

# **Product Environmental Report**

### motorola razr 60

April 2025

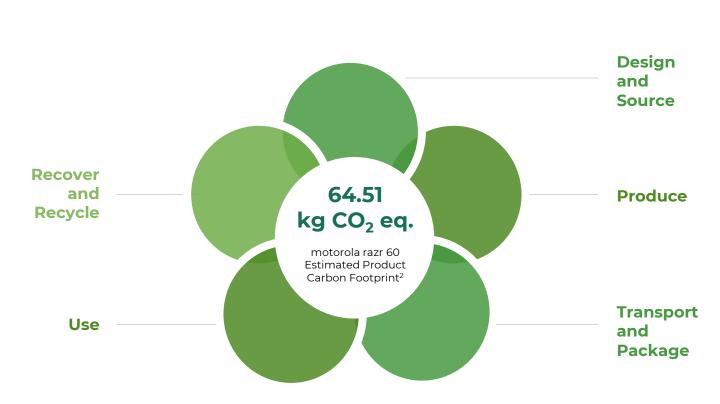


At Motorola, we're working to provide smarter technology that builds a brighter future while achieving sustainability goals as part of Lenovo Group. From our packaging and product design with sustainability in mind to our carbon emissions reduction efforts, we're committed to making progress on our environmental commitments and having a positive social impact in the communities where we do business.



## Acting Across the Product Journey

We are committed to taking responsibility for our products throughout their entire life cycles. We actively manage product carbon footprint (PCF), from sourcing of materials to the manufacturing, transportation, usage, and end-of-life stages.



For example, we assessed the estimated total PCF of motorola razr 60's entire life cycle, including manufacturing, transport, use and end-of-life (EoL) phases, using a life cycle assessment (LCA) methodology<sup>3</sup>.

The estimated total PCF is 64.51 kg  $CO_2$  eq. The distribution of the carbon footprint across each phase is accounted for as follows: Manufacturing 96.1%. Transport 2.9%. Use 1.4%. EoL -0.4%.

## **Design and Source**

We design products with sustainability and innovation at the forefront, incorporating recycled, renewable, biobased and responsibly sourced materials. Through our Full Material Disclosure (FMD) Platform, integrated in the supply chain, we proactively manage restricted chemical substances (to meet internal environmental policies and national laws) and ensure components are fully qualified before purchase.

Motorola razr 60 reduces reliance on virgin materials by using post-consumer recycled (PCR) plastics, ocean-bound plastics (OBP) and Lenovo closed-loop recycled plastics in its protective case<sup>4</sup>.

OBP is responsibly sourced from coastal regions to divert plastic waste from entering oceans, while Lenovo closed-loop recycled plastics is recycled from retired Lenovo devices.



#### **Recycled Plastic**

Plastic used in the protective case contains 65% PCR plastics, 5% OBP and 5% Lenovo closed-loop recycled plastics<sup>4</sup>.



As part of our global stewardship, we apply EU RoHS/REACH chemical restriction policies for all products, irrespective of where we sell them globally.

In addition to adhering to global regulatory requirements, we have voluntarily phased out the following hazardous substances across all products<sup>5</sup>.

- Polyvinylchloride (PVC)
- Brominated Flame Retardants (BFRs)
- Chlorinated Flame Retardants (CFRs)

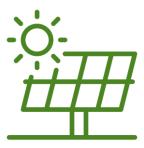
## Produce

We are committed to mitigating climate change during manufacturing, by expanding the use of renewable energy and implementing initiatives to lower greenhouse gas emissions across all operations.

Our manufacturing sites in China and Brazil where motorola razr 60 is produced, continuously work on improving operational energy conservation, reducing carbon emissions, and contributing to climate change mitigation through various initiatives. These include, but are not limited to, implementing solar power stations, installing energy-efficient LED lighting, and achieving zero waste to landfill.

- Our Wuhan manufacturing facility has been utilizing solar power stations since 2019, which may lead to an estimated annual reduction of 1,182 tons in carbon emissions, based on its 2023 electricity consumption data<sup>6</sup>.
- Our Jaguariúna and Manaus manufacturing sites in Brazil are Zero Waste certificated.







As a Lenovo subsidiary, Motorola shares the same commitment and policy to sound Environmental, Social and Governance (ESG) management across our end-to-end supply chain process.

Currently, we ask our key suppliers to report their environmental impact data (GHG emissions, water, waste, renewable energy) formally, via the RBA (Responsible Business Alliance) or the CDP (Carbon Disclosure Project) reporting methodologies, in addition to responding to the Institute of Public and Environmental Affairs (IPE).

## **Transport and Package**

Our packaging strategy focuses on eliminating plastics, utilizing recyclable materials, and optimizing compact designs to minimize resource use and reduce environmental impact during transportation.

As for transportation, we are implementing solutions to improve fleet efficiency. This includes optimizing the loading capacity of our vehicles by increasing the use of larger trucks, enabling us to transport more phones in less trips.

Aligned with our objective to reduce single-use plastics by 50% by FY 2025/26<sup>7</sup> across all smartphone product packaging, we have raised the threshold to set the highest standard for the razr and edge product families: the complete elimination of plastic in their packaging starting from 2024. As part of this initiative, the motorola razr 60 packaging now excludes all plastic components except where utilized within paint, inks and adhesives<sup>8</sup>.

The fiber utilized in this packaging is sourced from FSC-certified<sup>9</sup> forests and other controlled sources, which are managed with practices including selective logging and replanting of trees after harvesting. Additionally, the packaging incorporates a minimum of 65% recycled materials, by weight.



## Use

We prioritize energy efficiency in our products to help reduce greenhouse gas emissions. Additionally, we focus on improving product durability and extending lifespans to enhance long-term value for our customers.

Our goal is to achieve 30% improvement in smartphone product energy efficiency by FY 2029/30<sup>11</sup>.

We integrate innovative technologies into motorola razr 60 to enhance energy efficiency without sacrificing performance. This is achieved by reducing power consumption in key hardware components like processors and through advanced software optimization. The solutions leverage AI-driven optimization, adaptive display, connectivity controls, and context-aware background process management to extend battery life while maintaining seamless performance and visual fidelity.

# **25%** power efficiency of the processor<sup>12</sup>

Motorola razr 60 is the first flip phone with the new MediaTek Dimensity 7400X processor for improved Al performance. Unleash up to 25% better power efficiency than its predecessor<sup>12</sup>.



#### Moto AI eXperience Engine (MAXE)

An Al-powered engine that detects scenarios and runtime fine-tunes system parameters at different user scenarios to provide optimal user experience in Battery Life and Performance areas.

Motorola razr 60 is engineered with protection against everyday accidents with IP48-rated<sup>13</sup> dust and underwater protection. To bolster the hinge, we also used titanium, which is up to 4x stronger than surgical-grade stainless steel<sup>14</sup>. Plus, you'll take comfort in knowing the screen and hinge have been put through rigorous stress tests, ensuring they'll withstand use for the life of your phone, with up to 35% more folds than the previous generation<sup>15</sup>.



IP48 protection<sup>13</sup>



with titanium hinge design<sup>14</sup>

35% More Folds

than the previous generation<sup>15</sup>

## **Recover and Recycle**

We offer trade-in programs in selected markets, including the US, India and Brazil. This enables customers to exchange their old devices for credits toward new Motorola purchases, after our assessment and inspection of the old devices.

We ensure repair options are available to customers and have established Moto Care, which provides comprehensive smartphone warranty plans customized to meet customer needs. The repair submission process and availability of Moto Care may vary by region. Please visit <u>Motorola Support</u> and select your location for product support information, including repair options and Moto Care information.

In the US, we have also established partnerships with iFixit and MobileSentrix to offer self-repair options for technically inclined users, and in EU we have partnership with Replace Base.

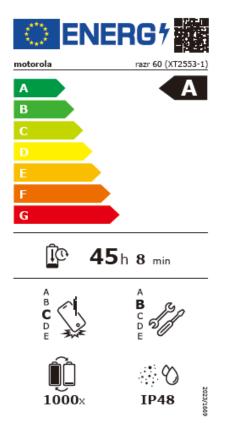


## **Industry Rating and Label**

### Eco Rating Result<sup>16</sup>

Device	motorola razr 60
Model Number	XT2553-1
RAM + Storage	8G + 256G
Eco Rating Overall Result	70
Material Efficiency Results	
Durability	61
Repairability	54
Recyclability	57
Use of Hazardous & Restricted	60
Substances	00
Recycled Material Content	24
Waste Packaging and Accessories	82
Additional Results	
Climate Efficiency	62
Resource Efficiency	63

### Product EU Energy Label<sup>17</sup>



## Endnotes

<sup>1</sup> Motorola razr 60 devices marketed, distributed, and sold in the US have achieved UL ECOLOGO Certification, complying with the UL 110 Standard for Sustainability for Mobile Phones.

<sup>2</sup> The calculation is performed on 8G+256G configuration. The product PCF is calculated using quantitative estimates and modelling assumptions. The lifecycle assessment of transport and use phases is based on data from the France site.

<sup>3</sup> The product lifecycle analysis (LCA) of motorola razr 60 is performed in accordance with the ISO 14040 and ISO 14044 standards. The estimated carbon footprint is an approximate measure of the greenhouse gas emissions produced over the lifecycle of the product and is reported as the global warming potential for 100-year time horizon(GWP-100) in units of CO2 equivalents (CO2e). The product carbon footprint (PCF) is calculated using GaBi© Software version 10 including the most current 2022 updates for modelling each of the product type lifecycle steps.

<sup>4</sup> The content of all recycled materials have been independently verified by third parties in accordance with ISO 14021.

<sup>5</sup> Controlled at 1,000 ppm.

<sup>6</sup> Based on Wuhan manufacturing site's 2023 electricity consumption data. The carbon emission factor used for the reduction calculation is based on the average carbon dioxide emission factor for electricity in the Central China region as published in the "2021 Carbon Dioxide Emission Factors for Electricity" jointly released by China's Ministry of Ecology and Environment and the National Bureau of Statistics in 2024.

<sup>7</sup> Performance relative to FY 2020/21. This excludes Lenovo smartphone packaging but includes RAZR smartphone packaging starting in FY 2023/24.

<sup>8</sup> Plastic was not detected in the packaging by third-party lab under test methods Fourier Transform Infrared Spectrometer (FTIR), Pyrolysis-Gas Chromatography Mass Spectrometry (PGC-MS) and Energy dispersive X-ray fluorescence spectrometer (EDX). Paint, inks and adhesives are excluded from the calculations of plastic content.

<sup>9</sup> FSC certification means materials are sourced from certified forests and other controlled sources managed with practices like selective logging, maintaining biodiversity, and replanting trees after harvesting, aligning with global forest stewardship standards of responsibly managed forests. For more information of FSC and FSC certification, visit <u>https://fsc.org/en</u>.

<sup>10</sup> Recycling programs may not be available to consumers in all markets.

<sup>11</sup>On average for comparable products relative to FY 2020/21.

<sup>12</sup> Compared with previous generation MediaTek Dimensity 7300X.

<sup>13</sup> Tested under controlled laboratory conditions, the phone is water and splash resistant to a rating of IP48 (IEC 60529) and can be submerged in up to 1.5 meters in still, fresh water for up to 30 minutes. Exposure to conditions beyond this rating are not covered by warranty. Resistance will decrease as a result of normal wear. Not designed to work while submerged underwater. Do not expose to pressurized water, or liquids other than fresh water. Do not attempt to charge a wet phone. Designed to protect against ingress of solid objects larger than 1mm. Not waterproof or dust proof.

## Endnotes

<sup>14</sup> Comparison made between the Yield strength of 900 MPa of titanium plate used in device hinge compared to Yield strength of 200 MPa of the 316L surgical-grade stainless steel.

<sup>15</sup> Testing conducted in a controlled environment at room temperature, using accelerated life testing protocols; many factors, not all of which are included in such testing protocol, affect the durability of a phone; subject to Motorola's standard limited warranty.

<sup>16</sup> Result applicable to European sales models XT2553-1. The Eco Rating scores the environmental performance of mobile phones based on an objective assessment of both life cycle and circular economy indicators. The highest possible Eco Rating score is 100 for maximum environmental performance. The closer the score is to 100, the better the environmental performance of the device. In addition, the Eco Rating provides guidance in five key areas: durability, repairability, recyclability, climate efficiency and resource efficiency. For more about Eco Rating and devices' Eco Rating scores, visit <u>https://www.ecoratingdevices.com</u>.

<sup>17</sup> Results shown on the energy label apply to European sales models XT2553-1 and are intended for EU customers only. Energy labelling requirements will apply to smartphones and tablets put on the EU market from 20 June 2025 onwards. Smartphones and tablets will have to display information on their energy efficiency, battery longevity, protection from dust and water and resistance to accidental drops. For more information on smartphone's EU energy label, visit https://energy-efficient-products.ec.europa.eu/product-list/smartphones-and-tablets\_en#energy-label; for more detailed information on the Energy Label, visit <a href="https://energy-efficient-products.ec.europa.eu/ecodesign-and-energy-label\_en">https://energy-efficient-products.ec.europa.eu/ecodesign-and-energy-label\_en</a>.