Save ENERGY Now

U.S. DEPARTMENT OF ENERGY LEADER INDUSTRY PARTNERSHIP

IAC Student Meeting

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Industrial Technologies Program

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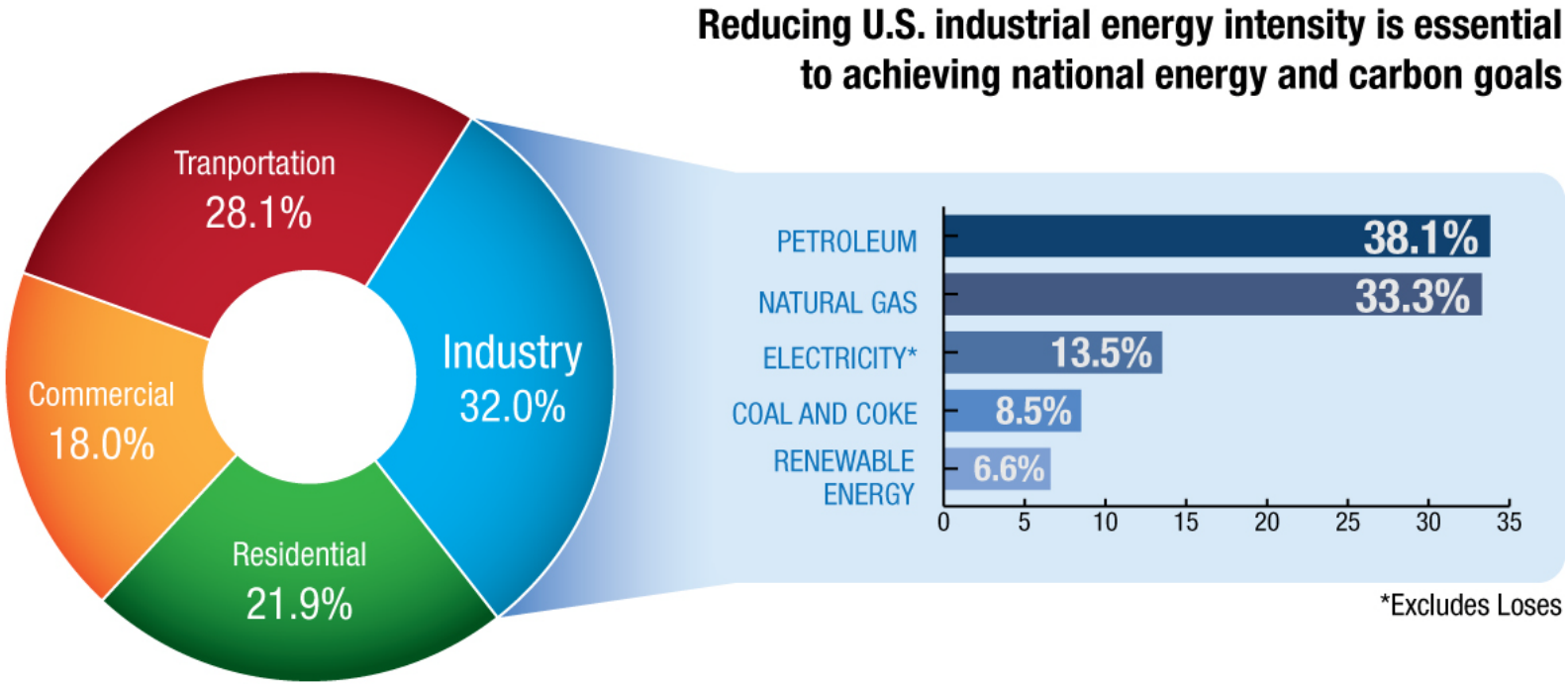
U.S. Manufacturing Sector

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

- Employs ~12 million people
- U.S. industry output in 2006: $2.6 trillion
- Spends ~$200 billion per year on energy
- Every million dollars in energy cost savings has the potential to create approximately 16–17 new jobs.



Potential Demand Reduction

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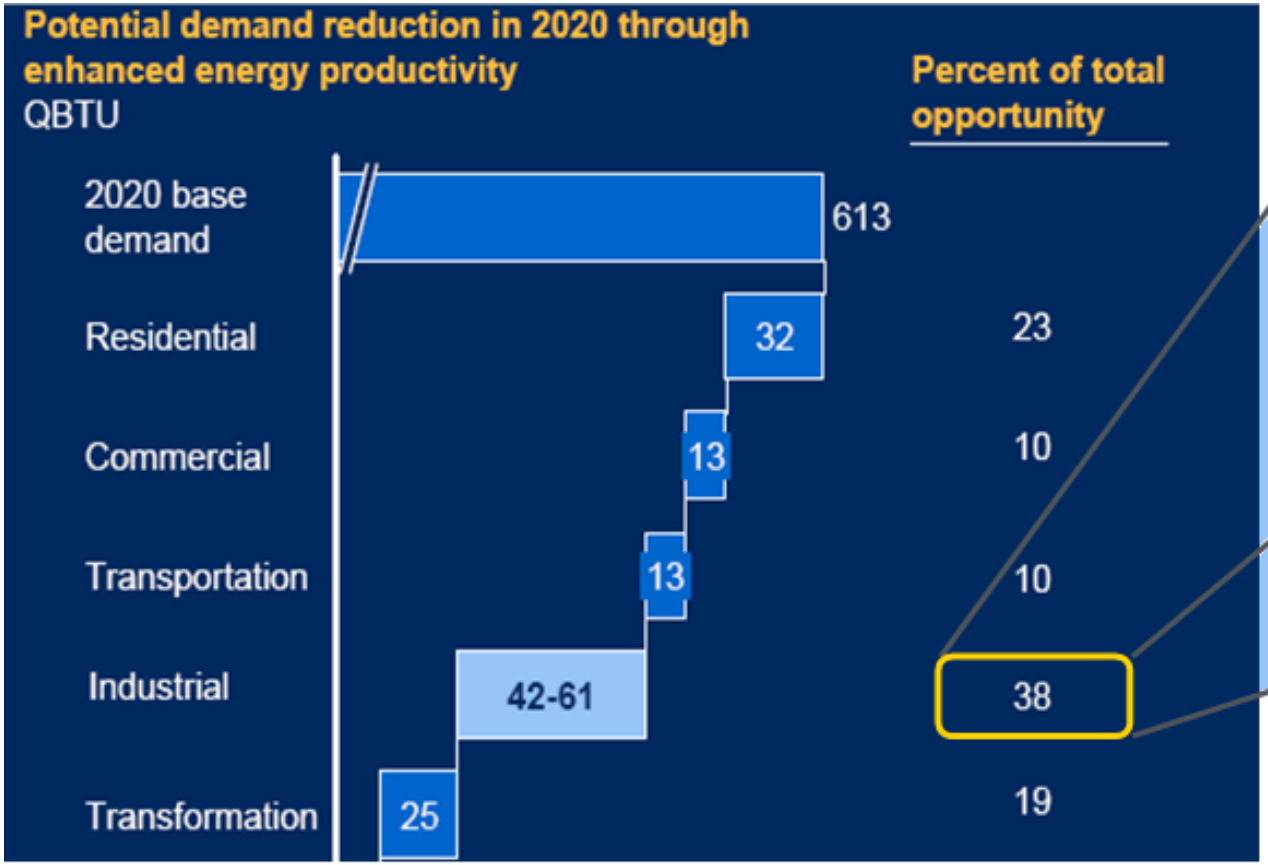
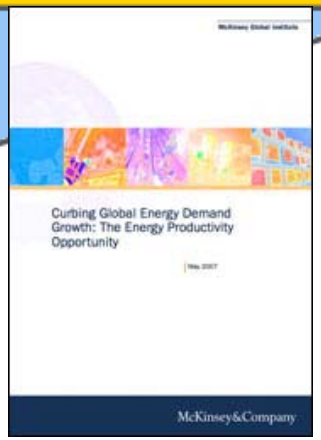
Energy Efficiency is the Most Cost-Effective Carbon Reduction Option

- Stated in an Independent Study by McKinsey & Company



Industry represents 38% of the total global opportunity for reducing carbon through energy efficiency



Industrial Technologies Program

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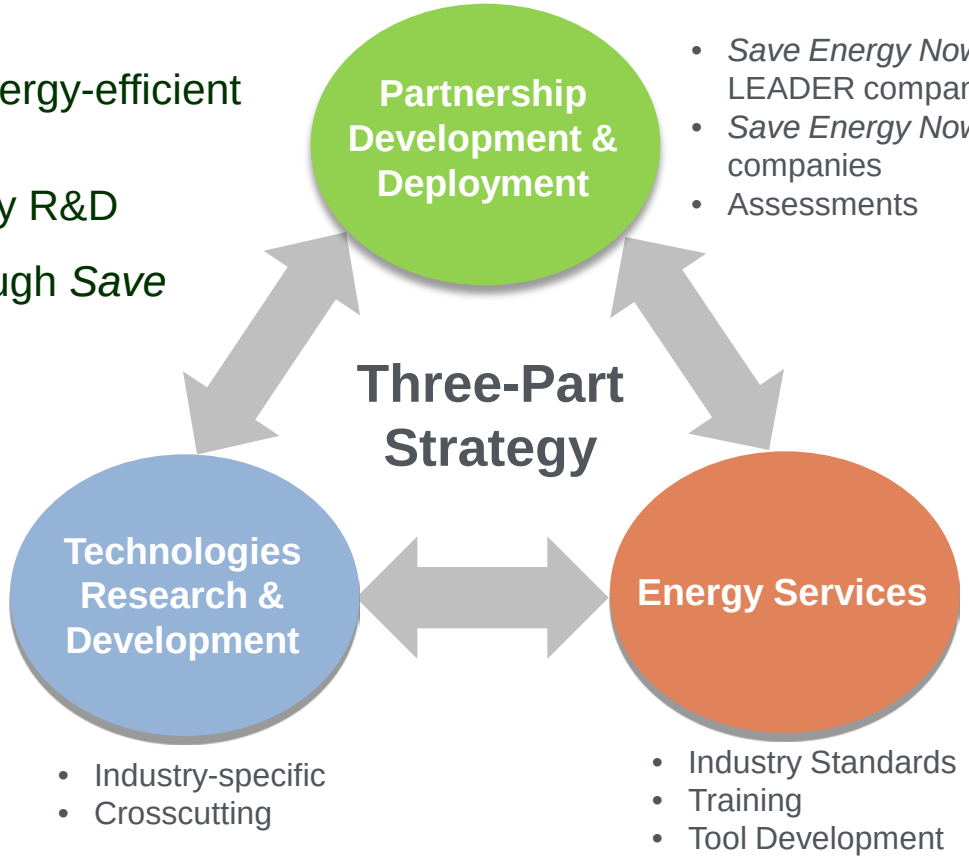
U.S. industry should lead the world in energy efficiency and productivity.

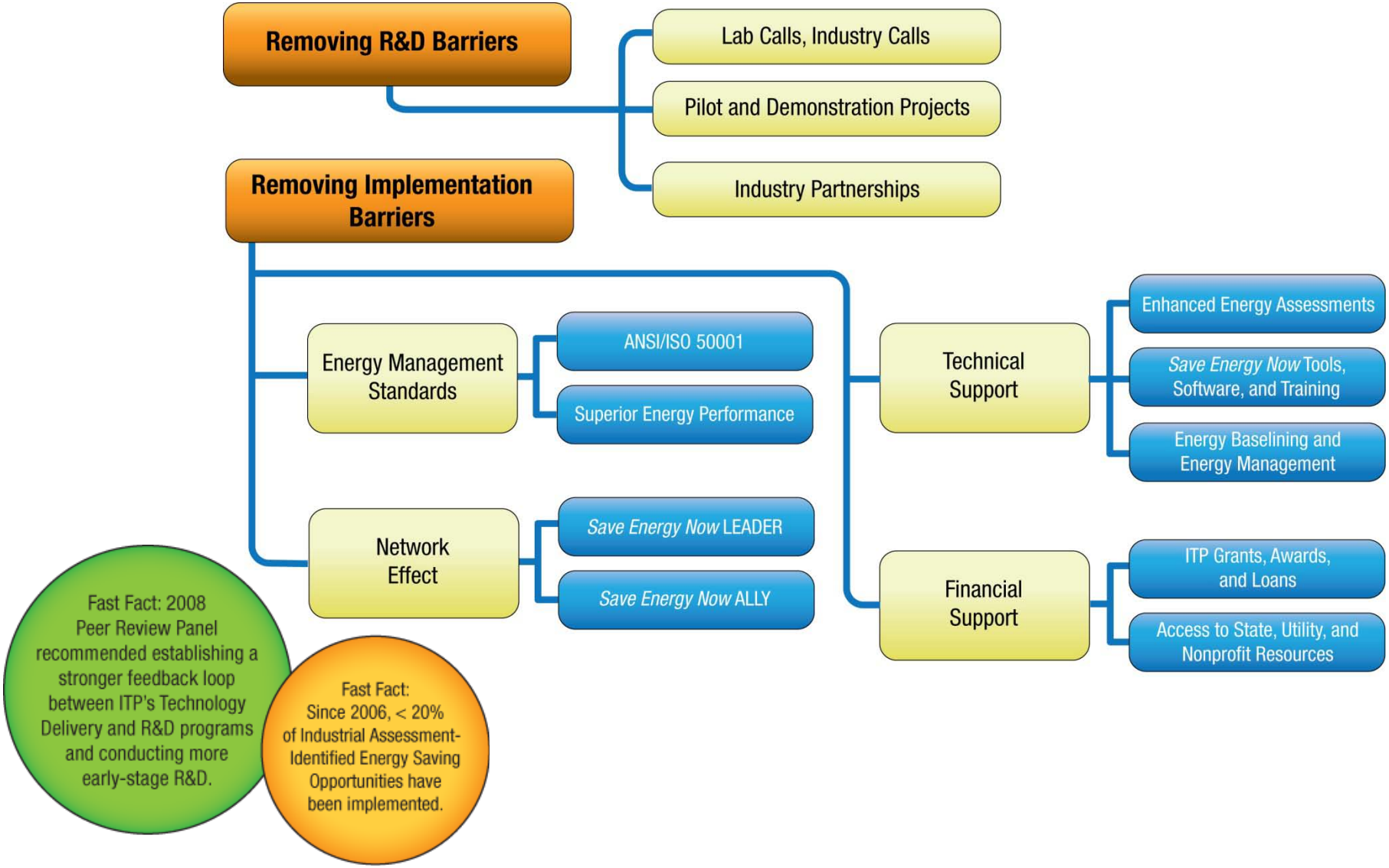
ITP supports this mission by:

- Accelerating the adoption of energy-efficient technologies and practices
- Conducting vigorous technology R&D
- Reducing energy intensity through *Save Energy Now*

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



Strategy for Implementation



Save Energy Now

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National Initiative: *Save Energy Now*
GOAL: Achieve *25 in 10*

Save Energy Now is the umbrella for ITP delivery of a robust set of industrial energy savings tools and services:

Tools

- Baselining/Plant Energy Profiler
- Process Heating
- Steam Systems
- Motors, Pumps, Fans, and more

Training

- Awareness
- Tool User
- System/ Topic
- Qualified Specialists

Assessments

- Large plants are eligible to participate in three-day, process-specific assessments
- Small plants qualify to participate in a one-day, full-plant assessment conducted by university-based IACs

Information

- Supply Chain energy efficiency
- Tip Sheets/Case studies
- Source Books
- Website and webcasts
- On-line data bases
- Information Center

Objectives:

- Increase technical and financial assistance
- Leverage partner outreach to manufacturers
- Solve problems region-by-region
- Publicize the *Save Energy Now* LEADER Pledge
- Recognize achievements to spur replication
- **Expand resources available to help companies achieve ambitious energy goals!**

Save Energy Now LEADER Pledge

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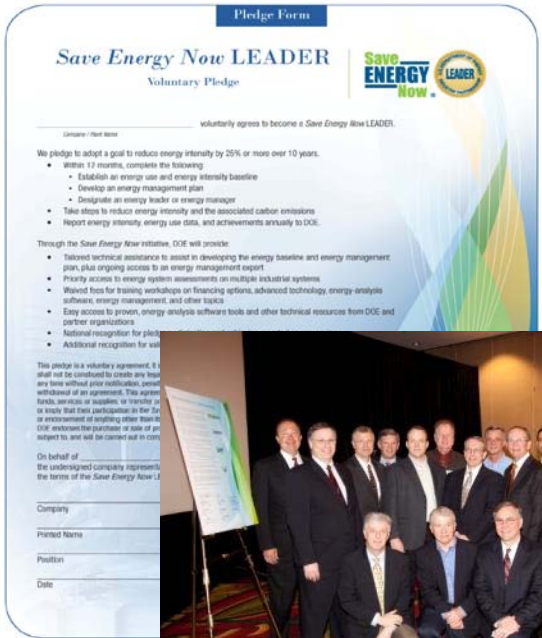

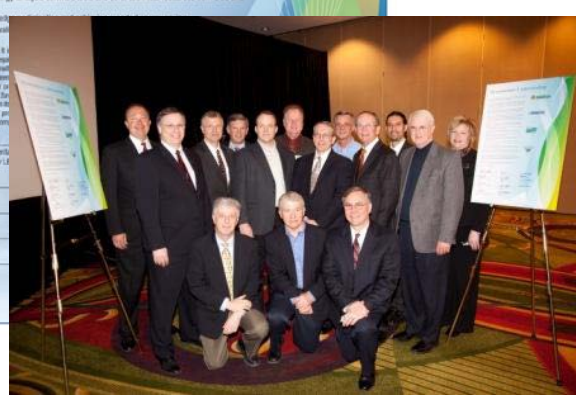

<u>*Save Energy Now* LEADER Pledge</u>

- **Companies pledge to reduce energy intensity by 25 percent or more in 10 years**
- ***Save Energy Now* LEADER Companies receive technical and financial support from DOE/ITP in meeting their energy management goals.**

Why take the Pledge?

- Reduce energy costs and carbon footprint
- Mitigate volatile energy costs
- Enhance economic competitiveness
- Receive recognition as an industry leader

Save Energy Now® LEADER

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Save Energy Now LEADER Companies will:

- Pledge to reduce energy intensity 25% or more over 10 years
- Designate an energy manager
- Develop an energy intensity baseline
- Develop an energy management plan

ITP will provide:

- Technical Account Manager
- Energy baseline assistance
- Industry benchmark comparison
- Priority access to plant assessments and emerging, advanced technologies
- Resources and tools for energy analysis and management
- Technical and financial assistance
- Savings measurement and verification

Save Energy Now LEADER Companies

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As of January 4, 2010, the following companies have signed on to become Save Energy Now LEADER Companies:

- 3M
- AMCOR Pet Packaging
- AT&T
- BPM, Inc.
- Bridgestone - Warren County and La Vergne, TN Plants
- Briggs & Stratton
- Cummins, Inc.
- Danfoss
- Didion Milling
- The Dow Chemical Company
- Earth20
- Flambeau River Papers
- Gray's Harbor Paper
- Honeywell
- Ingersoll Rand
- Intel
- JR Simplot
- Kenworth Truck Company - Renton
- Manitowoc Grey Iron Foundry
- Neenah Foundry
- Nissan North America
- Osram Sylvania
- Owens Corning
- PPG Industries
- Quad/Graphics, Inc.
- Saint-Gobain
- Schneider Electric
- Serious Materials
- Shaw Industries
- Sherwin-Williams, Richmond
- Spirax Sarco, Inc.
- Thilmany Papers
- ThyssenKrupp Waupaca
- Traco
- United Technologies Corporation
- Verso Paper Corp.
- Volvo Trucks, Inc.

Strategic Partnerships

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Maximizing the impact of federal dollars by leveraging resources and local relationships of strategic partners.

***Save Energy Now* LEADER:** 37 companies including 3M, AT&T, Dow, Honeywell, Intel, Sherwin Williams, and Volvo

***Save Energy Now* ALLY:** 20 organizations have committed to *Save Energy Now* ALLY, including Alliance to Save Energy, American Public Power Association, and the Tennessee Valley Authority

States: 23 State Awards (five are regional), all 50 State Energy Offices, and others

Supply Chain: Supply Chain pilot projects through *Save Energy Now* LEADER

International Collaboration: Collaboration with China, India, International Energy Agency, and the Asia-Pacific Partnership on Energy & Climate

Utilities: TVA, Bonneville Power Administration, Southern California Edison, Western Area Power Administration and numerous others

Interagency Coordination: Environmental Protection Agency; Department of Commerce; Small Business Administration; Department of Labor

Save Energy Now ALLY Organizations

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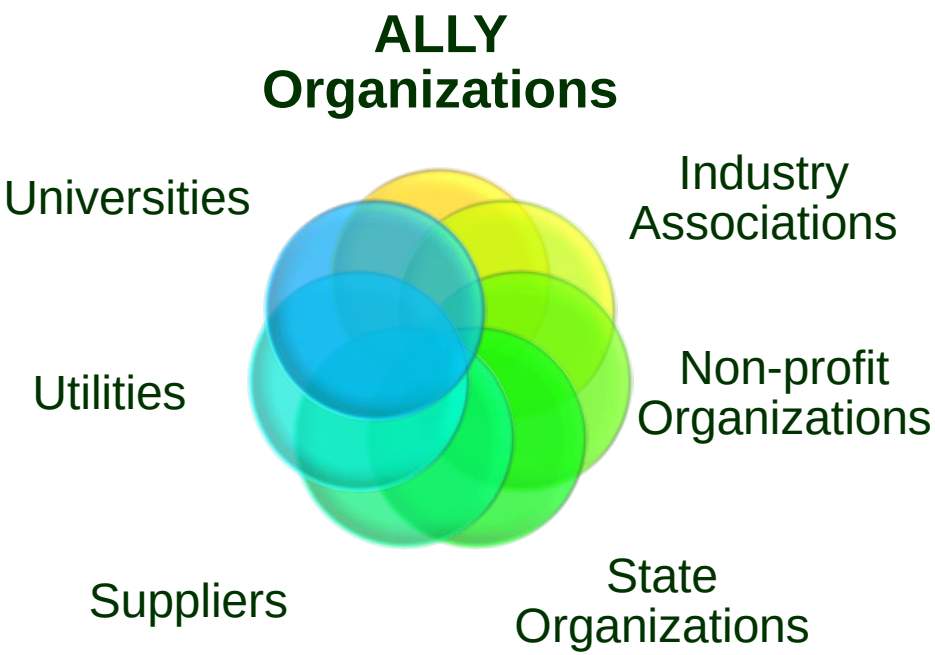
- ✓ **ALLY Organizations help ITP expand the reach of *Save Energy Now***
- ✓ **Support national efforts to reduce energy intensity**
- ✓ **Strengthen customer/ member relationships**
- ✓ **Become an energy efficiency steward**
- ✓ **Offer technical and financial resources that support industry**



Save Energy Now ALLY Organizations

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ALLY Organizations:

- Air Leader
- Alliance to Save Energy (ASE)
- American Council for an Energy-Efficient Economy (ACEEE)
- American Foundry Society (AFS)
- American Public Power Association (APPA)
- Cooper Development Association
- Eaton Corporation
- Focus on Energy
- Glass Manufacturing Industry Council (GMIC)
- Hydro-Thermal Corporation
- National Association of State Energy Officials (NASEO)
- National Insulation Association (NIA)
- Northwest Energy Efficiency Alliance (NEEA)
- NovusTherm Corporation
- Phinix, LLC
- Schneider Electric
- Sidel Systems U.S.A. Inc.
- Siemens Industry
- Spirax Sarco, Inc.
- Tennessee Valley Authority (TVA)

American Public Power Association

ALLIANCE TO SAVE ENERGY
Creating an Energy-Efficient World

NORTHWEST ENERGY EFFICIENCY ALLIANCE

NASEO National Association of State Energy Officials

focus on energy
The power is within you.

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Partnering with state energy offices and utilities to:

- Increase outreach that places efficiency tools into the hands of manufacturers
- Establish local energy assessment capabilities
- Leverage *Save Energy Now* resources to provide technical assistance
- Create partnerships to increase deployment of energy efficient solutions
- Reduce carbon emissions through energy efficiency

Using local resources to address local needs

Regional Partnerships

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- In 2009, ITP selected 5 Regional Project Awards with ARRA funding
- Engaging critical resource providers beyond state boundaries, including:
  - Industry Clusters
  - Utility Commissions
  - Regional Alliances and Nonprofits
  - Academia
- Regional Summits and Exchanges:
  - Southeast Industrial Energy Efficiency Summit served to establish a permanent Southeast Coalition
  - Northwest Industrial Energy Efficiency Summit propelled the region to host another Summit one year later
  - Midwest Industrial Energy Efficiency Exchange brought together service providers and industry to identify project opportunities
  - Gulf Coast Exchange: Summer 2010

Integrator Support

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***Save Energy Now* LEADER energy management support will be provided by the two Integrator Teams.**

→ Oak Ridge National Laboratory (ORNL)

→ Project Performance Corporation (PPC)

LEADER energy management support may include:

- **Energy baselining and benchmarking support**
- **Energy management plan and certification support**
- **An enhanced energy assessment**
  1. **Traditional *Save Energy Now* / IAC assessment**
  2. **Identification of energy- and money-saving implementation pathways**
  3. **Cost-benefit analyses**
- **Technical / financial assistance to implement projects**
- **Access to ITP partnerships resources**

Integrator – IAC Link

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Georgia Tech and Rutgers
Members of the ORNL Integrator Team

The Industrial Assessment Center (IAC) at Georgia Tech will work with *Save Energy Now* LEADER Companies to:

- Establish an energy use baseline
- Offer energy management training
- Deploy SEP Energy Management Pilot Projects with State partners

The IAC Database serves as a knowledge base for Rutgers to support *Save Energy Now* LEADER Companies through:

- Technical assistance and reporting
- *Save Energy Now* Portal support (a tool to share, monitor and report energy information, and track the progress of LEADER services)

The Role of the IAC

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Save Energy Now LEADER companies will have priority access assessments offers through by the IACs.

The role of IACs is shifting to support LEADER Companies:

- Enhanced energy assessments by newly contracted DOE Energy Experts
  - Personalized attention and tailored recommendations
  - More follow-up, reporting, and feedback on results
- Technical and financial assistance
  - Return on investment calculation assistance
  - Measurement and verifications support
  - CEO and plant management outreach
  - R&D recommendations, pilots, and showcases
  - Coordination with Regional Clean Energy Application Centers
- Deployment of partner resources
  - ALLY Organizations, Utilities, States, Universities, and Nonprofits

Back-Up

END

BACK UP:

Partnerships in Action

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- Made 5 regional awards with ARRA Funding
- In 2008 the **Southeast Industrial Energy Efficiency Summit** served to establish a permanent Southeast Coalition
- The February 2009 **Northwest Industrial Energy Efficiency Summit** propelled the region to host another Summit one year later
- In September 2009, the **Midwest Industrial Energy Efficiency Exchange** brought together service providers and industry to identify project opportunities
- Thirty U.S. companies participated in a December 2009 *Save Energy Now* LEADER **Signing Ceremony** at the U.S. Capitol in December 2009
- Another regional Exchange meeting is slated to be held next year