From design to end-of-life and everything in between, we work to improve the environmental impact of the products you purchase. As part of that process, we estimate the specific impacts throughout the lifecycle. This includes the contributions from materials, manufacturing, distribution, use and end-of-life management.

This product’s estimated carbon footprint:

1000 kgCO2e +/- 159 kgCO2e

Estimated impact by lifecycle stage with breakout for manufacturing by component:

Dell uses PAIA (Product Attribute to Impact Algorithm) to perform product carbon footprints. PAIA is a streamlined LCA tool developed by MIT’s Materials System Laboratory. It takes into consideration important attributes of the product which can be correlated to activities in order to calculate the product carbon footprint.
As part of our commitment to transparency, the chart to the right demonstrates the degree of uncertainty that exists within the PAIA model for product carbon footprinting, based on assumptions we have made for select variables.

**Assumptions for calculating product carbon footprint:**

<table>
<thead>
<tr>
<th><strong>Product Weight</strong></th>
<th>16.742 kg</th>
<th><strong>Screen Size</strong></th>
<th>49&quot;</th>
<th><strong>Assembly Location</strong></th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Lifetime</strong></td>
<td>6 years</td>
<td><strong>Use Location</strong></td>
<td>EU</td>
<td><strong>Energy Demand</strong></td>
<td>94.54 kWh</td>
</tr>
</tbody>
</table>

1000 kg CO2e

1 of these products... has a footprint approx. equivalent to **driving 2450 miles** in a passenger car.

10 of these products... have a footprint approx. equal to what **11.8 acres of US forests** can absorb in a year.

100 of these products... have a footprint about the same as the annual average carbon footprint of **20 people**.

† Disclaimer: This PCF was calculated using the PAIA model, version 1.2.5, 2019, copyright by the ICT Benchmarking collaboration, which includes the Massachusetts Institute of Technology’s Materials Systems Laboratory and partners. Results shown here are subject to change as the tool is updated.

Calculations are based on the following methodologies: 2.45 miles driven per 1 kg co2e (source: [U.S. EPA](https://www.epa.gov)); approx. 850 kg co2e absorbed per acre of forests over a year (source: [U.S. EPA](https://www.epa.gov)); global personal carbon footprint estimated at 5 MTco2e per person (source: [World Bank](https://www.worldbank.org)).