



PRESS KIT

Environmental Key Performance Indicators Methodology

Operational data

Operational data (except Land Use) was sourced from PUMA's environmental management system. Data covers all operations for the 2010 financial year in which PUMA owns more than a 50% stake and has more than 10 employees.

For GHGs, the system covers carbon dioxide (CO₂) emissions derived from operational fuel use in buildings and vehicles, purchased electricity and steam, logistics and business travel. For water abstraction, the system covers all direct water consumption. For waste, the system covers all non-hazardous and hazardous waste generation.

Additional operational GHGs including methane (CH₄), nitrous oxide (N₂O) and air pollutants including carbon monoxide (CO), sulphur dioxide (SO₂), nitrogen oxide (NO_x) and particulate matter (PM) were incorporated based on fuel consumption data collected in PUMA's environmental management system. The latest fuel conversion factors from the International Energy Agency (IEA) were used.

Supply chain data

Supply chain emissions data was calculated using Trucost's econometric input-output (I-O) model supplemented with actual emissions data collected through engagement with first-tier suppliers. The three step process is summarised below:

Step 1 - Modelling: Trucost's econometric input-output model calculates environmental impacts through supply chains by combining economic flows and environmental data. Using government census data, it identifies 464 business sectors which have economic interactions (inputs and outputs)

with other sectors. Each sector also has an environmental profile per unit of output which is derived from numerous sources, including the US Toxic Release Inventory, UK Environmental Accounts, Japanese Pollution Release and Transfer Register and Australia's National Pollution Inventory. Therefore the economic magnitude of a sector's input from another defines its environmental impact, and so on through the supply chain, until all economic flows to produce a unit of output at the top of the supply chain have been accounted for. The model is adjusted on an annual basis to take into account changes in the environmental impact of a unit of output for each sector.

Using information on the expenditure and sectors of operation for 195 of PUMA's first-tier suppliers in the 2010 financial year, volumes of GHGs and other air pollution, water abstraction and waste generation were calculated for each supplier's own operations and those of its own supply chain.

Step 2 - Supplier engagement: High impact suppliers were identified for direct engagement, based on the modelled footprint. Emissions disclosure was obtained from 60 first-tier suppliers whose own operations and supply chains accounted for 90% of PUMA's overall supply chain environmental impact. Data collected from these suppliers included operational fuel use in buildings and vehicles, purchased electricity and steam, water consumption and waste generation by type and waste management route. Data was sourced from environmental audits carried out by PUMA in 2010 and Trucost's online supplier questionnaire, which was completed over a six week period.

Step 3 - Analysis and validation: Energy use data (fuel, electricity and steam) for each supplier was converted to GHG and air pollution emissions using IEA conversion factors. This data and the water consumption and waste generation quantities were then validated against the original modelled footprint to ensure data integrity across the supply chain. Following validation, the engagement data was incorporated into the original modelled calculation to develop final volumes data. 30% of total greenhouse gas emissions, 15% of total air pollution emissions, 6% of total water abstraction quantities and 56% of total waste generation quantities are based on actual data collected. The remaining data is modelled.

Geographical breakdown

At Tier 1, the location of each supplier is known. Engagement with some suppliers in Tiers 2 and 3 provided information on their locations and the geographical sourcing of raw materials (by production quantity) within each product category (Apparel, Footwear, and Accessories) was used to determine the geographical breakdown for Tier 4.

* It is important to note that the E P&L has calculated the emissions from the basket of six Greenhouse Gases (Carbon Dioxide, Methane, Nitrous Oxide, Ozone, Chlorofluorocarbons and Water Vapour) as a CO₂-equivalent value rather than just solely for Carbon Dioxide. For this reason it cannot be compared to the figures published in PUMA's Annual Report 2010, the carbon emissions offset by PUMA in 2010 or to any other companies that report in CO₂ only terms. It is also important to note that the Greenhouse Gases analysed from PUMA operations include emissions from Offices, Retail, Warehouses, Business Travel and Logistics – again something not always reported upon by all companies.