

Superior Energy Performance 50001™: Preview

Paul Scheihing
U.S. Department of Energy
Advanced Manufacturing Office



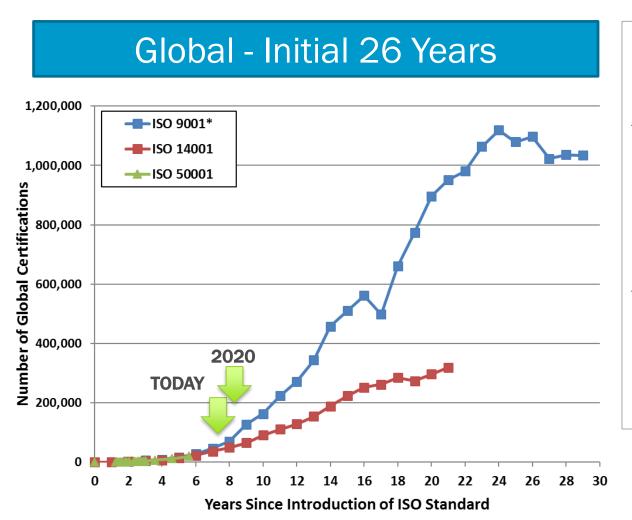
Outline

- Welcome and Introductions
- DOE ISO 50001 Offerings
- 2019 Updates: Superior Energy Performance 50001™
- DOE Recognition for SEP 50001™
- Trainings
- Proposed transition
- Questions and Answers



ISO 50001 following trend of ISO 9001 and ISO 14001

Adoption of management system standards have typically seen an inflection point ~10 years after introduction.



Number of ISO 50001 certifications

United States

77 certificates in 2017, covering an estimated 200-300 facilities

1~64% over 2016

Worldwide

22,870 certificates in 2017 † 13% over 2016

From ISO Survey 2017



Early Adoption of ISO 50001 is yielding results

Based on US DOE findings, a structured EnMS yields greater, more cost-effective, and more sustainable energy savings than a more traditional, project-based energy efficiency program.

Findings on typical US energy savings over time.

• Business-as-Usual [EIA] ~1% per year

• Industry Leaders [DOE] ~ 2.5% per year

• ISO 50001 facilities [DOE] ~4.6% per year

75% of energy savings from no/low cost operational improvements

Companies with North American facilities adopting ISO 50001

- 3M
- Aflac
- BAE Systems
- BMW
- Bosch Rexroth
- Bridgestone
- Cargill
- Fiat Chrysler Auto
- Cummins
- Detroit Diesel
- Google
- Hilton Worldwide
- IBM

- Intertape Polymer Group
- Johnson Controls
- Mack Trucks
- Marriott International, Inc.
- MedImmune
- Nissan North America
- Samsung
- Schneider Electric
- Titan America
- Volkswagen
- Volvo Trucks



ISO 50001:2018 Revision

Updates clarify expectations for organizations committed to ISO 50001!

- Top management: expanded role and description of responsibilities
- Continual energy performance improvement: strengthened demonstration and emphasis on measurable benefits.
- Types of energy within the defined scope and boundaries cannot be excluded.
- Topics with new clarifying details:
 - Energy review
 - Energy performance indicators and associated energy baselines
 - Energy data collection plan, previously energy management plan
 - Normalization for variables that affect performance.
- Reorganized content and user friendliness
 - Adopts ISO's new "high-level structure" that aligns all management system standards for consistency and greater cross-discipline integration



Guidance on Updating to ISO 50001:2018

Coming soon: New resource guide to assist organizations transition from the 2011 to 2018 version of ISO 50001.

- Contents:
 - Section-by-section breakdown between the 2011 and 2018 versions
 - Practical guidance on what users need to do to "upgrade" their existing management system
- Jointly developed by DOE and the U.S. Technical Advisory Group to ISO TC 301 (ISO 50001 ISO committee) that represented U.S. interests in the international development of ISO 50001.
- Target release date: March 1
- Complementary and consistent with 50001 Ready Navigator guidance but stand alone document



DOE's Spectrum Approach to ISO 50001 Adoption

DOE has developed an energy management continuum that begins with market-driven business culture and culminates in verified savings.

50001 Ready:

Recognition for ISO 50001 conformance using guidance in DOE's 50001 Ready Navigator tool



Superior Energy Performance 50001™ (SEP 50001™):

Recognition for ISO 50001 certification and 3rd party verification of energy performance improvements



16 facilities with 50001 Ready recognition

200-300 (est.) facilities ISO 50001-certified



57 facilities SEP-certified



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



Company Name

Is recognized for instituting global best practices in continuous energy improvement

Recognized by the U.S. Department of Energy

Dr. Kathleen HoganDeputy Assistant Secretary for Energy Efficiency

ENERGY

DOE and others recognize 50001 Ready achievement



50001 Ready Navigator



- 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 ISO 50001

Detailed Guidance: Scope and Boundaries

Full Description

Notes 10

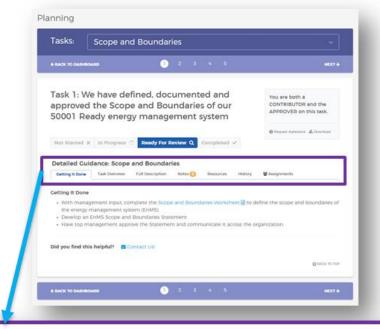
Task Overview

- Full Guidance comprehensive guidance about the task
- Transition Tips from other ISO management systems or ENERGY STAR
- Form teams and assign tasks
- Download guidance
- Create multiple projects
- Access over 100 related resources
- Available in English, Spanish, and French

navigator.lbl.gov

Cetting It Done

1,350+ users and growing!



History

Resources



Assignments

50001 Ready Navigator, continued



New features!

navigator.lbl.gov

- Multi-Site Platform
 - Currently beta-testing with end users and utilities
 - Central function 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
- Companion Playbook with task worksheets: available March 1!
 - 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



Verified Results in using ISO 50001

Through Superior Energy Performance...

- Achieving up to \$1 million in annual savings
- Significant savings from operational improvements with no capital investment
- Reducing carbon emissions, with third-party verified energy performance improvement
- Savings found to be almost double compared to other corporate leaders



























Verification of ISO 50001 through Superior Energy Performance 50001™ Certification

- A voluntary continual energy performance improvement certification program recognizing excellence in organizational energy management practices.
- SEP 50001[™] certification based upon third-party verification of:
 - Energy management system (ISO 50001) and
 - Energy performance improvement (MSE 50028-1)
- ANAB-accredited program





Energy Management System





Program Status

Version History:

- Launched SEP 2012 and SEP 2017 revision
- SEP 50001 (2019) launching upon approval of program standards

57 Active Certifications

Company (2 or More Certifications)	Certificates #	SEP Enterprise	Countries
Schneider Electric	20	yes	USA, Canada, Mexico
3M Company & 3M Canada	13	yes	USA, Canada
Cummins	8	yes	USA, Mexico
Nissan	2	yes	USA
Hilton	3		USA
Volvo Trucks	3		USA

Certified Facilities	
Bosch Rexroth Corporation	
Bridgestone	
Des Moines Water Works	5
Detroit Diesel Corporatio	n
HARBEC, Inc.	
Ingersoll Rand	
JW Marriott Hotel	
MedImmune, LLC	



Questions?



Superior Energy Performance 50001™: Program Updates & Enhancements



High Level Strategic Objectives for Program Updates

SEP 50001 verifies the value of ISO 50001 and is designed to encourage adoption across all types of manufacturing and commercial sectors to stimulate significant energy savings nationwide

- Achieve greater sector parity of SEP achievement.
- Encourage energy management best practice (beyond ISO 50001) and advanced technologies through the Scorecard.
- Continue to streamline and reduce the cost of the SEP process.
- Enhance recognition of high level achievements and success.



Diversifying Sector Participation

- Feedback from energy-intensive end users:
 - High SEnPI percentages required at the Platinum level are not easily achievable in some energy-intensive sectors without significant capital investment.
 - Some facilities do not begin the SEP process if Platinum is out of reach.
 - SEP Bronze/Silver certified facilities face challenges in selling their achievements to upper management, e.g., "Why didn't you achieve Platinum?"
 - Perceived risk of ability to achieve re-certification.
- SEP 50001 enhancements strive to address these concerns while preserving core value: the verification of energy performance.
- SEP 50001 should be a tool that helps energy managers promote their achievements to upper management.



Key Enhancements and Changes

- 1. Name change
- 2. Simplified certification requirements; shifted Silver/Gold/Platinum to separate DOE recognition.
- 3. Enabled multiple-site certification
- ISO 50001-certified facilities can more easily work with an SEP 50001
 Verification Body
- 5. Elevated DOE recognition of SEP 50001-certified facilities; Scorecard enhancements



Topic 1: Name Change

Introducing Superior Energy Performance 50001™ (SEP 50001™)!

- Name aligns with ISO 50001 and 50001 Ready
- Applies to both certification and recognition
- Version: SEP 50001 (2019)

Updated program terminology



energy.gov/SEP50001

Standards Renumbered

- MSE 50021 → MSE 500<u>28-1</u>
 Avoid confusion with ISO/FDIS 50021
- MSE 50028 → MSE 50028-2

Normative References

- SEP 50001 Program Certification Protocol: 2019
- SEP 50001 Program Measurement and Verification Protocol: 2019

Verification Body & Personnel Titles:

- SEP 50001 Verification Body
- Lead Auditor for SEP 50001*
- SEP Performance Verifier
- 50001 Certified Practitioner in Energy Management Systems

* Qualifications also updated



Topic 2: Simplified Certification; Added DOE Recognition

ANAB-Accredited ISO 50001 and SEP 50001 Program Certification

Achievement period: 1, 2, or 3 years

Organization meets requirements

- ISO 50001 EnMS
- SEP 50001 Verification
 - MSE 50028-1
 - Energy PerformanceImprovement:SEnPI > 0.0%

Aligns with ISO 50001 energy performance improvement requirement

SEP 50001 Verification Body

- Conducts audit
- Issues SEP 50001 program certificate
- Submits Energy Performance Improvement Report to SEP 50001 Program Administrator*

SEP 50001-certified

DOE recognition for <u>Silver</u>, <u>Gold</u>, <u>Platinum</u> offered to certified facilities separately.

ANAB-Accredited certification by SEP 50001 Verification Body required for DOE recognition



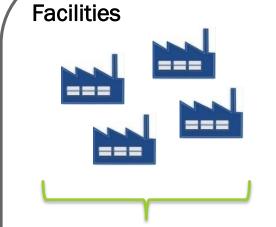
^{*} In multiple site certification, organization completes the reports for non-sampled sites, not Verification Body

Topic 3: Certification Across Multiple Sites

SEP 50001 program certification of multiple facilities under one central function with EnMS and performance sampling

Single SEP 50001 program certification for non-contiguous, multiple sites within close geographic proximity

Central function ISO 50001 certification audit at enterprise-wide level and facilities ISO 50001 EnMS and MSE 50028-1 conformance and energy performance improvement sampled at facility level Reduces overall auditing costs



Multiple sites that are non-contiguous, but within close geographic proximity can be aggregated together as part of one facility and under a common ISO 50001 EnMS and SEP 50001 scope.

Certification of Multiple Sites Under Central Function

SEP 50001 program certification of multiple facilities under one central function with EnMS and performance sampling

Central function



ISO 50001 certification audit at enterprise-wide level

Conducted by Lead Auditor for SEP 50001

and facilities





ISO 50001 EnMS and MSE 50028-1 conformance and energy performance improvement sampled at facility level

Energy Performance Improvement Report

Sampled sites:

Verification Body completes and submits report to Administrator

Non-Sampled sites:

The <u>organization's</u> certified SEP Performance Verifier completes report for each site not sampled.

The <u>Verification Body's</u> Performance Verifier checks reports for p-values, F-test, R², RF; confirms that a certified SEP Performance Verifier completed report for each site.





Aligning Certified Facilities within a Multi-Site SEP 50001 Enterprise

Companies with multiple, individual SEP 50001-certified facilities are interested in combining them onto one multi-site certificate.

Details that make this possible are under review, but could include the following:

- Modify any facility's achievement period to 12, 24, or 36 months, as long as final month of data is not more than 11 months from the aligned certification month.
- Any facility can re-baseline to develop a valid model under the M&V Protocol,
 with requirement to seek approval from SEP 50001 Program Administrator.

Separate webinar for existing SEP companies will be held in the near future to review approach for combining facilities under multi-site certificate.



Topic 4: Certification Bodies, Verification Bodies

Facilities certified to ISO 50001 by a non-SEP 50001 Verification Body may now work with an SEP 50001 Verification Body more easily.

- Scenario 1: Certification Body for ISO 50001 applies to become a SEP 50001 Verification Body.
- Scenario 2: Certification Body transfers ISO 50001 certificate to SEP Verification Body.
- <u>NEW</u>: Scenario 3*: Certification Body issues ISO 50001 certificate. SEP 50001 Verification Body issues SEP 50001 (2019) Program certificate.
 - Facilities with a valid ISO 50001 certificate may add SEP 50001 via scope extension, typically during recertification audit.
 - End users can maintain different certification dates for ISO 50001 and SEP 50001.
 - SEP 50001 Verification Bodies have access to wider customer pool of ISO 50001-certified facilities; end users no longer restricted to Scenarios 1&2.

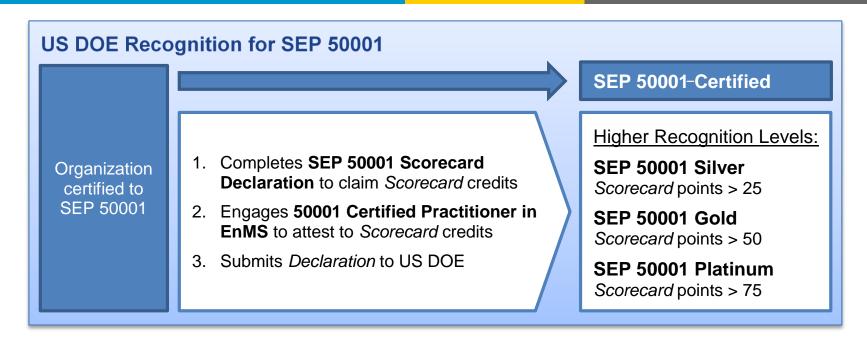


^{*} Only if SEP 50001 Verification Body allows for this option

DOE Recognition for SEP 50001: Qualifying for Silver, Gold, and Platinum levels using the Scorecard



Topic 5: DOE Recognition for SEP 50001



- DOE recognizes all SEP 50001-certified facilities.
- Silver, Gold, or Platinum designation are higher levels of recognition earned by SEP 50001certified entities that exceed certification requirements using the SEP 50001 Scorecard.
 - SEnPI verified under SEP 2012 or SEP 2017 cannot be used for higher levels of SEP 50001 recognition.
- SEP 50001 Scorecard
 - Describes how organizations achieve DOE recognition for Silver, Gold, or Platinum levels for SEP 50001.
 - No longer a normative reference for the ANSI/MSE Standards
 - SEP 50001 program verification audit no longer covers the Scorecard



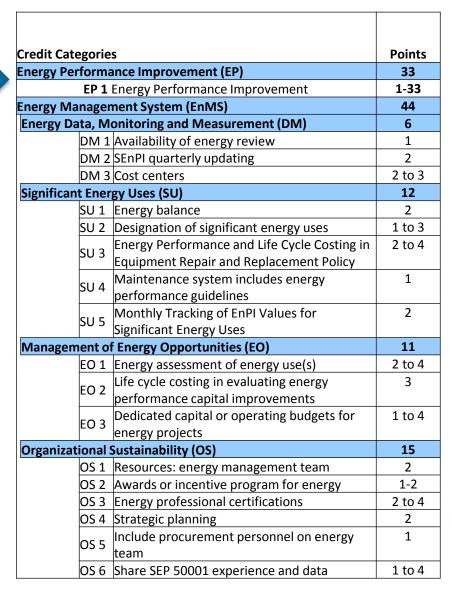
Notable Scorecard Enhancements

The SEP 50001 Scorecard encourages energy management best practices and advanced technologies. Key changes:

- No longer included in ANAB-accredited certification, not required to be audited by SEP 50001 Verification Bodies, and no longer a normative reference for ANSI/MSE standards.
- Designed to fairly recognize diverse best practices of varied sectors, size of facilities, and length of time participating in SEP 50001.
- New Features
 - Flexibility: Recognition levels achieved through energy performance and other credit categories.
 - Energy performance improvement bonus factors:
 - Past high level of improvement prior to first SEP 50001 program certification
 - Facility within energy-intensive sector
 - ENERGY STAR-certified facility, or corporation within DOE Better Plants
 - SEP 50001 program recertification



Scorecard Credits: 128 Total Points



New:

- Points for Energy Performance Improvement
- Advanced Energy Technologies
- Advanced Energy Supply

C	- (ti	Points
Credit Categories (continued)		
Certification, Partnership, and Reporting (CR)		23
CR 1	External Certification and Recognition	2
	Programs	
CR 2	Corporate Reporting Systems	1 to 2
CR 3	Promotion of ISO 50001	2 to 4
CR 4	Third Party Energy Efficiency Program	2
	Participation	
CR 5	Superior Performance with	1
	Benchmarks	
CR 6	Share SEP 50001 experience and data	1 to 4
Advanced Energy Technologies (AT)		
AT 1	Submeters and Smart Sensors and	1 to 4
	Controls	
AT 2	Other advanced technologies	1 to 4
Advanced Energy Supply (AS)		
AS 1	Combined heat and power	1 to 10
AS 2	Use of onsite renewable energy and	1 to 10
	recovered energy	





How to Earn Energy Performance (EP) Points

EP1 Credit Points = AEPI x EI x (4 + A + B + C)

Maximum of 33

$$\frac{\text{AEPI}}{\text{achievement period(s) (months)}} \times 12$$

Factor EI: For facilities within energy-intensive sectors:

Wet corn milling, sugar, wood products, paper, petroleum, chemicals, non-metallic minerals, and primary metals

<u>Factor A</u>: For current, relevant ENERGY STAR certifications or contribution to organization's US DOE Better Plants.

<u>Factor B</u>: Related to facility's prior 10-year energy performance improvement—for first-time, initial certification.

Factor C: For prior SEP 50001 program certifications

Scorecard defines each factor and specifies points allowed in more detail.



Example of EP1 Credit Calculation

A steel mill achieves first SEP 50001 program certification in Dec. 2019

- SEnPI is 1.5% over 3-year period
- Currently ENERGY STAR certified within top quartile of benchmarked sector
- Prior energy efficiency improvement = 12% in the 10 years immediately preceding SEP 50001 baseline period

- AEPI = 0.5 for annualized SEnPI
- EI=3 as the defined credit multiplier for energy-intensive sectors
- A=3 for its current ENERGY STAR certification
- B=5. defined credit multiplier for prior 10year energy efficiency improvements exceeding 10%

Renewable Energy

 C=0 for first SEP 50001 program certification

EP1 Credit Points = AEPI x EI x (4 + A + B + C)

Maximum of 33

Steel Mill's EP1 Credit Points =
$$0.5 \times 3 \times (4 + 3 + 5 + 0) = 18$$

DOE Recognition: Declaration Process

- SEP 50001-certified <u>facility</u>* completes a SEP 50001 Scorecard Declaration to claim credit points and provide justification.
 - Organization has 50001 CP EnMS (internal or external) attest to total Scorecard points achieved for accuracy.
 - 50001 CP EnMS and organization's top management sign the Declaration.
- Organization submits Declaration to DOE any time during their SEP 50001 certification cycle.
 - DOE spot-checks applications and may arrange phone call with organization to review evidence supporting credits claimed.
- Upon approval, DOE recognizes organization.
 - Recognition lasts until 6 months after the SEP 50001 certificate expiration date.
 - All certified organizations recognized on DOE website and other SEP 50001 promotions.
 - Additional DOE recognition certificates only for higher recognition levels: SEP 50001 Silver,
 Gold, or Platinum.



^{*} Can be within a multi-site SEP 50001 enterprise

Upgrading DOE Recognition

- Organizations may choose to increase the number of Scorecard points earned to upgrade their DOE recognition level.
 - Points may be added; existing points remain valid and are not re-checked.
 - Upgrades allowed only at 12 and/or 24 months after SEP 50001 program certification
- Scenarios allowing changes to Scorecard points:
 - New SEnPI obtained:
 - Early recertification to SEP 50001, or
 - Verification by a certified SEP Performance Verifier
 - Upgrades to other Scorecard credits.
- Upgrading recognition levels allows organization to:
 - Provide ability to verify year-on-year energy performance improvement for third-party annual incentives (e.g., utilities).
 - Update SEnPI energy performance improvement to better position themselves for national annual award programs.





Trainings



New Trainings Coming Soon!

ISO 50001:2018 Update Training

Learn about the recent changes to ISO 50001.

SEP 50001 Specialist Training for 2019

Gain an understanding of 2019 version of the SEP 50001

- Trainings recommended for all end users participating in ISO 50001 or SEP 50001
- Trainings required for certified professionals to maintain credential:
 - 50001 CP EnMS*
 - Lead Auditor for SEP 50001
 - SEP Performance Verifier (external)
 - An organization's SEP Performance Verifier (internal) for multi-site certification
- More details on following slides.

^{*}Note on 50001 CP EnMS: The SEP 50001 training is recommended, but not required. However, 50001 CP EnMS that sign an organization's Scorecard Declaration must also take the SEP 50001 Specialist Training for 2019 training.



ISO 50001:2018 Revision - Training

New Training: Learn about recent changes to the standard

ISO 50001:2018 Update Training

- 1-2 hour online training with knowledge checks
- \$99
- Register: https://pe.gatech.edu/courses/update-iso-500012018
- Required to support organizations using ISO 50001:2018
 - Once IEnMP updates its exams to address changes in ISO 50001:2018, new entrants will not need this training
- Training is offered online for access anywhere, anytime.
 - Knowledge checks must be completed with at least an 80% passing score. Student has three attempts to pass.
 - Upon successful completion, student receives Certificate of Completion and forwards it to IEnMP, which will then indicate on its website that credential holder is updated to ISO 50001:2018.
- Available now!



50001 CP EnMS

CP EnMS renamed, now called "50001 CP EnMS"

Requirements:

50001 CP EnMS Certification

Help organizations implement an EnMS ienmp.org/certifications/cp-enms/

ISO 50001:2018 Update Training

Learn about the recent changes to ISO 50001.

(Once 50001 CP EnMS exam is updated, new entrants will not need this training.)

- The training is required to support organizations* using ISO 50001:2018
- Training is offered online for access anywhere, anytime.
 - Knowledge checks must be completed with at least an 80% passing score, with three attempts to pass.
 - Upon successful completion, student receives Certificate of Completion and forwards it to IEnMP,
 which will then indicate on its website that credential holder has updated to ISO 50001:2018.
- Take the training early, be prepared for ISO 50001:2018!

^{* 50001} CP EnMS that sign an organization's Scorecard Declaration must also take the SEP 50001 Specialist Training for 2019 training.



SEP Performance Verifiers

Credential name remains the same

Forthcoming training: Learn about the 2019 program version of SEP 50001

SEP Performance Verifier Certification

Prerequisite: 50001 CP EnMS Certification

Verify energy performance ienmp.org/certifications/sep-performanceverifier/ Help organizations implement an EnMS ienmp.org/certifications/cp-enms/

SEP 50001 Specialist Training for 2019

Gain an understanding of 2019 version of the SEP 50001

Available March 1, 2019

ISO 50001:2018 Update Training

Learn about the recent changes to ISO 50001.

(This is required as part of the 50001 CP EnMS pre-requisite)

- Trainings are required to conduct audits for SEP 50001 (2019). Training is offered online for access anywhere, anytime.
 - Knowledge checks must be completed with at least an 80% passing score, with three attempts to pass.
 - Upon successful completion, student receives Certificate of Completion and forwards it to IEnMP,
 which will then indicate on its website that credential holder has updated to SEP 50001 (2019) and
 ISO 50001:2018



Lead Auditor for SEP 50001

- The SEP Lead Auditor credential will be sunsetted on date that audits no longer allowed for SEP 2012 and SEP 2017; to be replaced by the Lead Auditor for SEP 50001.
- For this Lead Auditor for SEP 50001, an auditor's certification body verifies the auditor has completed the following:

EPI ISO 50001 Lead Auditor Certification

Dual focus on EnMS development and data-driven improvements in energy performance

https://ienmp.org/certifications/epi-iso-50001-lead-auditor/

SEP 50001 Specialist Training for 2019

Gain an understanding of 2019 version of the SEP 50001

Available March 1, 2019

ISO 50001:2018 Update Training

Learn about the recent changes to ISO 50001.

(Once EPI ISO 50001 Lead Auditor exam is updated, new entrants will not need this training.)

- Trainings are required to conduct audits for SEP 50001 (2019). Training offered online for access anywhere, anytime. 80% passing score required, with three attempts to pass. Upon successful completion, student receives Certificate of Completion and forwards it to IEnMP, which in turn will indicate on its website that credential holder has updated to SEP 50001 (2019) and ISO 50001:2018.
- Take the training early, be prepared for SEP 50001 (2019)!



Proposed Transition

Proposed timeframe aligns with ISO 50001:2018 transition

- Verification Bodies transition by August 2019
- Only SEP 50001 (2019) audits offered after Feb. 2020
- SEP 2012 and SEP 2017 certificate withdrawn after Aug. 2021

Steps to transition

- Obtain MSE 50028-1 and MSE 50028-2 standards (pending ANSI approval)
 and normative references
- Auditors take ISO 50001:2018 update and SEP 50001 Program Specialist for 2019 training available March 1 (also recommended for end users)



Conclusions from the Certification Program Updates

- SEP 50001 simplifies SEP Performance Verifiers' responsibilities
 - Removed the Scorecard and performance levels from SEP 50001 (2019) program audit.
 - Simpler requirements → potentially lower audit costs → greater appeal to customers.
- SEP 50001 offers greater flexibility and participation, e.g.:
 - Multiple site certification options
 - Easier for facilities to work with SEP 50001 Verification Body if their ISO 50001 certification is from a non-SEP 50001 Verification Body
 - Easier for facilities to maintain their certification SEnPI > 0.0
- Online training modules for ISO 50001:2018 and SEP 50001 offer easier and less costly transition for certified personnel.



Conclusions from Higher DOE Recognition Levels

- Separating DOE recognition from certification enables program to adapt to the market's needs without disrupting the ANAB-accredited process.
- SEP 50001 Scorecard addresses stakeholder feedback:
 - Energy Performance points reward higher SEnPIs, participation in relevant federal programs on energy management, number of certification cycles.
 - EP1 credit calculation removes barrier to entry for energy-intensive sectors
 - New credit categories for advanced sensors and submetering and other advanced technologies
 - New credit categories for corporate reporting, assisting suppliers in ISO 50001, partnerships with utilities, etc.
 - Enhanced credits for CHP, renewables
- Verification Body business opportunities within DOE recognition:
 - SEP 50001-certified facilities can upgrade recognition levels by recertifying early, or engaging the SEP Performance Verifier to obtain new SEnPI.



Key Links

SEP 50001 Program home

https://betterbuildingssolutioncenter.energy.gov/iso-50001/sep-50001

Access Key Programs Documents

https://betterbuildingssolutioncenter.energy.gov/iso-50001/sep-50001/certify-and-get-recognized#program



More Information





Online resources:

energy.gov/50001Ready

energy.gov/SEP50001

energy.gov/ISO50001

- Download infosheets and FAQs
- Find links to the Navigator, EnPI Tool, and EnPI Lite
- Read case studies about certified facilities
- Find M&V guides
- Find reports and studies on energy impact of certification

Contacts:

Paul Scheihing

Technology Manager, Technical Assistance Advanced Manufacturing Office US Department of Energy paul.scheihing@ee.doe.gov 202-586-7234

