

WRI/WBCSD Review of US Department of Energy Proposed Revision of the General Guidelines for Voluntary of Greenhouse Gases Reporting (Section 1605(b) of the Energy Policy Act of 1992 (EPACT), 42 U.S.C. 13385(b))

The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol team reviewed the draft DOE Proposed Revision of the General Guidelines for Voluntary of Greenhouse Gases Reporting with the goal of improving the technical and policy aspects of the Guidelines and promoting consistency and alignment with the revised GHG Protocol Corporate Accounting & Reporting Standard. We would like to thank the Department of Energy (DOE) for the opportunity to comment on the proposed revisions and hope that our comments are helpful and constructive.

This review includes a comparison of the current proposed revisions to the guidelines to the *Revised Edition* of the GHG Protocol Corporate Standard, which is due for publication at the end of February 2004 (referred to as “GHG Protocol” in this document). The revised edition introduces a number of (mostly minor) changes compared to the first edition. These changes have been made in response to an extensive structured feedback process with companies, NGO’s and policy makers conducted over a two-year period.

General Comments

We support the US Government's stated need to revise the current General Guidelines to enhance their utility and credibility. We also support several of the recommendations made by the Secretaries of Energy, Commerce and Agriculture, and the Administrator of the EPA on July 8, 2002 for developing specific revisions to the program Guidelines (Pg. 7). Specifically these recommendations are: standardize widely accepted, transparent accounting methods; encourage corporate or entity-wide reporting; factor in international strategies as well as State-level efforts; minimize transaction costs for reporters and administrative costs for the Government, where possible; and assure the voluntary reporting program is an effective tool for reaching the 18% goal.

We believe, however, that the draft guidelines fall short on these recommendations for a number of reasons as indicated below:

- *"Standardize widely accepted, transparent accounting methods"*

Considerable progress has been made on the standardization of corporate GHG accounting and reporting since the establishment of the original 1605b guidelines. GHG

Protocol and its associated calculation tools - the product of a broad collaborative process of business, NGO's, governments, and trade associations - has been widely adopted by numerous businesses and climate programs in the US and beyond. However, the draft guidelines fail to fully utilize these standards and would, in its current form contribute to confusion and inconsistency between different reporting programs. Furthermore, the flexibility currently inherent in the guidelines does not serve the purpose of driving standardization.

In particular, the revised guidelines define offsets in a way that differs significantly from the emerging consensus among most climate programs. The concept of offsets, as used by GHG Protocol and others is strictly defined as an emission reduction compared to a hypothetical baseline that includes additionality considerations. We recommend DOE to refer to the GHG Protocol revised edition's chapter 8 for clarification.

- *"Encourage corporate or entity-wide reporting"*

The draft's focus on corporate scale reporting coupled with a requirement those reductions are only registered if an inventory of total emissions is provided is a positive step forward. However, the flexibility currently inherent in the guidelines does not serve the purpose of enhancing consistency and transparency, and might compromise the credibility of the program with stakeholders, which in turn might discourage companies from reporting under the program.

- *"Factor in international strategies as well as State-level efforts"*

Several US states are developing, or have operational, GHG registries. All build on the GHG Protocol and focus on registering absolute emissions and emission reductions, if applicable, over time. Similarly, the World Economic Forum Global GHG Registry uses GHG Protocol and register emissions. The draft guidelines' partial focus on registering *reductions* is inconsistent with most state and international strategies that emphasize the need to register complete, consistent, accurate, and transparent organizational level *emissions* information. While specific reductions are important, what ultimately counts the most from the atmosphere's perspective is less emissions overall.

- *"Minimize transaction costs for reporters and administrative costs for the Government, where possible"*

We fail to see how the proposed guidelines will reduce transaction costs for companies. The fact that they are incompatible with currently accepted best practices will increase transaction costs for reporters. Many companies who prepare GHG inventories want these to be capable of serving multiple objectives and GHG programs. However, an

inventory prepared using the 1605b guidelines will be incompatible with many existing voluntary or mandatory GHG programs based on best practices. This will necessitate reporters having to redo their inventories and entailing additional costs.

- “Assure the voluntary reporting program is an effective tool for reaching the 18% goal”

1605b might additionally consider instating a mechanism for registering voluntary long-term reduction commitments, not only reductions as they have been achieved before reporting. This might be more effective than just encouraging the reporting of emissions. Please refer to GHG Protocol chapter 11 on corporate target-setting for further information.

Emissions versus reductions

Given the lack of conceptual clarity, consistency, and rigor in defining the reduction options, we fail to see how the reported reductions would enable any user of the information to assess their aggregate effect on the climate, or make meaningful comparisons between companies. What is most needed for clarification is that a distinction be made between reductions over time (as quantified with reference to a historical base year) and reductions compared to a hypothetical scenario of what would have happened in the absence of a certain activity (the latter type of reductions are essentially what we would denote as “avoided emissions”, or “offsets” i.e., reductions occurring outside the GHG reporting boundary of the company that is using it as an offset). We recommend 1605b refer to the GHG Protocol revised edition’s chapter 5 and 8 for clarifying these points.

The greatest value to companies and other stakeholders (given that there are no promises that any registered reductions will be rewarded) is to provide a complete, consistent, accurate, and transparent record of corporate-wide emissions. These should be broken down by facility, gas, direct/indirect, and source/activity, and compared over time to a historic base year, while maintaining data consistency over time (comparing like with like). Emission reductions over time can thus easily be demonstrated (i.e. if overall emissions or intensity have actually gone down), for both direct and indirect emissions. This information will carry most weight in any future decisions to award credits/baseline protection - since it can be based on standardized and verifiable information. 1605b should therefore, focus on registering total company *emissions* and indicating how these change over time relative to a historic base year. Discrete project *reductions* (or offsets) should be reported separately (avoided emissions belong into this category from our point of view, see definitions under 300.2).

GHG Accounting and Reporting Principles

We recommend that the registry require reporting entities to account and report their GHG emissions according to the following four principles that are based on established financial accounting and reporting practices. This will ensure expectations are clearly set to promote the highest possible degree of rigor and credibility of the reported information.

- **Complete** - Account for all GHG emission sources and activities within the specified organizational and operational boundaries. Any specific exclusions should be stated and justified.
- **Consistent** - Allow meaningful comparison of emissions performance over time. Any changes to the basis of reporting should be clearly stated to enable continued valid comparison.
- **Transparent** - Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Important assumptions should be disclosed and appropriate references made to the calculation methodologies used
- **Accurate** - Exercise due diligence to ensure that GHG estimates have the precision needed for their intended use, and provide reasonable assurance on the integrity of reported GHG information.

In the interest of achieving the highest quality of data, these guiding principles must be established to ensure that reporting entities work toward the same goal with respect to the environmental integrity of their GHG emissions reports.

Specific Comments

§ 300.1 General

- (b) Registration and reporting options – Please see our general comments for further discussion. As the emphasis of the revised guidelines is on entity-wide reporting, we suggest that entity-wide inventories be registered while reductions are simply reported.

§ 300.2 Definitions (see also the glossary for the revised GHG Protocol)

- Avoided emissions - This definition is confusing and limits the concept of avoided emissions to the generation and sale of electricity, steam, hot water or chilled water produced from energy sources that emit fewer greenhouse gases per unit than other competing sources of these forms of distributed energy. Avoided emissions can result from many other types of activities as defined by GHG Protocol's scope 2 and 3 categories. Furthermore, the term “avoided emissions” implies that some emissions would have been emitted in some hypothetical scenario that is now not emitted in reality. This in turn implies that avoided emissions are quantified compared to a

baseline (the hypothetical scenario), and not over time, which would need to be specified in this definition for clarity. It is also not clear whether avoided emissions could come from purchased offsets.

- De minimis emissions – This definition neglects that the guidelines state that de minimis emissions may be omitted from the organization’s report.
- Direct emissions - This definition is dependent on the method selected to define the entity's organizational boundaries in § 300.4. This is normally based on control or equity share. We recommend replacing this definition with the one used in GHG Protocol which is well established and used by most GHG programs, i.e., emissions from sources that are owned [*if equity share is being used to define the organizational boundaries*] or controlled [*if control is being used to define the organizational boundaries*] by the reporting company.
- Fugitive emissions – This definition seems to blend “process emissions” and “fugitive emissions”. Fugitive emissions would better be defined as “Emissions that are not physically controlled but result from the intentional or unintentional releases of GHGs.” A separate category for process emissions, the release of which can be physically controlled by slowing or stopping their generating processes, should be included for clarity. A definition of process emissions could be “Emissions generated directly from manufacturing processes other than combustion”.
- Indirect emissions - This definition is confusing and unnecessarily narrow, for example why exclude process and fugitive emission sources? As with the definition of direct emissions, it would be clearer if it specified the criteria for determining organizational boundaries (ownership or control) and specified that indirect emission sources are owned or controlled by another entity. We recommend replacing this with the definition in GHG Protocol, i.e., emissions that are a consequence of the activities of the reporting company, but occur from sources owned or controlled by another company.
- Net emissions or net entity-wide emissions - we recommend not summing the combined effect of sequestration and emissions or direct and indirect emissions, since the reliability of these different types of information may significantly vary. Instead we recommend asking reporters to provide a transparent account of the different categories of information separately.
- Net emission reductions or net entity-wide emission reductions - This definition is confusing. We believe the best way to measure an entity's reduction in emissions is in relation to a base year, i.e., a single year or an average over multiple years against which a company's emissions are tracked over time.

- **Offset** - As written this definition could be applied to reductions in emissions associated with the purchase of electricity (which is a required element of the entity emissions report) or any other indirect emission caused by the entity. We do not believe this to be the intention of the DOE. We recommend using the definition of offset used in GHG Protocol, i.e., a discrete GHG reduction used to compensate for GHG emissions elsewhere, for example, to meet a voluntary or mandatory GHG target or cap. Offsets are generated by GHG mitigation projects and are calculated relative to a baseline that represents a *hypothetical scenario* for what emissions would have been in the absence of the project. To avoid double counting, the reductions giving rise to the offset must occur at sources or sinks not included in the target or cap for which it is used.
- **Missing definitions:**
 - There needs to be a definition of what emissions are accounted for in relation to purchased electricity, heat or steam since this is a required reporting category. The GHG Protocol defines scope 2 emissions in terms of the activity that *directly* causes the emission (e.g. “emissions associated with the *generation* of electricity, heat steam, or cooling purchased *for own consumption*”). Like all definitions used by GHG Protocol this is an outcome of an extensive dialogue with many different stakeholders. We believe this definition to be accurate and practical, given that this can be calculated on the basis of publicly available electricity emissions factors.
 - The definition of any sort of boundaries is missing.
 - There is no definition of project emission reductions and how these are quantified

§ 300.3 Guidance for defining the reporting entity.

- The current flexibility in definition will not meet the stated goals of standardization and consistency. We appreciate the difficulties involved in selecting a single method for defining an entity for reporting purposes since each approach has certain disadvantages. We also appreciate the effort to encourage entities to participate at the highest level of aggregation. However, we think it is important for the guidelines to be more prescriptive here since we believe the disadvantages of selecting a single approach will be far outweighed by those associated with giving participants too much flexibility and the resulting inconsistencies and accusations of cherry picking that will result. We recommend that the reporting entity be defined as the organization representing the highest level of domestic consolidation for the specified method of defining organizational boundaries (i.e., 300.4), i.e., control or equity share. This would require deleting the sufficient condition of being a legally distinct organization etc. The boundary of this organization would be defined by a clear set of

organizational boundary criteria that are consistent with common financial accounting practices (see next section). This would also have the additional advantage of eliminating double counting (assuming all participants follow the same consolidation approach), which can be significant if different organizations report at different aggregation levels. We recommend that 1605b adopts the guidelines developed for the revised edition of the GHG Protocol (chapter 3), which have been drafted with great care and have been reviewed extensively by businesses actually struggling with this issue in practice.

§ 300.4 Selecting operational boundaries for reporting.

- The overview (IIc) section refers to “entity boundaries”, while this section refers to operational boundaries. Internal consistency in this sort of terminology is essential, let alone consistency with other approaches.
- To be consistent with GHG Protocol, this section should be titled “Setting Organizational Boundaries”. This section borrows the term “operational boundary” from GHG Protocol but uses it in a different context. In the context of GHG Protocol, the operational boundary relates to the level of physical emission sources and emissions generating activities. It determines which emissions are included in the inventory, and which emissions are direct or indirect for accounting and reporting purposes. In contrast, the organizational boundary defines the organization for GHG accounting and reporting purposes, i.e., it relates to legal structures, operations, etc. Since there are many types of legal structures there is a need to provide standardized organizational boundary definitions. Please see Chapter 3: Setting Organizational Boundaries and Chapter 4: Setting Operational Boundaries of the revised edition of the GHG Protocol for more information.
- This section mixes together the concepts of control and ownership and as written would not result in consistent emissions information by participants. It is also insufficient to guide participants in drawing up organizational boundaries, given the different types of shared and joint operations that exist within companies. GHG Protocol includes specific discussion on accounting for leases, franchises, rentals, and outsourcing based on generally accepted accounting standards for these arrangements. Operating leases and finance leases are important in this regard and should be specifically cited in the revised guidelines.
- We recommend that the guidelines select one of the following three criteria described below for defining an entity's organizational boundaries: equity share, financial control, or operational control.
 - (i) **Equity Share** - a company accounts for GHG 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. Typically, the share of economic risks and rewards in an operation is aligned with the company's percentage ownership of that operation, and equity share will normally be the same as the ownership percentage. Where this is not the case, the economic substance of the relationship the company has with the operation should always override the legal ownership form to ensure that equity share reflects the percentage of economic interest. The principle of economic substance taking precedent over legal form is consistent with international financial reporting standards.

(ii) Financial Control - a 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. Financial control usually exists if the company has the right to the majority of benefits of the operation, however these rights are conveyed. Similarly, a company is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets. Under this criterion, the economic substance of the relationship between the company and the operation takes precedence over the legal ownership status, so that the company may have financial control over the operation even if it has less than a 50 percent interest in that operation. This criterion is consistent with international financial accounting standards; therefore, a company has financial control over an operation for GHG accounting purposes if the operation is considered as a group company or subsidiary for the purpose of financial consolidation, i.e., if the operation is fully consolidated in financial accounts. If this criterion is chosen to determine control, a company accounts for 100% of emissions from operations over which it or one of its subsidiaries has financial control. However, emissions from joint ventures where partners have joint financial control are accounted for based on the equity share approach.

(iii) 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. This criterion is consistent with the current accounting and reporting practice of many companies that report on emissions from facilities, which they operate (i.e. for which they hold the operating license). Under the operational control approach, a company accounts for 100% of emissions from operations over which it or one of its subsidiaries has operational control.

- The strength of these approaches to aggregating emissions is that they can be applied to any type of business arrangement and therefore provide a standard method or

determining how an organization can be consolidated. If all reporting entities use the same approach, there will be no double counting of direct emissions between two or more organizations. They also provides a method for determining the highest level of possible domestic aggregation by isolating the organizational level that can not be aggregated into another domestic entity's organizational boundary. We encourage adopting one of these standardized approaches for determining organizational boundaries, especially as the definitions are already quite familiar to accountants and have been determined as robust by generations of accounting practice fine-tuning.

§ 300.5 Submission of an entity statement.

- (a) Initial entity statement requirements - A transparent and complete entity statement would be a welcome addition to the guidelines. It should also specify that reporting entity provide a list of all facilities that are included in its organizational boundaries.
- (a) (3) Initial entity statement requirements – This seems to imply that there is no standard for which subsidiaries will be included. We would suggest replacing this with a requirement to state the organizational boundaries criteria employed to aggregate emissions to the reporting organization's level. Specific exceptions to these criteria should be listed and explained.
- (a) (6) Initial entity statement requirements - If the revised guidelines select a single organizational boundary approach, there will be no need for organizations to state that they know of no double counting, as it will be impossible. If the revised guidelines allow flexibility to choose between financial control, operational control, or equity share, double counting will remain possible between organizations using different criteria. If the goal is to eliminate double counting, we suggest selecting a single approach. See Chapter 3 of GHG Protocol for further guidance.
- (b) Reasons for changing the scope of entity reports - We suggest standardizing the specific requirements for base year adjustment to ensure consistent comparisons of “like with like” over time. A list of accepted criteria for making adjustments is provided in Chapter 5 of GHG Protocol. We suggest that the guidance on how and when to make base year adjustments be provided separately from this section on entity statements.
- (c) Documenting changes in amended entity statements - We suggest that significant changes to data gathering and calculation methodologies also be documented as changes in amended entity statements.

§ 300.6 Emissions inventories

- (b) (1) Direct emissions inventories - For better clarity and consistency use GHG Protocol definition for direct emissions as defined above. We also recommend reporting emissions from each of the six GHGs separately.
- (b) (2) Direct emissions inventories - We support the requirement for separate reporting of emissions from the combustion of biomass fuels.
- (c) Inventories of indirect emissions associated with purchased energy - We support the requirement for separate (from direct emissions) reporting of this important category of emissions. We recommend changing the definition of this class of indirect emission to “emissions associated with the generation of energy purchased *for own consumption*”. This added clause ensures that there will be no double counting of emissions in this indirect category by two different companies, as only the end user accounts for these emissions in this category (purchased electricity is often resold). Without this clause, double counting and double registration could occur, for instance, when a utility purchases electricity which it transports through its transportation lines and resells to an end user – both the utility and end user would have purchased the electricity and reported the associated indirect emissions. See GHG Protocol chapter 4: Setting Organizational Boundaries and Appendix A for more guidance on accounting of indirect emissions associated with purchased energy.
- (c) (2) Inventories of indirect emissions associated with purchased energy - We support and encourage the eligibility of other indirect emissions for registration. There are significant reduction opportunities available from these sources for most companies.
- (d) Entity-level inventories of changes in terrestrial carbon stocks - We recommend the separate reporting of direct emissions, indirect emissions, and changes in carbon stocks. Accounting for each category separately ensures completeness and transparency. This is particularly important for imported and exported energy, which should not be netted. Please see GHG Protocol chapter 4 for more guidance.
- (e) Treatment of de minimis emissions and sequestration - Establishing which sources qualify as de minimis will require estimating emissions from those sources. Once they have been estimated, we fail to see the value of excluding such sources unless it is prohibitively expensive or burdensome to do so. 'Materiality' is a term that is relevant in the context of verification and material discrepancy. A material discrepancy is an error that results in the reported quantity being significantly different to the true value. The point at which a discrepancy becomes material is referred to as the materiality threshold. Thus materiality threshold is directed at providing some guidance to verifiers to maintain consistency in the

treatment of errors. It should not be a permissible quantity of emissions that a reporting entity can leave out of its inventory. Also, given the difficulties in defining a threshold level that can be applied universally to all types of companies (either in percentage or absolute terms) we do not support the use of a single threshold. Instead participants should strive for accuracy and completeness and be transparent about any omissions and justify why they are not deemed to be material. See GHG Protocol chapters 1 and 10 for more information.

- (f) Covered gases - We support the inclusion of the six main GHGs reported separately from any other gases with warming potential.

§ 300.7 Net entity-wide emission reductions.

- (a) Assessing entity-wide emission reductions: It is not clear how avoided emissions, which represent a cumulative measure of emissions, could be summed with a comparison of emissions (or intensity) over time. A comprehensive reporting template would be of use here. We believe the guidelines are making the calculation of reductions unnecessarily complicated. We believe it would be simpler to focus on tracking overall corporate emissions over time relative to an historical base year (adjusted as appropriate to maintain consistency over time in the event of structural adjustments such as acquisitions and divestitures or methodological changes). This would also result in information that is more consistent, transparent, accurate, credible and verifiable.
- (b) Assessing the emission reductions of entities with small emissions: We do not support the provisions to exempt small emitters from having to do an entity wide inventory. WRI, for example, reports annually on its organization wide inventory of its emissions. WRI has developed a simple to use guide consistent with the *GHG Protocol* to help office-based organizations understand how to track and manage their emissions. *Working 9 to 5 on Climate Change: An Office Guide* is accompanied by a suite of calculation tools, including one for using a survey method to estimate employee commuting emissions. The Guide and tools can be downloaded from the *GHG Protocol* website (www.ghgprotocol.org). We believe the focus of the 1605b guidelines should be company (or organizational) reporting. If the DOE wishes to encourage reporting by individuals or households it should develop a specific program for this purposes, rather than try to accommodate them in a system that is focused on and almost exclusively used by organizations.
- (c) Net emission reductions achieved by third parties (offsets): We believe it is a mistake to mix the definition of entity reductions as outlined in § 300.8 with the term offsets. This is inconsistent with how GHG programs in the US and internationally uses the term and it will not be deemed credible in GHG markets. Instead, offsets should be accounted for using a project quantification method, such as the

forthcoming *GHG Protocol Project Quantification Standard*, that addresses the following accounting issues:

- ***Defines the baseline scenario and emissions:*** the baseline scenario represents what would have happened in the absence of the project. The baseline emissions are the emissions associated with this scenario. In practice, the selection of a baseline scenario always involves uncertainty, because it represents a hypothetical scenario for what would have happened without the project. The project reduction is calculated as the difference between the baseline and project emissions.
- ***Demonstrates additionality:*** this relates to whether the project has resulted in emission reductions or removals in addition to what would have happened in the absence of the project. It involves demonstrating that the project itself is not the baseline, and that project emissions are less than baseline emissions. Additionality ensures the integrity of the fixed cap or target for which the offset is used. Each reduction unit from an offset allows the organization with a cap one additional unit of emissions above its target level. If the project were going to happen anyway (i.e., is non-additional), global emissions would be higher by the number of reduction units issued to the project, than it would have been without the project.
- ***Identifies and quantifies relevant secondary effects:*** these are GHG emissions changes resulting from the project not captured by the primary effect(s).¹ Secondary effects are typically the small, unintended GHG consequences of a project and include leakage (changes in the availability or quantity of a product or service that results in changes in GHG emissions elsewhere) as well as changes in GHG emissions up and downstream of the project. If significant, secondary effects must be incorporated into the calculation of the project reduction. Corporate GHG accounting does not include procedures to address secondary effects because concerns about the shifting of emissions are addressed by proper construction of organizational and operational boundaries and baseline adjustments.
- ***Addresses reversibility:*** some projects achieve reductions in atmospheric carbon dioxide levels by removing and/or storing carbon in biological systems, e.g., forestry and land use management projects. These reductions may be temporary in that the removed carbon dioxide may be returned to the atmosphere at some point in the future through intentional activities or accidental occurrences – such as harvesting of forestland or forest fires, etc. The risk of reversibility should be

¹ Primary effect is the specific GHG reducing elements or activities (reducing GHG emissions, carbon storage, or enhancing GHG removals) that the project is intended to achieve.

assessed, together with any mitigation or compensation measures included in the project design.

§ 300.8 Calculating emission reductions

- (b) Calculation methods: The option of selecting from several approaches is problematic if the goal is to improve standardization and consistency. The only standardized and universally relevant approach to measuring corporate reductions is by looking at how overall emissions change over time relative to a base year. Companies should additionally be able to report information on their emissions performance using, for example, a relevant intensity ratio (also reporting on changes over time in relation to a base year). The draft guidelines allows entities to use five different structural approaches to claiming an emission reduction, but provides no guidance on when a specific approach is appropriate or what criteria or level of stringency is required. Furthermore, entities can mix and match all of the approaches within a single report. This flexibility opens up the system to the possibility of gaming and is not consistent with the President's stated aim of standardizing GHG accounting and reporting practices. We therefore, recommend the purpose of registration should be for registering overall corporate *emissions* and not *reductions*.
- (b) (1) Changes in emissions intensity: It is not clear how the reduction would be calculated here. Would the reduction be calculated relative to historical emissions intensity and then converted to absolute emissions based on a measure of activity level? A key point here is that intensity reductions should not be considered real emission reductions, but explicitly referred to as intensity reductions. Also, when reporting on intensity ratios, companies should be required to report absolute emissions as well, in order to enhance transparency.
- (b) (2) Changes in absolute emissions: It is not clear how a company would demonstrate that any reductions derived from such changes were not achieved as a result of reductions in U.S. output (is this meant to be the reporting entities output instead?), or major shifts in the types of products or services produced. Also, what is wrong with reductions achieved from switching to products that are less GHG intensive to produce or use? Shifting the economy towards less GHG intensive products and services represents a key GHG reduction strategy for most countries.
- (b) (4) Changes in avoided emissions (for actions within entity boundaries): this section is confusing and most likely contains some conceptual flaws. We are at a loss understanding why it refers to *changes* in avoided emissions. Avoided emissions as such should only be credited, if additional (see comments on definition of avoided emissions, that of offsets, and 300.7 (c). Section (ii) is not comprehensive.
- (e) Determining the entity responsible for emission reductions: The guidelines state that "the entity presumed to be responsible for emission reduction, avoided emission

or sequestered carbon is the legal owner of the facility, land or vehicle" - this seems to imply that companies can only be responsible for direct emissions reductions from sources they legally own (or presumably control if that is the criteria selected in § 300.4). This is clearly not the case as recognized by the fact that the draft guidelines include companies to report emissions from purchased electricity.

§ 300.10 Certification of reports:

- (a) The requirement for CEO sign off is tantamount to a requirement for independent verification for most CEO's. It is not clear why certifying the accuracy of GHG reductions by CEO would be any harder for international emissions.

§ 300.12 Acceptance of reports and registration of entity emission reductions:

- (b) Registration of emission reductions: We do not support registration of reductions. We believe the focus should be on registering a company's absolute emissions changes over time relative to a historic base year. We also do not support excluding any credible corporate wide emissions reductions that occurred before 2002. To do so would be unfair and constitute a threat to every voluntary GHG program in the US.