



# 2009 Energy Policy

## **Background**

The citizens of Fort Collins created the municipal electric utility in 1935. In 1973, Fort Collins joined with Estes Park, Longmont and Loveland to create Platte River Power Authority, a joint-action agency charged with meeting the electric generation and transmission needs of the four cities. These organizations have demonstrated progressive long-term planning throughout their history. In 2003, City Council adopted the *Electric Energy Supply Policy* that recognized the interrelated planning goals of high reliability, low rates and minimizing environmental impacts.

This revised Energy Policy reflects five years of experience implementing the 2003 policy, the evolving electric utility industry and the interests of Fort Collins citizens. In May 2008, Fort Collins' City Council adopted greenhouse gas emissions goals of 20% below 2005 levels by 2020 and 80% below 2005 levels by 2050.

The purpose of this policy is to provide strategic planning guidance for Fort Collins Utilities' Light and Power Service Unit, the Energy Services group and the entire City government. The policy describes a mid-century vision and four goals with associated objectives and metrics.

## **2050 Vision**

To ensure for the Fort Collins community highly reliable, competitive, carbon neutral electricity supplies, managed in a sustainable, innovative, responsible and efficient manner.

## **Goals**

### **Goal #1: Provide highly reliable electric service.**

Highly reliable electric service is a core responsibility of the electric utility, defined by reliability statistics, power quality and customers' perception of "up-time." Reliable service is critical for the physical and economic welfare of the community. Long-term planning, high standards and qualified staff responsible for the planning and maintenance of the electric infrastructure are the primary drivers of high reliability.

Exemplary service from knowledgeable, responsive and courteous staff is a part of customers' perception of Light and Power's reliability. Light and Power demonstrates the value of skilled and qualified employees through long-term planning for hiring, retention and succession. Continued financial health and adequate investment in Light and Power supports the reliable electric service goal.



Smart grid innovations are expected to have an increasing role in the electric system. Smart grid is the integration of an electric transmission or distribution system, a communications network, software and hardware to monitor, control and manage the reliability and overall system efficiency of the generation, distribution, storage and consumption of energy.

#### *Goal #1: Objectives and Metrics*

- Demonstrate and communicate the high reliability of the Fort Collins electric system by maintaining annual reliability metrics of:
  - Average System Availability Index (ASAI) greater than 99.9886%;
  - Customer Average Interruption Index (CAIDI) less than 60 minutes; and
  - System Average Interruption Frequency Index (SAIFI) less than 1.0.
- Apply appropriate construction standards and material specifications for long-term reliability.
- Create an asset management plan by 2010 for the long-term integrity of the electric utility infrastructure.
- Create a smart grid roadmap by the end of 2009, defining specific objectives and implementation plans.
- Manage peak loads to reduce demands on the distribution system, optimize infrastructure investment and reduce purchased power costs.
  - Maintain energy efficiency and demand side management programs targeting peak loads.
  - Increase the power managed by load management, smart grid and distributed generation to at least 5% of 2005 system peak demand by 2015 and at least 10% by 2020. Develop a methodology for tracking load management as a percentage of peak demand, considering utility programs, customer response and weather normalization.
  - Support customer efforts to reduce electric costs through managing peak loads.
- Annually report on human resources benchmarks designed to sustain a skilled and qualified Light and Power workforce.
- See Goal #4 for reliability related coordination with Platte River Power Authority.

#### **Goal #2: Support the community's carbon emissions goal of reducing the City's carbon footprint 20% below 2005 levels by 2020 and 80% by 2050.**

Fort Collins citizens place a high value on a healthy and sustainable environment. Fort Collins Utilities goal is to continuously move in the direction of sustainability, reducing impact on ecological systems while improving the well-being of the community.

Energy use, water use and transportation are major components of the community environmental footprint, and solutions that integrate the relationship between these sectors will result in optimal long-term outcomes. All energy sources have



environmental impacts related to resource exploration, extraction, transportation, emissions and land use. Carbon emissions related to the provision of electric energy, including energy supply resources and operations, is a meaningful and pragmatic metric for measuring the community environmental footprint.

Fort Collins Utilities is committed to first maximizing the benefits of efficiency and conservation, moving toward clean and renewable energy sources, and adapting to the opportunities brought by innovation and emerging technologies in the electric utility industry.

### *Goal #2: Objectives and Metrics*

- Develop a methodology for reporting carbon emissions and savings related to:
  - Overall electricity consumption;
  - Reductions in energy use from efficiency programs;
  - Substitution of fossil fuel based electricity with renewable or clean resources; and
  - Increases in use of electricity for transportation.
- Adopt pricing policies that reflect the short term and long term costs, both direct and indirect, of generating and delivering electricity.
- Continuously reduce energy use through verifiable energy efficiency programs, independent of population growth and economic trends.
  - Achieve annual energy efficiency and conservation program savings of at least 1.5% of annual energy use (based on a three year average history).
- For renewable energy resource investments, balance the interrelated factors of carbon reduction cost-effectiveness, impact on power plant operations and local economic benefits.
  - Maintain a minimum fraction of renewable energy in compliance with State of Colorado requirements. In coordination with Platte River Power Authority, develop generation resources and the delivery of renewable energy to meet minimum requirements.
  - Offer voluntary renewable energy programs, whereby customers can support renewable energy and local renewable energy projects through opt-in premium pricing.
  - Increase the contribution of renewable energy to reach the 20% by 2020 carbon reduction goal, after accounting for the contributions of resource mix, energy efficiency, conservation, minimum renewable energy requirements and voluntary renewable energy programs.
  - Include renewable energy sources that can be scheduled to maintain system stability and reliability.
- Promote sustainable practices in homes and businesses by requiring highly energy efficient new buildings and supporting increased efficiency in existing buildings.



- Participate in research, development and demonstration efforts to remain at the forefront of emerging technologies and innovative solutions.
- Develop a plan for reporting and continuous improvement on the sustainability of electric utility operations.

### **Goal #3: Enhance local economic health.**

Fort Collins Utilities' Light and Power Service Unit has supported our local economy with highly reliable service, and a history of low and stable electric rates. Going forward, competitive rates should be combined with energy efficiency and conservation programs to result in low and sustainable community energy bills, supporting economic activity in all areas.

Fort Collins Utilities' Light and Power Service Unit business activities also support the local economy as a direct and indirect employer, as a contributor to the City's general fund, by leveraging customer investment in energy efficiency, supporting research and demonstration projects and as a participant in clean energy collaborations.

#### *Goal #3: Objectives and Metrics*

- Maintain the financial health of Fort Collins Utilities' Light and Power Service Unit to support the vision of the Energy Policy.
  - Continue to meet the Utilities Light and Power fund financial policies.
  - Maintain sufficient revenues through biennial budget planning for on-going operation and maintenance of the electric system and meet the projected requirements of the asset management plan.
- Maintain regionally competitive rates that promote energy efficiency and conservation.
- Maintain efficiency and conservation programs to help keep customers' energy bills affordable. Develop a metric reflecting the affordability of electric bills for Fort Collins customers.
- Promote the benefits of clean energy solutions to existing and potential customers.
- Strive to invest climate improvement monies locally in programs that have long-term positive impacts.

**Goal #4:** Work closely with Platte River Power Authority members and Platte River staff to further City of Fort Collins' Energy Policy goals.

Platte River provides a strong means for furthering the energy goals of Fort Collins and the other Platte River members. Platte River provides generation and transmission level electric services, while Utilities provides distribution service, metering and direct customer services. Fort Collins contracts with Platte River for all of the electricity delivered to customers, including renewable energy. Platte River is controlled by a



board of directors comprised of two representatives from each of the four cities, typically the utilities director and mayor.

*Goal #4: Objectives and Metrics*

- Develop closer working relationship with the other Platte River cities.
- With other member cities, provide policy guidance to Platte River to:
  - Design, operate and maintain the electric generation and transmission system to minimize the risk of system outages.
  - Develop long-term planning policies for Platte River that facilitate innovative solutions to future energy challenges.
  - Design, operate and maintain the electric generation, transmission and distribution system to maximize system efficiency.
  - Avoid the construction of new base load generation facilities.
  - Reduce impacts from fossil fuel use in current and future generation facilities.
  - Diversify the portfolio of energy sources that serve the City.

**Reporting and Policy Update**

In order to provide transparency and document progress, the Utilities Executive Director will provide the City Manager, Electric Board and City Council with an annual status report on the Energy Policy. The report will document progress on the goals and objectives included in the policy, report policy related costs and benefits of policy initiatives and update plans for the next year.

The Energy Policy will be reviewed and revised in the fifth year after adoption.