

Superior Energy Performance^{cm} Certification Protocol

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1.0 INTRODUCTION

Superior Energy Performance^{cm} (SEP) is a certification program that provides facilities with a roadmap for achieving continual improvement in energy performance while maintaining competitiveness. The program provides a transparent system for verifying energy performance improvement and energy management practices through application of an internationally-accepted standard. Third-party conformity assessment to Superior Energy Performance^{cm} (SEP) is accredited by the American National Standards Institute (ANSI) and the ANSI-ASQ National Accreditation Board (ANAB).

A central element of SEP is implementation of ISO 50001: *Energy management systems-Requirements with guidance for use* (referred to as ISO 50001 in the remainder of this document). Additional SEP requirements to achieve documented and verified energy performance improvements are defined in ANSI/MSE 50021. Facilities pursuing certification must demonstrate a specified improvement in energy performance. This program will provide companies with a framework for fostering energy efficiency at the facility level and a methodology for measuring and verifying energy performance improvements.

SEP is designed to encourage participation among facilities of all sizes and levels of experience in managing energy. The program offers flexibility by offering two tiers—self-declared and ANSI-ANAB certified—depending on the degree of verification desired by a facility. In addition, the program emphasizes program transparency through measurement and verification of energy performance improvement and associated energy savings.

ANSI-ANAB accredited SEP Verification Bodies will perform verification for the SEP program, and are accredited to national and international standards. [ANSI] MSE 50028 defines the requirements for SEP Verification Bodies. This standard incorporates all of the requirements of ISO 17021 – Conformity assessment for bodies providing audit and certification of management systems—and further defines SEP requirements beyond ISO 17021 to ensure that SEP Verification Bodies operate energy management system certification and energy performance verification in a competent, consistent, and impartial manner.

The U.S. Department of Energy (U.S. DOE) has partnered with the industrial and commercial buildings sectors to develop the SEP program. The partnership is a cooperative effort that brings together the respective strengths of industry, standards authorities, federal agencies, national laboratories, universities, and technical experts. The U.S. DOE owns the SEP certification mark and will license the use of the mark accordingly to facilitate delivery of the program through private sector organizations.

2.0 SCOPE

The SEP certification program applies to a facility that meets the requirements of the ISO 50001 international energy management standard and achieves a specified energy performance improvement. SEP Partners self-declare that they have met program requirements. SEP Certified Partners are subject to third-party verification.

This SEP Certification Protocol outlines the program's purpose and defines the steps required for participation from initial application through SEP certification by an ANSI-ANAB accredited Verification Body.

2.1 Requirements

- Conform to the international energy management system standard, ISO 50001.
- Satisfy the additional requirements defined in ANSI/MSE 50021 and the associated normative references

Requirements will vary based on the applicant's desired level of verification, facility energy performance level, and maturity of energy program.

3.0 NORMATIVE REFERENCES

The following normative references are required for the application of the SEP certification program by the participating organization.

3.1 ISO 50001

SEP requires that participants conform to the ISO 50001 energy management system standard. Conformance with ISO 50001 demonstrates that an organization has sustainable energy management systems in place, has completed the energy planning process, and has a commitment to continual improvement of their energy performance. The standard addresses measurement of current energy consumption, and implementation of a measurement system to record, report, and demonstrate continual improvement in the areas of energy management and energy performance.

3.2 ANSI/MSE 50021

ANSI/MSE 50021 defines the additional requirements of the SEP program beyond ISO 50001. This American National Standard provides additional requirements for the energy management system (EnMS). Its normative references define requirements for the verification of improvements in energy performance.

3.3 SEP Sector-Specific Measurement and Verification Protocols

Each active SEP-defined sector will have a sector-specific energy performance Measurement and Verification Protocol defined and documented. Appendix A lists the current sectors. Currently the SEP Measurement and Verification Protocol for Industry has been developed and applies to two sectors: Industry-Light and Medium and Industry-Heavy. An SEP Measurement and Verification Protocol for commercial buildings is under development. Sector-specific SEP Measurement and Verification Protocols for additional sector types will follow.

3.3.1 Measurement and Verification Protocol for Industry

The SEP Measurement and Verification Protocol for Industry defines a methodology for the following:

- 1) Verify the results and impact of a facility's implementation of ISO 50001.
- 2) Track energy performance changes over time for an industrial facility.
- 3) Document energy performance normalized to production and other relevant variables.

The SEP Measurement and Verification Protocol for Industry has been designed to document energy performance indicators where the value is adjusted so that the consumption amounts correspond to consistent conditions and resulting energy performance improvement can be verified. This Protocol is intended to emphasize reliability in the consistency of reporting, sustainability of results, and credibility of assertions.

3.3.2 Industrial Facility Best Practice Scorecard

SEP for Industry currently provides two pathways for demonstrating performance levels: the Energy Performance Pathway and the Mature Energy Pathway. Most industrial facilities will qualify for the Energy Performance Pathway. However, continued achievement of aggressive energy performance improvements will prove to be more challenging for industrial facilities that have a long track record of sustained energy performance improvement. The Mature Energy Pathway is designed for Certified Partner applicants with mature energy management systems and requires the use of the SEP Industrial Facility Best Practice Scorecard in addition to the SEP Measurement and Verification Protocol for Industry.

The SEP Industrial Facility Best Practice Scorecard assesses the maturity of the facility's energy management system by providing credits for energy management system activities, processes, or procedures that are "above and beyond" what is required by ISO 50001. These best practices define superior energy management that is exhibited by "best in class" companies. The Scorecard also gives credit to companies that have implemented and continue to operate innovative technologies that lead to a reduction in dependence on carbon-based energy sources. Industrial facilities that implement enough credits will accumulate points that qualify them to certify at the silver, gold, and platinum levels.

3.4 SEP Application

Organizations wishing to participate in the SEP program must apply to the SEP Administrator. An application for industry is attached to this document and provides the basic information regarding the organization and intentions regarding pathways and certification levels. Note: the intent is that the application will be available online from the SEP Administrator at a later date.

4.0 FACILITY CERTIFICATION

4.1 Application

Requirements will vary based on the applicant's desired level of verification, facility energy performance level, and maturity of energy program.

Partner Application (Self-Declaration)

A facility seeking to self-declare its performance contacts the SEP Administrator to become a SEP Partner. The facility's staff will submit the application along with the report resulting from successful completion of an internal audit and documentation that the energy performance requirement has been met. The successful completion of the internal audit, including closure of corrective actions, will be needed to provide confirmation that the facility conforms to the ISO 50001 and ANSI/MSE 50021 standards, and has achieved an energy performance

improvement appropriate to its sector. The facility must submit the results of the internal audit to the SEP Administrator and attest that the following activities have been accomplished:

- Facility conforms to ISO 50001 and ANSI/MSE 50021.
- Energy performance improvement has been internally verified using the appropriate sector-specific SEP Measurement and Verification Protocol.
- Corrective actions have been completed and verified for effectiveness.

Upon review and confirmation, the SEP Administrator will issue a document recognizing status as an SEP Partner. Silver, Gold, and Platinum achievement performance levels are not available for the self-declared partner.

Certified Partner Application: ANSI-ANAB Accredited Certification

A facility contacts the SEP Administrator and submits an application to be a SEP Certified Partner. The application includes an energy performance level and a certification pathway appropriate to the sector.

The facility must choose a Verification Body that is ANSI-ANAB accredited to conduct the SEP conformity audit. Additional information on ANSI-ANAB accredited SEP Verification Bodies can be found at <https://www.ansica.org/wwwversion2/outside/SEPgeneral.asp?menuID=218>.

For initial certification, the selected SEP Verification Body will conduct an SEP conformity audit, which includes a Stage 1 audit to confirm whether the facility is prepared for the Stage 2 audit. The Verification Body will then send a SEP Lead Auditor and SEP Performance Verifier(s) to the facility to assess the following:

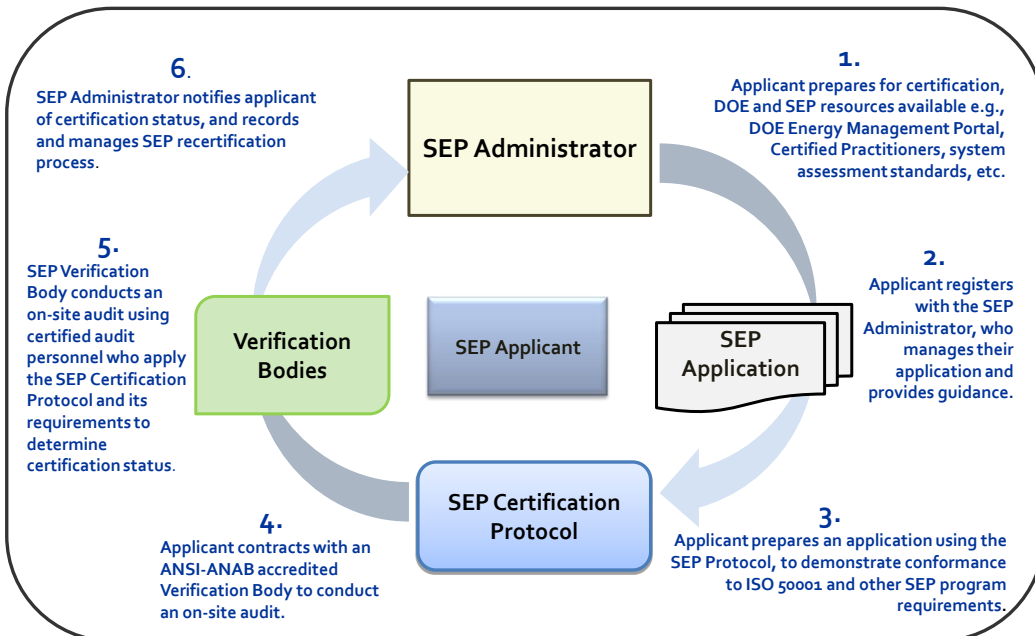
- Conformance to ISO 50001 and ANSI/MSE 50021
- Energy performance improvement verified using the appropriate sector-specific SEP Measurement and Verification Protocol

Appendix B includes information about professionals certified to provide energy management assistance and those certified to conduct a SEP conformity audit related to SEP to industrial and commercial facilities. Additional details for industrial applicants are contained in Appendix C.

Following the SEP conformity audit, the SEP Verification Body will inform the SEP Administrator whether the facility has met the requirements for certification to ISO 50001 and ANSI/MSE 50021 including the specified energy performance improvement and whether a certificate will be issued to the SEP Certified Partner applicant.

The SEP Administrator will then publish the results of the certification decision.

ANSI-ANAB SEP Certification Process (for Certified Partner)



The SEP designation is awarded for a period of three years. After three years, participating facilities choosing to recertify will submit an application and updated performance and management system information documenting that they continue to meet the SEP criteria. Certified Partners may change pathways and performance levels each time they certify.

4.2 Certification

Participating facilities are required to verify conformance to ISO 50001 and to verify an energy performance improvement using the appropriate sector-specific SEP Measurement and Verification Protocol. Two methods for verifying results are offered:

- **Self-Declaration (Partner):** Facilities applying to become SEP Partners will self-declare their conformance to the program requirements. Self-declaration may include audits conducted by team members within the facility or by off-site representatives. (See Section 4.1 Application, under Partner)
- **ANSI-ANAB accredited certification with SEP conformity audit conducted by Verification Body with SEP Lead Auditor and Performance Verifier (Certified Partner):** Facilities applying to become Certified Partners will submit required material to an ANSI-ANAB accredited SEP Verification Body of their choice. The Verification Body will conduct the SEP conformity audit and will provide certification of the results. (See Section 4.1 Application, under Certified Partner)

- If the organization chooses to use a model or data gathering/assessment approaches not specified in the applicable Measurement and Verification Protocol (such as model choice, data interval, derived energy sources calculation, or adjustment methods), the proposal and rationale must be approved in advance of the Stage 1 audit. The organization is responsible for the cost of review and approval. The SEP Administrator will ensure that both the organization and the SEP Performance Verifier have the verification criteria and that the criteria are agreed upon during the Stage 1 audit.

4.3 Surveillance

For the SEP Certified Partner, an annual surveillance will be conducted to confirm that the energy management system is being maintained and continual improvement of energy performance is being supported. The surveillance will focus on two aspects:

- 1) Evidence that the EnMS has been effectively maintained through the review of key management system processes, as well as evidence to support this review.
- 2) Review of energy performance indicators and supporting evidence to assure that energy performance improvements have been supported.

Annual internal audits for Partners are recommended but no records of these audits are required to be submitted to the SEP Administrator.

4.4 Recertification

Triennial recertification for both Partners and Certified Partners will be required to maintain SEP status. For Partners, the self-declaration process is similar to the initial application process. For Certified Partners, the SEP conformity audit for recertification is similar to the Stage 2 audit. If significant changes in the system have occurred, a Stage 1 audit may be required. If a Stage 1 audit is required, the SEP Verification Body will notify the Certified Partner.

4.5 Suspension or Revocation of SEP Certification

The SEP Administrator will suspend SEP certificates when the facility encounters substantial issues in the submitted triennial recertification audit materials in either the requirements for ISO 50001 or ANSI/MSE 50021. The substantial issues include anything indicating a breakdown in the system with no credible commitment to take appropriate corrective action. The suspended certificate can be re-established after acceptable corrective action information is submitted and reviewed by the SEP Administrator.

The SEP Administrator will revoke certificates when the facility fails to respond with corrective action for a suspended certificate, or if the facility fails to submit the triennial recertification materials or respond to the SEP Administrator after multiple attempts of communication.

ANSI-ANAB accredited SEP Verification Bodies have documented procedures for suspension and revocation of SEP certifications. Certificates are suspended when the facility has encountered substantial issues where structural

breakdowns in ISO 50001 or SEP requirements have occurred or where the organization has failed to implement elements of its EnMS, and there is no credible commitment to take appropriate corrective action. The suspended certificate can then be re-established following acceptable corrective action that has been verified.

The SEP Verification Body will revoke certificates when the facility encounters substantial issues in which structural ISO 50001 or SEP requirements have not been met, and it is apparent that conformance cannot be reestablished in a reasonable time frame.

Information on certificates that have been suspended or revoked by the SEP Verification Body shall be communicated to the SEP Administrator.

5.0 CONFIDENTIALITY

ANSI-ANAB accredited SEP Verification Bodies have established and implemented procedures for assuring confidentiality. These procedures address both the Verification Body organization as well as the individual auditor/verifier. Subcontracted or outsourced activities are subject to the same requirements. These requirements are detailed in [ANSI] MSE 50028.

6.0 USE OF SUPERIOR ENERGY PERFORMANCE^{CM} LOGO AND MATERIALS

The U.S. DOE owns the Superior Energy Performance^{cm} certification mark and will license the use of the certification mark to the SEP Administrator. DOE will own the Superior Energy Performance logo, and the SEP Administrator will define how the SEP-certified facilities can use the logo.

Public reference to SEP certification and the related logos must be in accordance with SEP Administrator guidelines for publicizing certification as well as those of the individual SEP Verification Body. Specific references to SEP certification must clearly indicate the part of the organization that has been certified and must not infer that other parts of the organization, or products produced, are also certified. Proposed use of the certification and logos must be reviewed and approved by the SEP Administrator and the SEP Verification Body responsible for granting the SEP certification prior to use.

7.0 UPDATES TO THE SUPERIOR ENERGY PERFORMANCE^{CM} CERTIFICATION PROTOCOL

The U.S. DOE may modify this document, which could include updating the SEP certification system, SEP program guidelines, or revising any of the SEP program specifications contained in this document. The current version of this document will be available on the SEP website.

Revisions to any of the SEP program specifications can occur due to technological or market changes that affect the usefulness of current specifications to stakeholders or the environment.

APPENDICES

A. [NORMATIVE] SECTORS

Sector	Definition
1. Industry - Light to Medium	Manufacturing facilities producing consumer or end user oriented products that are not raw material- or energy-intensive. Examples: Clothing, Consumer Electronics, Home Appliances, Furniture, Plastics Fabrication, Specialty Chemicals, Food Processing, Semiconductors, Water and Wastewater Treatment, etc.
2. Industry – Heavy to Very Heavy	Manufacturing facilities requiring high capitalization and consuming large quantities of raw materials and energy. Examples: Vehicles, Chemicals, Mining, Metals Production, Pulp and Paper, Oil Refining, Ship Building, Industrial Machinery.
3. Commercial Buildings	Facilities with construction and operation that are generally applicable to standard commercial building-type practices.* Examples: Small-medium Office, K-12 Education, Food Sales, Lodging, Retail, Warehouse, etc.
4. Buildings – Complex Energy Use	Commercial building-type facilities with operations that are highly specialized and require specific domain expertise due to the complexity of energy use.* Examples: Health Care Facilities, Educational Campuses, Research Laboratories, Large Office, Data Centers, etc.
5. Transportation	Facilities, systems or means for transporting people or goods. Examples: Ports, Trucking Services, Rail, Monorail, Cruise Liners, etc.
6. Energy Supply	Facilities or systems for generation, transmission, or distribution of an energy source. Examples: Electric Power Plant, Natural Gas Transmission System, Oil Wells, Natural Gas Drilling, Electricity Distribution Systems, etc.

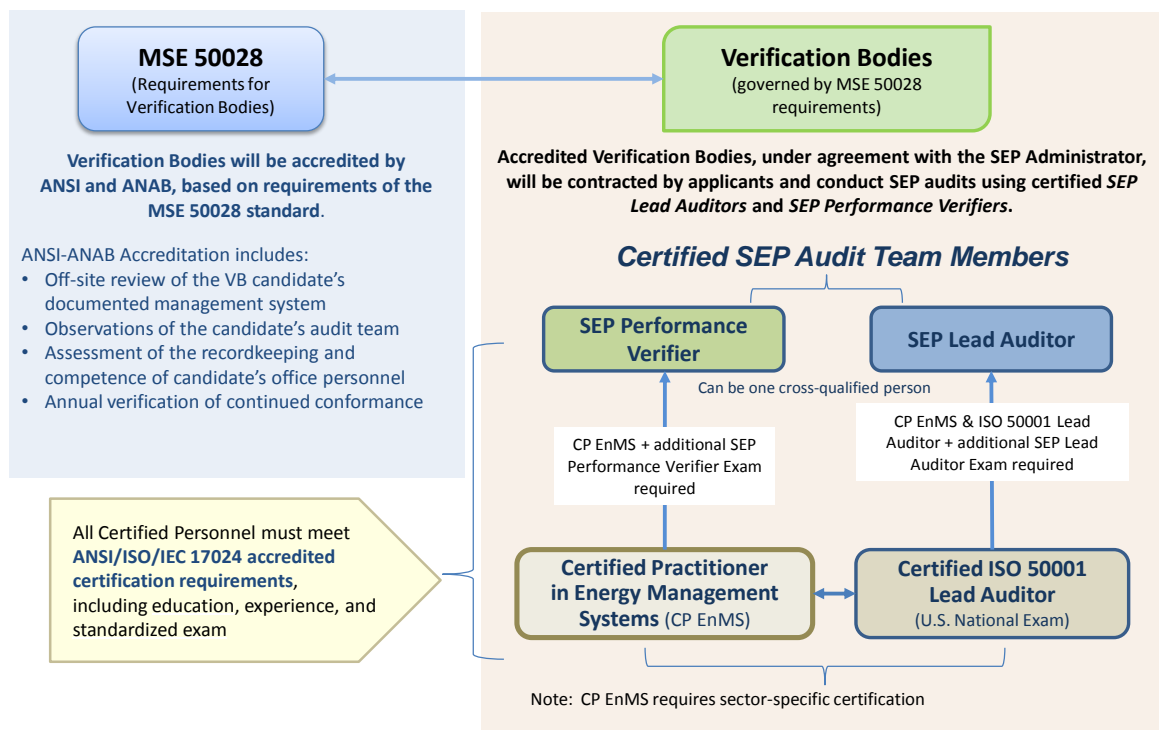
*Building Type examples are consistent with the US Energy Information Administration Commercial Buildings Energy Consumption Survey building definitions.

http://www.eia.gov/emeu/cbecs/building_types.html.

B. [NORMATIVE] CERTIFIED PROFESSIONALS

Certified Professionals provide assistance to industrial and commercial facilities in assessing energy efficiency opportunities in various types of energy systems and conformance to the requirements of the ISO 50001 energy management system standard and ANSI/MSE 50021. These professionals are facility personnel, consulting professionals, or service providers with the appropriate technical experience in industrial and commercial energy systems. A company or facility may apply for SEP certification without engaging a Certified Practitioner. However, using a qualified individual adds a level of assurance for the facility that the standards will be properly applied.

SEP Verification Bodies & Certified Personnel



Certified Practitioners to Assist Facilities Seeking Certification

Institute for Energy Management Professionals (IEnMP)-accredited Certified Practitioners support facilities in assessing energy efficiency opportunities. Certified Practitioners in Energy Management Systems will assist facilities in implementing ISO 50001.

Certified Professionals to Provide Third-Party Verification of Results

IEnMP Certified SEP Lead Auditors and SEP Performance Verifiers are required members of the SEP Audit Team, which conducts SEP conformity audits verifying that a facility meets the requirements of SEP Certified Partner.

- SEP Lead Auditors assess a manufacturing facility's conformance to ISO 50001 and additional SEP management system requirements documented in ANSI/MSE 50021.
- SEP Performance Verifiers assess a manufacturing facility's conformance to the (1) measurement and verification protocols, related documents as appropriate and (2) energy performance improvement levels defined by the SEP program.

Superior Energy Performance^{CM} SEP Audit Team Table

	Management System		Energy Performance	Technical Experts
Role	SEP Lead Auditor (SEP LA)	SEP Team Member	SEP Performance Verifier (SEP PV)	Sector Technical Expert
Qualification	<ul style="list-style-type: none"> • Certified ISO 50001 Lead Auditor ¹ • Certified Practitioner Energy Management Systems - CP EnMS^{TM 2} • Certified SEP Energy Management System Lead Auditor ⁴ (SEP LA) 	<ul style="list-style-type: none"> • Recommended Certified ISO 50001 Lead Auditor or Auditor ⁶ • Recommended CP EnMS^{TM 3} 	<ul style="list-style-type: none"> • CP EnMS^{TM 2} • Certified SEP Performance Verifier – SEP PV⁵ 	<ul style="list-style-type: none"> • Sector-specific experience needed by the SEP Audit Team to supplement the team experience
	<p>¹ Certified Lead Auditor – in accordance with the DOE-approved Scheme, including the National Exam.</p> <p>² Institute of Energy Management Professionals (IEnMP) Certification as a Certified Practitioner - Energy Management Systems (CP EnMSTM) - Passed National Exam and Achieved IEnMP Certification for sector being audited.</p> <p>³ If the team member is responsible for SEP requirements or sector specific requirements CP EnMS is necessary otherwise it is recommended. SEP team members who are not CP EnMS certified shall not audit energy planning or monitoring and measuring requirements.</p> <p>⁴ IEnMP SEP Lead Auditor Certification – Pass National Exam and achieve IEnMP Certification.</p> <p>⁵ IEnMP SEP Performance Verifier Certification – Pass National Exam, and achieve IEnMP Certification for sector being audited.</p> <p>⁶ Certified Auditor – in accordance with the DOE-approved Scheme, including the National Exam.</p>			

C. [NORMATIVE] SUPERIOR ENERGY PERFORMANCE^{CM} APPLICATION FOR INDUSTRY

Introduction

SEP is a voluntary program designed to provide a transparent system for verifying energy management practices and energy performance improvement at the facility level. The program provides facilities with a roadmap for achieving continual improvement in energy efficiency while maintaining their economic competitiveness.

A central element of SEP is implementation of the international energy management standard ISO 50001, with additional requirements to achieve and document energy performance improvements. The program seeks to improve industrial energy performance for facilities of all levels of experience in managing and reducing energy use. Thus, SEP is designed with multiple participation levels to accommodate the diversity of facilities.

The SEP program is accredited by ANSI and ANAB.

Minimum Program Requirements

1. Conform to the ISO 50001 energy management standard.
2. Have achieved, measured, and audited energy performance improvement over the 3 or 10 years after the baseline period. Requirements will vary based on the applicant's desired level of verification, performance level claimed, and maturity of energy program.

Please note: If the applicant is already certified to ISO 50001 from an accredited SEP Verification Body, then the ISO 50001 portion of the SEP conformity audit does not need to be repeated. If the applicant received certification to ISO 50001 by a certification body that is *not* an accredited SEP Verification Body, then the applicant will need to repeat the ISO 50001 certification audit as part of their SEP conformity audit.

Achievement Period

SEP offers facilities two options to demonstrate their progress in improving energy performance:

- **Energy Performance Pathway:** This pathway requires demonstrated energy performance improvements over the three years after the baseline period. Shorter periods of improvement may be used under limited circumstances.
- **Mature Energy Pathway:** Alternatively, applicants with longstanding energy management programs may meet the requirements by demonstrating they currently have in place energy management best practices and have achieved at least a 15% improvement in energy performance over the 10 years after the baseline period. Shorter periods may be used under limited circumstances.

The SEP designation is awarded for a period of three years. Participating facilities choosing to recertify will submit updated performance and management system information documenting that they continue to meet the SEP criteria. Facilities may change pathways, type of verification, and performance levels each time they certify.

TIERS AND VERIFICATION OF PROGRAM REQUIREMENTS

SEP for Industry offers flexibility by offering two tiers of participation, depending on the degree of verification desired by a facility. All participating facilities are required to verify conformance to the energy management standard and to demonstrate energy performance improvement using the SEP Measurement and Verification Protocol for Industry.

The program offers two tiers:

Partner	Certified Partner
<u>Self-declaration:</u> Facilities are required to submit internal audits conducted by team members within the facility or by off-site representatives.	<u>ANSI-ANAB accredited certification:</u> Facilities are required to submit required materials to an ANSI-ANAB accredited SEP Verification Body. The Verification Body will conduct the SEP conformity audit and will provide certification of the results.

PARTNERS

One designation is available to Partners. Applicants are required to submit the same information as applicants seeking to become Certified Partners. The SEP Administrator is responsible for confirming that the Partner applicant has met SEP requirements. The confirmation process for Partners is still being finalized and this section will be updated.

CERTIFIED PARTNERS

To encourage facilities to achieve greater energy performance improvements, SEP offers silver, gold, and platinum designations to Certified Partner applicants based on energy performance improvement levels attained. Facilities can demonstrate their energy performance improvement through the Energy Performance Pathway or the Mature Energy Pathway.

These designations and pathways are available only at the Certified Partner tier.

Facilities will select one of the following pathways:

Pathway	SEP Performance Requirements	Level		
		Silver	Gold	Platinum
Energy Performance	Minimum % improvement	5%	10%	15%
	Maximum years to achieve	3*	3*	3*
Mature Energy	Minimum % improvement	15%	15%	15%
	Maximum years to achieve	10*	10*	10*
	Minimum Best Practice Scorecard points	35	61	81

*Facilities may use a shorter time period than 3 years for the Energy Performance Pathway and 10 years for the Mature Energy Pathway (after the baseline period) if specified criteria are met.

CRITERIA FOR SELECTING A SHORTER TIME PERIOD FOR PATHWAYS

To qualify for the Energy Performance Pathway, the energy performance improvement may be demonstrated over a period of 1 or 2 years rather than 3 years if one or more of the following reduced timeframe justifications are true:

- Changes have occurred in operations and product such that a meaningful baseline cannot be constructed from the earlier year(s) requiring a shorter period of analysis.
- Data are not available from earlier years to allow construction of normalized consumption.
- The facility began its energy management system (EnMS) program less than 3 years ago, and wishes to use the year immediately prior to its EnMS start as the baseline.

Similarly, to demonstrate change over a 10-year period, a total of 132 months of data are required—from the first month of the baseline period to the last month of the reporting period. That is, the baseline period is the first 12 months of data and the reporting period is the most recent 12 months of data, ending 10 years later than the baseline period.

To qualify for the Mature Energy Pathway, the energy performance improvement may be demonstrated over a period of 5 to 9 years rather than 10 years if one or more of the following are true:

- Changes have occurred in operations and product such that a meaningful baseline cannot be constructed from the earlier year(s) requiring a shorter period of analysis.
- Data are not available from earlier years to allow construction of normalized consumption.
- The facility began its EnMS program less than 10 years ago, and wishes to use the year immediately prior to its EnMS start as the baseline.

SUPERIOR ENERGY PERFORMANCE INDUSTRIAL FACILITY BEST PRACTICE SCORECARD

The Superior Energy Performance Industrial Facility Best Practice Scorecard enables organizations with mature energy management systems to achieve SEP certification under the Mature Energy Pathway. The Scorecard awards points for (1) improving energy performance beyond the prerequisite and (2) implementing of energy management best practices. The energy management best practices are energy management system activities, processes, or procedures that are “above and beyond” the requirements of ISO 50001.

Only applicants seeking to become a Certified Partner under the Mature Energy Pathway will use this Scorecard.

APPLICATION CHECKLIST

Attachment B of this application includes an *optional* checklist providing guidance for applicants seeking to become an SEP Partner or SEP Certified Partner.

Application

Instructions:

Submit this application to the SEP Administrator via email.

Contact Information

Company Name:	
Facility Name:	
Street Address:	
Mailing Address: (if different than street address)	
City, State, Zip Code:	
Country:	
Contact Name:	
Contact Title:	
Phone Number:	
Email Address:	

Basic Facility Information

Facility square footage:	
Sector:	
NAICS Code: http://www.census.gov/eos/www/naics/	
Information on site such as products or services produced as applicable:	
Number of employees:	
Number of shifts:	
Proposed Scope:	
Scope exclusions:	

Primary Energy Consumption for the Facility

Please check the appropriate category that indicates your annual total primary energy consumption in the table below:

Industrial Light	< 25,000 MMBTU/Yr	
Industrial Medium	25,000 to 500,000 MMBTU/Yr	
Industrial Heavy	> 500,000 MMBTU/YR	
Industrial Very Heavy	> 500,000 MMBTU/YR (e.g. refineries, complex chemical sites)	

Complete the table below for each energy source that is applicable. Imported electricity, steam, compressed air, chilled water, and hot water all provide energy services and need to be accounted for. Additional lines near the bottom of table are provided for energy sources not listed. The sum of items in this table should be listed in the "Total" line at the bottom of the table. The total should be in the appropriate range for the primary energy consumption value indicated above. Please do not list secondary energy sources (e.g., on-site generated steam) that are derived from primary sources.

Energy Source	Annual Primary Energy Consumption MMBTU/YR
Purchased Electricity— <i>Expressed by multiplying the delivered BTU by a source conversion factor of 3</i>	
Natural Gas	
Coal	
Fuel Oil	
Diesel	
Bio-Fuel	
Propane	
Purchased Steam	
Purchased Compressed Air	

Purchased Chilled Water	
Purchased Hot Water	
(other)	
(other)	
(other)	
Total	

Facility Statement

_____ (name of facility and location) seeks to become a:

- ☐ SEP Partner through Self-Declaration.
- ☐ SEP Certified Partner. This is a third-party verified, ANSI-ANAB accredited certification.
- ☐ This is a certification audit (Stage 1 and Stage 2) ☐ This is a recertification audit

For Certified Partner Applicants Please Answer the Following Questions

1. The scope of the proposed certification is registered to other ISO standard(s).
 - a. ☐ Yes ☐ No
 - b. If Yes, which ISO standard(s)? _____
 - c. If Yes, the certification body is: _____
2. Please indicate which pathway your facility plans to use for certification. (Please select one.)
 - ☐ Energy Performance Pathway
 - ☐ Mature Energy Pathway (go to question 4)
3. If Energy Performance Pathway was selected in #2: What percentage energy performance improvement do you think your facility has achieved over the 3 years after the baseline period? (Please select one, then go to question 5)
 - ☐ At least 5% but less than 10%
 - ☐ At least 10% but less than 15%
 - ☐ At least 15%
 - ☐ None of the above*, however I have reviewed the criteria for selecting a shorter time period for the Energy Performance Pathway. Our facility meets the criteria listed and has achieved an energy performance improvement of at least 5% in the 1-2 years after the baseline period.
4. Has your facility achieved an energy performance improvement of 15% or greater over the 10 years after the baseline period? (Please select one.)
 - ☐ Yes
 - ☐ No
 - ☐ No*, however I have reviewed the criteria for selecting a shorter time period for the Mature Energy Pathway on Page 4. Our facility meets the criteria listed and has achieved an energy performance improvement of at least 15% over 5-9 years after the baseline period.

Please attach the Best Practice Scorecard Application Worksheet (Attachment A) to indicate which credits are being claimed.

5. This question refers to the SEP Energy Performance Indicator (SEnPI), which is defined in the SEP Measurement and Verification Protocol for Industry, Section 3.1.2. In determining the SEnPI, select the method that the organization used:

☐ Ratio of energy consumption to single production level

Use of this option requires the ability to meaningfully represent all output in a single quantity, such as total tons or gallons per year. However, in most cases, the consumption depends on more than one production quantity and may also depend on additional factors including weather and non-production related energy consumption. In these cases, this approach would not be appropriate. Evidence must be provided to support the claim of only one relevant variable and that the ratio form is adequately predictive of energy performance.

☐ Linear regression Model

☐ Forecast

☐ Backcast

☐ Standard conditions

☐ SEnPI chaining

☐ Complex regression model

☐ Polynomial models

☐ General nonlinear models

☐ Other model. Note: all other model options require review and approval by the SEP Administrator in advance of the Stage 1 audit. See the SEP Measurement and Verification Protocol for Industry, Section 3.2.2.

6. All other alternative approaches must be submitted to the SEP Administrator for approval in advance of the Stage 1 audit.

☐ The organization proposes to use data reporting intervals that are more frequent than monthly. See the SEP Measurement and Verification Protocol for Industry, Section 3.4.2.

☐ The methodology and calculation for derived energy sources proposed is not listed in the SEP Measurement and Verification Protocol for Industry, Section 3.7.2.

☐ Alternative adjustment model application methodologies, under the conditions of Section 3.6.6 in the SEP Measurement and Verification Protocol for Industry.

☐ Justification of circumstances, where a model does not satisfy all the explicit model validity requirements specified in Sections 3.4.1 through 3.4.10 of the SEP Measurement and Verification Protocol for Industry.

☐ Justification of non-routine adjustments, including calculations (Section 3.6.7 of the SEP Measurement and Verification Protocol for Industry).

7. Surveillance and Certification Renewal Requirements

☐ I acknowledge that there will be annual surveillance to confirm that the energy management system is being maintained and continual improvement of energy performance is supported. These audits will assess the continued effectiveness of the energy management system (not a re-assessment of the energy performance).

☐ I also acknowledge that this certification is valid for three years following approval of my certification request.

Name of individual submitting this application: _____

Title: _____

Address: _____

Phone Number: _____

Email Address: _____

Date: _____

Name of individual authorizing this application: _____

Title: _____

Address: _____

Phone Number: _____

Email Address: _____

Date: _____

Attachment A: Superior Energy Performance Best Practice Scorecard for Industry: Application Worksheet

If the industrial facility has selected the Mature Energy Pathway, please attach this worksheet to the SEP application to indicate which credits are being claimed.

Energy Data, Monitoring and Measurement (DM)	
<input type="checkbox"/>	DM Credit 1.1: Data availability
<input type="checkbox"/>	DM Credit 1.2: Improve data collection and analysis
<input type="checkbox"/>	DM Credit 2.1: EnPI updating
<input type="checkbox"/>	DM Credit 2.2: Establish benchmarks
<input type="checkbox"/>	DM Credit 3.1: Submeters
<input type="checkbox"/>	DM Credit 3.2: Cost centers
Significant Energy Uses (SU)	
<input type="checkbox"/>	SU Credit 1: Facility energy balance
<input type="checkbox"/>	SU Credit 2: Designation of significant energy uses
<input type="checkbox"/>	SU Credit 3.1: Equipment repair and replacement policy
<input type="checkbox"/>	SU Credit 3.2: Utilize energy efficient design
<input type="checkbox"/>	SU Credit 4.1: Energy efficient maintenance practices
<input type="checkbox"/>	SU Credit 4.2: EnPIs for significant energy uses
Energy Supply (ES)	
<input type="checkbox"/>	ES Credit 1.1: Include procurement personnel on energy team
<input type="checkbox"/>	ES Credit 1.2: Demand optimization
Management of Energy Projects (EP)	
<input type="checkbox"/>	EP Credit 1.1: Regular assessment of significant uses
<input type="checkbox"/>	EP Credit 1.2: Energy system assessment standards
<input type="checkbox"/>	EP Credit 1.3: Continual improvement tools
<input type="checkbox"/>	EP Credit 1.4: Life cycle costing
<input type="checkbox"/>	EP Credit 2: Lower financial barriers

System Sustainability (SS)	
<input type="checkbox"/>	SS Credit 1.1: Resources: Energy management team
<input type="checkbox"/>	SS Credit 1.2: Awards or incentive program for energy
<input type="checkbox"/>	SS Credit 1.3: Energy professional certifications
<input type="checkbox"/>	SS Credit 1.4: Strategic planning
<input type="checkbox"/>	SS Credit 2: Preventive action
<input type="checkbox"/>	SS Credit 3: Management review of inputs from stakeholders
Energy Performance Improvement Credits	
<input type="checkbox"/>	Energy Performance Improvement Credit
Innovation Credits for Energy Performance	
<input type="checkbox"/>	Innovation Credit 1: Combined Heat and Power
<input type="checkbox"/>	Innovation Credit 2: Renewable Energy Supply
<input type="checkbox"/>	Innovation Credit 3: Superior Performance with Benchmarks
<input type="checkbox"/>	Innovation Credit 4: Other Innovative Actions

Attachment B: Facility Certification Application Checklist

This checklist has been prepared as an informal guide for facilities applying to the SEP certification program. Use of this checklist is not required.

Partner Application (Self-Declaration) Checklist:

- ☐ Have you contacted the SEP Administrator?
- ☐ Have you submitted the application along with the report resulting from successful completion of an internal audit and documentation that the energy performance requirement has been met?
- ☐ Have you attested to the SEP Administrator in writing that the following activities have been accomplished?
 - ☐ Facility conforms to ISO 50001 and ANSI/MSE 50021.
 - ☐ Energy performance improvement has been internally verified using the appropriate sector-specific SEP Measurement and Verification Protocol.
 - ☐ Corrective actions have been completed and verified for effectiveness.

Certified Partner Application: ANSI-ANAB Accredited Certification Checklist

- ☐ Have you contacted the SEP Administrator and submitted an application to be a SEP Certified Partner?
- ☐ Have you selected a SEP Verification Body that is ANSI-ANAB accredited to conduct the SEP conformity audit?
- ☐ Has the selected SEP Verification Body conducted an SEP conformity audit, which includes a Stage 1 audit to confirm whether the facility is prepared for the Stage 2 audit?
- ☐ Has the selected SEP Verification Body sent a SEP Lead Auditor and SEP Performance Verifier(s) to the facility to perform a Stage 2 audit assessing the following?
 - ☐ Conformance to ISO 50001 and ANSI/MSE 50021
 - ☐ Energy performance improvement verified using the appropriate sector-specific SEP Measurement and Verification Protocol
- ☐ Has the SEP Verification Body informed the SEP Administrator whether the facility has met the requirements for certification to ISO 50001 and ANSI/MSE 50021 including the specified energy performance improvement and whether a certificate will be issued to the SEP Certified Partner applicant?
- ☐ Has the SEP Administrator published the results of the certification decision?