



Carbon Footprint of Products

CFP Declaration

Registration number : JR-BF-24006C

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan

<https://ecoleaf-label.jp/>

Hitachi, Ltd. Hitachi Virtual Storage Platform One Block 23 (15TB NVMe drive support)



Functional unit

Per sales unit (per unit)

System boundary

- final products
- intermediate products

Main specifications of the product

All-Flash Array

- Controller chassis

HT-40SQ-NNANNA

Up to 24 NVMe SSD

Up to 1 unit

- Drive box

HT-F40SQ-DBN2E

Up to 24 NVMe SSD

Up to 2 units

- Assumed operating years : 5years

* The specifications listed are subject to change without notice due to product improvements.

Company Information

Hitachi, Ltd.

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Registration#	JR-BF-24006C
PCR number	PA-520000-BF-04
PCR name	IT equipments
Publication date	5/29/2024
Verification date	3/12/2024
Verification method	Product-by-product
Verification#	JV-BF-24006
Expiration date	3/11/2029
PCR review was conducted by:	
Approval date	8/15/2023
PCR review panel chair	Ken Yamagishi Sustainable Management Promotion Organization
Third party verifier*	
	Takahiro Atou

Independent verification of data & declaration in accordance with ISO/TS14067

- internal
- external

*Auditor's name is stated if system certification has been performed.

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1. Quantification results, and contents of the declaration

CFP quantification unit :

Parameter			Unit
CFP Quantification results		54,000	kg-CO₂eq
Breakdown	Raw material acquisition	2,800	kg-CO ₂ eq
	Production	800	kg-CO ₂ eq
	Distribution	54	kg-CO ₂ eq
	Use & maintenance	50,000	kg-CO ₂ eq
	End-of-Life	32	kg-CO ₂ eq
Value on CFP mark		54,000	kg-CO₂eq
Unit for the value on CFP mark		Per sales unit (per unit)	
Value on CFP mark		10	kg-CO ₂ eq/TB · Year
Unit for the value on CFP mark		Per TB · Year^{*1}	

*Quantification results may slightly differ from the sum of the breakdown due to rounding of fractions.

*1 The amount of CO₂ emissions per unit function. Divided CFP results by the storage capacity (TB) and the assumed service life (Years).

3. Supplementary environmental information

2. Additional information

<Products>

- Product Name : Hitachi Virtual Storage Platform One Block 23

- Conditions for calculating CO₂eq emissions :

Calculated using 1 controller chassis (HT-40SQ-NNANNA) with 24 NVMe SSDs installed and 2 drive boxes (HT-F40SQ-DBN2E) with the maximum installed of 48 NVMe SSDs

- Product type name of the scenario used :

Disk array (Solid State Drive(SSD) installed)

<Product main specifications>

Storage capacity^{*1} : 1,080TB

Operating years^{*2} : 5 years

Drive type : Solid State Drive (NVMe SSD)

Drive interfaces : NVMe

Installed drives : 72 units

- CO₂eq emissions :

-Per product : 54 t-CO₂eq

-Per 1TB · 1Year : 10 kg-CO₂eq/TB · Year

- Measurement conditions :

-Power during use is measured by the measurement method specified by certified PCR (PA-520000-BF-04)

*1 The capacity is calculated as 1TB = 1,000,000,000,000 bytes

*2 The operating years were assumed to be the statutory useful life(5 years for computer/others)

4. Interpretation

- Greenhouse gas emissions at the use and maintenance stages are the largest, accounting for about 93% of the entire life cycle, and the influence of power consumption during use is large, so it can be said that energy-saving performance during use is a very important factor. Please note that the usage and maintenance stage may not be the same as the customer's terms of use because general conditions have been set and evaluated.
- In calculating CFP, we use our data for the amount of raw materials used, but since it is difficult to collect data at the time of manufacturing thousands of parts, we use general data at the time of manufacturing raw materials. Therefore, it may not reflect the unique characteristics of this product.

5. Assumptions of secondary data used

IDEA V2.1.3 , complemented by CO₂ Emissions Intensity v1.10.

6. Remarks

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- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied.
(Reference URL : <https://ecoleaf-label.jp/regulation/>)
- The CFP only addresses the single impact category of climate change and does not assess other potential social, economic and environmental impacts arising from the provision of a product.

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