

# Team Sapporo-Hokkaido Green Finance Framework Sub-Framework (Storage Batteries)



### 1. Storage Batteries

Storage batteries are expected to become widespread as they can be used as a balancing tool to expand the introduction of renewable energy. Storage batteries are essential technology for maximizing the use of renewable energy in Hokkaido, and they are also a key element in forming microgrids and contribute to strengthening regional resilience.

## <u>Installation status of storage batteries</u> (Grid-scale storage batteries and regional microgrid storage batteries)



Created by TSH based on existing information

## 2. Green Criteria

| Evaluation       |  | Criteria   | Key Reference   |  |
|------------------|--|--|---|--|
| Label            | [Utilization]  |  | [Manufacturing] Standards   |  |
| Green<br>Premium | A+B or A+C   |  |   |  |
|                  | А  | Charging source (electricity) is <100g-CO <sub>2</sub> /kWh  |   |  |
|                  | В  | renewable energy <sup>1</sup> and Recycling  |   |  |
|                  | С  | Green standards for five environmental goals other than climate change mitigation (water, pollution prevention, circular economy, climate change adaptation, biodiversity)  Meet at least one of the above | Environmentally<br>conscious/advanced<br>technology, etc.                   | Climate Bonds Standard (CBS)  EU Taxonomy                  |
| Green            | Charging source (electricity) is <100g-CO <sub>2</sub> /kWh  |  | Manufacturing method<br>other than<br>Green Premium<br>Manufacturing method |  |
| Transition       | The type of charging source<br>(electricity) does not matter, but<br>plans to function as<br>a balancing resource. |  | None  | GX Promotion Strategy Sector-Specific Technologies Roadmap |
| Not applicable   | Pr   | ojects that do not meet any of the ab<br>Or projects that meet the criteria  |   |  |

## For details on each criterion, please see below.

- ■CBS: Transmission, Distribution & Storage Criteria Electrical Grids and Storage Criteria <a href="https://www.climatebonds.net/our-expertise/climate-bonds-standard-and-certification-scheme/sector-criteria/electricals-grids-storage">https://www.climatebonds.net/our-expertise/climate-bonds-standard-and-certification-scheme/sector-criteria/electricals-grids-storage</a>
- ■EU Taxonomy: Manufacture of batteries

https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/269/view

- Agency for Natural Resources and Energy: Transition Roadmap for the Electricity Sector <a href="https://www.meti.go.ip/policy/energy-environment/global warming/transition/transition finance roadmap electric ipp.pdf">https://www.meti.go.ip/policy/energy-environment/global warming/transition/transition finance roadmap electric ipp.pdf</a>
- ■GX Promotion Strategy (Reference Material: Case Study 15: Next-Generation Networks)

  https://www.cas.go.jp/jp/seisaku/gx.jikkou\_kajgi/pdf/kihon.sankou.pdf

<sup>&</sup>lt;sup>1</sup> As defined in the Act on <u>Special Measures for the Promotion of the Use of Renewable Energy Electricity</u>

## 3. Reporting

Business operators are required to submit annual reports.

## [Annual Report Template]

| Business Operator Name    |                           | Department Person in Charge: Name Contact: Listed   |
|---------------------------|---------------------------|---|
| Target Project            | Category                  | <ul> <li>□ Offshore Wind Power Generation</li> <li>□ Hydrogen</li> <li>□ Data Centers</li> <li>□ Battery Storage</li> <li>□ Next-Generation Semiconductors</li> <li>□ Synthetic Fuels (e.g., SAF)</li> <li>□ Subsea DC Transmission</li> <li>□ Electric and Hydrogen Carriers</li> <li>□ Other (specify)</li> </ul> |
|                           | Project Name              | Specify   |
|                           | Basic<br>Information      | Details (Location, Scale, Specifications, Start of Operation)   |
|                           | Reporting<br>Period       | YYYY MM - YYYY MM (Number of Months)  |
|                           | Green<br>Evaluation Label | □ Green Premium □ Green □ Transition  |
| Funding<br>Status         | Funding Date              | YYYY MM DD  |
|                           | Funding<br>Amount         | Amount in millions JPY  |
|                           | Allocation<br>Category    | <ul><li>□ New Investment (Including expenditures from cash on hand within the past three years)</li><li>□ Refinancing</li></ul>   |
|                           | Allocation<br>Status      | □Fully allocated □ In progress (Amount already allocated: ¥XX million JPY Unallocated Amount: [Amount in millions JPY] Expected Allocation Completion Date: [Year] [Month] ※If there are multiple projects, list them individually  |
| Environmental<br>Benefits | Item                      | GHG/CO₂ Reduction □ Other (specify)   |
|                           | Quantity (Unit)           | Description (t-CO <sub>2</sub> / year)  |
|                           | Attribution               | □Business Operator (Specify) □User (Specify) □Other (Specify)   |
|                           | Actual/Plan               | □Actual □Planned  |
|                           | Calculation<br>Method     | A = B × (C - D) × E A: CO <sub>2</sub> Reduction Amount, B: CO <sub>2</sub> Emission Factor, C: Baseline Factor D: Project Coefficient,   |

|                          |  | E: Equipment Utilization Rate/Period *If there are prerequisites, describe them in the reference information below   |
|--------------------------|--|--|
|                          | Reference<br>Information                         | <ul> <li>☐ Ministry of the Environment materials</li> <li>☐ Ministry of Economy, Trade and Industry materials</li> <li>(List materials referenced for the above calculation)</li> <li>☐ Other (specify)</li> </ul>                   |
| Region<br>Sustainability | Target<br>Individuals/Targ<br>et Area            | Specify (e.g., XX Town)  |
|                          | Item   | □Environmental Impact Assessment □Fostering Local Understanding □Solving local issues and Promotion regional development □Participation in Community Activities □Number of Employees □Procurement Ratio □Value Added Creation Amount |
|                          | Actual/Planned                                   | □Actual Results □Plans   |
|                          | Plan Progress<br>Status                          | Description  |
|                          | Quantitative<br>Data                             | Description (Person, Case, JPY) Other (Specify)  |
|                          | Calculation<br>Method                            | Listed by item (e.g., data comparable to the previous fiscal year)   |
|                          | Other<br>Reference<br>materials, etc.<br>Remarks |  |

## 4. Do No Significant Harm Criteria (DNSH)

- **%1** Quoted from the EU Taxonomy
- ※2 Quoted from the Climate Bonds Standard (CBS)

### 4.1 Climate Change Adaptation

The activity complies with the criteria set out in Appendix-A (Attachment)
 (%1)

#### 4.2 Water

The activity complies with the criteria set out in Appendix-B (Attachment)
 (※1)

#### 4.3 Circular Economy

- For manufacturing of new batteries, components and materials, the activity assesses the availability of and, where feasible, adopts techniques that support:
  - a. Reuse and use of secondary raw materials and reused components in products manufactured.
  - b. Design for high durability, recyclability, easy disassembly and adaptability of products manufactured.
  - c. Information on and traceability of substances of concern throughout the life cycle of the manufactured products.
- Recycling processes meet the conditions set out in <u>Article 12 of Directive 2006/66/EC of the European Parliament and of the Council</u> and in Annex III, Part B, to that Directive, including the use of the latest relevant Best Available Techniques, the achievement of the efficiencies specified for lead-acid batteries, nickel-cadmium batteries and for other chemistries. These processes ensure the recycling of the metal content to the highest degree that is technically feasible while avoiding excessive costs. (%1)
- Where applicable, facilities carrying out recycling processes meet the requirements laid down in <u>Directive 2010/75/EU</u> of the European Parliament and of the Council. (%1)

#### 4.4 Pollution Prevention

- The activity complies with the criteria set out in Appendix-C (Attachment) (%1)
- Batteries comply with the applicable sustainability rules on the placing on the market of batteries in the Union, including restrictions on the use of hazardous substances in batteries, including <u>Regulation (EC) No 1907/2006</u> of the European Parliament and of the Council and <u>Directive 2006/66/EC</u>. (※1)

#### 4.5 Biodiversity

The activity complies with the criteria set out in Appendix-D (Attachment)
 (※1)

4.6 Operation and Maintenance Plan for Long-Term, Stable Environmental Improvement Effects and Consideration for the Surrounding Environment

• Not applicable

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