

ISO 50001:2018

Energy Management Systems Documentation

Energy Manual / Documented Information

Document No. EnMS-002

Street Address

City, State, Zip

Tel,

Cell Phone:

Email:

Web Site:

Instructions:

This manual is used as a template in developing your ISO 50001:2018 Energy Management Systems.

- Methods and systems used in the development and operation of the EnMS vary widely from company to company.
- The blue text and suggestions displayed in the manual are intended to offer some options and to highlight the areas that need attention / update / replacement.
- Review the text and suggestions and at a minimum replace or update them to reflect the unique / customized information of your energy system requirements.
- Delete the blue text after each task is completed.
- Use replace function – enter “Your Company” in find space, enter your company name in replace space – system should make changes throughout the entire document.
- Additional details and instructions in the use of the EnMS-002 manual template is included in a separate file “EnMS-Template-Instructions”.

Additional documentation review.

- Similarly, the blue text and suggestions displayed in the EnMS documentation (that will follow) for the procedures, instructions, attachments, forms, and flow diagrams are intended to offer some options and to highlight the areas that require update or replacement.

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Clause 6 Planning

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Energy Objectives, Targets and Action Plans

1.0 Purpose/Scope

- 1.1 The purpose of this procedure is to describe the process of setting the energy objectives and targets at relevant functions and levels in [Your Company](#).
- 1.2 This procedure provides for the development of the energy programs required to achieve the objectives and targets and outlines the process for developing action plans for the identified energy programs.

2.0 Responsibilities and Authorities

- 2.1 The [Energy management team leader](#) has the prime responsibility and approval authority for this procedure.
- 2.2 The [Energy management team leader](#) in consultation with the [Energy management team](#) is responsible to coordinate activities associated with the implementation and the maintenance of this procedure covering the energy objectives, targets and action plans.
- 2.3 Additional responsibilities for other personnel are detailed in relevant paragraphs of section 5.0 below.

3.0 References and Definitions

- 3.1 This document addresses clause 6.2 of the ISO 50001:2018 standard, covering objectives and targets.

4.0 Resources

- 4.1 None

5.0 Instructions

- 5.1 By setting objectives and targets at the relevant functions, levels, processes and facilities, [Your Company](#) can focus its efforts and resources on areas of greatest energy impact and/or greatest concern to internal and/or external stakeholders.
- 5.2 Objectives and targets are consistent with the energy policy. They are measurable, monitored, communicated and updated as needed.
 - 5.2.1 The objectives and targets become the drivers for the improvement in energy performance and consider legal and other applicable requirements, SEUs-significant energy uses, and energy improvement opportunities identified with the energy review.
 - 5.2.2 The energy objectives planning record, form F-620-001 is used to establish and document the objectives and targets. The form is a multi-section form where:
 - **Section 1** is used to restate the company's energy policy (as detailed in attachment A-520-001).
 - **Section 2** describes the primary objective(s) consistent with and as outlined in the energy policy.
 - **Section 3** describes the general objectives as identified in support of the primary objectives

1.0 Purpose/Scope

- 1.1 This procedure describes the process for internal and external communication regarding energy management at [Your Company](#)
- 1.2 The procedure applies to personnel whose work affects energy performance and the EnMS.

2.0 Responsibilities and Authorities

- 2.1 The [Energy management team leader](#) has the prime responsibility and approval authority for this procedure.
- 2.2 Additional responsibilities for the [Energy management team leader, the human resources staff, the supervisors, and employees](#) are detailed in relevant paragraphs of section 5.0 below.

3.0 References and Definitions

- 3.1 This document relates to clause 7.4 of the of the ISO 50001:2018 standard, covering communication.

4.0 Resources

- 4.1 None

5.0 Instructions

- 5.1 In support of the procedure P-720 for Competence, awareness, and training the [Energy management team](#) determines the method(s) for internal and external communication of energy matters.

- 5.1.1 The internal communication of dependable information is consistent with that generated with the EnMS and is provided through:

- Publication of the Energy policy, A-520-001,
- Communication of the Organization chart, A-530-001,
- Overview of the P-D-C-A, plan-do-check-act approach to continual improvement with guidelines, A-600-001.
- Overview of the Risk-based-thinking approach to improvement with the Risk and opportunities worksheet, form F-610-001.
- Overview of the process approach and risk-based thinking,
- Issue and access of the EnMS Manual, Procedures and Instructions as controlled documents, with the procedure P-750,
- Overview of the procedures & instructions, and the forms & attachments with Master documentation lists, F-750-003,
- Employee comment / suggestions (per par 5.1.2 below),
- [Daily production schedules/sheets,](#)
- [Crew meetings,](#)

INSERT YOUR COMPANY LOGO/NAME HERE

F-750-005
Document Change Request

Document Title:	Document Number:
------------------------	-------------------------

Requestor: _____ Date Requested: _____

Change Requested: *Attach copy of document page with changes indicated.*

Reason for Change:

Approver Comments:

Change Approved: Yes
 No

If yes, is training required? Yes No
Individual Training
Group Training

Training Notes:

Authorized Staff Signature *(Principal signature(s) needed for procedures)*

Energy Management Team Leader

Date

Date

SAMPLE

INSERT YOUR COMPANY LOGO/NAME HERE

F-1010-001

Corrective Action Request - CAR

CA IA

(Check appropriate box to indicate Corrective Action or Improvement Action)

Corrective Action # _____ or Improvement Action # _____ Date: _____

	Date Due	By/Assigned to	Completed Initials & Date
Investigation			
Implementation			
Audit			
CAR closed			

Description of Issue

DESCRIPTION OF ISSUE

Investigation Finding / Root Cause

INVESTIGATION FINDING / ROOT CAUSE

WI-620-002 Example – ACTION PLAN & PROJECT TIMING CHART - DEVELOPMENT OF ENERGY PROGRAM		
COMMITMENT and POLICY	PLANNING	PROCESS
Energy Policy Commitment 1	Program Instruction WI-620-002	Conserve Energy Resources
Reduce energy use per unit of production by 20% in 5 years in manufacturing operations.	Objective 1	Achieve increased energy awareness for contractors.
	Target 1	Provide energy awareness training to all contractors – to be completed in 5 months.
	Energy Program	Energy awareness
Date started:	Action	Human resources, Technical services and Purchasing departments to set up relevant training programs.
PROGRAM – ACTION PLAN PROJECT: _____ LEADER: _____		
Action Plan is relevant to objectives as defined in the Energy Planning record, F-620-001:		
Primary Objectives: _____	General Objectives: X	Energy review Objectives: _____
Legal and Other Requirements: _____	Relevant Functions: _____	Other: _____
Other Action Plan Considerations:		
Are there financial requirements associated with this objective? ___ No, X Yes Training resources are required		
Is funding available? ___ No, X Yes Funds allocated in training budget		
Are there business and operational conditions relevant to this objective? ___ No, ___ Yes Not applicable		
Are the views of interested parties considered? ___ No, ___ Yes _____		
Are there feasible technological options available for this objective? ___ No, ___ Yes _____		
Are there alternative energy sources available for use for this objective? ___ No, ___ Yes _____		
Will operational controls be needed? ___ No, ___ Yes _____, _____, _____		
Will an EnPI be used to report on this objective / target(s)? ___ No, ___ Yes, If yes what is the EnPI metrics? _____		

GUIDELINES FOR ASSESSING ENERGY SIGNIFICANCE	Date Approved:	DATA Form A-630-001
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With reference to **Column 4 of the Energy Assessment Worksheet**, F-630-001 a simplest method of assessing / quantifying the significance of energy use / consumption is to use the letters **H or M or L** to indicate whether the Severity and Occurrence are high or medium or low.

H = High

M = Medium

L = Low

In general:

When both Severity and Occurrence are High, the energy use is significant, and the process step requires improvement action

When one or both the severity and the likelihood are indicated as medium, additional reviews are required to identify existing conditions that reduce or eliminate the energy use.

Below is a method to quantify the energy assessment.

S = Severity of the Outcome

High = 10, 9, 8

Medium = 7, 6, 5, 4

Low = 3, 2, 1

L = Likelihood of the Occurrence

High = 10, 9, 8

Medium = 7, 6, 5, 4

Low = 3, 2, 1

(L x S) = Significance of energy use,

High = 100 to 50 range

Medium = 49 to 16 range

Low = 15 to 1 range

Significance of Use and Consumption

A variation in the method to analyze the Severity and Likelihood and assess the significance or energy performance associated with the process step.

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ISO 50001:2018

Employee Training Overview



Trainer Guide

Includes Trainer's Guide with speaker's notes



ISO 50001 EMPLOYEE TRAINING

"It is Everyone's Job to Conserve Energy"

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Every employee in your company has an important role to play in the Energy Management System (EnMS).

You are participating in this training to learn the basics of this management system, and what it means to be ISO 50001 registered and how it will affect your job.

SECTION 1 - FUNDAMENTALS

- Who is ISO?
- What is a Management System?
- P-D-C-A Continual Improvement Cycle
- Process approach
- Risk-Based Thinking

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Let's start with some fundamentals.

WHAT IS PDCA?

P-D-C-A is applied in ISO 50001

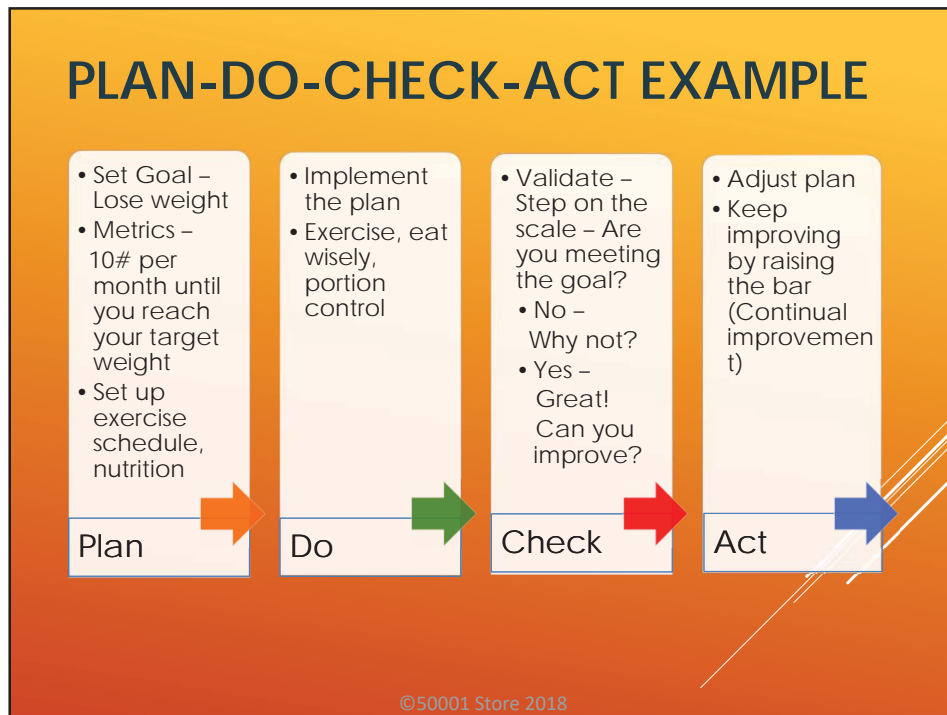


The Plan-Do-Check-Act Cycle – An Approach for
Continual Improvement

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ISO management systems use some common formats to keep them simple.
One is the Plan-Do-Check-Act (P-D-C-A), a continual improvement approach.

PLAN-DO-CHECK-ACT EXAMPLE



You could consider a diet an example of a “Nutritional Management System”.

This is basic, common sense, put into practice.

In this example, there are very common ideas for each of the Plan Do Check Act components.

Sometimes the best solutions are not too complicated, and much more likely to be effective if you have a structured plan in place.

Continual improvement keeps your momentum going and helps you improve your goal.

If you don't improve, you may stop putting in the effort and will ultimately fall backwards.

Student Guide included with space for notes

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ISO 50001 EMPLOYEE TRAINING

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TOPICS COVERED

1. Fundamentals	2. Basics of an EnMS and ISO 50001	3. Establishing your EnMS	4. Managing the ISO 50001 EnMS
<ul style="list-style-type: none">• Who is ISO?• What is a Management System?• Plan Do Check Act• Process approach• Risk Based Thinking	<ul style="list-style-type: none">• What is EnMS?• What is ISO 50001?• Benefits of certification• ISO 50001 registration	<ul style="list-style-type: none">• Action to address risks and opportunities• Legal requirements• Objective, energy targets and programs• Requirements	<ul style="list-style-type: none">• Key elements of an ISO 50001 EnMS

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SECTION 1 - FUNDAMENTALS

- Who is ISO?
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- Process approach
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