# Green bonds issued on October 7, 2020 Environmental Impact (March 2023)

Category		Projects	Annual Energy Production (Unit: MWh) <sup>1</sup>	Mizuho's Contribution <sup>3</sup> to Expected CO <sub>2</sub> Emission Reductions (Unit: tons of CO <sub>2</sub> /year) <sup>2</sup>
	Solar	1	127,721	12,764
Renewable Energy	Wind	2	4,083,845	69,757
	Biomass	1	724,229	246,794
Total		4	4,935,795	329,315

### **Renewable Energy**

Notes:

1. Total production for all projects.

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2. Annual expected  $CO_2$  emission reductions are based on the concept of Avoided Emissions under <u>PCAF</u> Guidance. We use the emission factors of fossil fuels that are consumed to generate the biggest electricity in the region that the project is located, and calculate  $CO_2$  emission reductions contributed by the renewable power projects that Mizuho finance.

3. Calculated by multiplying the project expected CO<sub>2</sub> emission reductions by the ratio of Mizuho's outstanding debt of the total project cost (Mizuho's Attribution Factor). Mizuho's Attribution Factor is in line with <u>PCAF</u> Guidance.

### **Green Building**

Catagory	Number of		Number and certification level of green buildings <sup>5</sup>					
Category	Buildings <sup>4</sup>	LEED <sup>6</sup>	CASBEE <sup>7</sup>	DBJ Green Building	BELS <sup>8</sup>			
Green Building	182	Platinum: 1 property Gold: 1 property	S rank: 53 properties A rank: 66 properties	5 stars: 2 properties 4 stars: 26 properties	5 stars: 40 properties 4 stars: 9 properties			

Notes:

- 4. Number of Buildings which have received classifications
- 5. As some buildings obtained more than one certifications, the total numbers don't match with the number of buildings
- 6. LEED : Leadership in Energy and Environmental Design
- 7. CASBEE : Comprehensive Assessment System for Built Environment Efficiency
- 8. BELS : Building-Housing Energy-efficiency Labelling System

## **Environmental Impact (March 2022)**

<b>Renewable Energy</b>	R	enev	vab	le	En	ergy
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Category		Projects	Annual Energy Production (Unit: MWh) <sup>1</sup>	Mizuho's Contribution <sup>3</sup> to Expected CO <sub>2</sub> Emission Reductions (Unit: tons of CO <sub>2</sub> /year) <sup>2</sup>
	Solar	1	127,721	24,460
Renewable Energy	Wind	2	4,400,081	61,592
	Biomass	1	724,229	228,235
Total		4	5,252,031	314,287

Notes:

1. Total production for all projects.

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- 2. Annual expected  $CO_2$  emission reductions are based on the concept of Avoided Emissions under <u>PCAF</u> Guidance. We use the emission factors of fossil fuels that are consumed to generate the biggest electricity in the region that the project is located, and calculate  $CO_2$  emission reductions contributed by the renewable power projects that Mizuho finance.
- 3. Calculated by multiplying the project expected CO<sub>2</sub> emission reductions by the ratio of Mizuho's outstanding debt of the total project cost (Mizuho's Attribution Factor). Mizuho's Attribution Factor is in line with <u>PCAF</u> Guidance.

#### **Green Building**

	Number of	Number and certification level of green buildings			
Category	Buildings <sup>4</sup>	CASBEE <sup>5</sup>	BELS <sup>6</sup>	CASBEE and BELS	
Green Building	54	S rank: 17 properties A rank: 20 properties	5 stars: 7 properties 4 stars: 3 properties	S rank and 5 stars: 4 properties S rank and 4 stars: 3 properties	

Notes:

- 4. Number of Buildings which have received classifications
- 5. CASBEE : Comprehensive Assessment System for Built Environment Efficiency
- 6. BELS : Building-Housing Energy-efficiency Labelling System

## **Environmental Impact (March 2021)**

<b>Renewable Energy</b>	
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Category		Projects	Annual Energy Production (Unit: MWh) <sup>1</sup>	Mizuho's Contribution <sup>3</sup> to Expected CO <sub>2</sub> Emission Reductions (Unit: tons of CO <sub>2</sub> /year) <sup>2</sup>
	Solar	2	1,752,731	72,108
Renewable Energy	Wind	3	6,663,846	219,632
	Biomass	1	761,881	158,277
Total		6	9,178,458	450,017

Notes:

1. Total production for all projects.

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- 2. Annual expected  $CO_2$  emission reductions are based on the concept of Avoided Emissions under <u>PCAF</u> Guidance. We use the emission factors of fossil fuels that are consumed to generate the biggest electricity in the region that the project is located, and calculate  $CO_2$  emission reductions contributed by the renewable power projects that Mizuho finance.
- 3. Calculated by multiplying the project expected CO<sub>2</sub> emission reductions by the ratio of Mizuho's outstanding debt of the total project cost (Mizuho's Attribution Factor). Mizuho's Attribution Factor is in line with <u>PCAF</u> Guidance.

#### **Green Building**

	Number of Buildings <sup>4</sup>	Number and certification level of green buildings			
Category		CASBEE <sup>5</sup>	BELS <sup>6</sup>	CASBEE and BELS	
Green Building	33	S rank: 14 properties A rank: 10 properties	4 stars: 2 properties	S rank and 5 stars: 4 properties S rank and 4 stars: 3 properties	

Notes:

- 4. Number of Buildings which have received classifications
- 5. CASBEE : Comprehensive Assessment System for Built Environment Efficiency
- 6. BELS : Building-Housing Energy-efficiency Labelling System