

Pixel 9a

Product environmental report



Environmental sustainability at Google

At Google, operating in an environmentally sustainable way has been a core value from the beginning. As our business has evolved to include the manufacturing of electronic products, we've continually expanded our efforts to improve each product's environmental performance and minimize Google's impact on the world around us.

This report details the environmental performance of the Pixel 9a over its full life cycle, from design and manufacturing through usage and recycling.

Product highlights

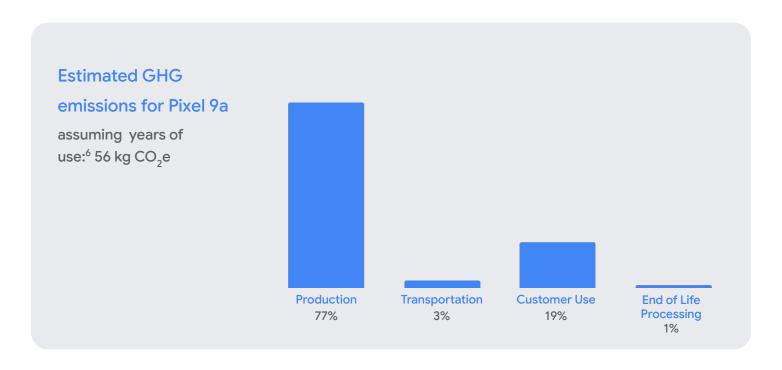


The Pixel 9a is designed with the following key features to help reduce its environmental impact:

- ✓ UL ECOLOGO GOLD^{1,2}
- PVC-free³
- Brominated Flame Retardant (BFR)-free³
- Designed with recycled aluminum to reduce its carbon footprint⁴
- 100% plastic-free packaging⁵

Greenhouse Gas (GHG) emissions

The production, transportation, use, and end of life processing of electronic products generate GHG emissions that can contribute to rising global temperatures. Google conducted a life cycle assessment on this product to identify materials and processes that contribute to GHG emissions, with the goal of minimizing these emissions. See our <u>Consumer Hardware Carbon Reduction Guide</u> to learn more.



Energy efficiency

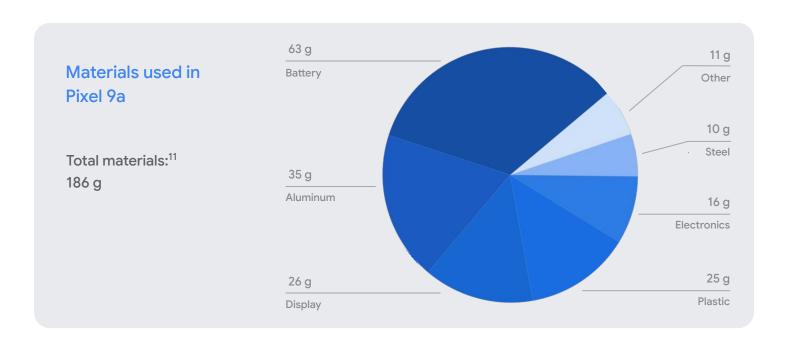
The Pixel 9a incorporates power-management software to maximize battery-charging efficiency and extend battery life during use.

Energy efficiency of Pixel 9a

	115 V, 60 Hz	230 V, 50 Hz
Standby (battery maintenance mode) power ⁷	0.21 W	0.23 W
Annual energy use estimate ⁸	8 kWh	8 kWh
Annual cost of energy estimate	US\$1.36 ⁹	€2.31 ¹⁰

Material use

Pixel 9a is designed to be light and compact. Minimizing the size and weight of the Pixel 9a allows materials to be used more efficiently, thereby reducing the energy consumed during production and shipping as well as minimizing the amount of packaging.



Recycled materials

- Pixel 9a is made with at least 23% recycled materials based on product weight
- The aluminum in the housing is 100% recycled content¹²
- Pixel 9a back cover is made with at least 81% recycled plastic 13
- Of the 11 plastic parts in Pixel 9a, 7 are made with at least 59% recycled plastic¹⁴
- Pixel 9a uses 100% recycled tin in the solder of multiple rigid and flexible printed circuit boards, including the main logic board¹⁵

Battery

Lithium-ion polymer

Restricted substances

Historically, many electronic devices contained materials such as lead, mercury, cadmium, and brominated flame retardants that pose environmental and health risks. We designed Pixel 9a to meet global regulations that restrict harmful substances, including the following:

- European RoHS Directive restrictions on lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and four different phthalates (DEHP, BBP, DBP, DIBP)
- European Battery Directive restrictions on lead, mercury, and cadmium in batteries
- European Packaging Directive restrictions on lead, mercury, cadmium, and hexavalent chromium in packaging

Voluntary substance restrictions

Pixel 9a also meets the following voluntary substance restrictions:¹⁶

- Ø Brominated Flame Retardant (BFR)-free³

Packaging

Pixel 9a comes in more consciously designed packaging. Our packaging is built with recycled and responsibly sourced fibers and continues to be 100% plastic-free, improving recyclability.¹⁷ To learn more about our plastic-free packaging, please see our <u>Plastic-Free</u> Packaging Design Guide.

Ethical sourcing

Google and its subsidiaries are committed to ensuring that working conditions in our operations and in our supply chains are safe, that all workers are treated with respect and dignity, and that business operations are environmentally responsible and ethically conducted. Learn more about our expectations for manufacturing partners in the Google Supplier Code of Conduct, our 2024 Supplier Responsibility Report, and our Conflict Minerals Policy.

Learn more

For more information about our environmental sustainability initiatives— including case studies, white papers, and blogs—please see our <u>Sustainability website</u> and our <u>2024 Environmental Report</u>.

Learn more about Google's strategy of reducing consumer hardware emissions in our <u>Consumer Hardware Carbon Reduction Guide</u>.

Learn how to recycle your used device in the <u>Google Store Help</u> section of our website.

Endnotes

- ECOLOGO® Certified products are certified to ECOLOGO® standards for reduced environmental impact. For more information, visit <u>ul.com/el</u>. ECOLOGO-registered in the US only.
- Pixel 9a is designed with approximately 45% recycled content across its plastic
 parts. This does not include plastics in printed circuit boards, labels, cables,
 connectors, electronic components and modules, optical components, electrostatic
 discharge (ESD) components, electromagnetic interference (EMI) components, films,
 coatings and adhesives.
- Google defines its restrictions on harmful substances in the <u>Google Restricted</u> <u>Substances Specification</u>.
- Carbon footprint reduction claim based on third-party verified life cycle assessment performed in 2025. Recycled aluminum in the housing is at least 16% of product based on weight.
- Based on retail packaging (excluding adhesive materials and required plastics stickers) as shipped by Google. To meet the request of some retail partners, stickers and/or security tags are applied to some packaging variations and may contain plastic.
- 6. GHG emissions estimates are calculated in accordance with ISO 14040 and ISO 14044 requirements and guidelines for conducting life cycle assessments, and include the production, transportation, use, and end of life processing of the product, accessories, and packaging. GHG emissions estimates are for the 128 GB memory configuration.
- 7. Power measured with phone connected to cellular and WiFi networks in standby mode with fully charged battery and attached to the power adapter using the in-box USB-C cable. Tested in accordance with a modified version of the <u>U.S. DOE Uniform Test Method for Measuring the Energy Consumption of Battery Chargers</u>. Energy consumption patterns may vary when adaptive charging is enabled.
- 8. Based on average charging of previous generation devices. Actual energy consumption will vary by user.
- 9. The average residential cost of energy for U.S. households was \$0.17 per kWh in November 2024 (source: <u>U.S. Energy Information Agency</u>).
- The average household cost of energy for consumers in the EU-27 was €0.29 per kWh in the first half of 2024 (source: <u>Eurostat Statistics Explained</u>).
- Product material masses are for the Pixel 9a only, excluding packaging and accessories. For the U.S. configuration, an additional 27 g of electronic accessories are included in-box.
- 12. Recycled aluminum in the housing is at least 16% of product based on weight.
- 13. The recycled plastic in the back cover accounts for at least 3% of the product based on product weight.
- 14. This recycled plastic accounts for at least 4% of the product based on product weight. This does not include plastics in printed circuit boards, labels, cables, connectors, electronic components and modules, optical components, electrostatic discharge (ESD) components, electromagnetic interference (EMI) components, films, coatings and adhesives.

Endnotes (cont.)

- 15. Solder paste is made with multiple materials and contains at least 80% tin. The tin in the solder paste is made with 100% recycled content.
- Google continues to restrict arsenic content in glass, mercury in displays, and heavy metals (lead, cadmium, and mercury) in batteries as listed in <u>Google's Restricted</u> <u>Substances Specification</u>.
- 17. Based on retail box packaging weight reduction and absence of plastic (excluding adhesive materials and required plastic stickers) as shipped by Google. To meet the request of some retail partners, stickers and/or security tags are applied to some packaging variations and may contain plastic. Google defines responsibly sourced fibers as those derived from recycled content, FSC-certified suppliers, or reclaimed industrial residues (such as bagasse). Recyclability improvement based on fiber yield recovered certified by the Fibre Box Association voluntary standard.