Google TV Streamer (4K)

Product environmental report

Model GRS6B
introduced September 2024

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 Google TV Streamer (4K) over its full life cycle, from design and manufacturing through usage and recycling.

Product highlights

The Google TV Streamer (4K) is designed with the following key features to help reduce its environmental impact:

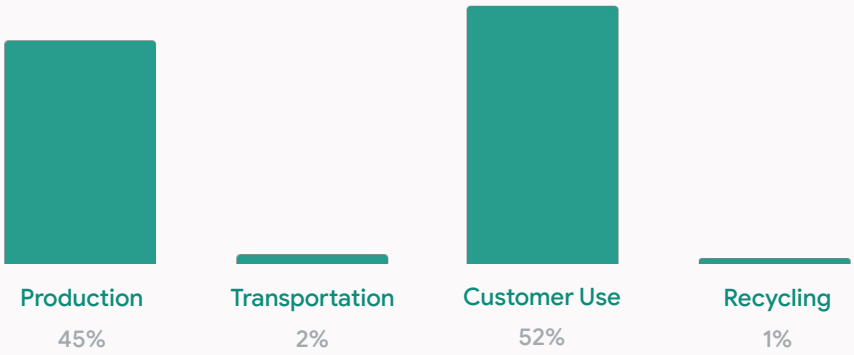
- PVC-free[1]
- Brominated Flame Retardant (BFR)-free[1]
- The Streamer and Remote bundle is made with at least 65% recycled plastic[2]
- 100% plastic-free packaging[3]
- Power adapter with Level VI efficiency rating[4]

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 Google TV Streamer (4K)

assuming four years of use:[5] 33 kg CO_2e



Energy efficiency

The Google TV Streamer (4K) uses an energy efficient DOE Level VI power adapter.[4]

Energy efficiency of Google TV Streamer (4K)

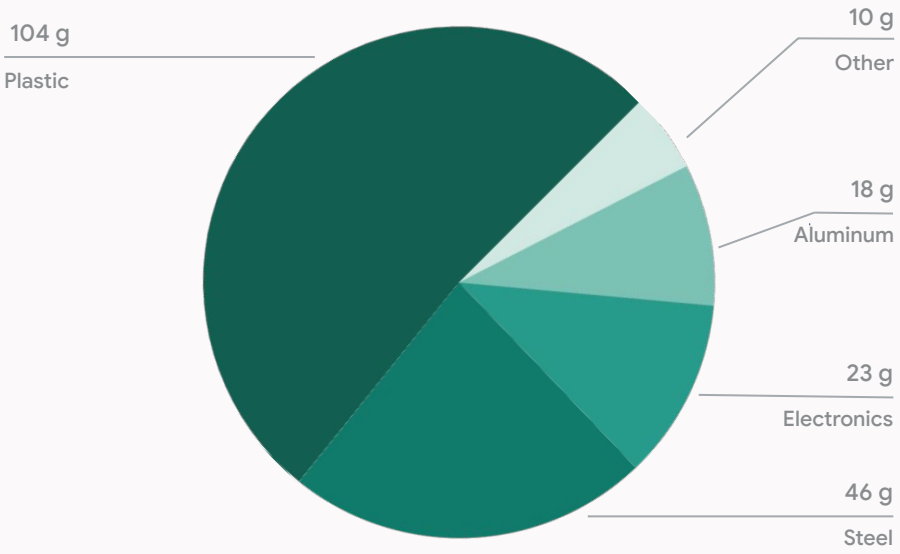
	115 V, 60 Hz	230 V, 50 Hz
Power adapter average efficiency[6]	81.9%	79.8%
Active mode	1.76 W	1.82 W
Ambient mode	1.63 W	1.59 W
Sleep mode (screen off)	0.84 W	0.85 W
Annual energy use estimate[7]	9 kWh	9 kWh
Annual cost of energy estimate	US$1.48[8]	€2.56[9]

Material use

Google TV Streamer (4K) is designed to be light and compact. Minimizing the size and weight of the Google TV Streamer (4K) 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 Google TV Streamer (4K)

Total materials:[10]
201 g



Recycled materials

- The Streamer and Remote bundle is made with at least 22% recycled materials based on product weight
- The Streamer and Remote bundle is made with at least 65% recycled plastic[2]

Battery

- 2 Alkaline AAA batteries

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 Google TV Streamer (4K) 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

Google TV Streamer (4K) also meets the following voluntary substance restrictions:[11]

- PVC-free[1]
- Brominated Flame Retardant (BFR)-free[1]

Packaging

Google TV Streamer (4K) comes in more consciously designed packaging. Our lighter packaging is built with recycled and responsibly sourced fibers and continues to be 100% plastic-free, improving recyclability.[12]

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 Environmental 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 2024 Environmental Report.

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

Endnotes

1. Google defines its restrictions on harmful substances in the Google Restricted Substances Specification.
2. Recycled plastic is at least 22% of combined products based on weight.
3. 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.
4. 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.
5. 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.
6. 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 5 V. Tested in accordance with the U.S. Department of Energy Uniform Test Method for Measuring the Energy Consumption of External Power Supplies.
7. Estimated energy use is based on 4.1 hours per day of streaming video per day.
8. The average residential cost of energy for U.S. households was $0.16 per kWh in May 2024 (source: U.S. Energy Information Agency).
9. The average household cost of energy for consumers in the EU-27 was €0.29 per kWh in the second half of 2023 (source: Eurostat Statistics Explained).
10. Product material masses are for the Google TV Streamer (4K) and remote only, excluding packaging and accessories. For the U.S. configuration, an additional 70 g of electronic accessories can be included in-box.
11. 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.
12. Compared to Chromecast with Google TV (HD) box packaging. 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.