



Boulder's

Energy Future *Today*



July 2012
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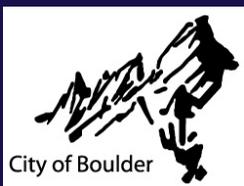
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What's happening with electric utility exploration

The new executive director of energy strategy and electric utility development is working to develop a work plan to build on the research done to-date and guide the project over the next few years. Community members, stakeholders and experts will soon be recruited to assist in many parts of the exploration. Guiding principles and an outline will be presented to council on Tuesday, July 24, with more details and a timeline expected at council's Tuesday, Aug. 28 study session.



www.BoulderEnergyFuture.com

Enhanced CAP programs recommended for 2013 and beyond

In 2006, Boulder voters were the first in the country to agree to tax their own electricity use to raise money for programs that would help reduce harmful greenhouse gas emissions. Since then, the city has collected between \$600,000 and \$1.8 million a year from this Climate Action Plan tax (CAP tax) to fund energy efficiency and conservation programs for homes and businesses. This tax is set to expire in March 2013.

As voters consider whether to extend the CAP tax, the city, community stakeholders and The Brendle Group, an Ft. Collins based consultant, have worked to determine the best strategies for how any available future funding should be used. The goal was to develop an approach that evaluated gaps in existing CAP programs and collect ideas that would improve existing services to achieve community greenhouse gas reduction and other goals.

After concluding the analysis, the city and Brendle recommended a package that builds on existing programs that are yielding positive results, like EnergySmart, and new components, such as an open request for proposal (RFP) process that will allow for innovative solutions to be integrated if existing programs aren't delivering forecasted savings.

Key elements of the recommendation:

If the CAP tax is extended, the new and enhanced strategy would:

- Consolidate existing commercial programs and making them the highest priority efforts
- Include both voluntary and mandatory approaches

- Allocate funding to spur market innovation
- Support continued improvement through new data tracking and reporting systems
- Promote renewable energy programs for residential, commercial and industrial customers

How much would this cost?

The annual cost of the recommended package would stay within the current \$1.8 million generated annually from the existing CAP tax. Residential electrical customers would continue to pay an average of \$21 per year, while commercial customers would contribute about \$94. Industrial customers, the largest users of electricity in the city, would pay about \$9,600 annually.

Why would this approach will work when previous efforts have not seen desired outcomes?

CAP programs and services are seeing positive results, but community goals have yet to be met. By enhancing the programs that work and combining those with new innovative approaches, the community can expect to achieve greater success.

To ensure that services are working, a new tracking system will be created to monitor each program and guide investment decisions with frequent reporting.

What went into this analysis?

After receiving over 80 ideas for programs from stakeholders and the city, Brendle zeroed in on 15 of the most viable programs. A complete list of the data used and a program evaluation matrix developed by Brendle is included in the final report, which is available at www.BoulderEnergyFuture.com.

Who is RMI?

Rocky Mountain Institute was co-founded by leading environmentalist Amory Lovins in 1982. The Colorado-based, independent non-profit is committed to collaborating with businesses, governments and communities to drive the efficient and restorative use of resources using profitable and innovative approaches.

RMI works in the four energy-using sectors of the economy: buildings, industry transportation, and electricity, and leverages whole-system thinking to reveal interconnections and systematic solutions, which are often simpler, cheaper and able to solve multiple problems with single investments.

RMI adheres to a set of guiding principles, including one called the “end-use/least-cost” approach: “What are we trying to do, and what’s the best and cheapest way to do it?”

Learn more about RMI at www.rmi.org.

Report: CAP tax money spent wisely, efficiently

The city’s Climate Action Plan (CAP) programs have successfully leveled off and avoided some carbon emissions in Boulder, but continued funding for existing and new, more comprehensive programs is necessary to successfully address the climate change challenge, according to a report prepared by Rocky Mountain Institute (RMI).

The city asked RMI to analyze the effectiveness of CAP tax funded programs, which have received between \$600,000 and \$1.8 million per year in voter-approved funds since 2007.

RMI found that the city has used community tax dollars to invest in programs that are reducing emissions at a reasonable cost. The consultant recommend continued support and funding for these programs and encourage the community to make even more substantial efficiency improvements to reach community goals.

Key Findings:

- Lighting replacement programs, especially in the residential sector, offered the most cost effective savings.
- Renewable programs in Boulder, such a Solar Grants, have been more cost effective than city-run programs in other states.
- EnergySmart programs are showing impressive results in helping people put energy effi-

ciency recommendations into action. While they have had significant, and anticipated, start-up costs, these programs are expected to gain in cost effectiveness, providing greater emissions reductions per dollar invested.

Boulder has done well, but we can do better. According to the report, “Boulder must push beyond the simple and easy programs and begin additionally encouraging residents and businesses to think long-term about their buildings, investment choices and energy use.”

The interaction between where our energy comes from (specifically, increasing renewable energy sources) and how we use it is important and should be a focus if the community wants to hit future emissions-reduction targets.

In order for Boulder to act on RMI’s suggestions, the CAP tax, which expires in March 2013, should be renewed, or we risk jeopardizing future emission reductions. This is why City Council is looking to place a renewal of the tax on the Nov. 6, 2012 election ballot.

Learn more about all that the CAP has to offer at www.BoulderColorado.gov/CAP. You can read the entire RMI report at www.BoulderEnergyFuture.com.



On June 13, the City of Boulder hosted *Boulder’s Climate Action Open House: Planning for our Energy Future*. Staff explained why reducing greenhouse gas emissions and addressing climate change is important. The open house also addressed Boulder’s long- and short-term goals and how to measure progress. All meeting materials are available on the Energy Future website - www.BoulderEnergyFuture.com.

Reducing energy use and emissions by the big users, commercial buildings; a three-phased approach

Energy use in Boulder makes up 76% of the community's greenhouse gas (GHG) emissions, and the electricity consumption of industrial and commercial sectors accounts for nearly 64% of those emissions. This is the main reason why City Council has asked staff to develop new programs (both voluntary and mandatory) and possible regulations that would reduce energy use in this area while striving to maintain strong working partnerships and economic vitality.

The city's response to council involves a three-phased commercial energy efficiency strategy (CEES) that considers lessons learned from Boulder's experiences, draws upon best practices from other communities' commercial programs and policies, and aligns efforts with the timing of the Energy Action Plan (EAP), which is currently being created.

The proposed approach attempts to balance incentives and regulations to increase energy efficiency and reduce GHG emissions without negatively impacting - in fact, striving to positively contribute to - the community's economic vitality and social sustainability. This would ensure that Boulder remains an attractive community for businesses, stimulating and creating opportunities for them to move into and grow in Boulder.

Phase I – Continued and Enhanced Voluntary Programs - May to November 2012

Commercial energy efficiency isn't new in Boulder. Over the last few years, several programs, including Commercial EnergySmart and 10 for Change, have experienced success in helping local businesses and building owners reduce their carbon footprint and save money at the same time.

Since 2011, EnergySmart has provided over 2,000 services, including advising and rebates for energy efficiency upgrades, to over 1,300 businesses and property owners in Boulder. These businesses have received over 500 rebates totaling \$700,000, and the services and upgrades received are saving an estimated 7,000,000

kilowatt hours of electricity and 5,800 metric tons of CO₂ emissions annually.

In 2012 and beyond, expanded incentives for businesses to reduce their energy use will include support for property owners willing to rate and report out on their buildings' performance. Other incentives include, but are not limited to:

1. Advising services, including free assessments.
2. Rebates for incorporating energy efficient building equipment.
3. Energy rating and/or benchmarking assistance.

Phase II – Required Energy Rating and Reporting - Late 2012 to late 2013 or 2014

In this phase, commercial property owners would be required to rate or "benchmark" their building's energy performance, using a standardized system, and report the rating to the city. This will allow building owners to more effectively target measures specific to each building's needs, so that energy savings can be made more effectively. It will also give the city a snapshot of the current building stock so that improved tracking measures can be implemented and incentives can be strategically structured to address the biggest needs.

Phase III – Required Prescriptive Measures and/or Performance Standards - Late 2014 and beyond

Using the critical benchmarking and other data gathered in Phase II, the city will work to determine the most appropriate energy efficiency standards that advance Boulder's energy efficiency, GHG reduction and economic vitality goals. Improvements will be phased in over period of years, similar to the city's current SmartRegs requirements for rental housing, which has been effective in increasing energy efficiency in that sector. This phase would potentially include an ordinance requiring commercial property owners to meet specific prescriptive measures and/or performance standards.

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Save Energy and Reduce Waste:

- You can calculate your home's energy usage with the Home Energy Saver - visit <http://hes.lbl.gov/consumer>.
- You can create an Energy Action Plan for your home with Recharge Colorado's Energy Action Planner. Visit http://rechargecolorado.org/index.php/energy_action_planner.
- Take a No Trash to Work Lunch - bring reusable containers (Tupperware, old yogurt cups, etc.) instead of disposable items like plastic bags. Then take them home, wash them, and use them again.
- Turn the water off when you don't need it running, when washing dishes, washing hands, and brushing teeth.
- Keep shower times to 5 minutes.
- Wait until you have a full load of laundry to run the washing machine.
- Wait until the dishwasher is full to run it.
- Install a faucet aerator on your kitchen faucet. Tip: You can get these for FREE with an EnergySmart Assessment or with a FREE indoor water audit.
- Replace your current shower head(s) with a low-flow shower head(s). Tip: You can get these for FREE with an EnergySmart Assessment or with a FREE indoor water audit.

Upcoming Events

- Tuesday, July 24 - 6 p.m.
- Study Session with City Council - 1777 Broadway
- Saturday, July 28 - 8 a.m. to 2 p.m. - Energy Future at the Farmers Market. Look for the City of Boulder tent near Canyon Boulevard and 13th Street.
- Tuesday, Aug. 7 - 6 p.m.
- City Council's second reading of the proposed Climate Action Plan tax extension ballot item - 1777 Broadway
- Tuesday, Aug. 21 - 6 p.m.
- Potential third reading of the proposed Climate Action Plan tax extension ballot item - 1777 Broadway
- Saturday, Aug. 25 - 8 a.m. to 2 p.m. - Energy Future at the Farmers Market. Look for the city of Boulder tent near Canyon Boulevard and 13th Street.
- Tuesday, Aug. 28 - 6 p.m. - City Council Study Session on electric utility exploration work plan.



July 24 Study Session on municipalization work plan, CAP programs, and commercial energy strategy

The public is invited to attend a Study Session with City Council at 6 p.m. on Tuesday, July 24, in the Council Chambers, 1777 Broadway, to learn more about Boulder's new climate commitment and other ongoing work comprising Boulder's Energy Future.

Presentations from staff will focus on:

- General areas of exploration that will be part of the municipalization work plan. Feedback from council will help refine the plan, which will be brought back for discussion at a Tuesday, Aug. 28 Study Session with City Council.
- Boulder's new Climate Action Commitment: carbon neutrality
- Energy action planning efforts, including: a staff recommended investment package of programs and services (read the article on

page one) provided by the city that could be used if the Climate Action Plan tax is renewed by voters in November;

- Recently completed CAP tax survey results
- Work to-date and future plans for the Commercial Energy Efficiency Strategy (CEES); and,
- Options for residential and commercial building code updates for new construction and major remodels.

No public feedback will be heard at this meeting, but people can comment on these topics and all other aspects of the project on the BoulderEnergyFuture.com website. The complete study session packet is available at www.BoulderEnergyFuture.com.

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Throughout the process, the following principles will continue to act as guides:

- Data is important to understanding energy efficiency opportunities in Boulder's commercial building sector
- We will learn from past and present initiatives and build on what has worked
- An ongoing commitment to make the process clear and transparent
- Collaboration with the commercial building industry and professional energy consultants is key
- Will explore best practices and find cost effective means to increase energy efficiency
- Partnerships are valuable for sharing the best ways to reduce energy use, increase efficiency and save money

We recognize that stakeholder involvement in the development of the CEES is imperative for initia-

tives to be supported by the community and to help ensure the project's success. The stakeholder engagement process will include and balance commercial building industry and businesses. Property owners and managers, contractors, real estate brokers and business tenants will all be invited to participate and provide input.

Outreach and education is already ongoing and a few preliminary stakeholder meetings have been held. After receiving feedback from council, a more formal stakeholder process will be assembled this summer. Ongoing one-on-one meetings will continue throughout the process to ensure feedback and input is received by commercial stakeholders.

Commercial property owners, building managers and tenants are encouraged to participate and provide feedback. Use the comment form at www.BoulderEnergyFuture.com and we'll add you to our stakeholders list.



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