



Second Opinion

KITZ Corporation Sustainability Linked Bond Framework

August 5, 2022

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Rating and Investment Information, Inc. (R&I) has confirmed the alignment of the Sustainability Linked Bond Framework of KITZ Corporation (KITZ) dated August 2022 with the International Capital Market Association (ICMA)'s Sustainability-Linked Bond Principles 2020 and the Ministry of the Environment (MOE)'s Green Bond and Sustainability Linked Bond Guidelines 2022. This opinion is based on the following views.

■ Outline of the Opinion

(1) Selection of Key Performance Indicators (KPIs)

The KPI is the domestic group's Scope 1 and 2 CO2 reduction rate compared to the base year of FY2013. In a Long-term Management Vision, the KITZ Group has placed sustainability management at the core of its management strategy and identified key themes for each ESG component. On the environmental front, it aims to realize CO2 Zero, Zero Environmental Impact and Zero Risk in 3 ZERO (Triple Zero) initiatives. The KPI of the Framework is a measure of progress in CO2 Zero, which is an especially important target in the Triple Zero initiatives that addresses climate change, an urgent social issue. It constitutes an indispensable element of the KITZ Group's sustainability management.

(2) Calibration of Sustainability Performance Targets (SPTs)

The SPTs are the domestic group's Scope 1 and 2 CO2 reduction rate in each fiscal year compared to the base year of FY2013. The target for the end of FY2030 is a 90% reduction compared to FY2013. This is a higher rate of reduction than Japan's ambitious interim target toward carbon neutrality by 2050, which is a 46% greenhouse gas emissions reduction in FY2030 compared to FY2013. During the most recent eight-year period, KITZ achieved a 26.3% reduction compared to FY2013. The SPTs are an additional 63.7% reduction during the nine-year period from FY2022 through FY2030, which far exceeds the company's track record of reduction. The SPTs are also considered more challenging than targets of industry peers. The SPTs are therefore sufficiently ambitious and meaningful targets.

(3) Bond Characteristics

The bond characteristics will vary, imposing the obligations of 1) purchase of emission credits or 2) donation depending on SPTs achievement.

In the case of purchasing emission credits in 1), KITZ will purchase the amount of emission credits (credits/certificates of CO2 reduction value) equivalent to a certain percentage of the issue amount of bonds corresponding to SPTs achievement, before the bonds are redeemed. In the case of making a donation in 2), it will donate a certain percentage of the issue amount of bonds corresponding to SPTs achievement to public interest incorporated associations, public interest foundations, international organizations, local government-authorized NPOs, local governments and similar organizations engaged in activities for a transition to a decarbonized society, before the bonds are redeemed. The values of SPTs and the date of determination of SPTs achievement, which define the bond characteristics, are specified in statutory disclosure documents, together with variations in bond terms and conditions as well as KPI and SPT definitions.

The amount of purchase in 1) and donation in 2) is set at an appropriate level for sustainability linked bonds. The bond characteristics are linked to SPTs achievement, functioning as an economic incentive for KITZ. The financial and structural characteristics of the sustainability linked bonds strengthen the company's commitment to achieving CO2 Zero, one of the key initiatives in its Triple Zero Long-term

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Environmental Vision.

(4) Reporting

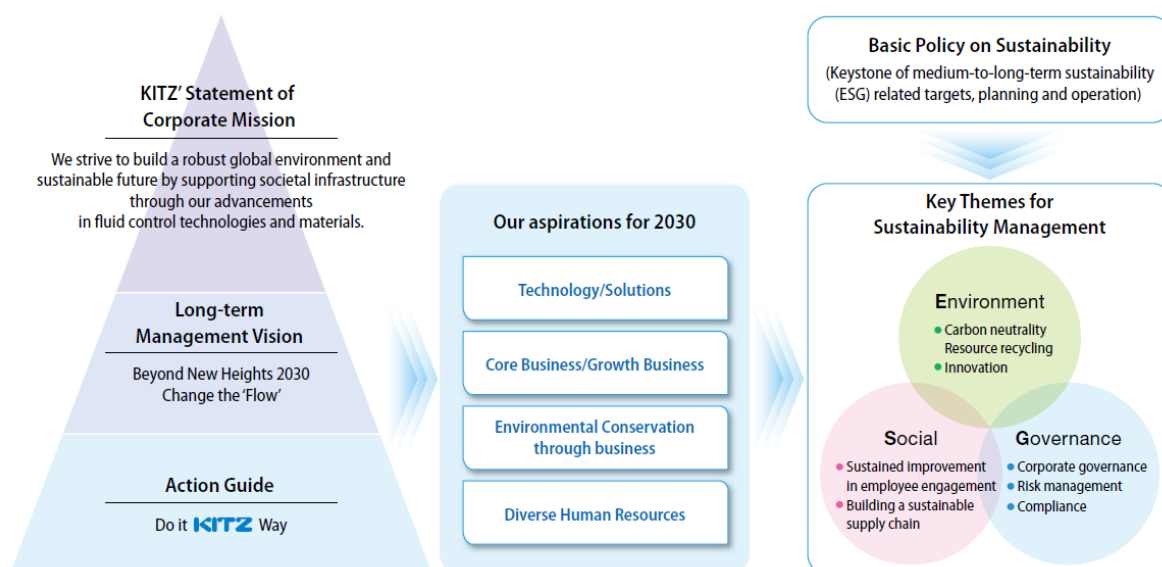
KITZ will disclose KPI performance on its website annually, together with an assurance report obtained from an independent third party. If it purchases emission credits or makes a donation based on the characteristics of the sustainability linked bonds, details will be made available. The company will also disclose information that may affect SPTs achievement (e.g., formulation and update of sustainability strategies) on its website.

(5) Verification

KITZ will have its KPI performance verified by an independent third party and disclose an assurance report on its website. It will also obtain a report on SPTs achievement by notifying R&I of whether the KPI performance meets the SPTs as of the date of determination.

Overview of the Issuer

- KITZ is the largest all-round valve manufacturer in Japan founded in 1951. Its strength lies in the integrated production system that covers the entire process starting from casting of raw materials. The company operates globally, supplying products to diverse markets, including buildings, houses, water distribution lines, drainage systems, various factories, semiconductor manufacturing facilities, petrochemical plants and LNG terminals. Its corporate philosophy called KITZ' Statement of Corporate Mission is as follows: We strive to build a robust global environment and sustainable future by supporting societal infrastructure through our advancements in fluid control technologies and materials. To realize the Statement in a changing social environment, the company accelerates its entry into growth businesses relating to digitalization and decarbonization while strengthening the foundations of its core businesses.
- The company is establishing groupwide environmental management, obtaining ISO14001 certification at its production sites in Japan and overseas (10 domestic sites and 10 overseas sites), beginning with Nagasaka Plant in 1998. Since the 2000s, it has actively allocated management resources to development and supply of environmentally friendly products, effective use of resources, and waste reduction and recycling, based on its recognition of environmental activities as a key theme for corporate management. Efforts have long been underway to undertake business activities that give due consideration to the environment.
- The Long-term Management Vision "Beyond New Heights 2030 – Change the Flow" unveiled in February 2022 places sustainability management at the core of its management strategy. In keeping with its Basic Policy on Sustainability, the company identified priority ESG issues to be addressed as key themes for sustainability management to realize its aspirations for 2030 and has been pressing ahead with specific initiatives.
- To realize KITZ' Statement of Corporate Mission, the company aims to sustainably grow and enhance corporate value while at the same time solving social issues and creating social value, by implementing sustainability management.



[Source: KITZ' website]

1. Selection of KPIs

'Selection of KPIs' of the Framework is in conformity with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022 from the following perspective.

(1) Abstract of KPIs

- The KPI is the domestic group's Scope 1 and 2 CO2 reduction rate.
(The domestic group refers to KITZ and its consolidated subsidiaries in Japan.)

(2) Materiality of KPIs

① The KITZ Group's Sustainability Promotion Structure

- As a roadmap for promoting sustainability management to realize its corporate philosophy called KITZ' Statement of Corporate Mission, a Basic Policy on Sustainability was formulated in December 2021.

<Basic Policy on Sustainability>

To realize "KITZ' Statement of Corporate Mission", which expresses the KITZ Group's corporate philosophy, we will work toward the following:

- Strive to increase both corporate value and social value by delivering solutions to social challenges through our businesses
 - Be an enterprise that deserves society's trust, through realizing efficient, fair, and transparent, highly ethical corporate management
 - Build unshakeable relations of trust through dialogue with all stakeholders
- In December 2021, KITZ also established the Group Sustainability Promotion Committee to promote integrated sustainability management groupwide.

<Outline of the Group Sustainability Promotion Committee>












Goals	(i) Promoting integrated sustainability management groupwide (ii) Ensuring sustainability management takes root in individual companies and sections (iii) Sharing priority themes and measures for sustainability management, formulating KPIs for individual companies and sections, and revising plans
Activities	(i) Reporting and sharing the Basic Policy on Sustainability with individual companies and sections (ii) Reporting and sharing priority themes of sustainability management with individual companies and sections (iii) Reporting and sharing Group KPIs and formulating and reporting individual companies' and sections' KPIs (iv) Reporting on the progress of Group plans and reporting and sharing Group basic policies and revised plans, and formulating and reporting individual companies' and sections' revised plans (v) Sharing and deliberating on issues related to sustainability management at individual companies and sections
Chairperson	General Manager, Corporate Planning Division
Membership	Executive Officers, presidents of KITZ Group companies
Administrative office	Sustainability Promotion Office
Frequency of meeting	Twice a year

[Source: KITZ' website]

- To continue to be a sustainable company in a changing management environment, KITZ reinforced a structure for promoting sustainability initiatives across the group.

② Materiality of KPIs

- KITZ identified the following key themes for sustainability management to realize its Long-term Management Vision:

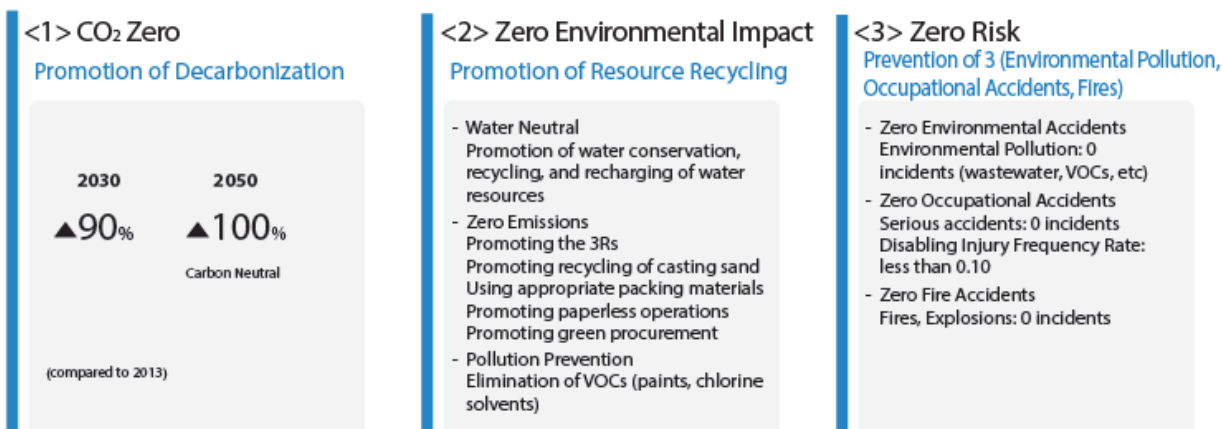
	Key Themes for Sustainability Management	Social Issues	Specific Initiatives	FY2030 Quantitative Targets	Relationship with the SDGs
E Environmental	Carbon neutrality Resource recycling	<ul style="list-style-type: none"> Transition to a decarbonized society Depletion of resources Increase in waste 	Initiatives for realization of Long-term Environmental Vision "Triple Zero" (1) Zero CO ₂ emissions (2) Zero environmental impact • Water neutrality (Promote water saving, circulation, and recharge) • Zero emissions (Promotion of the 3Rs, recycling of casting sand, etc.) (3) Zero risk • Zero environmental accidents (Environmental pollution) • Zero occupational accidents (Serious accidents and LTIF rate) • Zero fire accidents (accidents involving fire or explosions)	CO ₂ reduction rate (90%) Waste landfill disposal rate Less than 1.0% Water resource discharge (100%)*1 (Compared to FY2013)	      
	Innovation	<ul style="list-style-type: none"> Economic growth through innovation Transition to a decarbonized society Depletion of water resources 	Development of fluid control technology to support a decarbonized/hydrogen-powered society Development of materials that contribute to reducing environmental impact Initiatives to solve social issues related to limited water and fluids		
S Social	Sustainable improvement of employee engagement	<ul style="list-style-type: none"> Decline in the working-age population Respect for human rights Active role played by diverse human resources System and environment for a better workplace A rewarding work culture 	Permeation of corporate philosophy and long-term management vision Promotion of D&I and fostering of a culture of collaboration Human resource development and system reforms to support global management Realization of a workplace environment in which employees can work with vitality	Employee engagement score*2 "Rewarding work culture" 56 pt "Better work environment" 55 pt Percentage of women managers: 20%*3 Total working hours: 1,870 hours Percentage of paternity leave: 100%	  
	Building a sustainable supply chain	<ul style="list-style-type: none"> Responsibilities in the supply chain surrounding the Company 	Emphasis on CSR procurement Establishment of a structure for stable procurement of raw materials and parts		
G Governance	Corporate governance Risk management Compliance	<ul style="list-style-type: none"> Sustainable corporate management Corporate fraud and scandals 	Further enhancement of transparency in management decision-making Risk management that focuses on both risk reduction and opportunity creation Global compliance conducive to sustainable management		

*1 Scope: Process water used in the manufacture of valves, etc.
 *2 FY2024 target
 *3 Employees of the department manager

[Source: KITZ' website]

- Among the key themes relating to the environment, society and governance, environmental themes focus on realizing a 3 ZERO (Triple Zero) Long-term Environmental Vision. For the KITZ Group, which engages in integrated production from materials to finished products, casting is an indispensable process to supply high-quality products, but involves risks associated with energy consumption, waste management, and safety management for employees. In light of such business characteristics, the Triple Zero initiatives are considered important to the group, serving as a guide to manufacturing that takes the environment and safety into account.

Long-term Environmental Vision 3ZERO (Triple Zero)



[Source: KITZ' website]

- In the Triple Zero initiatives, CO₂ Zero is an especially important target to address climate change, an urgent global issue.
- Since the valve manufacturing process involves a large amount of CO₂ emissions derived from electricity consumption, KITZ will achieve zero CO₂ emissions by having all domestic group companies use renewable energy for their electricity.
- The KPI defined in the Framework is an appropriate measure of progress in the above initiative and constitutes an indispensable element of the KITZ Group's sustainability management.

2. Calibration of SPTs

'Calibration of SPTs' of the Framework is in conformity with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022 from the following perspective.

(1) Abstract of SPTs

- The SPTs are the domestic group's Scope 1 and 2 CO₂ reduction rate in each fiscal year compared to the base year of FY2013. The target for the end of FY2030 is a 90% reduction compared to FY2013.

	Actual	Actual	SPT				
Fiscal year	2013	2020	2024	2025	2026	2027	2030
CO ₂ emissions (t) Scopes 1 & 2	65,933	48,197	13,187	12,066	11,011	9,890	6,593
CO ₂ reduction rate (%) Compared to FY2013	Base year	26.9%	80.0%	81.7%	83.3%	85.0%	90.0%

(2) Ambitiousness of SPTs

① Ambitiousness of SPTs

- The SPTs are an 80% reduction in total Scope 1 and 2 emissions by FY2024 compared to FY2013 and subsequent reductions at an average pace of 1.7% per year by FY2030. This is a higher rate of reduction than Japan's ambitious interim target toward carbon neutrality by 2050, which is a 46% greenhouse gas emissions reduction in FY2030 compared to FY2013.
- During the eight-year period from FY2014 through FY2021, KITZ reduced total Scope 1 and 2 emissions by 26.3% compared to FY2013. The SPTs are an additional 63.7% reduction during the nine-year period from FY2022 through FY2030, which far exceeds the company's track record of reduction.
- The SPTs are also considered more challenging than CO2 reduction targets of industry peers for FY2030.
- In light of the above factors, the SPTs are ambitious and meaningful targets.

② Relevance of Strategies for Achieving SPTs

- KITZ aims to slash CO2 emissions by having all domestic business sites (excluding sales offices) use renewable energy for their electricity by FY2024. Starting in April 2022, it has adopted CO2-free Shinshu Green Denki electricity and makes maximum use of the abundant water resources in Nagano Prefecture, where many of the KITZ Group's manufacturing facilities are located. KITZ has also adopted CO2-free electricity utilizing the environmental value of hydroelectric and solar power (non-fossil-fuel certified) at eight business sites in Japan. For the KITZ Group, whose valve manufacturing process involves a large amount of CO2 emissions derived from electricity consumption, this is an effective way of reduction.
- At its three plants, KITZ will work to install solar power generation systems and shift fuels. It will also actively promote operational improvement through visualization of energy consumption, as well as renewal into high-efficiency equipment, to minimize energy consumption.
- KITZ intends to achieve the SPTs mainly through a shift to renewable energy and also by thoroughly implementing energy conservation measures. It will move ahead with each initiative by managing energy consumption per unit at the business site level and the total amount of CO2 at the group level.

(3) Relevance of SPTs

- A Second Opinion has been obtained from R&I, an independent third party, regarding the alignment of the Framework with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022.

3. Bond Characteristics

'Bond characteristics' of the Framework is in conformity with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022 from the following perspective.

- The characteristics of the sustainability linked bonds issued under the Framework will vary depending on SPTs achievement. Details are specified in statutory disclosure documents such as amended shelf registration statements and shelf registration supplements relating to the issuance of the sustainability linked bonds, and include one or both of 1) purchase of emission credits and 2) donation.
- The amount of purchase in 1) and donation in 2) is set at an appropriate level for sustainability linked bonds. The bond characteristics are linked to SPTs achievement, functioning as an economic incentive for KITZ. The financial and structural characteristics of the sustainability linked bonds strengthen the company's commitment to achieving CO2 Zero, one of the key initiatives in its Triple Zero Long-term Environmental Vision.

<Purchase of emission credits>

If the SPTs have not been achieved as of the date of determination, KITZ will purchase the amount of emission credits (credits/certificates of CO2 reduction value) equivalent to a certain percentage of the issue amount of sustainability linked bonds, as defined in the above statutory disclosure documents, before the bonds are redeemed.

<Donation>

If the SPTs have not been achieved as of the date of determination, KITZ will donate a certain percentage of the issue amount of sustainability linked bonds, as defined in the above statutory disclosure documents, to public interest incorporated associations, public interest foundations, international organizations, local government-authorized NPOs, local governments and similar organizations engaged in activities for a transition to a decarbonized society, before the bonds are redeemed.

4. Reporting

'Reporting' of the Framework is in conformity with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022 from the following perspective.

- KITZ will disclose the following information on KPI performance and SPTs achievement on its website annually, until the sustainability linked bonds issued under the Framework are redeemed:

Item	Information to Be Reported
KPI performance	KPI performance as of the end of each fiscal year
Material updates, etc.	Information that may affect SPTs achievement (e.g., formulation and update of sustainability strategies)
Details of purchase of emission credits or donation	<p>If emission credits are purchased based on the bond characteristics: the name of emission credits, the date of transfer and the amount of purchase</p> <p>If a donation is made based on the bond characteristics: the name of the eligible recipient, the reason for selection, the amount of donation and the schedule of donation</p>

- If events (e.g., mergers and acquisitions, regulatory changes in relevant countries) that cannot be foreseen at the time of the issuance of sustainability linked bonds occur and make it necessary to change KPI definitions and SPT settings, KITZ will disclose such changes, including the reason for changes and the method of recalculation, in a timely manner.

5. Verification

'Verification' of the Framework is in conformity with the ICMA's Sustainability-Linked Bond Principles 2020 and the MOE's Green Bond and Sustainability Linked Bond Guidelines 2022 from the following perspective.

- KITZ will have its KPI performance verified by an independent third party and disclose an assurance report on its website.
- It will also obtain a report on SPTs achievement by notifying R&I of whether the KPI performance meets the SPTs as of the date of determination. The report will be disclosed on its website.

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