

***Why Demand Side Management
(Energy Efficiency)
is Coming
to a Utility Near You***

Harvesting Clean Energy Conference

Billings, MT

January 26, 2009

Key Definitions of DSM Terms

Demand Side Management (DSM)

- An attempt by utilities to reduce customers' demand for electricity or energy by encouraging efficiency.⁽¹⁾

Integrated Resource Planning (IRP)

- A planning process for electric utilities that evaluates many different options for meeting future electricity demands and selects the optimal mix of resources that minimizes the cost of electricity supply while meeting reliability needs and other objectives.⁽²⁾

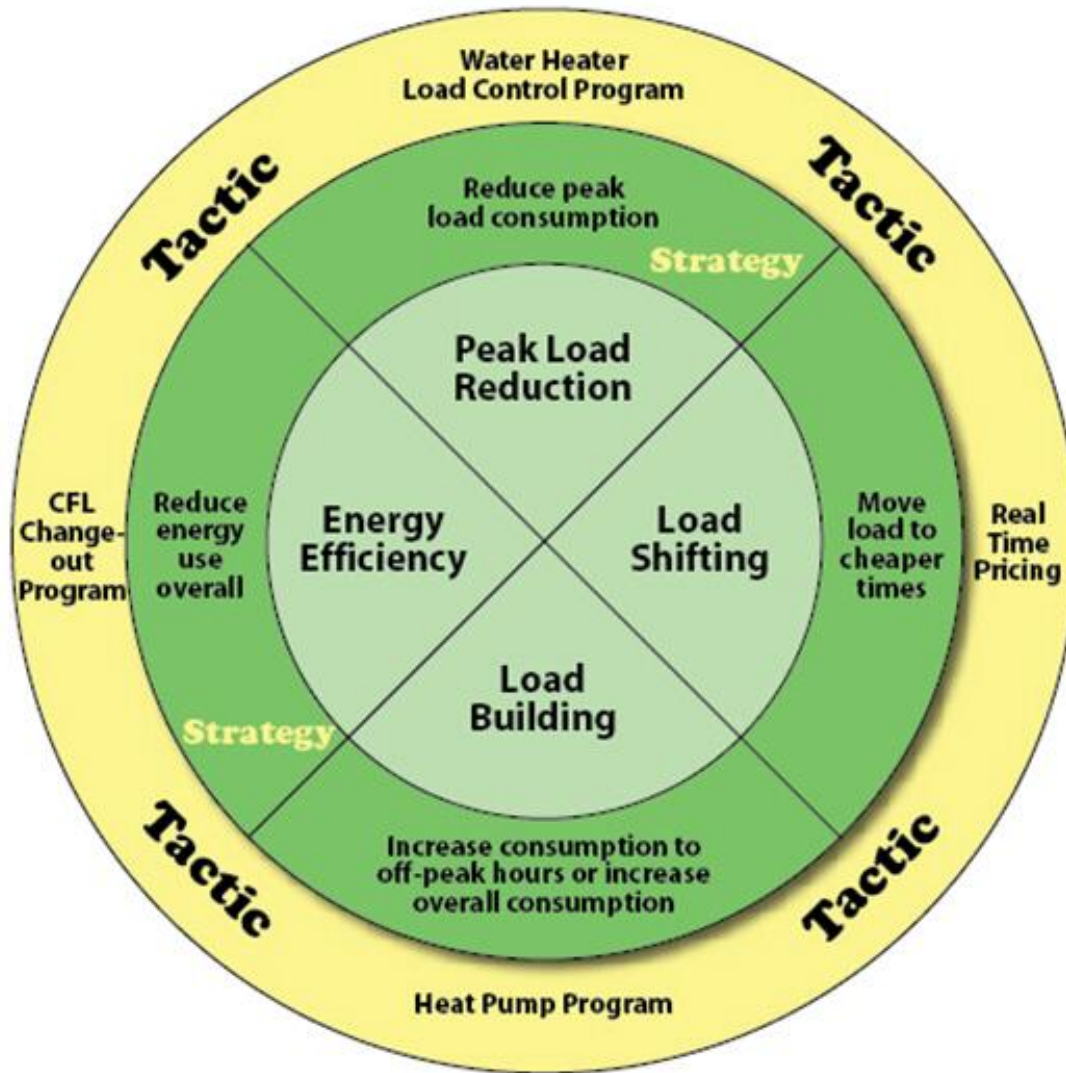
(1) National Resources Defense Council

(2) ACEEE

DSM Strategies

- Energy Efficiency: Reduce energy use overall
- Peak Load Reduction: Reduce peak load consumption
- Load Shifting: Move load to cheaper times
- Load Building: Increase consumption to off-peak hours or increase overall consumption

How Load Strategies Link to Program Tactics



Overview of DSM Policies

Energy Policy Act 2005

- 2% annual energy reduction goal for all Federal Buildings
- Energy efficiency technologies in public and administrative buildings
- Tax deductions for commercial buildings with energy efficiency improvements

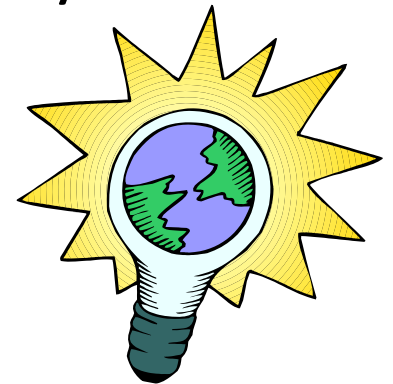
National Action Plan for Energy Efficiency

- 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.

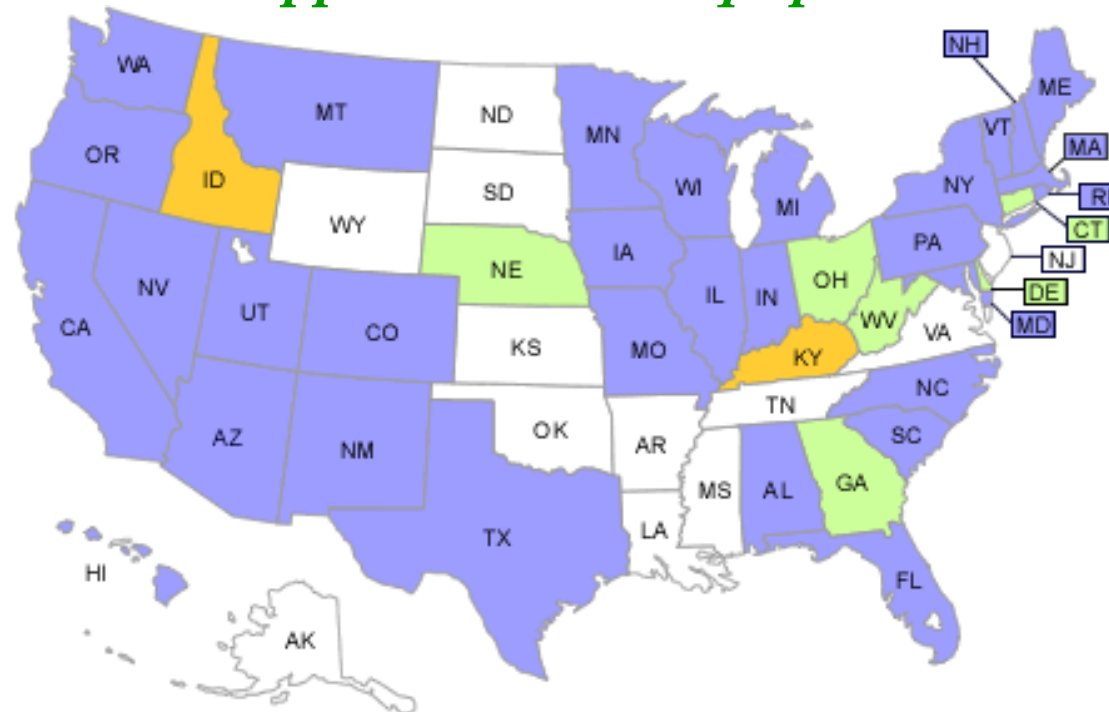


Regional Activities

- **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

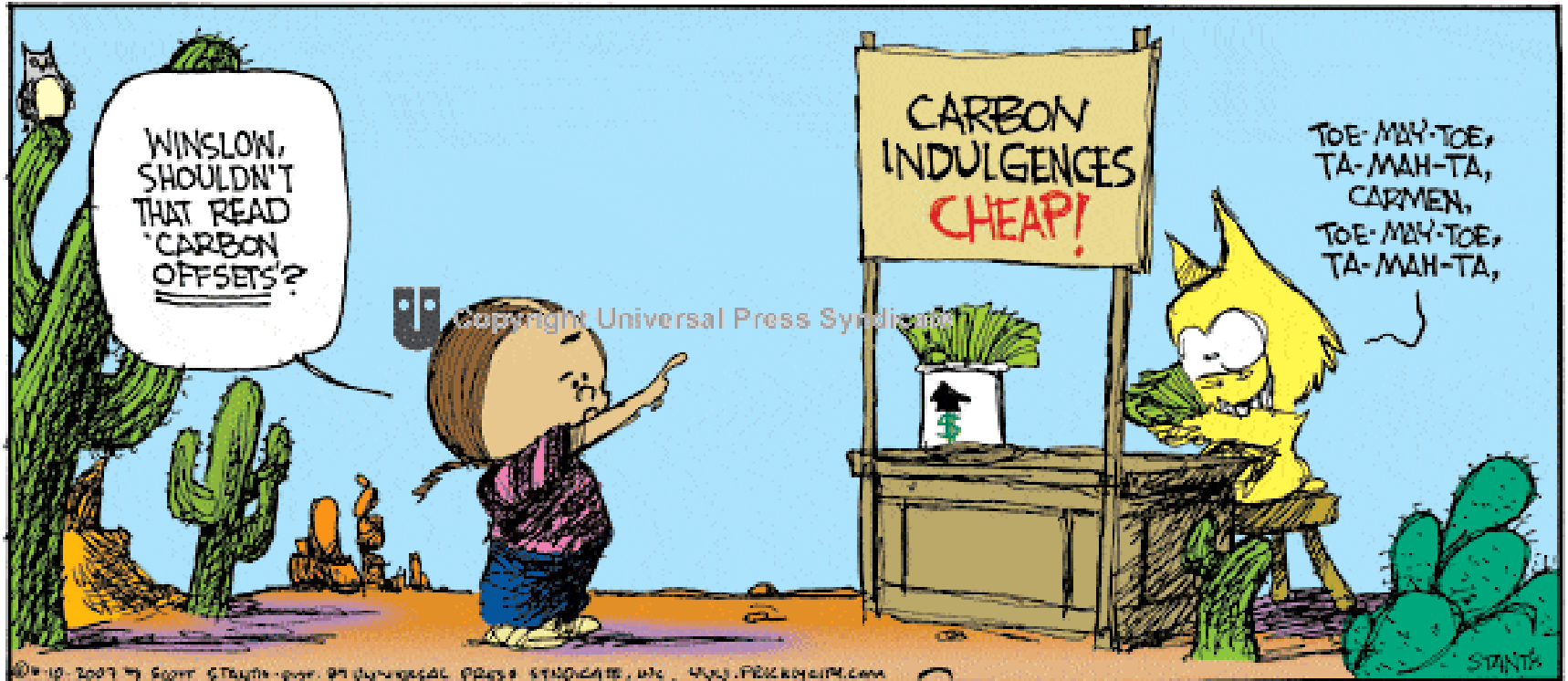
Energy Efficiency is Main Stream and on Main Street

Wal-Mart grows 'green' strategies

- Cut energy use at its more than 7,000 stores worldwide by 30% and cut greenhouse-gas emissions at existing stores by 20% in seven years. Wal-Mart is the largest private electricity user in the USA.
- Wants to sell 100 Million CFLs

USA Today, 9-25-2006





Where to Learn More

- Association of Energy Services Professionals: www.aesp.org
- Energy Hog (Alliance to Save Energy): **ENERGYHOG[®].org**
www.energyhog.org
- Touchstone Energy:
www.touchstoneenergy.com
- ENERGY STAR[®]:
www.energystar.gov
- Department of Energy:
www.doe.gov



Questions?

Katherine Johnson

Johnson Consulting Group

kjohnson@johnsonconsults.com

301- 461- 4865