

Boulder's Energy Future

CLEAN LOCAL ENERGY

low-cost. reliable. possible.

April 14 2014

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Agenda



I. Introduction

II. Regulation in Colorado

III. The Municipalization Exploration Project

IV. Boulder's Path to the Future

V. Next Steps

Regulation in Colorado



Colorado Utility Regulation	Deregulated States
Supports vertically integrated utility structure	Unbundled generation and transmission to avoid preferential treatment of generators
Prices set by regulator based on historical cost model (little incentive to manage cost and efficiency)	Cost of power established by market/ transmission regulated
Services must be approved by PUC and offered to all customers	Services and pricing packages can be created to meet unique customer needs



The Municipalization Exploration Project



Municipalization Exploration Project

It's about Decarbonization, Decentralization, and Democratization of our Electricity Services

**WHAT DO
10 METRIC
TONS OF
EMISSIONS
LOOK LIKE?**

CAP
CLIMATE ACTION PLAN
2015-2020

WANT TO START AND GO FURTHER TO HELP REDUCE EMISSIONS IN BOULDER?
READ ALL ABOUT IT UNDER ACTION IN BOULDER www.bouldercolorado.gov/climateaction

**LET'S
SHOW THE
WORLD
HOW IT'S
DONE**

**IT WILL TAKE
ALL OF US
TO CONTINUE
REDUCING
EMISSIONS**

“ Boulder's Climate Action Plan has helped avoid nearly 100,000 metric tons of CO₂ emissions. In 2010, Boulder's efforts put us in a small group of American cities that have managed to stabilize or decrease emissions. **”**

**WHAT DOES
SAYING FAREWELL TO
FOSSIL
FUELS
LOOK LIKE?**

CAP
CLIMATE ACTION PLAN
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Municipalization Exploration Project

Objective: To evaluate options for a city-owned electric utility that support community goals and guiding principles, determine whether those options meet the City Charter test for municipalization, and to provide City Council with a preferred option(s) and recommendation on whether to proceed with municipalization.

Needed to answer these questions:

- *Can* we municipalize? – Meets Charter reqs
- *Should* we municipalize? – Adds value

History of Municipalization



- **2005** – City began researching power supply options
- **2010** – Franchise with Xcel Energy expires, city decides not to renew after extensive negotiations
- **Nov. 2010** – Boulder voters approve utility occupation tax to replace franchise fee
- **2011 - to the Present** – Ongoing negotiation with Xcel Energy
- **Nov. 2011** – Boulder voters pass measures to establish Charter requirements for municipalization



History of Municipalization

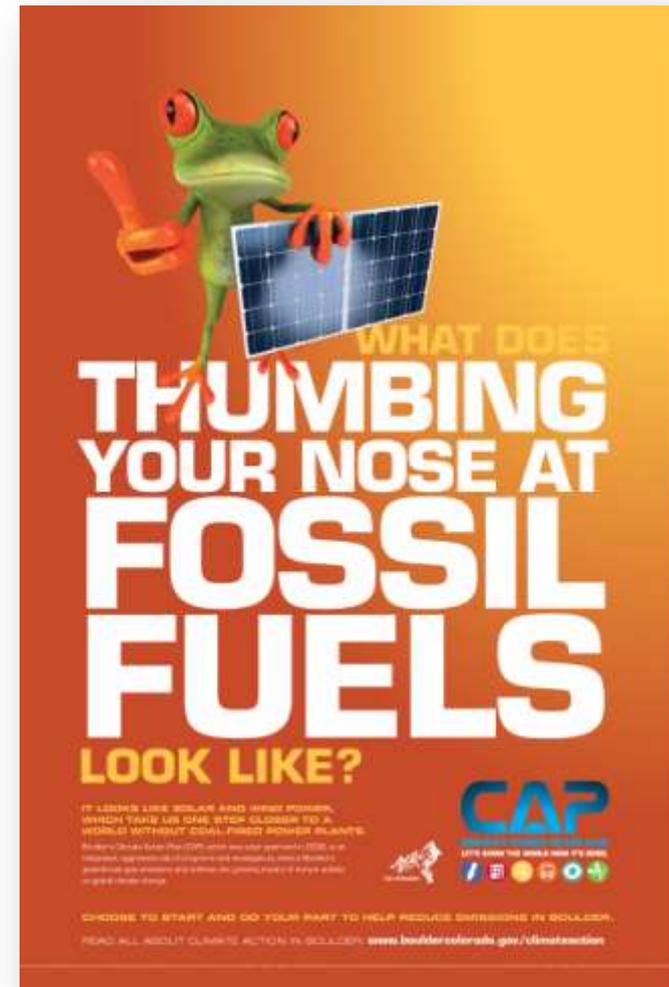


- **Jan. 2012 to Aug. 2013** – Analysis to determine if municipalization could meet Charter requirements and add community value:
 - Detailed analysis and modeling of scenarios, data collected and vetted
 - Working groups formed to advise staff
 - Models reviewed by independent 3rd party, and recommendation to City Council
- **Nov. 2013** – Second ballot measure defeated
- **Nov. 2013 to Jan. 2016** – Legal filings and transition plan developed and implemented with ongoing public engagement

Why a New Utility Model is Important to Boulder



- **Driven by the Boulder Community**
 - Climate Action Plan – Climate Commitment
- Achieve greenhouse gas reduction and climate change mitigation goals
- One of the most carbon-intensive fuel supplies in the nation
- **Community access to:**
 - Reliable power that is increasingly clean and competitively priced
 - Local decision-making authority on where power comes from and new investments in emerging technology
- **Drive economic vitality and foster community innovation & involvement**



What is the Problem – Financial Incentives



- Current model is inherently in conflict with reduced use and localized generation
- Returns are tied to investments in assets, incenting large capital programs
- Revenue growth relies on increased Kwh and Kw sales

The Community is Engaged



Local, regional and national experts enlisted to help with analysis of all work plan areas:

- 100 community working group volunteers
 - Helped with financial, reliability, resource, decision analysis and communications & engagement
 - Many combined years of electric utility experience in all facets of industry
 - Local entrepreneurs and business owners
 - Federal laboratory scientists and professors
- Expert consultants retained
 - Technical engineers, modelers, financial planners, and legal
 - All highly skilled in electric utility analysis

Summary of Key Findings



- Four options exceed Kyoto in year 1; a fifth in year five
- Under some options, customers have equal or lower rates over 20 years
- Maintain or exceed current reliability
- Reduce emissions by more than 50% with 54% of electricity from renewable resources
- All options meet the debt service coverage ratio – 1.25x
- Provide path for strong economic development



Boulder's Path to the Future

Boulder's Energy Future: Why We're on this Path



What we want ↓



What we have ↓



Boulder's Path to the Future



“The Utility of the Future is the unifying entity that connects the wants, needs, and desires of the user with the core values of the community in the most efficient and sustainable way possible.”

How can Boulder...

- Pursue a Low-Carbon Future?
- Focus on customer choice and treat energy as a service rather than a commodity?
- Become a hub of innovation and technological advances?
- Leverage infrastructure and ensure reliability?
- Change the business model to reflect values and economics of 21st century?



Boulder's Energy Future: Not Unlike a Previous Transformation



Times have changed . . .



For the better!

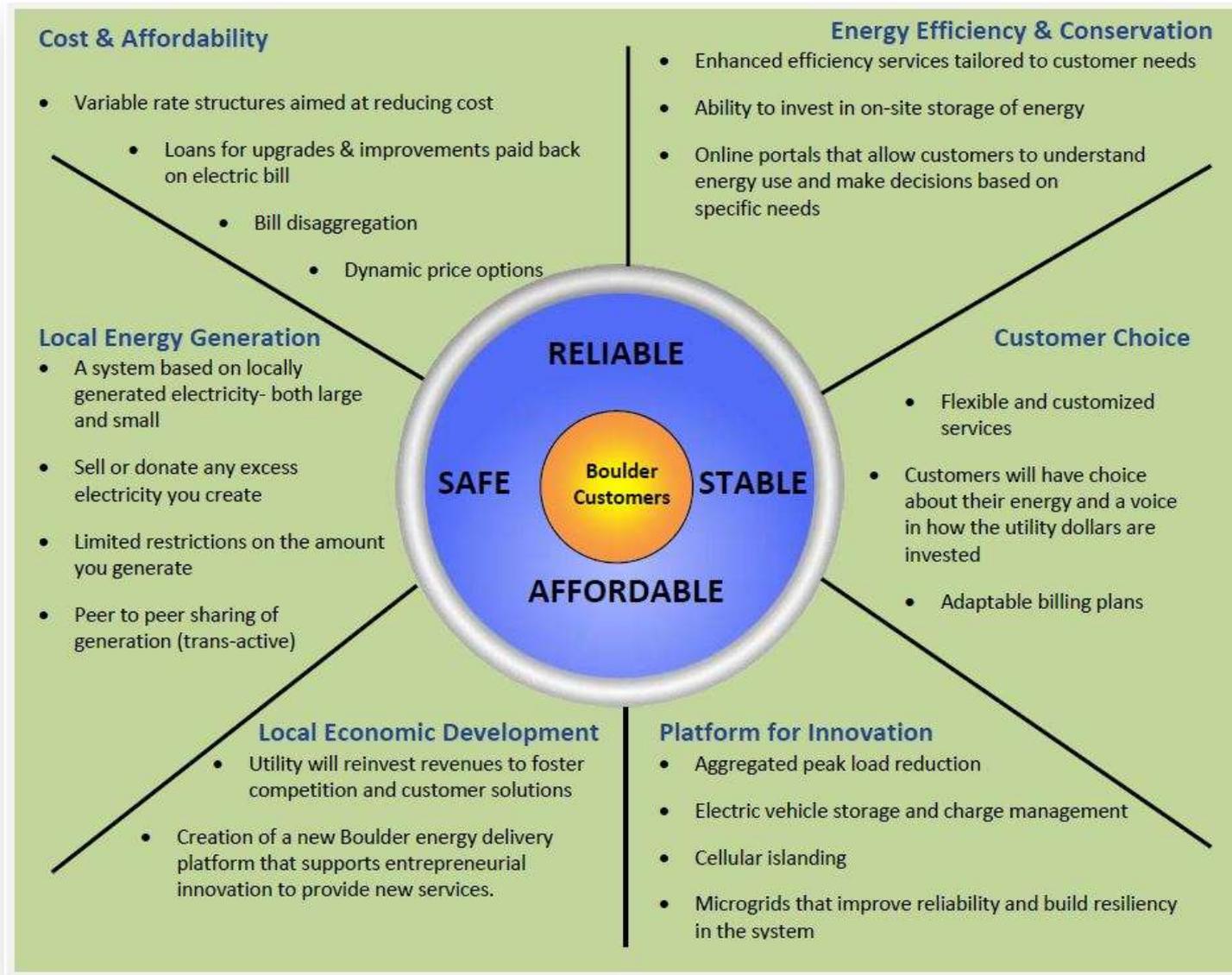


What Should Change – The Business Model



- Pricing shift to a service based model
- Continue to provide pricing signals to incent energy efficiency
- Flexible pricing and services
- Move away from returns based on large capital investments
- Insure fair recovery of utility T&D infrastructure

The Utility of the Future



Where We Are Going



Providing the flexibility to create new services:

- Welcoming local innovations
- Test bed for new services
- Community engagement in the vision
- Developing the revenue and business model of the future
- Insuring we do not create barriers to our long term vision

Next Steps



- Proceeding with legal steps
- Developing Transition Plan (May 13 draft to council)
- Developing Energy Services (April 29 council mtg)
- Continuing public engagement & outreach around Utility of the Future vision and transition plan
- Open to working with Xcel on a potential partnership

Stay Informed



Follow along at www.BoulderEnergyFuture.com

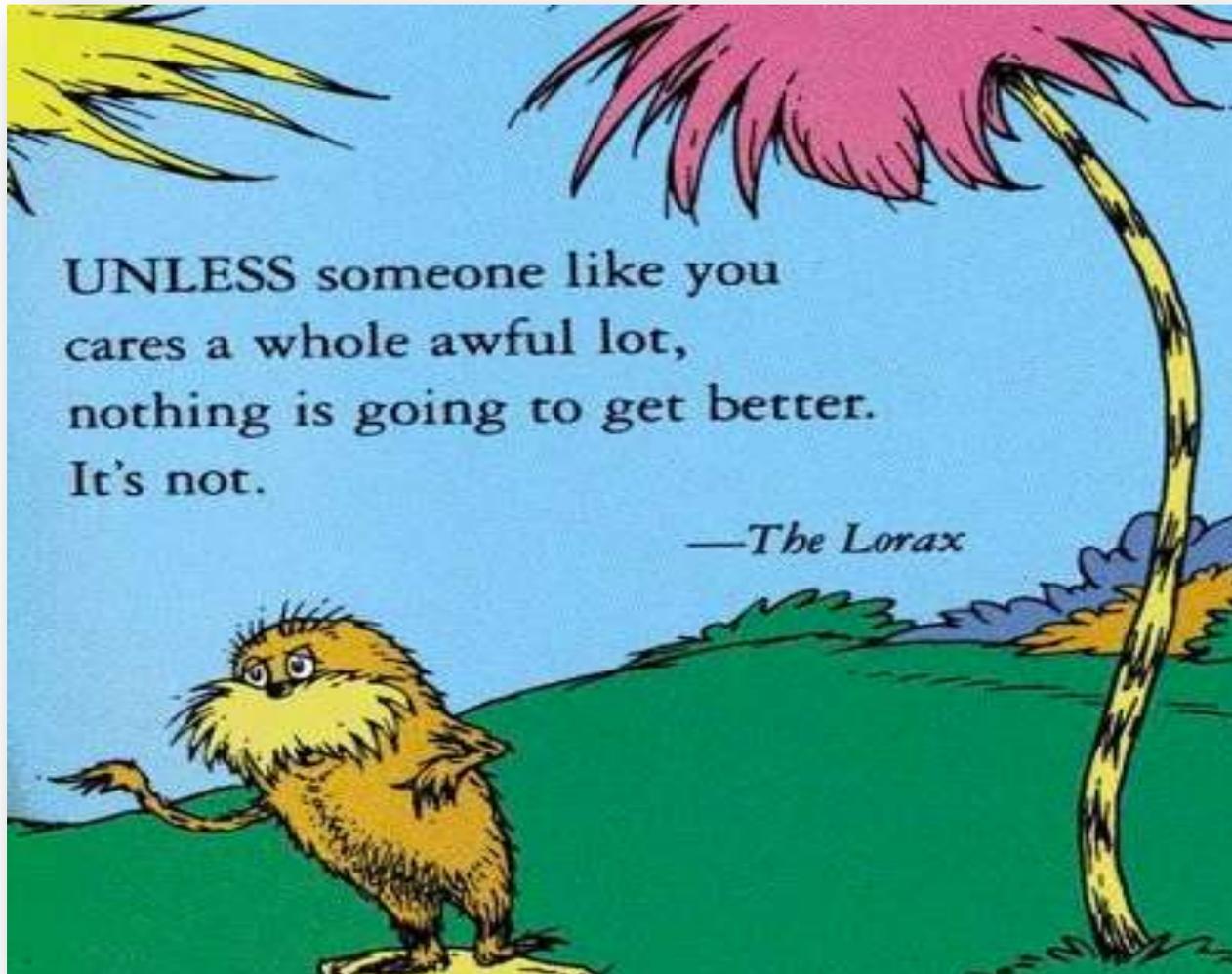
- Sign up for E-News reports and monthly newsletter
- Use online comment form for questions/feedback
- Send an email: energyfuture@bouldercolorado.gov

Provide feedback on specific questions/areas at
www.InspireBoulder.com

Contact Heather Bailey with questions/comments

- BaileyH@BoulderColorado.gov or 303-441-1923

Get Involved



Dr. Suess, right as usual