Reporting Template 4 – Greenhouse Gas (GHG) Emissions

Introduction

Many companies calculate and/or disclose their GHG emissions for purposes other than mainstream financial reporting. For example, GHG emissions may be reported to the Carbon Disclosure Project, The Climate Registry or in accordance with the EU Emissions Trading Scheme. This Reporting Template is designed to ensure, as far as possible, that GHG emissions calculated and/or reported for purposes other than mainstream financial reporting may be used, wholly or partially to satisfy reporting requirements under the CDSB Framework so as to minimize duplication of work. In particular, where GHG emissions results prepared other than for mainstream financial reporting meet the following conditions, they may be used for the purposes of disclosure under the CDSB Framework:

- The GHG emissions cover the group of entities for which consolidated financial statements are prepared (See Section 7.2); and
- The GHG emissions disclosed reflect the characteristics of decision-usefulness described below.

Where these conditions are only partially satisfied, for example, the GHG emissions results prepared for purposes other than mainstream financial reporting cover some of the entities for which consolidated financial statements are prepared, disclosures under the CDSB Reporting Framework should supplement available GHG emissions information so as to satisfy the above conditions. Alternatively, companies should reconcile in qualitative or quantitative terms, the GHG emissions information that is available to satisfy the above conditions.

Disclosure Guide

The Reporting Framework relies on management to determine the content of climate change-related disclosures based on the Reporting Templates. **However, CDSB recommends that as a matter of best practice, companies should at a minimum, disclose actual direct and certain indirect GHG emissions and GHG intensity measures.**

This is because:

- Investors have expressed a particular need for high quality quantitative data on GHG emissions that may be used for benchmarking and analyzing risks associated with future regulation to restrict or minimize GHG emissions. Information about GHG emissions is therefore *relevant* to users; and
- Standards for calculating direct and certain indirect GHG emissions are sufficiently reliable to produce *faithfully represented* disclosures.

Companies should disclose the following at a minimum for the reporting period (See Section 4) and for the group of entities within the reporting boundary of the company (See Section7.2):

- Total gross direct (Scope 1) GHG emissions in CO_2 equivalent metric tonnes;
- Total gross indirect (Scope 2) GHG emissions associated with the use of purchased electricity, steam, heating and cooling in CO_2 equivalent metric tonnes;
- A measure of direct (Scope 1) GHG intensity by reference to the company's revenue[32]; and
- A measure of indirect (Scope 2) GHG intensity by reference to the company's revenue[32].

32 "Revenue" means the gross inflow of economic benefits (cash, receivables, other assets) arising from the ordinary operating activities of a company (such as sales of goods, sales of services, interest, royalties and dividends). This definition is based on International Accounting Standard 18. Revenue might be described in some jurisdictions as "turnover" or "sales".

Gross emissions means total emissions that are actually emitted to the atmosphere before any deductions or other adjustments are made to take account of activities in the reporting period that have reduced or compensated for GHG emissions emitted to the atmosphere.

In order to produce consistent results, GHG emissions disclosed under the CDSB Framework should be made in accordance with one or more of the standards, national, regional or industry specific programs listed below. These are all based on the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard - Revised Edition (GHG Protocol) developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBSCD). This Reporting Template adopts language from and should be read in conjunction with the GHG Protocol. In particular, the Framework uses the GHG Protocol's categorization of emissions by "Scope" in order to distinguish between direct (Scope 1) and indirect (Scopes 2 and 3) emissions, thereby ensuring, as far as possible, that double counting by organizations is minimized, or where it cannot be avoided, is identifiable. Categorization of corporate emissions sources also enables reduction activities to be identified and targeted through the value chain.

In addition, the following information should be considered for disclosure:

- A description of activities during the reporting period that have reduced or compensated for Scope 1 and/or Scope 2 GHG emissions, for example, the purchase of offset credits, acquisition of renewable energy certificates, energy/emissions efficiency gains etc. Disclosures might include, the amount in CO2 equivalents of Scope 1 and/or Scope 2 GHG emissions reduced or compensated for as a result of those activities;
- Indirect (Scope 3) emissions from sources not owned or controlled by the reporting organization but which are a consequence of the activities of the reporting organization;
- A measure of direct (Scope 1) GHG intensity by reference to non-financial output; and
- A measure of indirect (Scope 2) GHG intensity by reference to non-financial output.

Characteristics of decision-useful information under Reporting Template 4

Information about GHG emissions is decision-useful if it is:

- Prepared by reference to one or more of the Standards, national, regional or industry specific programs listed below;
- Supplemented by contextual disclosures explaining the basis on which GHG emissions disclosures have been prepared; and
- Disaggregated/segmented to aid understanding.

Prepared by reference to one or more of the following **Standards:**

- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), (GHG Protocol) available at **www.ghgprotocol.org; and**
- The International Organization for Standardization's ISO 14064-1 – "Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals" available at **www.iso.org.**

And/or any of the following **National or Regional programs** which are based on the GHG Protocol:

- The GHG Mexico Program;
- Philippine Greenhouse Gas Accounting and Reporting Program (PhilGARP);

- China Corporate Energy Conservation and GHG Management Program;
- Brazil GHG Protocol Program;
- The Climate Registry;
- India GHG Inventory Program; and
- The GHG Monitoring and Reporting Manual - Japanese Ministry of Environment see **http://www.env.go.jp/earth/ghg-santeikohyo/manual/index.html** (available in Japanese only).

And/or any **industry specific guidelines** based on the GHG Protocol including:

- IPIECA's Petroleum Industry Guidelines for reporting greenhouse gas emissions (2003); and
- The Aluminum Sector GHG Protocol – Addendum to the WRI/WBCSD Greenhouse Gas Protocol.

And/or **monitoring and reporting guidelines accompanying mandatory trading schemes,** including the EU Emissions Trading Scheme.

Contextual disclosures on GHG emissions should:

- Confirm that GHG emissions disclosures relate to the group of entities for which consolidated financial statements are prepared. Where GHG emissions data has been prepared for purposes other than mainstream financial reporting and/or under other consolidation methods, the consolidation method used should be defined and GHG emissions data should be reconciled in quantitative terms (using estimates if necessary) to the GHG emissions data for the group of entities for which consolidated financial statements are prepared (See Section 7.2);
- Confirm the name or names of the Standard, national or regional program, industry guidelines or trading scheme used to calculate GHG emissions;
- State the quantification methodology for calculating GHG emissions, in particular whether results are:
  - Calculation/estimation based (e.g.: emissions factors applied to activity data, models or material/mass balance),
  - Taken from continuous or intermittent direct measurements, or
  - Based on a combination of measurement and calculation/estimation methods;
- Disclose all assumptions made in the preparation of results;
- Specify any calculation tools used to prepare results;
- Disclose emissions factors and/or the source of emissions factors used to calculate indirect emissions from activity data;
- In support of Scope 2 (indirect) GHG emissions figures companies should provide details in KWh, MWh or GWh of the purchased electricity the company has consumed;
- Disclose the global warming potentials used and the source;
- Describe the main sources of uncertainty in calculations of Scope 1 (direct) and Scope 2 (indirect) emissions e.g.: data gaps, assumptions, extrapolation, metering/measurement, inaccuracies etc;
- Describe intensity measures in accordance with Framework Section 6 so that users are able to assess the company's performance in the context of its industry sector;

- State whether Scope 1 (direct) and Scope 2 (indirect) emissions results have been verified or assured in house or by an independent third party. If so, disclosures should state what level of assurance has been provided (e.g.: limited or reasonable), the scope of emissions covered by the verification or assurance exercise and the standard(s) by reference to which the verification or assurance was conducted; and
- State whether emissions reported for the accounting year vary significantly compared to previous years and/or whether a recalculation of the base year emissions has been triggered by structural changes to the business.

Disaggregation/segmentation of data

A segment breakdown of Scope 1 direct emissions and Scope 2 indirect emissions in CO_2 equivalent metric tonnes should be provided for the main countries or regions in which the reporting organization operates, taking account of local trading and regulatory reporting schemes and the relative regulatory risks in countries classified under Annex 1 and Annex 2 according to the UN Framework Convention on Climate Change process, in order to decide which segments are most exposed to risk.

Scope 1 direct and Scope 2 indirect emissions information should be further subdivided where this aids transparency, by:

- Business units/facilities;
- Source types (stationary combustion, process, fugitive, etc);
- Activity types (production of electricity, transportation, generation of purchased electricity that is sold to end users etc); and
- Each of the six "Kyoto" GHGs (CO_2, CH_4, N_20, HFCs, PFCs and SF_6).

CDSB does not require reporting at facility level because the focus of interest is in risk to the financial operation.