**Product carbon footprint**

**HP 290 G1 SFF**

**Estimated impact**

236 - 950† kgCO$_2$e

†All estimates of carbon footprint are uncertain. HP Inc reports the 5th and 95th percentile of the carbon footprint estimate to reflect that uncertainty. For this product, that estimate has a mean of 421 kg of CO$_2$-e and standard deviation of 108 kg of CO$_2$-e. Other organizations might report this value as 421 ± 108 kg of CO$_2$-e.

As part of HP’s commitment to continually improve the environmental performance of our products, we are focusing on better understanding the impacts that occur at different stages of the product life cycle through the use of product carbon footprinting (PCF). A product carbon footprint is defined as the total amount of greenhouse gases emitted directly and indirectly by a product over its lifetime. It includes emissions from materials extraction, manufacturing, distribution, use, and end-of-life management.

The information provided here was calculated using the PAIA tool†† and represents the lifecycle carbon footprint of an industry-average desktop computer with the specifications listed in Under Assumptions on Page 2.

**GHG emissions [percentage of total]**

![Pie chart showing percentage of GHG emissions]

The plot below shows the uncertainty associated with the various elements of the product carbon footprint. Uncertainty in product carbon footprinting stems from differences in the data, assumptions, and methodology used. Since uncertainty can be quite large, results should not be compared with those of other products, but rather are intended to inform product design and life cycle management decisions.
**Disclaimer**

††This calculation was done using the Product Attribute to Impact Algorithm (PAIA) model, November 2016 Desktop Version, copyright by the ICT Benchmarking collaboration, which includes the Massachusetts Institute of Technology’s Materials Systems Laboratory and partners. PAIA estimates the carbon footprint of different PC products, including uncertainty of the result. Uncertainty is included in order to provide our customers with greater transparency in estimation results. The PAIA tool is not released for use by the public. Results shown here are subject to change as the tool is updated.

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**GHG emissions [kg CO2 eq]**

![Graph showing GHG emissions](image)

**Assumptions**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime of product</td>
<td>5 years</td>
</tr>
<tr>
<td>Use location</td>
<td>Worldwide</td>
</tr>
<tr>
<td>Use energy demand (Yearly TEC)</td>
<td>53.67 kWh</td>
</tr>
<tr>
<td>Product weight</td>
<td>4.76 kg</td>
</tr>
<tr>
<td>Final manufacturing location</td>
<td>China</td>
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</tbody>
</table>

**Additional product environmental performance**

Additional information about HP’s carbon footprinting program can be found in HP’s yearly Sustainability Report, which is available on the HP Sustainability website. The site also contains IT Eco Declarations, which provide product-specific environmental information, as well as information on HP’s product recycling programs.

**Learn more at**

[HP’s Sustainability Website]