

## **ISO 14064: an emerging standard on Greenhouse Gas accounting and verification**

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### **Identifying the need for an international standard on GHG accounting and verification**

Governments, corporations and voluntary initiatives currently use a number of approaches to account for organization- and project-level greenhouse gas (GHG) emissions and removals. In mid-2002, the International Organization for Standardization (ISO) identified a need to standardize aspects of GHG accounting and verification to support the credibility, comparability and environmental integrity of existing and emerging regulatory (international, regional, national) and voluntary GHG schemes.

Currently, the most widely used approach to preparing corporate GHG inventories is the *Greenhouse Gas Protocol: a Corporate Accounting & Reporting Standard* (GHG Protocol) developed under the auspices of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD)<sup>1</sup>. Several voluntary GHG registries have built scheme rules based on the GHG Protocol (eg, California Climate Action Registry, US EPA Climate Leaders, WWF Climate Savers). Existing (eg, UK Emissions Trading Scheme) and emerging (eg, EC Emissions Trading system) allowance-based regulatory systems have developed or are developing scheme rules for entity-level GHG accounting often consistent with the GHG Protocol. Recently, the WRI/WBCSD released a draft of its GHG Protocol Project Module and initiated the module's "road test" across a range of GHG projects. Internationally recognized best practice guidelines on GHG verification currently do not exist.

ISO's goal in developing standards for GHG accounting and verification is to provide a set of unambiguous, verifiable requirements or specifications to support organizations and GHG project proponents in using a quantification, monitoring and verification approach that ensures "a ton of carbon is always a ton of carbon". ISO standards may also enable GHG scheme administrators to design systems using standardized "building blocks", supporting the compatibility of rules and comparability and credibility of GHG quantifications.

ISO 14064 will be of interest to organizations, GHG scheme administrators, project proponents, validation/verification bodies, environmental non-governmental organizations and others. It is hoped that the standard will:

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<sup>1</sup> See [www.ghgprotocol.org](http://www.ghgprotocol.org)

- Enhance environmental integrity by promoting consistency, transparency and credibility in GHG quantification, monitoring, reporting and verification;
- Enable organizations to identify and manage GHG-related liabilities, assets and risks through the systematic development and maintenance of GHG inventories;
- Facilitate the trade of GHG allowances or credits;
- Support the design, development and implementation of comparable and consistent GHG schemes or programs.

**Comment:** See reworking of the list below with footnoted references

## What is ISO and Who is Working Group 5?

ISO, a federation of some 148 national standards bodies and 550 international or regional liaison bodies, is a non-governmental organization based in Geneva, Switzerland. Delegates nominated by national standards bodies or liaison organizations develop and negotiate ISO standards through a rules- and consensus-based process. All ISO standards are voluntary.

ISO's Technical Committee 207 (TC207) on Environmental Management is responsible for the ISO 14000 family of standards, the best known of which is ISO 14001 on Environmental Management Systems. In mid-2002, a joint Malaysia-Canada proposal to begin development of GHG accounting and verification standards was approved by ISO TC207 and Working Group 5 on Climate Change was established to undertake the work. Some 140 international experts from 24 countries and 3 liaison organizations have participated in Working Group 5 work to-date.

## The Scope of ISO 14064 for GHG accounting and verification

ISO's GHG accounting standard (ISO 14064) will have 3 Parts:

**Part 1 - Greenhouse gases: specification for the quantification, monitoring and reporting of organization emissions and removals.** Part 1 of ISO 14064 will specify verifiable requirements for organizations to design, develop, maintain and report on organizational-level GHG inventories. The Part 1 standard will be of interest to organizations participating in voluntary GHG registries or regulatory allowance-based schemes or GHG scheme administrators designing such programs or schemes.

**Part 2 - Greenhouse gases: specification for the quantification, monitoring and reporting of project emissions and removals.** Part 2 of ISO 14064 will specify verifiable requirements for GHG project proponents to plan, monitor, quantify and report on projects, including resultant GHG emission reductions or removal enhancement units. The Part 2 standard will be of interest to project proponents participating in voluntary programs or regulatory credit-based schemes or GHG scheme administrators designing such programs or schemes.

**Part 3 - Greenhouse gases: specification and guidance for validation, verification and certification.** Part 3 of ISO 14064 will specify verifiable requirements for validation/verification bodies and validators/verifiers in providing assurance against GHG claims from organizations (eg, Part 1) or projects (eg, Part 2). The Part 3 standard aims

to be applicable to any GHG scheme and will be of interest to validation/verification bodies, validators/verifiers and GHG scheme administrators.

### **When will ISO 14064 be available?**

ISO 14064 is planned for publication in mid-2005. Technical development of the standard, initiated in mid-2002, is scheduled for completion in mid-2004. Those interested in participating in the technical development of ISO 14064, are encouraged to contact their national standards body or relevant international liaison organization (see <http://www.iso.org>).

### **Challenges in standardizing GHG accounting and verification**

ISO has developed international standards since 1947. The ISO “brand” builds from its infrastructure and processes, including the following aspects:

**Equal footing:** Every ISO member body has the right to take part in the development of any standard that it judges to be important to its country. No matter what the size or strength of that country’s economy, each participating member in ISO has one vote.

**Market-driven:** ISO develops only those standards for which there is a market requirement. ISO work is carried out by experts on loan from industrial, governmental, technical, business, non-governmental or other sectors which have asked for the standards, and which subsequently put them to use.

**Voluntary, Consensus:** ISO standards are voluntary and based on consensus among interested parties<sup>2</sup>. ISO requires a review of its standards at least every five years to decide whether they should be maintained, updated or withdrawn.

**Worldwide:** ISO standards are technical agreements that provide the framework for compatible technologies, products or services worldwide.

The developers of ISO’s GHG accounting and verification standard, whilst taking advantage of ISO’s reputation and process strengths, are not immune from the challenges of standardization in this sometimes complex and always political area. To help guide their work, those responsible - ISO Working Group 5 – have established four principles. Adherence to these principles through the standards development process is important and sometimes challenging:

<i>Regime neutrality</i>	ISO 14064 will be GHG regime or scheme neutral. While being scheme neutral, ISO 14064 must maintain its applicability and relevance. In other words, the developers of ISO 14064 need to balance being “scheme sensitive” with becoming “scheme selective” or being “policy relevant” with becoming “policy prescriptive”.
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<sup>2</sup> Two qualifications are helpful. Despite the voluntary nature of ISO standards, they may be made mandatory through adoption into legislation or regulation. “Consensus” is defined by ISO as the “absence of sustained opposition” and does not imply unanimity in voting.

<i>Technical rigour</i>	The developers of ISO 14064 recognize that anything short of a technically rigorous standard will lose market credibility and relevance. To this end, ISO's Working Group 5 has decided to aim for alignment with the GHG Protocol. Compatibility with the GHG Protocol continues to be discussed with the WRI/WBCSD as the ISO standard is developed. Other relevant technical best practice, including IPCC methodologies and Kyoto Protocol CDM requirements, is being considered by the ISO developers.
<i>Extensive participation</i>	ISO recognizes that the credibility of ISO 14064 may be impacted by the extensiveness of participation in the standards development process. The participation of various countries, regions, stakeholder groups and technical experts is important to ensure different perspectives, needs and expertise is accounted for.
<i>Speed-to-market</i>	Recognizing that much GHG accounting and verification best practice is mature for standardization, the developers of ISO 14064 have committed to an aggressive, but responsible, schedule to complete the standard. As a variety of GHG schemes are under development or are being planned, ISO hopes that the timely publication of its GHG accounting and verification standard will encourage its wide application.

ISO 14064 developers hope that by regularly revisiting process principles – regime neutrality, technical rigour, extensive participation, speed-to-market – ISO 14064 will provide a variety of users with a flexible, credible, verifiable standard applicable across a variety of voluntary or regulatory GHG schemes. ISO is not under the illusion that ISO 14064 will represent a “total solution” to GHG accounting and verification needs, but is confident that it will represent an important “building block” to organizations or project proponents participating in various voluntary or regulatory initiatives or to administrators responsible for designing and implementing GHG schemes or programs.