ISO and climate change

Great things happen **when the world agrees.**

We are ISO, the International Organization for Standardization

We are an independent, non-governmental organization.

We are a global network of national standards bodies with one member per country.

Our job is to make International Standards.

We are coordinated by a Central Secretariat in Geneva, Switzerland.

We are not for profit : selling our standards allows us to finance their development in a neutral environment, to maintain them and to make new ones.

ISO provides a platform for developing practical tools through common understanding and cooperation with all stakeholders.

161* members

22 000* International Standards

100 new standards each month

245* technical committees

* July 2018

Why do we need ISO standards for climate change?

ISO environment-related standards help open world markets for clean energy and energy-efficient technologies and support climate change adaptation and mitigation.

ISO standards help governments and organizations address climate change.

ISO standards are seen as essential to the greenhouse gas (GHG) markets for cap-and-trade schemes, offsetting credits, carbon neutrality and low-carbon strategies and policies.

ISO standards for climate change contribute directly to the United Nations Sustainable Development Goal 13 on climate action.

Who benefits from ISO standards for climate change?

ISO standards for climate change help businesses not only adhere to increasing regulatory requirements but get a handle on their own environmental impact. They help them take concrete actions to reduce their impact, improve energy efficiencies and put robust risk management processes in place.

Regulators can rely on ISO standards as a solid base on which to create public policy that meets international commitments and addresses the many challenges that climate change brings.

Consumers benefit from ISO standards when they are used by both business and authorities to address climate change impacts through better disaster management, improved energy efficiency and environmentally friendly infrastructures and policies.

What environment-related sectors does ISO cover?

- Environmental management
- Quantifying GHG emissions
- Mitigation and adaptation
- Financing climate change activities
- Communicating on environmental performance
- Opening world markets to clean energy
- Monitoring climate change
- and many more...

What standards does ISO have for climate change?

ISO has produced over 600 environment-related standards.

Below is a selection of our climate change standards:

Environmental management

The ISO 14000 family of standards for environmental management developed by ISO technical committee ISO/TC 207, *Environmental management*, is firmly established as the global benchmark for promoting good practice in environmental management and design.

- **ISO 14001**, ***Environmental management systems – Requirements with guidance for use***

This standard helps organizations achieve their objectives in an environmentally sustainable manner.

Other standards in the family include:

- **ISO 14004**, ***Environmental management systems – General guidelines on implementation***
- **ISO 14006**, ***Environmental management systems – Guidelines for incorporating ecodesign***
- **ISO 14040**, ***Environmental management – Life cycle assessment – Principles and framework***
- **ISO 14044**, ***Environmental management – Life cycle assessment – Requirements and guidelines***

The ISO 14000 family also includes supporting tools for environmental management and the design of environmentally friendly products and services.

Who develops ISO standards?

ISO standards are developed by groups of experts within technical committees (TCs). TCs are made up of representatives from industry, non-governmental organizations, governments and other stakeholders who are put forward by ISO's members. Each TC deals with a different subject; when it comes to climate change, for example, there are committees focused on calculating greenhouse gas emissions, measuring the carbon footprint of products and financing climate change activities. Visit our Website **ISO.org** to find out more about the standards developed in a particular sector by searching for the work of the relevant technical committee.

Quantifying GHG emissions

ISO standards are designed to be policy-neutral, giving them the flexibility to be applied to many different GHG programmes around the world. The growing use of ISO GHG standards for both regulatory and voluntary purposes is a testament to their versatility and their contribution to linking GHG markets around the world. They provide an internationally agreed framework for measuring GHG emissions, verifying claims and accrediting the bodies that carry out such activities to ensure accuracy and completeness.

Key standards include:

- **ISO 14064**, *Greenhouse gases*
- **ISO 14065**, *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition*

Mitigation and adaptation

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

- **ISO 14080**, *Greenhouse gas management and related activities – Framework and principles for methodologies on climate actions*

This standard sets out a framework and principles to make adaptation and mitigation schemes more compatible and elaborate on their different approaches. In addition, there are a number of standards in the pipeline to support the way organizations and communities adapt and become more resilient to climate change, including those for vulnerability assessment, adaptation planning and adaptation monitoring and evaluation.

These include:

- **ISO 14090**, *Adaptation to climate change – Principles, requirements and guidelines*
- **ISO 14091**, *Adaptation to climate change – Vulnerability, impacts and risk assessment*
- **ISO 14092**, *GHG management and related activities: requirement and guidance of adaptation planning for organizations including local governments and communities*

Financing climate change activities

- **ISO 14030**, *Green bonds – Environmental performance of nominated projects and assets*

Private initiatives and capital will be required to create sustainable solutions in the future. Green bonds are one way of financing climate and environmental investments. ISO is now developing ISO 14030 to harmonize the definition of green bonds and specify requirements to evaluate the environmental performance of the assets they finance.

Coming soon!

The future ISO 14097 for assessing and reporting investments and financing activities related to climate change will provide a general framework and technical guidance to financial institutions on climate-related metrics.

Communicating on environmental performance

ISO has developed a number of standards to ensure good practice when making environmental claims and communications.

These include:

- **ISO 14020**, *Environmental labels and declarations – General principles*
- **ISO 14026**, *Environmental labels and declarations – Principles, requirements and guidelines for communication of footprint information*
- **ISO 14063**, *Environmental management – Environmental communication – Guidelines and examples*
- **ISO 21930**, *Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services*

Did you know?

ISO is developing a new standard – ISO 14016 – on the assurance of environmental reports, which will give readers of corporate sustainability reports greater confidence by demonstrating the reliability of the information included.

Opening world markets to clean energy

International Standards can also be the vehicle for the dissemination of innovative technologies, particularly for alternative and renewable energy 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 14034,** ***Environmental management – Environmental technology verification (ETV)***

This standard can assist companies developing innovative environmental technologies in reaching new markets. It provides independent verification of the performance of new environmental technologies, helping manufacturers prove the reliability of their performance claims and technology purchasers identify the innovations that suit their needs.

- **ISO 50001,** ***Energy management systems – Requirements with guidance for use***

This standard helps organizations of all kinds and sectors manage their energy performance and use energy more efficiently, while other standards in the ISO 50000 range provide specific guidance in areas such as auditing, measurement and energy savings.

Related standards

ISO has already developed many other standards that have an impact on climate change in areas such as nuclear energy, solar energy, hydrogen technologies, intelligent transport systems, building environment design, and sustainability in building construction.

Benefits of ISO standards for climate change

Developed under a consensus process by experts from all around the world, ISO standards are leading climate action in a variety of ways by:

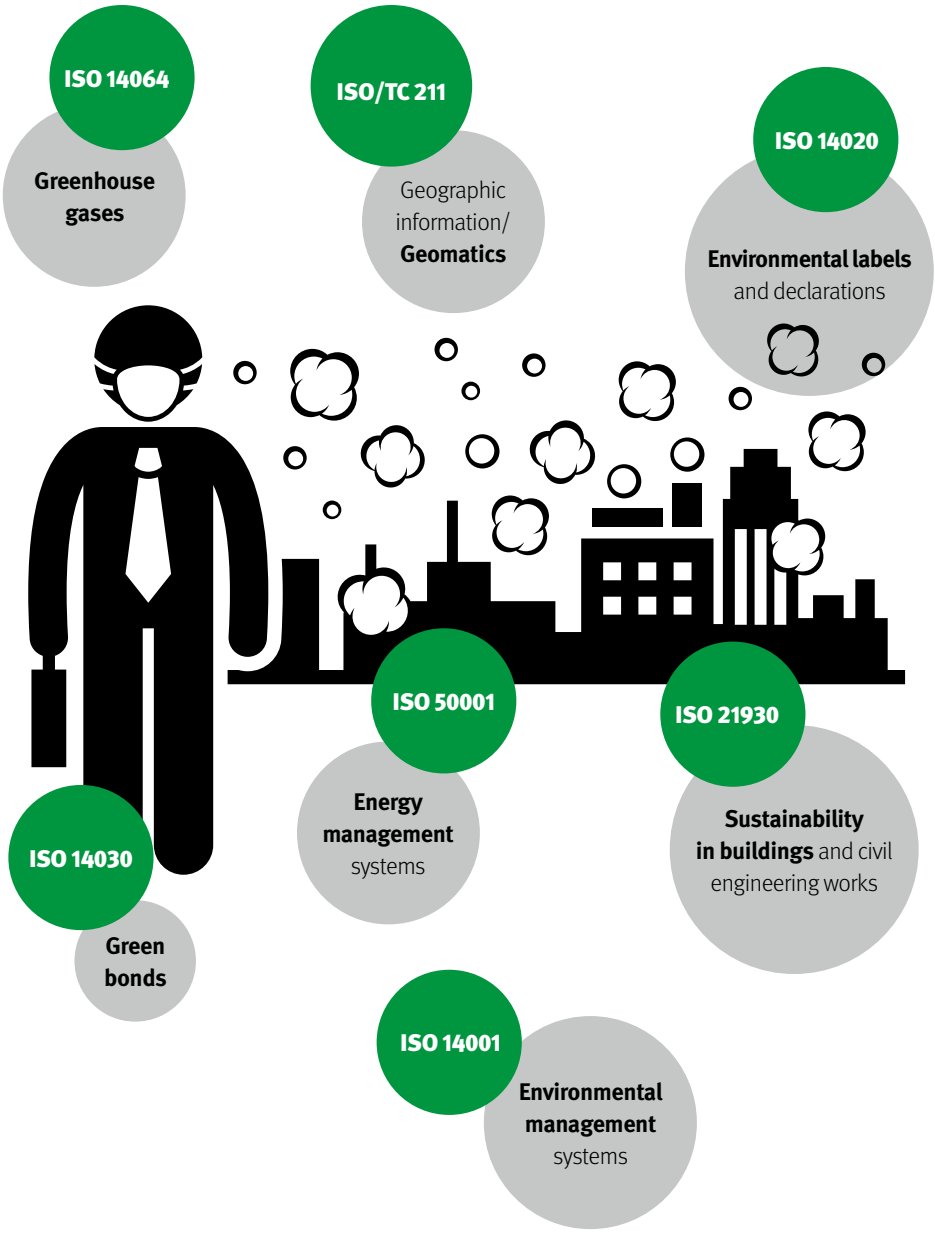
- Offering transparent and comparable GHG reporting
- Providing a foundation of best practices upon which to build a GHG reductions programme
- Providing opportunities for improved consistency, increased flexibility and decreased effort associated with voluntary GHG inventories
- Offering a consistent technical approach that simplifies verification and facilitates emissions trading
- Decreasing transaction costs
- Building greater confidence in GHG inventory and improving stakeholder credibility

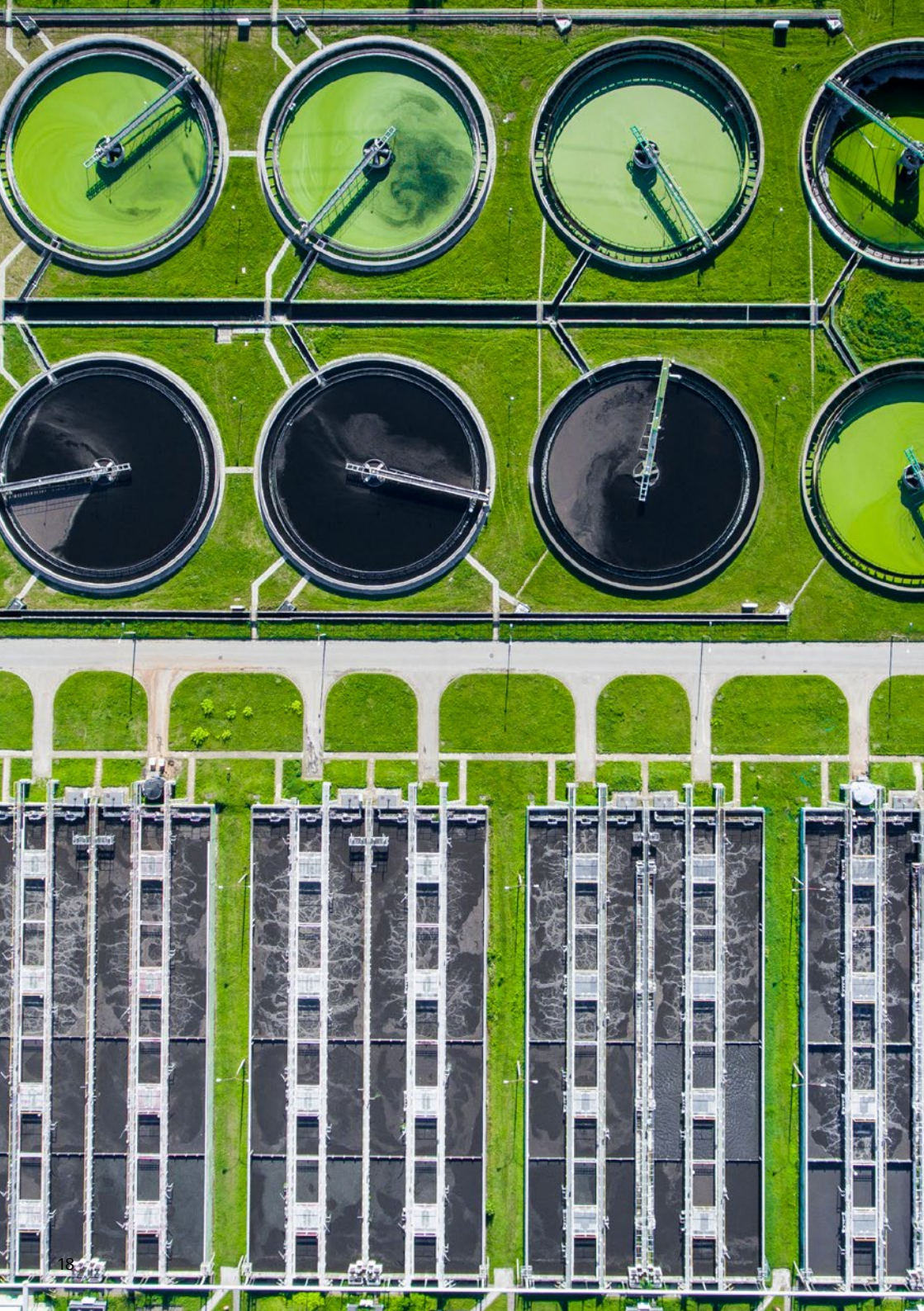
ISO's proactive stance on climate change topics has resulted in the initiation of ISO work on biofuels, energy management systems and the examination of new opportunities in energy efficiency and renewable energy sources. To this end, ISO maintains its close cooperation with the International Electrotechnical 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.

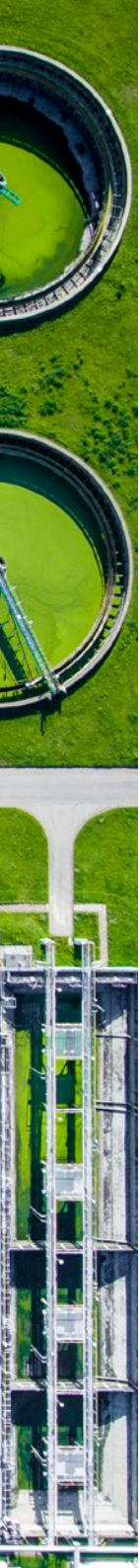
Monitoring climate change

- **ISO/TC 211**, ***Geographic information/Geomatics***

This ISO technical committee deals with standardization in the field of digital geographic information. It collaborates, among other partners, with the Food and Agriculture Organization of the United Nations (FAO) on standards for satellite mapping and data acquisition and processing and with the World Meteorological Organization (WMO) on standards for meteorological and climatological data.


ISO 14064
Greenhouse gases
ISO/TC 211
Geographic information/ Geomatics
ISO 14020
Environmental labels and declarations
ISO 50001
Energy management systems
ISO 21930
Sustainability in buildings and civil engineering works
ISO 14030
Green bonds
ISO 14001
Environmental management systems





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

ISO videos
www.iso.org/youtube

Follow us on Twitter
www.iso.org/twitter

Join us on Facebook
www.iso.org/facebook

Join us on GooglePlus
www.iso.org/gplus

International Organization for Standardization

ISO Central Secretariat
Chemin de Blandonnet 8
Case Postale 401
1214 Vernier, Geneva
Switzerland

iso.org

ISBN 978-92-67-10827-8

The symbol on the cover comes from the International Standard **ISO 7000, *Graphical symbols for use on equipment – Registered symbols***. It is used on sunglasses to signify high protection against extreme sunglare.

Available on our Online Browsing Platform at: **gotoi.so/isosymbols**.