

CHINA

Standardization Administration of China (SAC) Developing standards for low-carbon equipment

Overview

Energy conservation as it relates to the fight against climate change has always been a top priority for China's sustainable development. With growing policy emphasis on improving energy efficiency and reducing environmental pollution and carbon emissions, the country has implemented a series of new minimum energy performance standards to improve appliance energy efficiency.

The Standardization Administration of China (SAC) has taken many productive measures to actively develop national standards that address climate change. Standards play a key role in the country's energy policy by promoting standardized technical specifications that form the basis for new green technologies, products and methodologies. These have proved effective for energy saving and carbon management and are widely accepted both in China and around the world.

SAC's standards portfolio currently contains 73 standards for minimum energy performance of end-use equipment spanning almost the whole gamut of end-use household appliances as well as most common commercial and industrial equipment. Similarly, the national suite of standards for energy intensity of industrial products totals 111 deliverables. These cover a broad range of products from China's main industrial sectors, including the oil industry, iron & steel, chemical engineering, power plants, non-ferrous metal, and coal. In addition, over three hundred voluntary standards for energy conservation offer an essential complement to these standards.

In the area of greenhouse gases, China has also published 16 national standards for the accounting and reporting of greenhouse gas (GHG) emissions since 2015. These cover 12 typically polluting industrial sectors such as iron & steel, chemical engineering, building materials, power plants, non-ferrous metal, the coal industry and civil aviation.

The main stakeholders involved in the development and implementation of these standards are governmental agencies, relevant industry associations, universities and research institutes, testing laboratories, and certification and accreditation bodies. The standards will be referenced when making specific technical requirements in regulation/legislation.

Outcomes and benefits

Both energy conservation standards and standards for GHG emissions accounting have made a significant contribution to China's climate action by promoting technologies, equipment, products and methodologies that are environmentally friendly and effective. These have resulted in substantial energy savings and a reduction in GHG emissions in the industrial production process and the end-use product sectors in China.

Partners involved

Requesting organizations:

This standards development initiative was launched by the Standardization Administration of China (SAC) in conjunction with relevant government agencies. SAC works in collaboration with the National Development and Reform Commission (NDRC) to develop national standards for energy conservation. Its greenhouse gas accounting standards are produced with the participation of the Ministry of Ecology and Environment (MEE).

Supporting organization:

The China National Institute of Standardization (CNIS) provides the requesting organizations with technical support in devising the plan and programmes for standards development and ensures these are followed when developing and maintaining standards for energy conservation and GHG emissions accounting.

Timeline

China has been publishing mandatory national standards for energy conservation of equipment since the late 1980s, branching out towards industrial products in 2007. More recently, in 2015, it began developing standards for the accounting and reporting of greenhouse gases.

References

- Law of the People's Republic of China on Conserving Energy
- Opinions on Strengthening Energy Conservation Standardization Work (released by the General Office of the State Council)