

Using 50001 Ready to Help Meet Your Energy Goals

Jay Wrobel, U.S. DOE

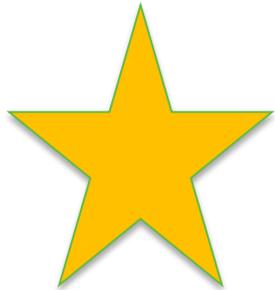
Prakash Rao, Lawrence Berkeley National Laboratory

Energy Exchange 2018, August 22, 2018



Agenda

1. Overview of 50001 Ready
2. Walk through Navigator
3. BREAK
4. In-depth instruction
5. Coming soon to 50001 Ready
6. Discussion



You will earn 0.2 CEU credits for this workshop upon successful completion of your quiz. Slides marked with this star have important information for your quiz

What is ISO 50001?

- **ISO 50001 is a *voluntary* standard for establishing an energy management system**
 - Known globally and transferable across multiple facilities/bases in every sector
 - Not a ‘project by project’ system but full organizational culture
 - Think ISO 14001 but focusing on energy
- **ISO 50001 is an Energy Continuous Improvement Platform**
 - Commitment. Leadership commitment and empowerment to energy team
 - Data. Collection and analysis of energy performance in facility and large energy users
 - Culture. Change management process transferable across facilities and staff
 - Scalable, Can start small, get the system up and running and add more

“Not only is our ISO 50001 important to the environment, but any opportunity for us to conserve directly affects the bottom line. The money we saved, \$37 million, can be reinvested in the plant to create more jobs for the people here in Detroit.”

—Jeff Allen, **Detroit Diesel**

Value of ISO 50001?

- **50001 Supports Resiliency**

- Staff turnover is eased by having written practice in place with roles and responsibilities
- Top management turnover is managed as new manager inherits the practice as part of job
- Established 50001 practice increases facility resiliency to energy disruptions
- Allows trained staff to walk into any facility and instantly pick up the energy practice

- **50001 Supports Efficiency**

- Establishes a continuous improvement practice across part or many facilities
- DOE data shows savings persistent through the life of the 50001 practice
- Follows proven plan-do-check-act cycle for continuous improvement
- Identifies a list of energy opportunities to be evaluated over time



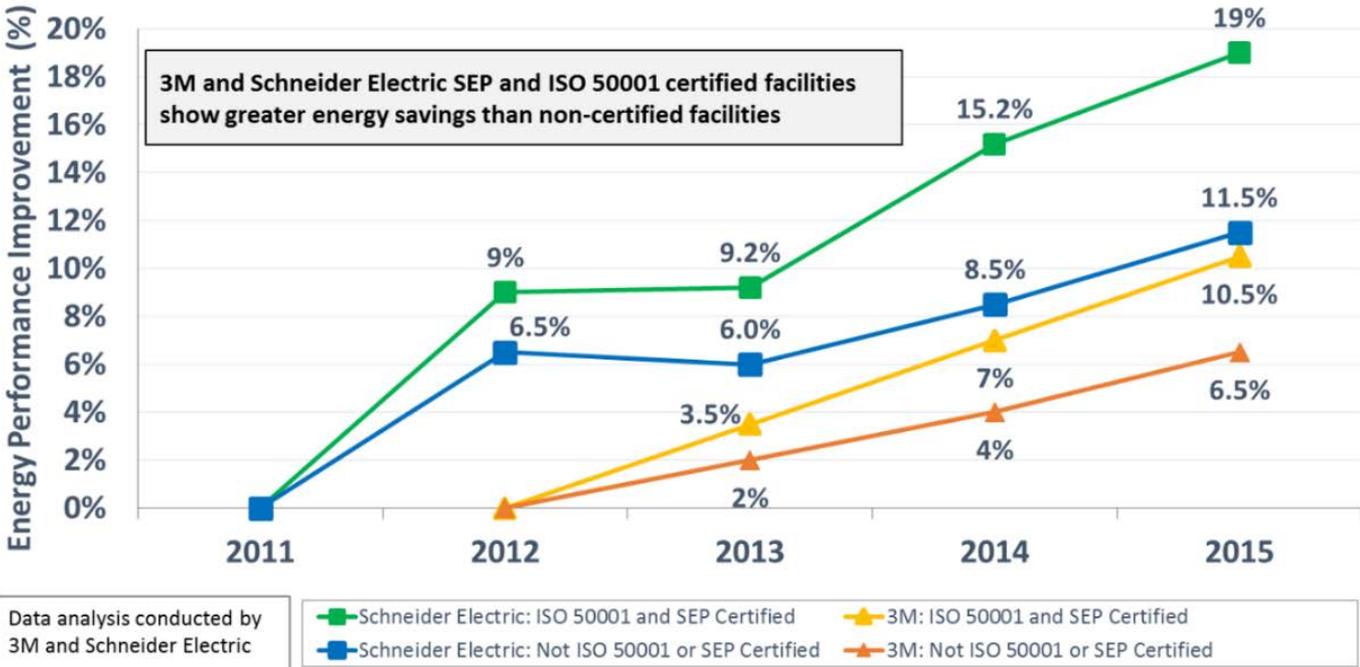
ISO 50001 is based on the plan-do-check-act cycle

“We have found that both ISO 50001 and SEP are very beneficial for our company. We’ve seen energy savings of over \$3.5 million with a program implementation payback period of about 12 months. This is a good investment with really strong returns.”

—Mark Dhennin, **Cummins**

50001: Increased Energy Performance

Multi-sites in 3M & Schneider-Electric showed a 2x improvement vs internal BAU



US DOE Partners in 50001

- Industrial**
- 3M
 - Arcelor Mittal Steel
 - Bridgestone
 - Cummins
 - Detroit Diesel
 - General Motors
 - HARBEC Inc.
 - Intertape Polymer Group
 - Johnson Controls
 - Mack Trucks
 - MedImmune
 - NewGold
 - Nissan North America
 - Schneider Electric
 - Titan America
 - Volvo
- Other Sectors**
- Des Moines Wastewater
 - Hilton Worldwide
 - Marriott International, Inc.
 - Tinker Air Force Base

- Other Partners**
- American Chemistry Council
 - American Forestry and Paper Association
 - Council for Industrial Boiler Owners

“ISO 50001 is a standard that drives results directly to the bottom line. ISO 50001 systematically drives down energy costs and improves competitiveness through the assignment of responsibilities and raising the visibility of energy management within the organization.”
 —Andrew Hejnar, **3M**

Available 50001 training

50001 Certified Practitioner In Energy Management Systems (50001 CP EnMS):

- Learn the ins and outs of ISO 50001 implementation
- Become a professional to assist organizations in implementing 50001
- Create in house expertise for adoption of ISO 50001



50001 Ready: DOE recognition for excellence



50001 Ready
U.S. DEPARTMENT OF ENERGY

- **50001 Ready Program that provides...**
 - **Recognition** Program from UD DOE for conformance to ISO 50001
 - Provides a tool to build your custom EnMS
 - Does not require certification from third parties
 - Comes with free resources (web, video, help desk) to streamline adoption
 - Applicable for all sectors of all sizes
 - Technical assistance available from FEMP, BTO and AMO
 - Means to coordinate and streamline your energy performance
 - Recognition is annual allowing for system maintenance and updating

Since May 2017, over 700 projects and 900 accounts in the 50001 Ready Navigator and 9 energy utilities are partnering with DOE to offer 50001 Ready to customers!



Recognition is valid for 1 year, at which time you can reapply. All U.S.-based facilities, regardless of sector, can apply

How 50001 Ready Works

1. Implement ISO 50001 principles

Complete 25 Tasks in US DOE's 50001 Ready Navigator free, self-guided online tool

2. Present energy performance

Submit energy performance data. May use EPA's Portfolio Manager, DOE's EnPI Lite or FEMP/OMB energy reporting data

3. Self-attest to 50001 Ready

Sign-off by management of 50001 Ready implementation and commitment

energy.gov/50001Ready



DOE and others recognize
50001 Ready achievement

50001 Ready Navigator - Overview

- Free online 'Turbo Tax-like' tool, with step-by-step approach to ISO 50001 implementation
- Guidance broken into straight forward sections, including:
 - Getting It Done – what specifically needs to be accomplished
 - Task Overview – how does this task connect with ISO50001
 - Full Guidance – comprehensive guidance about the task
 - Transition Tips – from other ISO management systems
- Form teams and assign tasks
- Download guidance
- Create multiple projects
- Access over 100 related resources



Guidance in Navigator is based on ISO 50001 principles. There is no fee to use the tool

The screenshot shows the 'Planning' section of the ISO 50001 Ready Navigator. The main heading is 'Tasks: Scope and Boundaries'. Below this, there is a progress bar with five steps, where the first step is highlighted. The task description reads: 'Task 1: We have defined, documented and approved the Scope and Boundaries of our 50001 Ready energy management system'. A status bar indicates 'Not Started: 3', 'In Progress: 0', and 'Ready For Review: 1'. A 'Detailed Guidance: Scope and Boundaries' section is highlighted with a purple box, showing sub-sections like 'Getting It Done', 'Task Overview', 'Full Description', 'Notes', 'Resources', 'History', and 'Assignments'. The 'Getting It Done' section lists three bullet points: 'With management input, complete the Scope and Boundaries Worksheet to define the scope and boundaries of the energy management system (EnMS)', 'Develop an EnMS Scope and Boundaries Statement', and 'Have top management approve the Statement and communicate it across the organization'. A 'Did you find this helpful?' section with a 'Contact Us' link is also visible.

This block shows a detailed view of the navigation bar for 'Detailed Guidance: Scope and Boundaries'. It features a horizontal menu with the following items: 'Getting It Done' (highlighted in blue), 'Task Overview', 'Full Description', 'Notes' (with a '0' notification), 'Resources', 'History', and 'Assignments' (with a gear icon).

50001 Ready Navigator Steps

- Having a **Continuous Energy Improvement or Energy Mgmt. System** means you are already at least **HALF WAY DONE**

Strongly prepared

Partially prepared

Planning

1. **Scope and Boundaries***
2. **Energy Policy**
3. **Management Commitment**
4. **Energy Team***
5. **Legal Requirements**

Energy Review

6. **Data Collection**
7. **Data Analysis**
8. **Performance Indicators (EnPIs)***
9. **Significant Energy Uses (SEUs)***
10. **Relevant Variables**
11. **Baselines, Objectives and Targets***
12. **Improvement Opportunities***
13. **Improvement Projects**

Continual Improvement

14. **Monitoring***
15. **Measurement***
16. **Operational Controls***
17. **Corrective Actions**
18. **Energy Consideration in Design**

System Management

19. **Documentation and Records**
20. **Communications**
21. **Training**
22. **Procurement***
23. **Internal Audit**
24. **Calculate Energy Savings***
25. **Management Review**



While 50001 Ready is not a mandate, it will help you meet many existing ones..

Summary: 50001 Ready is...

- Getting recognized for best in class energy management
- A tool for onboarding new staff
- Institutionalizes energy management that can survive leadership change
- Builds off of current energy efforts
- Supports your efforts to meet mandates
- A way to develop and prioritize a list of continuous improvement opportunities
- Can be delivered by utilities, contractors, ESPCs
- Enhances resiliency by surviving staff disruptions
- Can break down internal stovepipes by creating collaboration

Next Steps & Opportunities

1. Go to *energy.gov/50001Ready* for more information
2. Review the **50001 Ready Navigator** (don't have to register)
3. DOE offering **free staff and informational resources** to implement/pilot in one or more of your sites
4. DOE will coordinate with you on how 50001 Ready links to **federal energy data reporting** and energy audit requirements



Contact Jay.Wrobel@ee.doe.gov or David.Boomsma@ee.doe.gov
for more info or to get started

50001 Ready events at Energy Exchange

- **Wednesday**

- 9:00 am: Second workshop, Room 24 (invite those that may have missed this one!)
- 3:30 pm: Ask-an-expert, entry to trade show
- 4:00 pm: ISO 50001 Federal session, Room 21
 - Tinker AFB, Honeywell, DOE

- **Thursday**

- 8:30-10am: Ready to Save Energy: Using DOE's Free 50001 Ready Tool, Room 23
 - ArcelorMittal, Strategic Energy Group, Des Moines Water Works

50001 Ready Free Resources

- **Help Desk:**
 - Free email and phone support from LBNL’s EnMS experts at: 50001Ready@lbl.gov
 - Can also use “contact us” feature in Navigator
- **Reach out to LBNL directly:**
 - Chris Payne: CTPayne@lbl.gov
 - Prakash Rao: PRao@lbl.gov
 - Paul Sheaffer: Psheaffer@lbl.gov
 - Peter Therkelsen: Ptherkelsen@lbl.gov
- **Reach out to DOE:**
 - David Boomsma: David.Boomsma@ee.doe.gov
 - Pete Langlois: Pete.Langlois@ee.doe.gov
 - Paul Scheihing: Paul.Scheihing@ee.doe.gov
 - Jay Wrobel: Jay.Wrobel@ee.doe.gov

Federal 50001 Ready Community of Practice

- **Kick-off yesterday working with federal agencies to:**
 - Provide feedback on 50001 Ready resources
 - Pilot and test multisite, workbook
 - Implement 50001 Ready in facilities
 - Share stories and lessons learned
- **Current members include:**
 - NASA
 - Air Force
 - USACE
 - NOAA
 - TVA

Walk through Navigator

- Setting up a team
- Walking through a task

In-depth instruction

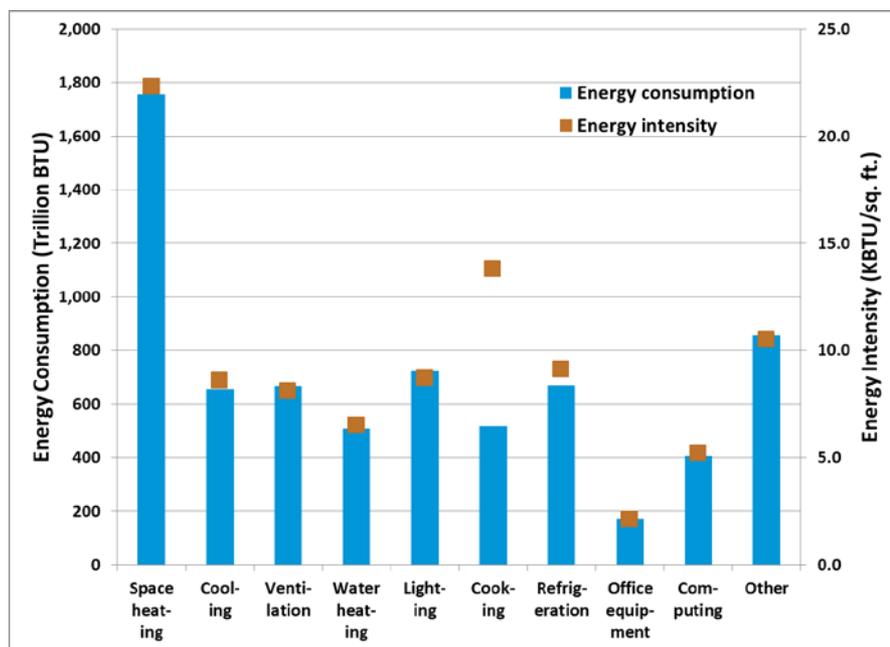
Overview

- **Through meeting federal mandates you have**
 - completed many of the Navigator tasks
 - close to completing many others
 - will advance existing activities to realize greater benefit
- **Two types of tasks will be presented**
 - Shoe-in
 - Deep dive
- **Our goal: Demonstrate value of 50001 Ready and empower you with the knowledge and tools to complete many of the tasks when you return to the office**

In-depth instruction: Shoe-in tasks

Task 8: Significant Energy Uses (SEUs)

We have determined our Significant Energy Uses (SEUs) and their energy consumption.



Annual energy consumption and intensity by end use for all commercial buildings in the US. From CBECS 2012

Tips:

- You know where you use the most energy
- Do you know which energy systems have the most opportunities (e.g., HVAC, fleet, steam/hot water)?
- For 50001, choose only 1 or 2 systems to start:
 - Navigator will reference the SEUs throughout
 - Pick something you have a good handle on (e.g. HVAC)
 - Can add SEUs later

Task 1: Scope and Boundaries

We have defined, documented and approved the Scope and Boundaries of our 50001 Ready energy management program



Tips:

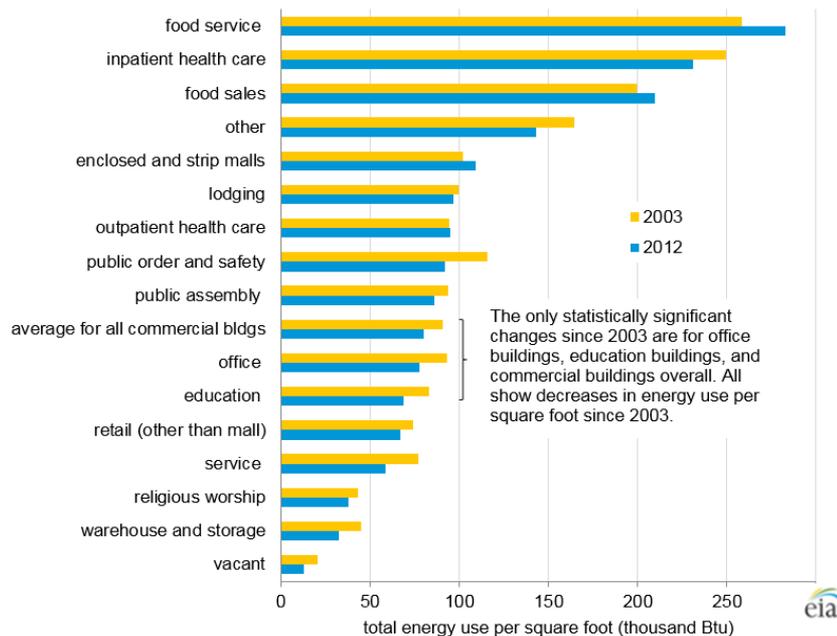
- Are you considering your whole facility/base? If not, what are you not including?
- Can you use the same scope and boundary that you calculate and report your energy intensity around?
- Can go smaller if you like; there is no strict requirement but you probably already have this defined!



50001 Ready is done across a scope and boundary, not each individual energy efficiency project

Task 10: Performance Indicators (EnPIs)

We have identified energy performance indicators (EnPIs) and developed a methodology for determining and updating them.



Source: U.S. Energy Information Administration, Commercial Buildings Energy Consumption Survey.

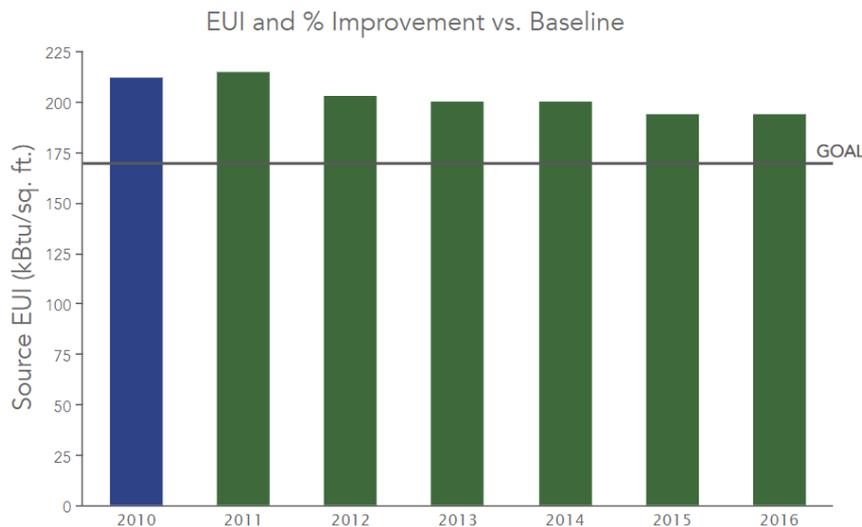
Tips:

- 50001 only requires one, but can have more if you want
- Use energy consumption/ft²
- Federal facilities use this to report energy intensity
- Also used in Portfolio Manager
- Developing additional EnPIs at the facility, sub-facility, and/or SEU-level, is good practice, but not a requirement

Change in energy intensity of commercial building energy end uses between 2003 and 2012. From EIA.

Task 11: Baseline, Objectives, and Targets

We have established an energy baseline(s), approved objectives and energy performance improvement targets, and timeframes for their achievement



Tips:

- 50001 requires >0% improvement
- Top management already set in Task 3!
- **OMB Scorecard and federal mandates require annual 2.5% reduction in BTU/ft²**
- Can set others baselines, objectives and targets to help improve energy performance

Cleveland, OH (Better Buildings Challenge partner) progress towards meeting goal of 20% reduction in kBtu/ft² by 2020 against a 2010 baseline. From Better Buildings Initiative website.

Task 12: Improvement Opportunities

We have identified and prioritized energy performance improvement opportunities, and have a process in place to continue to update them

改善

Do you or your staff look for energy opportunities? Can be formal (like a Kaizen or treasure hunt) or simple (like suggestion boxes)

Tips:

- 50001 Ready requires a prioritized list of opportunities
- You are done with this task
- Your facility gets an energy (and water) audit every four years
- Site is free to prioritize as desired: Cost-effective? Lowest first cost? Increases resiliency? Operational importance?
- Create a mechanism to continually identify opportunities



Use existing documents, data, and procedures to complete tasks, such as an existing energy policy or your required energy audit

Task 22: Procurement

We have established energy performance criteria spanning the operating life for purchases affecting energy performance, informed supplies that this is a factor in procurement, and have defined and currently use specifications for energy supply purchases.



Tips:

- **50001** Requires consideration of energy impact of procured products and energy
- You are already doing more than this task requires
- Already required to purchase **ENERGY STAR** and/or **FEMP Designated Products**
- Already have procurement goals (for renewable energy and clean energy)
- Attention must be given to impact on **SEUs**

Task 24: Calculate Energy Savings

We have determined our energy performance improvement.

Tips:

- **50001 Ready** requires documentation of annual energy consumption
- You're done! Your FEMP/OMB reporting satisfies this requirement
- Federal facilities already calculate their energy performance using Portfolio Manager, an 50001 Ready-approved reporting mechanism

Company/Location	Latest Achievement
Hilton San Diego Bayfront <i>San Diego, CA - Feb. 2017</i>	22.7% over 3 years
Waldorf Astoria La Quinta Resort & Club <i>La Quinta, CA - Feb. 2017</i>	17.6% over 3 years
JW Marriott Hotel <i>Washington, DC - Mar. 2016</i>	16.5% over 3 years
Des Moines Water Works <i>Des Moines, IA - Nov. 2017</i>	2.7% over 1 year

Energy savings from companies pursuing ISO 50001

In-depth instruction: Deep dive into other tasks

Task 4: Energy Team

We have established an energy team that meets regularly and includes a management representative. Roles and responsibilities have been defined for the energy team and all affected personnel.



Tips:

- 50001 requires formalization of the energy team (on the org chart)
- Management empowers the team as part of the job responsibilities
- Formalizes dialogue between top management and facility on energy

Joseph Cecrle and Kenneth McKuen
Oklahoma City Air Logistics Complex

Tasks 14-16: Monitoring, Measurement, and Operational Control

- Sustains energy savings
- Delivers continual improvement
- Makes day-to-day energy management an ongoing activity for more than just the energy manager
- Raises energy readiness
- Prepares for the unexpected

ISO 14001 tip:

Many Navigator tasks can be implemented by leveraging your ISO 14001 EMS. These include monitoring, measurement, and operational control. Adding energy-related activities to these existing practices can quickly complete these tasks.



Tasks 14: Monitor

- **You already:**
 - Benchmarking facility using Portfolio Manager (42 USC 8253(f)(8))
 - Follow-up on implemented measures (42 USC 8253(f)(5))
 - Web-based certification (42 USC 8253 (f)(7))
- **Add:**
 - Monitoring of SEUs, Relevant Variables, and anything else that effects energy performance
 - Keep looking for energy opportunities

Tasks 15: Measure

- **You already**
 - Benchmarking of federal facilities (42 USC 8253(f)(8))
- **Add:**
 - Create a procedure for ongoing measurement of overall energy consumption, specifically of SEUs
 - Measurement should be specific to equipment: lighting and HVAC will have different measurement procedures
 - Set a schedule for ongoing measuring

Tasks 16: Operational Control

- **You already:**
 - Electric motors and air conditioning maintenance (42 USC 8259b(d))
- **Add:**
 - Operational control is an established procedure for ensuring proper O&M of equipment (SEU)
 - Assign someone on energy team to be responsible for the O&M
 - Pay special attention to SEUs. Ex:
 - If HVAC is your SEU: An established plan for ongoing monitoring of temp set points, checking controls/dampers, filter status, procurement of maintenance contract, etc.

This is the continuous energy improvement aspect of 50001 that DOE has shown to return 4.5% annual improvement through 70-80% low/no-cost opportunities

Getting recognized

- **Requires**
 - Self-attestation by energy lead and management representative
- **One year DOE (and other) recognition**
 - 1st year does not require positive energy performance improvement
- **Subsequent years requires**
 - Re-attestation
 - Sign off on positive energy performance improvement
- **DOE plans to allow other actors to provide the recognition: Ex: USACE, NASA HQ, ESPC, utility**

Coming soon to 50001 Ready

50001 Ready Playbook

- 50001 Ready Navigator is a personnel management and tracking tool
 - Bring in energy team and consultants (ESPCs)
 - Assign to Tasks and track feedback
 - Leave notes and Sharepoint locations for the needed deliverables
- Under development is a Companion Playbook with Task worksheets
 - Fill out the worksheets for each Task
 - Living document (spreadsheet) that contains the energy data and system
 - Step-by-step guide to establishing and improving energy use
 - On boarding tool for new energy personnel (management or staff)
 - Will contain sample completed forms to show end product example

Multi-Site Platform!

- Multi-site functionality – central office involvement to coordinate and support activities at multiple linked facilities
- Reduces time and effort to implement 50001 Ready across multiple facilities
- Standardizes 50001 Ready system across facilities
- Centralized repository for understanding how your facilities manage energy
- Best practice for 50001 leaders: Hilton, 3M, Cummins, Nissan, Schneider Electric

50001 Ready Navigator Multisite features

- Track overall 50001 Ready implementation across multiple sites
- Platform for communicating with sites on 50001 Ready

The screenshot displays the 50001 Ready Navigator interface. At the top, there is a navigation bar with the 50001 Ready logo (U.S. DEPARTMENT OF ENERGY), the title "Navigator", a language dropdown set to "English", and links for "Contact", "FAQs", "My Tasks", and "My Navigator". Below this is a "Select One" dropdown menu.

The main content area is titled "Central Office Portfolio View" and includes several action buttons: "Central Office Dashboard", "Manage Project", "Manage Team", and "Add Site".

A "Central Office LEAD" section features a "Central Office Tasks" calendar. The calendar shows a grid of days from 1 to 25. A legend indicates task statuses: Not Started (light blue), In Progress (medium blue), Ready for Review (light green), Approved (dark green), Review (yellow), and Support Only (white).

Below the calendar is a table with the following data:

ID	Site Name	Location	Task Progress	Action	Last Activity																										
#719	Lincoln	lincoln, NE	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td></td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		Dashboard	07/30/2018 Remove
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#720	Atlanta	Atlanta, GA	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td></td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		Dashboard	07/30/2018 Remove
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1	2	3	4	5	6	7	8	9	10	11	12	13																			
14	15	16	17	18	19	20	21	22	23	24	25																				

At the bottom of the table, there is a "Download Table" button with a download icon.

50001 Ready Navigator Multisite features

- Establish role of Central Office in 50001 Ready implementation

The screenshot shows the '50001 Ready Navigator' web application interface. The header includes the U.S. Department of Energy logo and navigation links for 'Contact', 'FAQs', 'My Tasks', and 'My Navigator'. The main content area is titled 'Create a Multi-Site Project' and features a section for 'Select Central Office responsibilities'. Under 'Central Office Executive Management', there is a dropdown menu. Below that, a section titled 'Select which tasks should be accomplished at the CO level' includes a table with columns for 'CO Responsibility', 'Lead', and 'Review'. The table lists four tasks: 'Task 1: Scope and Boundaries', 'Task 2: Energy Policy', 'Task 3: Management Representative', and 'Task 4: Energy Team'. A callout box explains how the CO can help with the Energy Policy, stating that the CO may develop the Energy Policy based on existing corporate policies, and the site will need to be made fully aware of the energy policy in order to implement actions in support of it.

Central Office Executive Management
Please indicate the Top Management Executive at the Central Office level that can sign off on the implementation of an EnMS. This is OPTIONAL and can be selected later.

Select which tasks should be accomplished at the CO level.
Please indicate which tasks are the responsibility of Central Office. For tasks completed at the site level, please indicate whether Central Office review is required.

To help get you started, the matrix below is pre-populated with a sample approach to CO. Clicking the 'i' at the end of each row. This sample approach is not required; please select the option that best fits your needs. The matrix can be changed later.

Section: Planning

Task	CO Responsibility	Lead	Review	Info
Task 1: Scope and Boundaries	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	i
Task 2: Energy Policy	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	i
Task 3: Management Representative	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	i
Task 4: Energy Team	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	i

How can the CO help with the Energy Policy? The CO may develop the Energy Policy based on existing corporate policies. However, the site will need to be made fully aware of the energy policy in order to implement actions in support of it.

50001 Ready Navigator Multisite features

- Track 50001 Ready implementation across multiple sites for each task

The screenshot displays the '50001 Ready Navigator' interface. At the top, a purple header bar contains the text 'Tasks: Scope and Boundaries' with a dropdown arrow. Below this is a navigation bar with a 'BACK TO DASHBOARD' link, a progress indicator with steps 1 through 5 (step 1 is active), and a 'NEXT' link. The main content area features a task description: 'Task 1: We have defined, documented and approved the Scope and Boundaries of our 50001 Ready energy management system'. To the right of this description is a callout box asking for more guidance and providing links to 'Ask the EnMS experts at the 50001 Ready Help Desk' and 'View Learning Module'. Below the task description, it shows the 'Central Office role for this task: Support' with a 'change role' button. A 'Multi-Site wide Task 1 related announcement' section contains the text 'tes test' and an 'edit' button. The 'Detailed Guidance: Scope and Boundaries' section has tabs for 'Site Progress', 'Getting It Done', 'Task Overview', 'Full Description', and 'Resources'. The 'Site Progress' tab is active, showing a table with columns for 'Site Name', 'Location', and 'Task Status'.

Site Name	Location	Task Status
Lincoln	lincoln, NE	Not Started
Atlanta	Atlanta, GA	Completed
akjdsdhf	Site setup not yet complete.	

50001 Ready Navigator Multisite features

- Collaborate with sites on implementing tasks

The screenshot displays the 'US sites | Central Office View' dashboard. At the top, there is a navigation bar with 'Language English' and a 'Select One' dropdown. Below this is a secondary navigation bar with 'Dashboard', 'Planning', 'Energy Review', 'Continual Improvement', and 'System Management'. The main content area features a 'Dashboard' section with a 'Switch to Site View' button and several action buttons: 'Getting Started', 'Status Report', 'Manage Central Office', 'Manage Team', and 'Site Portfolio View'. The 'OVERALL PROGRESS' section shows '7% Completed' and four progress indicators: 'PLANNING' at 13%, 'ENERGY REVIEW' at 0%, 'CONTINUAL IMPROVEMENT' at 0%, and 'SYSTEM MANAGEMENT' at 14%. Below this is the 'Task Assignments' section, which is currently filtered to 'Continual Improvement'. It shows a table of tasks with columns for 'Task', 'CO Role', 'Status', and 'Completion Status'.

Task	CO Role	Status	Completion Status
14 Monitoring	Support	View Sites	0 of 3 sites complete
15 Measurement	Support	View Sites	0 of 3 sites complete
16 Operational Controls	Support	View Sites	0 of 3 sites complete
17 Corrective Actions	Support	View Sites	0 of 3 sites complete
18 Energy Consideration in Design	Reviewer	Review Sites	0 of 3 sites complete

Discussion

www.energy.gov/50001Ready

Planning

1. **Scope and Boundaries**
2. **Energy Policy**
3. **Management Commitment**
4. **Energy Team**
5. **Legal Requirements**

Energy Review

6. **Data Collection**
7. **Data Analysis**
8. **Performance Indicators (EnPIs)**
9. **Significant Energy Uses (SEUs)**
10. **Relevant Variables**
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Continual Improvement

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System Management

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24. **Calculate Energy Savings**
25. **Management Review**

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