



DSM is Back- What does it mean to your utility?

**Joni Livingston, MRES,
and
Ed Thomas, Market Development Group**

Overview of DSM Policies

- Energy Policy Act 2005
 - Requires 2% annual energy reduction goal for all Federal Buildings
 - Installation of Energy efficiency technologies in public and administrative buildings

National Action Plan for Energy Efficiency

- Focuses on ways to help customers reduce energy bills and cut greenhouse emissions.
- Recognizes energy efficiency as a high-priority energy resource that requires a long-term commitment from energy organizations
- Led by EPA and developed by group of 50 organizations, co-chaired by Jim Rogers, CEO of Duke Energy and Commissioner Diane Munns, Iowa Public Utility Board member

Sampling of State Activities

DSM is Back

- 16 States (and counting) have public benefits funds dedicated to supporting energy efficiency and renewable energy projects
- CO: Created climate action plan and inventory
- Others are creating programs/policies to promote energy efficiency, reductions in carbon emissions, and strategies to combat climate change.

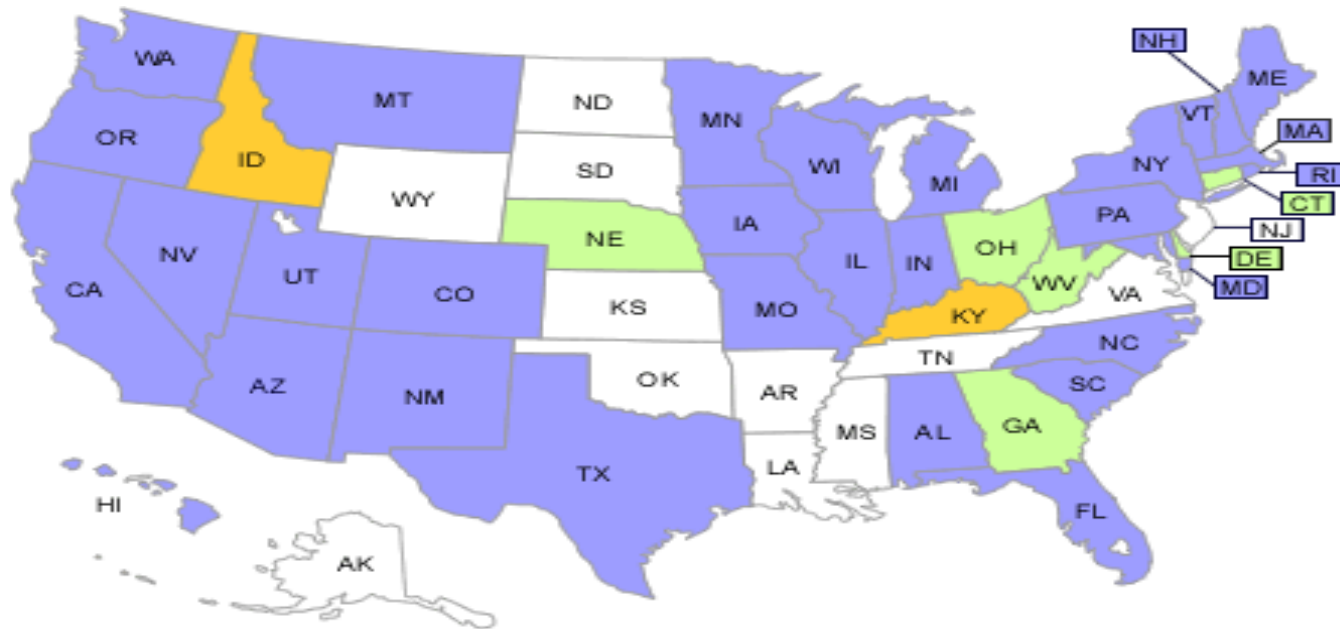





Regional Activities

- **Powering the Plains Initiative:**
 - Brings together stakeholders to address climate issues surrounding energy and agriculture while adding value to the region's economy and mitigating the risk of climate change and other environmental concerns.
 - IA, MN, ND, SD, WI
- **Governor's Association of Clean and Diversified Energy Initiative focuses on the feasibility of:**
 - Developing 30,000 Megawatts of clean and diverse energy by 2015.
 - Increasing energy efficiency 20 percent by 2020.
 - Providing adequate transmission to meet the region's needs through 2030.
 - AK, AZ, CA, CO, HI, ID, KS, MT, NE, NV, NM, ND, OR, SD, TX, UT, WA, and WY

State Lead by Example Measures

Energy Efficiency Requirements for Public Facilities, Appliances and Equipment



-  **Appliances and Equipment Only (6)** CT, DE, GA, OH, NE, WV
-  **Buildings, Appliances, and Equipment (30)** ; AL, AZ, CA, CO, FL, HI, IL, IN, IA, ME, MD, MA, MI, MN, MO, MT, NV, NH, NM, NY, NC, OR, PA, RI, SC, TX, UT, VT, WA, WI
-  **Buildings Only (2)** ; ID, KY

Source: EPA 10/18/06

Resources for States, Utilities and Stakeholders

- **Guides and Papers**
 - **National Action Plan for Energy Efficiency Report**
 - **Aligning Utility Incentives with Energy Efficiency Investment (Fall 07)**
 - **Resource Planning with Energy Efficiency (Fall 07)**
 - **Conducting Potential Studies for Cost-Effective Energy Efficiency (Fall 07)**
 - **Model Energy Efficiency Program Evaluation (Fall 07)**
 - **National Action Plan Vision for 2025 (Fall 07)**
- **Outreach Material and Tools**
 - **Energy Efficiency Benefits Calculator**
 - **Communications Kit (Fall 07)**
 - **Resource and sample docket database (Fall 07)**
 - **Educational Briefings (Fall 07)**
- **Fact Sheets**
 - **Building Codes and Energy Efficiency**
 - **Consumer Energy Efficiency**
- **Regional Implementation Meetings**
 - **Policy tracking tables**
 - **Presentations and meeting summaries**
- **Sector Collaborative on Energy Efficiency**
 - **Presentations from June 27 and 28 Meeting**
 - **Background Paper on Utility Data Availability**
 - **Energy Consumption Profiles for participating sectors**

Government

- *ENERGY STAR*®
 - www.energystar.gov
- *Department of Energy*
 - www.doe.gov

Tools for Energy Efficient Commercial Buildings

- **Commercial Building Energy Alliances:**
 - Focus on retail, commercial, and institutional buildings
 - Retail Energy Alliance
- **High Performance Buildings Database:**
 - Collects information from buildings around the world, ranging from homes and commercial interiors to large buildings and even whole campuses and neighborhoods.
- **High Performance Commercial Building Case Studies:** Documented the energy performance of six commercial buildings to understand how they perform with respect to their design goals.
- **Advanced Energy Design Guide for Small Retail Buildings:** Developed by the American Society of Heating Refrigeration and Air-Conditioning Engineers, in cooperation with the Illuminating Engineering Society of North America, the American Institute of Architects, the U.S. Green Building Council, and DOE.
 - Application of the recommendations could result in small retail buildings achieving 30% energy savings when compared to those same retail buildings designed to the minimum code requirements.
- **Buildings Energy Data Book:** Includes statistics on residential and commercial building energy consumption. The data tables contain statistics related to construction, building technologies, and energy consumption

Retailer Energy Alliance

- Exploring best practices and promoting research in energy-efficient design and operation for retail facilities:
 - Right-sizing of HVAC and refrigeration equipment and systems
 - Rooftop HVAC equipment
 - Refrigerated display cases
 - Interior and exterior lighting systems
 - Process and plug loads including maintenance equipment, electronic displays, and cooking equipment
 - Building-integrated renewable energy supply systems
 - Central or building-level energy management systems

<http://www1.eere.energy.gov/buildings/retailer/about.html>

RESOURCES FOR TODAY

U.S. companies are using DOE resources to identify opportunities for quick-payback process improvements that save energy.

Save ENERGY Now



DOE provides resources to help manufacturing plants *Save Energy Now*:

- ✓ **Plant Assessments** performed by ITP's Industrial Assessment Centers and energy efficiency experts to identify energy savings opportunities.
- ✓ **Phone consultations and technical assistance** provided by experts at the EERE Information Center.
- ✓ **ITP's software analysis tools**, including instructional training, web casts, and workshops.
- ✓ **Save Energy Now CD**, containing an interactive energy use quiz, more than 30 free software tools, and many publications all in one package.
- ✓ **Access to ITP's extensive portfolio**, including tip sheets, case studies, handbooks, and more.
- ✓ **Recognition on the ITP Web site.**

Visit the web site at: www.eere.energy.gov/industry/saveenergynow

Save Energy Now Assessments:

Rapid Progress Toward Industrial Energy Efficiency

ITP developed the *Save Energy Now* assessments in response to Secretary Bodman's Easy Ways to Save Energy campaign and his pledge to help industry reduce natural gas use. ITP responded rapidly by sending energy experts with proven tools and protocols to the largest energy-consuming manufacturing facilities in the country. Over 344 assessments have been completed to date. These assessments have identified ways for plants to cut their energy costs by an average of 10% or more! Most of these opportunities can be found in many plants today. *Save Energy Now* Assessments are recognized as an important resource for improving industrial energy and carbon management.

Results so far

- ▶ 344 assessments completed
- ▶ \$330 million in implemented or planned energy savings
- ▶ 60.4 trillion Btu of potential natural gas savings per year, equivalent to the amount consumed by 8.15,000 typical U.S. homes
- ▶ \$586 million in potential energy cost savings per year
- ▶ 4.7 million metric tons of potential carbon dioxide emissions reduction per year



DSM is Back- What does it mean to your utility?

**Joni Livingston, MRES,
and
Ed Thomas, Market Development Group**