



PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY	
Date of proposal	Reference number (to be given by Central Secretariat)
Proposer	ISO/TS/P

A proposal for a new field of technical activity shall be submitted to the Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives (part 1, subclause 1.5). The proposer may be a member body of ISO, a technical committee or subcommittee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives (part 1, annex Q).

The proposal (to be completed by the proposer)

<p>Subject (the subject shall be described unambiguously and as concisely as possible)</p> <p>Energy Management</p>
<p>Scope (the scope shall define precisely the limits of the proposed new field of activity and shall begin with "Standardization of ..." or "Standardization in the field of ...")</p> <p>Standardization in the field of energy management, including: energy supply, procurement practices for energy using equipment and systems, energy use, and any use-related disposal issues. The standard will also address measurement of current energy usage, and implementation of a measurement system to document, report, and validate continuous improvement in the area of energy management.</p>
<p>Purpose and justification (the justification shall endeavour to assess the economic and social advantages which would result from the adoption of International Standards in the proposed new field)</p> <p>The Standard will build on the framework of standards such as ANSI MSE 2000:2005 and other national standards (See Justification Study for a non-exhaustive review of standards regarding energy management) and will support the continual improvement plan-do-check-act approach utilized in ISO 9001 and ISO 14001 to provide compatibility and integration opportunities. The energy management standard will provide a practical approach to improving energy efficiencies, reducing costs and potential improvements in the environmental footprint of the implementing organizations by combining both the technical aspects of energy management and the strategic management aspects.</p> <p>See Attachment A for a complete description of the Purpose and Justification.</p>

Programme of work (list of principal questions which the proposer wishes to be included within the limits given in the proposed scope, indicating what aspects of the subject should be dealt with, e.g. terminology, test methods, dimensions and tolerances, performance requirements, technical specifications, etc.)

The anticipated timeframe provides for a first meeting of new committee in June of 2008. It includes a 12 month preparation stage of working drafts and committee drafts. This stage consists of the development of working drafts during the timeframe of June 2008 to January 2009, a period of comments, voting and further edits during January 2009 to May 2009, resulting in a final committee draft (CD) representing the consensus of experts as well as the Technical and Sub-Committees. Then it moves to an inquiry stage during May 2009 to October 2009 (6 months) with a work product of a draft (DIS) as representing the input from the larger ISO membership and a text based on the CD voting results. Then it moves to the approval stage for the DIS during October 2009 to March 2010. This will be followed by the preparation of the Final standard (FDIS) for the six months of March 2010 to August 2010 followed by the publication for vote on the FDIS August 2010 to October 2010. The entire process is anticipated to end with the publication of the International Standard (IS) by the end of 2010. The entire process is anticipated to take a maximum of thirty-six months.

The programme of work will involve the generation of management system documents that represents three basic categories. The first category will be requirements or specification. This will be accompanied by a definition document and a guidance document that will address issues for implementation and continual improvement, and a guidance on metrics and measurements.

Survey of similar work undertaken in other bodies (relevant documents to be considered: national standards or other normative documents)

Existing National Energy Management Standards

Denmark DS 2403:2001 Energy Management-Specification and DS/INF 136:2001 Energy Management-Guidance on Energy Management

Ireland IS 393:2005 Energy Management Systems-Specification with Guidance for Use and IS 393:2005 Technical Guideline (December 2006)

Sweden SS 627750:2003 Energy Management Systems-Specification

United States ANSI/MSE 2000:2005 A Management System for Energy

Developing National Energy Management Standards

China Management System for Energy - in development, China Standard Certification Center, China National Institute of Standardization

EU European Committee for Standardization (CEN) harmonized EU standard - in development

Existing Energy Management Specifications

Australia AS3595-1990 Energy Management programs -Guidelines for financial evaluation of a project and AS 3596-1992 Energy Management programs -Guidelines for definition and analysis of energy and cost savings

Canada PLUS 1140:1995 A Voluntary Energy Management Guideline

China GB/T 15587:1995 Guides for energy management in industrial enterprise

Germany VDI 4602 Blatt 1:2006-04 Energy Management - Terms, definitions

Japan JIS Z 9211 (1982-02-01) titled Technical terms used in energy management and JIS Z 9212 (1983-01-01) Technical terms used in energy management (2003-05-20)

Korea B 0071 (1985) Technical terms used in energy management (No. 2)

Netherlands Energy Management System Specification with Guidance for Use, June 2004 publication of SenterNovem

United Kingdom BIP 2011:2003 Continual Improvement through auditing (Integrated Management Systems Series)

United Kingdom HB 10190:2001 The Framework (Integrated Management System Series) and HB 1091:2002 Implementing and operating (Integrated Management System Series)

United Kingdom PASS 55-1:2003 Specification for the optimised management of physical infrastructure assets and PASS 55-2:2003 Guidelines for the application of PASS 55-1.

United States ANSI 739:1995 IEEE Recommended practice for energy management in industrial and commercial facilities

Other Relevant Documents

United Nations Industrial Development Organization (UNIDO) issues paper on energy management and outcomes of 21-22 March 2007 Experts Group Meeting
<http://www.unido.org/doc/64561>

Liaison organizations (list of organizations or external or internal bodies with which cooperation and liaison should be established)

United Nations Industrial Development Organization

Renewable Energy and Energy Efficiency Programme

World Bank

World Resources Institute

International Energy Agency

United Nations Development Programme

United Nations Environmental Programme

Association of Southeast Asian Nations (ASEAN) Consultative Committee on Standards and Quality

Asia Pacific Economic Cooperation (APEC)

Asia Pacific Partnership

European Commission

Asian Development Bank

African Development Bank

Inter-American Development Bank

Pan American Standards Commission

World Energy Council

World Energy Efficiency Association

Technical Committees for Liaison: TC 207 Environmental management, TC 176 Quality management and quality assurance, TC 203 Technical energy systems, TC 193 Natural gas, TC 146 Air quality, TC 147 Water quality

Others to be determined

Other comments (if any)

Signature of the proposer

Comments of the Secretary-General (to be completed by the Central Secretariat)

Signature

Attachment A

Purpose and Justifications- Energy Management

The Standard will build on the framework of standards such as ANSI MSE 2000:2005 and other national standards (See Justification Study for a non-exhaustive review of standards regarding energy management) and will support the continual improvement plan-do-check-act approach utilized in ISO 9001 and ISO 14001 to provide compatibility and integration opportunities. The energy management standard will provide a practical approach to improving energy efficiencies, reducing costs and potential improvements in the environmental footprint of the implementing organizations by combining both the technical aspects of energy management and the strategic management aspects.

Given the growing global constraints on energy supply and the significance of energy efficiency in mitigating greenhouse gas (GHG) emissions, energy management is an important topic in its own right. Since effective energy management is largely operational, it requires a unique combination of strategic planning at the organizational level and technical guidance to implement new procedures and projects. Energy efficiency has long been recognized as a separate discipline from environment, quality assurance, or other management concerns. Existing ISO Technical Committees have insufficient expertise in both the technical aspects of system energy efficiency and the organizational management of energy required to complete the development of this standard. These Technical Committees may address the technical issues concerning an energy using component or subsystem, or management systems that have different purposes, but not the integrated approach required for energy management. A Technical Committee dedicated to energy management would attract the participation by well-informed experts in the field and would be prepared to address both technical and management aspects of the standard as well as alignment with other management system standards, thus encouraging integration and best practices.

There is a growing interest and need for promoting voluntary private initiatives in the area of energy management. The diverse range of initiatives across the globe indicate the need for standards harmonization through collaboration as represented by the statement issued by the United Nations Industrial Development Organization (UNIDO) on March 21-22, 2007.

"Statement from Participants in the UNIDO Expert Group Meeting (EGM) on Industrial Energy Efficiency and Energy Management Standards, March 21-22, 2007.

The EGM participants reached a consensus that the timing is favorable to move forward with the international harmonization of standards for Energy Management.

Currently, four countries have standards for Energy Management (Denmark, Sweden, Ireland, and the United States) and two have standards under development (China, and Spain). In addition, two other energy management specifications are already in use (Netherlands, Germany), and in some countries, such as Brazil, companies are developing their own energy efficiency standards. Moreover, harmonization efforts within the European Union have begun

under the auspices of the European Committee for Standardization (CEN).

For these reasons, the meeting participants request that the International Organization for Standardization (ISO), as the appropriate international entity for global harmonization of standards, consider initiating development of an ISO Energy Management standard at the earliest possible opportunity."

The main benefits from the proposed standard include but are not limited to:

- * Provides organizations and facilities (industrial, commercial, governmental) with a well-tested framework for integrating energy efficiency into their management practices
- * Offers organizations with operations in more than one country a single, harmonized standard for implementation across the organization
- * Provides a logical and consistent methodology for identifying and implementing energy efficiency improvements that contribute to continual improvement of energy efficiency in these facilities
- * Assists participating organizations in better utilization of existing energy consuming assets, thus reducing costs and/or expanding capacity with existing assets
- * Offers guidance on baselining, measuring, documenting, and reporting energy intensity improvements and their projected impact on reductions in GHG emissions.
- * Creates transparency and standardization in the management of energy that currently doesn't exist, facilitating recognition of energy management best practices by outside organizations, thus reinforcing the value of energy managing behavior.
- * Assists facilities in evaluating and prioritizing the new energy using technologies
- * Provides a framework for organizations to encourage suppliers to manage their energy, thus multiplying the energy intensity reduction from each participating organization
- * Facilitates the use of energy management as a trade mechanism that contributes positively to GHG emissions reductions
- * Expands the market for energy efficient services

The Standard is intended to be used by organizations of all sizes and type, regardless of the nature of their activities, products or services.

Energy is the common thread for industry, consumers, trade, governments and distributors. Improved technical management of the supply and demand side of energy and cost reduction would benefit all these interested parties.

The current supply of energy available globally is not projected to match the growing demand, resulting in the need for additional utility facilities to be built. Effective energy management would reduce the urgent demand on the development of these facilities, improving energy infrastructure and security.

There is currently a global interest in energy due to the increasing costs, public pressures related to climate change, and increasing demand on a limited supply. The urgency of climate issues provides a strong rationale and has created interest in the accelerated development of this Standard. The suggested timeframe for development is 36 months.

Energy efficiency best practices are well-tested and energy efficient technologies are widely available. The principle barriers to wider adoption of these practices and technologies are institutional and behavioral, rather than technical. It is these organization barriers that the energy management standard seeks to address.

If the voluntary approach to energy management is not pursued in a timely manner, it is likely that this will become a regulated issue. This is due to the need to validate energy savings to qualify for white certificates and to consider energy efficiency improvements for carbon credits. This type of approach to energy management will address easily identified reductions in energy use to be achieved through use of energy efficient component equipment, which will not yield the level of energy use reduction through energy management.

Please see attached ISO Guide 72, Justification Study.