**Greenhouse-gas emissions reporting by businesses**

Self-assessment template

This assessment template is intended to help business apply either of three “primary protocols” (chapter 1) for reporting on greenhouse-gas emissions: the “GRI 305: emissions” protocol, by the Global Reporting Initiative; the “ISO 14064 standard” by the International Standards Organization; and the “greenhouse-gas protocol corporate accounting and reporting standard”, by the World Resources Institute and the World Business Council for Sustainable Development*.*

This assessment template helps businesses understand the type of information, including quantitative data, that they should collect and prepare in the context of monitoring and reporting on their greenhouse-gas emissions. The information presented in the following paragraphs has been extracted from the three protocols mentioned above, plus one report (referenced below).

|  |
| --- |
| General company information |
| Company name |  |
| Name of the action assessed |  |
| Person(s)/organisation(s) that did the assessment |  |
| Date of the Inventory assessment |  |
| Whether the assessment is an update of a previous assessment, and if so, links to any previous assessments |  |
| Objective(s) of the assessment  |  |
| Intended audience(s) of the assessment  |  |
| Opportunities for stakeholders to participate in the assessment |  |
| Does the assessment apply to an individual action or a package of related actions, and if the latter, which policies and actions are included in the package |  |

**Organizational Boundaries**

Which of the following approaches your company is using for reporting?

|  |
| --- |
|  |
| Equity Share [ ]   | Financial Control[ ]  | Operational Control[ ]  |

*Definitions:*

Equity Share: Under the equity share approach, a company accounts for greenhouse-gas emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.

Financial Control: The company has financial control over the operation if the former has the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities.

Operational Control. A company has operational control over an operation if the former or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.

|  |  |  |  |
| --- | --- | --- | --- |
| List of all legal entities or facilities over which you (as the reporting company) have equity share, financial control or operational control | Percent equity share in the legal entity | Does the reporting company have financial control? (yes/no) | Does the reporting company have operational control? (yes/no) |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| If the parent company does not report emissions, consider including an organizational diagram that clearly defines relationship of the reporting subsidiary as well as other subsidiaries |
|  |

**Scope**

Which scope did you use in this inventory, and why?

|  |  |
| --- | --- |
| [ ]  Scope 1[ ]  Scope 2[ ]  Scope 3 | Why: |

*Definitions:*

Scope 1: emissions from sources owned or controlled by the company.

Scope 2: emissions associated with the use (by the company) of grid-supplied electricity, heat, steam and/or cooling.

Scope 3: emissions associated with the company’s value chain.

**Greenhouse gases considered**

Accounting of emissions should be independent of any greenhouse-gas trades, such as sales, purchases, transfers, or banking of allowances.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Emission types | Emission volumes(mtCO2e) | CO2 | CH4 | N2O | HFCs | PFCs | SF6 |
| Scope 1 |  |  |  |  |  |  |  |
| Scope 2 |  |  |  |  |  |  |  |
| Scope 3 |  |  |  |  |  |  |  |

**Timing**

Specify whether the assessment has been conducted ex-ante, or ex-post, or whether it is a combination of both:

|  |
| --- |
| [ ]  ex-ante[ ]  ex-post[ ]  combination of ex-ante and ex-post |
| State the assessment period: |

**Base year**

|  |
| --- |
| Year chosen as base year: |

If the base year is recalculated, it is recommended to explain the basis of, and context for, the recalculation. If applicable, the company should also state any significance threshold applied for deciding on historic emissions recalculation.

|  |
| --- |
| In addition to providing base-year emission estimates (see the table below), it is recommended to clarify concepts and explain any significant[[1]](#footnote-1) emissions changes that trigger base year emissions recalculations. Possible reasons for base-year recalculation include acquisitions/divestitures, outsourcing/insourcing, and changes in reporting boundaries or calculation methodologies, among others. |
| **Base year emissions** |
| **Emission types** | **Emission volumes****(mtCO2e)** | CO2 | CH4 | N2O | HFCs | PFCs | SF6 |
| Scope 1 |  |  |  |  |  |  |  |
| Scope 2 |  |  |  |  |  |  |  |
| Scope 3 |  |  |  |  |  |  |  |

**Methodologies**

|  |
| --- |
| Specify the methodologies that your company uses to calculate or measure emissions (see figure 1 overleaf for an overview of types of emission sources). |
|  |

**Figure 1: information on emissions by source types**



Source: adopted from DEFRA 2009[[2]](#footnote-2)

**Inventory of emissions**

For scope 1 and scope 2 emissions, the following tables illustrate the type of data that constitutes a typical emissions inventory.

|  |
| --- |
| Emissions disaggregated by source types |
| Scope 1: Direct Emissions from Owned/Controlled Operations |  |
| 1. Direct Emissions from Stationary Combustion
 |  |
| 1. Direct Emissions from Mobile Combustion
 |  |
| 1. Direct Emissions from Process Sources
 |  |
| 1. Direct Emissions from Fugitive Sources
 |  |
| 1. Direct Emissions from Agricultural Sources
 |  |
| Scope 2: Indirect Emissions from the Use of Purchased Electricity, Steam, Heating and Cooling |  |
| 1. Indirect Emissions from Purchased/Acquired Electricity
 |  |
| 1. Indirect Emissions from Purchased/Acquired Steam
 |  |
| 1. Indirect Emissions from Purchased/Acquired Heating
 |  |
| 1. Indirect Emissions from Purchased/Acquired Cooling
 |  |

|  |
| --- |
| Emissions disaggregated by facility (recommended for individual facilities with stationary combustion emissions over 10,000 mtCO2e) |
| Facility | Scope 1 emissions |
|  |  |
|  |  |

|  |
| --- |
| Emissions disaggregated by country |
| Country | Emissions (specify Scopes included) |
|  |  |
|  |  |

**Information about emissions-reduction targets**

Companies may want to set an emissions-reduction target, to help contextualize their emissions-reduction efforts. Typically, targets are established in absolute or relative (so-called intensity-based) terms.

*Definitions:*

Absolute targets: they compare greenhouse-gas emission levels in the target year to the levels in the base year.

Intensity targets: they measure decreases in greenhouse-gas emissions relative to a certain parameter, such as the tonne of product produced, or the floor space.

Type of target

|  |
| --- |
| What type of target your company is pursuing?  |
| [ ]  Absolut target |
| [ ]  Intensity target |

Link of the target to base year:

|  |
| --- |
| What type of target base year your company is pursuing?  |
| [ ]  Fixed target base year |
| [ ]  Rolling target base year (the *emissions are always compared to the previous year).* |

Decide on the target boundary

*Definition:*

The target boundary explains what has been included or covered by the target – for example, the emissions sources and activities concerned, or the geographic operations concerned. Stated differently, a target may coincide with the corporate carbon footprint, or may be a sub-set of it. The latter makes sense, for example, in the context of an emissions trading scheme that regulates only of sub-set of the company’s greenhouse-gas emissions.

|  |
| --- |
| What target boundary your company has defined?  |
|  |
| **Define the target completion date**  |
|  |

**Third party verification**

|  |
| --- |
| Has the inventory been verified by an accredited third party? |
| [ ]  No[ ]  Yes (if yes, fill in verifier contact information below and attach verification statement) |
| Date of verification: MM/DD/YYYY |
| Verifier Name:  |
| Contact information: |

**Offsets**

|  |
| --- |
| Report on offsets that have been bought or developed *outside* the inventory boundary |
| Greenhouse-gas emission levels (mtCO2e) | Type of offset project | State whether the offsets were verified/certified and/or approved by an external greenhouse-gas emissions-reduction programme |
|  |  |  |
|  |  |  |

|  |
| --- |
| Report on cutbacks *inside* the inventory boundary that have been traded/transferred as offsets to a third party |
| Greenhouse-gas emission levels (mtCO2e) | Type of offset project | State whether the offsets were verified/certified and/or approved by an external greenhouse-gas emissions-reduction programme |
|  |  |  |
|  |  |  |

**Additional information companies may want to provide**

|  |
| --- |
| Emissions from greenhouse-gases not covered by the Kyoto Protocol |
|  |

|  |
| --- |
| Data and information on the reasons of emissions changes (such as process changes, efficiency improvements, or plant closures) that did not trigger a recalculation of the base year |
|  |

|  |
| --- |
| Greenhouse-gas emissions data for all years between the base year and the reporting year (including details of and reasons for recalculations, if appropriate) |
|  |

|  |
| --- |
| Relevant performance indicators, such as emissions per kilowatt-hour generated, or per unit of turnover |
|  |

|  |
| --- |
| An outline of any greenhouse-gas management or reduction programmes or strategies |
|  |

|  |
| --- |
| Information on any predetermined provisions addressing greenhouse gas-related risks and obligations |
|  |

|  |
| --- |
| An outline of any external assurance provided and a copy of any verification statement, if applicable, of the reported emissions data |
|  |

|  |
| --- |
| Information on the quality of the inventory (notably, regarding the uncertainty of the emission estimates) as well as an outline of policies in place to improve inventory quality |
|  |

|  |
| --- |
| Information on any greenhouse-gas emissions sequestration |
|  |

# Annex: recommended check list of information to report

|  |  |
| --- | --- |
| **Relevant information** | **Category** |
| General company information | company information |
| State the reporting period covered | reporting period |
| State the reason for any significant changes in emissions since previous year | changes in emissions and the relevant reasons |
| State the measuring and reporting approach followed | Organisational boundary |
| State the scopes included. Companies should provide a list specifying the activity types included in each scope | Operational scops |
| Provide detail of any specific exclusions of emissions from scopes 1 and 2  | Operational scops |
| State the conversion tools / emission factors you used | Operational scops |
| Provide a breakdown by country of total GHG emissions | Operational scops |
| Provide detail of any exclusions of countries if a global total is reported | Operational scops |
| Provide detail of any exclusions of countries if a global total is reported | Operational scops |
| State the base year chosen and approach used to set the base year | base year |
| State base year recalculation policy | base year |
| State appropriate context for any significant emissions changes that trigger baseyear emissions recalculation (acquisitions/divestitures, outsourcing/insourcing,changes in reporting boundaries or calculation methodologies, etc.). | base year |
| State your target, including scopes covered and target completion date. Providea brief overview of progress towards target. | Target |
| State the name of the person(s) responsible for achievement of this target and their position in your organisation | Target |

|  |  |
| --- | --- |
| **Relevant information** | **Category** |
| State the reason for your intensity measurement choice | intensity measurement  |
| State the reason for any significant changes in your intensity measurement fromthe previous year | intensity measurement  |
| Provide an outline of any external assurance received and a copy of anyassurance statement, if applicable | External AssuranceStatement |
| For purchased carbon credits state the reduction in tonnes of CO2e per year | Carbon Offsetting |
| State the type of carbon credit (Kyoto compliant or non-Kyoto compliant credit)• If carbon credits are Kyoto-compliant, organisations should specify whichexternal GHG programme has approved them, provide the name of thesupplier and a hyperlink to the project documentation where possible• If carbon credits are non-Kyoto compliant, organisations should provide thename of the supplier, a hyperlink to the project documentation where possible,details of who developed the quantification methodology, how the project wasvalidated and verified and how other ‘good quality criteria’ were met. | Carbon Offsetting |
| For purchased green tariffs state the reduction in tonnes of CO2e per year | green tariffs  |
| State the supplier and the name of the tariff | green tariffs  |
| State the additional carbon saving associated with the tariff as a percentage (%) | green tariffs  |
| State in MWh the amount of electricity generated from owned or controlled sources. State if the owned or controlled source is onsite or offsite. | electricity generation |

Source:

DEFRA, 2009: *Guidance on how to measure and report your greenhouse gas emissions*. Department for Environment, Food, and Rural Affairs. United Kingdom.

1. The *GHG Protocol Corporate Standard* makes no specific recommendations as to what constitutes “significant”. However, some greenhouse-gas emission-reduction programmes do specify numerical significance thresholds. For example, in the California Climate Action Registry, the change threshold is 10 percent of the base year emissions, “determined on a cumulative basis from the time the base year is established”. [↑](#footnote-ref-1)
2. DEFRA, 2009: *Guidance on how to measure and report your greenhouse gas emissions*. Department for Environment, Food, and Rural Affairs. United Kingdom. [↑](#footnote-ref-2)