

Boulder's Energy Future Project and Municipalization Exploration Study

ReENERGYze Your Business
March 8, 2013

www.BoulderEnergyFuture.com

Agenda



I. The Municipalization Exploration Project

II. The Electric Utility of the Future

III. What's the Disconnect?

IV. Where we are now and the Options for moving forward

V. What's next

Municipalization Exploration Project



Objective: To evaluate options for a city-owned electric utility that support community goals and guiding principles, determine whether those options can meet city charter test for municipalization, and to provide City Council with a preferred option(s) and recommendation on whether to proceed with municipalization, or not.

To answer the questions:

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

Why Boulder is on this path



- **Seeking new ways to achieve community greenhouse gas reduction and climate change mitigation goals**
- **To give the 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

Boulder's Path to the Future



- **2005** - City started researching power supply options
- **2010** – Franchise with Xcel expires, city decides not to renew after extensive negotiations
- **Nov. 2010** – Boulder voters approve utility occupation tax to replace franchise fee
- **2011** – Continued negotiations with Xcel, which included potential “wind agreement,”
 - Wind deal did not meet community goals, so it was not pursued

Boulder's Path to the Future



- **Aug. 2011** – Municipal exploration ballot measures placed on Nov. ballot
- **Nov. 2011** – Voters pass municipalization measures that establish Charter requirements
- **Jan. to Sept. 2012** – Work plan developed – path to Utility of the Future
- **Nov. 2012** – Charter metrics developed and approved
- **Nov. 2012 to Feb. 2013** – Options for moving forward developed



Envisioning the Utility of 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...

- *Be positioned for 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?*



What's the Disconnect?



- Coal-based resource portfolio
- Limited renewable resources in current mix - 24 percent
- PUC regulation versus local control
 - One-size fits all
 - Difficult to meet community values and goals
 - Rate oversight
- Business model
 - Energy as a service vs. a commodity
 - Shareholders versus community
 - Consumption based revenue model

Current Resource Mix



- Estimated load is between 240 – 260 MW
- Currently 12 MW of distributed generation
- 2011 Colorado Supply from Xcel
 - Coal = 59.8%
 - Natural Gas = 24.11%
 - Wind = 13%
 - Hydroelectric = 1.84% (Boulder has 8 hydros)
 - Solar = 0.56%
 - Nuclear = 0.6%
 - Oil = 0.03%
 - Biomass/waste = 0.06%

Charter Requirements & Metrics



- **Charter requirements are absolute conditions that must be met prior to creating a utility.**
 - These are the “floor” or baseline requirements
 - Won’t be the only criteria that will be used to make a decision on moving forward.
- **If Charter requirements are met, we will know that we CAN, but we still won’t know if we SHOULD.**
 - The next steps will help determine if enough value will be added to the community by forming municipal electric utility.

Where we are now: Work Plan



Objectives:

- Roadmap for creating Utility of the Future
 - Moving toward a different model of utility services
 - Could take the form of a municipal utility, Xcel partnership or something else.
- Created potential service area map
- Develop options for moving forward
- Gain community support and/or understanding of outcomes (address as many concerns as possible)
- Ensure integrity of the process
- Documentation for third-party evaluation

Where we are now: Work Plan



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

- 50+ 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

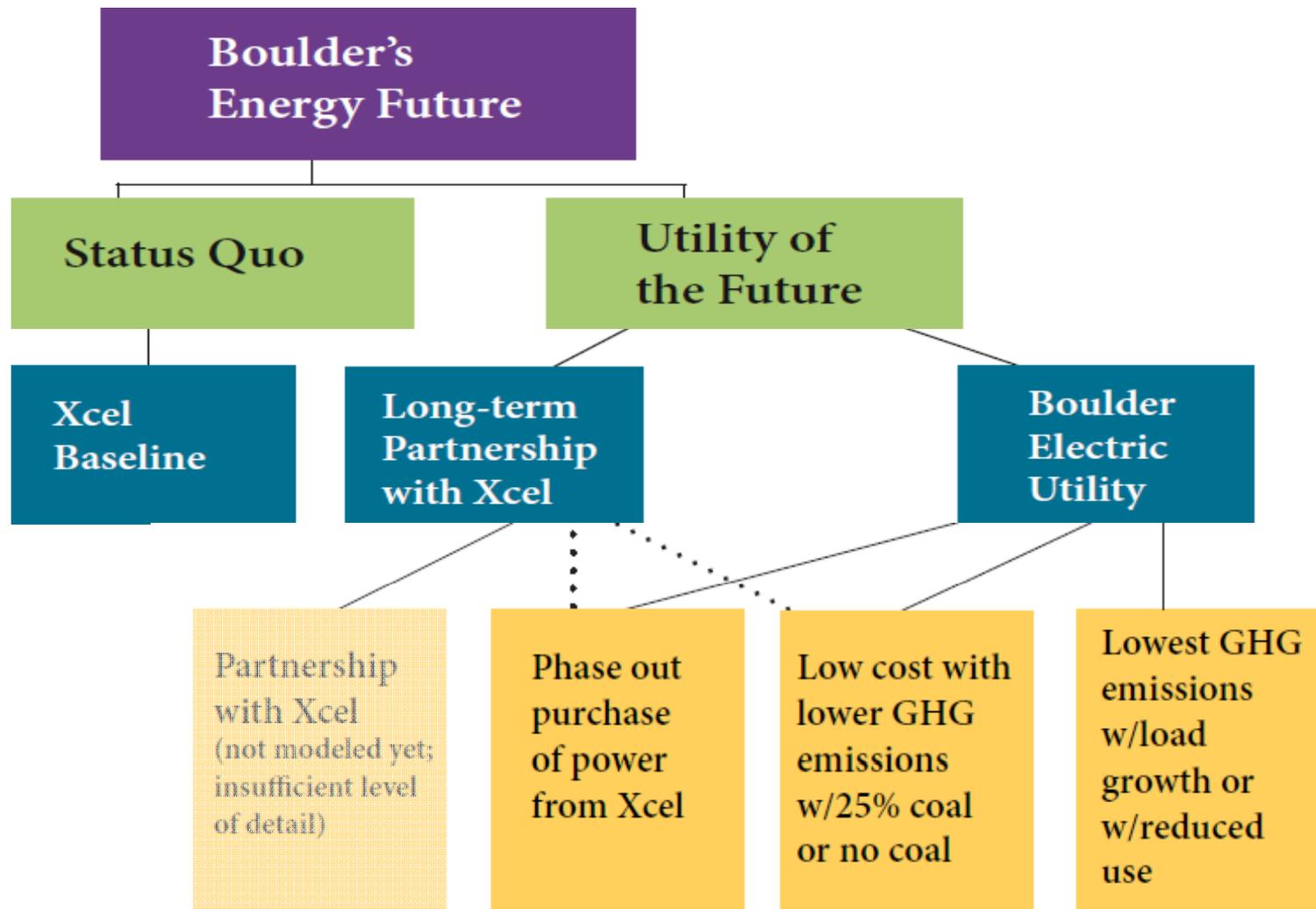
Formulating Options



What do we mean by an “Option?”

- How and where we get our energy resources
- What business structure meets financial targets
- What assets do we need to serve our community
- What investments do we need to make in electric infrastructure
- How we achieve excellent reliability
- Other components needed to support the community goals

What Options were Modeled?

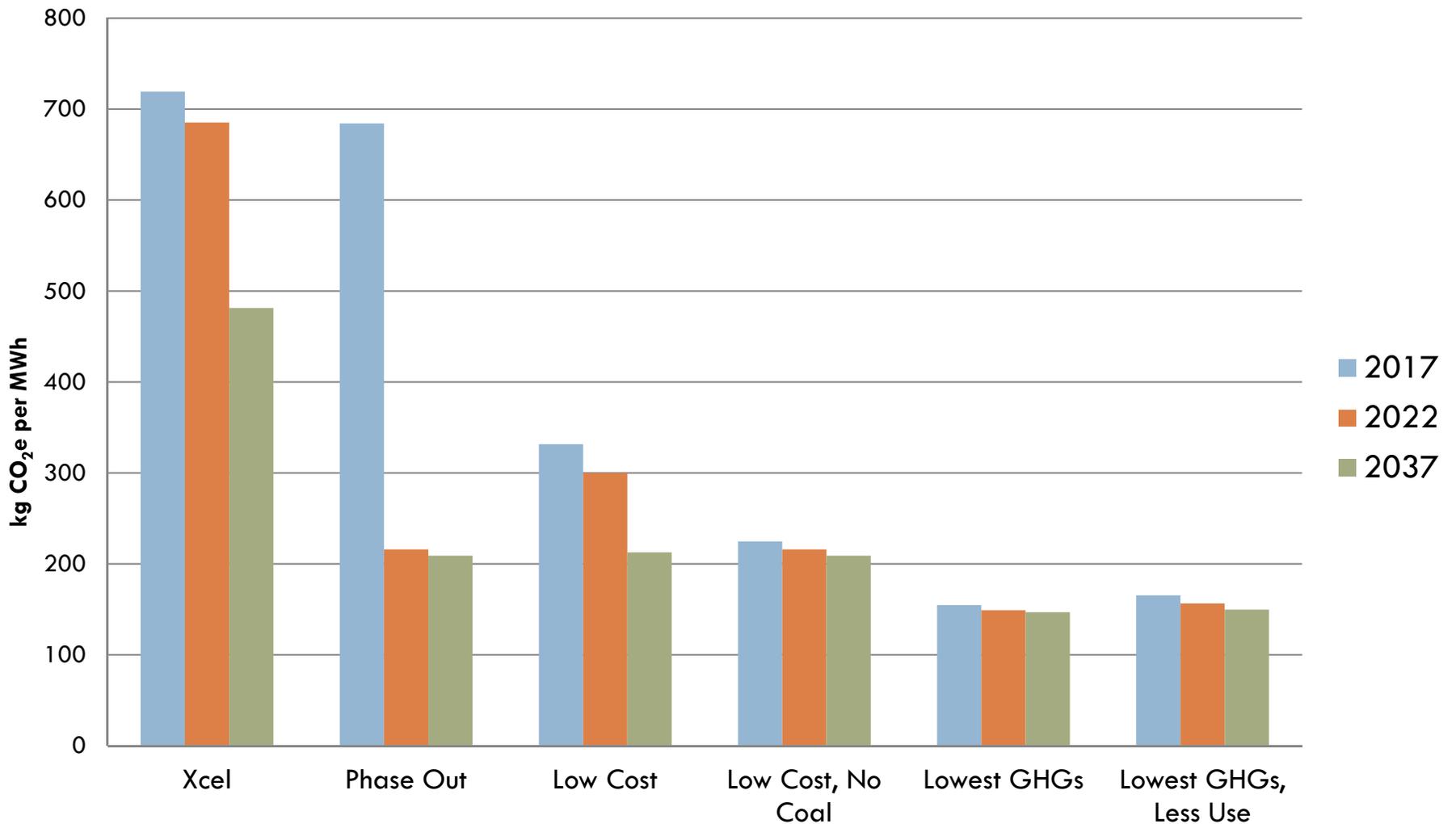


Potential Resource Options

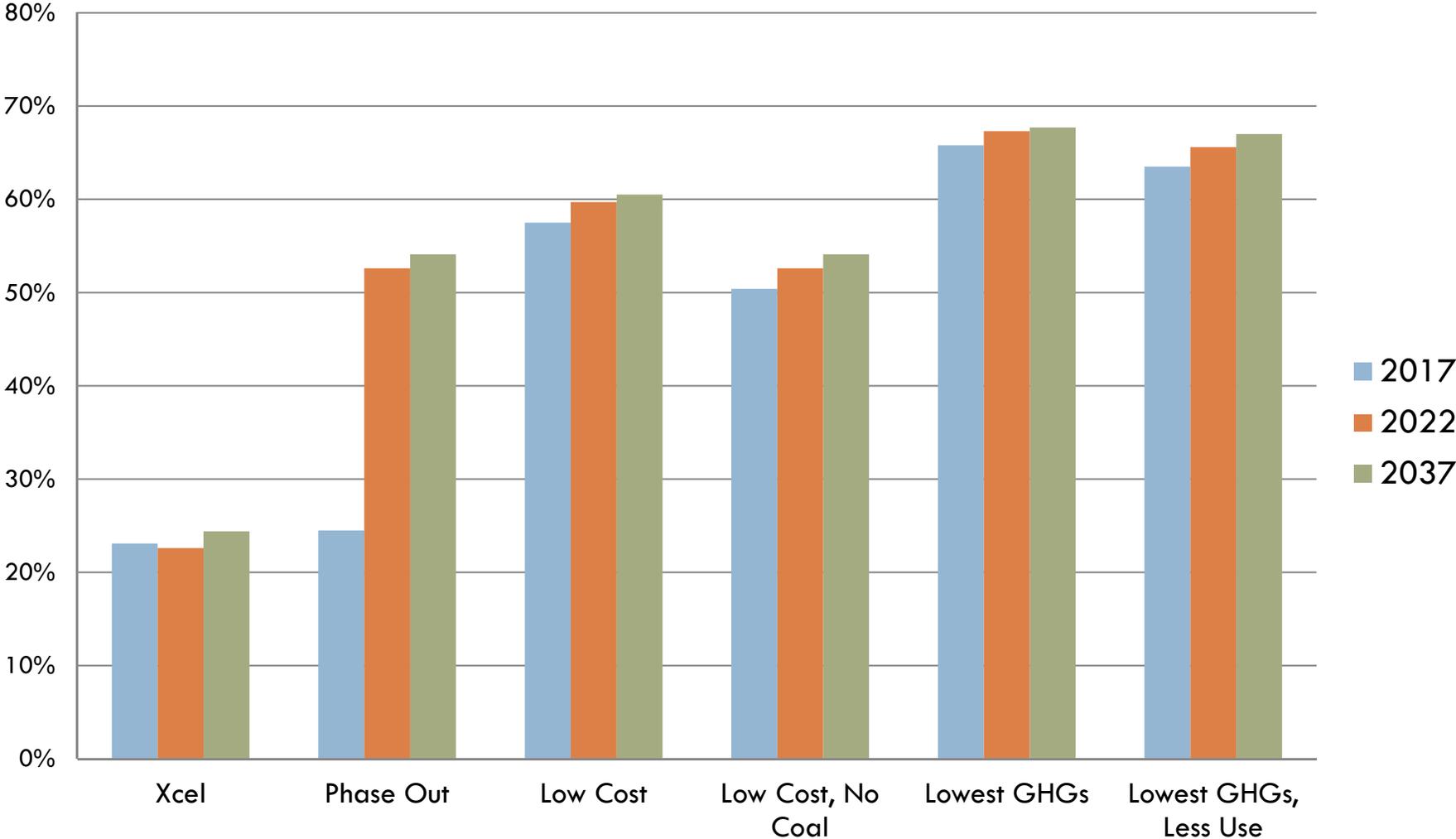


- **Xcel Baseline** – The status quo
 - Established to provide comparison point
- **Municipalization Options**
 - **Phase out purchase of power from Xcel – 5 year PPA**
 - **Lowest Cost – 25% coal**
 - **Low Cost, No Coal**
 - **Lowest Greenhouse Gas**
 - **Lowest Greenhouse Gas, Reduced Use**

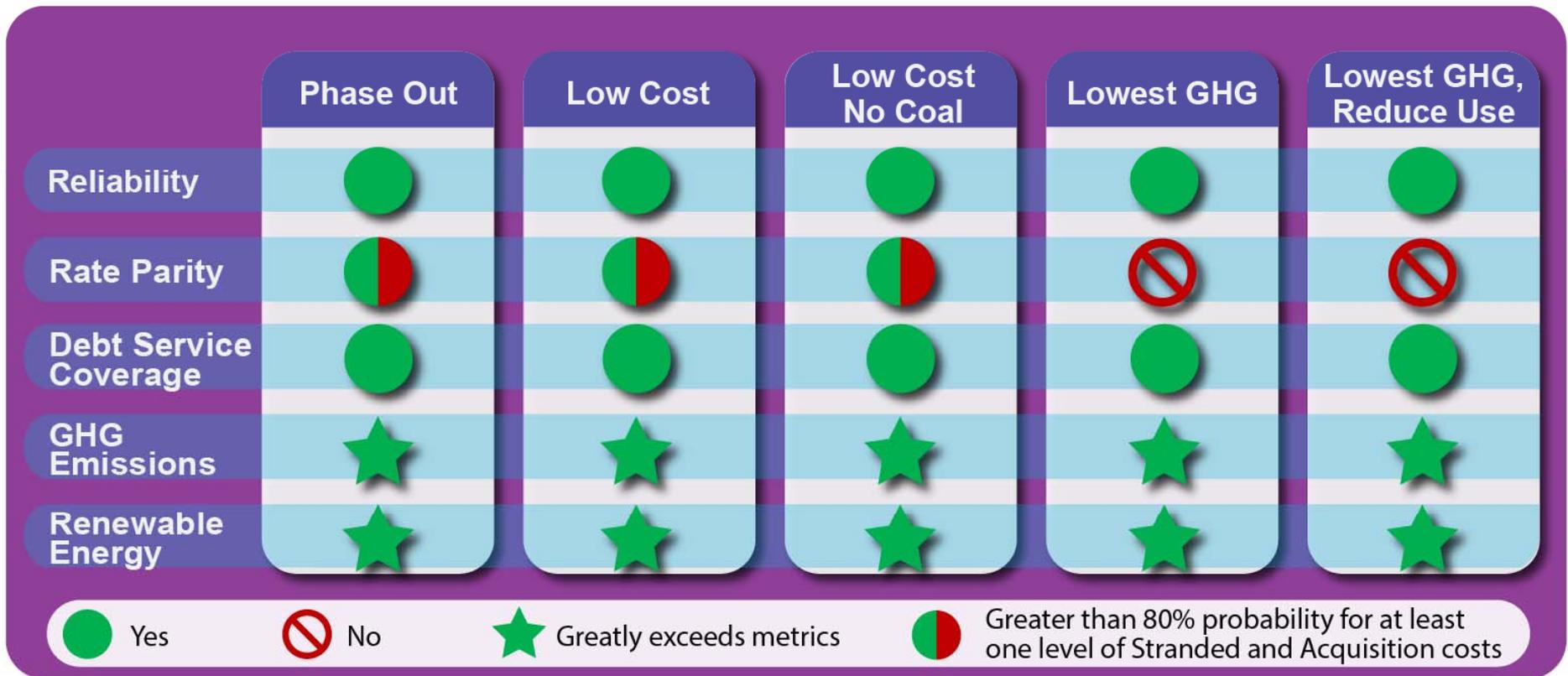
Carbon Intensity by Option



Renewable Resource Mix by Option



Key Findings Related to Charter Metrics



Summary of Key Findings



- Four options exceed Kyoto in year 1; a fifth in year five
- Under some options, offer customers 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

Next Steps



- **Tuesday, Feb. 26** – Study Session with City Council on options for moving forward
 - Memo available www.BoulderEnergyFuture.com
- **Feb. 27 to March 27** – Focused community outreach period (presentations, open houses, conference calls, social media, etc.)
 - **Business-focused conference call – March 12**
 - **Open House – March 13**
- **April 16** – Return to City Council with refined options and community feedback to seek their guidance on how to proceed in Phase II

Next Steps – Phase II



- Proceed with legal steps
- Initiate process for hiring independent evaluator
- Initiate discussions with bond rating agencies
- Explore resource options in detail
- Identify service providers – issue RFPs
- Continue public engagement & outreach around Utility of the Future vision
- Initiate governance discussions
- Develop formal implementation plan
- Continue to work with Xcel on a potential partnership



How to Keep 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