



International Federation of Accountants

545 Fifth Avenue, 14th Floor, New York, NY 10017 USA

Tel +1 (212) 286-9344 Fax +1 (212) 286-9570 www.ifac.org

Agenda Item

B

Committee: IAASB Consultative Advisory Group

Meeting Location: Dubai

Meeting Date: March 9 – 10, 2009

Assurance on Carbon Emissions Information

A. Objectives of Agenda Item

- A1. To review key matters identified in an Issues Paper discussed by the IAASB at its December 2008 meeting. The substance of that Issues Paper and key points from the IAASB's consideration of it are included in this paper.

B. Task Force

- B.1 Prof. Roger Simnett (former IAASB member, and chair of the IFAC Sustainability Experts Advisory Panel) and Caithlin McCabe (IAASB member) have been appointed as co-chairs of the task force. Further members are currently being appointed to the task force.
- B2. Given the need for emissions-specific expertise on this project, a Project Advisory Panel of 14 members has been established, and has assisted with the content of the roundtables (see paragraph C.1 below), and the preparation of the Issues Paper discussed by the IAASB at its December meeting. PAP members are:
- Prof. Dr. Peter Eimers, PricewaterhouseCoopers, The Netherlands
 - Maria Fatima Reyes, Philippine Institute of CPAs, Philippines
 - Dr. Nancy Kamp-Roelands, Ernst & Young, The Netherlands
 - Julie Desjardins, CICA, Canada
 - Dr. Jeroen Kruijd, PricewaterhouseCoopers, The Netherlands¹
 - Stirling Habbitts, ING Wholesale Banking, The Netherlands
 - Yoichi Mori, JICPA, Japan
 - James McKenzie, Office of the Auditor General of Canada
 - Robert Casamento, Ernst & Young, UK
 - Eric Dugelay, Deloitte Conseil, France
 - Alun Bowen, KPMG Audit LLC, Kazakhstan

¹ Dr. Kruijd attended the IAASB meeting in December and assisted in presenting the Issues Paper to the IAASB.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- Richard Spencer, ICAEW, UK
- Eric Koudijs, KPMG Sustainability, The Netherlands
- Beth A. Schneider, Deloitte & Touche, USA

C. Background to this Project

C.1 The IAASB approved the project proposal on this topic at its December 2007 (Washington) meeting. Since that time, 4 roundtables have been held as follows:

- Oceania roundtables were held in Sydney and Melbourne in May. They were held in conjunction with the University of NSW as part of an Australian Research Council grant to explore this topic. The Institute of Chartered Accountants in Australia and CPA Australia hosted the roundtables.

Australia has a number of voluntary and state-based regulatory schemes currently in operation, has recently introduced a National Greenhouse and Energy Reporting Act, and in 2010 will commence a national emissions trading scheme. In October 2008, the Department of Climate Change released an “External Audit Consultation Paper” canvassing such issues as the scope of audits, which standards should be applied, and the qualifications of auditors.

- A North American roundtable was held in Toronto in September. The Canadian Institute of Chartered Accountants hosted the roundtable.

Most participants were from Canada. Both the Canadian federal government and the Alberta government have introduced mandatory reporting requirements for major emitters, and have set emissions intensity limits. The Canadian federal government has also set out a regulatory framework to establish a national emissions trading scheme.

- A European roundtable was held in Brussels on 5 December. It was hosted by the Fédération des Experts Comptables Européens

Europe has had an emissions trading scheme since 2005². The EU ETS is the largest multi-national emissions trading scheme in the world. It covers more than 10,000 installations in the energy and industrial sectors which are collectively responsible for close to half of the EU’s emissions of CO₂ and 40% of its total greenhouse gas emissions. In addition, some member states have additional reporting or trading

² In an ETS, a central authority usually sets a limit, or “cap,” on carbon emissions, and entities in the scheme are given tradable credits (allowances) that represent the right to emit a specific amount of GHGs. The total amount of credits cannot exceed the cap, thereby limiting total emissions to that level. Entities that pollute beyond their allowance must either buy credits from those who pollute less than their allowance, or face penalties. In effect, the buyer is being fined for polluting, while the seller is being rewarded for having reduced emissions. Thus, entities that can easily reduce emissions will do so, and those for which it is harder will buy credits. The rationale behind such schemes is to provide market incentives for emission reductions to take place where the cost of the reduction is lowest.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

systems, for example, the UK's Carbon Reduction Commitment (formerly the Energy Performance Commitment).

- C2. Each roundtable had 25-30 participants. Participants were from a diverse range of stakeholder groups, including:
- Accounting firms and accounting bodies
 - Government regulators and policymakers
 - Reporting companies
 - Auditors-Generals' Offices
 - Non-accounting assurers and standard-setters
 - Institutional investors
 - NGOs
 - Academics, and
 - Legal profession.
- C3. The Oceania roundtables were principally open, exploratory discussions to identify key issues and seek initial direction. The North American roundtable debated key issues identified at the Oceania roundtables, using a "straw man" skeleton ISAE to focus discussions. The European roundtable discussed the same Issues Paper that was discussed by the IAASB at its December meeting.

D. Background to Emissions Disclosure and Assurance

What are GHG emissions?

- D.1 Greenhouse gases (GHGs) trap heat in the atmosphere causing it to be warmer than it would otherwise be. They do this by allowing incoming solar radiation to pass through the earth's atmosphere, but inhibiting the outgoing infrared radiation (heat) from the surface and lower atmosphere from escaping into outer space.³ They therefore act like a giant greenhouse around the earth.
- D.2 The principal greenhouse gases that enter the atmosphere because of human activities are:⁴
- Carbon Dioxide (CO₂): Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

³ http://www.climatechangenorth.ca/H1_Glossary.html

⁴ <http://www.epa.gov/climatechange/emissions/index.html>

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- Methane (CH₄): Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide (N₂O): Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- Fluorinated Gases: Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are powerful, synthetic greenhouse gases that are emitted from a variety of industrial processes.

D.3 According to the GHG Protocol,⁵ every business has processes, products, or services that emit greenhouse gases either directly (e.g., through the burning of fuel in the business' plant or vehicles), or indirectly (e.g., through the use of electricity generated using fossil fuels).

What is an emissions inventory?

D.4 An emissions inventory is a quantified statement of an entity's GHG emission over a particular period. An example of an emissions inventory is included as Agenda Item B.1.⁶ It is important to note that an "entity" for this purpose may be a complete organization, or an individual installation or facility within an organization – many regulatory requirements are aimed at individual installations or facilities that have emissions over a particular threshold, rather than at complete economic entities to which the installations or facilities belong. An emissions inventory usually:

- Discloses GHGs as carbon dioxide equivalents (CO₂-e) so that the quantity of different gases can be meaningfully aggregated.
- Calculates emissions by measuring an activity, e.g., the distance travelled by a vehicle or the use of a particular fuel, and applying an "emission factor" that relates the measured activity to the emissions it causes, e.g., X tonnes of CO₂-e per kilometer travelled or Y tonnes of CO₂-e per liter of fuel. (Direct measurement of GHG emissions by monitoring concentration and flow rate can be used for some sources, but is less common.)

⁵ "The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, Revised Edition, 2004" (The GHG Protocol) was developed by the World Business Council for Sustainable Development & World Resources Institute. It is commonly referred to in emissions inventories as the measurement, calculation and reporting criteria used. It is available for free download at www.ghgprotocol.org/standards. Another set of measurement, calculation and reporting criteria for emissions inventories is ISO 14064-1:2006 "Greenhouse Gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals," released in 2006 by the International Organization for Standardization. It is available for purchase at www.iso.org/iso/iso_catalogue.htm.

⁶ Source: <http://fsd.monash.edu.au/files/CarbonNeutralStrategy12Sep08.doc>

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- Includes a categorization of emissions by source⁷ (and perhaps, e.g., geographical segments), and explanatory notes including the measurement and calculation methods used.

D.5 The reason an entity prepares an emissions inventory (sometimes known as its “carbon footprint”) may be because:

- It is required to do so under a regulated disclosure regime, such as the National Greenhouse and Energy Reporting System in Australia;
- It is required to do so as part of an emissions trading scheme (ETS); or
- It decides to voluntarily disclose its emissions. Voluntary disclosure may be included as part of an entity’s broader sustainability report; it may be published as a stand alone document; it may be in the form of a response to a questionnaire, e.g., the Carbon Disclosure Project, which is “the largest repository of corporate greenhouse gas emissions data in the world,”⁸ or it may be included in a “carbon register” such as the California Climate Action Registry.⁹

Components of an emissions inventory

D.6 An emissions inventory will ordinarily include at least DIRECT EMISSIONS (called Scope 1 emissions in the GHG Protocol), which “*occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.*”

D.7 An emissions inventory may also include INDIRECT EMISSIONS, which the GHG Protocol splits into categories called Scope 2 and Scope 3.

- Scope 2 emissions, which are required to be reported under the GHG Protocol, are “GHG emissions from the generation of purchased electricity consumed by the

⁷ The GHG Protocol offers the following broad categorization of sources of emissions:

- *Stationary combustion*: combustion of fuels in stationary equipment such as boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares, etc.
- *Mobile combustion*: combustion of fuels in transportation devices such as automobiles, trucks, buses, trains, airplanes, boats, ships, barges, vessels, etc.
- *Process emissions*: emissions from physical or chemical processes such as CO₂ from the calcination step in cement manufacturing, CO₂ from catalytic cracking in petrochemical processing, PFC (perfluorocarbon) emissions from aluminum smelting, etc.
- *Fugitive emissions*: intentional and unintentional releases such as equipment leaks from joints, seals, packing, gaskets, as well as fugitive emissions from coal piles, wastewater treatment, pits, cooling towers, gas processing facilities, etc.

⁸ www.cdproject.net

⁹ www.climateregistry.org

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

company.” Scope 2 emissions are “indirect” because the physical emissions associated with electricity occurs at the facility where electricity is generated, rather than at the place where the electricity is consumed. Thus, turning on a light in an office block does not emit any GHGs at the office block, rather the GHGs caused by turning on that light are emitted where the electricity is generated.

- Scope 3 emissions, which is an optional reporting category under the GHG Protocol, “are a consequence of the activities of the company, but occur from sources not owned or controlled by the company.” Examples of activities that give rise to Scope 3 emissions are: employee business travel; outsourced activities; consumption of fossil fuel or electricity required to use the entity’s products; extraction and production of materials purchased as inputs to the entity’s processes; and transportation of purchased fuels.¹⁰

¹⁰ Note on the example emissions inventory at Agenda Item B.1: This inventory may at first glance appear to repeat in Scope 3 certain sources that are included Scope 1 or 2. The reasons for this are as follows:

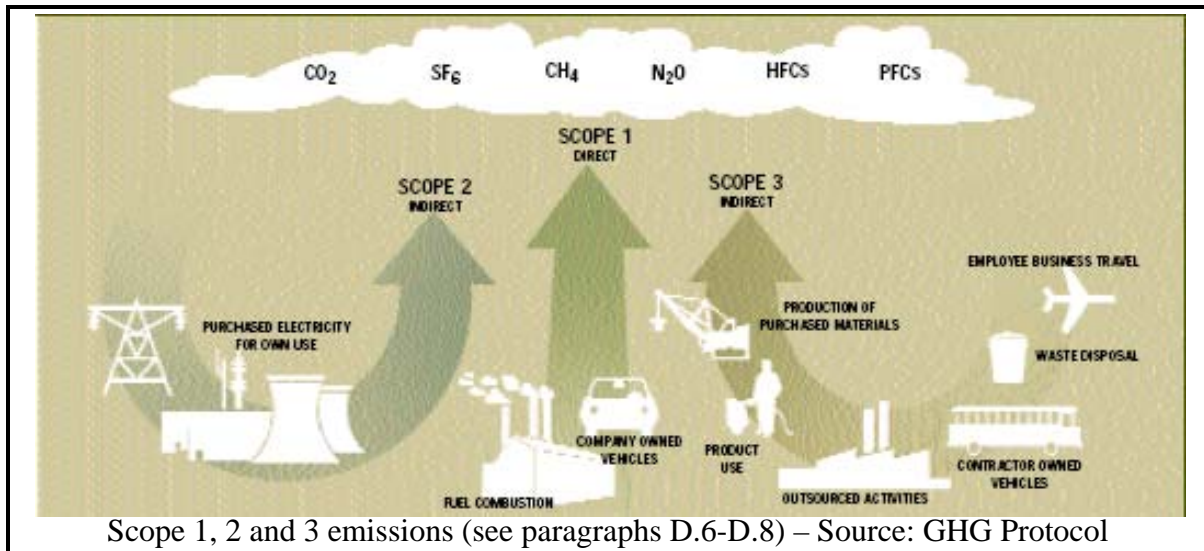
- The Unleaded Petrol, Diesel Petrol and LPG included in Scope 1 represent emissions caused by combustion of those fuels by University-owned equipment. The reason they are in Scope 3 as well is to account for the additional petrol used by the trucks that deliver the fuel to the University. The consumption figures are the same in both Scopes 1 and 3 (being the volume of each fuel that was actually combusted by University machinery), but the factor applied to them is different, which therefore gives a different figure in the “Calculated Emissions” column.
- The reason electricity is in Scope 3 as well as Scope 2 is to account for the fact that electricity inevitably “leaks” when it is transmitted from one place to another along a power line. The consumption figure is the same in both Scopes 2 and 3 (being the amount metered at the University), but the factor applied to it is different. The factor applied in Scope 2 reflects the volume of emissions caused by GENERATING the electricity. The factor applied in Scope 3 reflects the volume of emissions caused by TRANSMITTING that electricity from the power plant to the University (i.e. the volume of emissions caused by generating that portion of the electricity that never actually gets consumed because it is lost in transmission).

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information



- D.8 The relative significance of Scopes 1, 2, and 3 emissions will vary considerably from entity to entity. For example, a company that owns and operates long-haul trucks would have high Scope 1 emissions because of the fuel burned in its trucks; a service organization's biggest emissions may be through purchased electricity (Scope 2); and for an organization like IFAC, Scope 3 emissions through business travel may be the most significant contributor to its total emissions.
- D.9 Some entities provide emissions inventory information in the form of emissions intensity, i.e., emissions per unit of output, either in addition to, or in place of, absolute emission information. Disclosure in the form of emissions intensity is required by some regulatory schemes, e.g., Alberta's Climate Change and Emissions Management scheme.

Why focus on emissions inventories?

- D.10 There are other emissions-related information disclosures besides emissions inventories that could potentially be included in the scope of an IAASB pronouncement, e.g., claims that an entity, or certain product or services, are carbon neutral. These other disclosures are discussed in section M of this paper; however, judging by the discussion at roundtables and feedback from PAP members, it appears that the most pressing need is for an IAASB pronouncement that deals with emissions inventories.
- D.11 Quantification of an entity's emissions inventory (whether that entity is an entire organization or an individual installation or facility), is the backbone of all ETSs. Assurance of an entity's emissions inventory when that entity is involved in an ETS is therefore likely to have a direct economic effect. The rules of the ETS also will usually include detailed measurement, calculation and reporting criteria, which are likely to be suitable (with or without supplementation) for the purposes of an assurance engagement.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- D.12 The assurance requirements for ETSs, including not only the assurance standard to be applied, but also qualification, registration, independence and other requirements for auditors, differ from jurisdiction to jurisdiction (even from member state to member state within the EU ETS). If this project were to result in an IAASB pronouncement on emissions inventories, it is likely to be of assistance to ETS regulators in a number of jurisdictions who are looking to the accounting profession, amongst others, to assist them in determining how the assurance requirements will evolve in future. Also, given the financial statement effects of ETSs, an IAASB pronouncement on emissions inventories is likely to be of considerable assistance to financial statement auditors when they are considering the carrying value of an entity's emission trading rights.
- D.13 Focusing on emissions inventories would also have considerable utility beyond those entities involved with an ETS. The number of entities reporting, either under regulatory disclosure schemes or voluntarily (e.g., as part of a sustainability report prepared in accordance with the Global Reporting Initiative's G3 Guidelines,¹¹ which requires disclosure of direct and indirect emissions), is increasing, as too is the number of such reports that is being externally assured.
- D.14 Also, when an entity's claim of carbon neutrality¹² is based on an emissions inventory, as it should be, assurance of that inventory is a necessary precondition for assurance on the claim of carbon neutrality.
- D.15 If an IAASB pronouncement on emissions inventories is to be developed, technical issues about scope still remain that will need to be dealt with during the project, e.g.:
- What should be required of the practitioner if the criteria allow potentially material sources of Scope 1 or Scope 2 emissions to be excluded from the assurance engagement (the problem of "cherry picking")?
 - If the criteria allow choice as to which Scope 3 emissions are to be included in the inventory, should the auditor be satisfied not only with the disclosures that are made, but also that the entity's main Scope 3 emissions are included?
 - Where the entity's emissions inventory includes external offsets,¹³ what minimum procedures should the practitioner perform (e.g., verify that disclosed offsets were purchased during the year; verify that they are properly described in the emissions inventory; or verify whether the claimed greenhouse gas removal or storage has been, or will be achieved)? How should those procedures vary, if at all, depending on whether the external offsets were purchased on the voluntary or the regulated market? What disclosures should be included in the assessor's report about offsets?

¹¹ www.globalreporting.org/ReportingFramework/G3Guidelines

¹² Claims of carbon neutrality are discussed further in section M of this Paper.

¹³ Offsets are discussed further in section M of this Paper.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- How should an IAASB pronouncement deal with emissions intensity information? For example, should it include requirements/guidance for evidence gathering procedures with respect to output measurements used?
- How should an IAASB pronouncement deal with a claim of carbon neutrality that is extracted from an assured carbon inventory and presented on a stand-alone basis, or presented with only summarized emissions inventory information? For example, should guidance based on the ISA on summarized financial information be included?¹⁴

Any initial direction on these issues that the IAASB CAG would care to provide at this stage would be welcome.

What about qualitative information published with an emissions inventory?

D.16 Entities often publish qualitative or future oriented information along with their emissions inventory. That information may include the following, which is based on draft reporting templates of the Climate Disclosure Standards Board (CDSB):¹⁵

- (a) Estimated future direct and indirect GHG emissions.
- (b) GHG emissions reduction targets and an analysis of performance against those targets.
- (c) Physical risks from climate change – an overview of current and potential material exposure to direct and indirect physical risks due to, e.g., changing weather patterns, sea level rises, shifts in species distribution, higher incidence of disease, changes in water availability, changes in temperature, variation in agricultural yield and growing seasons. Exposure to physical risks may arise from extreme events such as intense storms and hurricane activity and/or from more subtle changes such as shifts in species distribution and increased night-time temperatures.
- (d) Regulatory risks from climate change – an analysis of the material legal and financial effects that current and prospective climate change-related regulation may have on the company's business and operations, e.g., emissions limits, energy efficiency standards, carbon taxation, process or product standards, and regulation of GHG emissions.
- (e) Strategic analysis, including:

¹⁴ ISA 810 (Revised and Redrafted), "Engagements to Report on Summary Financial Statements."

¹⁵ The CDSB is a consortium of seven business and environmental organizations, including the World Economic Forum (WEF), formed in 2007 to jointly advocate "a generally-accepted framework for corporations to report climate change-related risks and opportunities, carbon footprints, and carbon reduction strategies and their implications for shareholder value in mainstream reports." <http://www.cdsb-global.org/>

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- A statement of the entity's position on climate change, its responsibility to address climate change and its engagement with governments and advocacy organizations to influence climate change policy.
- An explanation of all significant actions the entity is taking to minimize risks and maximize opportunities associated with climate change.
- A description of corporate governance actions taken to address climate change, including involvement of those charged with governance.

D.17 There appears to be little support for developing an IAASB pronouncement that specifically deals with qualitative or future oriented information if it is published in the absence of an emissions inventory. When, however, it is published along with an emissions inventory that is assured, an approach that appears to have support is to treat that information as “other information” in the same way ISA 720 (Redrafted)¹⁶ treats a Chairman's report, Management Discussion and Analysis, etc. published with financial statements. This approach can be depicted as follows:

Annual Reporting Model	Emissions Disclosure Model
Financial statements: <ul style="list-style-type: none">• Audited in accordance with ISAs	Emissions inventory: <ul style="list-style-type: none">• Assured in accordance with ISAE 3000 (or ISAE 34xx)
Chairman's report, MD& A etc.: <ul style="list-style-type: none">• Published in Annual Report along with the financial statements• Not audited, but has been subject to ISA 720 (Redrafted)	Risks, Strategy, Targets etc.: <ul style="list-style-type: none">• Published in a periodic Emissions Report along with emissions inventory• Not assured, but has been subject to ISA 720 (Redrafted) equivalent

D.18 This approach would likely amount to the practitioner reading the qualitative or future oriented information to identify material inconsistencies, if any, with the assured emissions inventory. This approach is consistent with that emerging from the CDSB.

IAASB's Consideration

D.19 The IAASB had a broad ranging discussion of emissions reporting and assurance, including such matters as: direct methods of measuring emissions versus indirect methods of calculating an estimate of emissions; mechanisms to prevent “cherry-picking” and double counting; limitations on the sources of evidence; the use of emissions information and the potential for both that information and the assurance report to be misunderstood;

¹⁶ ISA 720 (Redrafted), “The Auditor's Responsibilities Relating to Other Information in Documents Containing Audited Financial Statements.”

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

the coverage and operations of Emissions Trading Schemes (ETs); the relevance of a Monitoring Plan under the European ETS; how the reporting entity concept applies to emissions reporting; the demand for guidance regarding both voluntary disclosures and disclosures required by regulations; the relevance of accounting skills and the role of the IAASB in this field; the meaning of the completeness assertion with respect to an emissions inventory; and, the commonality of some of the terminology used in this field with that used by financial statement auditors and the challenge of ensuring consistency of meaning.

E. Levels of Assurance

Issue

- E.1 Should an IAASB pronouncement deal with both reasonable and limited assurance engagements?

Background

- E.2 Both reasonable assurance engagements and limited assurance engagements are currently performed with respect to emissions inventories. For example, the EU ETS requires reasonable assurance, whereas Alberta's Climate Change and Emissions Management scheme has opted for limited assurance at this time.
- E.3 A range of alternative approaches could underlie how an IAASB pronouncement deals with the level of assurance for emissions inventory engagements. The main alternatives appear to be:
- (a) Requiring engagements to be reasonable assurance engagements unless a limited assurance engagement is required by law or regulation.
 - (b) Noting that either reasonable or limited assurance engagements may be undertaken, but that the market is likely to require reasonable assurance engagements in most cases, and therefore focusing an IAASB pronouncement solely, or at least primarily, on reasonable assurance engagements. This is the approach taken in the AICPA's SoP 03-2: "While a review-level service relating to an entity's GHG inventory is permissible under existing attestation standards, it is most likely that the market will ultimately demand an examination-level service. Accordingly, this SOP provides guidance only on an examination-level service."¹⁷
 - (c) Making an IAASB pronouncement equally applicable to both reasonable and limited assurance engagements. This would require the ISAE to distinguish between the 2 types of engagement in terms of both work effort and reporting. ISAE 3000¹⁸ does

¹⁷ AICPA Statement of Position (SoP) 03-2, "Attest Engagements on Greenhouse Gas Emissions Information."

¹⁸ International Standard on Assurance Engagements (ISAE) 3000, "Assurance Engagements Other than Audits or Reviews of Historical Financial Information."

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

not stipulate what procedures would be required for a limited assurance engagement, it simply notes that the procedures must be enough to result in a level of assurance that is meaningful, but which are deliberately of a lesser nature and/or extent than a reasonable assurance engagement. If the ISAE were to cover limited assurance engagements, the sort of issues that would arise include:

- Should the IAASB specify particular procedures that should be performed and those that need not be performed (relative to a reasonable assurance engagement) on all limited assurance engagements regarding emissions inventories, or should the nature of procedures be allowed to differ from engagement to engagement as decided by the practitioner, the entity, and/or users (for example, regulators)?
- If the ISAE is to determine the procedures to be performed on all limited assurance engagement, what should they be; and as a corollary, which procedures performed in a reasonable assurance engagement need not be performed for a limited assurance engagement. For example should practitioners be required to:
 - Have an “audit level” understanding of the organization as a basis for directing work effort?
 - Perform a formal risk assessment as a basis for directing work effort?
 - Conduct some substantive tests of detail?

Discussion

E.4 Discussion at roundtables and feedback from PAP members seemed to indicate a commonly held belief that reasonable assurance is preferable to limited assurance. This was more apparent at the roundtables held in Australia than at the roundtable held in Canada. This may be because limited assurance engagements on financial statements are more prevalent in North America than they are in Australia, and because the Alberta scheme has currently opted for limited assurance. Although a preference was expressed for reasonable assurance engagements, it was recognized nonetheless that the legitimacy of limited assurance should at least to be acknowledged in an IAASB pronouncement because:

- (a) Reasonable assurance is inevitably more costly than limited assurance, so limited assurance may legitimately be preferred when an entity is reporting voluntarily, particularly a smaller entity; and
- (b) The Alberta scheme has currently opted for limited assurance, as may other schemes in future. (An alternative view was put, however, that as the economic impact of emissions grows, e.g., through ETS carbon pricing, fines, and financial statement effects, the more likely it is that financial regulators and others will want “investment grade,” i.e., audit quality, assurance.)

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

E.5 Concerns expressed about limited assurance engagements included:

- Readers of an assurance report on an emissions inventory may not be as familiar with the concept of limited assurance and negatively expressed conclusions as financial statements users, and may misinterpret the level of assurance obtained, leading to an expectations gap. This may be exacerbated by the fact that the assurance report, in addition to noting the limitations of the assurance process, will likely include an explanation of the limitations of GHG measurement and the uncertainty associated with GHG data.
- Not all assurers of emissions inventories are professional accountants and it is not uncommon to find imprecise wording in assurance reports that confuses the level of assurance obtained, e.g., referring to the engagement as an audit and then giving a negatively expressed conclusion, or providing a positively expressed conclusion when it appears from the description of the work done that only limited assurance was obtained. Allowing for both reasonable assurance and limited assurance in an IAASB pronouncement may promote confusion and make it more difficult to prevent such practices.
- Because information systems for preparing emissions inventories are immature and errors are expected, it is not unusual for an assurer to perform a significant amount of detailed substantive testing, more commonly associated with a reasonable assurance engagement.
- It is questionable whether limited assurance is an adequate public policy response to compensate for an environment in which the risks of material misstatement are known to be high because, e.g., the process for generating GHG data is inherently less robust than for financial statements since it is not susceptible to self-balancing double entry, and information systems are currently immature. For example, a recent survey revealed that only 5 per cent of chief executive officers or chief financial officers have a high or even medium level of confidence in their GHG emissions data.¹⁹

E.6 If an IAASB pronouncement includes requirements/guidance for limited assurance engagements, it should include requirements/guidance on the nature, timing and extent of procedures to ensure consistency of work effort. This should likely include the assurer being required to go further than the inquiry and analytical procedures ordinarily associated with a review of financial statements (e.g., each of the questions in the final dot points of the Background section above would likely be answered affirmatively). Defining procedures will, however, be challenging given the diversity of industrial processes that cause GHG emissions, and inevitably a balance will need to be struck between guidance

¹⁹ Survey of 303 Australian companies with annual turnovers of at least A\$150 million, as reported in “Carbon Countdown -- A survey of executive opinion on climate change in the countdown to a carbon economy,” PwC, January 2008.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

being at too high a level to yield consistency of work effort, and at too detailed as a level such that it invokes a rules-based, checklist approach.

IAASB's Consideration

- E.7 The IAASB noted that discussions at the roundtables had indicated some confusion about the meaning of limited assurance in the context of subject matters such as emissions reporting; in particular, some participants appeared to think that limited assurance is an appropriate response when the subject matter of an assurance engagement is “soft,” or when systems used to produce the subject matter information are immature. This is not consistent with the approach adopted in the International Assurance Framework and ISAE 3000, and the IAASB agreed that it should not be adopted for emissions assurance: if a practitioner could not issue an unmodified reasonable assurance report because of, e.g., a soft subject matter or immature systems, then an unmodified limited assurance report could not be issued either.
- E.8 The IAASB agreed that the Task Force should aim to draft guidance on both levels of assurance, and noted that the project to revise ISRE 2400 will likely consider topics such as the application of the risk model to limited assurance engagements that will be of assistance in determining the work effort required for a limited assurance engagement on emissions information. The IAASB suggested that in drafting the ISAE, the Task Force should first concentrate on the work effort necessary for a reasonable assurance engagement, and then consider how that work effort should vary for a limited assurance engagement.

F. Assertion-Based Versus Direct Reporting Engagements

Issue

- F.1 Should an IAASB pronouncement deal with both assertion-based and direct reporting engagements?

Background

- F.2 In an assertion-based engagement, the reporting organization prepares the emissions inventory and publicly takes responsibility for it. In a direct reporting engagement, the emissions inventory only appears as part of the report prepared by the assurator (direct reporting engagements are more common in the public sector – performance audits are often direct reporting engagements).

Discussion

- F.3 The prevailing view in discussion at roundtables and feedback from PAP members is that an IAASB pronouncement should focus on assertion-based engagements only.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

IAASB's Consideration

- F.4 The IAASB noted a preference for assertion-based engagements, but asked the Task Force to consider further whether direct reporting engagements should also be covered, particularly if they are required by regulators. The Task Force was also asked to clarify whether an engagement in which the emitter prepares and takes responsibility for the emissions inventory, but does not include with that inventory an explicit assertion to the effect that it is fairly presented in accordance the criteria, should be considered an assertion-based engagement or a direct reporting engagement.

G. Professional Accountants

Issue

- G.1 To what extent, if at all, should an IAASB pronouncement be written from a perspective that contemplates its application by non-accountants?

NOTE: This question applies more broadly than to this project alone, but has particular resonance in the context of emission assurance where non-accountants are currently performing such engagements as well as professional accountants in public practice.

Background

- G.2 Unlike financial statement audit engagements, it is not uncommon for emissions assurance engagements to be undertaken by professional engineers or environmental scientists in their own right (i.e., not as part of a team lead by a professional accountant in public practice).
- G.3 When such an engagement is undertaken by a professional accountant, a multi-disciplinary team would invariably be assembled and the following requirements of ISAE 3000 will apply:

The practitioner should accept (or continue where applicable) an assurance engagement only if the practitioner is satisfied that those persons who are to perform the engagement collectively possess the necessary professional competencies. (Para 9)

When the work of an expert is used in the collection and evaluation of evidence, the practitioner and the expert should, on a combined basis, possess adequate skill and knowledge regarding the subject matter and the criteria for the practitioner to determine that sufficient appropriate evidence has been obtained. (Para 26)

The practitioner should be involved in the engagement and understand the work for which an expert is used, to an extent that is sufficient to enable the practitioner to accept responsibility for the conclusion on the subject matter information. The

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

practitioner considers the extent to which it is reasonable to use the work of an expert in forming the practitioner's conclusion. (Para 30)

The practitioner should obtain sufficient appropriate evidence that the expert's work is adequate for the purposes of the assurance engagement. (Para 33)

G.4 Various measures are taken to regulate the quality of services delivered by professional accountants in public practice. Such measures include those taken by IFAC member bodies in accordance with IFAC's Member Body Compliance Program and Statements of Membership Obligations.²⁰ Measures include:

- Education and experience benchmarks for entry to the profession.
- Ongoing continuing professional development/life-long learning requirements.
- Competency requirements for providing particular services, e.g., International Education Standard for Professional Accountants (IES) 8, "Competence Requirements for Audit Professionals."
- Performance standards for particular engagements (in the case of emissions assurance: ISAE 3000, or a more specific IAASB pronouncement if developed).
- Quality assurance policies and procedures implemented at both: (a) the engagement level, and (b) the firm level.
- External quality assurance review/inspection programs.
- A strong and detailed Code of Ethics founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.
- Stringent investigative and disciplinary processes.

G.5 ISAE 3000 states in paragraph 1 that its purpose "is to establish basic principles and essential procedures for, and to provide guidance to, professional accountants in public practice..." It also includes a requirement to "comply with the requirements of Parts A and B of the IFAC Code of Ethics for Professional Accountants."

G.6 Nonetheless, published reports by non-accountants, e.g., assurance reports regarding sustainability, have cited ISAE 3000. This has given rise to questions about whether non-accountants have sufficient understanding of the assurance concepts and processes implicitly embedded in ISAE 3000 to be able to perform an engagement in a way that is comparable to how a professional accountant would perform the same engagement. This is not to deny the expertise of other professionals in their chosen field, but rather to acknowledge that ISAE 3000 was written with a presumption that it would be applied by professional accountants who are assurance experts and who, as well as being trained in

²⁰ www.ifac.org/MediaCenter/files/Member_Body_Compliance_Program.pdf.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

the concepts and processes underlying ISAE 3000, are subject to the measures noted in paragraph G.4 above

- G.7 A similar issue arises when language and concepts from ISAE 3000, and the IAASB's assurance framework, are included in standards developed by other bodies that are aimed at application by both accountants and non-accountants. This includes, e.g., the concepts of reasonable and limited assurance, and inherent, control, and detection risk. The issue is compounded when such concepts are included in other standards without full explanation, or with different and possibly conflicting requirements. For example, the concepts of reasonable and limited assurance are included in one standard without any requirement for a negative expression of conclusion to convey limited assurance; and in another standard that requires the level of assurance to be considered when establishing materiality.

Discussion

- G.8 It was noted at the roundtables held in Australia that any emissions assurance standard produced by the Australian Auditing and Assurance Standards Board (AUASB) may be applicable to non-accountants as well as accountants, consistent with the AUASB's mandate as a government instrumentality.
- G.9 It was noted at the roundtable held in Canada that the legislation for the Alberta scheme specifically acknowledges that assurance engagements may be undertaken by either professional accountants or professional engineers.
- G.10 PAP members offered a number of observations and suggestions on this issue, including:
- Whether or not an IAASB pronouncement is written for application by non-accountants, consultation with non-accountants while developing the pronouncement may lead to more consistency of approach between non-accountants and professional accountants.
 - If an IAASB pronouncement were to be written for application by non-accountants as well as professional accountants, it would be necessary to include specific mechanisms to refer to, or even replicate in some way, certain of the measures noted in paragraph G.4. If, on the other hand, an IAASB pronouncement were to be written for application by professional accountants only, it would be necessary to clearly put readers on notice that this is the case.
 - The IAASB should consider whether the assurance report should include disclosures about the competencies (both assurance competencies, and subject matter competencies) of those performing the engagement.
 - ISAE 3000 notes that *“the practitioner may expand the assurance report to include other information and explanations that are not intended to affect the practitioner's conclusion. Examples include: details of the qualifications and experience of the practitioner and others involved with the engagement ... Whether*

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

to include any such information depends on its significance to the needs of the intended users.”

- A financial statement audit report does not refer to experts used during the audit, nor does it include information about the expertise of the auditor with respect to auditing or financial reporting. It might be argued that the reason this is so is because it is generally accepted and understood by financial statement users that auditors are auditing and financial reporting experts, and that auditing standards require the auditor to bring to bear on the engagement any other expertise that may be relevant in the circumstances of the engagement, for example, actuarial expertise in the case of a life insurance entity.
- In the case of emissions assurance engagements, it may be that many users are unfamiliar with the expected competencies of assurors, and with the requirements of assurance standards with respect to using the work of experts.
- Disclosures about the competencies of those performing the engagement may be particularly important where emissions inventories are published voluntarily and the competency of assurers is unregulated.
- The IAASB should consider whether emissions assurance reports could be signed jointly by professional accountants (assurance experts) and subject matter experts. One possible way of ensuring “those persons who are to perform the engagement collectively possess the necessary professional competencies” is for accounting firms to form strategic alliances with firms of subject matter experts (in particular, engineers and scientists). Such alliances are becoming evident in the market place, although the existence of such alliances does not necessarily mean that assurance reports will be jointly signed.

G.11 A separate but related issue is what responsibilities should a professional accountant have with respect to any conflict that might exist between an IAASB pronouncement and the requirements of another standard, or of an ETS or other scheme such as an emissions information registry, many of which have regulations or protocols that direct the assurer with respect to certain aspects of the engagement? An example of a potential conflict may be that ISO 14064-3 requires the practitioner to “*communicate the (assurance) plan to the client and the responsible party*”, and related guidance says the practitioner should confirm the plan with the client.²¹ By way of contrast, ISA 300 says “*When discussing matters included in the overall audit strategy or audit plan, care is required in order not to compromise the effectiveness of the audit. For example, discussing the nature and timing of detailed audit procedures with management may compromise the effectiveness of the audit by making the audit procedures too predictable.*”²²

²¹ ISO 14064-3:2006, “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.”

²² ISA 300, “Planning an Audit of Financial Statements.”

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

G.12 The “Preface to the International Standards on Quality Control, Auditing, Review, Other Assurance and Related Services” states:

The IAASB’s pronouncements govern audit, review, other assurance and related services engagements that are conducted in accordance with International Standards. They do not override the local laws or regulations that govern the audit of historical financial statements or assurance engagements on other information in a particular country required to be followed in accordance with that country’s national standards. In the event that local laws or regulations differ from, or conflict with, the IAASB’s Standards on a particular subject, an engagement conducted in accordance with local laws or regulations will not automatically comply with the IAASB’s Standards. A professional accountant should not represent compliance with the IAASB’s Standards unless the professional accountant has complied fully with all of those relevant to the engagement.

IAASB’s Consideration

G.13 Options considered by the IAASB included: requiring that the Emissions ISAE be applied by professional accountants only; noting in the ISAE that it was written for application by professional accountants only; requiring that anyone who follows the ISAE also follow, e.g., ISQC 1 and the Code of Ethics for Professional Accountants (the Code); and, requiring disclosure in the assurance report of whether the assessor followed ISQC 1, the Code etc.

G.14 It was noted that it would be in the public interest for all assessor, not just professional accountants, to follow the ISAE where that requires a higher quality of work than would otherwise be the case; however, it was also noted that it would be contrary to the public interest for non-accountants to claim compliance with the Emissions ISAE if they did not: (a) have the appropriate training and qualifications to ensure the ISAE was properly understood and applied as intended, or (b) comply with ISQC 1, the Code etc.

G.15 The IAASB agreed that although it may be unlikely that actions taken by the IAASB will prevent non-accountants referring in assurance reports to the ISAE, the ISAE should nonetheless: (a) state the fact that an underlying assumption in its development is that the person taking responsibility for the assurance report (the engagement partner), has the training and qualifications of a professional accountant; and, (b) require disclosures in the assurance report of the training and qualifications of those performing the engagement, and possibly require a statement of compliance with ISQC 1, the Code etc.

G.16 The IAASB also agreed that:

- The Task Force should explore the competencies required of a professional accountant and of a multi-disciplinary team when undertaking an emissions assurance engagement.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- The ISAE should not allow for joint signing of a single assurance report by a professional accountant and an expert in another field. It was noted that the issue of joint engagements in the context of environmental audits had been considered by the IAPC, the forerunner of IAASB. The position the IAPC reached was that joint signing of a single report is inappropriate when the professional accountant accepts sole responsibility unless the professional accountant's team is also fully competent in the other signatory's field of expertise. It was also noted that joint signing of a single report in which responsibility is divided is fraught with difficult communication issues and jurisdiction-specific legal issues that are beyond the scope of this project.

H. Inventory Uncertainty

Issue

- H.1 Emissions inventories are, necessarily, subject to uncertainty, and it is not uncommon for them to contain notes such as: "This figure varies slightly from that reported (previously) due to improved accuracy in calculation methodology."²³ What is the effect of inventory uncertainty on the IAASB project?

Background

- H.2 As the GHG Protocol notes: "Preparing a GHG inventory is inherently both an accounting and a scientific exercise. Most applications for company-level emissions and removal estimates require that these data be reported in a format similar to financial accounting data. In financial accounting, it is standard practice to report individual point estimates (i.e., single value versus a range of possible values). In contrast, the standard practice for most scientific studies of GHG and other emissions is to report quantitative data with estimated error bounds (i.e., uncertainty)."
- H.3 In developing emissions inventories, assessments of the causes and magnitude of uncertainties may be made, and may be disclosed as a measure of the quality of the inventory. The components of inventory uncertainty can be categorized as:²⁴
- (a) Scientific uncertainty, which is related to incomplete scientific knowledge on emission processes; and
 - (b) Estimation uncertainty. When emissions are calculated by applying an emissions factor to a measurable activity, which is commonly the case, estimation uncertainty includes:

²³ Commonwealth Bank of Australia's "Shareholder Review 2008."

²⁴ This categorisation and explanation of inventory uncertainty has been simplified for the purpose of this Paper. A significantly more detailed and precise discussion of inventory uncertainty can be found in the GHG Protocol's publication "Measurement and Estimation Uncertainty of GHG Emissions," available at www.ghgprotocol.org/downloads/calcs/ghg-uncertainty.pdf.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- (i) The uncertainty associated with the emissions factor used. Emissions factors are suitable for particular circumstances only, so application of the same factors across a range of circumstances can lead to consistent, but inaccurate and potentially meaningless information. For example, because of differences in climate and topography, an entity in Alberta calculating methane from landfills by using emissions factors based on readily available US data would be highly uncertain, as would using an emissions factor for electricity based on a national grid annual average that poorly reflects seasonal and hourly fluctuations in generation fuel mix corresponding to an entity's actual load profile; and
- (ii) The uncertainty associated with quantifying the activity, e.g., when calculating the emissions of a fleet of vehicles, uncertainty will be lower if complete fuel use records are tallied and multiplied by fuel factors, than if distance by vehicle type is multiplied by average fuel use per distance factors.

H.4 Scientific uncertainty is, for all practical purposes, beyond the control of the entity. Where emissions factors are entirely dictated by the criteria used, the entity also has no control over that aspect of uncertainty. The entity does, however, have control over the uncertainty associated with quantifying the activity (although in some cases, it seems that the criteria may also dictate data collection and aggregation methods).

Discussion

- H.5 The existence of significant inventory uncertainty may be seen by some as a reputational risk that argues for the accounting profession not to be associated with emissions assurance. On the other hand, it appears to be commonly understood that scientific uncertainty and uncertainty associated with emissions factors exist, and may cause inventories to be restated in subsequent periods, but that this should not prevent best efforts to calculate and disclose emissions inventories. Further, it was noted at all roundtables that involvement of the accounting profession is of considerable value in reducing uncertainty because of the profession's expertise with internal control in systems to record, process, and report information. It is therefore in the public interest that the accounting profession takes a lead role in ensuring emissions inventories are of high quality.
- H.6 It was also noted at all roundtables and in feedback from PAP members that many entity's emissions information systems are currently at an early stage of development, and do not have the controls that an auditor would ordinarily expect of a financial information system. An IAASB pronouncement should recognize this and offer guidance on the effect that immature systems may have on, e.g., engagement acceptance, assurance approach and procedures, and potential modifications required to the assurance report.
- H.7 Other implications of inventory uncertainty that may need to be elaborated on in an IAASB pronouncement include:

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- Consideration of uncertainty associated with the emissions factor when determining the suitability of criteria, e.g., some criteria allow entity-, facility-, or even machine-specific methodologies for calculating emissions where that increases accuracy.
- The relationship between estimation uncertainty, risk, and materiality.
- Disclosure of the nature and causes of uncertainty in the assurance report, in the same way an assurance report on internal control discloses the limitations of control.

IAASB's Consideration

H.8 The IAASB determined that the ISAE should clearly distinguish between the various sources of inventory uncertainty and their differing effects on the assurance process, which may include: declining the engagement; requesting that the emissions inventory include better disclosure of uncertainty or of the basis upon which comparatives have been recalculated; considering the risk of overstatement prior to the allocation of emissions credits and understatement after the allocation of emissions credits in an ETS; and, identifying whether different users may find different levels of uncertainty acceptable.

I. Suitable Criteria

Issue

- I.1 What guidance should an IAASB pronouncement provide with respect to the suitability of criteria?

Background

- I.2 One of the foundations upon which the IAASB's approach to assurance engagements is based is that suitable criteria exist for preparation of the subject matter information by the entity. The assurance framework notes that the characteristics of suitable criteria are relevance, completeness, reliability, neutrality and understandability. ISAE 3000 requires the assurer to assess the suitability criteria.
- I.3 The approach taken in proposed ISAE 3402²⁵ to assessing the suitability of criteria was to identify in the ISAE the minimum elements that suitable criteria must include.
- I.4 The criteria used (or elements of those criteria) to prepare an emissions inventory may be included in laws or regulations, or standards such as the GHG Protocol, or they may be generated specifically for the engagement. The following elements might be considered necessary for criteria to be considered suitable:
- (a) The required method for setting the organizational boundary (i.e., for determining which entities/activities will be reported on);
 - (b) The GHGs required to be accounted for;

²⁵ Exposure Draft of Proposed ISAE 3402, "Assurance Reports on Controls at a Third Party Service Organization."

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- (c) A requirement to include all material Scope 1 and Scope 2 emissions sources;
- (d) The required calculation approaches, including identification of relevant activity data and emissions factors; and
- (e) A requirement to disclose:
 - (i) The entities/activities included in the organizational boundary, and details of the specific method used for setting the organizational boundary if a choice between different methods is allowed;
 - (ii) The method used to determine which, if any, Scope 3 emissions have been included in the emissions inventory;
 - (iii) Separate disclosure of emissions attributable to each material source of Scope 1, Scope 2 and Scope 3 (if any) emissions included in the emissions inventory;
 - (v) Details of the specific calculation approaches used if a choice between different approaches is allowed;
 - (vi) Any significant interpretations made in applying the criteria in the entity's circumstances;
 - (vii) The nature, cause and effect of uncertainties in the information reported; and
 - (viii) Changes, if any, in the matters mentioned in this paragraph or in other matters that materially affect the comparability of the emissions inventory from the previous reporting period.

Discussion

- I.5 Feedback received from PAP members indicates that including minimum elements along the lines of those identified above would likely assist practitioners when determining whether the criteria to be used display the characteristics of suitable criteria noted in the assurance framework.
- I.6 Other matters noted during roundtables upon which guidance may be needed include:
 - Reconciliation of different criteria used for different purposes by the same entity. For example, the criteria an entity uses: (a) for its emissions inventory; (b) for financial reporting; and (c) for preparing a full sustainability report; may lead to a different organizational boundary (the entities/activities being reported on) for each.
 - Whether criteria should include the equivalent of a true and fair override.
 - The degree of granularity needed for criteria to render consistent inventories in similar circumstances.

IAASB's Consideration

- I.7 The IAASB agreed that criteria may be considered suitable whether they are set by regulation or are part of a voluntary disclosure regime; and that while regulatory criteria

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

may be suitable for the purposes of the regulator who set them, they may not be suitable for other users.

- I.8 The Task Force was asked to consider whether the “preconditions of an audit,” as detailed in ISA 210, should be adapted and included in the ISAE.

J. Definitions

Issue

- J.1 How should an IAASB pronouncement deal with the definition of emission-related terms that are defined elsewhere?

Background

- J.2 Definitions of terms such as greenhouse gas, direct and indirect emissions, emissions inventory, and offset, will likely be important to an IAASB pronouncement. These terms are already defined in laws or regulations, or in documents such as the GHG Protocol.
- J.3 Alternative ways for an IAASB pronouncement to deal with such definitions include:
- (a) Inserting definitions in the pronouncement. Such definitions could be based on definitions contained in other documents (like laws or other standards) at the time the IAASB pronouncement is approved. This would provide confidence that use of the term has a set meaning whenever the IAASB pronouncement is applied. On the other hand, it means that the definition may be inconsistent with how use of the term evolves, or with current use of the term in some jurisdictions where its meaning differs by virtue of local law, regulations, standards or custom.
 - (b) Referencing a particular source for each definition, for example the definition of Scope 1, Scope 2, and Scope 3 could be referred back to the GHG Protocol. This would allow the meaning to change if/when the source changes. It may still lead to differences with laws etc. in some jurisdictions.
 - (c) Allowing the meaning to be whatever is determined by the law, regulation, standard, criteria etc that applies to the engagement. This is the most flexible approach, but potentially gives the least certainty about the meaning of such terms and the least international consistency.
- J.4 This issue was faced by the IAASB when considering what definition of “related party” to include in ISA 550 (Revised and Redrafted).²⁶ In that case, the IAASB adopted a hybrid approach as follows (see particularly the final paragraph of the definition):

Related Party:

²⁶ ISA 550 (Revised and Redrafted), “Related Parties.”

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- (i) A person or other entity that has control or significant influence, directly or indirectly through one or more intermediaries, over the entity;
- (ii) Another entity over which the entity has control or significant influence, directly or indirectly through one or more intermediaries; or
- (iii) Another entity that is under common control with the entity through having:
 - a. Common controlling ownership;
 - b. Owners who are close family members; or
 - c. Common key management,and the entities have engaged in significant transactions or shared resources to a significant degree with one another.

When the applicable financial reporting framework provides additional criteria or more specificity in defining related parties, the definition in the framework is used in addition to (i) to (iii) above.

Discussion

- J.5 Different preferences were expressed on this issue in feedback from PAP members although no particularly strong feelings were expressed or arguments put.
- J.6 A related matter raised at the roundtable held in Canada was that some useful terms that have achieved a certain degree of general acceptance are not used totally universally and, therefore, if used in an IAASB pronouncement may appear to be an endorsement of those sources that use them. For example, the terms Scope 1, Scope 2 and Scope 3, are used in the GHG Protocol but not, apparently, in ISO 14064-1:2006 (see footnote 4).

IAASB's Consideration

- J.7 The IAASB did not express any strong views on this issue at the December 2008 meeting.

K. Recommendations in the Assurance Report

Issue

- K.1 Should an IAASB pronouncement comment on the desirability or otherwise of including the assurer's recommendations or other commentary in the assurance report?

Background

- K.2 ISAE 3000 states that: *"the practitioner may expand the assurance report to include other information and explanations that are not intended to affect the practitioner's conclusion. Examples include: ... findings relating to particular aspects of the engagement, and*

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

recommendations. Whether to include any such information depends on its significance to the needs of the intended users.”

- K.3 It is not uncommon for assurance reports on sustainability reports to include the assurer’s recommendations to management for improvements to the entity’s reporting practices or the entity’s underlying sustainability practices. Particularly as a number of the practitioners who currently perform sustainability assurance engagements are likely to be the ones who perform emissions assurance engagements, this practice may carry over to emissions assurance.

Discussion

- K.4 At the roundtables, a common view was that the publication of recommendations and advice to management in the assurance report is not appropriate:
- Publishing recommendations for improvements to reporting practices may pose a threat to independence.
 - While including recommendations may be justified for overall sustainability reports because the assessor could perhaps comment on strategies etc., that is not so for an emissions inventory.
 - It is essential that any additional information included in the assurance report does not contradict the practitioner’s conclusion.
 - Including recommendations in the assurance report may create unreasonable expectations, e.g., if it is common to recommend improvements to internal control, then a lack of such a recommendation may be taken as an opinion that controls are good.

IAASB’s Consideration

- K.5 The IAASB determined that ISAE should strongly discourage recommendations being included in the assurance report. Reasons for this include the potential for recommendations to confuse users as to the proper interpretation of the practitioners conclusion, the fact that users other than management and those charged with governance are unlikely to have a sufficient understanding of the context of the engagement to be able to properly interpret recommendations, and the difficulty of identifying which recommendations, and what level of detail, should be included in the report. It was noted that including recommendations may be appropriate when communicating with management and those charged with governance.

L. Technical Issues

- L.1 This section outlines a number of technical issues that would likely be considered in developing an IAASB pronouncement. It is anticipated that these will be discussed at

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

future IAASB meetings after further consideration by the task force, but the IAASB was asked if it would care to provide any initial direction on these issues at this stage.

Materiality

Issue

- L.2 How do financial reporting concepts of materiality relate to materiality for emissions inventories?

Discussion

- L.3 Are the following financial statement audit requirements from ISA 320 (Revised and Redrafted)²⁷ directly adaptable to emission assurance?

Determining Materiality and Performance Materiality when Planning the Audit

10. When establishing the overall audit strategy, the auditor shall determine materiality for the financial statements as a whole. If, in the specific circumstances of the entity, there is one or more particular classes of transactions, account balances or disclosures for which misstatements of lesser amounts than materiality for the financial statements as a whole could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements, the auditor shall also determine the materiality level or levels to be applied to those particular classes of transactions, account balances or disclosures.
11. The auditor shall determine performance materiality for purposes of assessing the risks of material misstatement and determining the nature, timing and extent of further audit procedures.

Revision as the Audit Progresses

12. The auditor shall revise materiality for the financial statements as a whole (and, if applicable, the materiality level or levels for particular classes of transactions, account balances or disclosures) in the event of becoming aware of information during the audit that would have caused the auditor to have determined a different amount (or amounts) initially.
13. If the auditor concludes that a lower materiality for the financial statements as a whole (and, if applicable, materiality level or levels for particular classes of transactions, account balances or disclosures) than that initially determined is appropriate, the auditor shall determine whether it is necessary

²⁷ ISA 320 (Revised and Redrafted), "Materiality in Planning and Performing an Audit."

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

to revise performance materiality, and whether the nature, timing and extent of the further audit procedures remain appropriate.

L.4 For example, could ISA 320.10 be “translated” along the following lines:

When establishing the overall ~~audit~~ engagement strategy, the ~~auditor~~ practitioner shall determine materiality for the emissions inventory ~~financial statements~~ as a whole. If, in the specific circumstances of the entity, there is one or more particular types of emission ~~classes of transactions, account balances~~ or disclosures for which misstatements of lesser quantities ~~amounts~~ than materiality for the emissions inventory ~~financial statements~~ as a whole could reasonably be expected to influence the ~~economic~~ decisions of users taken on the basis of the ~~financial statements~~ emissions inventory, the ~~auditor~~ practitioner shall also determine the materiality level or levels to be applied to those particular types of emission ~~classes of transactions, account balances~~ or disclosures.

L.5 Other materiality issues include:

- Some measurement, calculation and reporting criteria include quantitative guidelines for materiality (e.g., “accurate GHG inventories must be within the materiality threshold of 5% of the verifier’s estimate of total emissions”²⁸). What effect should this have on the guidance given in an IAASB pronouncement?
- How is materiality affected by aggregation/disaggregation of data, e.g., is the financial statements audit analogy re materiality at the subsidiary and the parent entity applicable?
- What is the relationship between materiality and the elements of inventory uncertainty?

IAASB’s Consideration

L.6 The IAASB noted that while materiality is well understood with respect to financial reporting, the concept may need some further interpretation in the context of emissions. Factors noted for the further consideration by the Task Force included:

- Whether, and if so how, the concept of materiality when applied to emissions extends beyond the effect of errors or omissions on user decision-making to, e.g., environmental impact.
- Whether the ISAE should define materiality for the purpose of emissions engagement, and whether an alternative word, such as significance, should be used.
- The effect of different decisions that may be based on the assured emissions information, e.g., in an ETS, there may be a direct, proportional, and identifiable

²⁸ “California Climate Action Registry - General Reporting Protocol, Version 3.0 2008”
www.climateregistry.org/resources/docs/protocols/grp/GRP_V3_April2008_FINAL.pdf.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

relationship between the assured quantity of emissions and a consequent flow of funds (e.g., a fine for over-emitting) from or to the entity.

- The relationship between the concepts of materiality and precision, particularly given (a) the more quantitative nature of emissions information relevant to disclosures in financial statements; and (b) the inherent potential for a high degree of estimation uncertainty when measuring emissions.
- Whether it is appropriate to require that the materiality level to be: agreed with users (e.g., regulators); identified in the criteria; or disclosed in the assurance report.

Requirements of other ISAs

Issue

- L.7 To what extent should the extensive requirements of other ISAs, in particular key standards such as ISAs 240 (fraud), 260 (those charged with governance), 300 (planning), 315 (identifying and assessing risks), and 330 (responding to assessed risks), be adapted and included in an IAASB pronouncement?

Discussion

- L.8 The required process steps for assurance on any subject matter are much the same as they are for an audit of financial statements. The key ISAs that set out these steps are ISAs 300, 315 and 330. Other standards too contain fundamental requirements for an audit of financial statements, e.g., ISAs 240 and 260.
- L.9 The requirements, and guidance, of these ISAs, and others, could be “translated” in the same way that ISA 320.10 has been in paragraph I.4 above. This would lead to a very long IAASB pronouncement on emissions assurance, particularly when emissions-specific procedures are added.

IAASB’s Consideration

- L.10 The IAASB noted that, like ISAE3402, a large volume of requirements and guidance could potentially be incorporated in an Emissions ISAE, and that judgment will need to be exercised to ensure balance. Similarly, the decision with respect to ISAE 3402 that ISAs should not be incorporated by reference applies to this ISAE also. It was further noted that the IAASB’s strategic plan includes considering in early 2009 of a project to update ISAE 3000 and to potentially develop a separate series of ISAEs on, e.g., planning, documentation and use of experts, and that where such topics are adequately covered in ISAE 3000 or in a separate series of ISAE, they need not be covered in this ISAE unless there is an emissions-specific perspective that needs to be added.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

Reporting

Issue

- L.11 What should be the content and wording of the assurance report on an emissions inventory?

Discussion

- L.12 Many reporting issues have been alluded to in the sections above, including:

- What disclosures should be included in the assurance report about offsets (paragraph D.15)?
- Is guidance based on ISA 810 (Revised and Redrafted) is appropriate when a statement of carbon neutrality is extracted from an assured carbon inventory and presented with only summarized emissions inventory information (paragraph D.15)?
- How should the difference between reasonable and limited assurance engagements be described (paragraph E.5)?
- Should the assurance report include disclosures about the competencies of those performing the engagement (paragraph G.10)?
- Can an assurance reports be signed jointly by professional accountants and subject matter experts (paragraph G.10)?
- What should be included in the assurance report if there is a conflict between an IAASB pronouncement and other requirements applicable to the engagement (paragraph G.11)?
- What modifications may be required to the assurance report when the entity's information systems are immature (paragraph H.6)?
- Should the nature and causes of inventory uncertainty be disclosed in the assurance report (paragraph H.7)?
- Should the practitioner's recommendations or other commentary be included in the assurance report (paragraph K.1)?

- L.13 A further reporting issue that was discussed at the roundtable held in Toronto was whether the practitioner's conclusion should be expressed in a relatively standard format such as "the emissions inventory is presented fairly in accordance with [the criteria]," or would it be more appropriate for the practitioner's conclusion to relate to the process for collating the information. This issue arose from the discussion of inventory uncertainty, when it was noted that a range of reported volumes would be equally correct depending on scientific assumptions, data collection methods etc. This may make the following form of conclusion

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

used for prospective information more appropriate than that used for historical financial statements.²⁹

Based on our examination of the evidence supporting the assumptions, nothing has come to our attention which causes us to believe that these assumptions do not provide a reasonable basis for the projection, assuming that (state or refer to the hypothetical assumptions). Further, in our opinion the projection is properly prepared on the basis of the assumptions and is presented in accordance with

IAASB's Consideration

L.14 The IAASB did not express any strong views on these issues at the December 2008 meeting.

M. Other Emissions-Related Disclosures

M.1 As noted in paragraph D.10, there are emissions-related information disclosures besides emissions inventories that could potentially be included in the scope of an IAASB pronouncement. These other disclosures are outlined and discussed in this section.

Background

Claims of carbon neutrality

M.2 An entity may publish a statement claiming that it is carbon neutral (or carbon negative). This means that its gross emissions, less offsets (see below), are zero or negative. To be credible, such a claim should be based on a quantified emissions inventory. The claim of carbon neutrality may be included with a complete, or a summary, emissions inventory, or may be made as a standalone statement.

M.3 While the concept of carbon neutrality is simple, there are varying interpretations of:

- (a) Which gross emissions need to be measured, e.g., should all Scope 1 and Scope 2 emissions be included, and which Scope 3 emissions, if any, need to be included?
- (b) Which offsets are valid for this purpose, and how they should be measured?

Offsets

M.4 “A ‘carbon offset’ is an emission reduction credit from another organization’s project that results in less carbon dioxide or other greenhouse gases in the atmosphere than would otherwise occur.³⁰ ... For example, wind energy companies often sell carbon offsets. The

²⁹ ISAE 3400, “The Examination of Prospective Financial Information,” paragraph 30.

³⁰ The GHG Protocol defines offsets as: “discrete GHG reductions used to compensate for (i.e., offset) GHG emissions elsewhere, for example to meet a voluntary or mandatory GHG target or cap. Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

wind energy company benefits because the carbon offsets it sells make such projects more economically viable. The buyers of the offsets benefit because they can claim that their purchase resulted in new non-polluting energy, which they can use to mitigate their own greenhouse gas emissions. The buyers may also save money as it may be less expensive for them to purchase offsets than to eliminate their own emissions.

- M.4 “Many types of activities can generate carbon offsets. Renewable energy such as the wind farm example above, or installations of solar, small hydro, geothermal, and biomass energy can all create carbon offsets by displacing fossil fuels. Other types of offsets available for sale on the market include those resulting from energy efficiency projects, methane capture from landfills or livestock, destruction of potent greenhouse gases such as halocarbons, and carbon sequestration projects (through reforestation, or agriculture) that absorb carbon dioxide from the atmosphere. A GHG offset is generated by the reduction, avoidance, or sequestration of GHG emissions from a specific project.”³¹
- M.6 “Carbon offset markets exist both under compliance schemes and as voluntary programs. Compliance markets are created and regulated by mandatory regional, national, and international carbon reduction regimes, such as the Kyoto Protocol and the European Union’s Emissions Trading Scheme. Voluntary offset markets function outside of the compliance markets and enable companies and individuals to purchase carbon offsets on a voluntary basis. With more than €20 billion traded in 2006, carbon markets are already a substantial economic force and will likely grow considerably over the coming years. The voluntary market, although much smaller than the compliance market, (€2.6 million in 2006) is also growing rapidly.”³²
- M.7 It is important to recognize that there are two quite different perspectives to an offset transaction: the seller’s perspective and the buyer’s perspective. Either or both the seller or the buyer may seek assurance.
- M.8 The seller may seek assurance to enhance the value of the offset. Assuring an offset from the seller’s perspective is a two stage process. Firstly, there is the initial “validation,” in which the project plans and quantification of projected reductions compared to a “business as usual” projection are assured; and secondly, there is an annual “verification,” in which progress against the project plans are assured.
- M.9 From a buyer’s perspective, a purchased offset will likely appear in its emissions inventory as a deduction from its gross emissions. Questions arise as to what responsibility the assurer of the buyer’s emissions inventory has with respect to the offset. For example, if an

of the mitigation project that generates the offsets. To avoid double counting, the reduction giving rise to the offset must occur at sources or sinks not included in the target or cap for which it is used.”

³¹ www.davidsuzuki.org/Climate_Change/What_You_Can_Do/carbon_offsets.asp

³² “Making Sense of the Voluntary Carbon Market – A Comparison of Carbon Offset Standards” May 2008 www.wwfint.org/news_facts/publications/index.cfm?uNewsID=126700

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

offset has been purchased which has been validated and verified from the seller's perspective, need the buyer's assurer simply ensure that disclosure of the offset is in accordance with what the buyer contracted for, or should the buyer's assurer substantiate (validate and verify) the actual volume of the offset, perhaps through an ISA 402 (Revised and Redrafted)³³ or ISA 600 (Revised and Redrafted)³⁴ type relationship with the seller's assurer?

Product claims

M.10 Entities make various claims about the GHG implications of their products (or services). Typically a claim of carbon neutrality is made, which requires the calculation of the GHG emissions attributable to a product, and therefore the volume of offsets that needs to be purchased to reduce the product's impact to zero. The methodology for doing this generally requires a detailed Life Cycle Analysis, i.e., the aggregation of the GHG emissions of each step of all the components necessary or caused by the product's existence, including extraction and processing of raw materials, manufacture, distribution, use and disposal, including all intervening transportation.

M.11 Examples of claims about the GHG implications of an entity's product include:

- A brand of beer claims that it is carbon neutral – “we offset the full lifecycle of the greenhouse gas emissions associated with Cascade Green - right from picking the hops to putting it in the recycling bin. Meaning the net impact of the greenhouse gas emissions for Cascade Green is reduced to zero.”³⁵
- A bank provides a “climate compensation credit card,” whereby “spending is allocated to some seven hundred different categories such as filling up, a visit to the theatre, tickets for a flight, purchases in a department store, and expenses on accommodation, meals, drinks and recreation, to name but a few. The average CO2 emission of each category is linked to the price in euros of CO2 emission ... When added together this gives us the total CO2 emission of all credit card spending. Rabobank is to compensate this emission by purchasing the CO2 emission rights of renewable energy projects with a Gold Standard label.”³⁶
- An ISP claims to provide “carbon free hosting.” “To achieve this and to offset the carbon footprint of the server your website/web-application runs on, we will plant a tree with the Woodland Trust. But that's not all, we will continue to plant a new tree

³³ ISA 402 (Revised and Redrafted), “Audit Considerations Relating to an Entity Using a Third-Party Service Organization.”

³⁴ ISA 600 (Revised and Redrafted), “Special Considerations — Audits of Group Financial Statements (Including the Work of Component Auditors).”

³⁵ www.cascadegreen.com.au/how-are-we-green.aspx

³⁶ www.rabobank.com/content/images/rabobank_case_study_climate_contribution_credit_card_tcm43-44399.pdf

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

every year that you remain with us. This means that in a few years not only will your website hosting be carbon free but you will be doing your bit to help reduce the carbon footprint of the ever growing IT industry.”³⁷

Financial statement effects

M.12 It is unlikely that the IASB or other accounting standard-setters will require disclosure of GHG emissions in the financial statements in the short or medium term. Nonetheless, with the introduction in 1998 of IAPS 1010,³⁸ the IAASB, or its predecessor the IAPC, explicitly acknowledged the financial statement effect of environmental matters generally. Further, implementation of the EU ETS in 2005, and other ETSs since then, has added a new and direct dimension to the financial statement effect of GHG emissions.

M.13 When an entity is involved in an ETS, the carrying value of emission trading rights may be of particular significance when preparing its financial statements. This has been recognized by the IASB, which decided in December 2007 to re-activate its project on Emission Trading.³⁹

Discussion

Claims of carbon neutrality

M.14 An IAASB pronouncement specifically dealing with claims of carbon neutrality is not considered a priority. As noted in paragraph D.14, when an entity’s claim of carbon neutrality is based on an emissions inventory, as it should be, assurance of that inventory is a necessary precondition for assurance on the claim of carbon neutrality. The other issues involved with determining the validity of such a claim are more a function of how the criteria deal with the issues noted in M.3 (and arithmetic), than it is an issue for assurance pronouncements.

Offsets and Product claims

M.15 There was little support at the roundtables or from PAP members to give high priority to developing a pronouncement that specifically deals with either product claims or offsets from the seller’s perspective. Both these areas are more complex than assurance on an emissions inventory, and if included in the scope of this project would inevitably lead to delays in producing an IAASB pronouncement on emissions inventories:

- Assurance of product claims involves not only “verification” of emissions data, but also analysis of business processes to determine which emissions are attributable to a

³⁷ www.logibase.com/services/carbonFreeHosting.php

³⁸ International Auditing Practice Statement 1010, “Consideration of Environmental Matters in the Audit of Financial Statements.”

³⁹ www.iasb.org/NR/rdonlyres/6939C5DC-D4A4-4033-A42F-E2243892B8B7/0/0711on04b.pdf

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

particular product. ISO standards exist on Life Cycle Analysis, which are used for this purpose.

- Involvement in the offset market (in particular the voluntary offset market) is considered by many to be highly risky, in part because of the lack of generally accepted measurement criteria for certain types of offsets. Offset “validation” in particular is not necessarily well suited to an IAASB pronouncement, e.g., the suitability of criteria can often be questionable because they are quite subjective and technical from an engineering/scientific perspective.

There would likely be support, however, for these areas to be covered by separate projects should IAASB resources allow.

Financial statement effects

M.16 A noted in paragraph D.12, an IAASB pronouncement on emissions inventories is likely to be of considerable assistance to financial statement auditors when they are considering the carrying value of an entity’s emission trading rights. A further project or pronouncement on disclosure of the financial statement effects of emissions is not considered necessary at this stage.

IAASB’s Consideration

M.17 The IAASB decided that the focus of this project should be on a pronouncement on emissions inventories.

N. Form of Output

N.1 When adopting this project, the IAASB noted that the final output is likely to be a new International Standard on Assurance Engagements (ISAE). However, the IAASB recognized the possibility that another form of output may be appropriate, either as an interim step or as a final product, e.g., a practice statement, or a consultation paper.

N.2 Discussions at the roundtables indicated a desire amongst stakeholders for the IAASB to produce an ISAE. Points raised in consultations that are relevant when considering the form of output include:

- If the output of the IAASB project is not a standard, it may not gain general acceptance within the regulatory community.⁴⁰
- Timing is important – disclosure and associated assurance of GHG emissions is increasing rapidly, and suitable guidance is needed to assist practitioners as soon as possible.

⁴⁰ Some regulatory schemes may recognize ISO 1064-3:2006 “Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions” released in 2006 by the International Organization for Standardization.

IAASB CAG PAPER

IAASB CAG Agenda (March 2009)

Agenda Item B

Assurance on Carbon Emissions Information

- The due process to produce a standard or practice statement takes longer to complete than the due process for, e.g., a consultation paper.
- GHG assurance is an evolving area, and regulatory overlays in a number of jurisdictions are affecting the direction of that evolution. It is also an area that is relatively new to a number of IAASB members. If the IAASB decides an ISAE or practice statement is appropriate, an interim step such as a consultation paper may be appropriate to ensure the broadest possible range of input prior to releasing an exposure draft.

IAASB's Consideration

N.3 The IAASB agreed that an ISAE should be developed. The IAASB also considered whether another, interim output should be produced, e.g., a Consultation Paper based on the issues paper presented at this meeting. It was agreed that an interim step would likely delay the ultimate publication of an ISAE and in any case is unnecessary given the feedback that had been received via the roundtables. It was also noted that it would likely be beneficial for the Explanatory Memorandum accompanying the exposure draft of a proposed ISAE to include some of the background material and issues discussed in the issues paper.