

Team Sapporo-Hokkaido Green Finance Framework Sub-Framework (Data Centers)



1. Data Centers

Data centers are the infrastructure of the digital society and are essential facilities for daily life, as all Internet services are provided via data centers. The national government has positioned Hokkaido as a core hub for digital infrastructure that complements and replaces the Tokyo and Osaka areas (¹). Recently, data centers for AI development are being established in Hokkaido, utilizing its cool climate and abundant renewable energy.

Major Data Center Locations in Hokkaido

Ishikari Renewable Energy Data Center No. 1 (Ishikari City)

An investment-based data center that utilizes 100% renewable energy, with participation from Tokyu Land Corporation and other entities. Selected for a subsidy from the Ministry of Internal Affairs and Communications. Plans for second and third buildings are currently underway.



Image Courtesy: Ishikari Renewable Energy Data Center No. 1

ALGO Graphics (Kitami City)

Sustainable data center utilizing renewable energy.



Image Courtesy: ALGO Graphics Inc.

HOTnet and Hokuden Information Technology (Sapporo City)

A data center operated by the Hokkaido Electric Power Group. It provides stable power supply, including renewable energy, and robust communication networks with the Tokyo metropolitan area.

Sakura Internet (Ishikari City)

Utilizing subsidies from the Ministry of Economy, Trade, and Industry, Sakura Internet has invested over 100 billion yen to develop a generative AI cloud infrastructure featuring 10,000 NVIDIA GPUs. Certified as part of the national Government Cloud.

SoftBank IDC Frontier (Tomakomai City)

A cutting-edge AI data center leveraging renewable energy, this facility is one of Japan's largest AI data centers.

(2026 Target: 50 MW, with plans to expand to 300 MW in the future.)



Image Courtesy: SoftBank Corp.

Created by TSH based on existing information

¹ May 2023, from [the Interim Summary 2.0 of the Expert Meeting on Digital Infrastructure \(DCs, etc.\) Development](#) convened by the Ministry of Economy, Trade and Industry and the Ministry of Internal Affairs and Communications

2. Green Criteria

Evaluation Label	Criteria		Key Reference Standards
Green Premium	A or B		EU Taxonomy
	A	PUE ² <1.3	
	B	PUE < 1.4 + Electricity usage for DC is renewable energy ³ or <100g-CO ₂ /kWh	
Green	A or B		
	A	PUE < 1.4	
	B	BAT ⁴ , and a building evaluated as a green building	
Transition	None		—
Not applicable	Projects that do not meet any of the above green/transition criteria. Or projects that meet the criteria but do not meet DNSH.		

For details on each criterion, please see below.

■ CBS: No applicable criteria

■ EU Taxonomy: Data processing, hosting, and related activities

<https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/357/view>

■ Conventional green finance market practices

■ When calculating PUE, refer to the "Overview of the Benchmarking System for the Data Center Industry" established by the Agency for Natural Resources and Energy.

https://www.enecho.meti.go.jp/category/saving_and_new/saving/enterprise/factory/support-tools/data/2023_01benchmark.pdf

² Power Usage Effectiveness: An indicator calculated by dividing the facility's total electricity consumption by the electricity consumption of IT equipment

³ As defined by the Act on [Special Measures for the Promotion of the Use of Renewable Energy Electricity](#)

⁴ Best Available Technology: The best technology currently available. Refers to "the best technology and management methods that can be introduced at the present time, considering economic factors, to protect the environment."

3. Reporting

Business Operators are required to submit annual reports.

[Annual Report Image]

Business Operator Name		Department Person in Charge: Name Contact: Listed
Target Project	Category	☐ Offshore Wind Power Generation ☐ Hydrogen ☐ Data Centers ☐ Battery Storage ☐ Next-Generation Semiconductors ☐ Synthetic Fuels (e.g., SAF) ☐ Subsea DC Transmission ☐ Electric and Hydrogen Carriers ☐ Other (specify)
	Project Name	Specify
	Basic Information	Details (Location, Scale, Specifications, Start of Operation)
	Reporting Period	YYYY MM - YYYY MM (Number of Months)
	Green Evaluation Label	☐ Green Premium ☐ Green ☐ Transition
Funding Status	Funding Date	YYYY MM DD
	Funding Amount	Amount in millions JPY
	Allocation Category	☐ New Investment (Including expenditures from cash on hand within the past three years) ☐ Refinancing
	Allocation 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 Benefits	Item	GHG/CO ₂ Reduction ☐ Other (specify)
	Quantity (Unit)	Description (t-CO ₂ / year)
	Attribution	☐ Business Operator (Specify) ☐ User (Specify) ☐ Other (Specify)
	Actual/Plan	☐ Actual ☐ Planned
	Calculation Method	$A = B \times (C - D) \times E$ A: CO ₂ Reduction Amount, B: CO ₂ 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 Information	☐ Ministry of the Environment materials ☐ Ministry of Economy, Trade and Industry materials (List materials referenced for the above calculation) ☐ Other (specify)
Region Sustainability	Target Individuals/Target 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 Status	Description
	Quantitative Data	Description (Person, Case, JPY) Other (Specify)
	Calculation Method	Listed by item (e.g., data comparable to the previous fiscal year)
	Other Reference materials, etc. 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

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

4.3 Circular Economy

- The equipment used meets the requirements laid down in Directive 2009/125/EC for servers and data storage products. (※1)
- The equipment used does not contain the restricted substances listed in Annex II to Directive 2011/65/EU of the European Parliament and of the Council, except where the concentration values by weight in homogeneous materials do not exceed the maximum values listed in that Annex. (※1)
- A waste management plan is in place and ensures maximal recycling at end of life of electrical and electronic equipment, including through contractual agreements with recycling partners, reflection in financial projections or official project documentation. (※1)
- At its end of life, the equipment undergoes preparation for reuse, recovery or recycling operations, or proper treatment, including the removal of all fluids and a selective treatment in accordance with [Annex VII to Directive 2012/19/EU](#) of the European Parliament and of the Council. (※1)

4.4 Pollution Prevention

- Not applicable

4.5 Biodiversity

- Not applicable

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

- Not applicable