

Product Carbon Footprint Standard

Applies To

This document applies to all operations involved with 3M products globally.

Introduction and Background or Purpose

Product carbon footprint consists of greenhouse gas (GHG) emissions resulting from a product across its entire life cycle. Product carbon footprint is determined by product life cycle GHG accounting, which is a subset of life cycle assessment (LCA). While LCA quantifies and addresses the environmental aspects and potential environmental impacts throughout a product's life cycle from raw material extraction through to end-of-life, product carbon footprint quantifies only carbon impacts.

3M has the opportunity to address life cycle GHG impacts through the development of products with a lower carbon footprint. While there are various methodologies available, a consistent and scientifically accepted methodology must be used for product carbon footprint determinations. ISO 14040, the principles and framework for life cycle assessment (LCA), is a globally accepted standard. The World Resources Institute (WRI) / World Business Council for Sustainable Development (WBCSD) Product Life Cycle Accounting and Reporting Standard may be used for additional guidance.

Product LCAs are excluded from this standard and covered under the Product LCA Standard. Environmental Marketing Claims, Product Scope 3 Emission Inventories, and other sustainability communications are covered under the BE HONEST: Advertising and Product Representation Principle and associated Policies.

Requirements or Expectations

Overall responsibility for compliance with this document is assigned to Environment, Health, Safety and Sustainability.

This Standard requires Greenhouse Gas (GHG) emissions related to 3M products to comply with applicable government emissions standards and the 3M Standard requirements. All businesses and countries must ensure that all product carbon footprint data and offsets are reported in accordance with the Standard requirements. The 3M Environmental Laboratory and 3M Global Sustainability must manage the product carbon footprint process as designated representatives of the 3M Climate Change Steering Committee.

The calculation of product carbon footprints and the management of product carbon offsets must comply with the following standard requirements. These requirements apply to all product carbon footprint calculations and product carbon offsets.

1. Product carbon footprint calculations must use a nationally or internationally recognized methodology.
 - If the product is going to be marketed internationally (beyond a local/national market), the internationally recognized LCA standard ISO 14040 must be used for the product carbon footprint calculation.
 - If the product is going to be marketed only in a local/national market, the product carbon footprint calculation must be based on the internationally recognized LCA standard ISO 14040. However, ISO 14040 requirements may be supplemented with a nationally recognized or accredited methodology.
2. Standard and approved product carbon footprint (life cycle CO₂ assessment) tools must be used in accordance with ISO 14040 for the product carbon footprint calculation.
 - The tools used for the life cycle CO₂ calculations for products being marketed globally must be globally accepted or approved (e.g. GaBi software and databases).
 - The tools used for the life cycle CO₂ calculations for products being marketed in a local/national market must be locally/nationally accepted or approved.
3. The product carbon offsets must be valid offsets managed in accordance to a recognized standard and must be valid offsets in their country of use or valid globally. Acceptable qualified offsets include:
 - Offsets from Certified Emission Reductions (CERs) issued by the Clean Development Mechanism (CDM) Executive Board for emission reductions achieved by CDM projects under the rules of the Kyoto Protocol.
 - Offsets from Verified Emission Reductions (VERs) including Voluntary Carbon Standard (VCS) and Gold Standard (GS) VCS. The VERs must represent real emission reduction which have been verified by an independent third party to ensure that they have not already been sold to another entity.
4. Prior to the purchase of product carbon offsets, 3M Global Sustainability must be consulted on the proposed transaction. Purchase of product carbon offsets must be reported to 3M Environmental Laboratory. 3M Global Sustainability will engage with the 3M Environmental Laboratory and 3M Treasury as necessary. Reporting of offset transactions must be conducted on a quarterly basis and must include:
 - amount of time offsets will be used (years/months),
 - quantity of offsets purchased (metric tons CO₂-eq),
 - cost of the offsets purchased per metric ton (\$ per metric ton CO₂-eq),
 - name of entity from which the offsets were purchased, and
 - protocol or standard used to quantify/verify the offsets.
5. Purchase of product carbon offsets must be authorized by 3M Treasury if greater than \$0.5 million (U.S.) in value.