

Verification of GHG Emissions

Climate Leaders Partners may choose to pursue third-party verification. However, Partners are still required to submit the Annual GHG Inventory Summary and Goal Tracking Form to EPA each year (as described in Chapter 9).

Verification is an objective assessment of the accuracy and completeness of reported GHG information to pre-established GHG accounting and reporting principles. Although the practice of verifying corporate GHG inventories is still evolving, the emergence of widely accepted standards, such as the GHG Protocol Corporate Standard and the forthcoming GHG Protocol Project Quantification Standard, should help GHG verification become more uniform, credible, and widely accepted.

Verification involves an assessment of the risks of material discrepancies in reported data. Discrepancies relate to differences between reported data and data generated from the proper application of the relevant standards and methodologies. In practice, verification involves the prioritization of effort by the verifier toward the data and associated systems that have the greatest impact on overall data quality.

This section provides guidance on conducting an independent verification of a GHG inventory. It is highly recommended that a company develops its inventory in such a way that verification can be easily conducted. *The Climate Leaders program provides an IMP checklist (IMP*

elements, as discussed in Chapter 9) that delineates the components that must be included when Partners opt for third-party verification (Appendix 3).

Internal Assurance

While verification is often undertaken by an independent, external third party, this may not always be the case. Many companies interested in improving their GHG inventories may subject their information to internal verification by personnel who are independent of the GHG accounting and reporting process. Both internal and external verification should follow similar procedures and processes. Independent internal verifications can provide valuable assurance over the reliability of information.

Internal verification can be a worthwhile learning experience for a company prior to commissioning an external verification by a third party. It can also provide external verifiers with useful information to begin their work.

The Concept of Materiality

The concept of “materiality” is essential to understanding the process of verification. Chapter 1 provides a useful interpretation of the relationship between the principle of completeness and the concept of materiality. Information is considered to be material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by the users of it. A material discrepancy is an error

(e.g., from an oversight, omission, or miscalculation) that results in a reported quantity or statement being significantly different from the true value or meaning. To express an opinion on data or information, a verifier would need to form a view on the materiality of all identified errors or uncertainties.

While the concept of materiality involves a value judgement, the point at which a discrepancy becomes material (materiality threshold) is often pre-defined. As a rule of thumb, an error is considered to be materially misleading if the value exceeds 5 percent of the total inventory for the part of the organization being verified.

The verifier needs to assess an error or omission in the full context within which the information is presented. For example, if a 2 percent error prevents a company from achieving its corporate target then this would most likely be considered material. Understanding how verifiers apply a materiality threshold will enable companies to more readily establish whether the omissions of an individual source or activity from their inventory is likely to raise questions of materiality.

A specific materiality threshold will not be defined under the Climate Leaders program; it is left up to the discretion of the Partner and/or verifier. Partners need to at least make an estimate for all sources, facilities, and operations and include the estimates in the inventory. The estimates can be approximate, and Partners can work with EPA to determine the potential impact on the inventory. Sources can be excluded from the inventory only if it is justified that they represent an insignificant amount of a Partner's total emissions AND either: 1) there is insufficient scientific understanding to develop a reliable

method for estimating emissions, or 2) an estimation method exists but data are not available (or would require excessive cost to the Partner to acquire) to estimate emissions.

Selecting a Verifier

When Partners choose to use external verification to meet EPA's reporting requirements, the verifier should be an independent, third-party verifier.

Some factors to consider when selecting a verifier include their:

- Previous experience and competence in undertaking GHG verifications
- Understanding of GHG issues, including calculation methodologies
- Understanding of the company's operations and industry
- Objectivity, credibility, and independence

It is important to recognize that the knowledge and qualifications of the individual(s) conducting the verification can be more important than those of the organization(s) they come from. Companies should select organizations based on the knowledge and qualifications of their actual verifiers and ensure that the lead verifier assigned to them is appropriately experienced. Effective verification of GHG inventories often requires a mix of specialized skills, not only at the technical level (e.g., engineering experience or an industry specialist) but also at a business level (e.g., verification and industry specialization).

Preparing for GHG Verification

Preparation of the IMP (as described in Chapter 9) allows Partners to prepare for the verification. The third-party verification report must certify that the requirements of the Climate Leaders GHG inventory review process have been met.

Appropriate documentation needs to be available to support the GHG inventory being subjected to external verification. Statements made by management for which there is no available supporting documentation cannot be verified. Where a *Partner* has not yet implemented systems for routinely accounting and recording GHG emissions data, an external verification will be difficult and may result in the verifier being unable to issue an opinion. Under these circumstances, the verifiers may make recommendations on how current data collection and collation process should be improved so that an opinion can be obtained in future years.

Partners are responsible for ensuring the existence, quality, and retention of documentation so as to create an audit trail of how the inventory was compiled. If a *Partner* issues a specific base year against which it assesses its GHG performance, it should retain all relevant historical records to support the base year data. These issues should be borne in mind when designing and implementing GHG data processes and procedures.

IMP Checklist

When verification is undertaken to meet Climate Leaders reporting requirements, then the verification should address each of the elements of the IMP, which is located in Appendix 3.