



**Superior  
Energy  
Performance<sup>®</sup>**  
U.S. DEPARTMENT OF ENERGY

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# Superior Energy Performance<sup>®</sup> (SEP<sup>®</sup>) Scorecard

## DRAFT

**Version:** This is a draft of a proposed update made available for informal public comment.  
This document has not been finalized for use in pursuing SEP certification

**Date:** 28 August 2017

**Replaces:**

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## 1. Introduction

Superior Energy Performance® (SEP®) is a certification program that recognizes excellence in energy management systems (EnMS) by verification of a facility's implementation of the ISO 50001 EnMS and continual energy performance improvement. Organizations that achieve SEP certification receive a certificate from a third-party SEP Verification Body indicating the level of SEP achieved and recognition from the U.S. Department of Energy (DOE) including the verified energy performance improvement value.

SEP certification can be achieved at the **SEP VERIFIED** or **SEP PERFORMER** levels.

### 1.1 The Superior Energy Performance Certification Protocol

The *SEP Certification Protocol* sets forth the requirements for achieving SEP certification at either the **SEP VERIFIED** or **SEP PERFORMER** levels as well as the processes and timeframes for applying and certifying to the SEP program.

### 1.2 SEP Certification Levels and Overview of Requirements

To be eligible to be certified at the **SEP VERIFIED** level, two major requirements must be achieved:

1. **Third party certification to ISO 50001 and ANSI/MSE 50021**
2. **Third party verification of energy performance improvement**

To be eligible to be certified at the **SEP PERFORMER** level, the following requirement must be achieved in addition to those listed for the **SEP VERIFIED** level:

3. **Third party verification of best practices in energy management, external programs, and advanced energy technologies through the Superior Energy Performance (SEP) Scorecard.**

### 1.3 The Superior Energy Performance Scorecard

This **SEP Scorecard** defines the credits (categorized into scorecard credit categories) and associated points for implementing actions, processes, procedures, or advanced technologies beyond the requirements for *ISO 50001* and *ANSI/MSE 50021* that are required for recognition at the **SEP PERFORMER** level. The *SEP Certification Protocol* states the number of points required for recognition at the **SEP PERFORMER** level.

### 1.4 Scorecard Credits

Credits are categorized in the following credit categories with maximum points:

- Energy Management System (EnMS) with 50 points
- Certification, Partnership, and Reporting (CR) with 25 points
- Advanced Energy Technologies (AT) with 25 points

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78 [Table 1](#) lists the credits and associated points achievable as categorized in the credit categories.

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**TABLE 1: SCORECARD CREDITS**

Credits Categorized into Credit Categories			Points
<b>Energy Management System (EnMS)</b>			<b>50</b>
<b>Energy Data, Monitoring and Measurement (DM)</b>			<b>8</b>
	DM 1	Availability of energy review	2
	DM 2	SEnPI monthly updating	2
	DM 3	Cost centers	4
<b>Significant Energy Uses (SU)</b>			<b>16</b>
	SU 1	Energy balance	3
	SU 2	Designation of significant energy uses	1 to 4
	SU 3	Energy Performance and Life Cycle Costing in Equipment Repair and Replacement Policy	3
	SU 4	Maintenance system includes energy performance guidelines	3
	SU 5	Monthly Tracking of EnPI Values for Significant Energy Uses	3
<b>Management of Energy Opportunities (EO)</b>			<b>10</b>
	EO 1	Energy assessment of energy use(s)	1 to 4
	EO 2	Life cycle costing in evaluating energy performance capital improvements	2
	EO 3	Dedicated capital budget for energy projects	1 to 4
<b>Organizational Sustainability (OS)</b>			<b>16</b>
	OS 1	Resources: energy management team	2
	OS 2	Awards or incentive program for energy	2
	OS 3	Energy professional certifications	1 to 3
	OS 4	Strategic planning	2
	OS 5	Include procurement personnel on energy team	2
	OS 6	Share SEP experience and data	1 to 5
<b>Certification, Partnership, and Reporting (CR)</b>			<b>25</b>
	CR 1	External Certification and Recognition Programs	3 to 5
	CR 2	Corporate Reporting and Reporting Systems	1 to 4
	CR 3	50001 in supply chain	3 to 8
	CR 4	Third party energy efficiency program participation	1 to 4
	CR 5	Superior performance with benchmarks	2 to 4
<b>Advanced Energy Technologies (AT)</b>			<b>25</b>
	AT 1	Combined heat and power	1 to 8
	AT 2	Renewable Energy Supply	1 to 8
	AT 3	Sensors and submeters	1 to 5
	AT 4	Other advanced technologies	1 to 4

80 Facilities using the SEP Scorecard for their SEP certification can track the credits they have or could  
81 achieve through the use of the SEP Scorecard Tool. The SEP Scorecard Tool may be found at [Note:  
82 WEBSITE address will be provided once SEP 2018 SEP Scorecard tool is developed. See SEP 2017

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83 SEP Scorecard tool at this link [LINK TO SEP 2017 SEP Scorecard tool]]. The use of the SEP Scorecard  
84 Tool is not required for SEP certification.

## 85 1.5 Auditing the SEP Scorecard

86 There are two different types of audits that award points for completing credits:

87 1. The **initial SEP certification audit** (stage 2 audit) assesses the information and evidence that  
88 demonstrate that the completed credit conforms to the credit requirements for those credits  
89 indicated on the SEP Application Form. The stage 2 audit determines if the credits are effectively  
90 implemented and how many points should be awarded.

91 Note: Stage 1 (certification) audit will confirm that the credits on the SEP Application Form are  
92 correct or that any changes are identified prior to the stage 2 audit.

93 2. The **SEP recertification audit** is based on a new application, in which the organization identifies  
94 the credits that the organization wants the audit to confirm. The recertification audit takes into  
95 account any internal or external changes to the system.

96 The surveillance audit does not assess the credits because no points are awarded or changed during  
97 surveillance audits.

98 The SEP Lead Auditor performs the audit of the Scorecard. Additional information about the credits and  
99 how they are audited is provided in *ANSI/MSE 50028 Superior Energy Performance® - Requirements for*  
100 *verification bodies for use in accreditation or other forms of recognition*.

101 In some credits, the term “effective personnel” is used. This term is from *ISO 50003:2014* and is defined  
102 as, “people who actively contribute to meeting the requirements of an EnMS,” along with the note, “EnMS  
103 effective personnel contribute to the requirements of the EnMS within the scope and boundaries for  
104 establishing, implementing or maintaining energy performance improvement.”

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## 2. SEP Scorecard Credit Details

This section of the *SEP Scorecard* provides the following details for each credit:

1. **Points:** Designates the number of points available for the credit.
2. **Intent:** Describes the purpose of the credit.
3. **Credit statement:** Summary of what the organization must demonstrate to receive points.
4. **Measurement and verification criteria for certification and recertification:** Defines the evidence that will be evaluated by the auditor during the SEP certification or recertification audit.

If an organization is seeking multi-site SEP certification using a central office EnMS, the following credits can be claimed for all sites if the claim is met at the central office:

- OS 2 - Awards or incentive program for energy
- OS 3 - Energy professional certifications
- OS 4 - Strategic planning
- OS 5 - Include procurement personnel on energy team
- CR 2 - Corporate reporting systems
- CR 3 - 50001 in supply chain

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## 2.1 Energy Management System (EnMS)

The energy management system (EnMS) credit category is divided into four subcategories:

- Energy Data, Monitoring and Measurement (DM)
- Significant Energy Uses (SU)
- Management of Energy Opportunities (EO)
- Organizational Sustainability (OS)

### 2.1.1 Energy Data, Monitoring and Measurement (DM)

ISO 50001 develops a culture of energy awareness, ownership, and management. An organization can't effectively manage energy if it lacks the proper and actionable energy data. Monitoring and measuring is the primary means to understand the organization's level of energy consumption and to control and ultimately reduce energy consumption. Energy consumption data are also useful to evaluate equipment and systems prior to purchase and installation so that the optimal option can be acquired to minimize operating expenses. To ensure that equipment continues to operate at peak performance levels, energy consumption is one aspect that must be monitored, collected, and analyzed during operation. Deteriorating energy performance can often signal a need for adjustments or other maintenance activities necessary to restore equipment to peak operating performance. In addition to indicating proper equipment operation, energy data monitoring can be a critical component in proper process operation when process parameters have changed, indicating detrimental results on energy consumption. Energy consumption data are also necessary to evaluate the results of process or equipment changes implemented to improve efficiencies and reduce operating costs.

Data monitoring and measurement is only the first step in the effective use of energy information. Once energy data are collected, data analyses are required to determine the performance of the organization's equipment and systems. Organizations can use the analyses to make decisions regarding process changes, process or equipment improvements, or the need for equipment maintenance. Analysis is also necessary to determine the root cause of any deterioration in efficiency. A growing inefficiency in energy consumption may be signal equipment issues or process problems not directly related to the condition of the equipment itself. Data are critical to defining and improving performance through the SEP program.

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## DM 1: Availability of Energy Review

### POINTS

2

### INTENT

To ensure that persons working for or on behalf of the organization—whose activities have been identified as having an impact on energy—have access to energy data and information from the energy review.

### CREDIT STATEMENT

The energy review shall be available and readily accessible, in electronic form, to persons working for or on behalf of the organization, whose activities have been identified as having an impact on energy.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies this credit:

- ▶ Evidence of availability and accessibility of the electronic energy review by effective personnel.
- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

## DM 2: SEnPI Monthly Updating

### POINTS

2

### INTENT

To update and monitor the SEP Energy Performance Indicator (SEnPI) at least on a monthly basis.

Note: This credit is different than credit SU 5, Monthly Tracking of EnPI Values for Significant Energy Uses.

### CREDIT STATEMENT

The organization shall update and monitor the SEnPIs at least monthly to assess improvement in energy performance across the entire facility and scope.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that SEnPI value is updated at least monthly. The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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### DM 3: Cost Centers

#### POINTS

4

#### INTENT

To report energy consumption and cost to organizational departments to encourage accountability for energy consumption.

#### CREDIT STATEMENT

Departmental managers shall be made known of energy costs incurred by the activities associated with their cost center, and those costs shall be based on the measured energy consumed by those activities. Reports of departmental costs that include energy costs shall be prepared and distributed to departmental managers at least quarterly.

#### MEASUREMENT AND VERIFICATION CRITERIA

##### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of energy consumption measurement for each energy source utilized by a cost center.
- ▶ Evidence of charges associated with measured energy consumption against each cost center.
- ▶ Evidence of quarterly reports and communication of energy charges to cost center managers.
- ▶ The organization shall show records related to this credit during the reporting period.

##### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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### 2.1.2 Significant Energy Uses (SU)

Significant energy uses are the equipment, processes, applications, or activities identified as being significant components of the organization's energy consumption and providing the largest improvement opportunities. In addition, these SEUs also pose the largest risk if they are not managed well.

Management of the SEUs entails a combination of activities. It is essential that SEUs are monitored, controlled, and maintained as appropriate to ensure continued or improved energy performance. In addition, energy considerations should be considered when purchasing new equipment or systems that are associated with the SEUs.

Without the proper management of SEUs, energy consumption can quickly increase. Because of the magnitude of energy consumption by these uses, poor purchasing decisions or improper operation of related equipment can drastically impact an organization's energy consumption. Large swings in consumption might even dwarf performance improvements made in other areas of the organization. Maintenance is another key component of management of significant energy uses. Without proper equipment maintenance, even the most energy-efficient equipment can become inefficient, resulting in increased energy consumption.

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**SU 1: Energy Balance****POINTS**

3

**INTENT**

To encourage a better understanding of the relative energy consumption of processes, equipment, and systems.

**CREDIT STATEMENT**

The organization shall document the method for an energy balance detailing the energy consumption of the systems and equipment, and the energy consumption data sources that, when combined, account for at least 90% of the reporting period total site energy consumption within the facility, and include all the SEUs. The method shall address how changes to the facilities, processes, or equipment are included. The energy balance shall be recorded, updated and maintained as a part of the energy planning process.

**MEASUREMENT AND VERIFICATION CRITERIA****CERTIFICATION CRITERIA**

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of a documented energy balance process detailing the energy consumption of processes, systems and equipment.
- ▶ The energy balance shall include all SEUs.
- ▶ Evidence that the energy consumption detailed in the energy balance record is at least 90% of the reporting period total site energy consumption for the scope of the facility seeking SEP certification.
- ▶ The organization shall show records related to this credit during the reporting period.

**RECERTIFICATION CRITERIA**

- ▶ Evidence of a new or updated energy balance completed after certification accounting for any changes in facilities, systems, processes, equipment, or SEUs.
- ▶ Evidence that the energy consumption detailed in the maintained energy balance is at least 90% of the reporting period total energy consumption for the scope of the facility seeking SEP recertification.

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## SU 2: Designation of Significant Energy Uses

### AVAILABLE POINTS

1 to 4

### INTENT

To encourage organizations to continually broaden the scope of the equipment, systems, and processes that are designated as significant energy uses.

### CREDIT STATEMENT

The combined energy consumption of SEUs shall be greater than a specified percentage of the total reporting period site energy consumption of the scope for the facility seeking SEP certification, shown in the table below.

SEUs % of total site energy consumption for the reporting period	Points
≥ 50% and < 60%	1
≥ 60% and < 70%	2
≥ 70% and < 80%	3
≥ 80%	4

Equipment, systems, or processes designated as SEUs must be managed as defined in ISO 50001.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of the percentage of site energy consumption utilized by all of the significant energy uses combined, based on the points above.
- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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### SU 3: Energy Performance and Life Cycle Costing in Equipment Repair and Replacement Policy

#### POINTS

3

#### INTENT

To encourage a systematic, life cycle costing policy for replacement and repair of equipment.

#### CREDIT STATEMENT

A repair and replacement policy shall be documented that defines how energy performance and life cycle costing are taken into account in repair and replacement decisions that covers all significant energy uses.

#### MEASUREMENT AND VERIFICATION CRITERIA

##### CERTIFICATION CRITERIA

The following evidence, using Approach 1 or 2, is required to determine if the organization satisfies the requirements of this credit:

- ▶ Approach 1: Evidence that a repair and replacement policy has been implemented and that the policy defines how energy performance and life cycle costing are taken into account.
- ▶ Approach 2: Implementation, maintenance, or certification to ISO 55001 *Asset management -- Management systems -- Requirements* may be used to meet this credit if energy performance and life cycle costing are taken into account in the asset management processes.
- ▶ For Approaches 1 or 2: The organization shall show records related to this credit during the reporting period.

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## SU 4: Maintenance System includes Energy Performance Guidelines

### POINTS

3

### INTENT

To encourage the use of preventive and predictive maintenance programs that incorporate energy performance guidelines for equipment, systems, and processes associated with all significant energy uses.

### CREDIT STATEMENT

The organization shall identify preventive and predictive maintenance activities that improve the energy-efficient operation of the equipment, systems, and processes associated with significant energy uses. Identified maintenance activities shall be included in the maintenance system, including energy performance guidelines, and be completed as scheduled.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that preventive and predictive maintenance activities that incorporate energy performance guidelines of the equipment, systems and processes associated with all significant energy use has been identified.
- ▶ Evidence that these preventive and predictive maintenance activities are included in the maintenance system.
- ▶ Evidence that these preventive and predictive maintenance activities are completed as scheduled.
- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

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## SU 5: Monthly Tracking of EnPI Values for Significant Energy Uses

### POINTS

3

### INTENT

To encourage a better understanding of operations and variability in significant energy uses.

### CREDIT STATEMENT

Energy performance indicators (EnPI(s)) shall be developed for each significant energy use based on metered data or measurements. Values for these EnPIs shall be tracked on at least a monthly basis.

Note: This credit is different than credit DM 2, SEnPI Monthly Updating.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that EnPIs are developed for each significant energy use based on metered data or measurements (i.e., not based on engineering model calculations).
- ▶ Evidence that value of EnPIs for significant energy uses are tracked on at least on a monthly basis.
- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

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### 2.1.3 Management of Energy Opportunities (EO)

The concept of management of energy opportunities is intentionally broad and incorporates many types of activities including purchasing, operational control, maintenance practices, and traditional capital improvement, among others. Organizations implement many action plans within their organization that have multiple benefits including energy savings. In some cases, energy savings may not be the primary goal.

This is a technical category that refers to the activities associated with identifying, planning, prioritizing, and implementing opportunities for energy performance improvement. Several key concepts in the ISO 50001 standard concerning this topic are:

- ▶ Implementing energy improvement opportunities is a means for achieving objectives and targets. Prioritizing these opportunities should result from careful planning that is influenced by an organization's energy policy, legal requirements, and its financial and business objectives.
- ▶ Action plans are documents that show the details required to implement energy performance opportunities.
- ▶ Action plans should be implemented as planned including the post-installation measurement and verification of energy performance improvement.
- ▶ Closing the loop on improvements in energy performance means incorporating resulting changes into the management system.
- ▶ Action plans must be evaluated to ensure that they are effective.

## EO 1: Energy Assessment of Energy Use(s)

### AVAILABLE POINTS

1 to 4

### INTENT

To ensure that opportunities for energy performance improvement related to SEUs and other energy uses are continually incorporated into the energy management system.

### CREDIT STATEMENT

Energy assessment(s) are conducted on SEU(s) at least once during the achievement period, and the energy assessment contains a final report with recommendations. Examples to model are the American Society of Mechanical Engineers (ASME) EA-series of standards, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level 2 or 3 audits, or U.S. DOE Industrial Assessment Center audit report formats.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that an energy assessment has been completed on an SEU during the achievement period. There is a maximum of 4 points for this credit and shown in the table below.

Number of SEUs	Points
1 SEU	1
2 SEUs	2
3 SEUs	3
SEUs representing $\geq 50\%$ of reporting period site energy consumption	1

- ▶ The organization shall show records related to this credit during the achievement period, including the energy assessment report.

### RECERTIFICATION CRITERIA

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- ▶ Evidence that a new energy assessment has been completed, or the original assessment has been updated on a significant energy use during the achievement period., including an updated original energy assessment report.

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## EO 2: Life Cycle Costing in Evaluating Energy Performance Capital Improvements

### POINTS

2

### INTENT

To consistently incorporate the techniques of life cycle costing into the evaluation of energy performance capital improvement opportunities.

### CREDIT STATEMENT

As part of the ISO 50001 energy review process, energy performance improvement opportunities and new designs for equipment, systems and processes shall be consistently evaluated and prioritized using the results of life cycle costing (LCC) analysis on new capital equipment, system, and process designs associated with significant energy uses.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of life cycle costing analysis for energy performance capital improvement opportunities and designs associated with significant energy uses.
- ▶ Evidence of energy performance capital improvement opportunity prioritization based on or partly based on life cycle costing analysis.
- ▶ The organization shall show records related to this credit during the achievement period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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### EO 3: Dedicated Capital Budget for Energy Projects

#### AVAILABLE POINTS

1 to 4

#### INTENT

To encourage greater implementation of energy performance improvement opportunities by providing financial incentives for implementing capital energy performance improvement opportunities included in the energy management action plans.

#### CREDIT STATEMENT

The organization shall establish a separate budget for capital expenditures for energy performance improvement opportunities that utilize a financial hurdle rate that is less stringent than hurdle rates for other capital projects in the organization.

#### MEASUREMENT AND VERIFICATION CRITERIA

##### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of an amount of capital budget slated and spent for energy performance capital improvement opportunities. Points are awarded as 1 point per 2% of total annual energy bill in any fiscal year within the achievement period [max of 4 points]. For example, if the total energy bill is \$1,000,000 per year and the annual capital expenditures for energy projects is \$20,000 in one fiscal year, then 2% of energy bill is devoted to capital expenditures. Therefore, 1 point is awarded.

Note: The capital for the energy projects may reside at various levels within the organization.

- ▶ Evidence of a financial hurdle rate that is less stringent than hurdle rates for other capital projects in the organization.

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### 2.2.1 Organizational Sustainability (OS)

Energy is used by everyone within the organization and is therefore the responsibility of everyone within the organization to manage with the guidance and support of the energy management team.

System sustainability is the phrase used to describe how the activities of the energy management system:

- ▶ Move into the everyday practices of the organization.
- ▶ Are addressed through roles, responsibilities, and authorities that are dispersed through every part of the organization and at every level within the organization.
- ▶ Address the energy-related activities of stakeholders (e.g., employees, suppliers, contractors).
- ▶ Promote transparency of energy policy and objectives of the organization.
- ▶ Promote informed decision making related to energy.
- ▶ Are prioritized and resourced by management and demonstrated through effectiveness of the management system.

## OS 1: Resources: Energy Management Team

### POINTS

2

### INTENT

To promote the active participation and involvement of top management in the organization's energy management system.

Having a top manager on the energy management team helps to achieve consistent top management support.

### CREDIT STATEMENT

The organization's energy team shall include a member of top management.

Note: A member of top management is a person that commits themselves (or works directly for) to adopting an EnMS and does any of the following:

- Commits the organization to defining, establishing, implementing, and maintaining the energy policy;
- Appoints the management representative for, and approves the formation of, an energy management team;
- Provides resources needed to establish, implement, maintain and improve the EnMS and the resulting energy performance.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that a member of top management is on the energy team.
- ▶ Evidence that this member participates consistently in energy team meetings and activities.
- ▶ The organization shall show records related to this credit during the reporting period

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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## OS 2: Awards or Incentive Program for Energy

### POINTS

2

### INTENT

The purpose of this credit is to encourage the active participation and involvement of employees from across the organization in energy management and energy performance improvements.

### CREDIT STATEMENT

The organization shall establish, implement, and maintain an ongoing awards or incentive program for energy that recognizes and rewards employee accomplishments in energy management and/or energy performance improvements.

Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the credit is met at the central office.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of an awards or incentive program that recognizes and/or rewards three or more employee's accomplishments in energy management and/or energy performance improvements.

NOTE: Award and incentive programs may reside at various levels within the organization.

- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

### OS 3: Energy Professional Certifications

#### AVAILABLE POINTS

1 to 3

#### INTENT

To promote the organization's investment in energy management competence that meets a recognized standard.

#### CREDIT STATEMENT

During the achievement period, the organization shall have invested in the education and training or in the hiring of one or more certified professionals in the field of energy management. This education shall also include ongoing training required to retain certification by energy management professionals. The certified professionals shall have responsibilities for and be active in the energy management activities of the organization.

For this credit, professional certifications<sup>1</sup> accredited to ANSI 17024 and related to the practice of energy management are recognized:

- ▶ Certified Energy Manager, CEM [Association of Energy Engineers (AEE)]
- ▶ Building Commissioning Professional, BCxP [ASHRAE]
- ▶ Building Energy Assessment Professional, BEAP [ASHRAE]
- ▶ Building Energy Modeling Professional, BEMP, [ASHRAE]
- ▶ High-Performance Building Design Professional, HBDP [ASHRAE]
- ▶ Certified Practitioner in Energy Management Systems, CP EnMS [Institute for Energy Management Professionals (IEnMP)]
- ▶ Superior Energy Performance (SEP) Performance Verifier, SEP PV [IEnMP]
- ▶ Superior Energy Performance Lead Auditor, SEP LA [IEnMP]
- ▶ ISO 50001 Lead Auditor [IEnMP, others]

Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the credit is met at the central office.

<sup>1</sup> Accredited per ISO 17024

570

571

**CERTIFICATION CRITERIA**

572

The following evidence is required to determine if the organization satisfies the requirements of this credit:

573

574

- ▶ Evidence that the organization has employees with responsibilities in energy management that maintain professional certifications from the following list:

575

576

- Certified Energy Manager, CEM [AEE]

577

- Building Commissioning Professional (BCxP) [ASHRAE]

578

- Building Energy Assessment Professional (BEAP) [ASHRAE]

579

- Building Energy Modeling Professional (BEMP) [ASHRAE]

580

- High-Performance Building Design Professional (HBDP) [ASHRAE]

581

- Certified Practitioner in Energy Management Systems (CP EnMS) [IEnMP]

582

- Superior Energy Performance (SEP) Performance Verifier (SEP PV) [IEnMP]

583

- Superior Energy Performance Lead Auditor (SEP LA) [IEnMP]

584

- ISO 50001 Lead Auditor [Energy Professional International, IEnMP, others]

585

- Other credentials as approved by SEP Administrator

586

Points will be awarded per the table below.

Number of certified personnel to any of the above credentials	Points
1 employee	1
2 employees with one or more credential, or 1 employee with 2 or more credentials	2
3 or more employees with one or more credential, or 2 employees with 2 or more credentials	3

587

588

Note: If the facility is part of a multi-site SEP certification under a central office EnMS, then a central office employee's professional credential may count toward the number of certified personnel of the facility seeking SEP certification

589

590

591

- ▶ Evidence that the organization has invested in the education and training required for employees to obtain or maintain this certification, or evidence that the organization hired one or more certified professionals in the field of energy management, in the achievement period.

592

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594 NOTE: Professional certifications may reside at various levels within the organization,  
595 provided they support the site. A certified person located at a corporate level may support  
596 more than one site.

- 597 ▶ Evidence of management commitment to sustain investment in energy management  
598 competence when personnel changes occur by acquiring certified personnel, by adding  
599 resources, or by acting to certify other personnel on staff.
- 600 ▶ The organization shall show records related to this credit during the achievement or reporting  
601 period.

#### 602 RECERTIFICATION CRITERIA

- 603 ▶ Recertification criteria are the same as those for certification.
- 604
- 605

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## OS 4: Strategic Planning

### POINTS

2

### INTENT

To ensure that prioritized energy management needs, opportunities, and expectations are aligned with and incorporated into an organization's strategic priorities.

### ACTION STATEMENT

Organizational strategic plans shall establish and address energy management priorities and shall provide for resource allocations consistent with those priorities.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that the organizational strategic plans address energy management priorities and provide resources consistent with priorities.

NOTE: Examples of energy management priorities within organization strategic plans could include, but are not limited to:

- Energy performance improvement goals.
- Capital planning and budget allocations that include funding for energy projects
- Definition of how the energy management program and its objectives are integrated within various organization departments, such as, engineering, operations, maintenance, procurement, public relations, environmental safety and health, etc.

- ▶ The organization shall show records related to this credit during the reporting period.

Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the claim is met at the central office.

#### RECERTIFICATION CRITERIA

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## OS 5: Include Procurement Personnel on Energy Team

### POINTS

2

### INTENT

To enhance communication and interaction between the personnel that procure energy and significant energy-related equipment, systems and processes, and those that manage energy use, consumption, and performance.

### CREDIT STATEMENT

Personnel responsible for procurement activities of energy, and significant energy-related equipment, systems and processes shall:

- a) Participate at least quarterly in energy team meetings,
- b) Provide scheduled awareness training on energy, or significant energy-related equipment, system and process, procurement bids and contracts to the energy team, and
- c) Act as liaison to facilitate communication between energy and energy-related equipment, system and process procurement personnel and the energy team.

Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the credit is met at the central office.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of energy team meetings that include personnel with procurement responsibility at least quarterly.
- ▶ Evidence that the energy team is being updated or trained by procurement personnel on energy, or significant energy-related equipment, system and process, procurement bids and contracts.
- ▶ The organization shall show records related to this credit during the reporting period.

#### RECERTIFICATION CRITERIA

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## OS 6: Share SEP Experience and Data

### AVAILABLE POINTS

1 to 5

### INTENT

To encourage organization to publicize their SEP experience by completing the SEP Voluntary Cost/Benefit Form, providing additional data demonstrating the benefits and cost for the SEP program, and completing a case study

### CREDIT STATEMENT

The organization shall complete and submit the SEP Voluntary Cost/Benefit Form with the application for each certification cycle (1 point).

The organization shall submit the top-down regression model and associated energy data, as well as, the Automated Register of Implemented Actions (“Register”) for the bottom-up comparison that was used to quantify and verify the SEnPI (1 point).

The organization participates in the development of a SEP Administrator formatted case study based on the submitted SEP Voluntary Cost-Benefit Form, top-down regression model, and Register energy data (3 points).

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ The SEP Administrator accepts the submitted forms as complete and notifies the SEP Verification Body (SEP VB).
- ▶ The SEP Administrator accepts the submitted Regression Model and Register of Implemented Actions electronic files as complete and notifies the SEP VB
- ▶ Evidence that the organization signed a commitment with the SEP Administrator to participate in developing and reviewing a case study based on the submitted SEP Voluntary Cost-Benefit Form, top-down regression model, and Register energy data.

#### RECERTIFICATION CRITERIA

- ▶ Same criteria as certification

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### 2.2.2 Certification, Partnership and Reporting (CR)

External programs and partnerships assist the facility to accelerate energy performance improvement and to increase corporate commitment to the principles of continuous energy improvement. Facility energy teams and top management may seek external facility certifications to any one of the following:

- ▶ Receive public recognition (e.g., ENERGY STAR building or industrial plant certification);
- ▶ Report to a global environmental reporting system;
- ▶ Engage with their supply chain to implement ISO 50001 or SEP;
- ▶ Partner with a local, third party utility or energy efficiency program to support their ISO 50001 and SEP efforts; or
- ▶ Demonstrate superior energy performance through its ranking with a recognized external benchmark system.

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## CR 1: External Certification and Recognition Programs

### AVAILABLE POINTS

3 to 5

### INTENT

To provide credit for:

- Facilities that have certifications from nationally-recognized energy efficiency facility/building certification programs, or
- Facilities whose corporation publicly reports energy performance improvement to an energy efficiency recognition program.

### CREDIT STATEMENT

During the reporting period the facility shall be certified to any of the following certifications:

- ENERGY STAR building or industrial plant certification
- LEED new construction or LEED existing building, operation and maintenance certification
- Better Buildings or Better Plants in which the Corporate Partner reports its facility's energy performance improvement
- Other certification/recognition approved by the SEP Administrator

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies this credit:

- ▶ Evidence of facility energy efficiency certifications and recognition programs, specified above, that were valid during the reporting period (3 points for one certification or recognition program; +1 point for each additional certification or recognition program), with a maximum of 5 points.

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## 740 CR 2: Corporate Reporting and Reporting Systems

741

### 742 AVAILABLE POINTS

743 1 to 4

### 744 INTENT

745 To provide credit for facilities whose corporation participates in and has reported to a global  
746 environmental reporting system(s) and the SEP certification of the facility is reported in the  
747 corporation's annual and/or sustainability report.

### 748 CREDIT STATEMENT

749 During the reporting period the corporation shall have reported to any of the following corporate  
750 environmental reporting systems along with the achievement of SEP certification of the facility:

- 751 • Carbon Disclosure Project (CDP)
- 752 • Global Reporting Initiative (GRI)
- 753 • Dow Jones Sustainability Index (DJSI)
- 754 • Others approved by the SEP Administrator
- 755 • [[Others provided by SEP 2018 ad hoc group]]

756 During the reporting period the corporation shall report the SEP certification of the facility in the  
757 corporation's annual and/or sustainability report.

758 Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the credit  
759 is met at the central office.

### 760 MEASUREMENT AND VERIFICATION CRITERIA

#### 761 CERTIFICATION CRITERIA

762 The following evidence is required to determine if the organization satisfies this credit:

- 763 ▶ Evidence that the corporation of the facility seeking credit has reported to any of the above global  
764 environmental reporting systems. One point will be awarded for each reporting system with a  
765 maximum of three points. Evidence that the SEP certification of the facility seeking credit was  
766 reported as part of the most recent annual report of any of the above corporate environmental  
767 reporting systems.
- 768 ▶ Evidence that the corporation reported the SEP certification of the facility seeking credit within  
769 their annual and/or sustainability report; 1 point.

#### 770 RECERTIFICATION CRITERIA

- 771 ▶ Recertification criteria are the same as those for certification.

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### 772 CR 3: 50001 in Supply Chain

773

#### 774 AVAILABLE POINTS

775 3 to 8

#### 776 INTENT

777 To provide credit for an organization that promotes or requires ISO 50001 conformance or  
778 certification from its suppliers in its supply chain.

779

#### 780 CREDIT STATEMENT

781 The organization shall demonstrate that it is engaged with their suppliers in their supply chain, or  
782 vendors and service providers by promoting the adoption of ISO 50001 conformance or certification  
783 and receiving reporting from the supply chain suppliers, vendors and service providers on its  
784 energy management activities and energy performance improvements.

785

#### 786 MEASUREMENT AND VERIFICATION CRITERIA

##### 787 CERTIFICATION CRITERIA

788 The following evidence is required to determine if the organization satisfies the requirements of this  
789 credit:

- 790 ▶ 1 point for every supply chain supplier, vendor and service provider facility recognized as  
791 50001 Ready, or certified to ISO 50001 or SEP, up to 8 points.
- 792 ▶ Evidence of promoting adoption of ISO 50001 conformance or certification with suppliers,  
793 vendors or service providers
- 794 ▶ Evidence of supply chain supplier, vendor and service provider reporting of results of  
795 implementation of ISO 50001

796 Note: This credit can be claimed for all sites that are part of a multi-site SEP certification if the credit  
797 is met at the central office.

798

##### 799 RECERTIFICATION CRITERIA

- 800 ▶ Recertification criteria are the same as those for certification.

801

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## CR 4: Third Party Energy Efficiency Program Participation

### AVAILABLE POINTS

1 to 4

### INTENT

To provide credit for an organization that, as part of their ISO 50001 process, is engaging an external, third-party energy efficiency program.

### CREDIT STATEMENT

The organization shall demonstrate engagement on its ISO 50001 implementation with a third-party energy efficiency program implementer, including utility, state, municipal, Energy Service Performance Contract (ESPC), Utility Energy Service Contract (UESC for Federal agency) programs.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence of partnering with one or more external, third-party energy efficiency program to improve the facility's energy efficiency through the implementation of ISO 50001.
- ▶ Evidence of sharing an ISO 50001/SEP case study in cooperation with a local utility or third-party energy efficiency program(s) to promote ISO 50001 and SEP to other local/regional end users in some capacity (e.g., workshop, training, webinar, etc.).
- ▶ Evidence of ISO 50001/SEP being used as part of a state or regional energy efficiency program

Points will be awarded per the table below for activity conducted during the achievement period:

	Points
Active partnership with energy efficiency program implementer as evidenced by facility staff participating in external ISO 50001 training or technical assistance sponsored by the third-party	1
Through party implementer promotion of ISO 50001 or SEP case study results to other end users (e.g., workshop, training, webinar, etc.)	1
Receiving incentive dollars or financial payments of > \$25,000 that are applied directly to the implementation or maintenance of the facility's ISO 50001/SEP certification (not applied to capital improvements)	2

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828

**RECERTIFICATION CRITERIA**

829

- ▶ Recertification criteria are the same as those for certification.

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## CR 5: Superior Performance with Benchmarks

### AVAILABLE POINTS

2 to 4

### INTENT

To permit organizations to demonstrate superior energy performance through its ranking within a recognized external benchmark system.

### CREDIT STATEMENT

An organization shall demonstrate a ranking within the top levels of a nationally/internationally recognized external benchmark system and obtain the points listed in the table below.

Organization's Position Relative to Benchmark System Levels	Points
Top 25%	2
Top 10%	3
Top 5%	4

This credit addresses the organization's performance relative to the external benchmark. Claiming credit for CR 1 through ENERGY STAR building or plant certification can also qualify for this credit in terms of the ENERGY STAR benchmarking score. A recognized external benchmark system is typically developed by credible organizations such as industry associations, government entities, or consulting groups.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit:

- ▶ Evidence that the organization demonstrates a ranking within the top levels of a recognized external benchmark system.
- ▶ The organization must demonstrate this credit using data from the achievement period.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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### 2.3 Advanced Technologies (AT)

Advanced technologies have a long term impact on energy performance and support implementation of ISO 50001 and SEP. These advanced technologies broadly fall into three categories: on-site energy generation, submeters and sensors, advanced energy technologies. Any of these can significantly improve the SEnPI value for most facilities.

- On-site generation includes technologies such as combined heat and power and use of renewables can improve source energy efficiency and reduce greenhouse gas emissions
- Submeters and sensors include submetering, sensors, controls and other technologies that inform or optimize energy usage and system performance.
- Advanced energy technologies: Given the evolving nature of energy efficiency and energy performance technology development, facilities pilot or install advanced technologies that impact the energy performance of the SEUs.

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**AT 1: Combined Heat and Power****AVAILABLE POINTS**

1 to 8

**INTENT**

To promote utilization of combined heat and power (CHP) that will support a facility's energy reliability, energy security, energy efficiency, overall cost reductions of operations, and energy utilization of existing fuel sources.

**CREDIT STATEMENT**

The two means of gaining points within this credit include pre-installation analysis or operation. A facility may only claim points from one of the two categories. A maximum of 8 points is available for this credit:

- ▶ 1 to 3 points are available if the organization conducts analysis of the potential for CHP during the achievement period.
- or-
- ▶ 1 to 8 points are available based on the installed CHP system and its operation during the reporting period.

CHP Potential. Operations with simultaneous electricity and thermal energy use shall have completed an analysis of CHP potential. The Qualification Screening is a high level economic analysis (often performed by the DOE CHP Technical Assistance Partnerships (TAPs)<sup>2</sup>) taking into account energy use and prices. The CHP feasibility study is a detailed engineering analysis that includes proposed size of the CHP system, prime mover employed, heat recovery method and application, system efficiency, avoided cost, and expected investment. The Qualification Screening and/or Feasibility Study shall be conducted during the achievement period.

CHP Potential Points	Points
Qualification Screening for CHP	1
Feasibility Study for CHP	2

<sup>2</sup> See [energy.gov/CHP](http://energy.gov/CHP)



898 Operating CHP. For points to be awarded for an installed CHP system, the minimum CHP  
 899 efficiency, as calculated using the following equation:

901 CHP Efficiency (%) =

$$902 \quad 100 \left[ \frac{\text{Electrical/Mechanical Output (BTU)} + \text{Useful Thermal Output (BTU)}}{\text{CHP Fuel Input (BTU)}} \right]$$

905  
 906 Note: The fuel energy input shall be based on the higher heating value of the fuel.

907  
 908 Points as listed in the tables below shall be awarded based on the CHP operating hours and the  
 909 total system efficiency per the tables below. For operating hours the points are as follows:

Installed CHP Operating Hours	Points
operated between 2000 and 4000 hours in reporting period.	1
operated between 4000 and 6000 hours in reporting period.	2
operated > 6,000 hours in reporting period.	3

910  
 911 To receive points for CHP total system efficiency, the CHP system must operate for a minimum of  
 912 2,000 hours in the reporting period. Points for CHP total system efficiency are available as per the  
 913 table below.

Installed CHP Total System Efficiency	Points
>60%	1
>75%	3
>90%	5

#### 914 MEASUREMENT AND VERIFICATION CRITERIA

#### 915 CERTIFICATION CRITERIA

916  
 917 The following evidence is required to determine if the organization satisfies the requirements of this  
 918 credit:  
 919  
 920

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- 921
- 922
- 923
- 924
- 925
- 926
- ▶ Evidence of a CHP qualification screening or feasibility study completed during the achievement period.
  - ▶ Evidence a CHP system is operating per the requirements of the tables above. Evidence of determining CHP operating hours in the reporting period, and the overall efficiency of the CHP system.

927

#### RECERTIFICATION CRITERIA

- 928
- 929
- 930
- 931
- 932
- 933
- 934
- ▶ Evidence of a new or updated CHP qualification study or feasibility study completed within during the achievement period
  - ▶ Evidence a CHP system is operating per the requirements of the tables above. Evidence of determining CHP operating hours in the reporting period, and the overall efficiency of the CHP system.

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## AT 2: Use of On-Site Renewable and Recovered Energy

### AVAILABLE POINTS

1 to 8

### INTENT

To promote the installation of energy technologies that produce useful energy from renewable or recovered energy sources. These technologies lead to greater energy security, reliability, and improved economics as well as providing additional on-site benefits. While the SEnPI will measure the actual energy output of these energy technologies, this credit will look at the capacity of the installed system as a percent of average facility energy consumption rate.

### CREDIT STATEMENT

The two means of gaining points within this credit include pre-installation and operation. A facility may only claim points from one of the two categories. A maximum of 8 points is available for this credit:

- ▶ 1-3 points are available if the organization conducts analysis of the potential for renewables.
- or
- ▶ 4 to 8 points are available based on the installed renewable or recovered energy system(s) during the reporting period.

Renewable Potential. Facility conducts analysis of the potential for renewable or recovered energy systems. A qualification screening is a high level economic analysis taking into account energy use and prices. A feasibility study is a detailed engineering analysis that includes proposed size of the system, technology employed, system efficiency, avoided cost, and expected investment. The qualification screening and/or feasibility study shall be conducted during the achievement period.

Renewable & Recovered Potential Points	Points
Qualification Screening	1
Feasibility Study	2

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963 Installed Renewable and/or Recovered Energy Systems.

964  
965 Points (8 points maximum) will be awarded based on the Renewable and Recovered Fuels/Gases  
966 Capacity Factor which is calculated as follows:

967  
968 Renewable and Recovered Fuels/Gases Capacity Factor =  $A / B * 100 (\%)$

969  
970 A = Total nameplate power capacity of renewable and recovered fuel/gas systems (MM Btu per  
971 hour)

972  
973 B = Average facility source energy consumption rate (MM Btu per hour)

974  
975 A (MM Btu per hour) =

976  
977 [ sum of all renewable electrical nameplate capacity (kW) \* 3412 (Btu/kW) \* 3 (site to source  
978 multiplier)  $\div 10^6$  (million Btus/MMBtu) ] +

979  
980 [ sum of all renewable non-electrical nameplate capacity (MM Btu per Hour)] +

981  
982 [ sum of all recover fuels and gases (MM Btu per Hour) ]

983  
984 B (MM Btu per hour) =

985  
986 [ reporting period primary (source) energy consumption of all purchased and onsite renewable  
987 generated energy (MMBtu)<sup>1</sup> ]  $\div 8,760$  hours of operation per year

988  
989 Note 1: This number would be verified by the SEP Verification Body and reported to DOE on the  
990 Energy Performance Improvement Report in Column E, Row 95 (Excel spreadsheet).

991 Organizations may derived this total source energy number from the results of their ISO 50001/SEP  
992 Energy Review.

993  
994 Points will be awarded (maximum of 8 points) per the table below:

995 Calculations and point totals are determined as follows:

996

997  
998  
999

Renewable and Recovered Fuels/Gases Capacity Factor (%)	Points
5 to 20%	4
20 to 40%	5
40 to 60%	6
60 to 80%	7
>80%	8

1000  
1001  
1002  
1003  
1004  
1005  
1006

Renewable and recovered energy types include: Biomass, Geothermal, Solar, Wind, Bio-gas, Municipal Solid Waste, Waste Fuels, Waste Gases, and any fuel or gas recovered from within the Scope of the EnMS that are consumed to supply heat and/or power within the boundaries of the EnMS. The SEP Administrator may approved renewable and/or recovered energy sources not listed on this list.

1007  
1008

Note: This credit requires the actual consumption of the renewable and/or recovered energy on-site. The purchase of renewable or recovered energy credits do not qualify.

1009  
1010

#### MEASUREMENT AND VERIFICATION CRITERIA CERTIFICATION CRITERIA

1011  
1012

The following evidence is required to determine if the organization satisfies the requirements of this credit. Only one of these options can be claimed for this credit:

1013  
1014  
1015  
1016  
1017  
1018

- ▶ Evidence of a qualification screening for renewable and/or recovered energy (1 point) and renewable and/or recovered energy feasibility study (2 points) completed within the achievement period. The feasibility study will include details such as proposed size of the system, energy resource recovered, proposed energy equipment used, system efficiency, avoided cost, expected investment and potential investment cost off-sets, and tax points available.

1019  
1020  
1021

Note: Points for conducting these analyses cannot be claimed if points are claimed for installation and operation of qualifying systems. That means an organization cannot receive points for both the study and the qualifying system.

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- 1022 ▶ Evidence of installed renewable and/or recovered energy systems along with the tables  
1023 provided in the credit statement to determine if points, will be awarded for this credit (up to 8  
1024 points).

#### 1025 RECERTIFICATION CRITERIA

1026 Only one of these options can be claimed for this credit:

- 1027 ▶ Evidence of a new or updated qualification screening for renewable and/or recovered  
1028 energy (1 point) and renewable and/or recovered energy feasibility study (2 points)  
1029 completed within the achievement period. The feasibility study will include details such as  
1030 proposed size of the system, energy resource recovered, proposed energy hardware used,  
1031 system efficiency, avoided cost, expected investment and potential investment cost off-sets  
1032 and tax points available.
- 1033 ▶ Evidence of installed renewable and/or recovered energy systems along with the tables  
1034 provided in the credit statement to determine if points, will be awarded for this credit (up to 8  
1035 points).
- 1036
- 1037

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### AT 3: Sensors and Submeters

#### AVAILABLE POINTS

1 to 5

#### INTENT

To improve energy performance by providing enhanced data collection through submetering and sensors and controls that automate and manage the energy used within the facility's SEUs.

#### CREDIT STATEMENT

To receive points for this credit, there are two options (both may be claimed). There is a maximum of 5 points for this credit.

The organization shall receive points for demonstrated submetering of the facility's SEUs. Data from permanent submeters shall be analyzed at least monthly and shall be included in the energy review and the measurement plan.

Impact of % total facility energy consumption or SEUs:	Points
Submeters installed on >50% of facility energy consumption	2
Submeters installed on >75% of all SEU energy consumption	3

Additional points will be awarded for the installation and utilization of smart sensors and/or control systems to more effectively manage energy by improving operational control procedures and thus improve facility-wide energy performance improvement. Smart sensors and controls systems include systems that are automated, wireless, web-enabled or remote controllable operations provide a service, or function above, with greater impact than traditional sensors or controls.

Impact of % total facility energy consumption or SEUs:	Points
>50% of total SEU energy use managed by sensors or controls	1
>75% of total SEU energy use managed by smart sensors or controls	2

The sensors, controls or submeters need to be in place at least 6 months of the reporting period. For the purposes of this credit:

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- 1064
- A submeter is defined as a fixed instrument or meter that continuously collects energy data.
- 1065
- A sensor is an instrument that detects or measures a physical property(ies) that can influence
- 1066
- and determine improved operational control procedures.
- 1067
- A control is an instrument that can automatically react and adjust operation to signals from
- 1068
- sensors to optimize energy performance.
- 1069
- Smart sensors and control systems include systems that are automated, wireless, web-
- 1070
- enabled or remote controllable operations.

1071

## 1072 MEASUREMENT AND VERIFICATION CRITERIA

### 1073 CERTIFICATION CRITERIA

1074 The following evidence will determine if the organization satisfies the requirements of this credit:

- 1075
- ▶ Evidence of sensors that enable enhanced operational control procedures.
- 1076
- ▶ Evidence of submeters are used for collecting energy consumption data.
- 1077
- ▶ Evidence that the sensor and/or submetered data are gathered and analyzed at least monthly.
- 1078
- ▶ Evidence that the sensor and/or submetered data are included in the energy review and
- 1079
- measurement plan.
- 1080
- ▶ The organization shall show records related to this credit indicating the sensors and/or submeters
- 1081
- are in place during at least 6 months of the reporting period.
- 1082
- ▶ Credits are awarded per the table above.

1083

### 1084 RECERTIFICATION CRITERIA

- 1085
- ▶ Recertification criteria are the same as those for certification.

1086

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## AT 4: Other Advanced Technologies

### AVAILABLE POINTS

1 to 4

### INTENT

To give credit for using advanced energy technologies. Given the evolving nature of energy efficiency and energy performance technology development, SEP will award points to facilities that pilot or install other advanced technologies outside of aforementioned criteria that have impact on energy performance of the SEUs.

### CREDIT STATEMENT

The organization shall achieve energy performance improvement by implementing emerging technologies and processes that are innovative and beyond the “business as usual” state of other sites in their industry sector (based on their two digit NAICS code). These technologies and processes cannot be addressed elsewhere within the SEP Scorecard.

In the organization’s SEP Application, the following information shall be submitted for each innovative action for which this credit is requested:

- ▶ Description of the emerging technology.
- ▶ Intent of the emerging technology action.
- ▶ Metric utilized to determine improvement.
- ▶ Energy performance improvement achieved.
- ▶ Justification for credit acceptance.

Credit for emerging technology shall be approved by the SEP Administrator. One to five points shall be awarded for each documented and accepted innovative action. The criteria will be provided by the SEP Administrator.

### MEASUREMENT AND VERIFICATION CRITERIA

#### CERTIFICATION CRITERIA

The following evidence is required to determine if the organization satisfies the requirements of this credit.

- ▶ Evidence of written approval by the SEP Administrator for measurement and verification criteria and potential points to be awarded.

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- ▶ Evidence of description and intent of the emerging technology
- ▶ Evidence of reported energy performance improvement.
- ▶ Evidence of performance improvement metric including data, collection frequency, and trends
- ▶ Evidence technology or strategy has been deployed.

#### RECERTIFICATION CRITERIA

- ▶ Recertification criteria are the same as those for certification.

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**ANNEX A: Revision History**

Title	Date	Version
Superior Energy Performance® Scorecard		4.0
Superior Energy Performance® Scorecard	11 July 2016 (R1)	3.0
Superior Energy Performance™ Industrial Best Practices Scorecard	5 December 2012	2.0
Superior Energy Performance™ Industrial Best Practices Scorecard	9 November 2011	1.0

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