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Energy management systems — Guidelines for a phased implementation

Systèmes de management de l'énergie — Lignes directrices pour une mise en œuvre par étapes



| Col | itent | S | Page |
|--------------------------|------------------------------------|---|------|
| Fore | word | | iv |
| | | n | |
| 1 | Scope | | |
| 2 | 70. | native references | |
| 3 | | is and definitions | |
| | | | |
| 4 | | naturity model approach to implementing an EnMS | 1 |
| | 4.1 | Explanation and structure of the maturity model | 1 |
| | 4.2 | Phased implementation of an EnMS using the maturity model | |
| | | 4.2.1 General | 3 |
| | | 4.2.2 Assess the organization's initial situation | 3 |
| | | 4.2.3 Set and confirm a goal for the phased implementation | 4 |
| | | 4.2.4 Set up a simple business case | 5 |
| | | 4.2.5 Set up a project plan | 5 |
| | | 4.2.6 Monitor the implementation of the project plan 4.2.7 Gap analysis versus ISO 50001:2018 | 5 |
| _55 | | | |
| 5 | Description of elements and levels | | 5 |
| | 5.1 | Element 1 — Context of the organization | 5 |
| | 5.2 | Element 2 — Leadership | 7 |
| | 5.3 | Element 3 — Resources | 8 |
| | 5.4 | Element 4 — Energy review | |
| | 5.5 | Element 5 — Energy performance indicators and energy baselines | |
| | 5.6 | Element 6 — Objectives, energy targets and action plans | 13 |
| | 5.7 | Element 7 — Competence and awareness Element 8 — Operations and maintenance | 14 |
| | 5.8 | Element 8 — Operations and maintenance | 15 |
| | 5.9 | Element 9 — Procurement and design | |
| | 5.10 | Element 10 - Process for communication and control of documented information | 17 |
| | 5.11 | Element 11 — Monitoring, measurement, analysis and evaluation of energy | |
| | | performanceElement 12 — Management review and improvement | 18 |
| | 5.12 | | |
| Ann | ex A (in | formative) Continual improvement and advancing of the EnMS | 22 |
| Ann | ex B (in | formative) Level version of the maturity model | 25 |
| BibliographyBibliography | | | 37 |

Introduction

0.1 General

It is important to engage all types of organizations and, in particular, small and medium-sized organizations (SMOs) into the broad scale implementation of energy management because of the significant potential such organizations have for energy performance improvement, associated energy cost savings and reductions in greenhouse gas (GHG) emissions.

This document is intended to enable organizations to initiate and improve energy management practices by following a systematic approach with appropriate effort given their resources and context, resulting in continual energy performance improvement.

This document provides practical guidance to undertake a phased implementation of an energy management system (EnMS), e.g. by using in-house capacity. The functioning EnMS can subsequently be extended to meet the requirements of ISO 50001. A well-planned phased implementation of an EnMS can reduce costs and the use of other resources while providing near-term success on which to build. This can help in overcoming barriers for implementation in organizations with limited resources, such as SMOs.

This document explains a phased implementation approach using twelve core elements based on ISO 50001:2018. It outlines the content of the elements and describes four different levels of maturity for each element. Annex A-includes best practices for continual improvement of an EnMS by using a phased approach. An organization can select appropriate tools to find an effective and efficient approach to achieve the desired maturity of its EnMS. The element(s) and the corresponding maturity level(s) targeted depend on the organization's objectives and strategic direction. The EnMS can be integrated with other management systems to benefit from common structures.

In this document, both terms "energy performance improvement" (as defined in ISO 50001:2018) and "energy savings" are used. Energy savings is considered as a subset of energy performance improvement in this document.

0.2 Advantages of a phased implementation

Implementing an EnMS in an organization can be a challenge. Organizations can have limited resources (e.g. knowledge and availability of personnel) in order to successfully implement an EnMS. A phased implementation results in several benefits to the organization. The phased implementation described in this document offers flexibility that allows an organization to:

- decide the scope and pace of its EnMS implementation to suit available resources and organizational needs;
- decide on the elements to target and the desired maturity level(s);
- start with areas that indicate the greatest potential for energy performance improvement, return on investment or align with current operational practices;
- stimulate a positive culture towards energy management;
- deliver simple and/or low-cost energy performance improvements and associated energy cost savings, emission reductions and other benefits;
- build initial successes to increase credibility and thus secure commitment and support for further development of the EnMS;
- build a strong foundation to expand an existing EnMS towards meeting the requirements of ISO 50001.