



INTERNATIONAL
TRADE
ADMINISTRATION

Checklist for Corporate Energy Efficiency



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DOC-Manufacturing and Services

- The Department of Commerce is committed to energy efficiency as a major competitiveness tool for U.S. businesses
- The Office of Energy and Environmental Industries can be a resource for U.S. manufacturers
 - Provide market research and opportunities
 - Voice industry concerns within the federal government
- <http://www.trade.gov/energy>

U.S. Department of Commerce
International Trade Administration

Check List for Corporate Energy Efficiency

Create a Corporate Energy Commitment
Mission statements and decision-making protocols can advance energy efficient practices, create a company-wide commitment to sustainability, and make efficiency a part of every corporate decision.
www.energy.gov/index.cfm?c=guidelines.guidelines_index
www1.eere.energy.gov/industry/bestpractices/corporate_resources.html

Perform an Energy Audit
Energy audits assess inefficiencies and identify upgrades that can reduce costs and improve processes. Often these audits can track a company's energy use, provide recommendations for improving efficiency, and give cost estimates and potential savings information.
www.eepa.net.gov/
www1.eere.energy.gov/industry/bestpractices/iaa.html

Set Performance Goals
Performance goals can create a unique work plan for entire companies and individuals within an organization. Targets should create a pathway to meeting overall efficiency goals.
www.energy.gov/index.cfm?c=industry.bus_industry_
www1.eere.energy.gov/industry/bestpractices/iaa.html

Determine Roles and Resources
The establishment of an energy manager can sustain a company's focus on efficiency upgrades and link employee performance goals to energy savings, helping to link energy decisions with corporate leadership.
www1.eere.energy.gov/industry/bestpractices/iaa.html
<http://www1.eere.energy.gov/industry/bestpractices/iaa.html>

Raise Awareness and Build Capacity
Employee training is essential to maintaining a long-term commitment to efficiency. Certification programs are often effective, as are personnel rewards for reducing consumption.
www1.eere.energy.gov/industry/bestpractices/training.html
www.nam.org/-/media/Files/nam/docs/233500/233434.pdf?ashx

Investigate Energy Efficiency Financing Options
Financing energy efficiency improvements can often be done without an upfront cost. Energy service companies can frequently provide financing for initial installations while the government can provide tax credits and low-interest loans.
www.naeco.org/
www.dtreasury.gov/


Install Energy Efficient Equipment and Processes
Energy-saving upgrades are often available at a negative marginal cost. More expensive upgrades generally have a payback period of under three years. As such, energy efficiency improvements can provide an almost immediate boost to a company's competitiveness.
www.energy.gov/index.cfm?c=th_focus.bus_industry_focus
www1.eere.energy.gov/industry/bestpractices/iaa.html

Measure Results and Evaluate Progress
Measuring results helps track progress and increases motivation. Measuring cost savings can help promote energy efficiency decisions within an organization.
www1.eere.energy.gov/industry/bestpractices/iaa.html
www1.eere.energy.gov/industry/bestpractices/iaa.html

Register for Third-Party Verification
Outside organizations can track, benchmark, and measure energy savings, improving a company's likelihood of meeting efficiency targets. Third-party verification can also increase the public credibility of efficiency improvements.
www1.eere.energy.gov/industry/bestpractices/iaa.html
www1.eere.energy.gov/industry/bestpractices/iaa.html

Recognize Achievement
Providing rewards for employees who reduce their energy consumption the most can even encourage greater employee participation and can create a common culture of efficiency.
www1.eere.energy.gov/industry/bestpractices/iaa.html
<http://www1.eere.energy.gov/industry/bestpractices/iaa.html>

www.trade.gov/energy



Step 1: Create a Corporate Energy Commitment

Mission statements and decision-making protocols can advance energy efficient practices, create a company-wide commitment to sustainability, and make efficiency a part of every corporate decision.

Guidelines for Energy Management Overview

EPA offers a proven strategy for superior energy management with tools and resources to help each step of the way. Based on the successful practices of ENERGY STAR partners, these guidelines for energy management can assist your organization in improving its energy and financial performance while distinguishing your organization as an environmental leader.

The steps:

- STEP 1: [Make Commitment](#)
- STEP 2: [Assess Performance](#)
- STEP 3: [Set Goals](#)
- STEP 4: [Create Action Plan](#)
- STEP 5: [Implement Action Plan](#)
- STEP 6: [Evaluate Progress](#)
- STEP 7: [Recognize Achievements](#)



Energy Star Guidelines for Energy Management

Energy Efficiency in
Manufacturing Forum



Department of Energy Resources for Corporate Decision Makers

U.S. Department of Commerce
International Trade Administration



Step 2: Perform an Energy Audit

Energy audits assess inefficiencies and identify upgrades that can reduce cost and improve processes. Often these audits can track a company's energy use, provide recommendations for improving efficiency, and give cost estimates and potential savings information.

The screenshot shows the NIST Hollings Manufacturing Extension Partnership website. The header includes the NIST logo and the tagline "Bringing the Pieces Together for U.S. Manufacturing". Below the header is a navigation menu with links for "ABOUT MEP", "MANUFACTURERS", "PARTNERS", "STATES", and "CLIENT SUCCESSSES". The main content area is titled "HOW CAN MEP HELP YOU?" and lists three options: "I WANT TO INCREASE PROFITS", "I WANT TO CUT COSTS", and "I NEED MORE INFORMATION". To the right of this list is a map of the United States with a callout box that says "Find the MEP location closest to you by clicking on the state." and "Contact Us". Below this is a section titled "MEP & AUTOMOTIVE SUPPLIERS" which discusses the challenges of the automotive industry and mentions that Ohio and Michigan are home to a significant number of auto suppliers. At the bottom, there is a section titled "NATIONAL INNOVATION MARKETPLACE" which mentions a meeting on June 23, 2009, in Perrysburg, OH, and the expansion of the National Innovation Marketplace program.

Manufacturing Extension Partnership

The map, titled "Industrial Assessment Center Locations", shows the United States with various state and university logos placed over different regions. The logos include OSU (Oregon State University), San Francisco State University, SJSU (San Jose State University), Colorado State University, KANSAS STATE UNIVERSITY, UIC (University of Illinois at Chicago), BRADLEY, DAYTON, LEHIGH UNIVERSITY, OSU (Ohio State University), MEMPHIS, KANSAS STATE UNIVERSITY, NC STATE UNIVERSITY, RUTGERS CAES (Center for Advanced Energy Studies), Georgia Tech, ALABAMA, UNIVERSITY OF LOUISIANA, UNIVERSITY OF FLORIDA, and Miami. At the bottom of the map, there is a logo for the U.S. Department of Energy and Renewable Energy with the tagline "Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable".

Department of Energy Industrial Assessment Centers

Step 3: Set Performance Goals

Performance goals can create a unique work plan for entire companies and individuals within an organization. Targets should create a pathway to meeting overall efficiency goals.

Industrial Energy Management Information Center

This information center has been designed to be a useful resource for industrial energy managers looking for information on corporate energy management, and also contains energy savings information tailored to industries or focused on specific plant utility and process improvements. More ENERGY STAR [Tools & Resources](#) are available to manage building energy and communicate the message of energy efficiency to your employees and others.

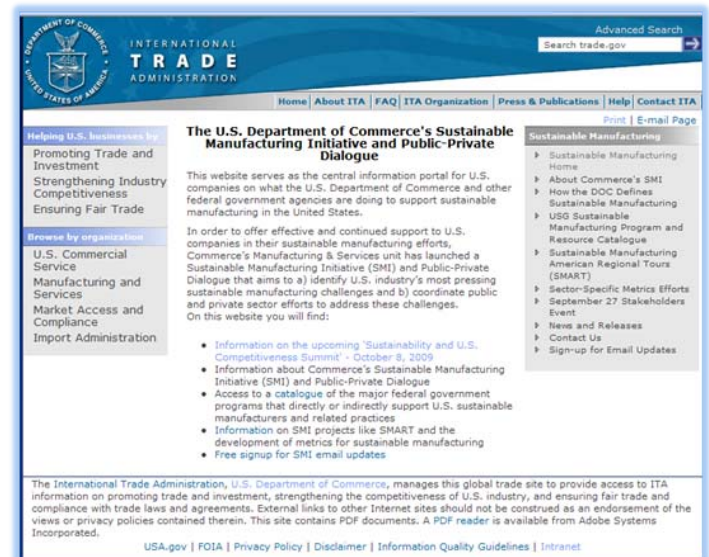


Topics in this Info Center

- ✦ [Resources for Corporate Energy Managers](#)
- ✦ [External Resources for Program Support](#)
- ✦ [Resources for Plant Energy Managers](#)
- ✦ [Industry Specific Resources](#)
- ✦ [Process/Plant Utility Improvement Resources](#)

Energy Star Management Information Center

Energy Efficiency in
Manufacturing Forum



The screenshot shows the website for the U.S. Department of Commerce's Sustainable Manufacturing Initiative and Public-Private Dialogue. The page features a navigation bar with links for Home, About ITA, FAQ, ITA Organization, Press & Publications, Help, and Contact ITA. The main content area is titled "The U.S. Department of Commerce's Sustainable Manufacturing Initiative and Public-Private Dialogue" and includes a description of the initiative's purpose and a list of resources available on the site. A sidebar on the right provides additional navigation options for Sustainable Manufacturing, including links to Home, About Commerce's SMI, How the DOC Defines Sustainable Manufacturing, USG Sustainable Manufacturing Program and Resource Catalogue, Sustainable Manufacturing American Regional Tours (SMART), Sector-Specific Metrics Efforts, September 27 Stakeholders Event, News and Releases, Contact Us, and Sign-up for Email Updates. The footer contains the Department of Commerce logo and various policy links.


Department of Commerce – Sustainable Manufacturing Initiative

U.S. Department of Commerce
International Trade Administration

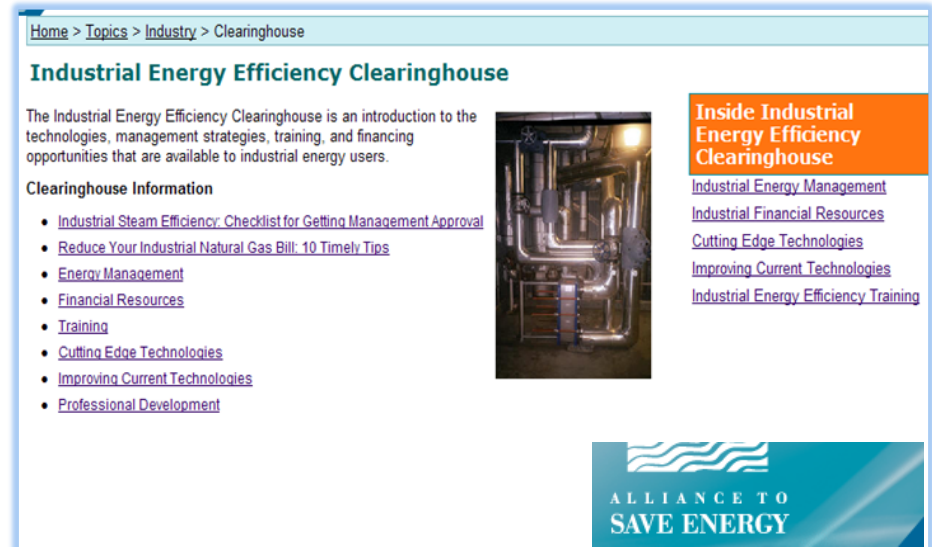


Step 4: Determine Roles and Resources

The establishment of an energy manager can sustain a company's focus on efficiency upgrades and link employee performance goals to energy savings, helping to link energy decisions with corporate leadership.



The screenshot shows the U.S. Department of Energy website. The header includes the U.S. Department of Energy logo and the text 'Energy Efficiency & Renewable Energy'. Below the header is a navigation bar with links for 'Your Home', 'Your Vehicle', 'Your Workplace', 'Products & Services', 'Renewable Energy', 'Information Resources', and 'Home'. The main content area is titled 'Industry Plant Managers & Engineers' and features a search bar and a 'Search Help' link. The main text reads: 'Learn How Others Have Saved Facilities Like Yours Can Save Big'. It states that energy efficiency projects can deliver large returns to your business and provides a list of companies that have saved energy, including Alcoa, Augusta Newsprint Company, ExxonMobil, Cooper Cameron, Ford Motor Company, Nalco Chemical Company, Progressive Powder Coating, Rohm and Haas, and Vulcan Chemicals. A sidebar on the right contains a section titled 'Access the National IAC Database' with a description of the database's contents.



The screenshot shows the Alliance to Save Energy website. The header includes the text 'Home > Topics > Industry > Clearinghouse'. The main content area is titled 'Industrial Energy Efficiency Clearinghouse' and features a search bar and a 'Search Help' link. The main text reads: 'The Industrial Energy Efficiency Clearinghouse is an introduction to the technologies, management strategies, training, and financing opportunities that are available to industrial energy users.' Below the main text is a section titled 'Clearinghouse Information' with a list of links: 'Industrial Steam Efficiency Checklist for Getting Management Approval', 'Reduce Your Industrial Natural Gas Bill: 10 Timely Tips', 'Energy Management', 'Financial Resources', 'Training', 'Cutting Edge Technologies', 'Improving Current Technologies', and 'Professional Development'. A sidebar on the right contains a section titled 'Inside Industrial Energy Efficiency Clearinghouse' with a list of links: 'Industrial Energy Management', 'Industrial Financial Resources', 'Cutting Edge Technologies', 'Improving Current Technologies', and 'Industrial Energy Efficiency Training'. The bottom of the page features the Alliance to Save Energy logo.

DOE- Information for Plant Managers and Engineers

Alliance to Save Energy – Industrial Efficiency Clearinghouse

Step 5: Raise Awareness and Build Capacity

Employee training is essential to maintaining a long-term commitment to efficiency. Certification programs are often effective, as are personnel rewards for reducing energy consumption.



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

Industrial Technologies Program

About the Program | Program Areas | Information Resources | Industrial Technologies Program | Logies | Deployment | Home

BestPractices

BestPractices Home [Printable Version](#)

About BestPractices

Resources

- Software Tools
- Publications
- Training**
 - Training Sessions
 - Training Calendar
- Databases
- Qualified Specialists
- Ways to Save Energy
- EERE Information Center

Opportunities

For Corporate Executive

For Plant Management

Visit the [Training Calendar](#)

Training

Do you want to learn how to manage your motors and optimize your pumping system? Or do you need to calculate the energy cost of compressed air in your facility?

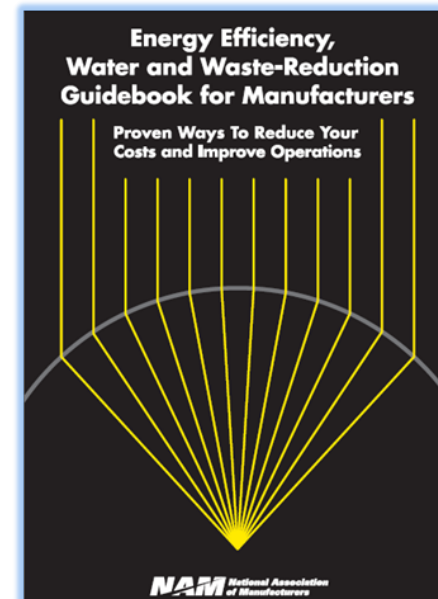
Whatever your industrial concern, you've come to the right place.

BestPractices offers system-wide and component-specific training programs to help you run your plant more efficiently. The training is offered throughout the year and around the country.

Please contact the [Training Coordinator](#) for further information on training sessions.



Best Practices in Energy Efficiency Training



National Association of Manufacturers Guidebook for Manufacturers

Step 6: Investigate Energy Efficiency Financing Options

Financing energy efficiency improvements can often be done without an upfront cost. Energy service companies can frequently provide financing for initial installations while the government can provide tax credits and low-interest loans.

The screenshot shows the NAESCO website. The header includes the NAESCO logo and the text "National Association of Energy Service Companies". Below the header is a navigation menu with links for "About NAESCO", "Membership Snapshot", "Finding a Provider", "NAESCO Membership", "Accreditation Programs", "Events", "Policy Priorities", "News", "Resources", "Bookstore", and "Jobs". The main content area features a large image of a modern building and several news articles. One article is titled "NAESCO Launches ARRA Resource Page" and another is "2009 NAESCO's 20th Annual Conference". A sidebar on the left lists "NAESCO THANKS ITS 2009 ANNUAL SPONSORS" with logos for Chevron, Applied Energy Management, ConEdison Solutions, Pecco Energy Services, Siemens Building Technologies, Synergy Companies, and UCDNS, L.L.C.

National Association of Energy Service Companies

The screenshot shows the DSIRE website. The header features the DSIRE logo and the text "Database of State Incentives for Renewables & Efficiency". Below the header is a navigation menu with links for "Home", "Glossary", "Links", "FAQs", "Contacts", and "About Us". The main content area includes a "DSIRE SOLAR" section, a "Resources" section with links for "Summary Maps", "Summary Tables", "Library", "Search", and "What's New?", and a "Federal Incentives" section. A map of the United States is displayed, with state abbreviations labeled. The map is overlaid with a grid and has several states highlighted with red borders.

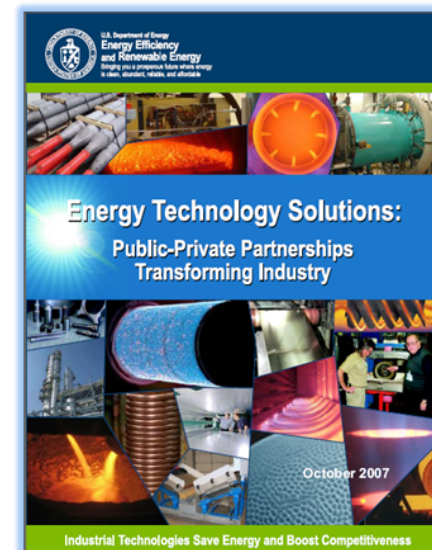
Database of State Incentives for Renewables and Efficiency

Step 7: Install Energy Efficient Equipment and Processes

Energy-saving upgrades are often available at a negative marginal cost. More expensive upgrades generally have a payback period of under three years. As such, energy efficiency improvements can provide an almost immediate boost to a company's competitiveness.



Energy Star Industry-Specific Tools and Resources



Department of Energy Energy-Technology Solutions

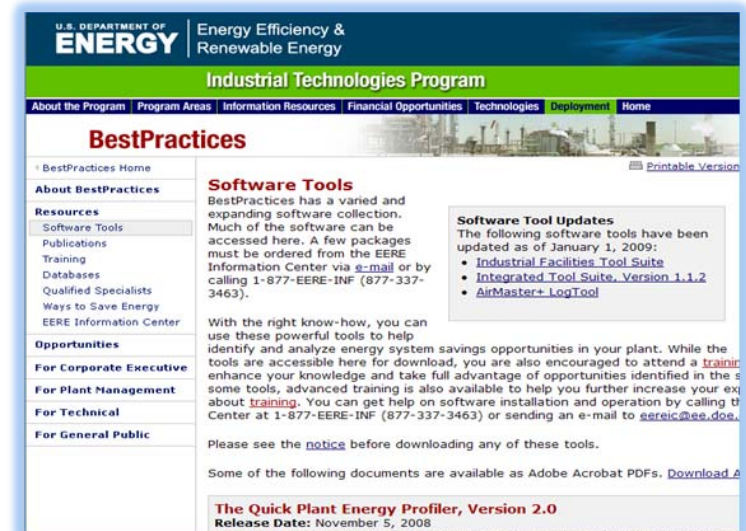
Step 8: Measure Results and Evaluate Progress

Measuring results helps track progress and increases motivation. Measuring cost savings can help promote energy efficiency decisions within an organization.



The screenshot shows the International Trade Administration website. The main heading is "U.S. Government Programs and Resources in Support of Sustainable Business". Below this, there are several sections: "Green Suppliers Network (GSN)", "Building for Environmental and Economic Sustainability (BEES)", "Interagency Network of Enterprise Assistance Providers (INEAP)", and "Manufacturing Extension Partnership (MEP)". Each section provides a brief description and a link to the respective resource.

International Trade Administration – Resources for Sustainable Business



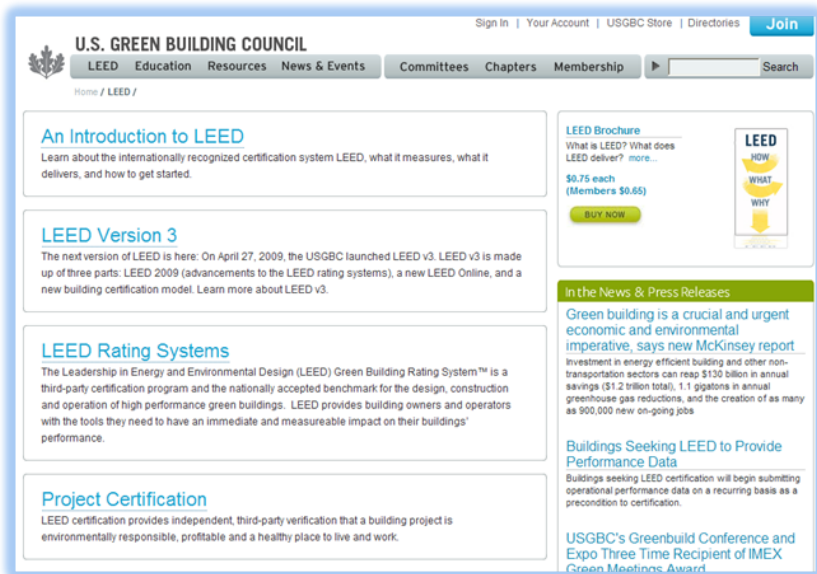
The screenshot shows the Department of Energy website, specifically the "Industrial Technologies Program" section. The main heading is "BestPractices". Below this, there are several sections: "Software Tools", "Software Tool Updates", and "For Corporate Executive", "For Plant Management", "For Technical", and "For General Public". Each section provides a brief description and a link to the respective resource.

Department of Energy Software Tools for Managing Energy



Step 9: Register for Third-Party Verification

Outside organizations can track, benchmark, and measure energy savings, improving a company's likelihood of meeting efficiency targets. Third-party verification can also increase the public credibility of efficiency improvements.



U.S. Green Building Council – Introduction to LEED



EPA Energy Star Plaque – Plants can display only if they meet Energy Star requirements

Step 10: Recognize Achievement

Providing rewards for employees who reduce their energy consumption the most can even encourage greater employee participation and can create a common culture of efficiency.

The screenshot shows the Energy Star for Industry website. The header features the Energy Star logo and the title "SUPERIOR ENERGY MANAGEMENT CREATES ENVIRONMENTAL LEADERS" from the U.S. Environmental Protection Agency. Navigation tabs include "Products", "Home Improvement", "New Homes", "Buildings & Plants", and "Partner Resources". The main content area is titled "ENERGY STAR for Industry" and includes a sub-header "Partner with ENERGY STAR. Improve your corporate bottom line while you become an environmental leader." Below this, there is a section "Be Strategic About Energy Management" with several bullet points linking to resources like "Prepare an Energy Strategy for the Future" and "Assess Your Facility Energy Program". A "Featured Story" section highlights the "NAM and EPA Challenge U.S. Manufacturers to Save Energy". A "Quick Finder" section offers "Portfolio Manager Login" and "Target Finder". A sidebar on the left lists various categories like "Buildings & Plants", "Getting Started for...", and "Real Estate/ Multifamily".

Energy Star for Industry

The screenshot shows the Alliance to Save Energy website. The header features the Alliance to Save Energy logo and the tagline "Creating an Energy-Efficient World". Navigation tabs include "Home", "Topics", "Programs", "Countries", "News", "Events", "About Us", and "Contact Us". The main content area is titled "Industrial Energy Managers" and includes a sub-header "Home > EProfessionals > Industrial Energy Managers". Below this, there is a section "Industrial Energy Managers" with a sub-header "Energy is a manageable expense in manufacturing. The efficient use of energy yields control of thermal resources, which means control of energy expenses—as well as increased productivity and safety, and decreased emissions." Below this, there is a section "Read about the benefits and challenges of industrial energy management on the Corporate Energy Management section of the Alliance website as well as in the Alliance document 'Strategic Industrial Energy Efficiency, Reduce Expenses, Build Revenue, and Control Risk with Energy Efficiency.'" A "Donate Now" button is visible at the bottom left.

Alliance to Save Energy – Recognition for Energy Management Leaders



Additional Information

Useful Websites

- [Department of Commerce – Office of Energy and Environmental Industries](#)
- [EPA Industrial Energy Star Program](#)
- [Department of Energy – Industrial Technology Program](#)
- [Industrial Assessment Centers](#)
- [Manufacturing Extension Partnership](#)
- [Alliance to Save Energy](#)
- [American Council on an Energy-Efficient Economy](#)
- [National Association of Manufacturers](#)
- [Green Building Council](#)
- [Database of State Incentives for Renewables and Efficiency](#)

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