

LCA Report

Server

Report produced November, 2025

Wistron continuously monitors the environmental impacts caused by the life cycle of its products. To ensure the completeness and transparency of the assessment results, the evaluation follows the ISO 14040 and 14044 life cycle assessment standards. The scope is defined as Cradle-to-gate, analyzing the carbon footprint and environmental impacts of products using Wistron's PCF/LCA system.



Period: 2025/01/01-2025/06/30

Product Carbon Footprint Results :

4,551.95 kgCO₂ eq

	Unit	Raw Material	Manufacturing	Total
Carbon Emission	kgCO ₂ eq	4,526.73	25.22	4,551.95
Percentage	%	99.44%	0.55%	100%

Figure 1. PCF results

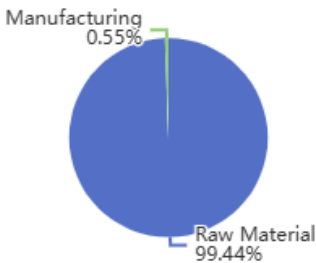
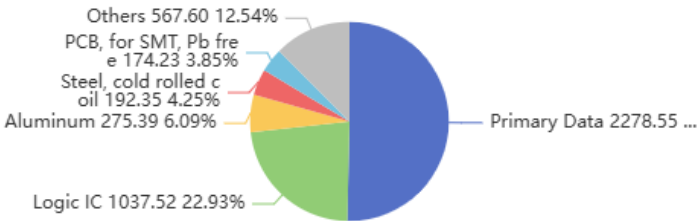


Figure 2. Hotspot Analysis of Raw Material [Emission Factor]



Assumptions

Product weight	Specifications/Structure	Manufacturing location
191.50 kg	Server/System	Hsinchu/Taiwan

- ◆ Figure 1. Product Carbon Footprint Calculation Results - The calculation follows the IPCC 2021 GWP100a v1.03 methodology. The total carbon emissions amount to 4,551.95 kgCO₂ eq. This result provides insights into the distribution of carbon emissions across various product life cycle stages.
- ◆ Figure 2: Hotspot Analysis of Raw Material Acquisition Phase - Further analysis identifies raw materials with higher carbon emissions, serving as a reference for future carbon reduction strategies for products.

The environmental impact assessment adopts the Environmental Footprint v.3.1 methodology to analyze the environmental impacts of various stages in the product life cycle. The results of the assessment are detailed in the following table:

Environmental Impact Assessment

Impact Category	Unit	Raw Material	Manufacturing	Total
Climate Change	kg·CO ₂ eq	5,069.75(99.59%)	20.72(0.41%)	5,090.47
Ozone Depletion	kg CFC-11 eq	0.00(99.96%)	0.00(0.04%)	0.00
Ionising Radiation	kBq U-235 eq	1,303.03(99.81%)	2.46(0.19%)	1,305.49
Photochemical Ozone Formation	kg NMVOC eq	24.08(99.71%)	0.09(0.29%)	24.17
Particulate Matter	kg PM _{2.5} eq	0.00(99.57%)	0.00(0.43%)	0.00
Human Toxicity, Non-Cancer	CTUh	0.00(99.92%)	0.00(0.08%)	0.00
Human Toxicity, Cancer	CTUh	0.00(99.94%)	0.00(0.06%)	0.00
Acidification	mol H ⁺ eq	37.46 (99.69%)	0.12(0.31%)	37.58
Eutrophication, Freshwater	kg P eq	6.72(99.95%)	0.00(0.05%)	6.72
Eutrophication, Marine	kg N eq	7.76(99.70%)	0.02(0.30%)	7.78
Eutrophication, Terrestrial	mol N eq	86.18(99.71%)	0.25(0.29%)	86.43
Ecotoxicity, Freshwater	CTUe	136,136.76(99.96%)	56.72(0.04%)	136,193.48
Land Use	Pt	33,026.03(99.85%)	48.81(0.15%)	33,074.84
Water Use	m ³	1,651.10(99.84%)	2.62(0.16%)	1,653.72
Resource Use, Fossils	MJ	65,749.54(99.60%)	261.33(0.40%)	66,010.87
Resource Use, Minerals and Metals	kg Sb eq	2.47(100.00%)	0.00(0.00%)	2.47

Environmental Impact Statistics Chart

