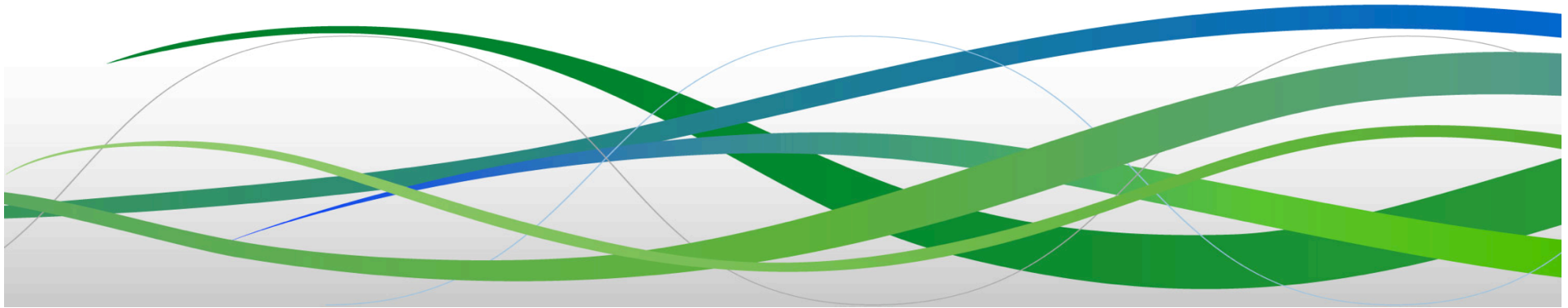


Continuous Improvement of Energy Performance: How policy makers can support ISO 50001 implementation for industry



Industrial Continuous Improvement Pilot Program (ICIPP)

Program outline presentation

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Presentation chapters

- Energy Management Systems Standard SEP
- Industrial Continuous Improvement Pilot Program (ICIPP)
 - Overview and timetable
 - Target groups and eligibility
 - Incentives
 - Consultancy assistance

Superior Energy Performance I

- The Superior Energy Performance (SEP) program is a market-based, ANSI/ANAB-accredited certification program
- ISO50001 certification is required for SEP certification
- Whereas ISO 50001 certification doesn't require actual energy savings, SEP does
- Three levels of performance: Silver, Gold and Platinum



Superior Energy Performance II

Certification Requirements



ISO 50001 is a foundational tool that any organization can use to manage energy.

ISO 50001

Components in place:

- Baseline
- Policy
- Plan
- Team/Leader



Superior Energy Performance

Single facility ISO 50001 conformance with validated energy performance improvement

ISO 50001



Superior Energy Performance III

Levels of certification

Performance Characteristics		Silver	Gold	Platinum
Energy Performance Pathway	Energy Performance Improvement	Meets 5% energy performance improvement threshold over the last 3 years.	Meets 10% energy performance improvement threshold over the last 3 years.	Meets 15% energy performance improvement threshold over the last 3 years.
	Energy Performance Improvement	Demonstrates an energy performance improvement of 15% or more over the last 10 years.	Demonstrates an energy performance improvement of 15% or more over the last 10 years.	Demonstrates an energy performance improvement of 15% or more over the last 10 years.
Mature Energy Pathway	Score on Best Practices Scorecard	<ul style="list-style-type: none"> •Meets a score of at least 35 and up to 60 out of 100 total points for Best Practices Scorecard •Minimum of 25 points required for the energy management best practices. 	<ul style="list-style-type: none"> •Meets a score of at least 61 and up to 80 out of 100 total points for Best Practices Scorecard •Minimum of 25 points required for the energy management best practices and 10 for energy performance. 	<ul style="list-style-type: none"> •Meets a score of at least 81 out of 100 total points for Best Practices Scorecard •Minimum of 25 points required for the energy management best practices and 10 for energy performance.
	<i>Includes credits for energy management best practices and energy performance improvements beyond 15% over the last 10 years..</i>			

Industrial Continuous Improvement Pilot Program (ICIPP)

- Overview and outline
- Target groups and eligibility
- Milestones and incentives
- Timetable

Why does the utility do that

- Obligation under state law
- Marketing material that that is beneficial to utility, e-mails, presentations, flyers, etc.
- Create image of utility as a future oriented company, taking care of customer's needs, being on the forefront of sustainable energy developments with the ultimate goal of retaining customers, winning new customers and showing a proactive sustainability culture.
- Building up better customer relations
- Building up better knowledge in the field of Energy Management Systems as well as related standards.
- Empowers a company-wide, systems-oriented approach
- Helps to justify industrial and commercial energy efficiency program investments, including permanent operational changes, to public utility commissions.
- Generates future projects



Industrial Continuous Improvement Pilot Program

Overview

- Creation of this new program to help industrial facilities prepare
 - for ISO 50001 and/or SEP certification , or
 - for ISO 50001 adaptation
- The pilot is available to a limited number of participants who meet the eligibility criteria and overall pilot goals.
- Incentives are additional to any offered by other programs.
- Application via website or by e-mail



Target group and eligibility criteria

Mandatory requirements

- Industrial, producing organizations
- Support at the officer level of a dedicated energy policy and implementation of energy saving strategies as integral part of organization's management and operations
- A senior manager is/will be appointed as Energy Manager
- Not already be working towards certification

Target group and eligibility criteria

Consumption requirements

- Either Customer of utility with electricity consumption > 2,000 MWh/year and interested in achieving ISO50001 and/or SEP Certification (certification path)

If a gas-only customer of CE, then customers using 20,000 mcf annual or greater are required to pursue the certification path. If an electric and gas customer of CE, then the electric thresholds apply.

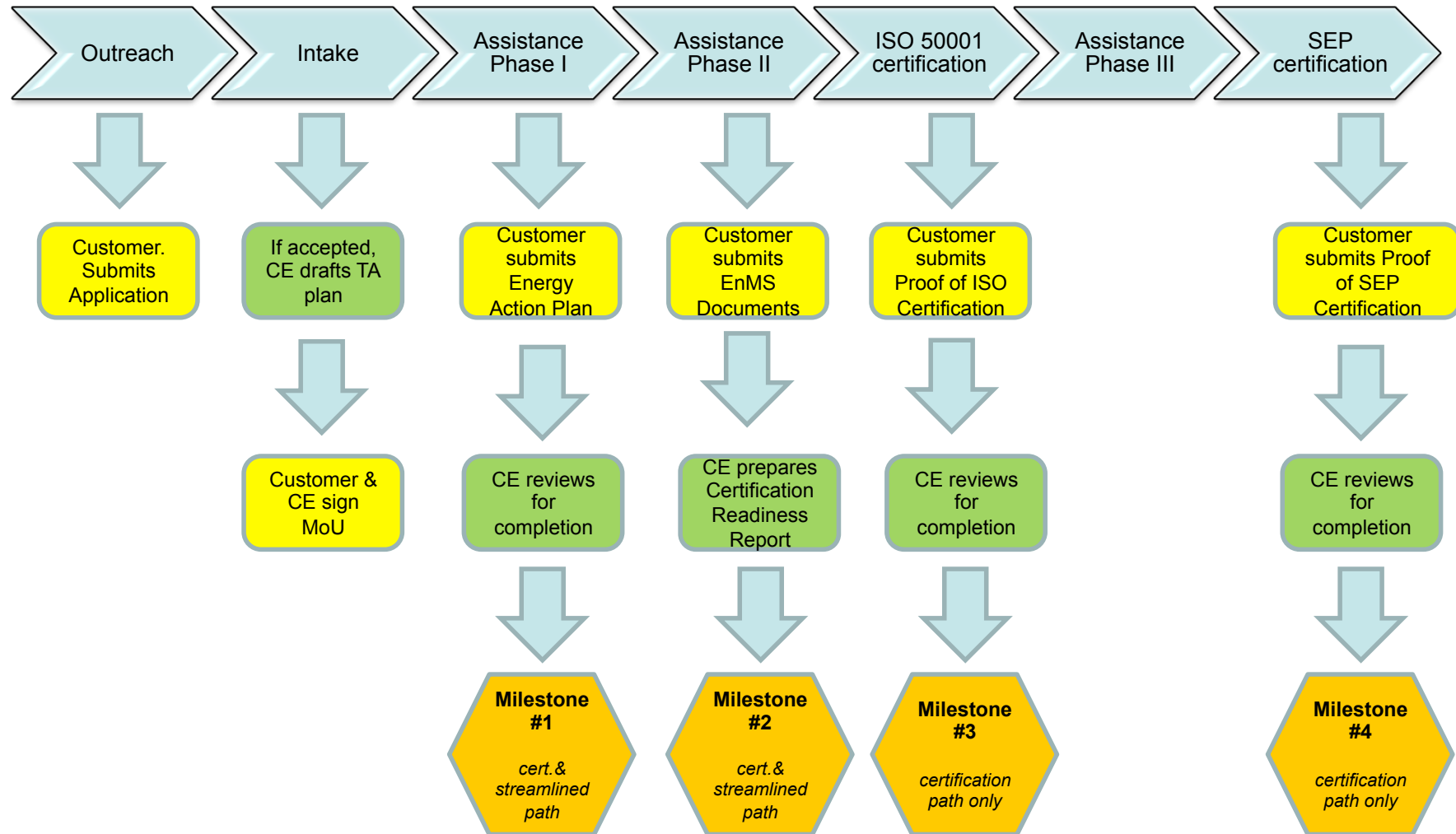
- Or CE Customer with electricity consumption 300-2000 MWh/year and interested in the streamlined program (streamlined path)
- Committed to invest time and resources to structurally lower energy consumption and related costs, with goal of achieving at least 5% savings in each of the first 3 years

Outreach steps and materials

Stage	Materials	Sample Activities
Building Awareness	Flyer Website	Phone existing contacts E-mail –single or blast Network at meetings, or other events Cold call from target list
Generating Interest	Factsheets <ul style="list-style-type: none"> - testimonials - standards - resources and links - applicable laws 	Follow up calls to likely prospects Follow up on referrals from CAMs Initial meeting/call with energy manager
Creating Desire	Outreach Presentation Tools <ul style="list-style-type: none"> - EnMS checklists - Factsheet: EnPIs - 14001 migration 	Presentation to energy manager, COO Education, sample tools/materials Begin to evaluate eligibility Identify other relevant programs
Taking Action	Application Intake Checklist	Scoping meeting with energy manager Limited technical assistance Either accepted or referred to other CEBS program

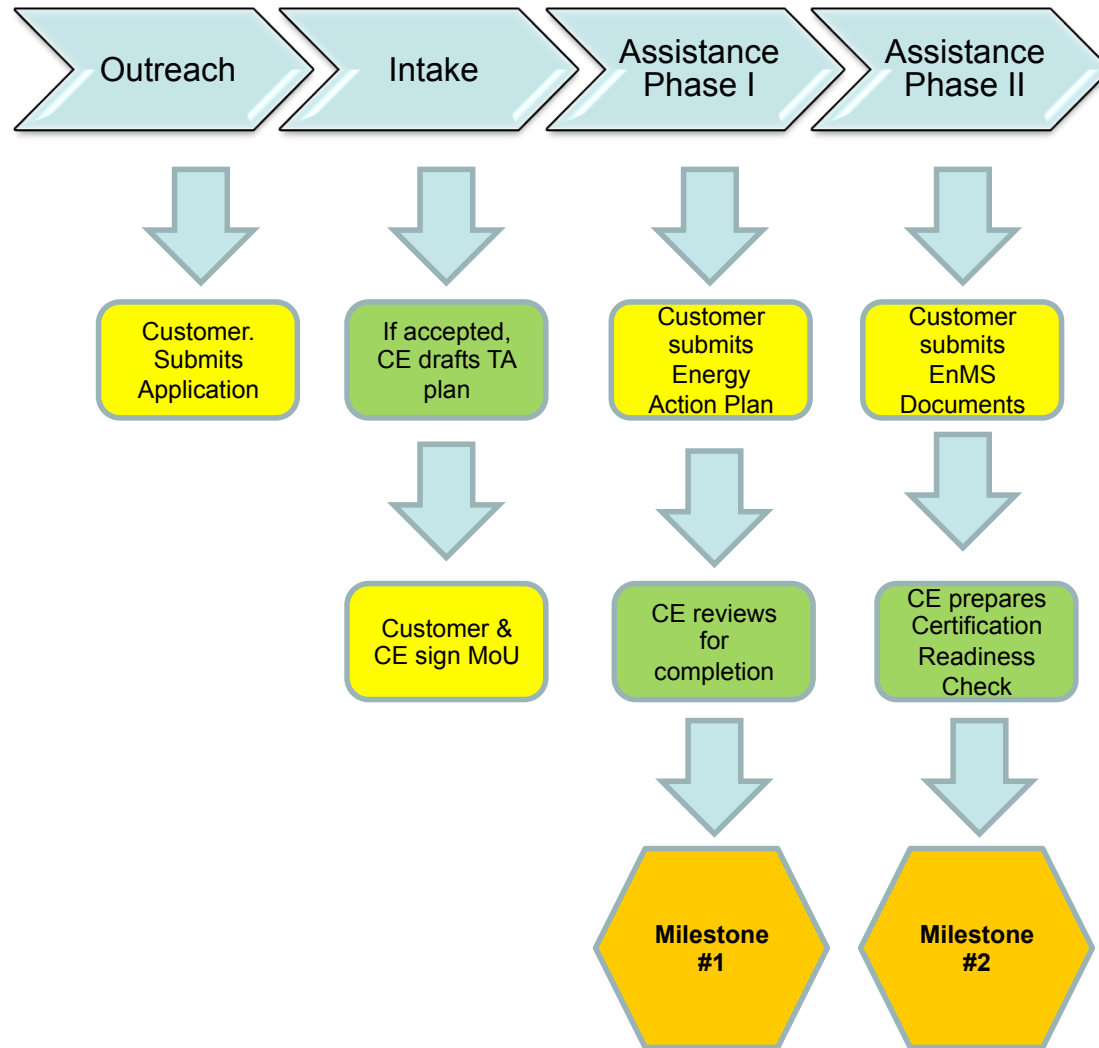
Pilot project outline

steps, milestones, incentives for large industries



Pilot project outline

Steps, milestones, incentives for small and medium sized industries



Milestones and benefits

Milestones Achieved	Certification Path Incentives (Required for >2,000 MWh/yr)	Streamlined Path Incentives (Designed for 300-2,000 MWh/yr)
1. Energy Action Plan approved	\$7,500	Up to \$ 5,000 for Energy Efficiency investments
1. Certification Readiness Report issued	\$7,500	
1. ISO 50001 certification received	\$7,500	n.a.
1. Superior Energy Performance certification	\$7,500	n.a.

Incentive milestones and requirements

The program requires successful implementation of at least 70% of the agreed number of measures, with at least 90% of the total savings value identified. Progress monitoring occurs after 6, 12 and 18 months, unless otherwise specified in Technical Assistance Plan. Total investments in equipment or installation work should reach at least \$5,000 in the first 12 months of the program.

Customers have to submit documentation at each milestone, which will be reviewed by program staff. The utility has the ultimate determination on whether the documentation provided sufficiently demonstrates successful completion in order to authorize incentive payment.



Technical Assistance offered

- A customized technical assistance plan will be developed for each participant focusing on the highest priority areas.
- Activities that are provided include:
 - EnMS assessment, including organizational and process gaps, measurement and IT scheme gaps
 - Training, Energy Policy, Energy Performance Indicators, EnMS Action Plan, EnMS handbook
 - Energy audit with energy baseline and savings potentials
 - Energy Review, including organizational and process gaps, measurement and IT scheme gaps, energy consumption benchmarks
 - Consultancy on EnMS implementation and operation
 - Certification Readiness Check
- Review progress and reconfirm commitment to proceed every 3 months

Program EnMS training and coaching

- Company staff will be trained at the start of the implementation phase. There is two training units, one for the Energy Team and one for the Energy Manager. For time efficiency reasons both trainings may be combined to one session.
- The training will complete the knowledge and understanding of EnMS, giving insight to the standards, their requirements and their implementation.
- The training will coach the participants how to use the tools and templates provided in the context of the pilot program.
- The training should include an interactive tour through the company helping to understand the energy situation.
- At the end of the training in more detail it is discussed what the consultancy assistance should look like and how the company can organize its own activities.

Program EnMS workshop

To prepare for a successful attainment of milestone 1, a workshop will be one month after the gap analysis was issued by the consultant.

In the workshop

- The results of the Energy Audit and Energy Review will be discussed
- Customer progress will be checked (performance improvement)
- Coaching on the long list of measures will be provided
- Consultancy on the use of program tools and templates will be provided
- It will be explained what documents are required from the customer, to be submitted to the consultant for the Certification Readiness Check
- Coaching on further progress up to milestone 2 will be provided

The workshop is a one day event. All internal stake holders of the customer should be involved, including the CEO. The number of participants will typically be up to around 10.

Milestone documentation

Milestone#1: Energy Action Plan

Addresses the following, as consistent with the ISO 50001 standard, at a minimum:

1. Energy Policy and Energy Performance Indicators with benchmarks.
2. Summary table of how items in the gap analysis were addressed.
3. Intended communication, reporting, reviewing, monitoring, and training processes.
4. Individual Action Plans for each technical, organizational and procedural measure intended to be executed.
5. Overview of Action Plans (addressing measures executed in the past, measures intended, and not intended to be realized) with summarized key indicators
6. Savings targets
7. Other documentation that demonstrates the current status of the EnMS (will vary by customer).
8. Confirm commitment to certification for customers on Certification Path



Milestone documentation

Milestone#2: Certification Readiness Check

Includes, as consistent with the ISO 50001 standard, at a minimum:

1. Energy Action Plan as described in Milestone #1 above
2. Summary table of how items in the Energy Review analysis were addressed
3. Action Plans implementation updates since Energy Action Plan was submitted
4. All other EnMS activities executed since Energy Action Plan was submitted
5. Savings balance, i.e. an overview of the overall and incremental energy savings attained to date through EnMS development, differentiating the savings that would have occurred anyway (e.g. projects previously planned)
6. Other documentation not specifically mentioned here that demonstrates the current status of the EnMS (will vary by customer)
7. Readiness statement: Confirm commitment to certification for customers on Certification Path



Milestone documentation

Milestones#3&4: Certifications Achieved

Customer will provide copies of the proof of certification that is supplied by certifying body for ISO 50001 or SEP certification, as appropriate.



Thank you for your attention!

Questions?

