

- 12:00 – 12:25** **Introductions and Grounding (Inform)**
- 12:25 – 1:10** **Energy Deep Dive & Focus on Building Energy Scoring (Inform/Collaborate)**
- 1:10 – 1:20** **Break**
- 1:20 – 2:20** **Messaging & Engagement Update (Involve)**
- 2:20 – 2:30** **Closing & Other Topics**

Introductions and Grounding (Inform)

Objectives:

- Introductions, ground rules reminder
- Overall update
 - **Global and national efforts (*Jackie Kozak Thiel*)**
 - **Statewide efforts (*Lucinda Smith*)**
 - **Local efforts (*Lindsay Ex*)**



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11





Climate Action PLAN

City of Fort Collins Climate Dashboard

Welcome to the Fort Collins Climate Dashboard, a snapshot of the community's progress toward reducing carbon emissions. The City organization tracks emissions annually using 2005 as a baseline year. The community aims to reduce carbon 20 percent below 2005 levels by 2020 and 60 percent by 2030 with the goal of being carbon neutral by 2050. As of 2016, the community had reduced emissions 12 percent – more than halfway to the 2020 goal. To learn more about our progress toward these goals, sign up for our [Climate Action newsletter](#).

Environmental Indicators
Community Greenhouse Gas Inventory
2016
2.1 Million
Metric Tons CO₂e (-12%)

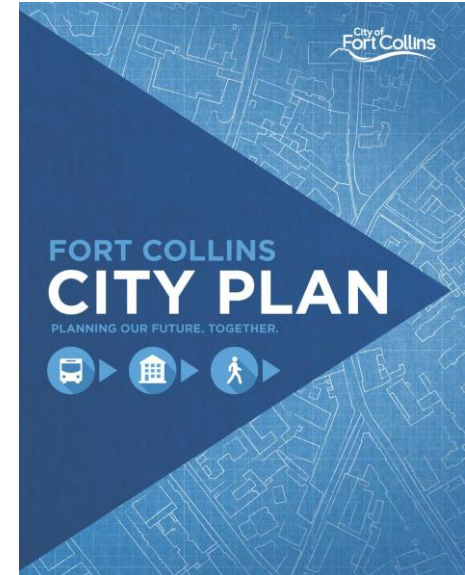
Down 12% since 2005
Down 28% per capita since 2005
Last updated 05/01/16

COMING SOON

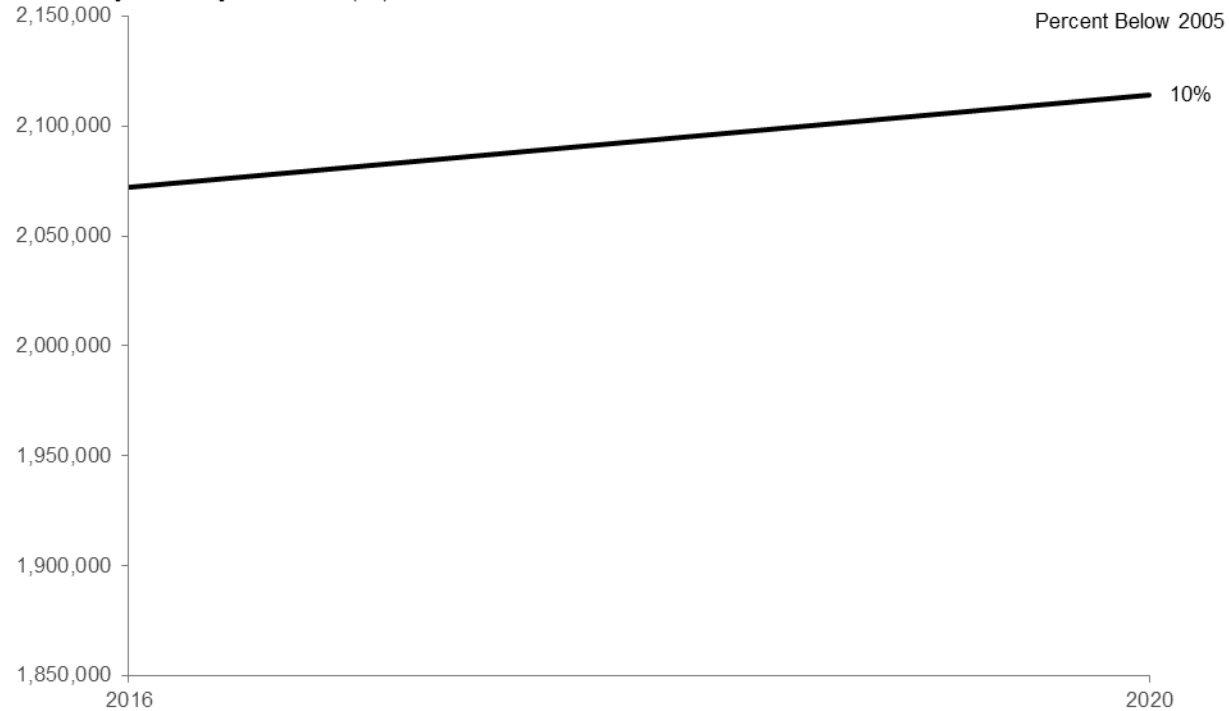
Community Carbon Inventory

Year	Water Related*	Solid Waste	Natural Gas	Ground Travel	Electricity
2005	~1,200,000	~100,000	~100,000	~100,000	~100,000
2006	~1,150,000	~100,000	~100,000	~100,000	~100,000
2007	~1,100,000	~100,000	~100,000	~100,000	~100,000
2008	~1,050,000	~100,000	~100,000	~100,000	~100,000
2009	~1,000,000	~100,000	~100,000	~100,000	~100,000
2010	~950,000	~100,000	~100,000	~100,000	~100,000
2011	~900,000	~100,000	~100,000	~100,000	~100,000
2012	~850,000	~100,000	~100,000	~100,000	~100,000
2013	~800,000	~100,000	~100,000	~100,000	~100,000
2014	~750,000	~100,000	~100,000	~100,000	~100,000
2015	~700,000	~100,000	~100,000	~100,000	~100,000
2016	~650,000	~100,000	~100,000	~100,000	~100,000
2017	~600,000	~100,000	~100,000	~100,000	~100,000

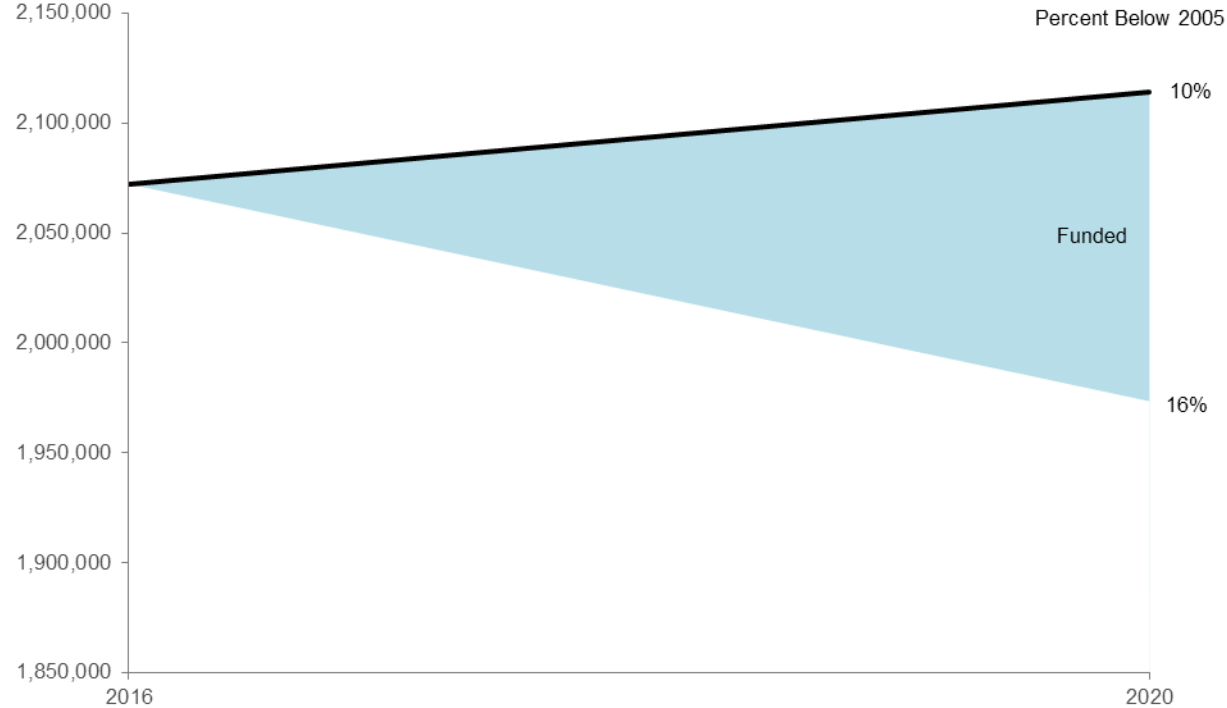
Click on any series in the chart legend to hide it from view.
*Water related emissions are hard to see because they make up +1% of the inventory



Community Inventory Emissions (MT)



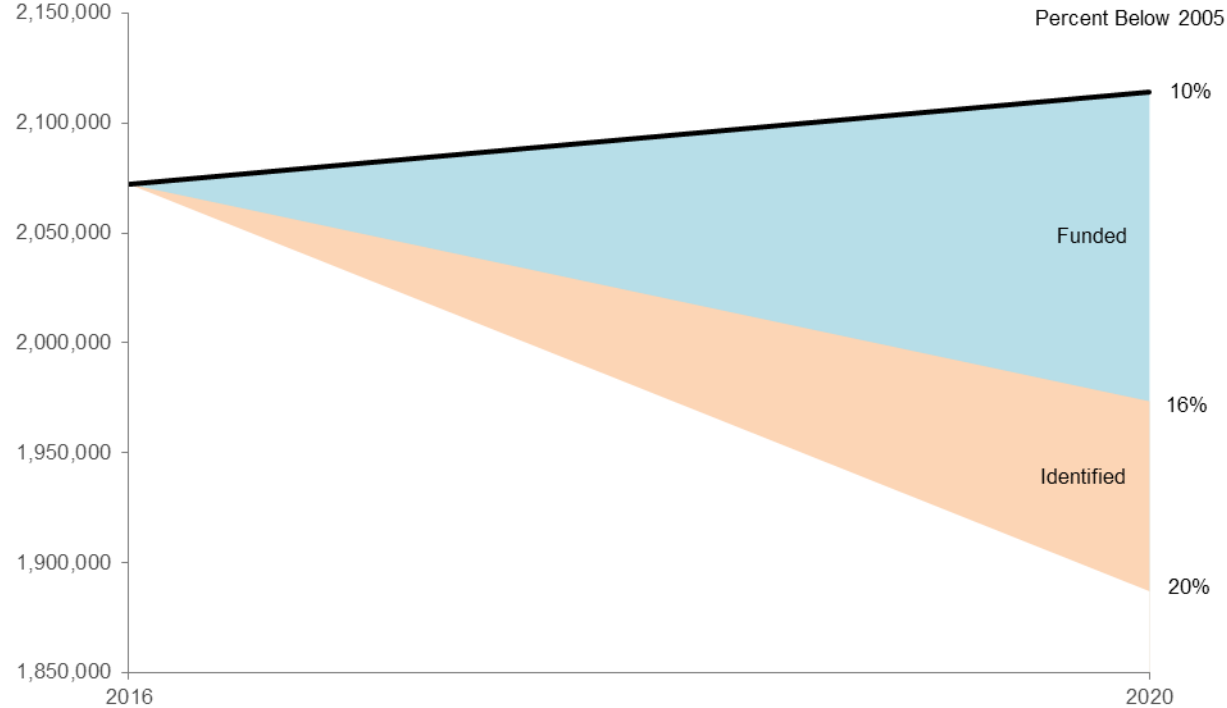
Community Inventory Emissions (MT)



Funded/Adopted:

- Energy Efficiency
- Community Solar
- Rooftop Solar
- Commercial Solar
- Transit system
- Community Recycling Ordinance

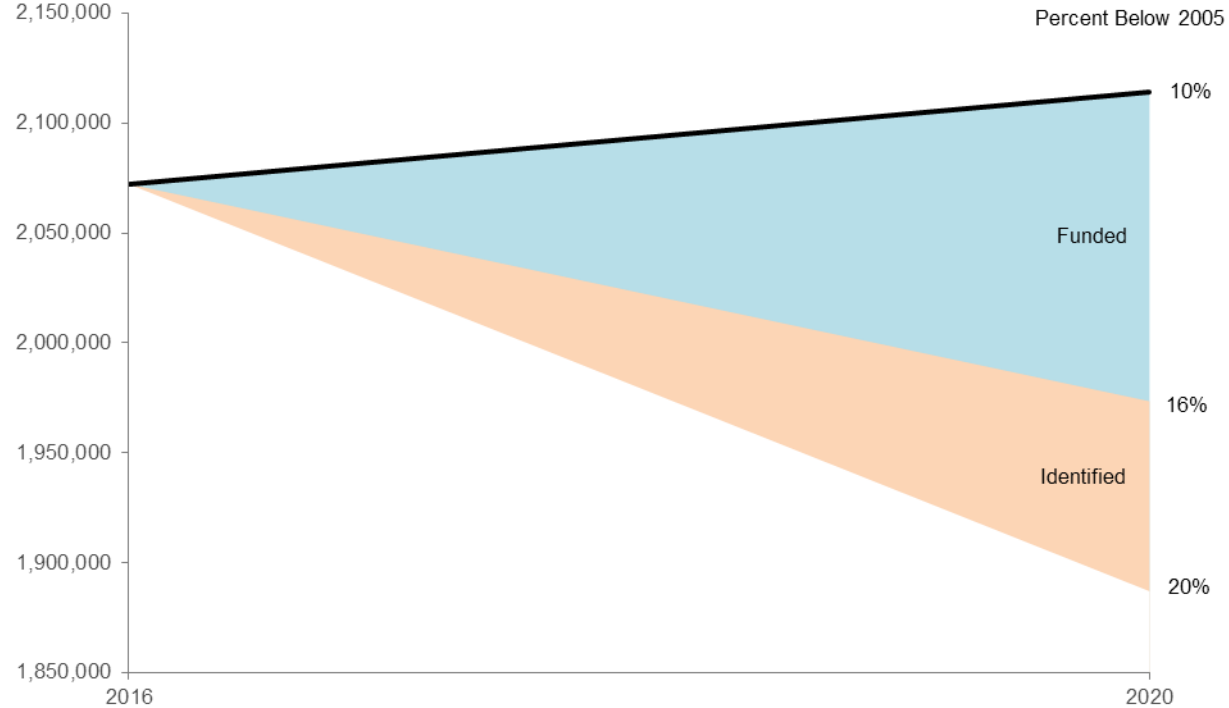
Community Inventory Emissions (MT)



Identified:

- Co-gen at Drake Wastewater Reclamation
- Trip Reduction Program
- Community Organics Recycling Program

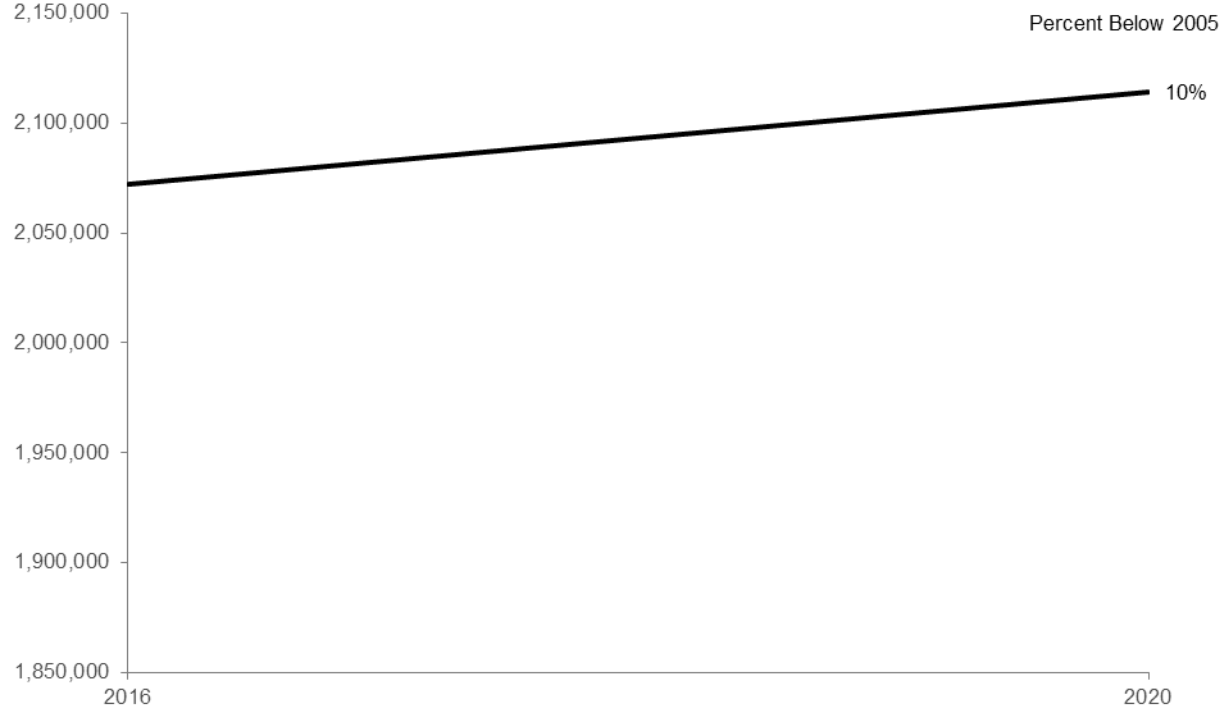
Community Inventory Emissions (MT)



And more to come...

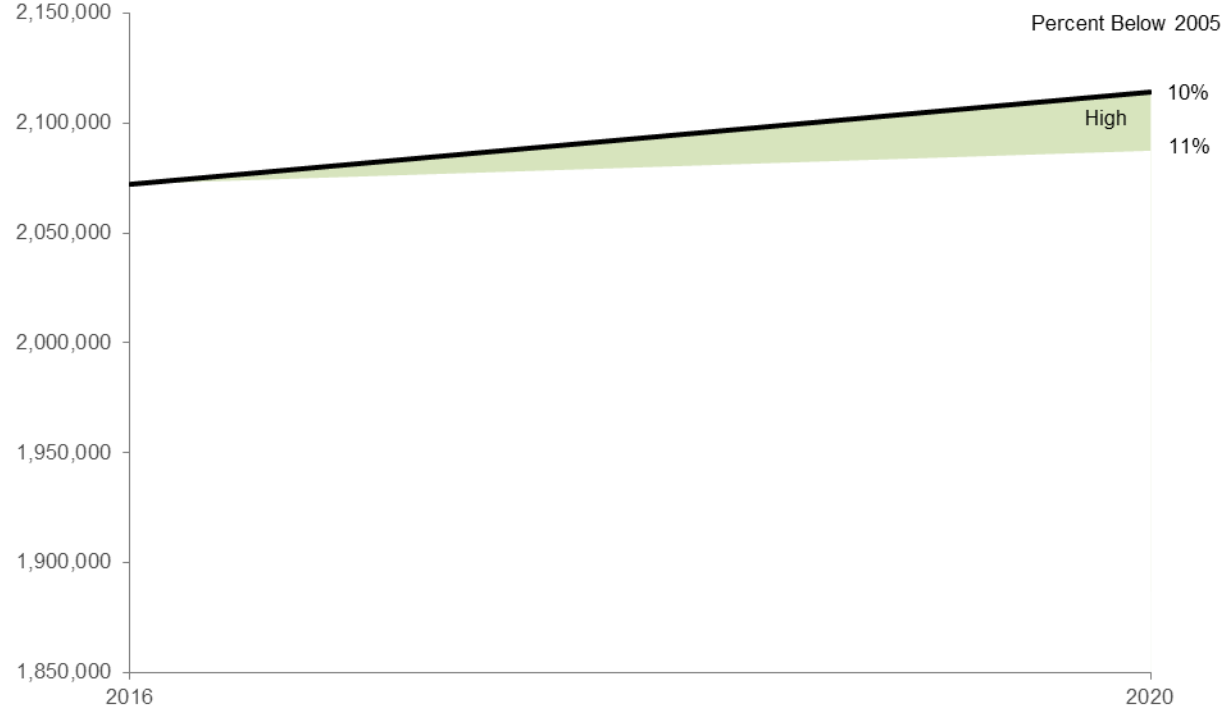
- Platte River Wind (80,000 MTCO₂e ≈3.4%)
- IFCC
- ClimateWise
- Climate Economy
- Messaging and Engagement
- City/Transportation Plans
- Inventory Protocol Review

Community Inventory Emissions (MT)



Cost ranges:

Community Inventory Emissions (MT)



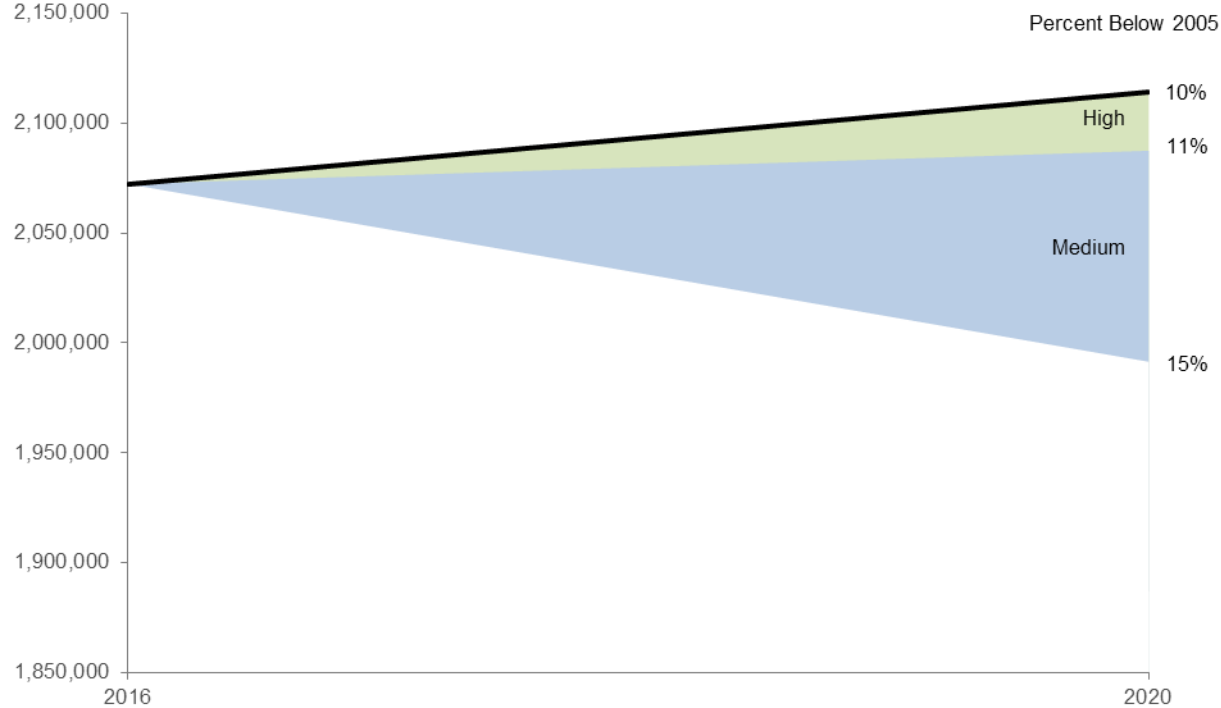
Cost ranges:

\$1; (\$65-\$100)

Examples:

- Time of Use
- Community Solar

Community Inventory Emissions (MT)



Cost ranges:

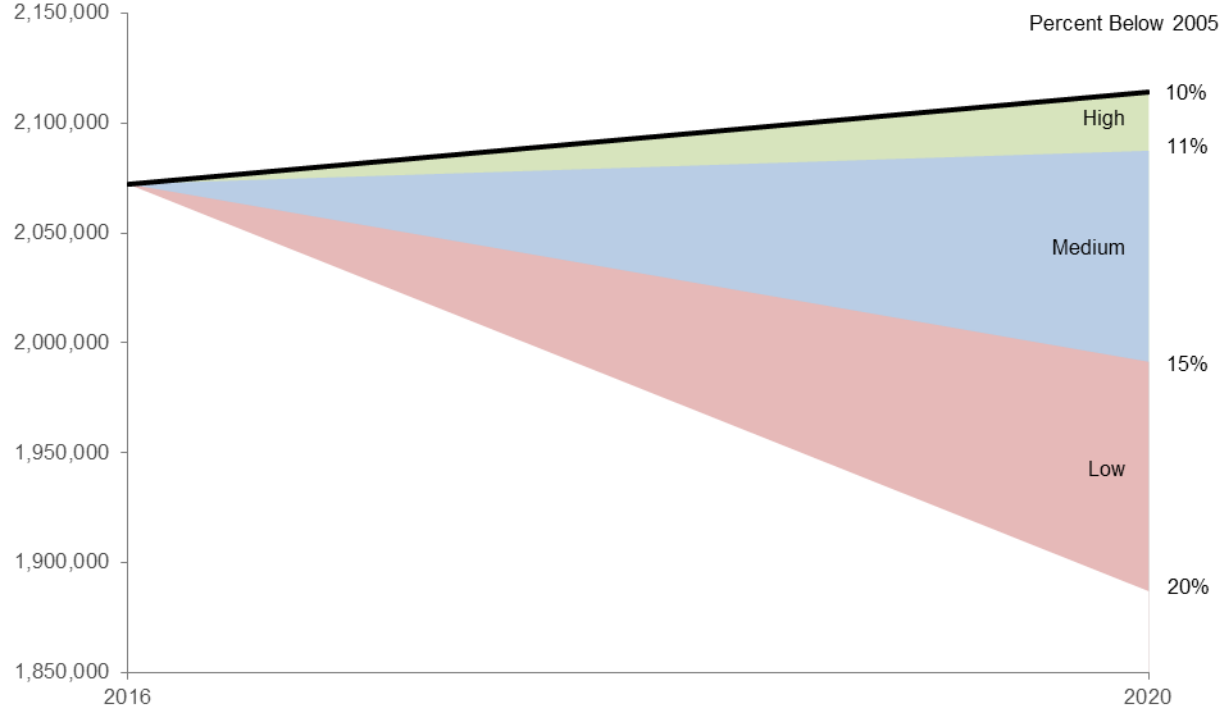
\$1; (\$65-\$100)

(\$50-\$90)

Examples:

- Energy Efficiency
- CORP

Community Inventory Emissions (MT)



Cost ranges:

\$1; (\$65-\$100)

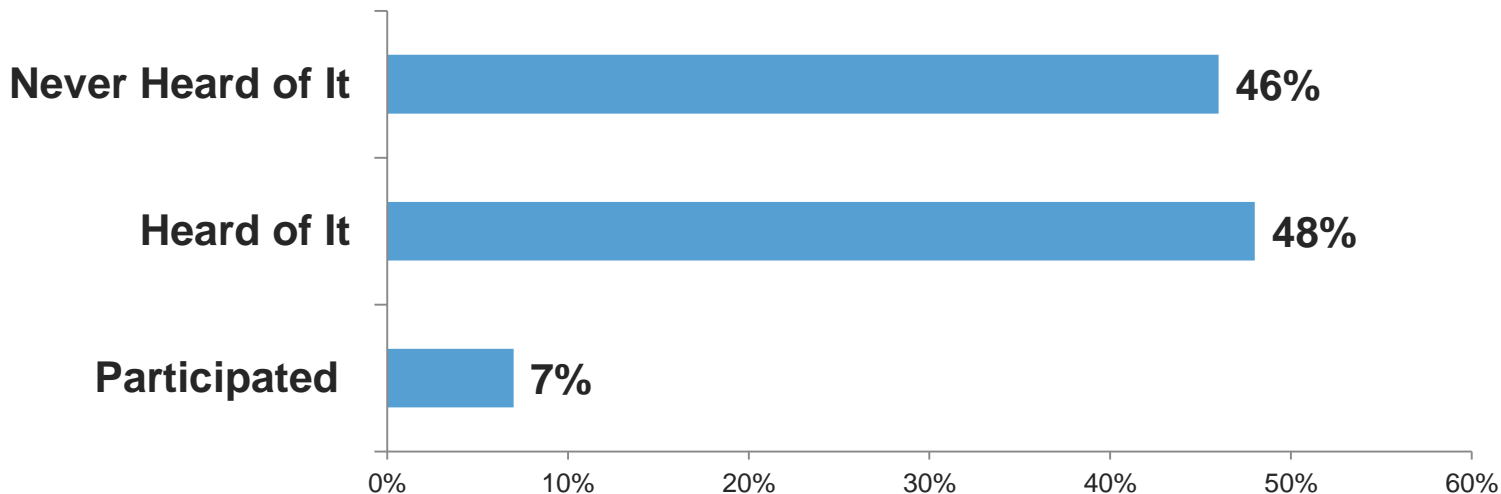
(\$50-\$90)

(\$3-\$2k)

- Energy Code
- Transit

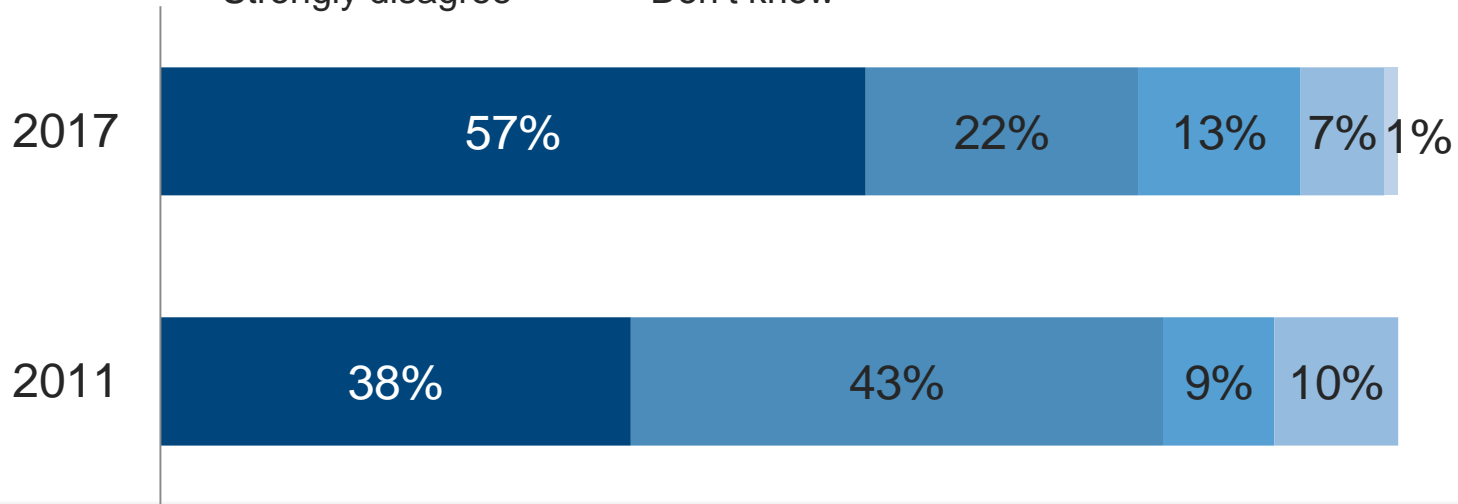
Community Survey – Key Climate Results

The City Offers a Variety of Specific Programs and Events to Address Air Quality and Environmental Issues. Do You Recall Hearing About, or Participating In, Any of the Following (Climate Action Plan)? (2017)



The City Should Invest in Programs and Create Policies to Address Climate Change

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree
- Don't know



Top Motivators

1. Cost savings (93%)

2. Social or health benefit
(93%)

3. Economic benefit (92%)

4. Environmental benefit
(91%)

9. Even if it would cost my
household more (68%)

*All percentages include strongly agree and somewhat agree

**Full Results available at www.fcgov.com/airquality/survey.php

Community Survey – Key Climate Results

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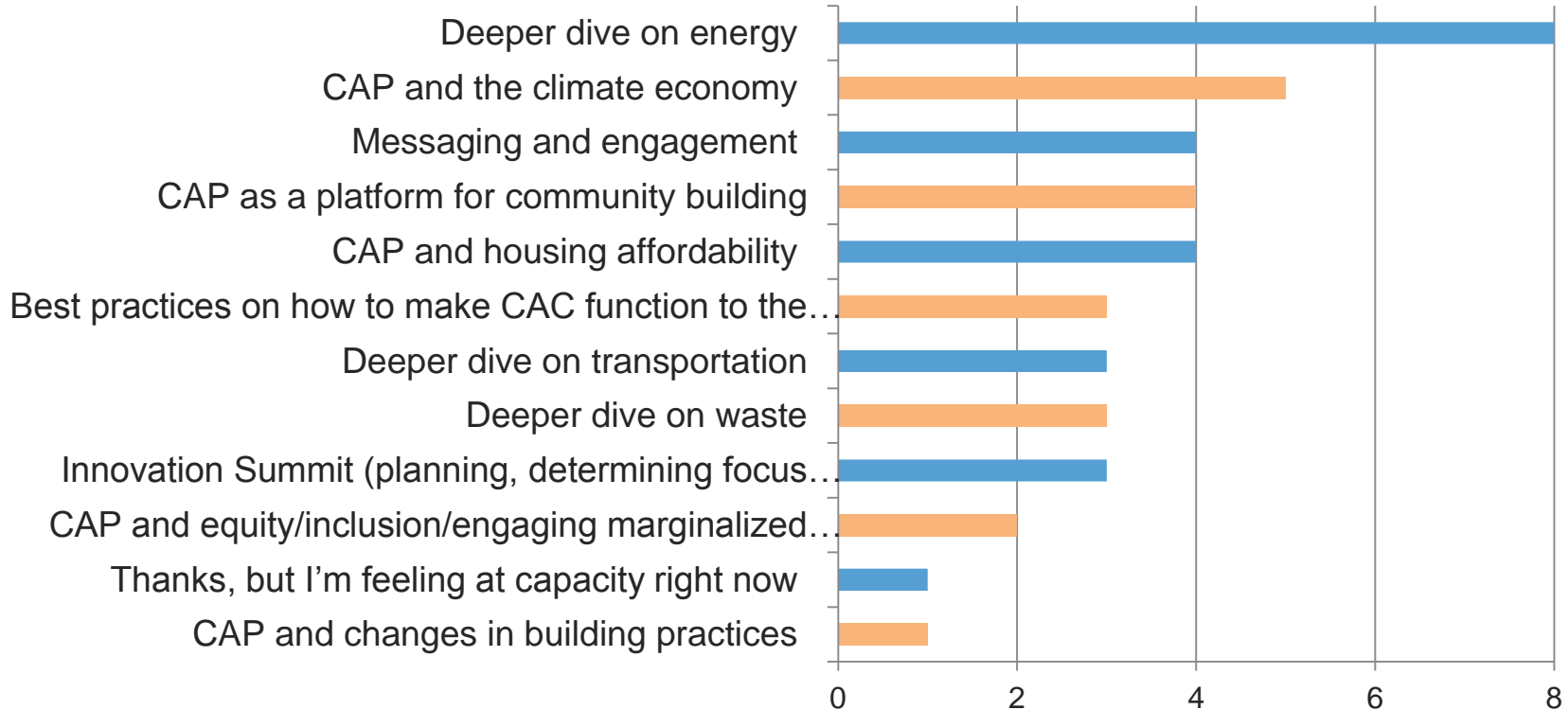
Support for Statements

1. City should lead by example in cutting its own emissions (92%)
2. ...offer voluntary programs to help citizens to address climate (91%)
3. Know what small changes I could make for climate change (88%)
9. ...enact ordinances and regulations to address climate (72%)

*All percentages include strongly agree and somewhat agree

**Full Results available at www.fcgov.com/airquality/survey.php

CAC Feedback on Additional Engagement



Energy Deep Dive and Focus on Building Energy Scoring (Inform/Collaborate)

Objectives: CAC Members will...

- Understand the role of energy in the overall Climate Action Plan, the City's energy efficiency programs and why the City makes these investments (inform)
- Have shared initial reactions to one energy efficiency policy under development (Building Energy Scoring) and provide input on the policy's community engagement process (collaborate)

Climate Action Plan
Citizen's Advisory Committee
August 24, 2017

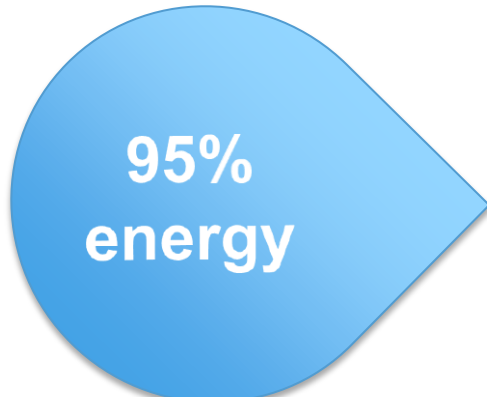
John Phelan
Resource Conservation Manager
Fort Collins Utilities



Energy Policy



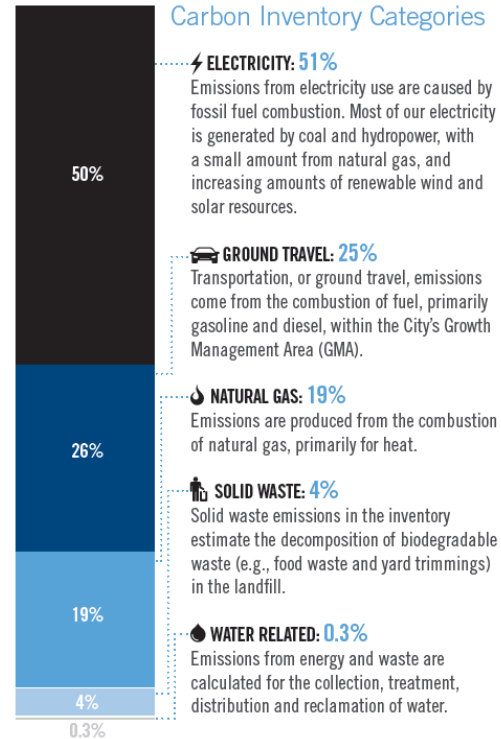
2016 ANNUAL UPDATE



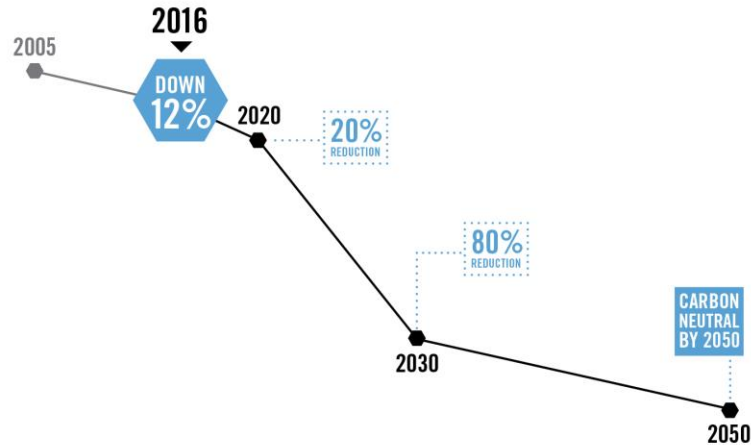
About 95% of the community's emissions come from electricity, natural gas, and transportation activities



Carbon Inventory Categories



Energy Policy Vision: Fort Collins is a leader in the transition to sustainable and resilient local energy systems to serve the community's 2050 carbon neutral future.

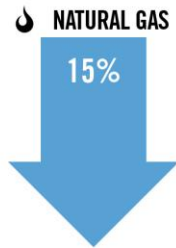
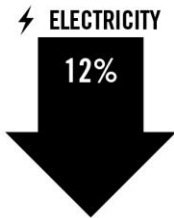


Report Contents

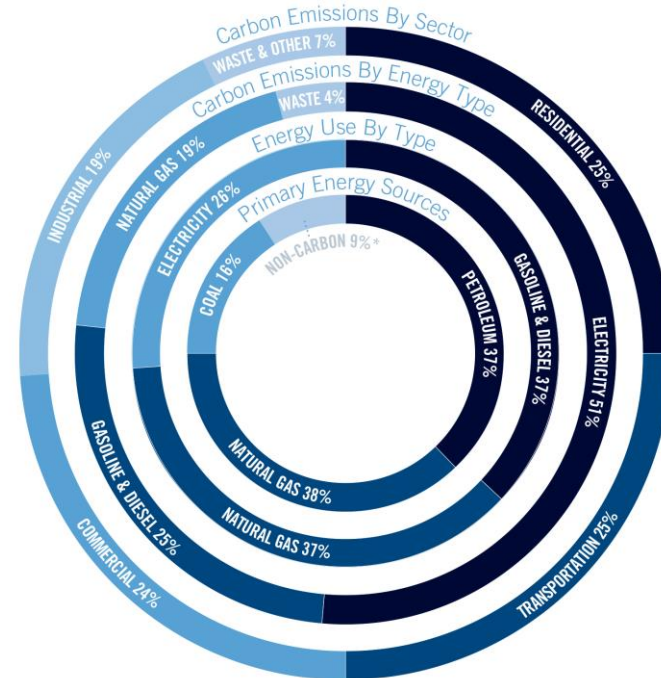
- Community Energy Use
- Built Environment and Efficiency
- Electricity Supply
- Community Economics and Partnerships
- Looking Ahead

2016 Energy Use Per Person

Compared to 2005



● **To the Point:** Per capita energy use is lower for all three primary energy sources, demonstrating that Fort Collins continues to improve efficiency.



Energy Sources and Carbon Emissions

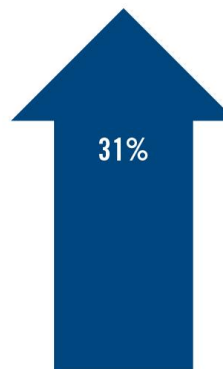
2016 Efficiency Program Savings

- 29,700,000 kilowatt-hours (kWh)
- Equivalent to 2% of the community's electric use or over 3,750 typical Fort Collins homes

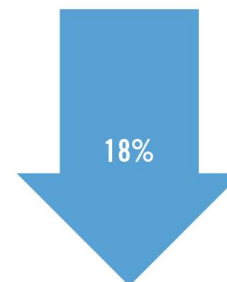
The Energy Policy efficiency target was 1.75% in 2016, rising to 2% in 2018 and 2.5% in 2020.

- **To the Point:** Customers are taking advantage of efficiency programs at a record pace and energy-use intensity data demonstrates the results.

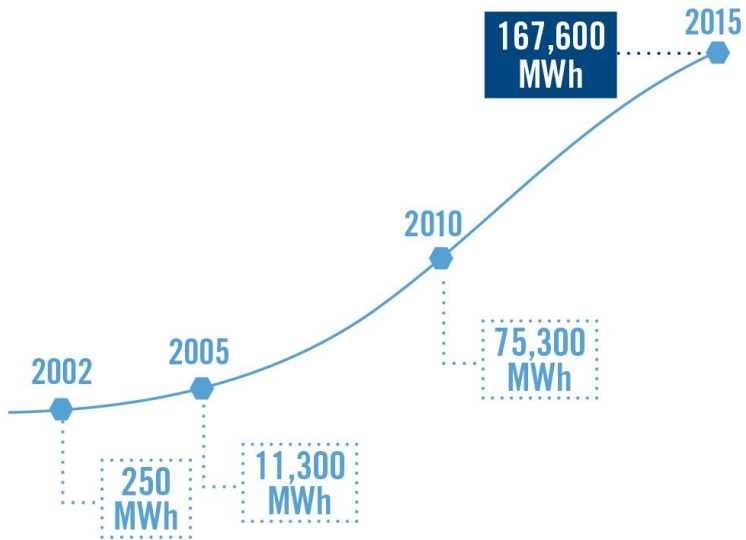
SQUARE FOOTAGE



ENERGY PER
SQUARE FOOT



Built Environment and Efficiency

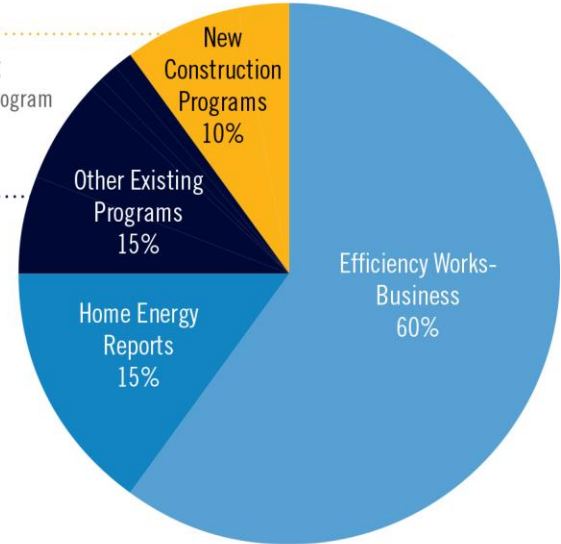


New Construction Programs



Energy Code and Green Building
Integrated Design Assistance Program

Other Existing Efficiency Programs

- Appliance Rebates and Recycling
- Home Lighting
- Conservation Corps
- Peak Partners Demand Response
- Efficiency Works-Home



● **To the Point:** Efficiency savings accumulate over time and are delivered by a wide range of programs, with businesses driving 60% of the reductions.

Metric/Indicator	2016 Value	% Change from 2005
Community electricity GHG emissions *	1,031,255 metric tons	-14% 
Utilities share of Platte River Power Authority (Platte River) electricity GHG emissions **	1,433,168 metric tons	-17% 

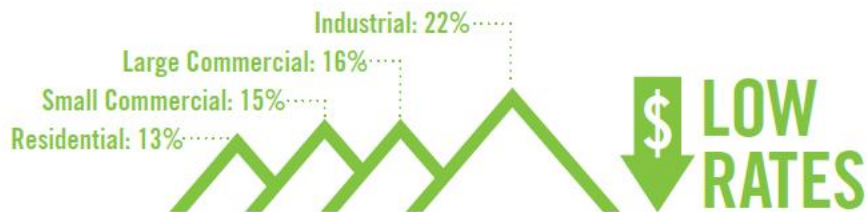


Come back next time for a deep dive!

Efficiency programs generated nearly **\$38 million** in local economic benefits through reduced utility bills, direct rebates and leveraged investment.

Utilities' Electric Rates

2016 rate class ranking among Colorado utilities



Source: Colorado Association of Municipal Utilities (CAMU)

Key Partnerships



Near-term

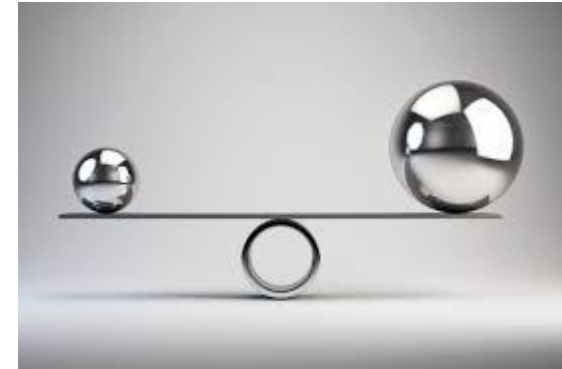
- Building Energy Scoring
- Time-of-Use Rates
- Customized Resource Planning
- Electricity Markets



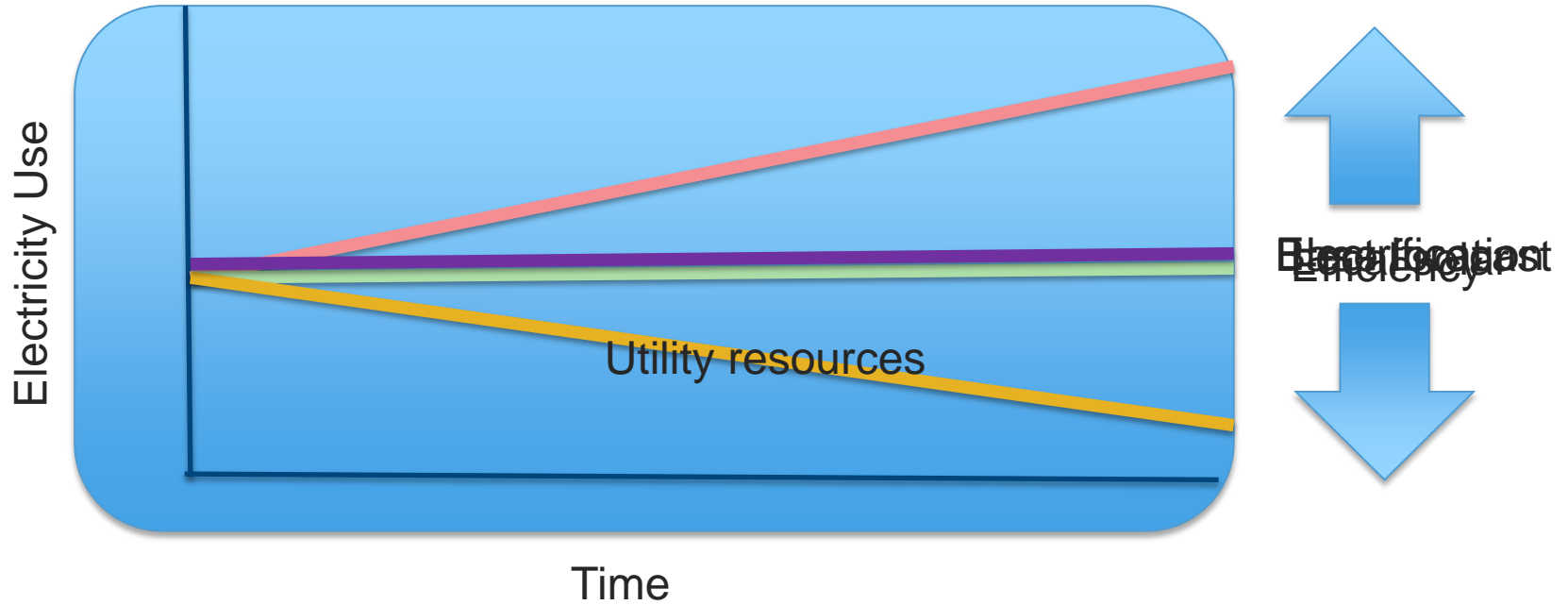
Long-term

- Maximize efficiency
- Clean electricity sources
- Electrify thermal and transportation loads
- Distributed energy resource management system (DERMS)

and 100,000 more people



Conceptual Electricity Forecast





LEARN MORE AT
energystar.gov

ENERGY STAR® Progress & Goals Report

96

ENERGY STAR®
Score¹

215 NM

Primary Property Type: Office
Gross Floor Area (ft²): 72,000
Built: 1999

For Year Ending: June 30, 2016
Date Generated: June 13, 2017

Property Address:
215 NM
215 north mason street
fort collins, Colorado 80524

Property ID: 1274576

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Building Energy Scoring

Is 60 MPG high or low...for this automobile?



Fuel Efficiency:
MPG

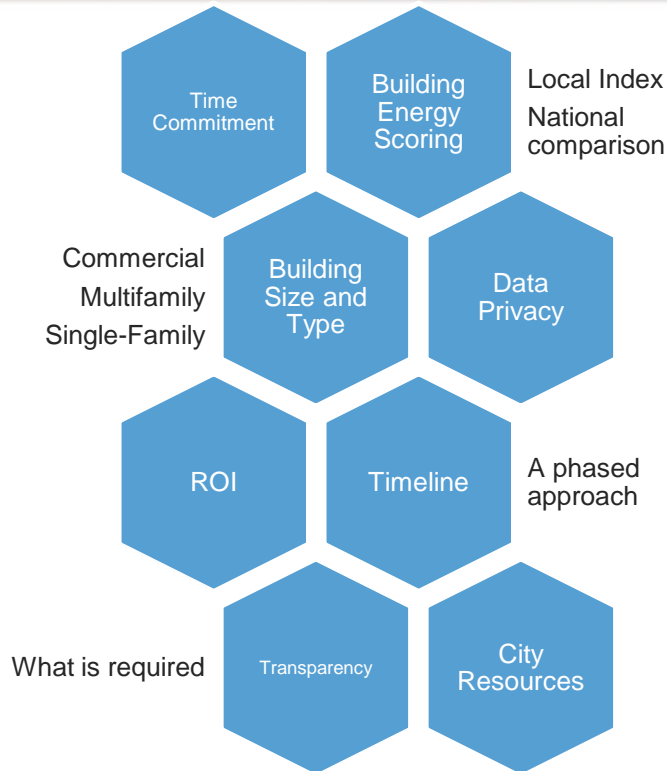
Is 90 kBtu/SF/YR high or low...for this building?



Energy Performance
Score: **1 to 100**

U.S. City Policies: Building Benchmarking, Transparency, and Beyond





Public Participation Objectives and Key Recommendations to City Staff

- Recommend essential services from Fort Collins Utilities required for effective implementation of building energy scoring.
- Establish policy implementation parameters: timeline, building sector, sizes, etc.
- Focus on larger commercial and multi-family buildings in short term with future timeline for inclusion of smaller buildings and homes.

- 1:1 Feedback Sessions
- Data Analysis
- Gather Public Feedback
- BES Working Group
- Council Work Session and next steps (FALL 2018)



Questions?
Contact Kirk Longstein



fcgov.com/BES



klongstein@fcgov.com



970.416.4325

- Based on the description outlined above for the Building Energy Scoring initiative, and any past experience, how do you believe the stakeholders you represent would react?
- What community groups should we engage overall?
- What sectors/groups should be represented on the BES Working Group?
- How would the CAC like to be engaged in this initiative as it moves forward?

Messaging and Engagement Update (Involve)

Objective: CAC Members will...

- Have provided the first public feedback on the initial work by PRR (Messaging and Engagement consultant) in surveying the community and peer cities (inform/involve)

Closing and Other Topics

Objective: CAC Members will...

- Have clarity on where the CAC is heading for the Q4 meeting (collaborate)

- Energy Deep Dive Part Two – Renewables (CRP)
- Initial Discussion on City Plan/Transportation Master Plan
- Climate Economy Action Plan
- Succession Planning for CAC/CAC Members

Open Discussion

Thank you!