Leverage state, utility, and local resources to help manufacturers reduce energy use and carbon emissions today—and **create a corporate culture** that fosters continuous improvement.

### Technical Assistance
- Tracking and managing energy intensity
- Project feasibility analysis
- Resource referrals

### Tools
- Energy and Carbon Baselining
- Software Tools

### Training
- Basic
- Advanced
- Qualified Specialists

### Assessments
- Industrial Assessment Centers
- Energy savings assessments
- States/Utilities

### Standards
- Superior Energy Performance (SEP)
- ISO 50001
- Assessment standards, protocols, and metrics

### Information
- Tip sheets, case studies
- Website, webcasts, databases
- Emerging technologies
- EERE Information Center
Energy Management Portal: Tools Module

Corporate Analysis Tools
- Corporate Baseline Creation
- Annual Report Generator

Facility Analysis Tools
- Facility Baseline (subset of corporate baseline)
- Recommendations Portfolio
- Project Prioritization and Tracking Tool (roll-up from projects)

Project Analysis Tools
- Project Prioritization and Tracking Tool

Energy Management System Implementation Self-Paced Module
- Step 1 - Getting Started
- Step 2 - Profile Your Energy Situation
- Step 3 - Develop Opportunities, Objectives and Resources
- Step 4 - Reality Check: Stop! Look! Can I Go?
- Step 5 - Manage Current State and Improvements
- Step 6 - Check the System
- Step 7 - Sustain and Improve the System

System Area Tools, Calculators and Scorecards
Each system area will include software tools and simple calculators/scorecards.

- Buildings and Facilities
- Compressed Air
- Data Centers
- Fans
- Motors
- Plant Energy Profiler
- Process Heating
- Pumps
- Steam

Supplier Self-Paced Module
“Lite” Version
ITP State, Regional, and Utility Partnerships

State and Regional Partnerships

Partnering with state government offices and regional energy efficiency organizations to:

- Seed the development of state and regional Industrial Energy Efficiency (IEE) programs
  - Leverage Save Energy Now national resources to reach more facilities (especially SMEs)
  - Build local capability at academic institutions and other key local resources
  - Garner State Leadership buy-in
- Foster State & Regional networks, bring in utilities and key stakeholder groups
- Identify and support implementation of State & Regional IEE program best practices

Utility Partnerships

Leverage more than 3,000 utilities’ relationship with industrial customers to deliver more energy efficiency services and resources:

- Support model utility programs for industrial customers; seek to grow and replicate
- Support utilities in delivering key information, and technical and financial resources through enhanced education and outreach
- Promote Continuous Energy Improvement and Strategic Energy Management models, use ISO 50001 and Superior Energy Performance certification program framework
Partnerships Strategy

State, Regional, & Utility Partnerships (SRU) Strategy:
1) Partners act as a market delivery mechanism for technical and financial tools and resources
   - ITP leverages partners’ resources and networks to achieve program goals
2) ITP bolsters partners’ capability to offer self-sustaining Industrial Energy Efficiency programs
   - Reduces ITP role in development and delivery of resources to all U.S. industry

Strategy Aims to:
- Increase IEE implementation at small- and mid-sized manufacturing facilities
- Leverage other agency programs such as EPA, MEPs, regional coalitions, etc.
- Integrate SRU Partnerships with the State Energy Efficiency (SEE) Action Network and Industrial Energy Efficiency / CHP Working Group

SEE Action IEE / CHP Working Group Goals:
- 2.5% average annual reduction in industrial energy intensity through 2020
- Installation of 40 GW of new, cost-effective CHP by 2020
- 10.4 quads of energy savings by 2020
Superior Energy Performance: CA Energy Management Demonstration

DOE Partners
- Pacific Gas and Electric (PG&E)
- Southern California Gas Company (SCG)
- Southern California Edison (SCE)
- San Diego Gas and Electric (SDG&E)

Industrial Demonstration Sites
- Bentley Prince Street
- Lockheed Martin (Sunnyvale)
- Accepting applications for 1-2 more sites

Participating facilities will receive training and support to:
- Implement the ISO 50001 EM standard
- Reduce energy, operational costs, and carbon emissions
- Monitor and verify energy performance improvements

JAN 2011 PG&E Kickoff Event
- California Public Utilities Commission
- 4 utility representatives
- 11 energy management consultants

Training
- Phase 1: Apr. 2011
- Phase 2: Nov. 2011
- Phase 3: Apr. / May 2012

At the close of the demo project, the facilities will be prepared to meet the requirements of ISO 50001 and positioned to pursue Superior Energy Performance certification.
DOE's 26 University-based Industrial Assessment Centers

- Provide assessments to small and medium-size plants
  - Identify $175,000 to $200,000 in potential annual energy savings per plant, with an average implementation rate of 35 to 45%
- Train engineering students for careers in industrial energy efficiency
- Help university professors stay connected to the technical needs in manufacturing
- Maintain database of recommendations to help other facilities identify opportunities
## How E3 is Being Communicated: Example on the Ground

### How Alabama is Leveraging Grant Funds for Industrial Energy Efficiency

<table>
<thead>
<tr>
<th>Grant Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 Tennessee Valley Authority (TVA) Grant</td>
<td>Will provide Practical Energy trainings for TVA clients</td>
</tr>
<tr>
<td></td>
<td>Will hold 40 Kaizen implementation events</td>
</tr>
<tr>
<td>2009 State Energy Sector Partnership-American Recovery and Reinvestment Act of 2009 Grant</td>
<td>Will provide Practical Energy trainings Tuscaloosa region</td>
</tr>
<tr>
<td></td>
<td>Will hold DOE Qualified Specialist Training</td>
</tr>
<tr>
<td>2009 DOE/ITP Save Energy Now Award 2009 DOE/ITP/IAC Base Funding</td>
<td>Will provide 66 training programs and 8 demonstrations over the 3-year funding period</td>
</tr>
<tr>
<td></td>
<td>10 of 32 ATN and AIAC assessments completed with $424,336 in identified potential annual savings</td>
</tr>
<tr>
<td>2009 Department of Labor Grant</td>
<td>Will provide workforce support for E3 program</td>
</tr>
</tbody>
</table>

Road to Corporate Energy Management & Sustainability

**Save Energy Now**
LEADER Recognition

**Superior Energy Performance Certification**

**ITP Tool Suite and Information Resources**

**Continuum of Industrial Energy Management Capacity**

- **Little to no knowledge of energy management**
  - 50,000 plants

- **Early stages of commitment to energy management**
  - 9,000 plants

- **Highly sophisticated**
  - 1,000 plants

**Partners are main vehicle of ITP resources to increase facilities’ energy management capacity**

- States & Utilities
- ALLY organizations
  - Services/assessments
  - Technologies/products
  - Financing options
  - Education/awareness
- Federal programs (e.g., EPA, MEP, DOL, SBA, DOD, GSA)
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: 202-257-6062