To Whom It May Concern:

Calculation methodology for EcoTank's environmental claim

This report shows the calculation methodology for Epson EcoTank environmental claim.

1. How did we derive the potential replacement laser units to be approximately 12 million?

We selected the potential laser market which can be replaced by Epson EcoTank models. Potential units refer to A4 1-20ppm monochrome laser printer and A4 21-30ppm colour laser printer worldwide sales of CY2019 in IDC WorldWide Quarterly Hardcopy Peripherals Tracker 2020 Q2 data.

Units	Year
Speed Range A4	2019
Color Laser 1–10 ppm	547,166
Color Laser 11–20 ppm	940,541
Color Laser 21–30 ppm	3,011,108
Mono Laser 1–20 ppm	9,237,938
総計	13,736,753

2. What was the calculation method for reduced electricity consumption?

Calculation of the difference between the TEC requirement value defined in the ENERGY STAR® Imaging Equipment Standard Version 3.0 and the TEC value of Epson EcoTank printers is made based on TEC measurement method. This electricity reduction contribution is for one year usage. Actual reduction amount may differ based on customer usage.

EcoTank supplementary explanation for the calculation:
We selected high-end A4 EcoTank models for monochrome and colour as representative replacement models.

Weekly reduction amount for the representative monochrome/colour model:

Target market	Representative Epson EcoTank	TEC [kWh] (a)	TECREQ [kWh] (b)	Weekly reduction amount [kWh] (a)-(b)=(c)	1 year reduction amount (c) x 52 weeks
A4 1-20ppm monochrome	M3180 /ET-M3180	0.181	0.363	0.182	9.46
A4 21-30ppm colour	L6570/ET-5850	0.143	0.450	0.307	15.96

What is TEC requirement value?
It is the conformity standard established by the International Energy Star Program (International Energy Saving System for Office Equipment). TEC (Typical Electricity Consumption) refers to the power consumption for one week (5 days when operation and sleep/off are repeated + 2 days when sleep/off is repeated) assuming the use of a standard printer usage in the office.

The Imaging Equipment Standard Version 3.0 sets TEC requirement values to qualify the top 25% of products in the entire market or in each speed range.

Reference: Imaging Equipment Standard Version 3.0 Second Draft Cover Memo
https://www.energystar.go.jp/document/pdf/Image_Equipment/3.0/IE30D2specD3testmethod-coverLetter.pdf

3. What was the calculation method for reduced consumables?

Calculation of the difference between the consumable quantity of the representative Epson EcoTank printers and the average of its major laser competitors for print volume of one year.

Print volume is calculated by referring to the TEC measurement standards defined in the ENERGY STAR® Imaging Equipment Standard Version 3.0. Actual reduction amount may differ based on customer usage.

Consumables reduction amount for the representative monochrome/colour model:

Category	Epson EcoTank Representative model	Life print volume	EcoTank consumable weight [kg] (c)	Laser consumable weight [kg] (d)	Reduction amount [kg] (c)-(d)
Mono	M3180/ET-M3180	100,000	1.91	47.86	-45.95
Colour	L6570/L5850	200,000	7.62	182.44	-174.82

How to select major competitors:
Comparison models were selected from among the top-selling models.
- A4 monochrome laser printers (below-20ppm class, 3-in-1) listed in IDC Worldwide Quarterly Hardcopy Peripherals Tracker 2020 Q3 data FY19 results.
- A4 colour laser printers (21-30ppm class) listed in IDC Worldwide Quarterly Hardcopy Peripherals Tracker 2020Q3 data FY19 results.

Total volume of used consumables was measured by Epson. The number of consumables was calculated by Epson based on yields published by the manufacture for each model. Quoted yields are simulated figures calculated by Epson based on the ISO/IEC24712 methodology.

How to calculate the number of lifetime print volume:
Each lifetime print volume is calculated by referring to the measurement standards defined in ENERGY STAR ® Image Equipment Standard Version 3.0.

Reference: Imaging Equipment Version 3.0 Test Method
https://www.energystar.go.jp/document/pdf/Image_Equipment/3.0/IE30FINAL_testMethod_Dec18.pdf