



Pixel 7

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 7 over its full life cycle, from design and manufacturing through usage and recycling.

Product highlights

The Pixel 7 is designed with the following key features to help reduce its environmental impact:



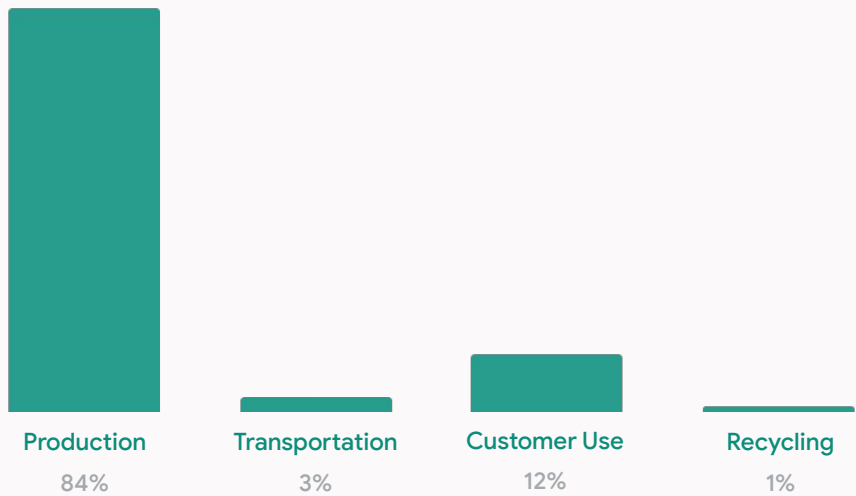
- ✓ EPEAT and UL ECOLOGO Gold¹
- ✓ PVC-free³
- ✓ Brominated Flame Retardant (BFR)-free³
- ↻ Designed with recycled aluminum to reduce its carbon footprint⁴
- ↻ 99% plastic-free packaging⁵



Greenhouse Gas
(GHG) emissions

The production, transportation, use, and recycling 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.

Estimated GHG emissions
for Pixel 7
assuming three years
of use:⁶ 70 kg CO₂e



Energy efficiency

The Pixel 7 incorporates power-management software to maximize battery-charging efficiency and extend battery life during use.

Energy efficiency of
Pixel 7

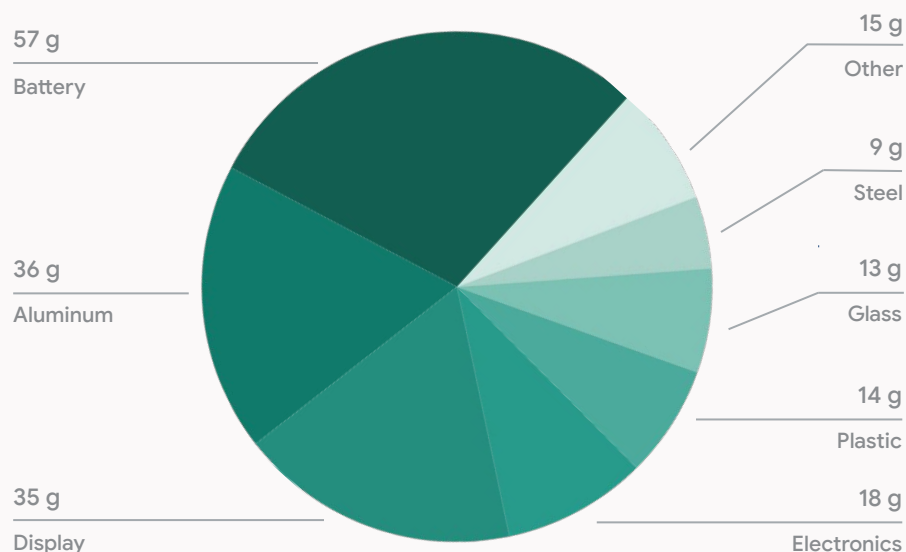
	115 V, 60 Hz	230 V, 50 Hz
Standby (battery maintenance mode) power ⁷	0.16 W	0.16 W
Annual energy use estimate ⁸	6 kWh	6 kWh
Annual cost of energy estimate	US\$0.93 ⁹	€1.42 ⁹

Material use

Pixel 7 is designed to be light and compact. Minimizing the size and weight of the Pixel 7 allows materials to be used more efficiently, thereby reducing the energy consumed during production and shipping as well as minimizing the amount of packaging.

Materials used in Pixel 7

Total materials:¹¹
197 g



Recycled materials

- Pixel 7 Pro is made with over 19% recycled materials based on product weight
- The aluminum in the housing and camera bar is 100% recycled content¹²

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 7 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 7 also meets the following voluntary substance restrictions:¹³

- ✓ PVC-free³
- ✓ Brominated Flame Retardant (BFR)-free³

Packaging

Packaging for the Pixel 7 uses 99% plastic-free materials.⁵ The greyboard in the box base and lid is made with 100% recycled content. We have designed the Pixel 7 packaging to minimize its weight and volume, which helps conserve natural resources and allows more devices to be transported in a single shipping container.

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 [2022 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 [Sustainability website](#) and our [2022 Environmental Report](#).

Learn how to recycle your used device in the [Google Store Help](#) section of our website.

Endnotes

1. EPEAT and UL registered in the US only.
2. Pixel 7 is designed with approximately 65% 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.
3. Google defines its restrictions on harmful substances in the [Google Restricted Substances Specification](#).
4. Carbon footprint reduction claim based on third-party verified life cycle assessment. Recycled aluminum in the housing is approximately 11% of product based on weight.
5. Based on U.S. retail packaging weight with adhesive materials excluded.
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 recycling of the product, accessories, and packaging.
7. Power measured with phone connected to cellular and WiFi networks in standby mode with fully charged battery and attached to the power adapter. Tested in accordance with a modified version of the [U.S. DOE Uniform Test Method for Measuring the Energy Consumption of Battery Chargers](#). 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 is \$0.15 per kWh (source: [U.S. Energy Information Agency June 2022 report](#)).
10. The average household cost of energy for consumers in the EU-27 was €0.24 per kWh in the second half of 2021 (source: [Eurostat Statistics Explained](#)).
11. Product material masses are for the Pixel 7 only, excluding packaging and accessories. For the U.S. configuration, an additional 34 g of electronic accessories can be included in-box.
12. Recycled aluminum is at least 11% of product based on weight.
13. Google continues to restrict arsenic content in glass, mercury in displays, and heavy metals (lead, cadmium, and mercury) in batteries as listed in [Google's Restricted Substances Specification](#).