

# Sustainable Games Standard

## Scope 3, Category 1 – Purchased goods and services/Scope 3, Category 2 – Capital Goods (IT Hardware) GHG emissions

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### Top-level summary

Emissions from:	<ul style="list-style-type: none"> <li>Purchased goods and services in the IT Hardware category, including: <ul style="list-style-type: none"> <li>Desktops</li> <li>Laptops</li> <li>Monitors</li> <li>Servers, racks, and equipment</li> <li>Individual hardware components (CPUs, GPUs, coolers, etc)</li> <li>Smartphone</li> <li>Other peripherals (keyboards, mice), including VR devices</li> </ul> </li> </ul>
Examples:	<ul style="list-style-type: none"> <li>New GPUs purchases for art teams</li> <li>Laptops purchased for work-from-home developers</li> <li>Purchased iPhones and Androids for work uses (QA, testing, etc) or for work-based communication</li> <li>Purchases of Macs, PCs, and Linux pre-built and custom-built machines</li> <li><b>EXCLUDES:</b> <ul style="list-style-type: none"> <li>Software purchases</li> <li>Rented devices</li> </ul> </li> </ul>
Data sources:	<ul style="list-style-type: none"> <li>Supplier sustainability websites</li> <li>Device average embodied emissions research</li> <li>Spend values (\$/€/etc) on IT</li> </ul>
Data types:	<ul style="list-style-type: none"> <li>Supplier LCA/sustainability data sheets results (kg or tonnes CO2e)</li> <li>Embodied emissions averages by device type (kg or tonnes CO2e)</li> <li>Dollar or other currency values</li> </ul>

## Consult with other SGA resources

Understanding the requirements and nature of this component of the GHG emissions standard may be aided by consulting the relevant [data input spreadsheet](#) to see the overall structure and major sections before reading the standard specification.

Depending on how a business categorises IT Hardware in its accounting practices, spend on IT Hardware may be considered either Scope 3.1 “Purchased Goods and Services” emissions, or Scope 3.2 “Capital Goods”. The GHG Protocol provides the following guidance that directs reporters to follow their accounting practices in making this decision:

Companies should follow their own financial accounting procedures to determine whether to account for a purchased product as a capital good in this category or as a purchased good or service in category 1. Companies should not double-count emissions between category 1 and category 2. (GHG Protocol, Scope 3 Calculation Guidance, p. 36)

Consult with your accounting or finance team to decide whether to include IT Hardware in Scope 3.1 purchased goods and services, or Scope 3.2 capital goods. Functionally, this will only affect which category of Scope 3 emissions to report under, there are *no changes to the underlying methodology*.

## Overview

The SGA standard methodology for Scope 3 Category 1/Category 2 “Purchased goods and services”/“Capital Goods” (IT Hardware) aims to improve the accuracy and applicability of the baseline GHG Protocol activity-based guidance for purchases of goods and services, specifically for purchases of laptops, computers, computer components, peripherals and other physical digital devices.

# Specification

Three methods are permissible:

- Option 1 – Supplier data sheet or LCA:
  - Shall use the embodied GHG total for the purchased device, as supplied by the IT hardware supplier, provided that a reasonable Life Cycle Analysis (LCA), or other accounting of the embodied emissions from the manufacturing of the device was undertaken by the supplier,
  - From this total, the user shall subtract the end user usage component (or the energy consumption component, or similar phrasing) from the LCA, to avoid double-counting.
  - The sum of all devices
- Option 2 – An intermediate method that uses industry-supplied and research-backed average data to approximate match purchased IT Hardware for the main types of devices:
  - Not currently available
  - Requires more SGA research to either generate averages for typical IT devices (laptops, PCs, etc) or for industry averages to be published by researchers
- Option 3 – A spend-based method, which shall consist of:
  - Dollar or other currency totals spent in the reporting period on IT Hardware
  - Categories according to the following types of IT Hardware:
    - Computer Hardware (PCs/Laptops/etc)
    - Computer Storage (HDDs, SSDs, etc)
    - Computer peripherals
    - Communications equipment
  - With the currency amounts converted into the relevant USD/year for the appropriate USEEIO emissions factor (i.e. 2021 USD)

A mixture of the three methods is permitted, so long as the same IT Hardware purchases are not represented in more than one option. For example, a user may choose to use Option 1 (supplier data) method for all Apple iPhone purchases in a reporting period, while using Option 2 for purchases of new PC laptops, and Option 3 for the purchase of a new server rack and equipment.

See the data input sheet for the mathematical calculations to be applied to each of the data inputs. Totals for the whole specification are the sum of each of the components.