involves first creating a geographical risk profile using the international WWF Water Risk Filter assessment tool. We then conduct surveys of sites that are revealed to be high-risk.</p> <p>In FYE2023, we participated in the Corporate Engagement Program run by the Science Based Targets Network (SBTN) and investigated the risk (water stress) and impact (water intake) relating to the amount of water in the catchment basin of our production sites, with reference to methods presented by SBTN. We will regularly update this analysis and implement appropriate measures at each site in order to further reduce risk.</p> <p>For more information:  <a href="#">Water Sustainability &gt; Business Operations</a> </p>
<p>5</p> <p>Increased demand for energy-saving products and services for new ZEH construction and energy-efficiency remodeling</p>	<p>The energy consumed from the building products sector accounts for about 30% of final energy consumption worldwide. In Japan, heating, cooling, and hot water account for about 60% of the energy consumed by the average home. Housing performance in Japan lags behind that of other regions such as Europe, with around 90% of existing homes in Japan failing to meet current national energy-efficiency standards. High-insulation windows have an important role to play in driving improvements that mitigate global warming.</p> <p>As a company that supplies products and services that contribute to reductions in carbon emissions through their high thermal and water efficiency or energy generation capabilities, LIXIL recognizes it has a major responsibility to reduce carbon emissions from homes and buildings. High-performance renovation of existing homes is particularly important due to the shrinking market size for new houses in Japan. LIXIL will help stimulate home renovation through high-performance construction methods for reinsulating entire homes; easy-to-install, highly-insulating windows and doors; and energy- and water-saving faucets, water-saving showers, toilets, and other products. In FYE2023, we will revamp all window lineup in our effort to reach a 100% sales ratio of high-performance windows for newly constructed homes by FYE2026.</p> <p>For more information:  <a href="#">Climate Change Mitigation and Adaptation &gt; Products and Services</a>   <a href="#">High Efficiency Housing for a Decarbonized World</a>   <a href="#">Money Saving Tips: Recommending Hot Water Saving Techniques to Conserve Electricity, Gas, and Water Because Heating Water is the Second Most Common Usage of Household Energy (Japanese only)</a>   <a href="#">Developed and Conducted Demonstration Experiments on a Solar Power Generation Roll Screen System that Promotes Decarbonization in Existing Buildings and Enhances Business Continuity Planning (BCP) (Japanese only)</a> </p>



Key risks and opportunities	Strategic response
<p>6</p> <p>Increased demand for products that use low carbon, eco-conscious materials or resources</p>	<p>In order to respond to rising prices for raw materials and components that generate a large amount of carbon emissions during procurement and production stages, stronger regulations on fossil-derived plastics, changing consumer preferences arising from the emergence of circular economy, and other market changes, we are using recycled materials and renewable materials as much as possible and designing products that take a longer product lifespan and recyclability into account.</p> <p>LIXIL's GROHE brand has steadily increased products with Cradle to Cradle certification over the years and released EPDs (Environment Product Declarations) for 18 product groups that cover 777 products. In Japan, we have set a target to increase the ratio of recycled aluminum used in our housing business to 100% by FYE2031. If we achieve this target, it will account for approximately one third of LIXIL's stipulated medium-term target for a 30% reduction in Scope 3 CO<sub>2</sub> emissions (compared to FYE2019). In December 2022, we launched the EcoLeaf certified <i>PremiAL</i> series of low-carbon aluminum profiles, which is made of 70% recycled aluminum. We can help reduce CO<sub>2</sub> emissions by 55% by replacing products that use new ingots. Furthermore, we have already succeeded in developing technologies to facilitate the use of recycled aluminum material in 100% of our raw materials, and we plan to start releasing our <i>PremiAL R100</i> low-carbon aluminum profile, which is made of 100% recycled aluminum, in fall 2023, initially as a construction material for buildings.</p> <p>In addition, we developed <i>revia</i>, a new recyclable material made from a combination of nearly any kinds of waste plastic and wood, including composite plastics and marine plastics that have been difficult to recycle up until now and consequently incinerated or placed in landfill. The effective use of waste plastic and wood is helping to reduce CO<sub>2</sub> emissions by 82%. In January 2023, we launched <i>revia pave</i> as our first <i>revia</i> product. The <i>revia pave</i> paving material has a wide range of applications from sidewalks to squares, parks, and building exteriors. We will strive to reduce the amount of CO<sub>2</sub> emitted during the incineration process and the environmental pollution caused by landfill by creating an ecosystem that spans procurement, production, sales, installation and collection and establishing a sustainable business model that encourages the recycling of waste plastics.</p> <p>We are developing and marketing products and services that provide new options and broaden consumer choices for sustainable living, such as resin window frames that have roughly three times the recycled content as conventional products, artificial wood deck that uses recycled plastic and recycled wood dust, and kitchen faucets that can be upgraded after purchase by simply replacing the spout with one that has a built-in water filter.</p> <p>For more information:</p> <p><a href="#">Circular Economy &gt; Products and Services</a> </p> <p><a href="#">Plastics Action Statement</a> </p> <p><a href="#">Developed a New Recyclable Material Called "revia" Made From a Combination of Waste Plastic and Wood</a> </p> <p><a href="#">Set a 100% Aluminum Recycling Rate Target for FYE2031 to Help Create a Carbon-Neutral, Circular Society. Newly Developed our PremiAL Series of Low-carbon Aluminum Profiles that Help Greatly Reduce Scope 3 Emissions (Japanese only)</a> </p>
<p>7</p> <p>Increased demand for products related to disaster preparation, response, and recovery</p>	<p>LIXIL is developing and marketing products that contribute to climate adaptation to address the increasing frequency of natural disasters such as typhoons and torrential rains and higher rates of heatstroke from rising temperatures. Such products include easy-to-install storm shutters that protect windows from high winds and flying debris during a typhoon, Style Shade sun blinds that block strong sunlight on window exteriors, and Resilience Toilet, a public toilet whose water consumption can be switched from five liters to one liter per flush during water supply disruptions. We are also promoting initiatives such as Think Heat, in which together with stakeholders, we explore the importance of indoor temperature, which can cause heatstroke or heat shock, and the efficient use of heaters and air conditioners; and a disaster mitigation project to build homes that protect families from disasters.</p> <p>For more information:</p> <p><a href="#">Climate Change Mitigation and Adaptation &gt; Products and Services</a> </p> <p><a href="#">Stakeholder Engagement &gt; Think Heat</a> </p> <p><a href="#">Disaster Mitigation Project: Build Homes That Protect Families (Japanese only)</a> </p>
<p>8</p> <p>Increased demand for products that help conserve water or improve water quality</p>	<p>Through water efficient products and solutions, LIXIL can enable consumers to use water more efficiently and responsibly, reducing daily consumption. LIXIL's water saving toilet and faucet products, and smart water controllers aim to reduce a total of 2 billion cubic meters of water per year by FYE2025, globally. Better homes also need clean and safe water — for showering, washing hands, or drinking. LIXIL is helping to enable safer water for consumers and communities to tackle contamination by providing product solutions and promoting behavior change. LIXIL is also committed to advocating for more effective and responsible water policies: working with partners and developing culturally and geographically relevant solutions, joining the conversation on water issues such as scarcity, efficiency, safety and reuse.</p> <p>For more information: <a href="#">Water Sustainability &gt; Products and Services</a> </p>

## 3. Risk Management

### a. Processes for Identifying and Assessing Climate-related Risks

LIXIL identifies significant climate-related risks and opportunities and assesses their impact by conducting scenario analyses based on the TCFD recommendations under the direction of the Environmental Strategy Committee (ESC). In this process, climate-related transition risks and physical risks are linked to business risk categories (strategic risks and operational risks) and prioritized based on group-wide risk assessment criteria (degree of impact on business planning and possibility of occurrence), taking into account the differences in the size of group businesses, changes in their external conditions, and inter-relationships among risks from business management perspectives.

### b. Processes for Managing Climate-related Risks

LIXIL makes continuous improvements to our management of business risks by evaluating the relative importance of each risk and planning, implementing and monitoring measures to address such risks at every level of our organization. For climate-related transition risks and opportunities in particular, we are developing processes to integrate such risks and opportunities into our environmental strategy, cascade them down to environmental targets and action plans, implement and promote measures to improve environmental performance and manage risks, and monitor and review progress.

### c. Integrating These Processes into Overall Risk Management

We are integrating these processes into overall risk management of the entire group by linking climate-related transition risks and physical risks to the strategic risk and operational risk categories of our business risks. We regularly monitor strategic and operational risks and implement risk mitigation measures at every level of the business. Moreover, members of the Audit Committee monitor whether effective measures are being taken to address high-priority risks through their participation in meetings of the Board of Directors and various other committees.

For more information: [Management Strategy & Structure > Business Risks](#)  [Corporate Governance > Risk Management](#) 

## 4. Metrics and Targets

### a. Metrics and Targets Used to Assess Climate-related Risks and Opportunities

The LIXIL Environmental Vision "Zero Carbon and Circular Living" expresses our commitment to achieve net-zero carbon emissions from our operations, products and services by 2050. In FYE2023, we renewed the Science Based Targets initiative (SBTi) certification for our 2030 medium-term CO<sub>2</sub> reduction targets, aligning them with the SBTi's new ambition level of 1.5°C. We also added some medium-term water- and resource-related targets for 2030.

Indicators for evaluating risks and opportunities relating to climate change and other environment issues		Targets
Risks	Scope 1 and 2 carbon emissions	Reduce by 50% by FYE2031 (vs. FYE2019)
	Scope 3* carbon emissions	Reduce by 30% by FYE2031 (vs. FYE2019)
	Scope 1, 2, and 3 carbon emissions	Net zero by FYE2051
	Water use efficiency	Improve by 20% by FYE2031 (vs. FYE2019)
	Waste recycling rates	Improve by 90% by FYE2026
Opportunities	Ratio of number of high-performance windows sold for new detached houses (Japan)	100% by FYE2026
	Ratio of number of energy and water-saving faucets and water-saving toilets sold (Japan)	100% by FYE2031
	Total water savings from water-saving products	2 billion m <sup>3</sup> per year by FYE2025
	Ratio of used recycled aluminum	100% by FYE2031

\* Excluding use-phase emissions from products that indirectly consume energy such as hot water supply during use

For more information: [Impact Strategy](#) 

### b. Scope 1, 2, and 3 carbon emissions

### c. Results of metrics used to assess climate-related risks and opportunities

We obtain third-party assurance of Scope 1, Scope 2, and particularly significant categories of Scope 3 emissions, water consumption, and waste generation, etc., and we disclose our targets and results for each indicator.

For more information: [ESG Databook](#) 