



**50001 Ready**  
U.S. DEPARTMENT OF ENERGY

U.S. DEPARTMENT OF  
**ENERGY**

Energy Efficiency &  
Renewable Energy



# 50001 Ready Utility Network Series

March 2018

U.S. Department of Energy  
Technical Partnerships  
Advanced Manufacturing Office

# Welcome + Logistics

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Welcome to the first ever DOE 50001 Ready Utility Network Series meeting!

- Today's presenters
  - Sandy Glatt, U.S. Department of Energy
  - Peter Therkelsen, Lawrence Berkeley National Laboratory
  - Christine Wu, Lawrence Berkeley National Laboratory
- Logistics
  - You are on mute by default; use the chatbox to ask questions at any time
  - We will take breaks for open questions and discussion
  - Session is being recorded
  - Slides will be emailed afterwards
  - Double click screen or press escape to exit full screen view
  - Zoom webinar control bar is at the bottom or top of your screen

# Today's Agenda

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- **What is the DOE 50001 Ready Network Series?**
  - + Why should you participate?
- ISO 50001, DOE, and the utility/PBA community
- 50001 Ready tools and recognition program
- 50001 Ready Navigator – a deeper dive

# A Forum for Energy Efficiency Programs & Federal Support

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## Objectives:

- Learn about DOE energy management resources
  - Discuss how the utility community is leveraging those resources
  - Work together to identify how these resources can support what you're doing
  - Keep pace with DOE, program, and resource updates.
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## Related SEM collaboratives and resources:

- Northwest and Northeast and new US/Canada SEM collaboratives – On-the-ground support and resources
- CEE Industrial SEM Committee – Member driven SEM program development
- SEM Hub – NEEA maintained online resource for guides, tools, videos, and online courses

# A Forum for Energy Efficiency Programs & Federal Support

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## What you should ask for from us:

- This is not a sales pitch! This should be a forum and a community of practice.
  - We welcome your feedback on what content would be most helpful to you.
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## Series content:

- Today will focus on the basics of the DOE 50001 Ready program and tools
- Future calls will feature
  - Utility/PBA community speakers showcasing how they are leveraging 50001 Ready to their benefit
  - Additional DOE 50001 Ready, ISO5001 and SEP resources for the utility/PBA community

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# Questions?

- Purpose of this call
- Logistics

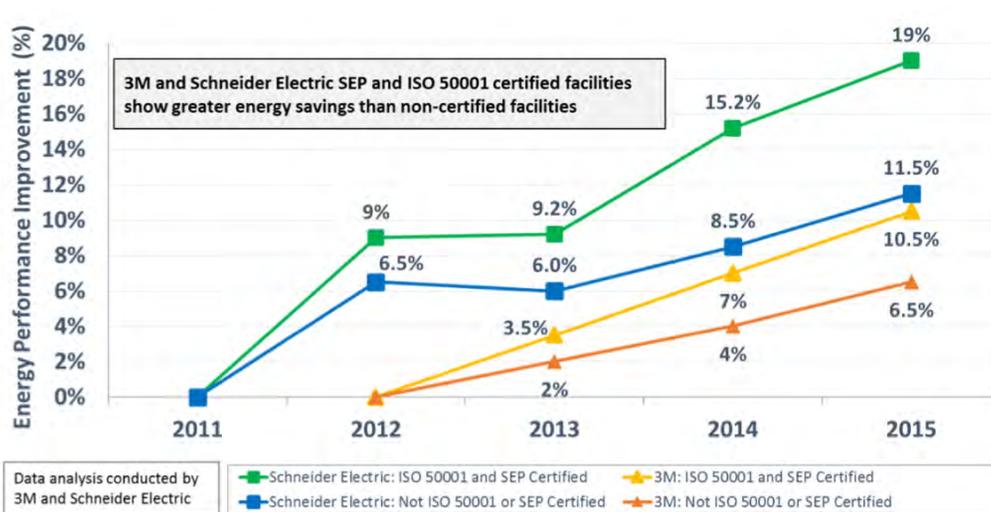
# ISO 50001 as a foundational concept, not the objective

- ISO 50001 is
  - A global framework for managing energy
  - What to do, not how to do it
  - Being taken up domestically and globally in a similar trajectory to ISO 14001 (environmental management) – it will become a common business practice
- CEE minimum elements and ISO 50001 mirror each other in many ways,
  - ISO 50001 provides additional requirements and guidance

	Desired Future State: ISO 50001
<b>Approach and Scope</b>	System-wide Equipment, systems, personnel, processes → <i>culture change</i>
<b>Project prioritization</b>	Structured prioritization of significant energy uses Established process for energy consideration in new facilities, systems, equipment and processes
<b>Management buy-in</b>	Executive decision-maker involvement Top management commitment
<b>Resilience to staff turnover</b>	Cross-organizational involvement. Integrated in core organizational and business practice.
<b>Self-sustaining</b>	Yes – Plan-Do-Check-Act management cycle Individual-independent
<b>Outcomes</b>	Establishes operational control procedures and organizational structure designed for continual improvement
<b>Current adoption levels</b>	Minimal: <0.1% of U.S. manufacturing facilities have adopted ISO 50001

# ISO 50001 – Energy Management Systems Standard

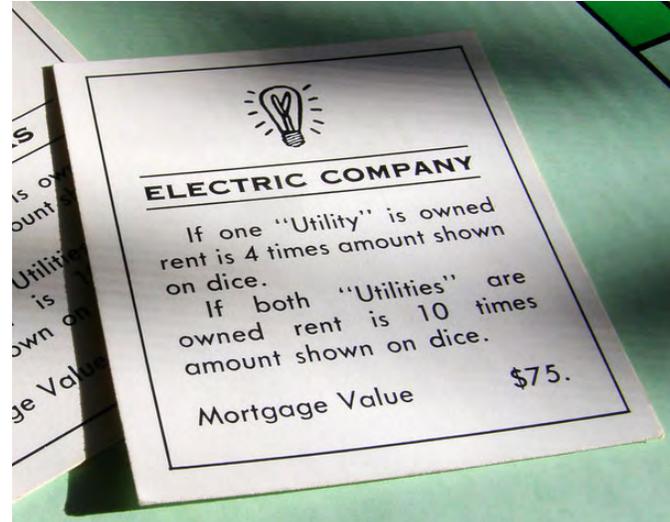
- **ISO 50001 is an EnMS (Energy Management System)**
  - Culture. ‘Change management’ process engaging facility personnel with leadership
  - Practice. Management practice to promote continuous improvement
- **Key Components**
  - Commitment. Leadership committed and empowering energy management
  - Data. Collection and analysis of energy performance in facility and large energy users
  - Value. Incorporating energy decisions into overall operations



- US manufacturing Business-as-Usual  
~1% per year
- US manufacturing Industry Leaders  
~ 2.5% per year
- **ISO 50001 SEP certified plants**  
~4% per year
- **Enterprise-Wide ISO 50001 SEP**  
~5% per year

# The utility/PBA community, DOE, and ISO 50001

1. DOE wants to increase ISO 50001 practices in the US
2. You (the utility/PBA community) have the best end-user relationships
3. DOE wants to add value to the utility/PBA community as you leverage ISO 50001 and 50001 Ready in your offerings



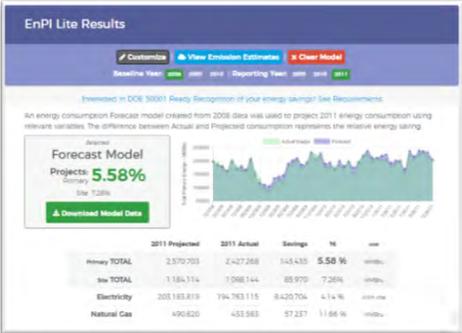
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# Questions?

- ISO 50001
- DOE's role

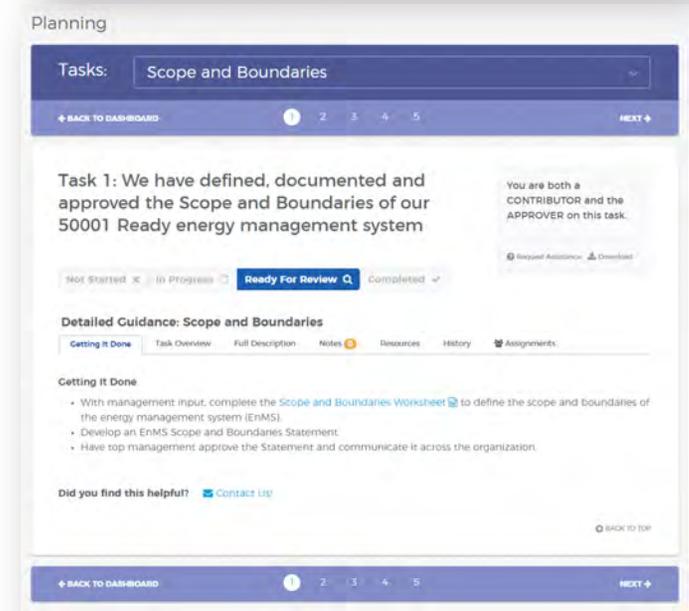
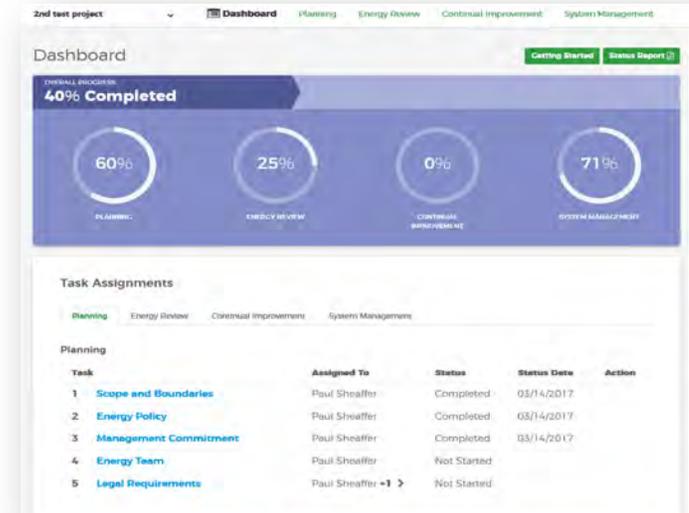
# The 50001 Ready Tools and Recognition

Developed to be actionable and flexible for you to help your customers move to 50001, without requiring certification

	<h3>50001 Ready recognition</h3> <ul style="list-style-type: none"> <li>External (DOE) recognition of accomplishment</li> <li>Recognition protocol based on two main components, below:</li> </ul>																														
	<h3>50001 Ready Navigator tool</h3> <ul style="list-style-type: none"> <li>Guidance and Templates</li> <li>Team management capabilities</li> <li>Portfolio management and administration</li> <li>Adaptable for coaching or other program structures</li> </ul>																														
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# 50001 Ready Navigator

- Simple, step-by-step guidance to ISO 50001 implementation
- Developed and maintained by DOE to provide free training and information to the market
- Guidance provided in easy-to-understand language, focusing on:
  - Actionable steps to get it done
  - Understanding the practical application of ISO 50001
  - Building off your experience with ISO 9001/14001 or Energy Star
- Track progress and facilitate team collaboration
- Resource library with 100+ templates and hands-on guides



# How can Navigator tasks supplement your offerings?

## Planning

- Scope and Boundaries
- Energy Policy
- Management Commitment
- Energy Team
- Legal Requirements

## Energy Review

- Data Collection
- Data Analysis
- Performance Indicators
- Significant Energy Uses
- Relevant Variables
- Baselines, Objectives and Targets
- Improvement Opportunities
- Improvement Projects

## Continual Improvement

- Monitoring
- Measurement
- Operational Controls
- Corrective Actions
- Energy Consideration in Design

## System Management

- Documentation and Records
- Communications
- Training
- Procurement
- Internal Audit
- Calculate Energy Savings
- Management Review

# 50001 Ready Prime Customers

- ✓ 50001 is not just Industrial!
- ✓ Prime Candidates include:
  - Government facilities
  - Water/Wastewater facilities
  - K-12 School Districts as an Enterprise
  - Universities
  - Data Centers
  - Distilleries, wineries, breweries
  - Multi-family
- ✓ How can program administrators get started?
  - Pilot 50001 Ready in own facilities
  - Partner on a REEO-led *50001 Ready* pilot to share data/successes

# Utility ‘Ownership’ of 50001 Ready

- 50001 Ready is low risk for customers: **no cost**, self-paced, non-certifying
- DOE has developed the platform, training and resources
- Utilities can leverage 50001 Ready in multiple ways, including:
  1. **EE program**. *Utility provides resources, portal, support to customers and claims the identified savings.*
  2. **Customer engagement/customer support**. *Provide support to customers as a value add of customer. Create long term energy partnership.*
- Engagement Options:
  1. **DOE Owned**. Utility recruits and directs their Members to DOE
    - ✓ DOE maintains the tools, help desk and recognition and reports savings to utilities
    - ✓ Utilities recruits members to 50001 Ready, can provide technical assistance or other resources
  2. **Utility Owned**. DOE transfers Tool and Resources to Utility
    - ✓ DOE maintains the core tool (pushes updates), cross-branded recognition
    - ✓ Utility recruits, hosts Navigator, provide tech assist, report participation to DOE

# Four examples of 50001 Ready in Use

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# Questions + What's Coming Up

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Visit the 50001 Ready website at [energy.gov/50001Ready](https://energy.gov/50001Ready)

- Download sample utility partner profiles and program implementation guides
- Find links to the Navigator and EnPI Lite

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## Stay informed

- Contact [sandy.glatt@ee.doe.gov](mailto:sandy.glatt@ee.doe.gov) to add others to this utility network distribution list
- Sign up at [energy.gov/50001Ready](https://energy.gov/50001Ready) for email updates about ISO 50001 and related DOE programs

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## Coming up in this series:

- Measuring energy performance
- Setting up a help desk
- Developing your own recognition program
- Training and curriculum

## Questions?

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# 50001 Ready Navigator demo

[navigator.industrialenergytools.com](http://navigator.industrialenergytools.com)