



## Initial Observations from TWG Members Residential, Commercial and Industrial (RCI) Technical Work Group (TWG)

### RCI-1. Energy Efficiency Programs, Funds, and Goals

#### 1.1 Utility Demand-Side Management (DSM) programs for electricity

TWG member observations include:

- DSM incentive programs for the industrial sector are often more difficult to create due to the unique structure of most industrial processes. Common industrial processes and appliances could be targeted by prescriptive DSM incentive programs, such as motors, lighting, automated valves and compressed air systems. Custom programs could be targeted by DSM incentive programs to account for individual industrial processes.
- One TWG member noted that lowering energy costs for a business, individual or industry can reduce GHG emissions but may also have positive or negative impacts on other environmental areas.

#### 1.2 Utility Demand-Side Management (DSM) programs for natural gas, propane, and fuel oil

#### 1.3 Non-utility Demand-Side Management (DSM) programs for electricity

TWG member observations include:

- DSM incentive programs for the industrial sector are often more difficult to create due to the unique structure of most industrial processes. Common industrial processes and appliances could be targeted by prescriptive DSM incentive programs, such as motors, lighting, automated valves and compressed air systems. Custom programs could be targeted by DSM incentive programs to account for individual industrial processes.

#### 1.4 Energy Efficiency Funds (e.g., public benefits funds) administered by state agency, utility, or 3rd party (e.g., Energy Trust)

#### 1.5 Regional market transformation alliance

**1.6 Reduced cost or free residential energy audits**

TWG member observations include:

- There are few certified energy auditors in the state; more auditors may be needed to implement this option.
- Consider tying these reduced cost energy audits to actual implementation of an auditor’s recommendations.
- [Energy and Environment Ratings Alliance \(http://ratingsalliance.org/\)](http://ratingsalliance.org/) lists certified energy auditors all around the country. As of July 20, 2008, this website lists 15 energy raters in Kansas.

**1.7 Reduced cost energy audits for commercial businesses**

TWG member observations include:

- There are few certified energy auditors in the state; more auditors may be needed to implement this option.
- Consider tying these reduced cost energy audits to actual implementation of an auditor’s recommendations.
- [Energy and Environment Ratings Alliance \(http://ratingsalliance.org/\)](http://ratingsalliance.org/) lists certified energy auditors all around the country. As of July 20, 2008, this website lists 15 energy raters in Kansas.

**1.8 Reduced cost energy audits for industry sectors (*Moved from RCI-9*)**

TWG member observations include:

- There are few certified energy auditors in the state, and it may be difficult to find auditors that can be specific about particular industry processes.
- [Energy and Environment Ratings Alliance \(http://ratingsalliance.org/\)](http://ratingsalliance.org/) lists certified energy auditors all around the country. As of July 20, 2008, this website lists 15 energy raters in Kansas.

**1.9 Low-cost loans for energy efficiency improvements**

**1.10 Saving energy, savings sales tax**

**1.11 Reduce energy use by 10% or more in state owned buildings**

TWG member observations include:

- In order to set any sort of energy efficiency goal for state-owned buildings, the state needs to establish what the comparison baseline would be.

**1.12 Encourage integrated Lean Six Sigma and energy use reduction technical assistance to Kansas industrial and commercial facilities**

**1.13 Develop investment tax credits for energy efficiency improvements in industrial or commercial facilities**

**RCI-2. Buildings and Facilities**

**2.1 Improved building codes for energy efficiency**

**2.2 Training of building code and other officials in energy code enforcement”**

**2.3 Improved design and construction, “government lead-by-example”**

TWG member observations include:

- A TWG member commented that performance contracting (mentioned in the “Related Actions” of the catalog) is not often the best and most effective means for achieving energy efficiency improvements.

**2.4 Increased use of blended cement (substituting fly ash or other pozzolans for clinker)**

**2.5 Support for energy efficient community planning, "Smart Growth"**

**2.6 Promotion and incentives for improved design and construction (e.g. LEED<sup>1</sup>, green buildings) in the private sector**

TWG member observations include:

- A TWG member noted that, if this effort was focusing primarily on GHG emission reductions, then implementing LEED certifications and similar programs may not be the best path, and those programs also focus on water and other factors that are not directly related to GHG emissions.

**2.7 Feebate program to encourage energy efficiency in building design**

**2.8 Incentives for retrofit of existing residential buildings**

**2.9 Training and education for builders and contractors (e.g., HVAC sizing, duct sealing)**

---

<sup>1</sup> Leadership in Energy and Environmental Design; see U.S. Green Building Council, <http://www.usgbc.org>.

**2.10 Energy management training/training of building operators**

**2.11 Require new government buildings in Kansas to meet LEED Gold certification requirements or equivalent**

TWG member observations include:

- A TWG member noted that, if this effort was focusing primarily on GHG emission reductions, then implementing LEED certifications and similar programs may not be the best path, as these programs also focus on water and other factors that are not directly related to GHG emissions.

**2.12 Create incentives and targets for retrofit of existing commercial or industrial buildings**

**2.13 Develop a modified cap-and-trade program for commercial and industrial buildings in Kansas**

**2.14 Explore advanced metering technologies that can monitor energy usage and allow homeowners and managers to adjust energy use remotely**

**RCI-3. Appliance Standards**

**3.1 Expansion of state-level appliance efficiency standards**

**3.2 Support for federal-level appliance efficiency standards**

**3.3 Require high-efficiency appliances in new construction and retrofits**

**RCI-4. Education and Outreach**

**4.1 Consumer education programs**

**4.2 Energy efficiency school curriculum**

**4.3 Truth in advertising campaigns**

**4.4 In-home energy displays**

**4.5 Create a university or community college degree curriculum focused on energy efficiency**

**RCI-5. Pricing and Purchasing**

**5.1 Green power purchasing for consumers**

**5.2 Net-metering for distributed generation (DG)**

**5.3 Time of use rates**

**5.4 Tiered (increasing block) rates for electricity and natural gas use**

**5.5 Bulk purchasing programs for energy efficiency or other equipment**

**RCI-6. Customer-Sited Distributed Energy and Combined Heat and Power**

**6.1 Incentives to promote implementation of renewable energy systems**

**6.2 Incentives and resources to promote combined heat and power (a.k.a. cogen)**

**6.3 Efficient transformers on the customer side of the meter**

**6.4 Incentives for passive solar heating**

**6.5 White roofs, rooftop gardens, and landscaping (including shade tree programs)**

**6.6 Focus on specific end-uses/technologies**

**6.7 Passive solar heating design**

**6.8 Solar hot water heating**

**6.9 Appliance recycling/pick-up programs**

**RCI-7. Non-Energy Emissions (HFCs, PFCs, SF<sub>6</sub>, CO<sub>2</sub> Process Emissions)**

**7.1 Voluntary industry-government partnerships**

**7.2 Promotion & funding for leak reduction / capture, recovery and recycling of process gases**

**7.3 Promotion & funding for process changes/optimization**

**7.4 Use of alternative gases (other HFCs. Hydrocarbon coolants/refrigerants, etc.)**

**RCI-8. GHG Emissions-Specific Goals and Policies**

**8.1 Support for switching to less carbon-intensive fuels (coal and oil to natural gas or biomass)**

**8.2 Industry-specific emissions cap and trade program**

**8.3 Negotiated emissions or energy savings agreements**

**8.4 Local government program for voluntary emissions targets by businesses**

**8.5 Provide tools and information for residents, businesses and communities to perform GHG inventories**

**RCI-9. Other**

**9.1 Government agency requirements and goals**

**9.2 Reduce energy use by 10% or more in state-owned buildings**

**9.3 State building carbon neutral requirement**

**9.4 Municipal energy management**

**9.5 Statewide effort to retrofit existing buildings (residential, commercial, public, and industrial) for energy efficiency**

**9.6 Focus on specific market segments**

**9.7 Energy efficiency reinvestment funds**

**9.8 Focus on industrial ecology / by-product synergy**