

PRIMER: ISO Climate-Related Standards, Updates, and Choosing the Right Committee

Tom Baumann

GHGMI Co-Founder and International Chair, ISO Climate Change Standards Committee

What are the ISO climate-related standards now? How are they being updated?

The main ISO climate change standards that have been published and are now in development include:

ISO 14064-1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

ISO 14064-2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements

ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions

The above three standards were published in 2006 and updated versions will be published in 2018. Among the important changes now at the Draft International Standard (DIS) stage are:

- ISO 14064-1 will require companies to report green electricity and associated GHG emission estimates separately from the GHG inventory. As well, ISO 14064-1 moves away from the conventional use of Scope 1, 2, 3, in which users were required to report Scope 1 and 2 only. The DIS requires users to report all significant indirect emissions from the conventional Scope 2 and 3.
- ISO 14064-3 has been expanded to apply to product carbon footprints (refer to ISO/TS 14067 below).

ISO 14065: Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition

ISO 14065 was published in 2013 and work has just started to update/expand it to encompass environmental assurance.

ISO 14066: Competence requirements for greenhouse gas validation teams and verification teams (published 2011)

ISO/TS 14067: Carbon footprint of products -- Requirements and guidelines for quantification and communication

ISO/TS 14067 was published in 2013 as a Technical Specification (TS) and is currently being updated to focus on quantification with the goal to be published as a full International Standard in 2018.

ISO/TR 14069: Quantification and reporting of greenhouse gas emissions for organizations -- Guidance for the application of ISO 14064-1 (published in 2013 as a Technical Report)

ISO 14080: Framework and principles for methodologies on climate actions (in development as a Draft International Standard)

ISO 14090: Framework for adaptation to climate change (in development)

ISO 14091: Climate Change Adaptation -- A guidance to Vulnerability Assessment (in development)

ISO 14092: Requirement and guidance of adaptation planning for organizations including local governments and communities (in development to become a Technical Specification)

ISO 14097: Framework and principles for assessing and reporting investments and financing activities related to climate change (in development)

Which ISO committee is right for you?

Recognizing the vast size of ISO and array of different types of standards and guidance, it is useful to understand how ISO is structured to develop climate-related standards. At a basic level there are three areas within ISO developing standards:

1. ISO TC207 SC7, which is Subcommittee (SC) 7, titled "GHG Management and Related Activities" of Technical Committee (TC) 207, titled Environmental Management.
2. ISO TMB TF7 CCC, which is Task Force (TF) 7, titled "Climate Change Coordination" of the Technical Management Board (TMB), which is the ISO entity overseeing all ISO Technical Committees
3. All the other 1000s of ISO committees working on standards for almost everything one can think of, e.g. ranging across health, security, industries, technologies, products, and of course environment – there's really much more than can be listed here.

In May 2014 I became the Chair of ISO TC207 SC7 (<http://committee.iso.org/tc207sc7>), which includes 80 national standards bodies and 20 international liaison organizations including UNFCCC, IETA, CDP, Gold Standard, WRI and others. As the new chair I led development of a strategic plan to guide the committee work over the next few years (my term as chair is 2014-2019). In the early phases of the strategic planning process, the official scope of the committee was defined to encompass GHG management, mitigation and adaptation in support of sustainability. In May 2015, Ira Feldman (<http://ghginstitute.org/people/ira-feldman>), GHGMI's Adaptation Leader, led development of a roadmap for adaptation standards, which became an integral part of the strategic plan. The strategic planning process helped expand stakeholder engagement participating in the new ISO working groups.

The three areas in ISO working on climate change have complementary missions:

1. ISO TC207 SC7 develops generally-applicable standards for mitigation and adaptation usually as a series of related standards. For example, the ISO 14064 series includes measurement and reporting for GHG inventories and GHG projects, as well as

validation/verification. Likewise for adaptation, in development are a framework standard (ISO 14090), vulnerability assessment (i.e. “pre-planning”, ISO 14091), and adaptation planning (14092). Plans are being prepared for a future standard on monitoring & evaluation (M&E). These series of generally-applicable standards serve as a foundation for a broad array of sector-specific standards to be developed.

2. ISO TMB TF7 CCC has a broad mandate to support strategy and engagement, both internal and external to ISO. An important work item is the development of a new ISO guide that will be for ISO standards developers. Recognizing ISO publishes a standard every 6 hours, 365 days a year, the ISO guide will be a valuable tool to consider climate change in other ISO standards. Not all ISO standards will include climate change, but for the many ISO standards that are somehow related to climate change (e.g. MRV, management, mitigation, adaptation), the objective is to enhance consistency and synergy.
3. There are several ISO committees (www.iso.org/technical-committees.html), for example, TC265 (Carbon dioxide capture, transportation, and geological storage), TC146 (Air Quality), TC301 (Energy management and energy savings) – just to name a few – are working on sector specific climate-related standards. Of special importance are other TC207 subcommittees, such as SC1 (Environmental Management Systems) and SC5 (Life Cycle Assessment), that are broader environmental management standards within which climate is included as one of many environmental issues such as water, waste, etc. In fact, such standards are often a foundation for the generally-applicable standards developed within SC7 (see #1 above).