



Pixel Tablet with Charging Speaker Dock

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 Tablet with Charging Speaker Dock over its full life cycle, from design and manufacturing through usage and recycling.

Product highlights



ENERGY STAR®
for Computers,
Version 8.0⁶

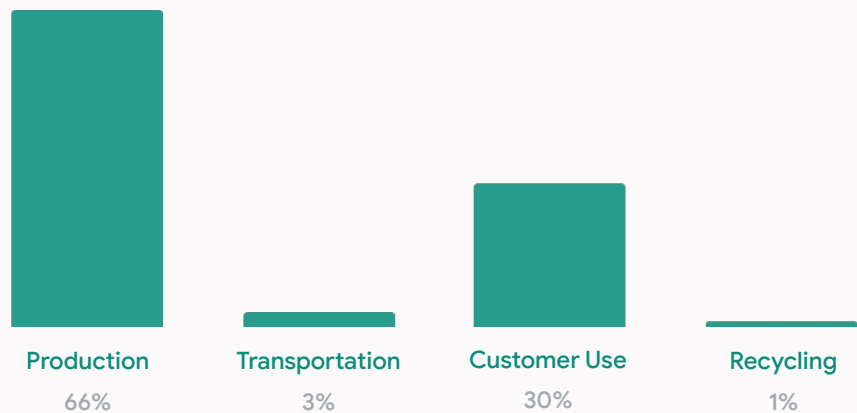
The Pixel Tablet with Charging Speaker Dock is designed with the following key features to help reduce its environmental impact:

- ✓ UL multi-attribute certification for IEEE 1680.1 - silver¹
- ✓ PVC-free²
- ✓ Brominated Flame Retardant (BFR)-free²
- ♻️ Docking magnets are made with 100% recycled rare earth elements³
- ♻️ The Pixel Tablet is designed with recycled aluminum to reduce its carbon footprint⁴
- ♻️ 99% plastic-free packaging⁵
- ⚡ Power adapter with Level VI efficiency rating⁶
- ⚡ ENERGY STAR⁷

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 Tablet with Charging Speaker Dock assuming three years of use:⁸ 89 kg CO₂e



Energy efficiency

The Pixel Tablet with Charging Speaker Dock uses an energy efficient DOE Level VI power adapter⁶ and incorporates power-management software to maximize battery-charging efficiency and extend battery life during use.

Energy efficiency of Pixel Tablet with Charging Speaker Dock

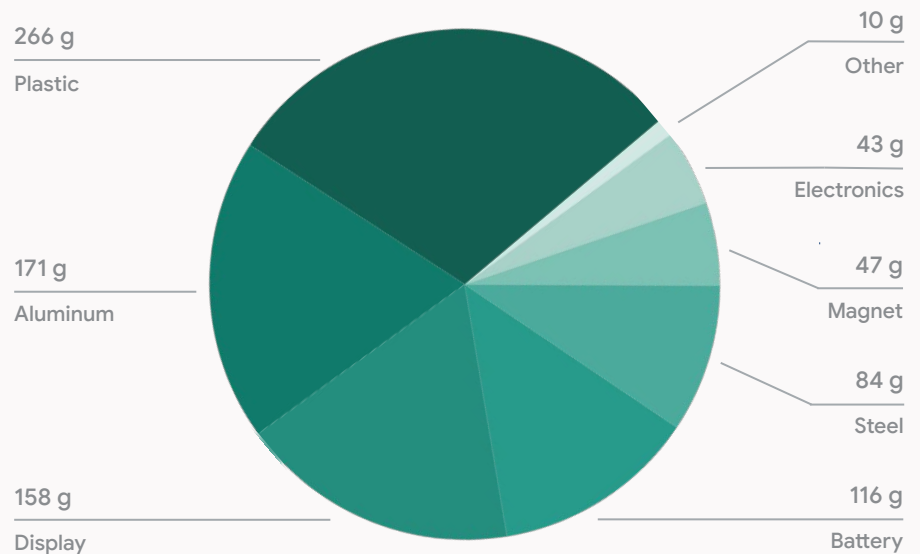
	115 V, 60 Hz	230 V, 50 Hz
Power adapter average efficiency ⁹	0.89%	0.89%
Active mode ¹⁰	4.93 W	5.15 W
Screen saver ¹¹	3.66 W	4.06 W
Low light clock	1.86 W	1.90 W
Display Off	0.75 W	0.76 W
Charging Speaker Dock (no tablet)	0.18 W	0.22 W
Annual energy use estimate ¹²	20 kWh	22 kWh
Annual cost of energy estimate	US\$3.17 ¹³	€6.25 ¹⁴

Material use

Pixel Tablet with Charging Speaker Dock is designed to be light and compact. Minimizing the size and weight of the Pixel Tablet with Charging Speaker Dock 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 Tablet with Charging Speaker Dock

Total materials:¹⁵
895 g



Recycled materials

- Pixel Tablet and Charging Speaker Dock combined are made with 35% recycled materials based on product weight
- The aluminum in the Pixel Tablet housing is 100% recycled content¹⁶
- The Pixel Tablet and Charging Speaker Dock docking magnets are made with 100% recycled rare earth elements³

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 Tablet with Charging Speaker Dock 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 Tablet with Charging Speaker Dock also meets the following voluntary substance restrictions:¹⁷

- ✓ PVC-free²
- ✓ Brominated Flame Retardant (BFR)-free²

Packaging

Packaging for the Pixel Tablet with Charging Speaker Dock uses 99% plastic-free materials.⁵ The greyboard used in the box base and lid is made with 100% recycled content. We have designed the Pixel Tablet with Charging Speaker Dock 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 Responsible Supply Chain 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. UL multi-attribute certification indicates that product(s), process(es), or packaging are certified to a UL standard, and meet stringent, lifecycle based environmental standards for reduced environmental impact. For more information, visit ul.com/ma. UL-certified to IEEE 1680.1 in the US only. The packaging contains 72% recycled content for wood-based fiber packaging.
2. Google defines its restrictions on harmful substances in the [Google Restricted Substances Specification](#).
3. Magnets contain 100% recycled rare earth elements, but the majority of the magnet weight consists of other materials.
4. Carbon footprint reduction claim based on third-party verified life cycle assessment performed in 2023. Recycled aluminum is at least 25% of Pixel Tablet based on weight.
5. Based on retail packaging (excluding adhesive materials) as shipped by Google. To meet the request of some clients, plastic stickers are applied to some packaging variations.
6. Level VI is the highest available efficiency rating for power adapters as defined in the [International Efficiency Marking Protocol for External Power Supplies Version 3.0](#).
7. This product is ENERGY STAR® certified in the United States and Canada. ENERGY STAR® and ENERGY STAR® mark are registered trademarks owned by the U.S. Environmental Protection Agency.
8. 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, in-box accessories, and packaging.
9. Average efficiency of power adapter when input and output power is measured at 25%, 50%, 75%, and 100% of rated output current and averaged and tested at the highest rated output voltage of 24 V. Tested in accordance with the [U.S. Department of Energy Uniform Test Method for Measuring the Energy Consumption of External Power Supplies](#).
10. Based on Pixel Tablet connected to Charging Speaker Dock playing a YouTube video at a 50% brightness level and 50% volume level.
11. Based on Pixel Tablet connected to Charging Speaker Dock with screensaver on at a 50% brightness level.
12. Estimated energy use is based on 1.5 hours per day of Pixel Tablet playing video, 9.5 hours per day with screensaver on, and a combination of low light clock mode, display off, and time with the Pixel Tablet off the Charging Speaker Dock.
13. The average residential cost of energy for U.S. households is \$0.16 per kWh (source: [U.S. Energy Information Agency Mar 2023 report](#)).
14. The average household cost of energy for consumers in the EU-27 was €0.28 per kWh in the second half of 2022 (source: [Eurostat Statistics Explained](#)).
15. Product material masses are for the Pixel Tablet with Charging Speaker Dock only, excluding packaging and accessories. For the U.S. configuration, an additional 123 g of electronic accessories can be included in-box.
16. Recycled aluminum is at least 25% of Pixel Tablet based on weight.
17. 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](#).