



# CARBON FOOTPRINT (CFP)

Hitachi Virtual Storage Platform E590  
Hitachi, Ltd.

## CFP Declaration

Registration Number: JR-BF-22002C-A

Ecoleaf Environmental Label Program

Sustainable Management Promotion Organization  
2-2-1 Kajicho, Chiyoda-ku, Tokyo

### Unit of Measure:

Sales unit (per vehicle)

### Calculation Target Stage:

Final Goods      Intermediate Goods

### Product Model:

HT-40SK-E590, HT-40SK-E590E

\*Controller chassis model. The suffix E is the encryption model.

### Main Specifications:

All-flash array

### Controller Chassis:

HT-40SK-E590 (Up to 24 NVMe SSD drives can be installed)

Up to 1 unit

### Drive Box:

No Drive Box (Not Expandable)

### Cache Memory:

384GB

### Assumed Service Life:

5 Years

\*Specifications are subject to change without notice due to product improvements.

### Contact Information:

Hitachi, Ltd.  
03-5741-2745

### Registration Number:

JR-BF-21001C

### Applied PCR Number:

PA-520000-BF-01

### PCR Name:

IT Machine



### Release Date:

April 1, 2021

### Validation Pass Date:

March 25, 2021

### Validation Method:

Individual Product Verification Method

### Validation Number:

JV-BF-21001

### Validation Period:

March 24, 2026

### Conducting a PCR Review:

Certification Date: February 19, 2021  
Ken Yamagishi, Chairman  
(Sustainable Management Promotion Organization)

### Third Party Verifier\*:

External Verified Yasuo Kozeki  
Independent verification of this declaration and data according to ISO/TS14067

\*In the case of verification within an entity that has received system certification, enter the name of the inspector.

## CFP Calculation Results

Calculation Unit: Sales Unit (per vehicle)

Project	Figures	Unit
CFP Calculation Results	35,000	KG-CO <sub>2</sub> eq/KG
Procurement of Raw Materials	1,500	KG-CO <sub>2</sub> eq/KG
Production	580	KG-CO <sub>2</sub> eq/KG
Distribution	45	KG-CO <sub>2</sub> eq/KG
Use & Maintenance Management	33,000	KG-CO <sub>2</sub> eq/KG
Disposal/Recycling	25	KG-CO <sub>2</sub> eq/KG
Numeric Display	35,000	CO <sub>2</sub> eq/KG
Display Unit	Sales Unit (per vehicle)	
Numeric Display	19	KG-CO <sub>2</sub> eq/TB·Year
Display Unit	TB/Per Year*	

\*Due to rounding, the total value of the CFP calculation results and the breakdown may differ slightly.

\*CO<sub>2</sub> emissions per unit functional quantity. Divide CFP calculation results by storage capacity (TB) and expected usage period (years).

## Additional Information on Calculation Results

### Product Name:

Hitachi Virtual Storage Platform E590

### Calculation Conditions for CO<sub>2</sub>eq Emissions:

Calculation is based on a configuration in which the maximum number of NVMe SSDs (24 units) are installed in one controller chassis (HT-40SK-E590)

### Product Type Name of Scenario Used:

Disk Array (equipped with semiconductor disk drives)

### Main Product Specifications:

Storage capacity<sup>1</sup>- 1,361TB

Assumed Usage Period<sup>2</sup>- 5 Years

Type of Drive- Semiconductor Disk Drive (NVMe SSD)

Type of Drive Interface- SAS

Number of Semiconductor Disk Drives- 24

### Cache Memory:

384GB

### CO<sub>2</sub>eq Emissions:

35 t-CO<sub>2</sub>eq per product

19 kg-CO<sub>2</sub>eq/TB year per year

\*Measurement conditions: Power consumption during use is measured by the measurement method specified by the certified PCR (PA-520000-BF-01)

<sup>1</sup>This capacity is calculated as 1TB=1,000,000,000,000Byte

<sup>2</sup> Estimated years of use are calculated based on the statutory useful life (5 years for electronic computers and other items)

## Interpretation of CFP Calculation Results

•The amount of greenhouse gas emissions during use and maintenance is the largest, accounting for approximately 94% of the total. Since the impact is large, it can be said that the energy-saving performance during use is a very important factor. In addition, the use/maintenance stage is generally Since we have set and evaluated various conditions, it may not be the same as the customer's terms of use.

•In calculating the CFP, we use our data on the amount of raw materials used, but because it is difficult to collect data during manufacturing of thousands of parts, we use general raw material manufacturing data. increase. Therefore, it may not reflect the unique features of this product

## Concept of Secondary Data Used

While preferentially using IDEA v2.1.3, supplemented with registration basic unit v1.10.

## Remarks

Date of change: April 25, 2022 Changed description of major specifications

•Please refer to the PCR and Calculation/Declaration Regulations for data calculation methods.

•Comparisons are permitted only when the conditions stipulated in the calculation and declaration regulations are met. (Reference URL: <https://ecoleaf-label.jp/regulation/>)

•We have not evaluated other potential social/economic/environmental impacts other than climate change arising from the provision of our products.