

## **ITP Solutions**



### Free Energy Assessments

For any size plant

#### Free Tools for Energy Analysis

Steam, process heat, fans, pumps, motors, refrigeration, CHP, data centers

### **Quick Plant Energy Profiler**

Generate a carbon baseline

#### **Attend Training Sessions**

Online and in-class

#### **Technical Resources**

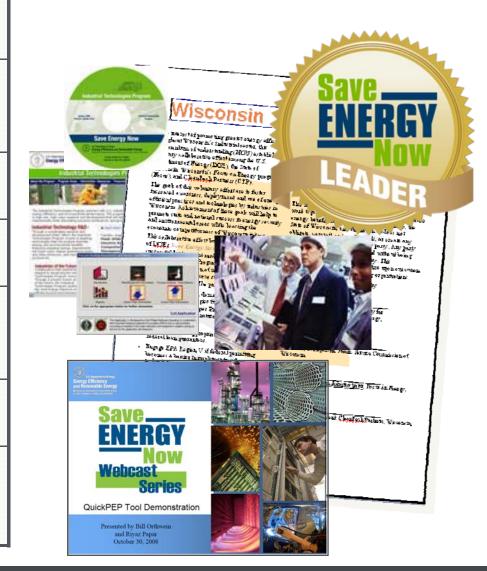
Fact sheets, manuals, case studies and project databases, industry sourcebook

## New and Emerging Technologies

200 proven EE technologies

### Funding & Other Assistance

R&D solicitations, Technical Assistance, State Incentives & Resources Database



# Department of Energy Industrial Technologies Program (ITP)



Three Part Strategy
Work together as a
team through the
Save Energy Now®
initiative to achieve
ITPs mission

Partnership
Development &
Deployment

- Save Energy Now® LEADER Companies
- Save Energy Now® ALLY Organizations

Technologies Research & Development

Energy Services

- Industry-specific
- Crosscutting

- Industry Standards
- Training

- Tool Development
- Assessments

Mission: ITP leads the national drive to reduce energy intensity and carbon emissions by changing the way industry uses energy.

**Goal**: Drive a 25% reduction in industrial energy intensity in the next ten years.

## **National Initiative to Reduce Energy Use**



#### Save Energy Now: An Industrial Sector National Initiative

**GOAL**: Drive a 25% reduction in industrial energy intensity by 2020



- The Energy Policy Act of 2005 (EPAct) has mandated that 25 percent of energy be saved in 10 years. The Save Energy Now program was established to achieve these goals.
- Encourages industry to voluntarily reduce its energy usage in a period of volatile energy prices and uncertain supplies by partnering with all U.S. manufacturing facilities.
- Utilizes interagency collaborations and relationship with industry partners to fulfill this goal.

"Energy intensity means the primary energy consumed for each unit of physical output in an industrial process"

-- As defined in *EPAct 2005*, Section 106

# **Energy Savings Assessment**



#### **All Industries**

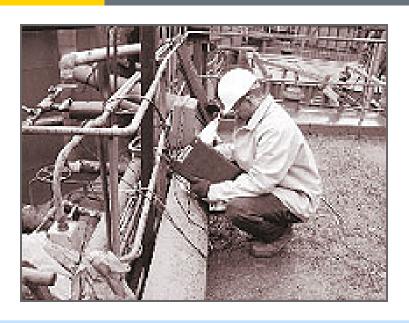
- 3-day assessments focusing on a single energy system in largest U.S. plants
- 820 assessments completed since 2006
- Average plant found ways to reduce energy bill by about 8%

Identified energy cost savings: \$1,063 million

Total potential carbon dioxide emissions reduction:

8.9 million metric tons

 Nearly 40% of recommendations implemented or in process



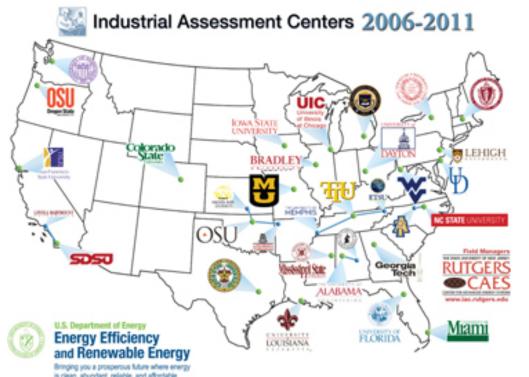
"Save Energy Now has helped us find creative ways to save energy and reduce carbon emissions in our manufacturing processes -- all while delivering the same great products our consumers love."

-- Dick Frohmader, Program Manager for Global Energy, Kraft Foods

## **Industrial Assessment Centers**



- DOE's 26 university-based Industrial Assessment Centers (IACs) train engineering students for careers in industrial energy efficiency
- IACs serve 300 plants per year and typically identify savings of over \$148,000/plant with average implemented savings of over \$72,600/plant
- Database of over 14,000 assessment results: <a href="http://iac.rutgers.edu/database">http://iac.rutgers.edu/database</a>





# Save Energy Now® Services





Goal: Drive a 25% reduction in industrial energy intensity in 10 years



#### **Tools**

- Process Heating
- Steam Systems
- Plant Energy Profiler
- Motors & Pumps
- Fans

#### **Standards**

 Plant Certification



#### **Training**

- Basic
- Advanced
- Qualified Specialist

#### **Information**

- Website
- Information Center
- Tip Sheets
- Case studies
- Webcasts
- Emerging Technologies







#### **Assessments**

 Energy Savings Assessments

Industrial **Assessment Centers** 







# Save Energy Now® LEADER – A Corporate Commitment to Meet the National Goal



A new public-private partnership dedicated to leading the way to a noticeably more energy efficient industrial sector with a smaller carbon footprint

<u>Framework:</u> ITP will provide enhanced access to technical resources and financial assistance to "prime the pump" for private sector investment in efficiency.

Drive a 25% Reduction in Industrial Energy Intensity by 2020



A 25% reduction in industrial energy intensity is equal to the total energy consumed in the State of California in all sectors each year— 8.4 quads annually.

## **LEADER Requirements**



- Pledge to adopt a goal to reduce energy intensity 25% or more over 10 years
  - Designate an energy manager
  - Develop an energy intensity baseline
  - Develop an energy management plan
- Take steps to reduce energy intensity and reduce carbon emissions
- Report energy intensity data and achievements annually to DOE
- Assess operational and financial feasibility





## **LEADER Benefits**



- ITP will provide tailored technical assistance:
  - Develop the energy baseline
  - Develop an energy management plan
  - Access to a Technical Account Manager
- Priority access to plant assessments and emerging advanced technologies
- Resources and tools for energy analysis
- Training workshops on financing options, advanced technology, energy management, software tools, etc.
- Materials for industrial supply chains
- National recognition for commitments and progress in achieving goals



## **LEADER Customized Services**





#### Receive:

- DOE Representative
- Individual Technical Account Manager
- No-cost expert Technical Assistance
- Recognition as a LEADER

# DOE Representative contacts the Energy Manager

#### **Develop customized plan:**

- Guide to how to get the most out of the Save Energy Now portfolio
- Access to DOE Contractor Assistance
- Track reporting requirements
- Arrange for delivery of services
  - Energy assessments
  - Consultation with Energy Expert

## Work with a DOE Energy Expert

#### Provide technical assistance with:

- Developing a useful energy baseline and tracking method
  - Tailored to the plant's operations and product output
  - Satisfies the reporting requirements
- Writing an energy management plan
- Developing engineering feasibility studies to help implement projects

# Save Energy Now® ALLY





- Leverage collaborations and partnerships to expand outreach, resources, and impact
- Build a nationwide network of partners to provide resources and incentives to help industry meet goals

# Save Energy Now® ALLY



- Based on ongoing research, ITP is pursuing new ALLY Organizations
  - States
  - Trade Associations & Allies
  - Suppliers & Vendors
  - Public officials
  - Utilities gas, electric, water
  - Regional Affiliations
  - Universities & Colleges
  - Federal Agencies
  - National Laboratories
  - NGOs



## **Contact Information**



Energy Efficiency and Renewable Energy Information Center:

1-877-337-3463

eereic@ee.doe.gov

http://www1.eere.energy.gov/industry/

# Thank You!

Scott.Hutchins@ee.doe.gov

Office: 202-586-0670

Mobile: 202-586-0670

14