



Agenda – Session TWO

- Welcome, Safety, and Housekeeping
- Review Previous Sessions
- Today's Content <u>Building the Foundation</u>
 - Section 1: Context of the Organization

But first, a

- _o Tasks 1, 2 & 3
- Section 2: Leadership
 - Tasks 4, 5 & 6
- Section 3: Planning
 - Tasks 7
- Webinar Training Schedule & Preparations
- Kahoot Quiz Game
- Q&A















Better Buildings is an initiative of the U.S. Department of Energy





- 1) The 50001 Ready navigator tool is a great resource. What is your status/plans for setting an account for your organization in 50001 Ready?
 - A. I have already set up a single site account for my organization
 - B. I have already set up a multi-site account for my organization
 - C. I plan to set up a single or multi-site account soon
 - D. I am undecided if I will set up an account
 - E. I was going to set up my account but the soft serve ice cream machine in the plant cafeterial broke down and that took priority
 - F. My dog ate my "getting started" document
 - G. I do not plan to set up an account for my organization





Welcome



- Welcome to the Virtual INPLT <u>50001 Ready</u> webinar training series
- Eight, 2.5-hour webinars, focused on Strategic Energy Management (SEM), in general, and the ISO 50001 standard and <u>50001 Ready Navigator</u>, in particular
- The webinars will help you understand the why and how of SEM and the <u>50001 Ready Navigator</u> tool
- Thank you for your interest!









Safety and Housekeeping

- Please make sure that your surroundings are safe:
 - o If you are driving, please use hands free mode
 - o If you are in a building, be sure you know the exit paths
 - o If you are at home, be sure there are no distractions
- You are welcome to ask questions at any time during the webinar
- When you are not asking a question, please <u>MUTE</u> your mic and this will provide the best sound quality for all participants
- We will be recording all these webinars and by staying on-line and attending the meeting you are giving your consent to be recorded
 - A limb to the mean and advise bine meanible to many indeed afternoon
 - A link to the recorded webinars will be provided, afterwards







Our 50001 Ready Training Group





































GE Aerospace





















Sarnafil®









REVIEW

Review of Previous Sessions



Quick List of Acronyms

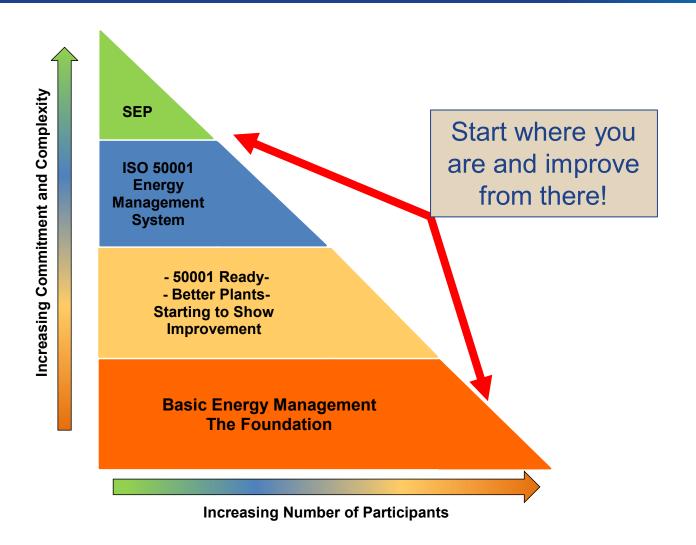
- SEM = Strategic Energy Management
- EnMS = Energy Management System
- SEU = Significant Energy Use
- EnPI = Energy Performance Indicator
- EnB= Energy Baseline
- PDCA = Plan, Do, Check, Act







Why SEM? - The Continuum







Why 50001?: A System

Navigator



Log In



Welcome to the 50001 Ready Navigator!

The 50001 Ready Navigator is an online application that provides step-by-step guidance for implementing and maintaining an energy management system in conformance with the ISO 50001 Energy Management System Standard. Join the 23,000+ sites worldwide benefiting from an energy management system!

The 50001 Ready Navigator has been updated to reflect the changes made to the ISO 50001 standard in 2018. The original version of the 50001 Ready Navigator, based upon the 2011 publication of ISO 50001, will be available online for one year and accessible by existing projects to allow for a seamless transition to the revised version. Information about the full transition from the current to updated 50001 Ready Navigator is available below.

About the Navigator



Explore the Navigator



- or -

Create an Account or Log-in to Get Started

EMAIL ADDRESS

ENTER PASSWORD

Log In

Forgot password?

50001 Ready Navigator ISO 50001:2018 Update

The 50001 Ready Navigator's structure and tasks have been updated to align with ISO 50001:2018. Documentation of this can be found here: Navigator crosswalk

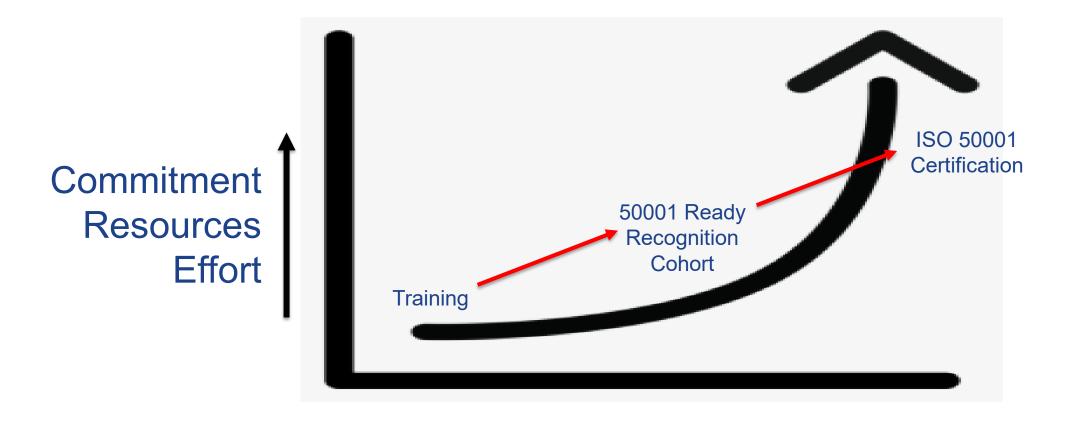


- Download ONLY, one way information flow
- None of your site info is uploaded
- Single site or multi-site capability





Consider your Pathway for 50001 Energy Management







Today's Content

Tasks 1-7



50001 Ready Navigator: Today's Tasks

Improvement

Context of the Performance Leadership Operation **Planning** Support **Improvement** Organization **Evaluation** 14. Competence 17. Operational 20. Monitoring 24. Corrective 1. An EnMS and 4. Management 7. Risks to EnMS and Training and Commitment Controls Action vour Success 15. Awareness Measurement of 25. Continual 18. Energy Organization 8. Energy Data and the EnMS 5. Energy Policy Considerations **Improvement** Collection and Communication in Design 21. Monitoring 2. People and Analysis 16. Documenting 19. Energy 6. Energy Team and Legal 9. Significant the EnMS Measurement of Requirements and Resources Considerations **Energy Uses** in Procurement Energy 10. Improvement Performance 3. Scope and **Opportunities Improvement** Boundaries 11. Energy 22. Internal Audit Performance 23. Management Indicators (EnPIs) Review and Baselines Plan (EnBs) 12. Objectives and Do Act **Targets** 13. Action Plans Check for Continual







Context of the Organization (Tasks 1-3)

Building a foundation for your EnMS



Regarding my EnMS, what are the:

- Risks, opportunities and strategic issues;
- Legal and other requirements;
- Interested parties;
- Scope and boundaries?





Task 1: An EnMS and Your Organization

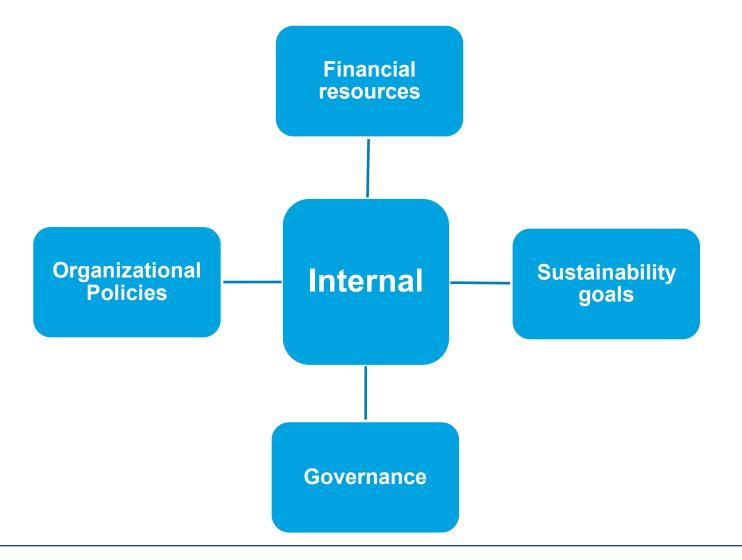
Task 1: We determine the strategic issues that affect our ability to improve our energy performance and achieve the goals of our 50001 Ready EnMS.







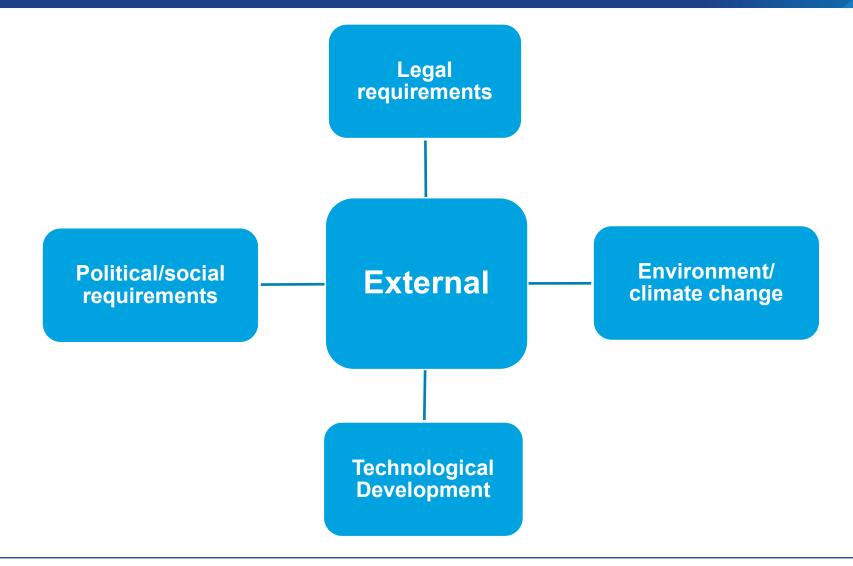
Task 1: Internal Issues







Task 1: External Issues







Task 1: Playbook

Activity

- Look at Task 1 in 50001 Ready
- Look at the Task 1 Playbook



50001 Ready Navigator Playbook

Task 1: An EnMS and Your Organization

Date last modified/updated: Click here to enter a date.

Internal audit: Click here to enter a date

Who last modified/updated:

Management review: Click here to enter a date

For Task 1: This part of the Navigator Playbook is completed when you have:

- 1. Identified the external and internal issues that affect your organization's ability to improve its energy performance and achieve the intended outcomes of the EnMS.
- 2. Recorded this information.

For Task 7: This part of the Navigator Playbook is completed when you have:

- 1. Identified the impacts, likelihood of occurrence, and risk level arising from the issues you already recorded
- 2. For each of the identified risks and opportunities, plan and implement actions to address them using the processes of the EnMS.

Add this information to the Risks and Opportunities Register by completing columns four through eight.



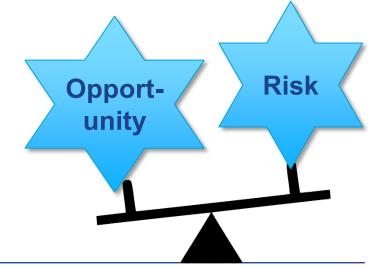


Task 7: Risks to EnMS Success (in Planning)

Task 7: We determine strategic risks and opportunities to ensure that our organization can achieve the intended outcomes of our EnMS and energy performance improvement.

We plan and implement actions to address these risks and opportunities and evaluate the effectiveness of the actions taken.

In other words: What gets in the way of your success? ...and What helps?







Task 7: Key Terms

- Risk: Something that poses a threat
- Opportunity: Something that has the potential for a positive impact





The Energy Team defines methods for identifying and assessing these items





Task 7: Risk Examples

EnMS

- Contracted design team that doesn't follow specs
- Disconnect between changing reporting requirements and EnMS system
- Complicated data collection processes
- High turnover in operational controls positions for SEUs

Energy Performance Improvement

- Weather that is much hotter or colder than expected
- Severe weather such as hurricanes, tornadoes and thunderstorms
- Poorly maintained equipment that decreases in efficiency over time
- Long and difficult capital approval processes or limited capital resources





Task 7: Actions to address these risks & opportunities

- Risk and opportunities must be evaluated in terms of how they impact the success of:
 - The EnMS
 - Continual energy performance improvement
- Once the risks and opportunities have been identified, <u>plan actions</u> to address them as part of your EnMS
- Be able to demonstrate this process to an auditor







Task 7: Playbook

Activity

- Look at Task 7 in 50001 Ready
- Look at the Task 7 Playbook (which is tied back to Task 1)



50001 Ready Navigator Playbook

Task 7: Risks to EnMS Success

Date last modified/updated: Click here to enter a date. Internal audit: Click here to enter a date.

Who last modified/updated: Click here to enter text. Management review: Click here to enter a date.

This part of the Navigator Playbook is completed when you have:

- 1. Identified the risks and opportunities pertaining to the ability of your EnMS to achieve its intended outcomes.
- 2. For each of the identified risks and opportunities, planned and implemented actions to address them using the processes of the EnMS and record this information.
- 3. Planned for how the actions taken will be evaluated for effectiveness. Performed an effectiveness evaluation.





Task 2: People and Legal Requirements Affecting the EnMS

Task 2: We determine the interested parties and energy-related legal and other requirements relevant to our energy performance and the energy management system.

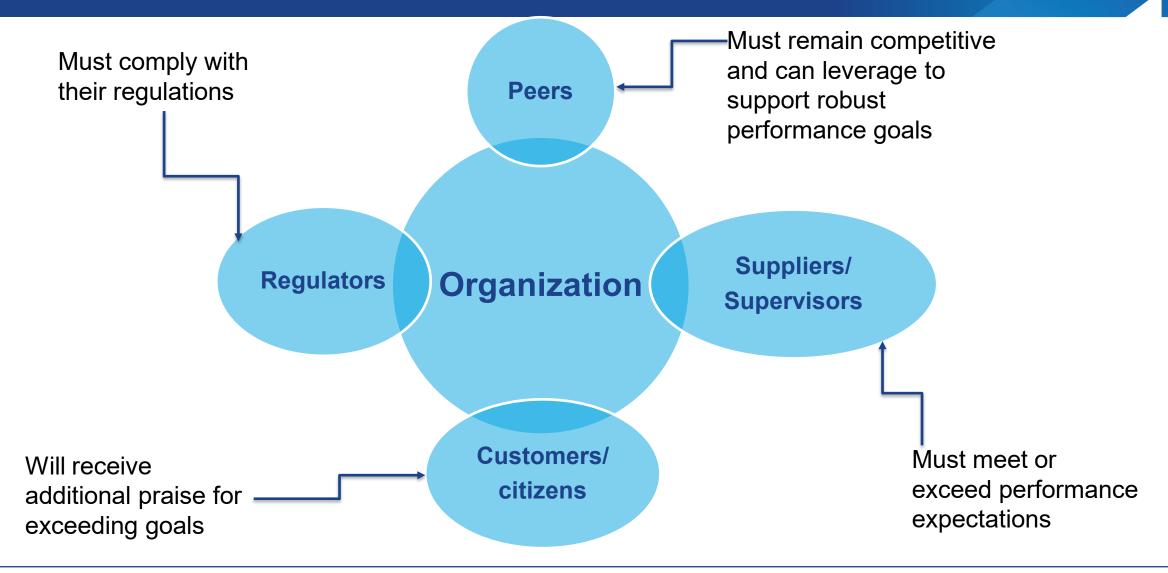
At defined intervals, we review these requirements and evaluate our compliance with them.







Task 2: Interested Parties, Plus Requirements







Task 2: Relative to the Audit Process

- REMEMBER THIS!
- Anything that you invoke on yourself as an EnMS requirement in Task 2
 becomes part of the audit criteria that will be evaluated later, either internally
 or by a third party
- Items that you voluntarily participate in like Better Plants and ISO 50001 would be considered "other" requirements





Task 2: Playbook

Activity

- Look at Task 2 in 50001 Ready
- Look at the Task 2 Playbook



50001 Ready Navigator Playbook

Task 2: People and Legal Requirements Affecting the EnMS

Date last modified/updated: Clok here to enter a date. Internal audit: Clok here to enter a date.

Who last modified/updated: Click here to enter text. Management review: Click here to enter a date

For Task 1: This part of the Navigator Playbook is completed when you have:

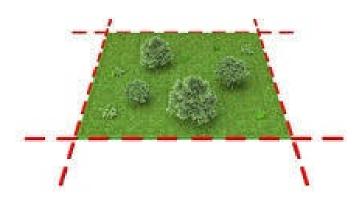
- 1. Identified and recorded the interested parties relevant to your organization's energy performance and EnMS using the Worksheet or similar document.
- 2. Determined the needs and expectations of these interested parties as they relate to your organization's EnMS.
- 3. Identified the applicable legal and other requirements related to energy.
- 4. Assigned responsibilities and establish a frequency for reviewing and updating the completed matrix.
- 5. Implemented a process to periodically evaluate compliance with the identified requirements.
- 1. <u>Identify interested parties and</u>
- 2. <u>Determine their needs and expectations</u>





Task 3: Scope and Boundaries

Task 3: We have documented and approved the scope and boundaries of our 50001 Ready energy management system.







Task 3: Boundary Examples





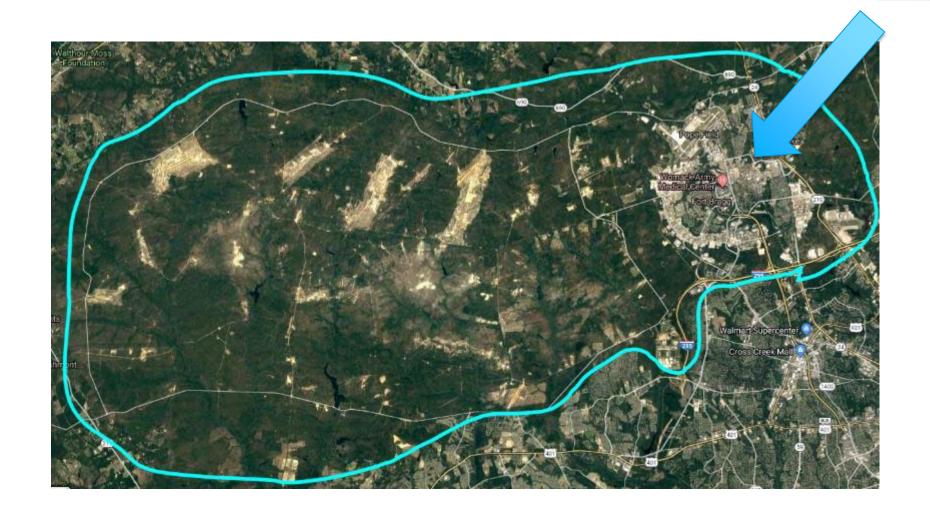








Task 3: A Big Scope and Boundary



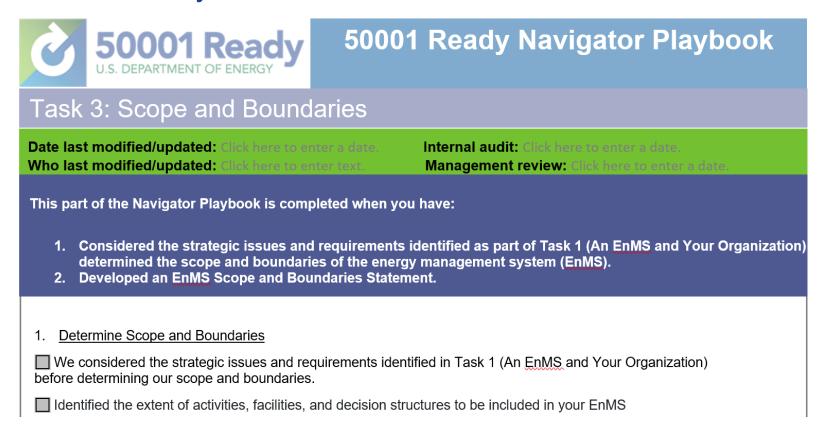




Task 3: Playbook

Activity

- Look at Task 3 in 50001 Ready
- Look at the Task 3 Playbook







- 2) Thinking about Tasks 1 3:
 - Task 1: An EnMS and Your Organization
 - Task 2: People and Legal Requirements Affecting the EnMS
 - Task 3: Scope and Boundaries

Where do you feel your organization is relative to these three tasks?

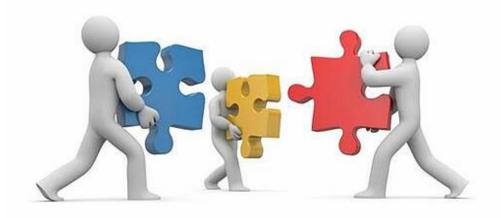
- A. We essentially already have all of this in place based on other ISO systems and/or our current energy management program. Just a little tweaking is needed.
- B. These make sense and my organization has some of this in place. It would not take too much effort to complete these.
- C. Most of this is new to my organization, but we do have some basics in place. It would take some effort to get this in place.
- D. I would basically have to start from scratch to get these tasks completed.
- E. I do not know where our organization is with respect to completing these tasks.





Leadership (Task 4 - 6)

Commitment and guidance from the top



Is there strong top management commitment to the EnMS? Is there a clear and well-communicated energy policy? Are there adequate resources for the energy team to carry out the implementation of the EnMS?





Task 4: Management Commitment

Task 4: Our top management demonstrates leadership and commitment to continual improvement of energy performance and the effectiveness of the 50001 Ready system.







Task 4: Questions to Ask

- Where does top management reside?
 - At an individual sites?
 - At a central office?
 - At a level above the central office?
- Who sets the energy policy?
- Who will do the management review?
- Who will establish and confirm management commitment?
 - Use the 50001 Ready Navigator Task 4 playbook resource





Task 4: Management Responsibility

- Ensure that scope and boundaries are established
- ✓ Ensure the energy policy and objectives and targets are established
- ✓ Ensure integration of EnMS requirements into business process.
- ✓ Ensures that actions plans are approved and implemented
- ✓ Ensure adequate resources are available
- ✓ Communicate the importance of effective energy management and conforming to EnMS requirements
- Ensure the EnMS achieves intended outcomes

- ✓ Promote continual improvement of energy performance and the EnMS
- ✓ Ensure the formation of the energy team
- ✓ Direct and support persons to contribute to the effectiveness of the EnMS and energy performance improvement
- ✓ Support other management roles to demonstrate leadership
- ✓ Ensure that EnPI(s) appropriately represent energy performance
- ✓ Ensure that processes are established and implemented to identify and address changes affecting the EnMS and energy performance





Task 4: Speak the Language

Cost Savings

Prioritized Projects

Track training effectiveness to sustain behavior changes

Energy Savings

Climate/Carbon Goals

Easier tracking for compliance





Task 4: What is the Commitment?

- STRONG management commitment is essential
 - Allow time for energy team participation
 - Allow time for EnMS development
 - Provide resources needed to succeed
 - Provide resources for travel to trainings, as needed
 - Provide capital funding for energy improvement
 - Communicate energy policy and its importance
 - Provide resources for internal auditing
 - Conduct meaningful management reviews









Task 4: Playbook

Activity

- Look at Task 4 in 50001 Ready
- Look at the Task 4 Playbook



50001 Ready Navigator Playbook

Task 4: Management Commitment

Date last modified/updated: Click here to enter a date. Internal audit: Click here to enter a date

Who last modified/updated: Click here to enter text. Management review: Click here to enter a date

This part of the Navigator Playbook is completed when you have:

- 1. Optionally, identified business drivers and benefits applicable to your organization.
- 2. Optionally, prepared and delivered a briefing to top management on the identified business drivers and benefits, management roles and responsibilities, and how these responsibilities will be met.
- 3. Secured commitment from top management to continual improvement of energy performance and the development and use of a 50001 Ready system.
- 4. Briefed top management on their EnMS leadership responsibilities.
- 5. Planned for how top management will meet their responsibilities.





- 3) At this point in your organization's energy management journey, please estimate your top management's understanding and commitment to implementing a 50001 based EnMS:
 - A. My top management totally gets it and I feel fully supported
 - B. I know my top management believes that energy management is a good thing, but I do not think that they fully understand the resource requirements for a 50001 Ready implementation
 - C. I am just learning about 50001 and will need to educate my top management on this and see where we go from there
 - D. I think this is going to be a real uphill battle with my top management
 - E. I do not know





Task 5: Energy Policy

Task 5: We have an energy policy statement, which has been approved by top management and communicated across the organization.







Task 5: Energy Policy Requirements

- 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
- 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.







Task 5: The Energy Policy Shall...

- The energy policy <u>shall</u>:
 - Be available as documented information
 - Be communicated within the organization
 - Be available to interested parties, as appropriate
 - Be periodically reviewed and updated as necessary





Task 5: Example Energy Policy

As an energy intense facility, we strive to reduce our energy consumption and costs to promote the long-term environmental and economic sustainability of our operations.

We are committed to:

- Reduce energy use per ton of product by 25% in 10 years
- •Ensure continual improvement in our energy performance
- Deploy information and resources to achieve our objectives and targets
- Uphold legal and other requirements regarding energy
- Consider energy performance improvements in design and modification of our facilities, equipment, systems and processes
- •Effectively procure and utilize energy-efficient products and services





Task 5: Playbook

- Look at Task 5 in 50001 Ready
- Look at the Task 5 Playbook





50001 Ready Navigator Playbook

Task 5: Energy Policy

Date last modified/updated: Click here to enter a date. Internal audit: Click here to enter a date.

Who last modified/updated: Click here to enter text.

Management review: Click here to enter a date

This part of the Navigator Playbook is completed when you have:

- 1. Drafted your energy policy statement.
- 2. Had top management approve the energy policy.
- 3. Incorporated the energy policy into your EnMS awareness program.
- Draft your energy policy statement

Energy policy includes commitments to the following:





Task 6: Energy Team and Resources

<u>Task 6:</u> We have established an energy team authorized by top management to oversee the EnMS. Responsibilities and authorities are assigned and communicated, and processes are in place to identify and provide resources.







Task 6: Questions to Ask

- How will you organize your energy teams at your sites?
 - Is this structure already in place?
 - What role at the sites will typically lead the energy teams?
 - How will the central office support the energy teams?
- Are responsibilities and authorities assigned?
- Are processes in place to ensure proper resources?
- How will the central office communicate with the individual site teams?





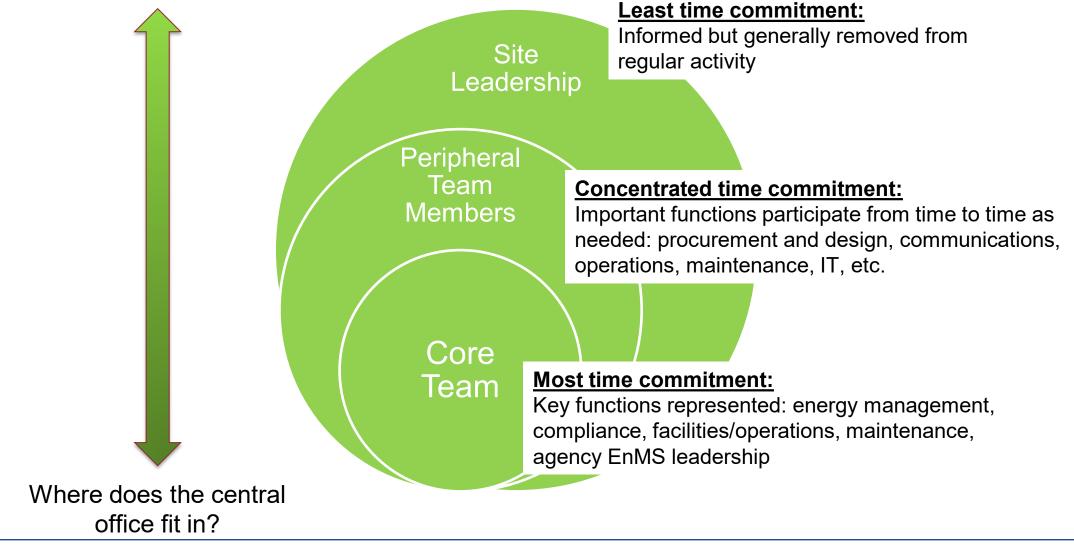
Task 6: Energy Team and Resources

- Form and authorize the team
- Cross functional is better
- Identify and authorize the team leader
- Confirm team resources are available
- Assign responsibilities
- Make a roster
- Set up team meeting times
- Promote awareness and acceptance outside the team





Task 6: Energy Team Roles and Time Commitment







Task 6: Playbook

- Look at Task 6 in 50001 Ready
- Look at the Task 6 Playbook





50001 Ready Navigator Playbook

Task 6: Energy Team and Resources

Date last modified/updated: Clockness to enter a date.

Who last modified/updated: Clockness to enter a date.

Management review: Clockness to enter a date.

This part of the Navigator Playbook is completed when you have:

- 1. Formed an energy team and obtained authority from top management for it to oversee the EnMS and carry out assigned responsibilities.
- 2. Documented who the energy team leader is.
- 3. Scheduled regular energy management team meetings.
- 4. Assigned and communicated **EnMS** responsibilities and authorities within the organization.
- 5. Addressed and communicated responsibilities for other relevant roles.
- 6. Identified, communicated to top management, and allocated the resources needed for the EnMS.
- 1. Form an energy team and obtain authority from top management for it to oversee the EnMS and carry out assigned responsibilities





4) Thinking about Tasks 4 - 7:

Task 4: Management Commitment

Task 5: Energy Policy

Task 6: Energy Team and Resources

Task 7: Risks to EnMS Success

Where do you feel your organization is relative to these four tasks?

- A. We essentially already have all of this in place based on other ISO systems and/or our current energy management program. Just a little tweaking is needed.
- B. These make sense and my organization has some of this in place. It would not take too much effort to complete these.
- C. Most of this is new to my organization, but we do have some basics in place. It would take some effort to get this in place.
- D. I would basically have to start from scratch to get these tasks completed.
- E. I do not know where our organization is with respect to completing these tasks.





Review and Wrap Up

Webinar Training Schedule & Preparations Kahoot Quiz Game Q&A



50001 Ready Navigator Tasks: Next Session in RED

Context of the Performance Leadership Operation **Planning** Support **Improvement** Organization Evaluation 14. Competence 17. Operational 20. Monitoring 24. Corrective 1. An EnMS and 4. Management 7. Risks to EnMS and Training and Commitment Controls Action vour Success 15. Awareness Measurement of 25. Continual 18. Energy Organization 8. Energy Data and the EnMS 5. Energy Policy Considerations **Improvement** Collection and Communication in Design 21. Monitoring 2. People and Analysis 16. Documenting 19. Energy and 6. Energy Team Legal 9. Significant the EnMS Measurement of Requirements and Resources Considerations Energy Uses in Procurement Energy 10. Improvement Performance 3. Scope and **Opportunities Improvement** Boundaries 11. Energy 22. Internal Audit Performance 23. Management Indicators (EnPIs) Review and Baselines Plan (EnBs) 12. Objectives and Do Act **Targets** 13. Action Plans for Continual **50001 Ready** Check **Improvement**





Training Schedule: By Session

- 1. An Overview March 28 **DONE**
- 2. Laying the Foundation of 50001 TODAY-April 4
- 3. Where does all the Energy Go? NEXT- April 11
- 4. Sorting out the Energy Data April 18
- 5. Engaging Other Functions April 25
- 6. Evaluating Performance May 2
- 7. Ensuring Continual Performance May 9
- 8. Wrap Up and Next Steps May 16

ALL on Thursdays

All sessions: 10:00 a.m. to 12:30 p.m.





Preparation for Session THREE

- We recommend that you purchase the ISO 50001: 2018 standard
- Set up your 50001 Ready account, if not done yet
- Prepare for Session THREE:
 - Review tasks 8-9 in 50001 Ready
 - Be prepared to discuss your site energy data collection methods (Task 8).
 - Think about your significant energy users (SEUs) by equipment, processes, or systems? (Task 9)

Between each session we will send out a quick homework survey. Please complete and return these.





Overview of 50001 Ready - Resources

- 50001 Ready Program
 - https://www.energy.gov/eere/amo/50001-ready-program
- 50001 Ready Navigator
 - https://navigator.lbl.gov/
- Energy Footprint Tool
 - https://www.energy.gov/eere/amo/downloads/energy-footprint-tool
- EnPI Lite Tool
 - https://enpilite.lbl.gov/
- 50001 Ready at Better Building
 - https://betterbuildingssolutioncenter.energy.gov/better-plants/software-tools





- 5) After listening to today's webinar session TWO, how do you feel about 50001 Ready as a resource to help you with your energy management plans:
 - A. Still overwhelmed.
 - B. Cautiously optimistic.
 - C. Very encouraged.
 - D. Confident Ready to get Ready.





And now, our Kahoot Quiz Review Game







Question and Answer Time







Please Contact Us With Any Questions



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