

# Local Power



City Council Study Session  
Dec. 10, 2019

# Tonight's Agenda

- Brief project background
- Proposed New Project Schedule
- Steps to prepare for community conversation
- Council discussion

# Questions for Council

1. Does council have any questions or direction about the timing of the Go/No-Go Vote, specifically the recommendation to postpone the vote to 2021?
2. Does council have any questions or direction about the variables that inform the financial feasibility of operating an electric utility?
3. Would council like to have a conversation to address whether recent changes in Xcel's business practices and Colorado state law impact the value-add of municipalization?
  - If so, would council like to have this discussion concurrent to future budget discussions and what information would council like staff to provide in the future to facilitate the conversation?

# Local Power and the City's Climate Actions

	CLIMATE ACTION				
DESIGN PRINCIPLE	RESILIENCE AND EQUITY				
CROSS-CUTTING STRATEGY	PARTNERSHIPS & POLICY COALITIONS				
FOCUS AREA	ENERGY	ECOSYSTEMS	CIRCULAR ECONOMY	LAND USE	FINANCIAL SYSTEMS
EXAMPLE PROGRAMS	Local Power	Carbon Sequestration	6400 Arapahoe	Boulder Valley Comprehensive Plan	Exploration of public banking, divestment, etc.
	Energy Efficiency	Open Space	Zero Waste		
	Building Performance	Urban Forests	Food Waste		

# City of Boulder Goals & Targets

## ENERGY FUTURE GOALS



CLEAN



LOCAL

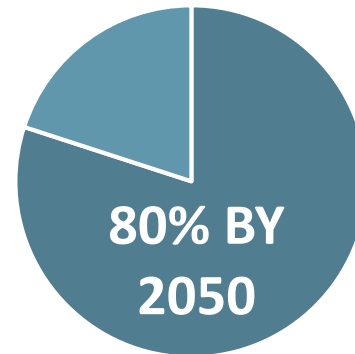


PROVIDES  
VALUE

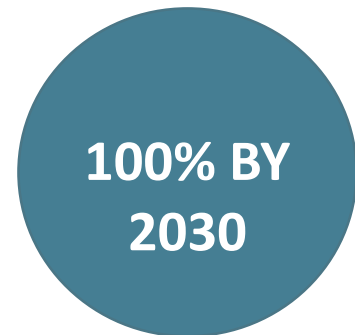


RELIABLE

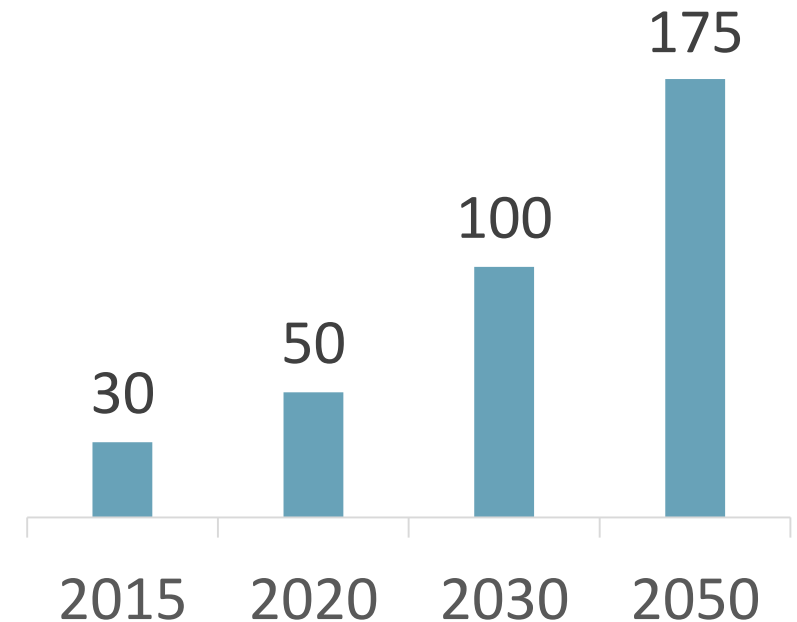
## EMISSIONS REDUCTION (ALL-SECTORS)



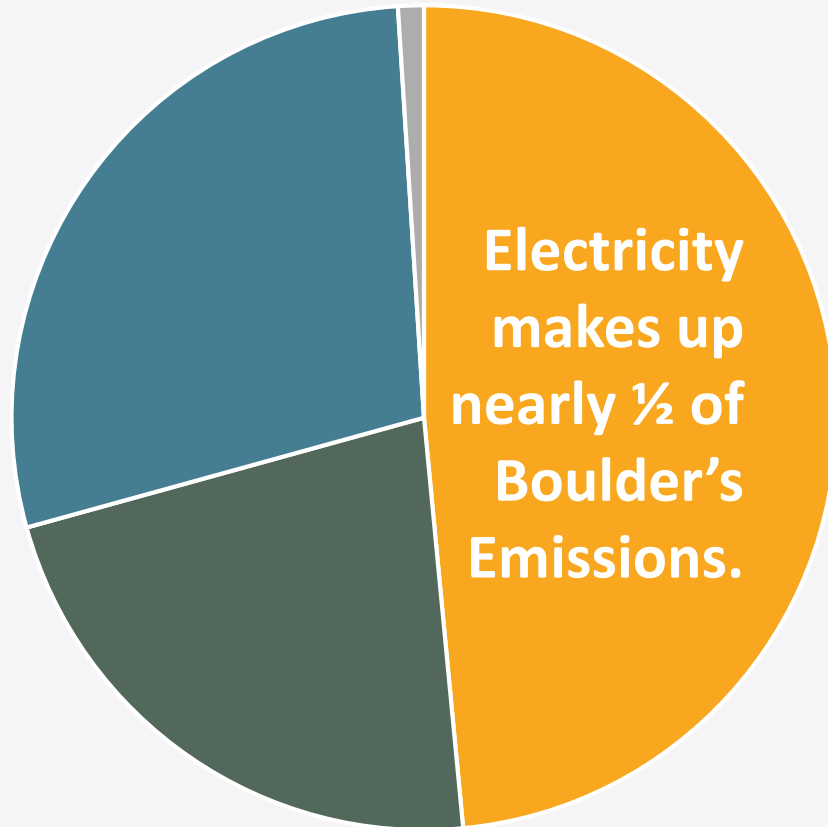
## RENEWABLE ELECTRICITY



## LOCAL RENEWABLE GENERATION (MW)



# Why 100% Renewable Electricity?



■ Electricity   ■ Natural Gas  
■ Transportaion   ■ Solid Waste

100% renewable  
**unlocks climate  
solutions** in the  
**transportation** and  
**building** sectors.

# Local Power: Status Update

# Working Towards Community Go/No-Go Vote

## What

- Asking Boulder voters whether to create a city-run electric utility

## How

- The city will ask Boulder voters whether to issue bonds to fund separation and construction of a local electric utility

## Work Plan

- Refining costs and completing the financial feasibility study for the community to make an informed decision



# Current Key Cost Estimates

Cost Type	Estimate
Acquisition Cost	\$150 Million
Separation Construction	\$110 Million
Start-Up Costs	\$28 Million
Power Supply	Needs to be updated (2018 Estimate: \$83M to \$126M)

# What is included in the \$214 million cap in §188 of the Charter?

Section 188 of the charter limits the debt issued by the utility to \$214 million for:

- Purchasing or otherwise acquiring the existing assets of the electric system; AND
- Paying stranded costs in one complete payment.
- The cap increases annually by the Denver-Boulder-Greeley Consumer Price Index from adoption of this section in 2013 (\$214 million adjusted per CPI is \$259 million today)

# Moving the Go/No-Go Vote

- Originally scheduled for 2020
- Now proposing vote in 2021

# Local Power Today: Work Categories

- **Legal:** Which assets the city will purchase and their value (Q4 2020 to Q2 2021)
- **Engineering:** Physically separating one electric system into two
  - City distribution Engineering work (Q1 2020 95% estimate, Q1 2021 bid)
  - Xcel distribution Engineering work (Q2 2020)
  - City Substation Engineering (Q4 2020 major equipment bid 95% estimate)
  - Xcel Substation Engineering (Q1 2020 25% estimate, Q4 2020 95% estimate)
- **Power Supply:** What type of energy the city will supply to its customers and who will provide it, including the analysis of potential stranded costs obligation (Q2 2021)
- **Operations and Maintenance:** How the city will manage the operations of the system (Q2 2021)
- **Communication and Engagement** (Ongoing)

# Budget Implications of a 2021 vote

- Unfunded need
- Staff will work to refine amount needed and identify solutions
- Return to council in April 2020 for discussion

# Building Space for Community Conversations

# Key Questions: Moving to the second-level

- **First-Level**

- Can the city municipalize? What are the costs? Can we afford them?

- **Second-level**

- What has changed over the past few years?
- Is a city-owned utility the best path to accomplish the broad set of goals the community set for its energy future?
- Would a city-owned electric utility provide value sufficient to offset potential risk and distinguish its services from those that Xcel Energy currently offers or could offer in the future?
- These types of questions are part of a value-based conversation on why the city is pursuing municipalization.

# Providing a Space for this Conversation

- **Work Item: Update Communication and Engagement Plan**
  - Reflect new timeline
  - Incorporate more opportunities for this conversation
  - Leverage synergies with parallel Climate Mobilization Action Plan (CMAP) process
  - Upcoming public meeting: January 2020



# Climate Goals: Local, State and Xcel

# Boulder Climate Commitment Emissions and Energy Targets

	Target Area	Current Status (2018)	2020	2030	2050
Community	Emission Reduction	18%	15%	50%	80%
City Organization	Emissions Reduction	38%	50%	80%	90+%
Renewable Energy	Percent of electricity supply that is renewable	27%	40%	100%	100%

# 2019 Legislation

<b>Clean Energy Plan (SB 19-236)</b>	<b>Climate Action Plan to Reduce Pollution (HB 19-1261)</b>
<ul style="list-style-type: none"><li>• Filed as part of Electric Resource Plan<ul style="list-style-type: none"><li>• To be filed by February 2020 or March 2021</li></ul></li><li>• Reduce emissions 80% by 2030 (vs. 2005 baseline)</li><li>• “Seeks to achieve” 100% clean energy resource by 2050</li></ul>	<p>Reduce total emissions (vs. 2005 baseline)</p> <ul style="list-style-type: none"><li>• 26% by 2025</li><li>• 50% by 2030</li><li>• 90% by 2050</li></ul>

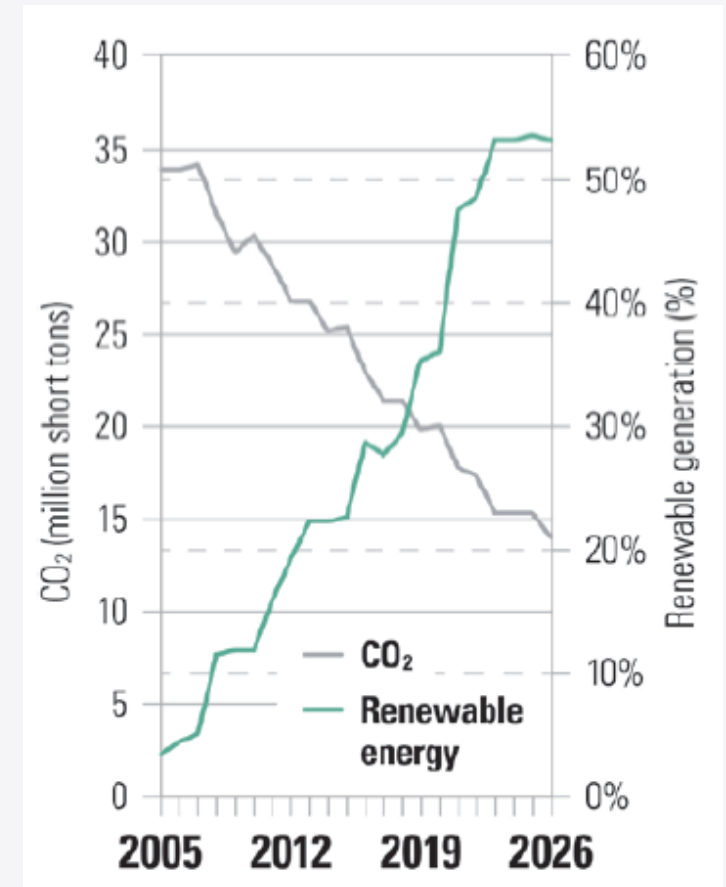
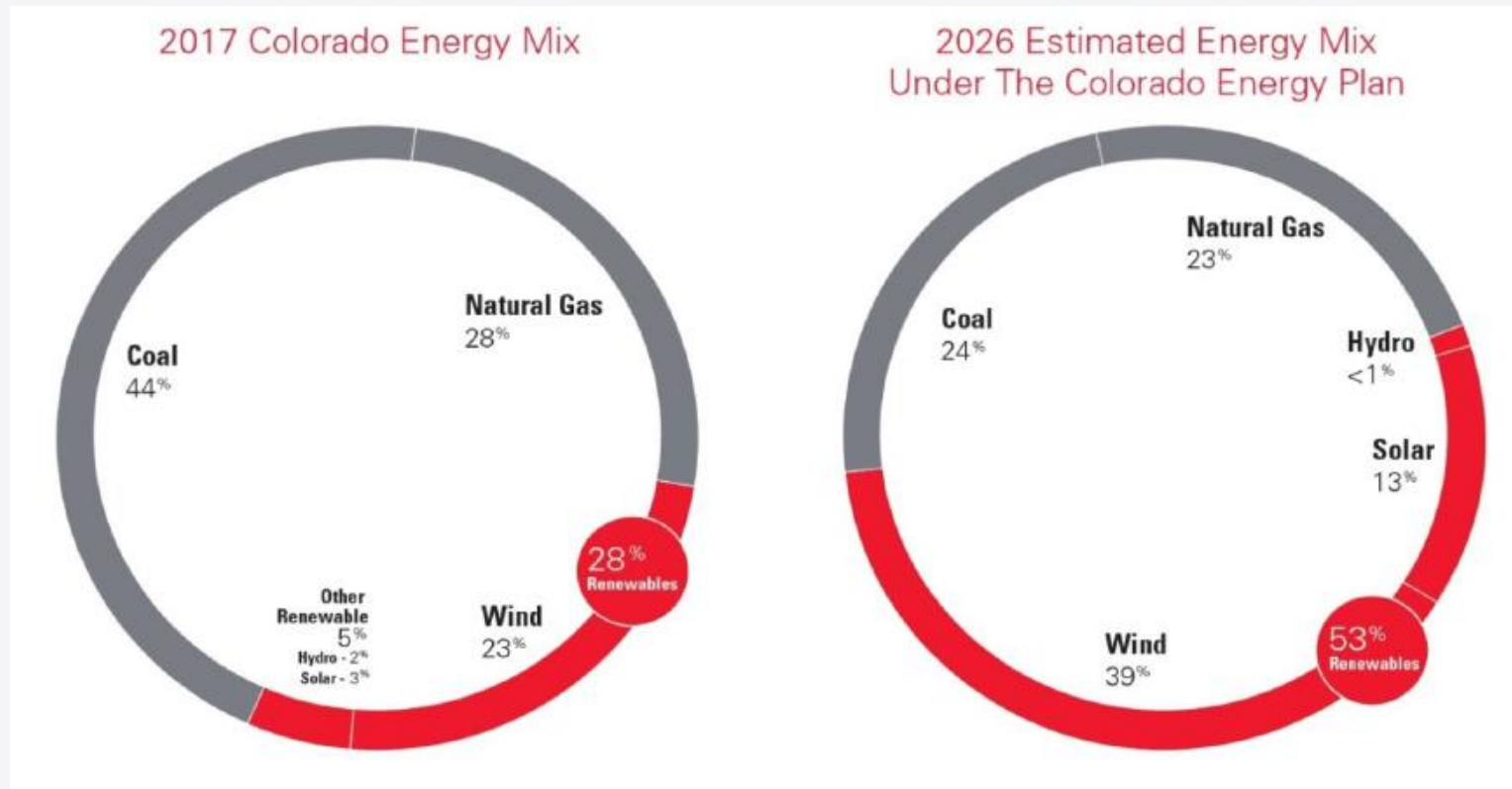
# What is the electricity-sector GHG emissions gap if legislative goals are achieved? 250,000 MT.

- Boulder's electricity-sector emissions for 2018: **710,000 MT**
- Boulder electricity-sector CO2 emissions in 2030 if the 80% emissions reduction goal is achieved: **250,000 MT**
- Boulder electricity-sector emissions in 2030 if Boulder achieves 100% renewable electricity: **0 MT**

## How can Boulder close the gap?

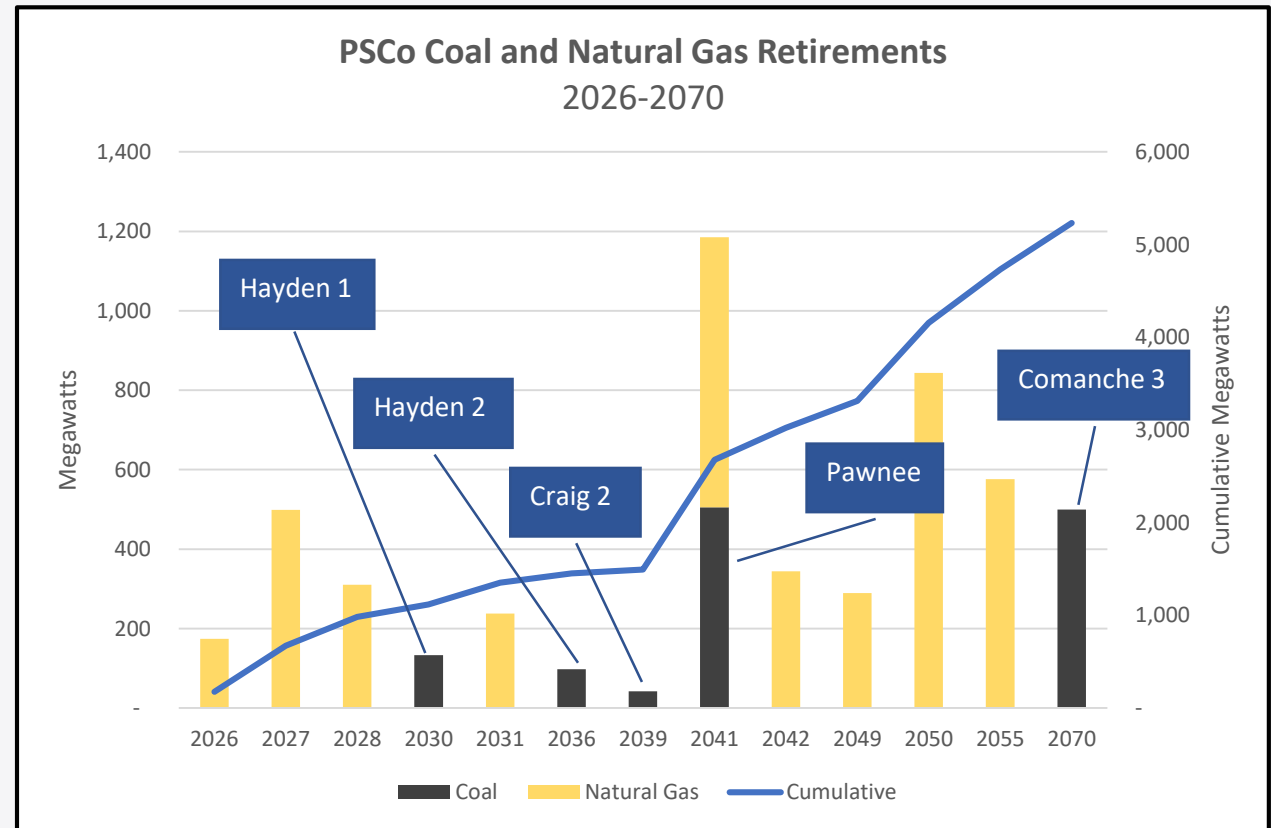
- Distributed Generation
- Conservation + Efficiency
- Electric Resource Plan

# Xcel Energy Generation Plan



# Xcel pathway to GHG emissions reduction requirements

- Four coal plants require early retirement
  - Hayden 2, Craig 2 and Pawnee by 2030
  - Comanche 3 by 2050
- Natural gas retirements also required
  - At least 600 MW by 2050.



# Next Steps

- Work with Xcel to determine path forward regarding substations
- Negotiated acquisition or condemnation
- Resolve litigation related to Xcel's attorney's fees
- Completed separation design engineering
- Participation in Xcel's next Electric Resource Plan proceeding
- Continued financial analysis to determine value of the electric utility assets and other high-impact variables for financial analysis
- Return to council with analysis on the budget
- Updated Communication and Engagement Plan

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Thank You!