



# Boulder Energy Future

**Heather Bailey**  
Executive Director of Energy Strategy  
and Electric Utility Development

# Agenda

I ..... Background

II ..... Energy Initiatives

III ..... Policy Reform: The “Top 10” List

IV ..... Community Engagement

V ..... Our Vision

# Background

## Timeline

- **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



# Background

## Timeline

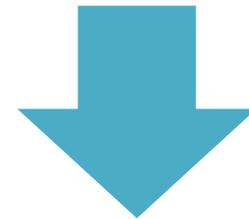
- **Jan. 2012 to August. 2013** – Analysis to determine if municipalization could meet Charter requirements and add community value:
  - Detailed analysis and modeling of scenarios, data collected and vetted
  - Working groups formed to advised staff
  - Models reviewed by independent 3<sup>rd</sup> 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

**The energy utility market is changing.  
This shift is necessary and inevitable.**

*Causes include:*

- Changing needs and demographics
- Deregulation and competition
- Technology
- Public pressure

**Current Business  
Model**



**Desired Business  
Model**

# Background

## Driven by the Boulder Community

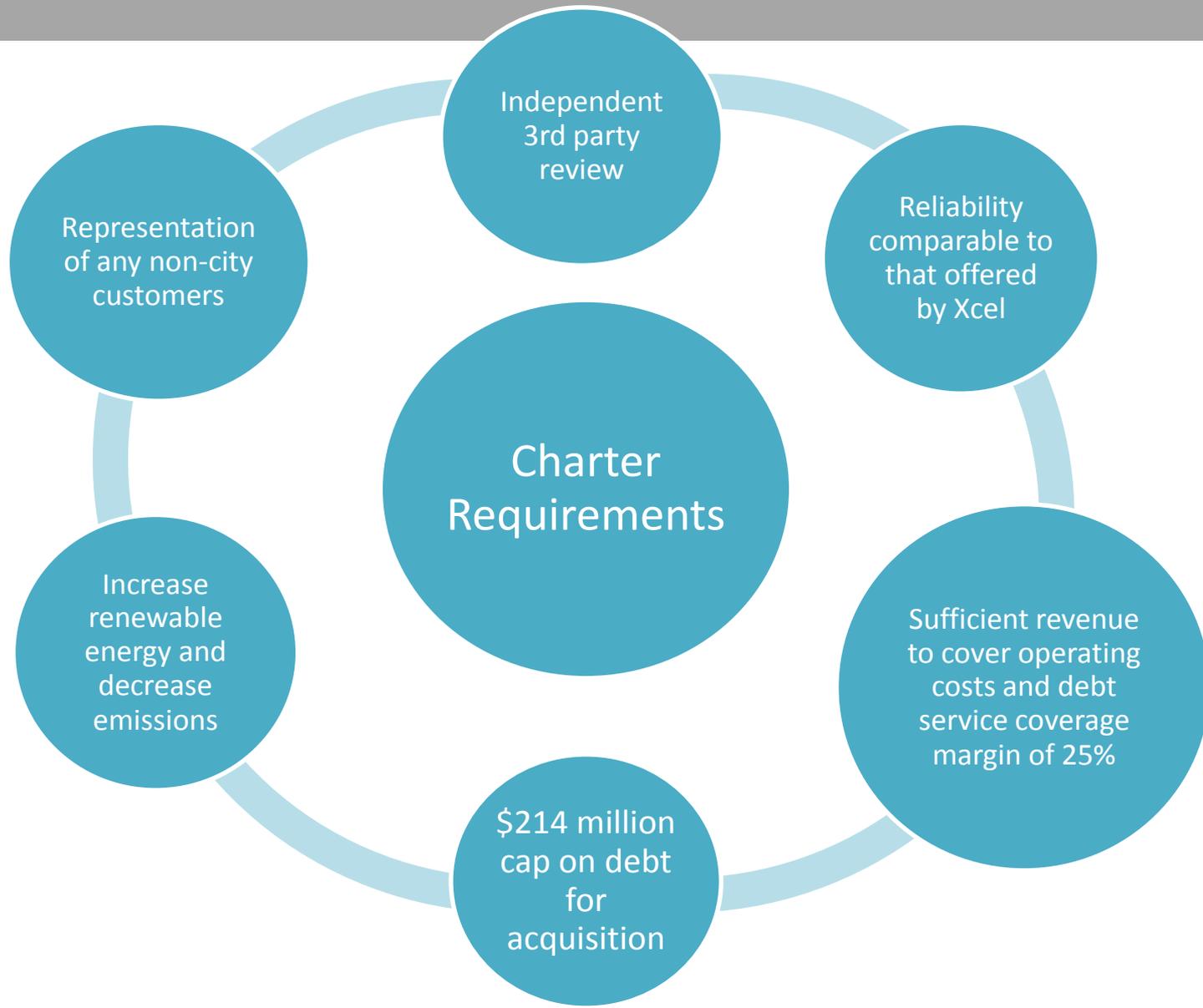
- Climate Action Plan – Climate Commitment
- Achieve greenhouse gas reduction and climate change mitigation goals
- One of the most carbon-intensive fuel supplies in the nation

## Community access to:

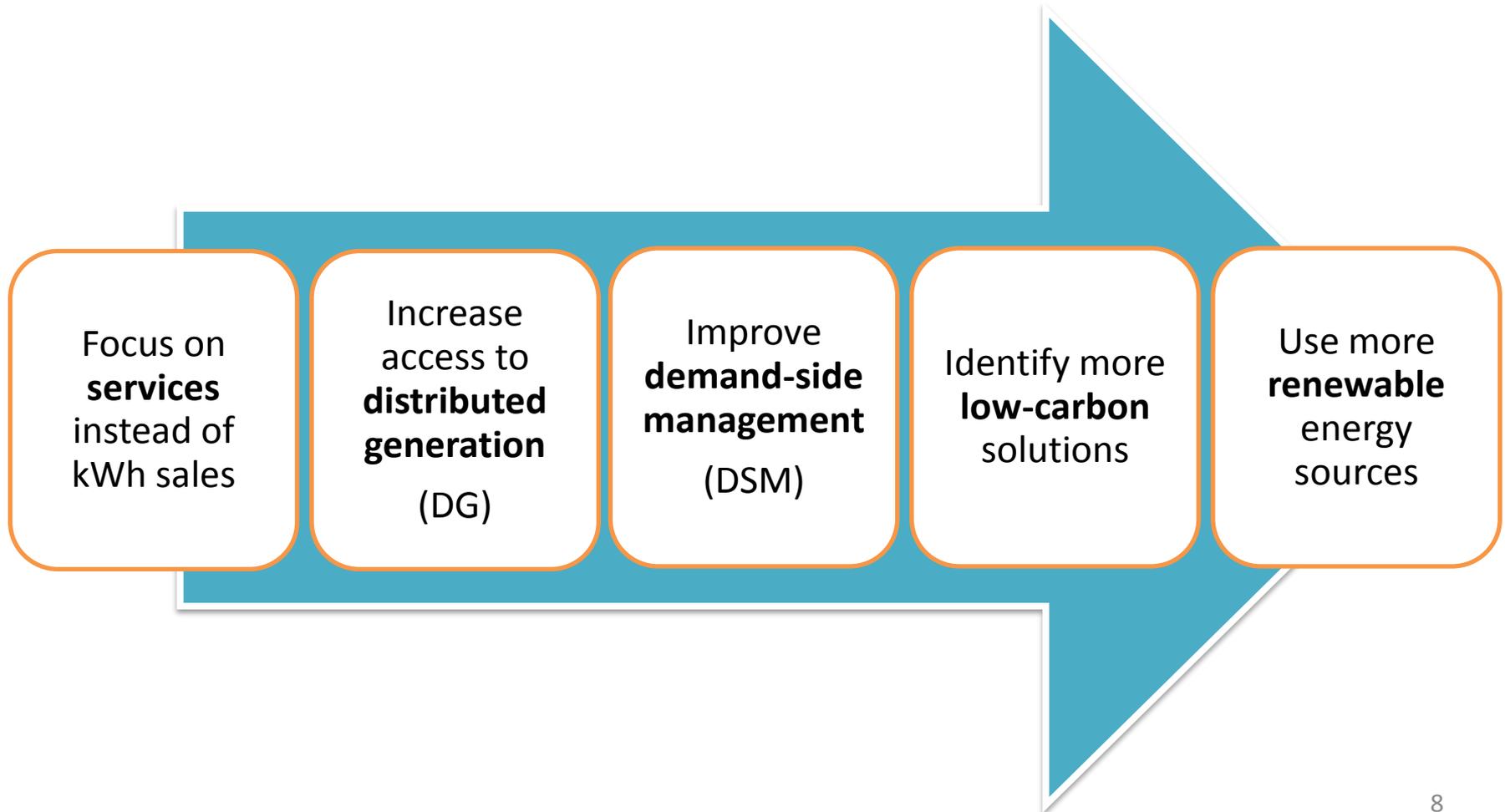
- Reliable power that is increasingly clean and competitively priced
- Local decision-making authority on where power comes from and new investments in emerging technology

## Drive economic vitality and foster community innovation & involvement

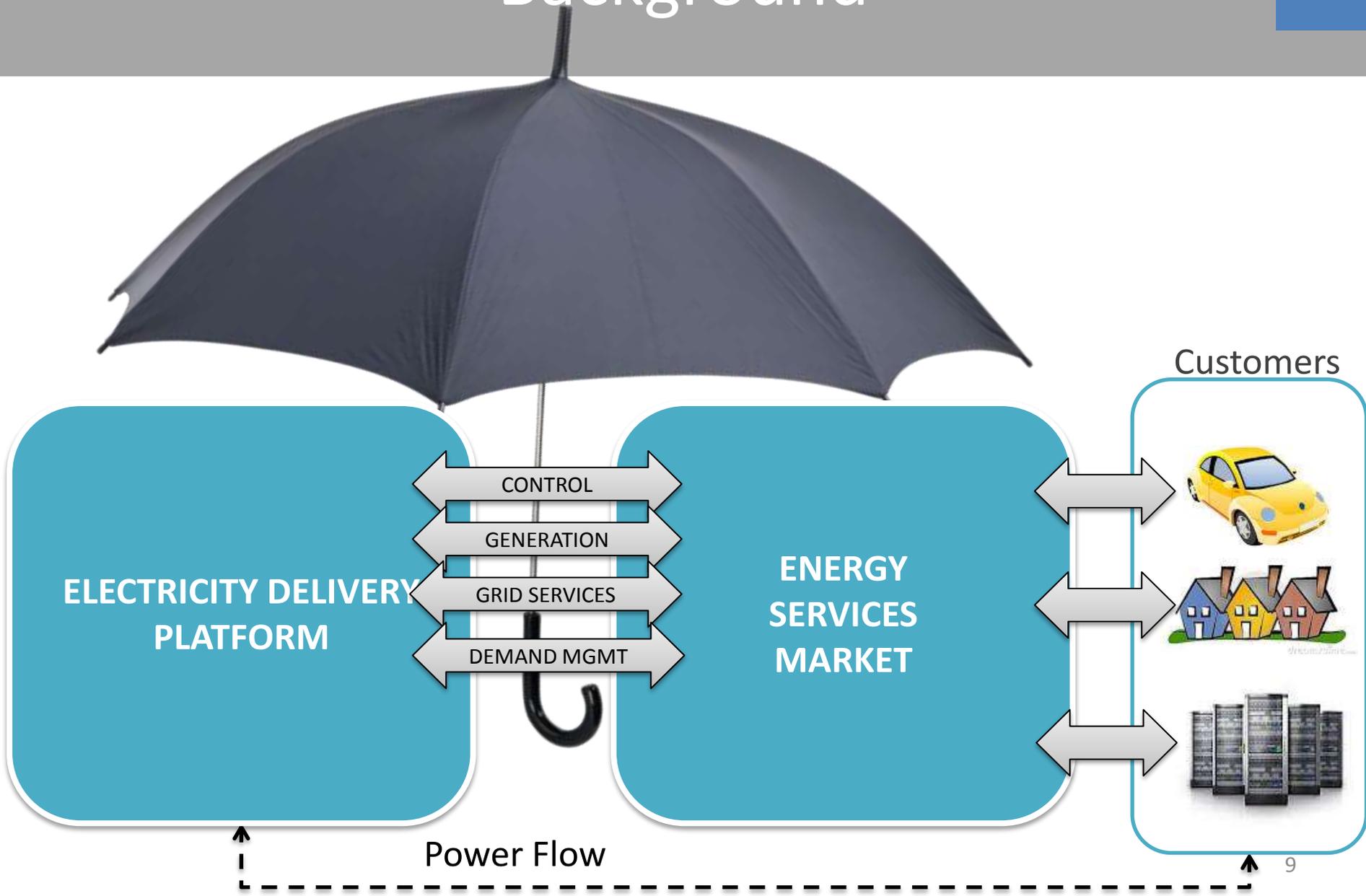
# Background



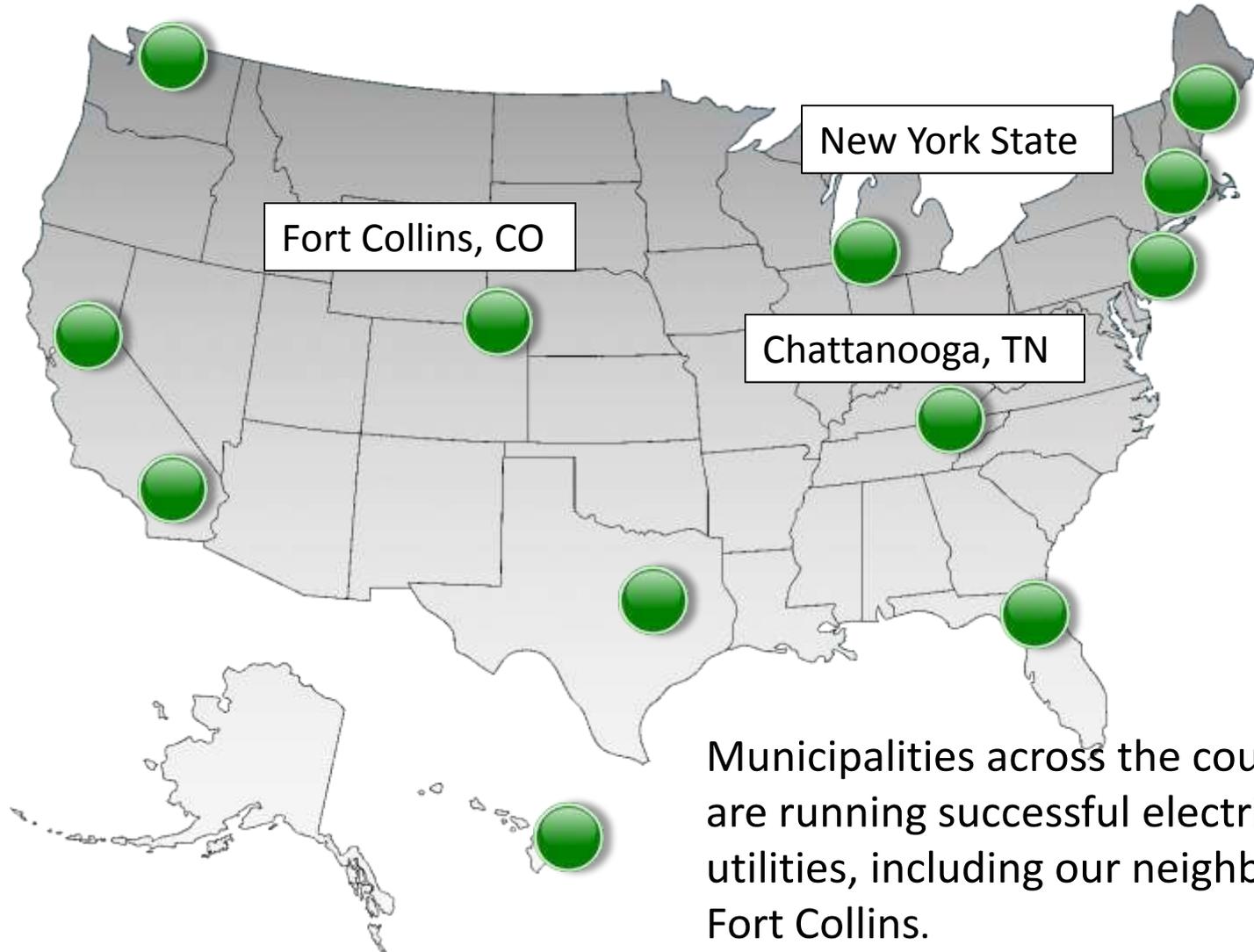
# Background



# Background



# Background



Municipalities across the country are running successful electric utilities, including our neighbor Fort Collins.

# Background

## New York State – Reforming Energy Vision (REV)

- Creates a marketplace for buying and selling distributed energy
- Give customers more choice, control, and value in their energy usage for each dollar spent
- Incentivize utilities to focus on system and capital efficiency

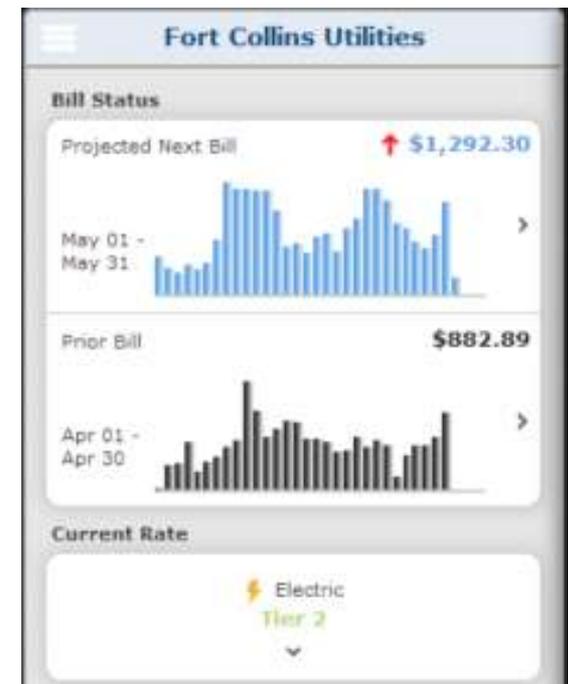
## Chattanooga, TN – Fiber-optic Network

- Fiber optic network as test bed for electric vehicles
- Invited entrepreneurs to access data and implement new strategies and programs
- Grid is likely to provide the city \$300M in economic benefits over 10 years

# Background

## Fort Collins, CO – Energy Engage Mobile

- First utility to provide Energy Engage Mobile to meet energy efficiency and customer satisfaction goals.
- With detailed usage and pricing data, customers will better understand their consumption and be empowered to make better energy and water usage decisions.



# Existing Energy Initiatives



Building in Better Buildings

## Rating & Reporting and Energy Efficiency for Commercial & Industrial (C&I) Building Owners: *Proposed Requirements*



### Community Power Partnership



Be informed.  
Track your resource use.  
**Contribute to innovative community solutions.**

# New 2015 Energy Initiatives



Targeted Solar Outreach



Carbon Offset Fund



DOE Nanogrid Pilot



Innovation Studies

# 2016 Ideas for Energy Initiatives



City "behind the meter" solar garden

Deep community retrofits

Education and incentives for behavior change

Loan pool for PACE projects

Finance concierge services

Payroll deduction for energy efficiency

Demand response from water storage systems

Partnership with Google for solar and efficiency

Case management services for low-income residents

Solar-plus-storage demonstration

Combined heat and power plant

Community geothermal loops

Media campaign for commercial PACE

On-bill financing through water bill

Zero Energy District

Load reduction business model

Solar Bond/Solar Bank

Realtor Network

# Policy Reform: The “Top 10” List



**1** Peer-to-Peer Sharing of Electricity

Community Choice Aggregation

**2**

**3** Energy Data Center

Alternative Energy Efficiency Management

**4**

**5** Remove the 120% Cap

Performance-Based Rates & Grid Modernization

**6**

**7** State Carbon Tax

Promote Electric Vehicle Uptake

**8**

**9** Green Electric Resource Planning

Time-of-Use Electric Rates

16 **10**

# Community Engagement

- Four working groups were initiated in 2014 and 2015 and have been contributing to moving municipalization forward:



Resource Acquisition



Energy Services



Safety & Reliability



Rates

# Our Vision

IV

**Decentralize**  
**Democratize**  
**Decarbonize**



# Contact and Learn More

Follow along at [www.BoulderEnergyFuture.com](http://www.BoulderEnergyFuture.com)

- Sign up for E-News updates and newsletter
- Use online comment form for questions, feedback or suggestions
- Follow the Local Environmental Action Division (LEAD) on Twitter!  
**@boulderlead**

Send an email to the staff team at

[EnergyFuture@BoulderColorado.gov](mailto:EnergyFuture@BoulderColorado.gov)

Contact **Heather Bailey** with questions/comments

[BaileyH@BoulderColorado.gov](mailto:BaileyH@BoulderColorado.gov) or **303-441-1923**