

# Achieving Superior Energy Performance: Certified Plants

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*An interagency collaboration to improve energy management  
performance in partnership with U.S. industry*

# Why certify plants for energy efficiency?

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- Introduces a standardized approach to
  - identifying,
  - developing,
  - documenting, and
  - reporting on energy efficiency progress

that provides transparency that currently doesn't exist.

# Planned Purpose

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- ❑ Provide a more consistent approach to industrial energy efficiency that is technically sound, yet flexible;
- ❑ Integrate energy efficiency improvements into existing industrial management systems for continuous improvement; and
- ❑ Position participating plants to be recognized by the financial community for superior energy management practices and their contribution to climate change mitigation.

## Four elements proposed for plant-level certification

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- ❑ Energy Management Standards
- ❑ Standardized Assessment Protocols for industrial systems (such as pumping, compressed air, steam, process heating) based on best practices identified over years of work by DOE with industry
- ❑ Certified Practitioners who can provide technical assistance with implementation of the energy management standard and/or system protocols, and
- ❑ Measurement and validation of energy savings

# Business Benefits

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- ❑ Reduce emissions without negative effect on operations
- ❑ Continue to improve energy use/product output over time
- ❑ Enhance shareholder value
- ❑ Gain broad recognition as a good corporate citizen
- ❑ Improve corporate opportunities for utility and state financial incentives through documentation/reporting
- ❑ Potentially for preferred supplier status
- ❑ Potentially set direction for international policy/programs

# How Could a Plant Become Certified?

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- ❑ Demonstrate compliance with the *energy management standard*;
- ❑ Identify energy intensity performance improvement opportunities or demonstrate best practices through application of *system assessment protocols*;
- ❑ Measure improvement by implementing identified opportunities and use recognized *methodologies to validate resulting energy savings*;

# What type of reporting is envisioned?

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- Provide certified documentation of plant energy savings and energy intensity improvement (%), and
- Re-certify every 3 years by documenting energy savings projects and continuous improvement of 5% or greater in energy intensity within the re-certification period.

# ANSI Energy Management Standard

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## Planned Purpose

- ❑ Provide a framework for integrating energy efficiency into existing industrial management systems for continuous improvement

## Business Benefits

- ❑ Develop a baseline of energy use
- ❑ Actively managing energy use and costs
- ❑ Reduce emissions without negative effect on operations
- ❑ Continue to improve energy use/product output over time
- ❑ Document savings for internal and external use

# ANSI Energy Management Standard

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## Needed Tools

- ❑ Modify existing ANSI energy management standard

## Issues to consider:

- ❑ Documentation requirements
- ❑ Compatibility w/existing management practices



# Standardized Assessment Protocols for industrial systems

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## Planned Purpose

- ❑ Create a market standard for industrial system assessments
- ❑ Introduce greater reliability and recognition of system energy efficiency opportunities
- ❑ Identify savings opportunities to meet continuous energy efficiency improvement goals

## Business Benefits

- ❑ Easier to secure internal approvals for assessment services
- ❑ Assurance that recommendations are sound and will produce predicted results
- ❑ Energy efficiency projects with attractive paybacks using commercially available technology

# Standardized Assessment Protocols for industrial systems

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## Needed Tools

- ▣ System Assessment Protocols (based on existing body of knowledge on system assessments and expert guidance)

## Issues to consider:

- ▣ Application requirements for energy-efficient plants



# Certified Practitioners

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## Planned Purpose

- ❑ Create a market standard for assessment services based on training and independent validation of requisite skills

## Business Benefits

- ❑ Easier to identify qualified experts
- ❑ Companies may choose to have internal staff certified



# Certified Practitioners

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## Needed Tools

- ❑ Training and testing program for certification (build on Qualified Specialist & ESA Experts training)

## Issues to Consider:

- ❑ Requirements to maintain certification
- ❑ Conditions to de-certify



# Plant Certification for Energy Efficiency

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## Planned Purpose

- ❑ Validate energy savings achievements
- ❑ Validate energy management processes
- ❑ Positions plant to be recognized by the financial community for superior management practices

## Needed Tools

- ❑ Business plan for certifying body
- ❑ Well-vetted value proposition for industry
- ❑ Documenting/reporting tools

# Plant Certification for Energy Efficiency

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Issues to consider:

- ❑ Cost of certification
- ❑ Documentation requirements
- ❑ Application and re-certification requirements
- ❑ Allow certification at both plant and corporate level?
- ❑ Acceptance by utilities and states for financial incentives
- ❑ Concerns about regulations
- ❑ Compatibility w/ ISO and programs in the EU and other countries