

2° Centralized training session

**Wednesday, 1 October – Consorcil El Far, Moll de
l'Escar - Barcelona**

SEAP + ENERGY MANAGEMENT SYSTEM

Introduction

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5000&1SEAPs Project:

- ❖ 13 Partners;
- ❖ 8 EU Countries involved;
- ❖ 40 Municipalities supported.



SEAP and EnMS: synergies in IEE Projects



The purpose of the ISO 50001 standard is to enable organizations to establish the systems and process necessary to improve energy performance, including energy efficiency, use and consumption.

- ❖ ISO implementation is intended to lead to CO₂ emission reduction and environmental impacts related to energy use and consumption;
- ❖ Applicable to all types and sizes of organization.
- ❖ It does not establish absolute requirements for energy performance.

The Top Management commitment the is the most important step:

- ❖ Define an Energy Team;
- ❖ Develop and implement an Energy Policy;
- ❖ Establish objectives and target of the EnMS;
- ❖ Do an Action Plan;
- ❖ Define the boundaries;
- ❖ Establish energy consumption and energy use;
- ❖ Communicating the importance of energy management (internal and external communication).



Who represent the Top Management in a L.G.?

- ❖ Political Administration (Mayor + members of the City Council);
- ❖ General Secretary of the L.G.;
- ❖ Directors of the L.G. sectors: Urban Planning, Public Works, Environmental sector, Accountancy, Maintenance.



Possible Administrative structure in Covenant signatories

Steering Committee

Headed by: City Mayor; Deputy: Councillor Xyz
Organisation: Dept. of Health and Environment
Members: Heads of all departments involved and lead of the project committee



Project Committee

Headed by: Chief Executive Dr. ABCD
Members: Staff members authorised by the departments will be delegated



Competence, training and awareness of the staff:

The organization shall ensure that any person(n) working for on its behalf, related to significant energy use, are competent on the basis of appropriate education, training skills or experiences.

→ Through:

- ❖ Training;
- ❖ Definition of roles and responsibilities (data collection/Actions);
- ❖ Definition of the roles and responsibilities in monitoring phase.

ISO 50001 and SEAPs: same purposes, different methodologies

- ❖ CO₂ emission reduction and environmental impacts related to energy use and consumption;
- ❖ ISO 50001 applicable to all types and sizes of organization;
- ❖ SEAP applicable in a L.G. or groups of LGs (Joint SEAP option 1-2).



This International Standard is based on the Plan – Do – Check – Act continual improvement framework, incorporating energy management into everyday organizational practices.

❖ **Plan**: conduct the energy review and establish the baseline, definition of the EnPIs, objectives and targets, definition of Energy Policy and Action Plan;

❖ **Do**: implement the energy management Action Plan;

❖ **Check**: monitor and measure processes and the key characteristics of operations that determine energy performance and report the results;

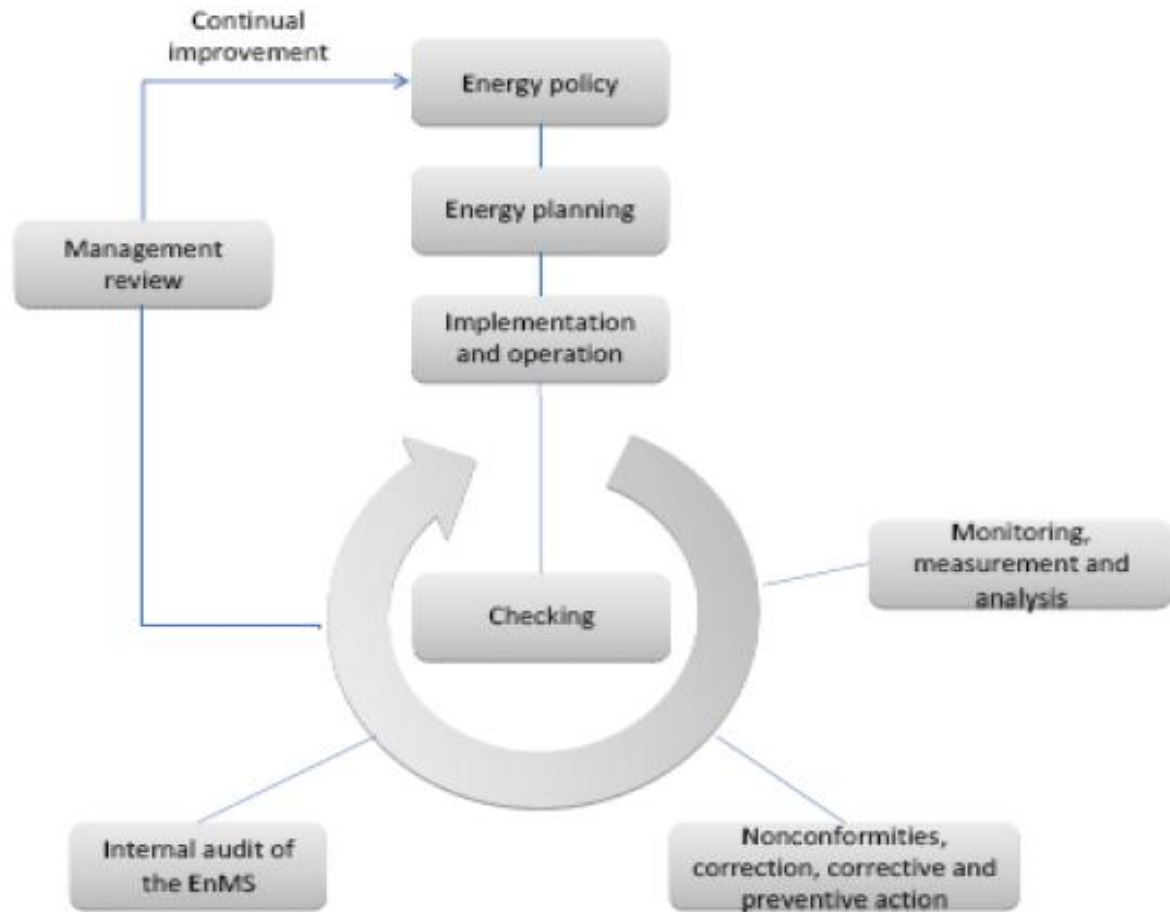
❖ **Act**: take action to continually improve energy performance and the EnMS



**ISO 50001 is a continual improvement
and monitoring model**



EnMS Model



SEAP AND SEAP+ENERGY MANAGEMENT SYSTEM, WHAT ARE THE DIFFERENCES?

SEAPs

SEAP+EnMS

Internal Structure of the Public Administration	Top Management
Baseline Emission Inventory	Energy Baseline + definition of EnPI
Vision of the most relevant aspects	Energy Policy
Action Plans	Action Plans
Implementation	Implementation
Monitoring and reporting of the actions	Monitoring and measure for Effectiveness (what to measure, how, who is the responsible, frequency, ...)
Internal and External Communication (stakeholders involvement, Energy Days, ...)	Internal and external Communication
Approval by JRC	Certification and Registration (stage 1 and Stage 2)

SEAP AND SEAP+ENERGY

SEAPs

SEAPs + EnMS

Energy Consumption in Public Administration
(Buildings, Public Lighting, Vehicle fleet)

(Should be an estimation)

Energy Consumption in Public Administration
(Buildings, Public Lighting, Vehicle fleet)

(Real consumption data)

Energy Consumption in Private sectors:
Residential, Commercial, Industrial, Private
Transport, Waste production, Renewable
energy Production (...)

Definition of EnMS boundaries:
Application of the EnMS at P.A. areas including
EnMS approach for private sectors
management

Definition of consumption indicators
(MWh/year – CO₂ reduction/year)

Energy Performance Indicators (EnPI)
(Detailed indicators about energy use)

Definition of monitoring indicators

Definition of monitoring indicators

Objectives/targets in terms of “numbers” are not a requirement of the ISO 50001 but..



Objectives/targets in terms of “numbers” are a requirement of the SEAPs

- ❖ **20% CO₂ reduction by 2020;**
- ❖ 20% of energy efficiency;
- ❖ 20% of RES use.

- ❖ + Monitor the results of the SEAP measures



ISO 50001 General requirements:

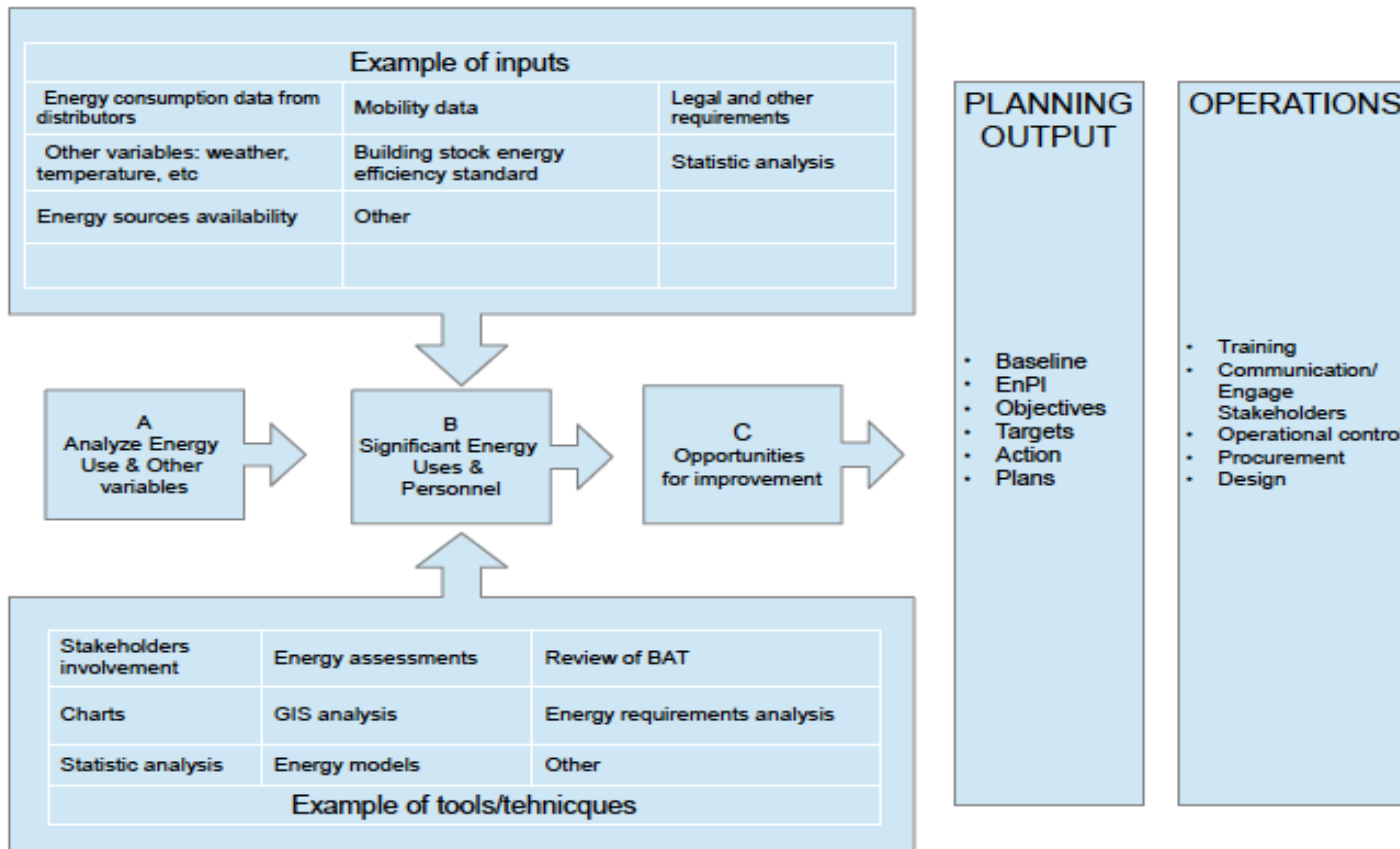
- ❖ Establish, document, implement, maintain and improve an EnMS in accordance with the International Standard requirement;
- ❖ Define and document the scope and the boundaries of the EnMS;
- ❖ Determine how it will meet the requirements of this ISO in order to achieve a continual improvement of its energy performance and of its EnMS;
- ❖ Identify, implement and apply the Legal requirements.



Definition of the boundaries in SEAP+EnMS development

- ❖ Public Buildings and facilities;
- ❖ Public Lighting;
- ❖ Vehicles fleet;
- **Private sectors:** Residential, Commercial, Agriculture, Industrial, Public and Private Transport

SEAP AND SEAP+ENERGY SCHEME

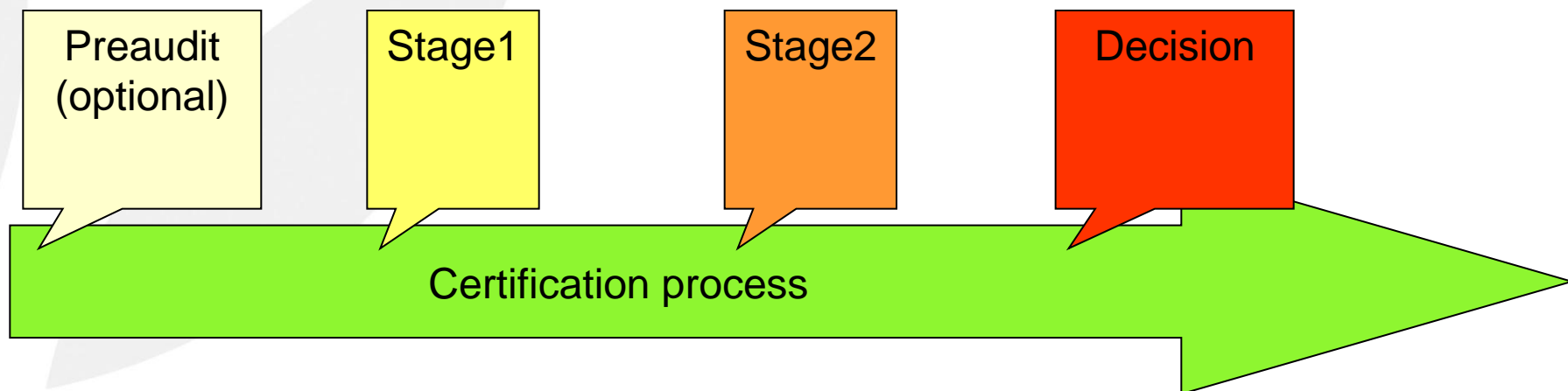


ISO 50001 CERTIFICATION PROCESS

STAGE 1: FOCUS PROBLEMS AND DOCUMENTS PREPARATION

STAGE 2: TO CHECK THE EFFECTIVENESS OF THE ENMS

DECISION FOR THE CERTIFICATION



SEAP development process

- ❖ Adhesion to the CoM initiative;
- ❖ Adapting administrative structure;
- ❖ Construction of the Baseline Emission Inventory;
- ❖ Involvement of citizens and stakeholders;
- ❖ SEAP development;
- ❖ SEAP implementation and monitoring

SEAP development process

- Stage 1 in SEAP approval: Resolution of the City Council;
- Stage 2: Official approval by the Joint Research Centre after the submission on the online template.



Communication strategy

- ❖ In the ISO 50001 external and internal communication are one of the most important requirements;
- ❖ In the SEAP development the internal and external communication are very important. The involvement of stakeholders and the L.G. staff information campaign could make the difference to reach the goal



50000and1SEAPs Project expected results

- ❖ Use an ISO 50001 methodological approach to implement a Sustainable Energy Action Plan;
- ❖ Develop an high quality SEAP using (where possible) real energy data consumption;
- ❖ Develop an EnMS of the organization;
- ❖ Approval of the SEAP document by City Council and JRC;
- ❖ Be certified by a Certification body.

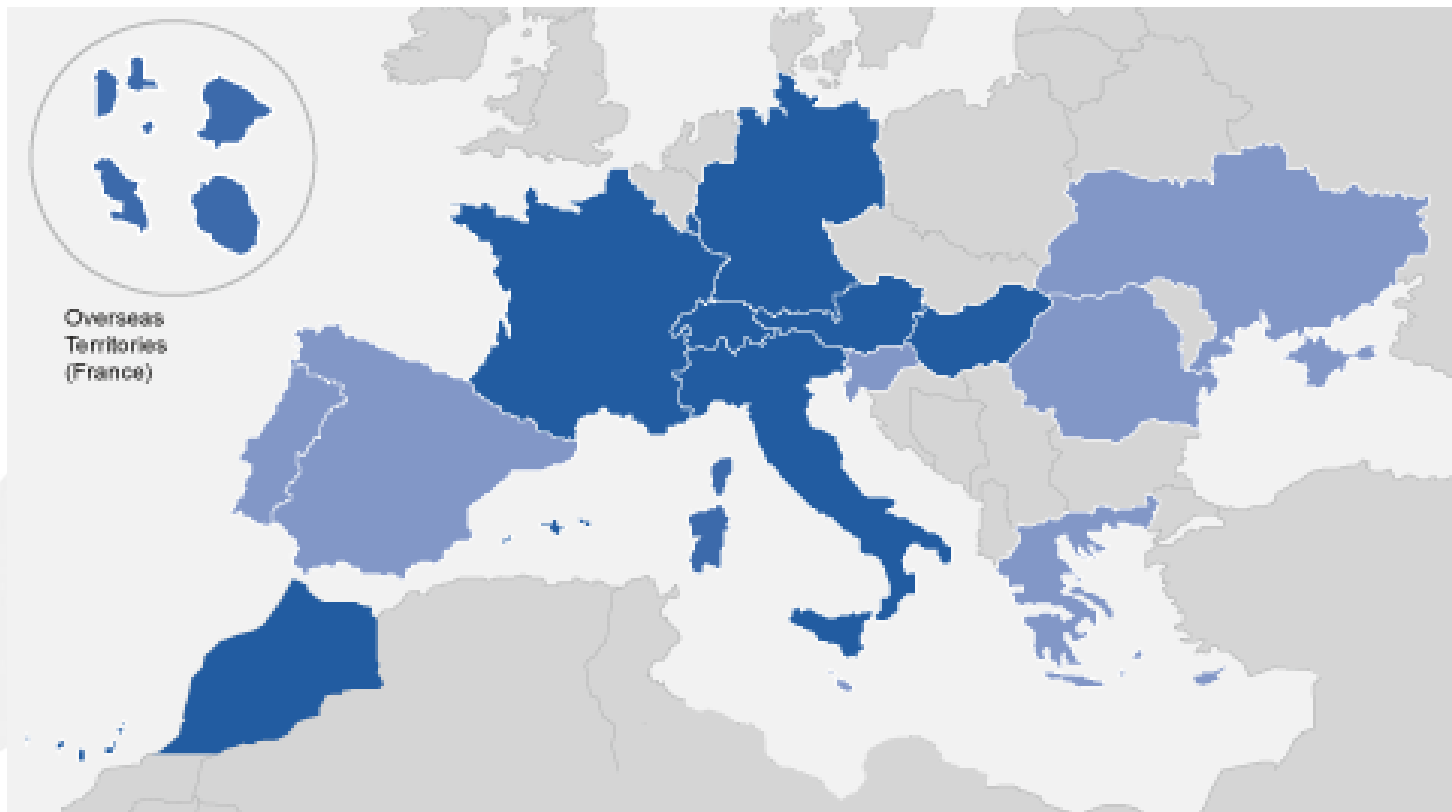


european
energy award

The European Energy Award[®] (eea) is a quality management and certification system for municipalities committed to sustainable municipal energy, climate and transport policies. From space planning to energy supply, from mobility to communication and cooperation – the eea comprises all proven energy and climate protection measures municipalities can take.



EEA JOINING COUNTRIES



THANK YOU FOR YOUR KIND ATTENTION.

Coffee break

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