# Reporting (as of March 31, 2025)

## 1. Allocation Reporting

### < 3rd Series of Green Bonds>

We have allocated proceeds from green bonds each eligible project as the following table all of Bond Proceeds 11.941 billion Yen which was excluded the issuance fee has been allocated for new investment as of the end of March 2025.

(Million Yen)

| Issuance amount | Issuance fee | Bond proceeds | Amount allocated in the previous term | Amount allocated in the current term |
|---|---|---|---|---|
| 12,000 | 59 | 11,941 | 10,141 | 1,799 |

(Million Yen)

| Eligible project categories | Allocated amount (April 2024 to March 2024) | Breakdown of allocated amount | | | Unallocated amount |
|---|---|---|---|---|---|
| | | R&D | Capital Investment | Manufacturing Cost/Expense | |
| Batteries | 927 | 216 | - | 711 | - |
| Next-generation power semiconductors | 194 | 194 | - | - | |
| CCU/CCS and hydrogen/ammonia | 595 | 595 | - | - | |
| Clean energy utilization | 21 | - | 21 | - | |
| Energy-efficient manufacturing | 60 | - | 60 | - | |
| Total | 1,799 | 1,006 | 81 | 711 | |

(Million Yen)

| New investment / Refinancing | Amount | Percentage (%) |
|---|---|---|
| Total amount in FY2023 (December 2023 – March 2024) | 10,141 | - |
| Total amount in FY2024 (April 2024 – March 2025) | 1,799 | |
| New investment | 10,941 | 100% |
| Refinancing | - | - |

## < 4th Series of Green Bonds>

We have allocated proceeds from green bonds each eligible project as the following table 4.520 billion Yen out of Bond Proceeds 4.970 billion Yen which was excluded the issuance fee for new investment from December 2024 to March 2025. We expect unallocated amount 450 billion Yen will be allocated by March 2026.

(Million Yen)

| Issuance amount | Issuance fee | Bond proceeds |
|---|---|---|
| 5,000 | 30 | 4,970 |

(Million Yen)

| Eligible project categories | Allocated amount (December 2024 to March 2025) | Breakdown of allocated amount | | | Unallocated amount |
|---|---|---|---|---|---|
| | | R&D | Capital Investment | Manufacturing Cost/Expense | |
| Batteries | 1,684 | 830 | - | 854 | 450 |
| Next-generation power semiconductors | 696 | 696 | - | - | |
| CCU/CCS and hydrogen/ammonia | 1,749 | 1,749 | - | - | |
| Clean energy utilization | 303 | - | 303 | - | |
| Energy-efficient manufacturing | 85 | - | 85 | - | |
| Total | 4,520 | 3,277 | 389 | 854 | |

(Million Yen)

| New investment / Refinancing | Amount | Percentage (%) |
|---|---|---|
| Total amount in FY2024 (December 2024 – March 2025) | 4,520 | |
| New investment | 4,520 | 100% |
| Refinancing | - | - |

## 2. Impact Reporting

| Eligible project categories | Impact Reporting Indicators |
|---|---|
| Batteries | - In April 2024, NGK has started operating a zinc rechargeable battery that it is currently developing, after the cell was adopted in a trial for a back-up power supply for a commercial base station of KDDI CORPORATION. The zinc rechargeable battery is being used to enhance the resilience of the base stations as an emergency storage battery. This trial is the first example in Japan of a zinc rechargeable battery being used in a base station that is in operation.<br>- In April 2024, NGK announces that it has received an order for NAS batteries for storing electric energy from Ganz Transformers and Electric Rotating Machines Ltd., a Hungarian transformer manufacturer, through Duna Center Therm Uzemi Szolgaltato Kft., a Hungarian engineering company.<br>- In May 2024, construction was completed for the "Abashiri Electric Power Co., Ltd. Solar Power Plant Installation Project," organized by the "Abashiri New Energy Equipment Introduction Promotion Consortium," formed by NGK, the city of Abashiri, and Abashiri Electric Power Co., Ltd. This project is certified under Hokkaido's FY2023 "New Energy Equipment Introduction Support Project."<br>- In June 2024, NGK began overseas sales of the improved NAS battery “NAS MODEL L24,” jointly developed with BASF Stationary Energy Storage GmbH.<br>- In June 2024, NGK, Ricoh Company, Ltd., and Daiwa Energy & Infrastructure Co., Ltd. began developing a business model utilizing a hybrid storage plant with sharing functions (StorageHub) through their joint venture NR-Power Lab Co., Ltd. NR-Power Lab aims to realize a one-stop business model that integrates the expertise and know-how of each company, covering everything from the construction and operation of StorageHub to the provision of related services.<br>- In August 2024, NGK received an order for NAS batteries for electricity storage to be used in a demonstration project at the Taiwan Power Research Institute of Taiwan Power Company, Taiwan’s state-owned power company.<br>- In October 2024, NGK jointly exhibited with KUNG YIK COMPANY LIMITED at “Energy Taiwan 2024,” Taiwan’s largest energy trade show, introducing an advanced type of sodium-sulfur batteries (NAS battery) “NAS MODEL L24.”<br>- In December 2024, NGK received an order for NAS batteries for storing electric energy from Greenergy Triotechnik Kft., renewable energy provider in Hungary, member of Greenergy Holdings, through Duna Center Therm Uzemi Szolgaltato Kft., a Hungarian engineering company. |
| Next-generation power semiconductors | - In June 2024, NGK exhibited at “PCIM Europe 2024” held in Nuremberg, Germany, and introduced SN-AMB/DCB Substrates and SiC wafers. |

| Eligible project categories | Impact Reporting Indicators |
| --- | --- |
| Next-generation power semiconductors | - In November 2024, NGK's insulated heat-dissipating circuit board for power semiconductor modules received the Promotion Award at the 23rd (FY2024) Awards by the Chubu Science and Technology Center Foundation.<br>- In January 2025, NGK, the AIST Group, and AIST Solutions Co., Ltd. have embarked on joint research regarding validating methods for evaluating thermal diffusivity of silicon nitride ceramic substrates used for power semiconductor components (power semiconductor modules) and other such applications. Through this joint research, we will pursue the highest accuracy methods for evaluating cuttingedge products, thereby bolstering production and development of substrate manufacturers with advanced technologies. This will contribute to enhance their competitiveness in globally expanding electronic device market. |
| CCU/CCS and hydrogen/ammonia | - Since April 2024, NGK has been jointly developing a membrane separation hydrogen purification system derived from ammonia decomposition gas with Mitsubishi Heavy Industries, Ltd., in anticipation of the introduction and large-scale transportation of hydrogen and ammonia supply chains.<br>- In June 2024, NGK has been selected by the Research Institute of Innovative Technology for the Earth (RITE) to provide its Direct Air Capture (DAC) ceramic substrate for use in a DAC system to be demonstrated at the 2025 World Expo in Osaka, Kansai, Japan (Expo 2025 Osaka-Kansai). The DAC substrate will be used in one of several CO2 removal units to be installed at the event. This demonstration is a part of the Moonshot Research and Development Program by the New Energy and Industrial Technology Development Organization (NEDO). |
| Clean energy utilization | - In May 2024, NGK and Mitsubishi Heavy Industries, Ltd. began joint development of a membrane separation dehydration system aimed at reducing costs and improving efficiency in the production processes of Bioethanol and e-Methanol. In the context of forecasted demand growth for both Bioethanol and e-Methanol as clean, raw materials and fuels, MHI and NGK will jointly drive forward the development of these systems achieve real-word deployment and establishment of a stable supply system.<br>- In November 2024, NGK signed a basic agreement with the "Chubu Region Hydrogen and Ammonia Social Implementation Promotion Council," which aims to implement hydrogen and ammonia in society within the Chubu region. This council was established to promote the construction and utilization of hydrogen and ammonia supply chains through collaboration among local governments and economic organizations. The signing of this agreement marks a step toward deeper cooperation among participating companies and the council, with the shared goal of achieving carbon neutrality by 2050. |
| Energy-efficient manufacturing | - NGK promotes new capital investment of the high-efficiency facilities by continuously applying the internal carbon pricing (140 US dollar per ton).<br>- NGK made the capital investment which will be more contributable the reduction of CO2 emission than existed facilities from April 2024 to March 2025. |

| Eligible project categories | Impact Reporting Indicators | | |
|---|---|---|---|
| | Major capital investment | Receipt amount | Annual reduction volume of $CO_2$ emission |
| Energy-efficient manufacturing | Air conditioning equipment renewal at Komaki Area | 46 Million Yen | -17.5t /year |
| | Installation of a new solutionizing furnace at Chita Area | 34 Million Yen | -54.0t /year |
| | Renewal of waste heat boiler at Ishikawa Area | 19 Million Yen | -57.0t /year |
| | Energy-saving measures for cooling water pumps at Chita Area | 18 Million Yen | -529.0t /year |
| | Renewal of dust collectors and compressors at Nagoya Area | 13 Million Yen | -3.5t /year |