



Energy Management Working Group

WORKING TOGETHER TO ACCELERATE PROGRESS TOWARD ENERGY & CLIMATE GOALS

Governments around the world recognize the pivotal role of energy in addressing economic, social, environmental, and security issues. The industrial and commercial buildings sectors jointly account for about 60% of global energy end use.¹

Countries participating in the Energy Management Working Group are leveraging their resources and taking collective action to strengthen national and international efforts to make it easier for these sectors to adopt energy management systems around the globe. EMWG collaboration enables member countries to enhance their domestic capacities to effectively accelerate quality adoption of ISO 50001 and energy management systems—helping to meet national energy, economic, and sustainability goals.



By implementing energy management systems, organizations establish policies, procedures, and tools to systematically track, assess, and improve energy use on an ongoing basis—ensuring continuous advances in energy performance. *Photo: iStock/17587664*

ENDURING VALUE OF ENERGY MANAGEMENT SYSTEMS

Energy management systems help an organization institutionalize the policies, procedures, and tools to systematically track, analyze, and improve energy efficiency—leading to continual improvements in energy performance.



ISO 50001 uses the Plan-Do-Check-Act cycle common to other ISO standards.

management systems can save up to 30% of total energy use in industry² and up to 40% in commercial buildings³.

EMWG analysis projects that implementation of ISO 50001 across the commercial and industrial sectors globally could drive cumulative energy savings of

In response to growing concerns about energy and sustainability, a rapidly growing number of organizations around the world are adopting energy management systems, such as the international ISO 50001 standard. ISO 50001 is considered the global best practice model for comprehensive and strategic energy management—and also serves as a global benchmark for climate and clean energy action.

By simply changing how energy is managed, industry and the commercial buildings sectors can significantly increase their energy productivity. Use of energy

Member Governments

EMWG member governments share knowledge, expertise, strategies and best practices to facilitate the effective implementation of energy management systems.

- Australia
- Canada
- Chile
- China (observer)
- European Commission
- Finland
- Germany
- India
- Indonesia
- Japan
- Mexico
- Republic of Korea
- Saudi Arabia
- South Africa
- Sweden
- United States

¹ Energy Information Administration, *International Energy Outlook 2013*, DOE/EIA (Washington, DC: U.S. Energy Information Administration, 2013).

² McKane, 2011, as reported in: OECD/IEA and Institute for Industrial Productivity, *Energy Management Programmes for Industry: Gaining through saving*, Paris, 2012, p.17. At: www.iea.org/publications/freepublications/publication/policy/pathways/industry.pdf

³ Ahmed, A., Ploennigs, J., Menzel, K., & Cahill, B. (2010). Multi-dimensional building performance data management for continuous commissioning. *Advanced Engineering Informatics*, 24(4), 466–475. doi:10.1016/j.aei.2010.06.007

approximately 62 exajoules by 2030, saving over \$600 billion in energy costs and avoiding 6,500 Mt of CO₂ emissions. The projected annual emissions savings in 2030 are equivalent to removing 215 million passenger vehicles from the road.

COLLABORATIVE APPROACH

EMWG member governments engage in active peer sharing on strategies, experiences, and best practices. To broaden its reach, the EMWG also engages private industry, non-government organizations (NGOs), standards and accreditation bodies, and regional energy efficiency programs to support cohesive national and regional energy and climate strategies. Partnerships with organizations such as ISO and UNIDO also strengthen the EMWG's focus on *quality* implementation of ISO 50001.



Company-level benefits from energy management systems include improved productivity, optimized processes, emissions reduction, and reduced exposure to cost fluctuations. Using ISO 50001, a 3M facility in Canada improved its energy performance by 15.2% during a two-year pilot project. *Photo courtesy of 3M*

ACTIVITIES AND PRODUCTS

Member countries pursue activities to maximize the value of ISO 50001 for business and climate. Selected examples:

ISO 50001 Global Impacts Research Network: The EMWG works to compile and analyze ISO 50001 implementation data to help corporate and government leaders assess the value of ISO 50001 and make informed and business and policy decisions.

Energy Professionals International Certification for ISO 50001 Lead Auditors: This new international exam and credential qualifies ISO 50001 professionals who possess a highly specific blend of education, skills, and experience with energy efficiency projects *as well as* business management systems and procedures.

Energy Management Leadership Awards: Leading companies that have a certified ISO 50001 energy management system are formally recognized for their accomplishments. Organizations submit case studies that describe their ISO 50001 implementation experiences, the business value at their company, and results.

Case Studies: The EMWG's growing suite of case studies from companies around the world show energy performance improvements of 10% or more and explain the business benefits of energy management systems.

Energy Management Toolbox: A collection of the best available, proven resources will be packaged into a free, online "toolbox" that companies can easily access to set up energy management systems and achieve energy savings.

Measurement and Verification: Member countries also work together to enhance energy measurement and verification best practices.

Objectives

Energy Management Working Group members share their knowledge, expertise, and experience to:

Build the Business Case: Make the private sector aware of the business case for energy management and its value in maintaining competitiveness.

Provide Support and Resources: Provide guidance and resources to support national and regional implementation of energy management.

Set Policy: Establish energy management as a key energy efficiency strategy for the industrial and commercial buildings sectors.

The Energy Management Working Group (EMWG) has been driving the global dialogue on ISO 50001 since 2010 as an initiative under the Clean Energy Ministerial (CEM), International Partnership for Energy Efficiency Cooperation (IPEEC), and the G20 Energy Efficiency Action Plan. Learn more about the EMWG, company experiences implementing ISO 50001, and how to maximize your efforts at www.cleanenergyministerial.org/EnergyManagement.