



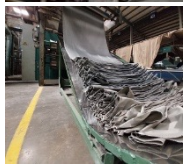
GETTING READY FOR CHANGE SETTING THE FRAMEWORK FOR ENERGY MANAGEMENT IN YOUR COMPANY

Getting ready for change

Overview

- Pre-requisites for energy management
- ISO50001 and Higg FEM requirements
- Key factors for bringing change
- Complete a quick-check/mini-audit





Getting ready for change

Pre-requisites for energy management

1. Understanding the organizational context
2. Leadership by top management
 - a. Create in-house awareness and willingness to change
 - b. Set energy policy, objectives and targets
 - c. Constitute your energy management change team
3. Complete a quick-check/mini-audit

1. Understand organizational context

a. Internal and external issues relevant to the organization

These may include;

- Market trends and business prospects
- Organizational mission, vision, and growth targets
- Internal capacities
- ...

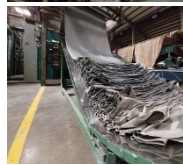


1. Understand organizational context

b. Understanding needs of interested parties

May include;

- regulatory bodies – enforcing laws and regulations related to pollution control
- Customers – setting targets for de-carbonizing supply chain, introducing renewable energy etc.
- Shareholders – expecting return on investments
- Communities – nearby communities getting effected by emissions
- Employees – expecting safe working conditions
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1. Understand organizational context

c. Set scope and boundaries

Set boundaries of organisation to which energy management system (EnMS) applies

- entire organization or any specific operating units?
- Any processes to exclude? And why?
- Ensure the authority to control energy efficiency, energy use and energy consumption within the scope and boundaries
- **Do not exclude** an energy type within the scope and boundaries.



Some sub-contractor activities can be excluded from scope, e.g.;

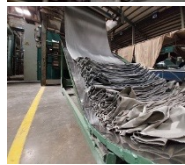
- Boiler owned and operated by a sub-contractor; in such case, Steam purchased from sub-contractor shall be considered as energy source.

2. Leadership by top management

a. Create in-house awareness and raise readiness to change

Key factors influencing the willingness to change in your company

- degree of dissatisfaction with current situation
- clear or publicly announced desired state (situation) in the future
awareness about first practical steps into direction of desired future state (situation)
- the 'costs' of change (both financial and emotional)



2. Leadership by top management

Key factors influencing the willingness to change in your company

- **C** is change
- **D**issatisfaction with current situation (D)
- **V**ision of what is possible (V)
- **F**irst concrete steps that can be taken towards the vision (F)
- **R**esistance to change (R)

Change will take place when

$$C = D \times V \times F > R$$

Gleicher Formula (Dannemiller version)

2. Leadership by top management

b. Set energy policy, objectives and targets

Higg FEM: Environmental Management section

Question: Does your facility have a company environmental management strategy that guides long-term decision-making on environmental management?

- address facility's significant environmental impacts and compliance obligations as prioritized in environmental impact assessment
- Must include all aspects of Energy, Water, Wastewater, Chemical management, air emissions, and solid waste
- supported by facility leadership and communicated to all employees.
- include plans for achievement that detail: actions, resources required, responsibilities, timelines, and how results will be evaluated and plans for 3+ years into the future
- Reviewed with facility managers annually

2. Leadership by top management

b. Set energy policy, objectives and targets

ISO 50001:2018: Energy Policy

- is appropriate to the purpose of the organization
- provides a framework for setting and reviewing objectives and energy targets
- includes a commitment to ensure the availability of information and necessary resources to achieve objectives and energy targets
- includes a commitment to satisfy applicable legal requirements and other requirements related to energy efficiency, energy use and energy consumption
- includes a commitment to continual improvement of energy performance and the EnMS
- supports the procurement of energy efficient products and services that impact energy performance
- supports design activities that consider energy performance improvement

2. Leadership by top management



c. Form a (energy management) change team having clear mandate from management

Functions/department to be represented

- Procurement
- Human Resources
- Legal/compliance
- Finance
- Production
- Engineering
- Maintenance
- EHS/CSR

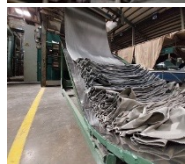


It is important to identify roles and responsibilities of all team members regarding energy management. Making a responsibility matrix helps a lot!

2. Leadership by top management

Typical questions to ask while picking your team

- What are the most critical issues and where are they in the organization?
- Who can issue policies and/or allocate resources?
- Who has responsibility for energy issues?
- Which managers are most directly concerned with and/or potentially affected by energy issues?
- Who can bring credibility to your program?
- Who do employees trust?
- Who has strong operational knowledge and experience?
- Who outside the fence line should be involved in EnMS decisions? (e.g. external experts)

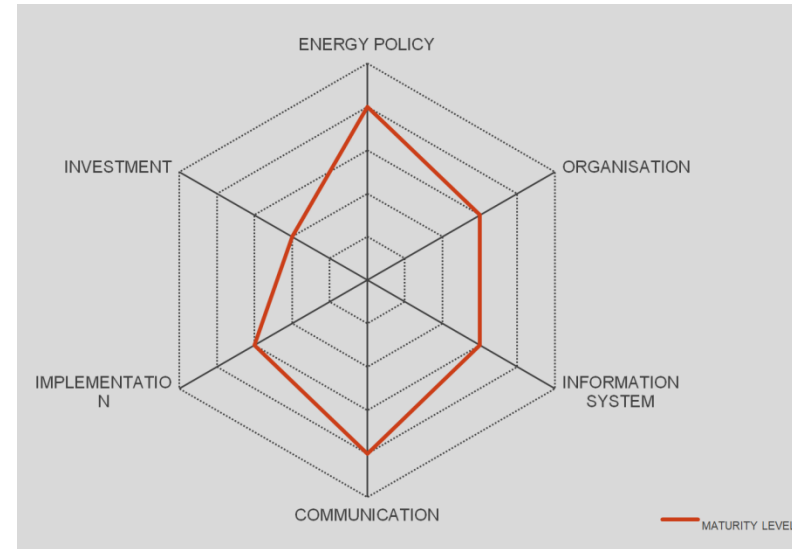


3. Complete a quick check

Conduct preliminary assessment of your existing energy management

Example of tools available:

- Espire EnMS Maturity Matrix
- Higg Facility Environmental Module (Energy & GHG)
- Carbon Trust Energy Management Self Assessment Tools
- Clean by Design (CbD) 10 best practices assessment tool



GETTING READY FOR CHANGE



Exercise

Assess the current energy management situation in your organization using the EnMS maturity matrix

Time 30 min

Practical tips

Reference material

- How to Higg Guide ([How To Higg](#)) – Energy & GHG section
- ISO 50001:2018 – Energy management system, Requirements with guidance for use
- ISO 50004:2014 – Guidance for implementation, maintenance and improvement of an energy management system

