EnMS Documentation Guidance Table

| *Use of this resource should be accompanied by use of the ISO 50001-2011 standard. This Guidance Table is not a substitute for reviewing the requirements of ISO 50001. Entries with* **Decision Needed** *identify those items for which the organization should make a decision on whether or not that particular item will be documented or recorded and, if so, how it will be documented or recorded. Remember that ISO 50001-20111 requires the organization to maintain records, as needed, to demonstrate conformance with its EnMS requirements, ISO 50001 and the energy performance results achieved. It also requires documents that your organization decides are necessary for its EnMS. Typically, items that are not documented or recorded are demonstrated through the training, awareness and communication processes of the EnMS. For further information and to ensure the most effective use of the information in this Guidance Table, review the other documents in the US DOE eGuide Level 2 Documentation Series which includes: Understanding EnMS Documentation,* *Energy Manual Guidelines, Checklist for Making Decisions on EnMS Documentation* and *EnMS Records: Check and Use the Evidence. Note that ISO 50001 does not require an Energy Manual. Key: § = section #; ¶ = paragraph #.* |
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| **REFERENCES** | | **DOCUMENTS** | | **RECORDS** | |
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| **ISO 50001-2011 Reference** | **Associated 50001 Ready Navigator Task #** | **What must be documented?** | **Notes/Comments** | **What must be recorded?** | **Comments/Notes** |
| § 4.1 b)  § 4.2.1 d)  § 4.5.4.1 a) | Task 1  Task 19  See also *Energy Manual Guidelines* | EnMS scope and boundaries | Setting scope and boundaries is a top management responsibility. Consider documenting EnMS scope and boundaries within an Energy Manual. Or, the scope and boundaries statement can be a standalone document. |  |  |
| § 4.1 c) | See *Energy Manual Guidelines* | **Decision needed** | ***Determine*** how the ISO 50001 requirements will be met to achieve continual improvement in energy performance. |  |  |
| § 4.2.1 a)  *See § 4.3* |  |  |  |  |  |
| § 4.2.1 b)  § 4.2.2 | Task 3  Task 4 |  |  | **Decision needed** | Top management to ***appoint*** management representative and ***approve*** formation of energy team. |
| § 4.2.1 c)  § 4.7.3 e) | Task 3  Task 11  Task 25 |  |  | **Decision needed** | Top management must ***provide*** needed resources. EnMS resources are adjusted as needed through the management review process. They may also be provided as part of setting and reviewing the energy objectives, targets and action plans. |
| § 4.2.1 d)  *See § 4.1 b)* |  |  |  |  |  |
| § 4.2.1 e)  *See also*  *§ 4.5.3* | Task 20 |  |  | **Decision needed** | Top management must ***communicate*** the importance of energy management. |
| § 4.2.1 f)  *See also*  *§ 4.4.6,*  *§ 4.7* | Task 3  Task 11  Task 25 |  |  | **Decision needed** | Top management ***ensures*** energy objectives and targets are established. This can be accomplished through the management review process and part of the management review records. |
| § 4.2.1 g)  *See also*  *§ 4.4.5,*  *§ 4.7* | Task 3  Task 10  Task 25 |  |  | **Decision needed** | Top management ***ensures*** appropriate EnPIs. This can be accomplished through the management review process and part of the management review record. |
| § 4.2.1 h) | Task 3  Task 8 |  |  | **Decision needed** | Top management must ***consider*** energy performance in long term planning. |
| § 4.2.1 i)  *See also*  *§ 4.6.1,*  *§ 4.7* | Task 3  Task 15  Task 25 | **Decision needed** | Top management ensures measurement and reporting of results at ***determined*** intervals. The intervals typically align with the intervals for conducting management reviews. | **Decision needed** | Top management ***ensures*** results are measured and reported. This can be accomplished through the management review process and part of the management review record. |
| § 4.2.1 j)  *See § 4.7* |  |  |  |  |  |
| § 4.2.2 | Task 3  Task 4  Task 19 | **Decision needed** | Top management appoints management representative with specified ***responsibilities and authorities***. These responsibilities and authorities can be part of a record of the appointment of the management representative. Or, for example they can be laid out in a standalone document such as a responsibilities matrix or an Energy Manual. | **Decision needed** | Top management appoints management representative with specified ***responsibilities and authorities***. These responsibilities and authorities can be part of a record of the appointment of the management representative. Or, for example they can be laid out in a standalone document or an Energy Manual. |
| § 4.2.2 b) | Task 3  Task 4  Task 19 | **Decision needed** | ***Identify*** persons to work with management representative. If a document is needed, a team roster with names and position titles can be an option. |  |  |
| § 4.2.2 c) and d)  *See § 4.7* |  |  |  |  |  |
| § 4.2.2 e)  *See § 4.4.1* |  |  |  |  |  |
| § 4.2.2 f) | Task 4  Task 19  Task 20  Task 21 | **Decision needed** | ***Define*** and ***communicate*** responsibilities and authorities for energy management. Typically this is addressed through documents, training or a combination of both. Documents can include, for example, procedures, job descriptions, responsibility and authority matrices, Energy Manual (if applicable). |  |  |
| § 4.2.2 g) | Task 14  Task 15 | **Decision needed** | ***Determine*** criteria and methods to ensure effective EnMS operation and control. The “Checking” processes of the EnMS (ISO 50001, § 4.6) are important here. |  |  |
| § 4.2.2 h)  *See § 4.5.2 and § 4.5.3* |  |  |  |  |  |
| § 4.3  § 4.2.1 a)  § 4.5.4.1 b) | Task 2  Task 3 | Energy policy | This is a top management responsibility. Consider documenting the energy policy within an Energy Manual. Or, the energy policy can be a standalone document. | **Decision needed** | What is your evidence that top management has ***defined*** and ***approved*** the energy policy? |
| § 4.3 g)  *See § 4.5.2* |  |  |  |  |  |
| § 4.3 h)  *See also*  *§ 4.7* | Task 2  Task 4  Task 25 |  |  | **Decision needed** | Energy policy is regularly ***reviewed*** and ***updated*** as needed. Note that the energy policy is a required input to management review and any change to the policy is an output of management review. A record of the policy review and update usually is a part of management review records. |
| § 4.4.1 | Task 5 through  Task 13 | Energy planning process | The components of energy planning include your organization’s processes for:   * Review of activities that can affect energy performance * Legal and other requirements * Energy review * Energy baseline(s) * Energy performance indicators (EnPIs) * Energy objectives, energy targets and energy management action plans |  |  |
| § 4.4.2 ¶ 1 | Task 5  Task 19 | **Decision needed** | ***Identify*** applicable legal requirements related to energy use, consumption and efficiency. Common approaches include compiling a list, register, database, table or spreadsheet. |  |  |
| § 4.4.2 ¶ 1 | Task 5  Task 19 | **Decision needed** | ***Identify*** other requirements subscribed to and related to energy use, consumption and efficiency. Common approaches include compiling a list, register, database, table or spreadsheet. |  |  |
| § 4.4.2 ¶ 2 | Task 5 | **Decision needed** | ***Determine*** how applicable legal and other requirements apply to organization’s energy use, consumption and efficiency |  |  |
| § 4.4.2 ¶ 2 | Task 5 | **Decision needed** | ***Ensure*** legal and other requirements are considered in the EnMS. |  |  |
| § 4.4.2 ¶ 3 | Task 5  Task 25 | **Decision needed** | Review legal requirements at ***defined*** intervals. | **Decision needed** | ***Review*** legal requirements at defined intervals. |
| § 4.4.2 ¶ 3 | Task 5 | **Decision needed** | Review other energy-related requirements subscribed to at ***defined*** intervals. | **Decision needed** | ***Review*** other energy-related requirements subscribed to at defined intervals. |
| § 4.4.3 | Task 25 | Methodology and criteria used to develop the energy review | This could be part of the documented energy planning process or a standalone document. | Energy review | The energy review must be recorded. The energy review includes:   * Energy sources * Analysis of past and present energy use and consumption * Significant energy uses (SEUs) * Relevant variables affecting SEUs * Current performance of SEUs * Estimated future energy use and consumption of SEUs * Prioritized energy improvement opportunities |
| § 4.4.3 ¶4 | Task 25 | **Decision needed** | Update energy review at ***defined*** intervals. This could be defined within the documented energy planning process or part of the documented methodology and criteria used to develop the energy review (see above). | **Decision needed** | ***Update*** energy review at definedintervals and when there are major changes. |
| § 4.4.4 ¶3 | Task 11 |  |  | Energy baseline(s) | Energy baseline(s) must be recorded. |
| § 4.4.4 ¶1 | Task 11 |  |  | **Decision needed** | Energy performance changes are ***measured*** against the baseline(s). |
| § 4.4.5 ¶1 | Task 10 |  |  | **Decision needed** | ***Identify*** appropriate EnPIs. |
| § 4.4.5 ¶1 | Task 10 |  |  | Methodology for determining and updating the EnPIs | This methodology must be recorded. Alternatively, it could be included in the documented energy planning process (see § 4.4.1). |
| § 4.4.5 ¶2 | Task 10 |  |  | **Decision needed** | The methodology for determining and updating the EnPIs must be regularly ***reviewed***. |
| § 4.4.5 ¶2 | Task 10 |  |  | **Decision needed** | EnPIs must be ***reviewed*** and compared to baseline(s). (See also § 4.4.4 ¶1) |
| § 4.4.6 ¶1  § 4.5.4.1 c) | Task 11 | Energy objectives and energy targets | The energy objectives and energy targets can be documented together or separately. |  |  |
| § 4.4.6 ¶3 | Task 5  Task 8  Task 11  Task 12 |  |  | **Decision needed** | When setting and reviewing energy objectives and targets, ***take into account*** legal and other requirements, significant energy uses and improvement opportunities. |
| § 4.4.6 ¶3 | Task 11 |  |  | **Decision needed** | When setting and reviewing energy objectives and targets, ***consider*** financial, operational and business factors, technology and views of interested parties. |
| § 4.4.6  ¶ 4-5 | Task 11  Task 14  Task 15 | Energy management action plans | Action plans include:   * responsibilities * means and timeframe(s) for targets * method of verifying energy performance improvement * method of verifying results |  |  |
| § 4.4.6 ¶ 5 | Task 14 | **Decision needed** | Action plans are updated at ***defined***intervals. The intervals could be set out within the documented energy planning process (see § 4.4.1). |  |  |
| § 4.5.2 ¶ 1 | Task 21  Task 19 | **Decision needed** | ***Ensure*** competency based on education, training, skills or experience. Competency requirements are sometimes referred to as qualifications needed. Be careful to not confuse competency requirements with job responsibilities. |  |  |
| § 4.5.2 ¶ 2 | Task 19 |  |  | Records of competency | Examples of competency records include certificates, diplomas, licenses, completed competency checklists or other competency forms, etc. |
| § 4.5.2 ¶ 2 | Task 19  Task 21 |  |  | Records of training needs | Examples of records of training needs include training plans, completed training schedules, training need matrices, etc. |
| § 4.5.2 ¶ 2 | Task 19  Task 21 |  |  | Records of training or other actions | Examples of training records include sign-in sheets or other attendance records, training certificates, confirmation letters, completed on-the-job (OJT) training forms, etc. |
| § 4.5.2 ¶ 3 | Task 19  Task 21 | **Decision needed** | ***Ensure***awareness. Consider developing documented energy awareness materials such as presentations, videos, brochures, posters, new or temp employee orientation handouts, etc. | Records of training | If training is one of the mechanisms used to ensure awareness of personnel, then records of that training could be relevant here. |
| § 4.5.3 ¶ 1 | Task 20 | **Decision needed** | ***Communicate*** internally about energy performance and EnMS. Sometimes documents such as trend charts, posters, fact sheets, handouts, etc. are used as part of internal EnMS communications. |  |  |
| § 4.5.3 ¶ 2 | Task 20 | **Decision needed** | ***Establish*** a comment/ suggestion process for the EnMS. Some organizations develop a documented comment form (blank) as part of the suggestion system. | **Decision needed** | ***Implement*** a comment/ suggestion process for the EnMS. Submitted comments or suggestions can be relevant records. |
| § 4.5.3 ¶ 3 | Task 20 | **Decision needed** | If decision made to communicate externally, ***establish*** a method for the communication. Common methods address who is authorized to communicate with whom, along with when, what and how. | Record of decision on external communication | Some options to consider: The decision could be recorded in a standalone record, in a record of management review or incorporated into an EnMS document such as the Energy Manual or an external or other communications procedure (if applicable). |
| § 4.5.4.1 | See *Energy Manual Guidelines* and *Understand EnMS Documentation* | **Decision needed** | ***Describe*** core EnMS elements and their interaction. |  |  |
| § 4.5.4.1 e)  § 4.6.5 ¶ 1 | Task 19 | The documents your organization determines are needed | Your organization has the flexibility and responsibility to decide what other documents are needed for your EnMS.  See *Understand EnMS Documentation*; *Checklist for Making Decisions on EnMS Documentation* and *EnMS Records: Check and Use the Evidence.* | **Decision needed** | ***Establish*** records, as needed, to prove that EnMS requirements are being met. In addition to the records explicitly required by ISO 50001, your organization must determine what other records are needed for its EnMS.  See *Understand EnMS Documentation* and *EnMS Records: Check and Use the Evidence.* |
| § 4.5.4.1 e)  § 4.6.5 ¶ 1 | Task 19 |  |  | **Decision needed** | ***Establish***records, as needed to demonstrate the energy performance results achieved.  See *Understand EnMS Documentation* and *EnMS Records: Check and Use the Evidence* |
| §4.5.4.2 | Task 19 | **Decision needed** | ***Establish*** procedure(s) for control of documents. Make sure your process addresses the controls listed in a) thru g) in this section of ISO 50001. |  |  |
| §4.5.5 ¶ 1 | Task 16 | **Decision needed** | ***Identify***and ***plan*** operations and maintenance related to significant energy uses. Some organizations use documented procedures (SOPs), work instructions, blank forms, preventive maintenance databases, etc.to help control operations and maintenance activities. |  |  |
| §4.5.5 a)  §4.5.5 b)  §4.5.5 c) | Task 16 | **Decision needed** | ***Set***operations and maintenance criteria for significant energy uses where their absence creates risks to effective energy performance. | **Decision needed** | Operate and maintain facilities, processes, systems and equipment to***meet***operational criteria. ***Communicate*** operational controls as appropriate. |
| §4.5.6 | Task 18 | **Decision needed** | ***Consider*** energy opportunities and operational control in design activities. Some organizations use a documented checklist (i.e., blank checklist form) or similar approach to ensure these considerations are part of the design process. Others simply ensure there are appropriate records as evidence that these considerations were made. | Results of design activities | These could include, for example, final design specifications and/or other design records, purchasing specifications, related purchase orders, etc. |
| § 4.5.7 ¶ 1 | Task 22 |  |  | **Decision needed** | ***Inform*** relevant suppliers that procurement evaluation includes energy performance. |
| § 4.5.7 ¶ 2 | Task 22 | **Decision needed** | ***Establish*** criteria for assessing lifetime energy use, consumption and efficiency in procurement actions likely to affect energy performance. | **Decision needed** | ***Implement*** criteria for assessing lifetime energy use, consumption and efficiency in procurement actions likely to affect energy performance. |
| § 4.5.7 ¶ 3 | Task 22 | Purchasing specifications for energy supply | ***Define*** purchasing specifications for energy supply. |  |  |
| § 4.6.1 | Task 15 | Energy measurement plan | ***Define*** an energy measurement plan. ***Define*** measurement needs. | Results from monitoring and measurement of key characteristics | Key characteristics include:   * energy sources * energy uses * energy consumption * significant energy uses * relevant variable related to significant energy uses * prioritized energy opportunities * EnPIs * effectiveness of action plans * evaluation of actual vs expected energy consumption * Effectiveness |
| § 4.6.1 ¶ 5 | Task 15 |  |  | **Decision needed** | Periodically ***review*** measurement needs. |
| § 4.6.1 ¶ 5 | Task 14  Task 15  Task 19 | **Decision needed** | ***Ensure*** measuring and monitoring equipment provides accurate and repeatable data. Some organizations set out calibration requirements separately from calibration records (e.g. in a documented procedure or instruction). Other organizations rely on competency of personnel (with appropriate records of competency) to meet this requirement. | Records of calibration | These records include both records of calibration and records of other means used to establish accuracy and repeatability. |
| § 4.6.1 ¶ 6 | Task 17  Task 19 | **Decision needed** | ***Investigate*** and ***respond*** to major changes in energy performance. Consider defining what constitutes “significant deviations” within the energy measurement plan. Some organizations use their existing corrective action process for the investigation and response, while others define and use a separate process. | Results of investigations and responses. | Examples of these records could include completed corrective action forms, notations made in energy performance data spreadsheets, investigation summaries, follow-up reports, etc. |
| § 4.6.2 | Task 5  Task 19 | **Decision needed** | ***Evaluate*** compliance with legal and other requirements. Some organizations develop tools for conducting compliance evaluations, such as checklists (blank forms), finding forms, report templates, etc. | Compliance evaluation results | Reports, summaries, completed checklists, completed compliance finding forms, etc. are common examples of these types of records. |
| § 4.6.3 | Task 19  Task 23 | Internal audit process | Section 3.20 in ISO 50001 defines *internal audit* as a systematic, independent and *documented* process. In addition to a documented procedure, many organizations develop tools for the audit program, such as checklists, finding forms, audit plan templates, report templates, for example. | Audit results | Audit results could be recorded in an audit report, on audit finding forms, or in the corrective action system, for example. |
| § 4.6.3 | Task 19  Task 23 | Audit plan and audit schedule | Conduct audits at ***planned*** intervals. ***Consider*** status, importance and prior audit results in developing the audit plan and schedule. An audit plan is developed for each audit. | Internal auditor training needs and training provided or other actions taken | § 4.5.2 requires appropriate records of EnMS related training needs and training provided or other actions taken. This applies to internal auditors. |
| § 4.6.4 | Task 17  Task 19 | **Decision needed** | ***Address*** actual and potential nonconformities. ***Taking*** corrective and preventive ***action*** includes:   * *Reviewing* * *Determining* causes * *Evaluating* need for action * *Determining* and *implementing* action appropriate for the problem * *Reviewing* effectiveness * *Making* any changes needed to the EnMS   Many organizations develop a documented procedure and/or a self-explanatory corrective/ preventive action form to ensure that all steps are followed. | Corrective actions and preventive actions | Records of corrective actions and records of preventive actions must be maintained. |
| § 4.6.5  *See also*  *§ 4.5.4.1 e)* | Task 19 | **Decision needed** | ***Define*** controls to identify, retrieve and retain records. Records must ***be*** and ***remain*** legible, identifiable and traceable. |  | ***Implement*** record controls. Make sure that the controls you define are applied to the EnMS records. |
| § 4.7 | Task 3  Task 19  Task 25 | **Decision needed** | Top management reviews the EnMS at ***planned*** intervals | Records of management reviews | Include in management review records the inputs covered and outputs generated, including decisions and actions. |