Practical tools for addressing climate change
Monitoring climate change, quantifying greenhouse gas (GHG) emissions and promoting good practice in environmental management and design are just some of the ways in which ISO International Standards help organizations address climate change.

ISO has produced over 570 environment-related standards, including those that help open world markets for clean energy and energy-efficient technologies and support climate change adaptation and mitigation schemes.

ISO technical committee ISO/TC 211 develops standards on geographic information and geomatics. It collaborates, among other partners, with the:

- United Nations Food and Agricultural Organization (FAO) on standards for satellite mapping and data acquisition and processing
- World Meteorological Organization (WMO) on standards for meteorological and climatological data
Quantifying GHG emissions and communicating on environmental impacts

Quantifying

The standards ISO 14064 and ISO 14065, developed by ISO/TC 207/SC 7, provide an internationally agreed framework for measuring GHG emissions and verifying reports made about them so that “a tonne of carbon is always a tonne of carbon”. They thus support programmes to reduce GHG emissions as well as emissions trading programmes. ISO 14064 is emerging as the global benchmark on which to base such programmes.

The Verified Carbon Standard (VCS), developed by The Climate Group (TCG), the International Emissions Trading Association (IETA) and the World Business Council for Sustainable Development (WBCSD), specifically integrates the principles of ISO 14064 and uses the validation and verification requirements of ISO 14065. Achieving international agreement on the quantification and verification of emissions trading is the key to supporting the development, networking and consistency of emissions credit trading schemes.

Communicating

ISO has developed a number of standards to ensure good practice in environmental claims and communications:

- ISO 14020:2000, Environmental labels and declarations – General principles
- ISO 14063:2006, Environmental management – Environmental communication – Guidelines and examples
Promoting good practice in environmental management and design

The ISO 14000 family of standards for environmental management developed by ISO technical committee ISO/TC 207 is firmly established as the global benchmark for good practice in this area.

**ISO 14001:2015, Environmental management systems – Requirements with guidance for use**, contributes to any organization’s objectives to operate in an **environmentally sustainable manner**.

In 2014, more than 324,000 ISO 14001:2004 certificates of conformity had been issued to private- and public-sector organizations in 140 countries and economies. The ISO 14000 family includes **supporting tools** for environmental management and designing environmentally friendly products and services, such as:

- ISO 14004:2004, *Environmental management systems – General guidelines on principles, systems and support techniques*
Opening world markets for clean energy and energy-efficient technologies

International Standards can also be the vehicle for the dissemination of innovative technologies, particularly for alternative and renewable sources, by reducing time to market, creating global interest and developing a critical mass of support to ensure the economic success of such technologies. ISO standards are among the leading objective tools that assist policy makers in decisions related to public incentives, regulations and use of standards, thus encouraging the judicious and widespread adoption of such innovative technologies. ISO has already developed standards with an impact on climate change for areas such as nuclear energy, solar energy, hydrogen technologies, intelligent transport systems, building environment design and sustainability in building construction.

ISO’s proactive stance on climate change topics has resulted in the initiation of ISO work on biofuels, energy management systems and the examination of new opportunities in energy efficiency and renewable energy sources. ISO maintains its close cooperation with the International Electrotechnical Commission (IEC) and has additionally partnered with the OECD’s International Energy Agency (IEA) and the World Energy Council (WEC) in joint initiatives related to this field.
Climate change mitigation and adaptation

ISO has partnered with key international stakeholders, such as the United Nations Framework Convention on Climate Change (UNFCC) and the World Bank, in developing strategic roadmaps for a system of standards on climate change mitigation and adaptation.

The future ISO 14080 will describe a framework and principles to make adaptation and mitigation schemes more compatible, and elaborate the different approaches of mitigation and adaptation. It will also support the efforts of developed and developing countries in relation to mitigation and adaptation.

In addition, ISO has several technical committees developing new standards to support adaptation and resilience for organizations and communities. Subcommittee SC 7 of ISO/TC 207 has established a standards roadmap that will guide development of a planned future suite of standards for vulnerability assessment, adaptation planning, and adaptation monitoring and evaluation.

ISO (International Organization for Standardization) is an independent, non-governmental international organization with a membership of 162* national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges.

ISO has published more than 21 000* International Standards and related documents covering almost every industry, from technology to food safety, to agriculture and healthcare.

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More information

ISO Website: www.iso.org
ISO Website section on climate change: www.iso.org/iso/climate_change
ISO 14001 information and resources: www.iso.org/iso/iso14000
ISOfocus magazine: www.iso.org/isofocus