



Energy Management and Auditing General Aspects – Part 1

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**Energy Audits in Industrial Small Medium Enterprises
(SMES) - Training Course**

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Energy Management (EnM) and Auditing – General Aspects

- Why Energy Management?
- How to setup EnM?
- Why Energy Auditing is the key to EnM?

Security, sustainability, competitiveness, productivity, and quality.

Vision and Mission, Planning, Objectives, Broad Policy and specific policies, Financial and Human resources, Monitoring Performance Indicators.

Setting the baseline data, formulate the energy management program with EE/RE based projects, setting the contribution of the EE/RE projects to the EnM objectives, calculating for projects feasibility (financial and technical), counting for the environmental benefits and the value chain of competitiveness.

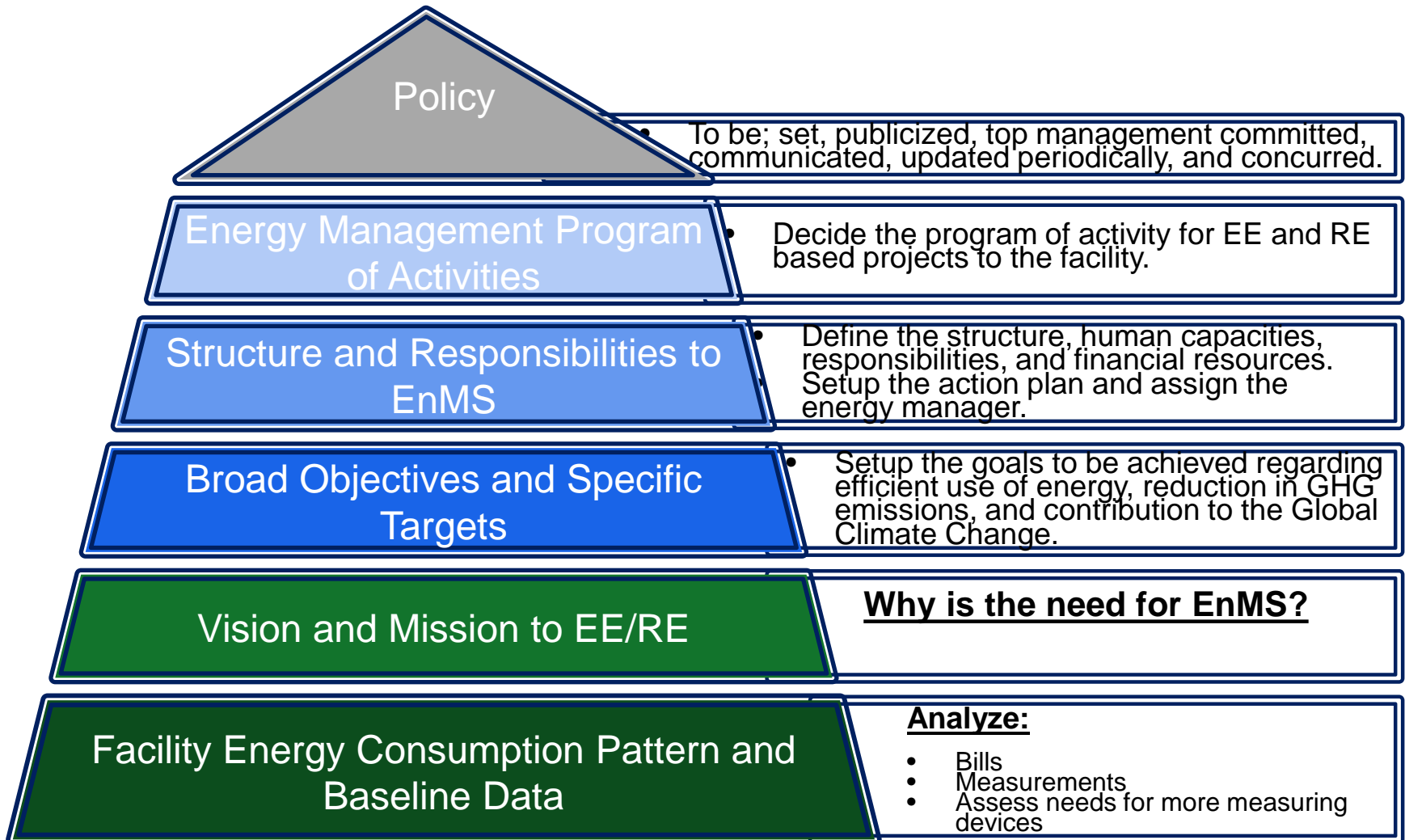
Energy Management System (EnMS) – Design Aspects/Considerations

- Facility Vision and Mission towards the EnMS.
- Energy Policy with Clear Objectives on which the specific targets will be set.
- Energy Data Flows, accessibility, tracking, and monitoring.
- EnMS responsibilities and structure.
- EnMS program of activity to the EE/RE based projects.

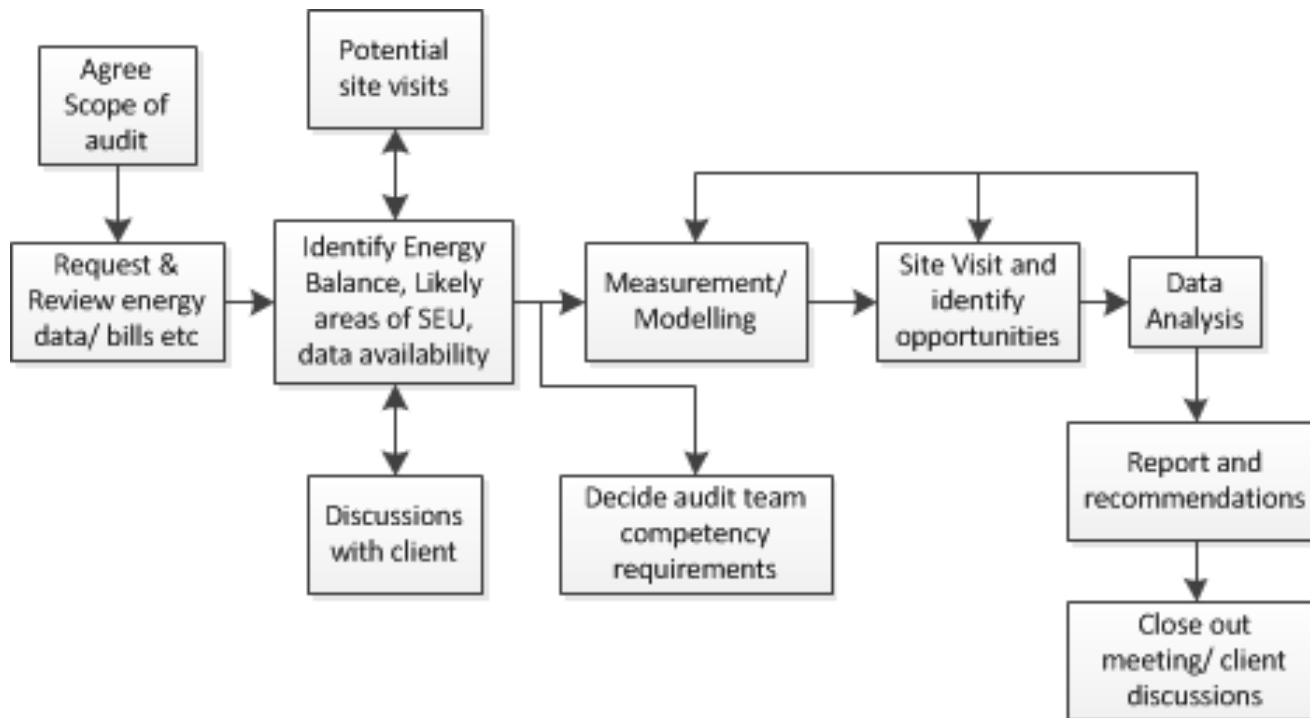
Energy Management System – Definitions and Approaches

- EnMS is the system that is being structured to ensure the performance of the facility considering:
 - The energy resources security and sustainability.
 - The anticipated changes in the energy market and its impact on the facility activity.
 - The tracking for the facility energy performance indicators.
 - The follow up for energy costs versus the facility competitiveness.
 - The facility environmental impact regarding the implementation of the EE/RE based projects/programs.
- The approach for EnMS is to:
 - Set properly the facility objectives and targets.
 - Structure the system in details with full transparency among the stakeholders.
 - Assign the financial and human resources to implement the system.
 - Mitigate the risks to totally eliminate the key barriers to the system performance.
 - Exploit the others experiences in performing the EnMS.

EnMS Bottom Up Approach



Auditing Aspects



- Planning.
- Agreement.
- Audit Level.
- Audit Anticipated Outcome.
- Measurement Plan.
- Calculation Tools.
- Site Visits.
- Data Analysis.
- Reporting.

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