

## **Environmental Impact of Product Repair Policies**

### **Alphabet 2022**

**Whereas:** By 2040, 14% of greenhouse gas emissions will result from internet-connected technologies like phones and tablets. Electronic waste is the fastest growing waste stream globally, and a recent World Economic Forum report found that product longevity and repair are critical to stemming this growth.

Alphabet Inc.'s Google has committed to carbon neutrality and to creating a circular economy for its products, which is aimed at reducing waste and conserving natural resources. Between 71% and 85% of the greenhouse gas emissions from a Pixel phone occur before the consumer even receives the product. By expanding access to repair that extends the life cycle of existing products, Google could mitigate climate and other material risks.

Google has come under scrutiny for:

- Denying access to repair materials such as repair manuals, spare parts, and repair software;
- Designing products in such a way that hinders third-party repair; and
- Vigorously lobbying against Right to Repair reforms.

Due to its practices, Google may be exposed to increased regulatory risks from proposed Right to Repair legislation, which would require electronics manufacturers to provide access to parts and service information in order to extend product lifespans. In the last year, Right to Repair legislation was introduced in 27 states and in the U.S. Congress. In July, President Biden signed an executive order calling for the Federal Trade Commission to develop rules on “unfair anticompetitive restrictions on third-party repair.”

Hewlett-Packard and Dell Technologies have long made service manuals available online while making spare parts available to consumers, and neither is known to lobby against Right to Repair. Apple and Microsoft, who have long opposed repair access, have recently changed course on the issue. Apple announced a new DIY repair program and Microsoft pledged to assess the impact of making its devices easier to repair and to act on those findings.

Major media outlets including *The New York Times* and *Bloomberg* have covered Google's anti-repair practices, exposing the Company to reputational risk. Google's authorized repair services have also generated negative media attention for privacy violations, highlighting the need for third-party repair options.

Google makes no mention of repair in its most recent Environmental Report or any of its Product Environmental Reports. Investors are concerned that Google's opposition to repair access could undermine its ambitious climate commitments and expose it to regulatory, competitive, and reputational risk.

**Resolved:** Shareholders request that the Board prepare a report, at reasonable cost and omitting proprietary information, on the environmental and social benefits of making Company devices more easily repairable by consumers and independent repair shops.

**Supporting Statement:** The report should, at Board discretion, assess, among other issues, the benefits or harms

of:

- Making instructions, parts, and/or tools for products more readily available;
- Adding more features to Android operating systems that support or facilitate diagnosis and repair, including for non-Company devices; and
- Lobbying against repair legislation.