



**A**s with financial accounting and reporting, generally accepted GHG accounting principles are intended to underpin and guide GHG accounting and reporting to ensure that the reported information represents a faithful, true, and fair account of a company's GHG emissions.

GHG accounting and reporting practices are evolving and are new to many businesses; however, the principles listed below are derived in part from generally accepted financial accounting and reporting principles. They also reflect the outcome of a collaborative process involving stakeholders from a wide range of technical, environmental, and accounting disciplines.

GHG accounting and reporting shall be based on the following principles:

**RELEVANCE**

Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.

**COMPLETENESS**

Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.

**CONSISTENCY**

Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.

**TRANSPARENCY**

Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.

**ACCURACY**

Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.



These principles are intended to underpin all aspects of GHG accounting and reporting. Their application will ensure that the GHG inventory constitutes a true and fair representation of the company's GHG emissions. Their primary function is to guide the implementation of the *GHG Protocol Corporate Standard*, particularly when the application of the standards to specific issues or situations is ambiguous.

## Relevance

For an organization's GHG report to be relevant means that it contains the information that users—both internal and external to the company—need for their decision making. An important aspect of relevance is the selection of an appropriate inventory boundary that reflects the substance and economic reality of the company's business relationships, not merely its legal form. The choice of the inventory boundary is dependent on the characteristics of the company, the intended purpose of information, and the needs of the users. When choosing the inventory boundary, a number of factors should be considered, such as:

- Organizational structures: control (operational and financial), ownership, legal agreements, joint ventures, etc.
- Operational boundaries: on-site and off-site activities, processes, services, and impacts
- Business context: nature of activities, geographic locations, industry sector(s), purposes of information, and users of information

More information on defining an appropriate inventory boundary is provided in chapters 2, 3, and 4.

## Completeness

All relevant emissions sources within the chosen inventory boundary need to be accounted for so that a comprehensive and meaningful inventory is compiled. In practice, a lack of data or the cost of gathering data may be a limiting factor. Sometimes it is tempting to define a minimum emissions accounting threshold (often referred to as a materiality threshold) stating that a source not exceeding a certain size can be omitted from the inventory. Technically, such a threshold is simply a predefined and accepted negative

bias in estimates (i.e., an underestimate). Although it appears useful in theory, the practical implementation of such a threshold is not compatible with the completeness principle of the *GHG Protocol Corporate Standard*. In order to utilize a materiality specification, the emissions from a particular source or activity would have to be quantified to ensure they were under the threshold. However, once emissions are quantified, most of the benefit of having a threshold is lost.

A threshold is often used to determine whether an error or omission is a material discrepancy or not. This is not the same as a de minimis for defining a complete inventory. Instead companies need to make a good faith effort to provide a complete, accurate, and consistent accounting of their GHG emissions. For cases where emissions have not been estimated, or estimated at an insufficient level of quality, it is important that this is transparently documented and justified. Verifiers can determine the potential impact and relevance of the exclusion, or lack of quality, on the overall inventory report.

More information on completeness is provided in chapters 7 and 10.

## Consistency

Users of GHG information will want to track and compare GHG emissions information over time in order to identify trends and to assess the performance of the reporting company. The consistent application of accounting approaches, inventory boundary, and calculation methodologies is essential to producing comparable GHG emissions data over time. The GHG information for all operations within an organization's inventory boundary needs to be compiled in a manner that ensures that the aggregate information is internally consistent and comparable over time. If there are changes in the inventory boundary, methods, data or any other factors affecting emission estimates, they need to be transparently documented and justified.

More information on consistency is provided in chapters 5 and 9.

### Volkswagen: Maintaining completeness over time

Volkswagen is a global auto manufacturer and the largest automaker in Europe. While working on its GHG inventory, Volkswagen realized that the structure of its emission sources had undergone considerable changes over the last seven years. Emissions from production processes, which were considered to be irrelevant at a corporate level in 1996, today constitute almost 20 percent of aggregated GHG emissions at the relevant plant sites. Examples of growing emissions sources are new sites for engine testing or the investment into magnesium die-casting equipment at certain production sites. This example shows that emissions sources have to be regularly re-assessed to maintain a complete inventory over time.

### Transparency

Transparency relates to the degree to which information on the processes, procedures, assumptions, and limitations of the GHG inventory are disclosed in a clear, factual, neutral, and understandable manner based on clear documentation and archives (i.e., an audit trail). Information needs to be recorded, compiled, and analyzed in a way that enables internal reviewers and external verifiers to attest to its credibility. Specific exclusions or inclusions need to be clearly identified and justified, assumptions disclosed, and appropriate references provided for the methodologies applied and the data sources used. The information should be sufficient to enable a third party to derive the same results if provided with the same source data. A “transparent” report will provide a clear understanding of the issues in the context of the reporting company and a meaningful assessment of performance. An independent external verification is a good way of ensuring transparency and determining that an appropriate audit trail has been established and documentation provided.

More information on transparency is provided in chapters 9 and 10.

### Accuracy

Data should be sufficiently precise to enable intended users to make decisions with reasonable assurance that the reported information is credible. GHG measurements, estimates, or calculations should be systemically neither over nor under the actual emissions value, as far as can be judged, and that uncertainties are reduced as far as practicable. The quantification process should be conducted in a manner that minimizes uncertainty. Reporting on measures taken to ensure accuracy in the accounting of emissions can help promote credibility while enhancing transparency.

More information on accuracy is provided in chapter 7.

### The Body Shop: Solving the trade-off between accuracy and completeness

As an international, values-driven retailer of skin, hair, body care, and make-up products, the Body Shop operates nearly 2,000 locations, serving 51 countries in 29 languages. Achieving both accuracy and completeness in the GHG inventory process for such a large, disaggregated organization, is a challenge. Unavailable data and costly measurement processes present significant obstacles to improving emission data accuracy. For example, it is difficult to disaggregate energy consumption information for shops located within shopping centers. Estimates for these shops are often inaccurate, but excluding sources due to inaccuracy creates an incomplete inventory.

The Body Shop, with help from the Business Leaders Initiative on Climate Change (BLICC) program, approached this problem with a two-tiered solution. First, stores were encouraged to actively pursue direct consumption data through disaggregated data or direct monitoring. Second, if unable to obtain direct consumption data, stores were given standardized guidelines for estimating emissions based on factors such as square footage, equipment type, and usage hours. This system replaced the prior fragmentary approach, provided greater accuracy, and provided a more complete account of emissions by including facilities that previously were unable to calculate emissions. If such limitations in the measurement processes are made transparent, users of the information will understand the basis of the data and the trade-off that has taken place.