TCFD Quantitative Analysis ~Prerequisites for Calculating Each Risk~

Risks and opportunities are calculated based on the following conditions. For each source, please refer to the following paragraph (References).

classification			precondition
Transition Risks	Policy	Occurrence and	[1.5°C scenario]
		increase of the	• Based on Source 1, we adopted a rent premium of 5.4% and an occupancy premium of 0.9%
		burden of	for properties that have obtained green building certification.
		carbon taxes	* The definition of whether or not a company has obtained green building certification is
			defined as the definition of the Investment Corporation (Green Certification (equivalent to 3 \star
			or more): DBJ Green Building Certification 3 \star or higher, BELS Certification 3 \star or higher, or
			CASBEE Real Estate B+ or higher).
			• In estimating based on the above, we will take the midpoint price of the rent, set it at a
			premium of $+2.7\%$ and a discount of -2.7% , and with regard to the occupancy rate,
			considering that the occupancy rate of the properties owned by the Investment Corporation is
			high and there is little room for an increase in the occupancy rate, the premium is 0.0%. The
			discount was -0.9%.
			• Based on the results of the Investment Corporation, the cost of obtaining a green building
			certification is set at 600,000 yen per case, and the average validity period of the GB
			certification is five years.
			• Since it is difficult to predict the 2050 year, the results of the 2030 impact calculation have
			been deferred.
			[4°C scenario]
			• There will be no premium depending on whether or not a green building certification has been
			obtained.

	Market	Declining	[1.5°C scenario]
		competitiveness	• Based on Source 2, the carbon tax price was set at 140 USD/tCO2 in 2030 and 250 USD/tCO2
		of properties	in 2050.
		with poor	• The improvement of BEI by energy conservation refers only to the improvement of air
		environmental	conditioning and the conversion to LEDs that are carried out on a regular basis, and no special
		performance	additional costs are incurred beyond the construction cost that is carried out on a regular
		(properties that	basis.
		have not	• With regard to the introduction of electricity derived from renewable energy (hereinafter
		obtained	referred to as "renewable energy"), the Investment Corporation has achieved its goal of
		environmental	introducing 100% renewable energy by 2030.
		certification)	※Applicable only to the portion over which NMF has management authority
			• The additional cost associated with the introduction of renewable energy was set at 0.66
			yen/kWh based on the performance of the Investment Corporation.
			[4°C scenario]
			 Based on the current Global Warming Method, the price was set at 289 yen/tCO2.
			• The achievement of energy conservation and renewable energy was the same as in the
			1.5~2°C scenario.
		Occurrence and	[1.5°C scenario]/[4°C scenario]
Physical Risks		increase of	• Based on hazard map information (floods and storm surges), the calculation was based on the
		property	probability of a flood occurring once every 1,000 years.
		damage due to	• In addition to the above, based on Source 3, an increase in the probability of flooding was
	Acute	floods and	factored in. (2.3 times in the 1.5°C scenario and 9 times in the 4°C scenario from 2020 to
		storm surges,	2100)
		and decrease in	 As the amount of direct damage, the damage rate of the number of floors of the building
		rental income	according to the depth of inundation was taken into account based on the source 4, and the
		due to	structure of the building was taken into account. The amount of damage was calculated by

	suspension of	multiplying the replacement price by the damage rate.
	business	 As the amount of indirect damage, the number of days off work according to the depth of
		inundation was calculated based on sources 4 and 5, and subtracted from the annual rental
		income.
	Rise in non-life	[1.5°C scenario]/[4°C scenario]
	insurance	• Based on Source 6, the rate of increase in the reference net rate of fire insurance premiums
	premiums	(1.5~2 °C: 4.1%, 4°C: 6.3%) was multiplied by the net insurance premium rate (45%) to
		obtain the annual premium increase rate (1.5~2°C: 1.84%, 4°C: 2.84%).
		 Based on the results of the Investment Corporation, the most recent non-life insurance
		premium amount is multiplied by the annual increase rate by a power calculation, and the
		estimated amount of insurance premiums for 2030 and 2050 is calculated for each scenario.
	Increased	[1.5°C scenario]/[4°C scenario]
	Cooling Costs	• The assumption of temperature rise was based on the value of source 3.
Chr	onic	• If the air temperature rises by 1°C, it is assumed that it will be affected in the same way as if
		the heating and cooling temperature is changed by 1°C, and the amount of electricity used will
		increase by 10%.

(References)

Source 1: CBRE Office Building Environmental Certification Trends 2023

Source 2: IEA World Energy Outlook 2023

Source 3: Bank of Japan Physical risks faced by Japan financial institutions due to climate change (NGFS)

Source 4: Ministry of the Environment Recommendations for Formulating Management Strategies Using TCFD~Practical Guide to Scenario Analysis

Incorporating Climate-Related Risks and Opportunities 2022 edition~

Source 5: Ministry of Land, Infrastructure, Transport and Tourism Flood Control Economic Survey Manual

Source 6: The damage protection rate is calculated as the reference net rate of fire protection