



# Design Commission

October 24, 2016

## Austin COMMUNITY 2015 CLIMATE PLAN



AUSTIN TRANSPORTATION DEPARTMENT





# Agenda

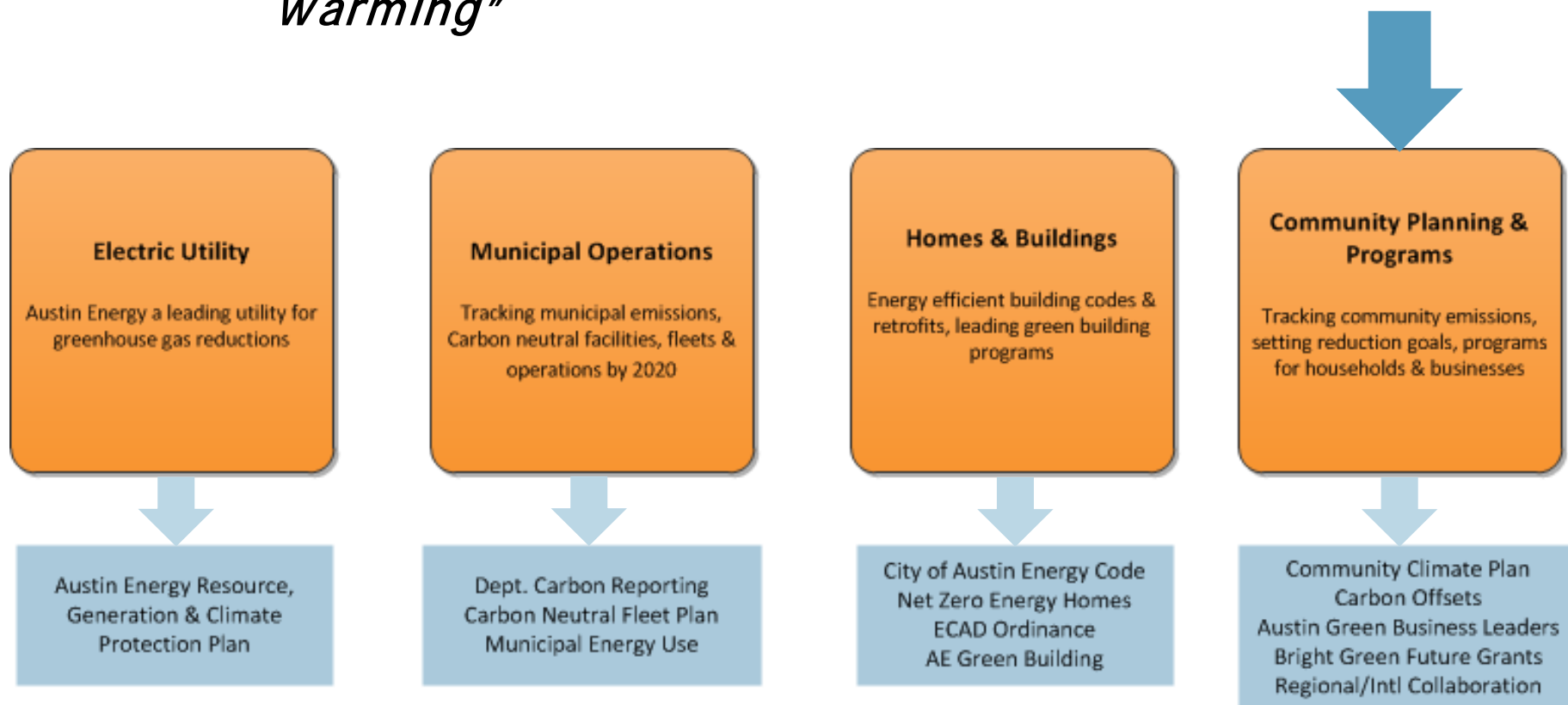
1. Climate Resolutions Background
2. Community Greenhouse Gas Sources
3. Phase 1 Strategies and Actions
4. City Operations Key Performance Indicators
5. Discussion





# 2007 Climate Protection Resolution

*“make Austin the leading city in the nation in the effort to reduce the negative impacts of global warming”*



# City Council Climate Resolutions





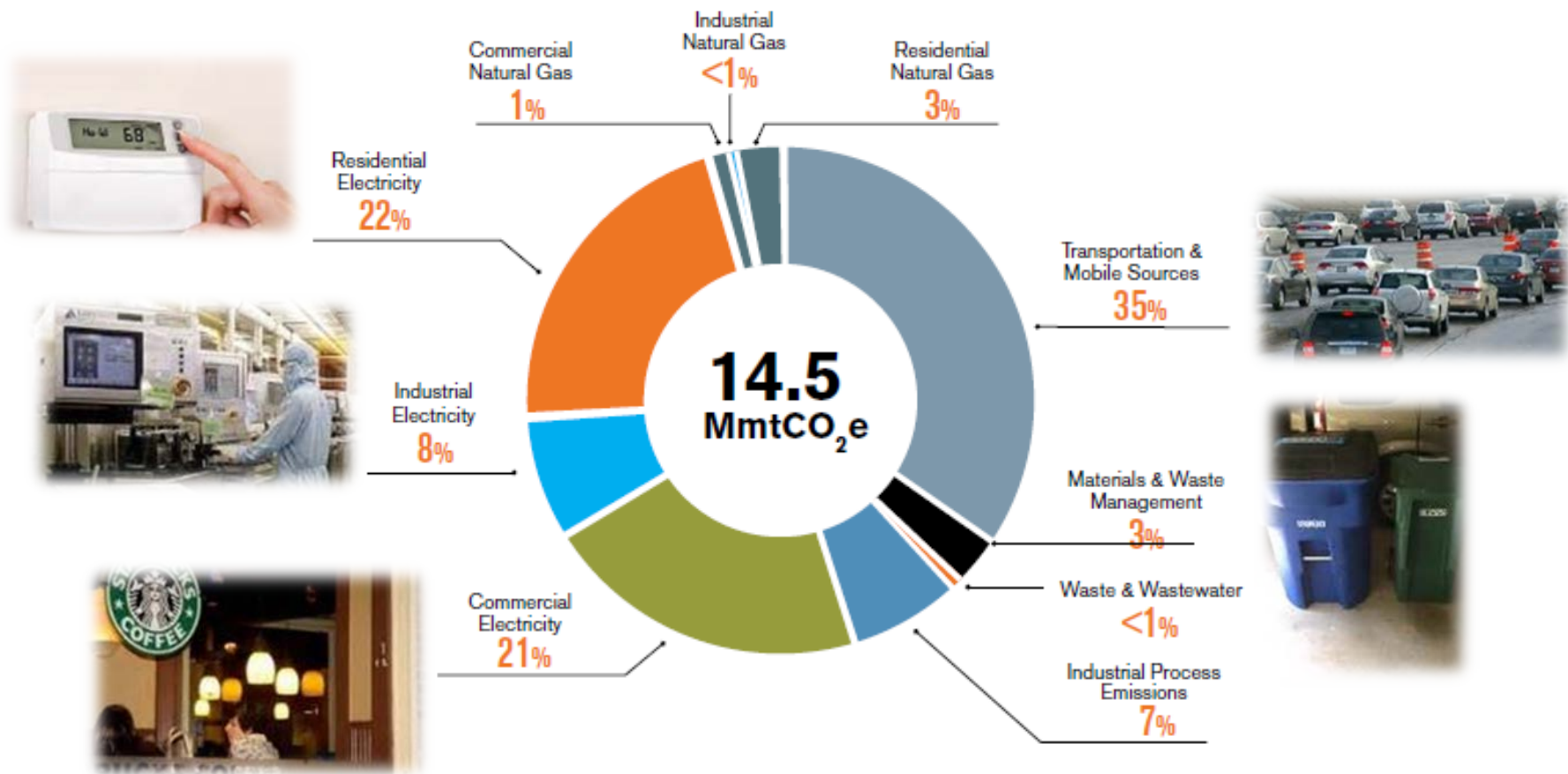
# Council Resolution 20140410-024

Net-zero community-wide greenhouse gas emissions by 2050

- Achieve as soon as feasible
- Create action plan for each major emissions sector
- Propose interim targets starting with 2020



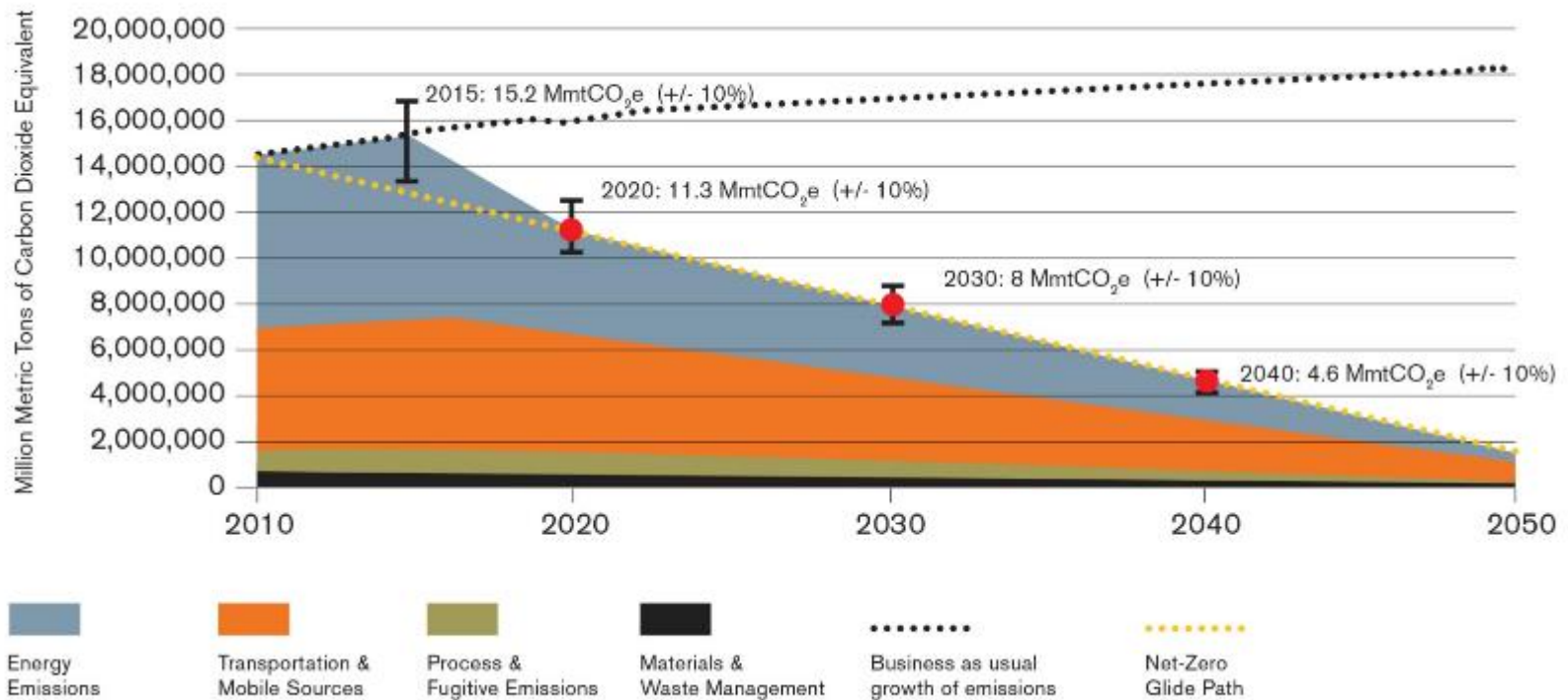
# 2010 Estimated Travis County Greenhouse Gas Inventory







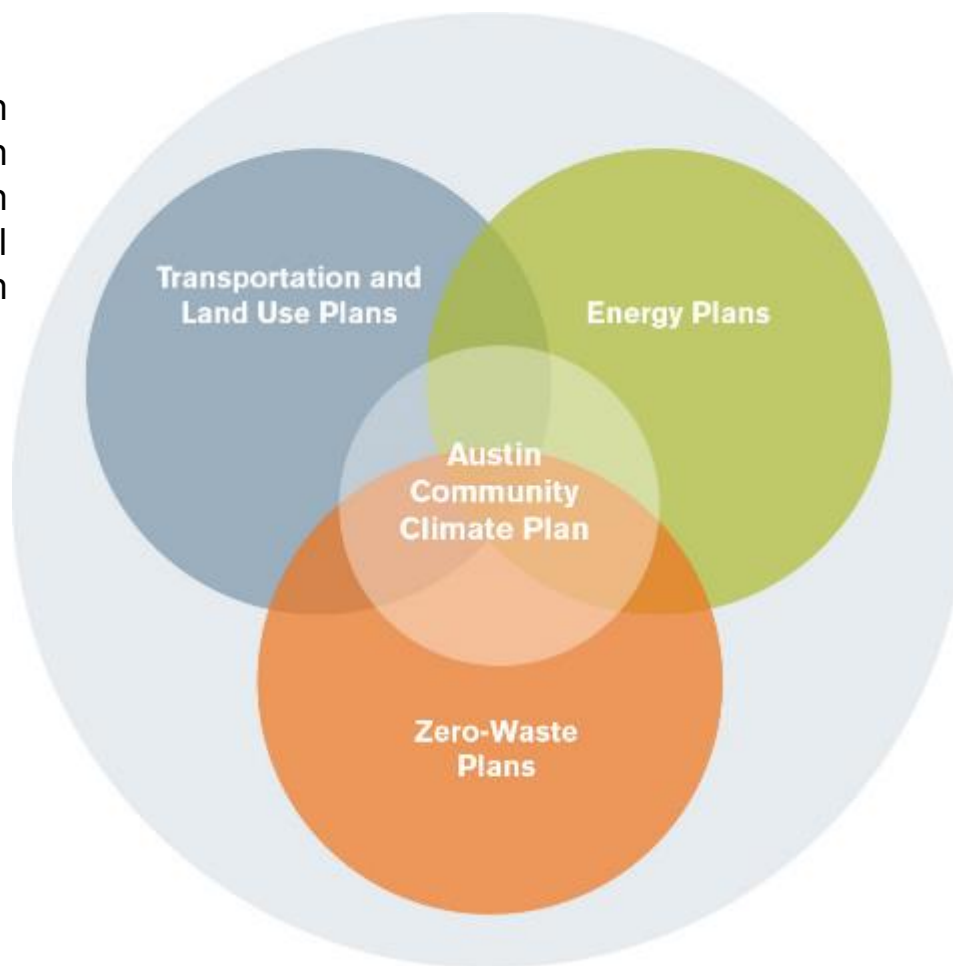
# What does net-zero in 2050 mean?





# Coordinating to Reach Common Goals

Imagine Austin  
Austin Bicycle Master Plan  
Urban Trails Master Plan  
CAMPO 2035 Regional  
Transportation Plan



Austin Energy Resource,  
Generation, and Climate  
Protection Plan

Austin Resource Recovery Master Plan





# Direct Benefits to the Community





# Technical Advisory Group Strategies

## Electricity and Natural Gas

- Buildings and Integrated Efficiency
- Promote Behavior Change
- Resource Technologies

## Transportation and Land Use

- Infrastructure and Service
- Land Use
- Demand Management
- Policy and Planning
- Vehicles and Fuel Efficiency
- Economic and Pricing Solutions

## Materials and Waste Management

- Organics Diversion
- Purchasing
- Methane Management
- Recycle / Reduce / Reuse

## Industrial Process

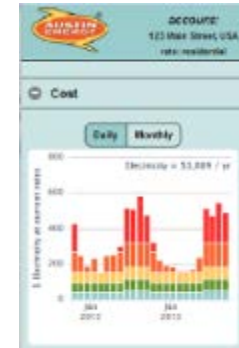
- Fuel Switching
- Process Optimization
- Capture and Destruction
- Local Offsets



# Electricity and Natural Gas

## Actions for Implementation within One Year

### Buildings and Integrated Efficiency



### Promote Behavior Change

### Resource Technologies





# Transportation and Land Use

## Actions for Implementation within One Year

### Demand Management

- Trip Reduction
- First and Last Mile



### Vehicles and Fuel Efficiency







# Materials and Waste Management

## Actions for Implementation within One Year

### Methane Management



### Procurement



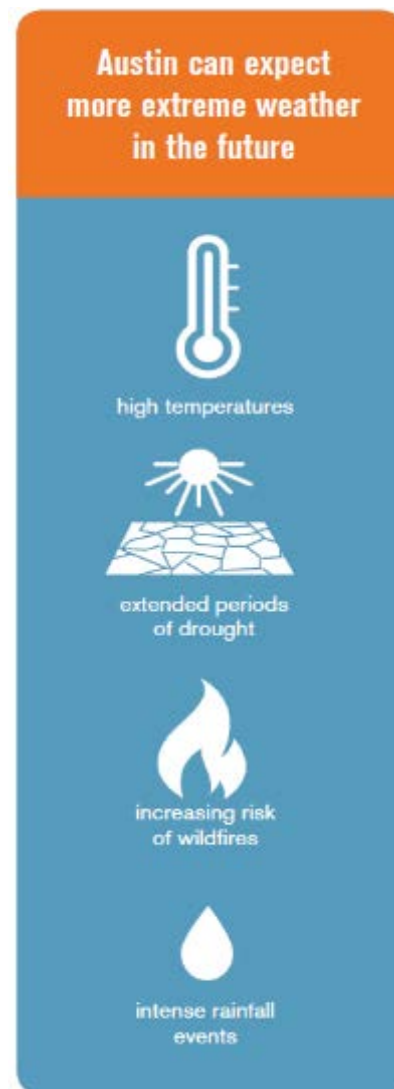
### Recycling and Organics Diversion





# Additional Recommendations

- Develop implementation plan for Phase 1 actions and public outreach plan by summer of 2016.
- Determine feasibility of carbon impact statement for major City Council decisions.
- Determine feasibility of local carbon fee or trading and investment program.
- Continue climate research and resilience planning efforts.





# Key Performance Indicators



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# 10 Organizational Key Performance Indicators

## PERFORMANCE KEY

TARGET MET	▶ Stated performance goal achieved or exceeded.
IN PROGRESS	▶ Performance goals and strategies under development.
TARGET NOT MET	▶ Stated performance goal not achieved.

TARGET MET	Carbon Footprint (Municipal Operations)
TARGET MET	Water Use
TARGET MET	Vehicles & Equipment
TARGET MET	City Right of Way
TARGET MET	Green Infrastructure & Stormwater Management
TARGET MET	Workforce Wellness
IN PROGRESS	Sustainable Purchasing
TARGET NOT MET	Energy Use
TARGET NOT MET	Green Building
TARGET NOT MET	Zero Waste

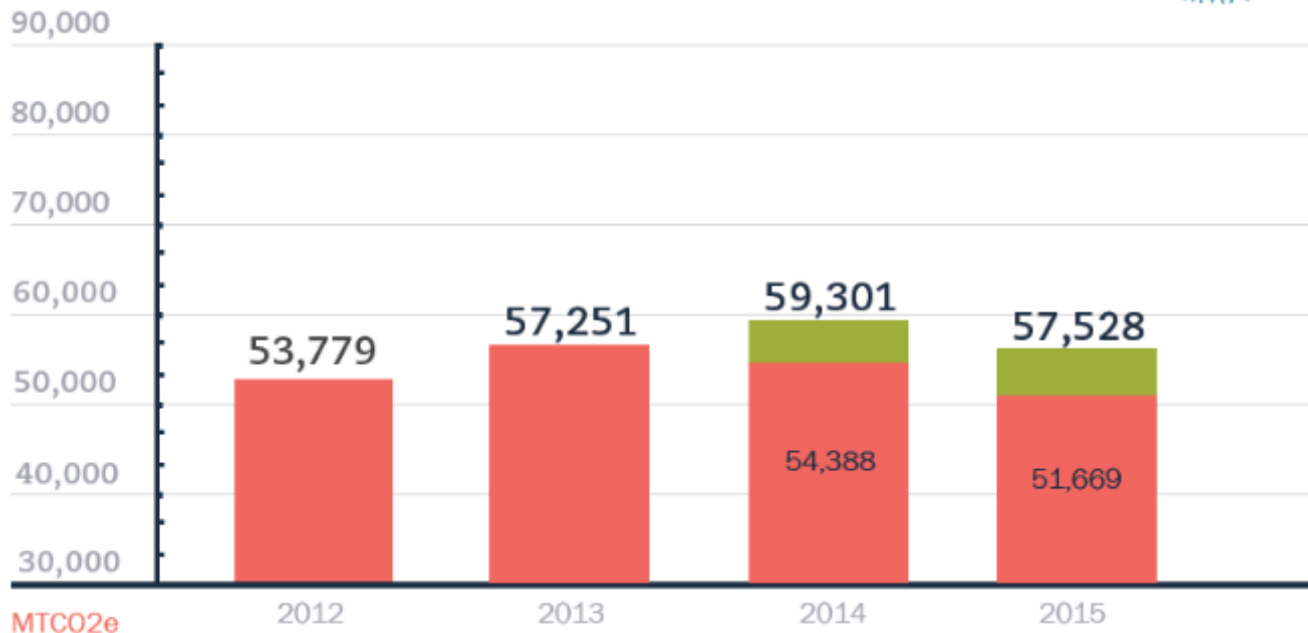


# Organizational Key Performance Indicator

## CARBON FOOTPRINT

CO2e Emissions from City Operations<sup>1</sup>

Carbon Offset Purchase



GOAL: 5% EMISSIONS REDUCTION PER YEAR

PERFORMANCE

TARGET MET

MTCO2e = Metric tons of carbon dioxide equivalent

### SCOPE

Electricity, natural gas, and vehicle fuel use (Does not include direct emissions from AE generation, the City landfill, or wastewater treatment)

### KEY TAKEAWAYS

2012 GreenChoice adoption created a major reduction; fleet reductions proving to be more challenging

Office of Sustainability and ACC plan to purchase offsets this year to stay on track for carbon neutral by 2020 goal

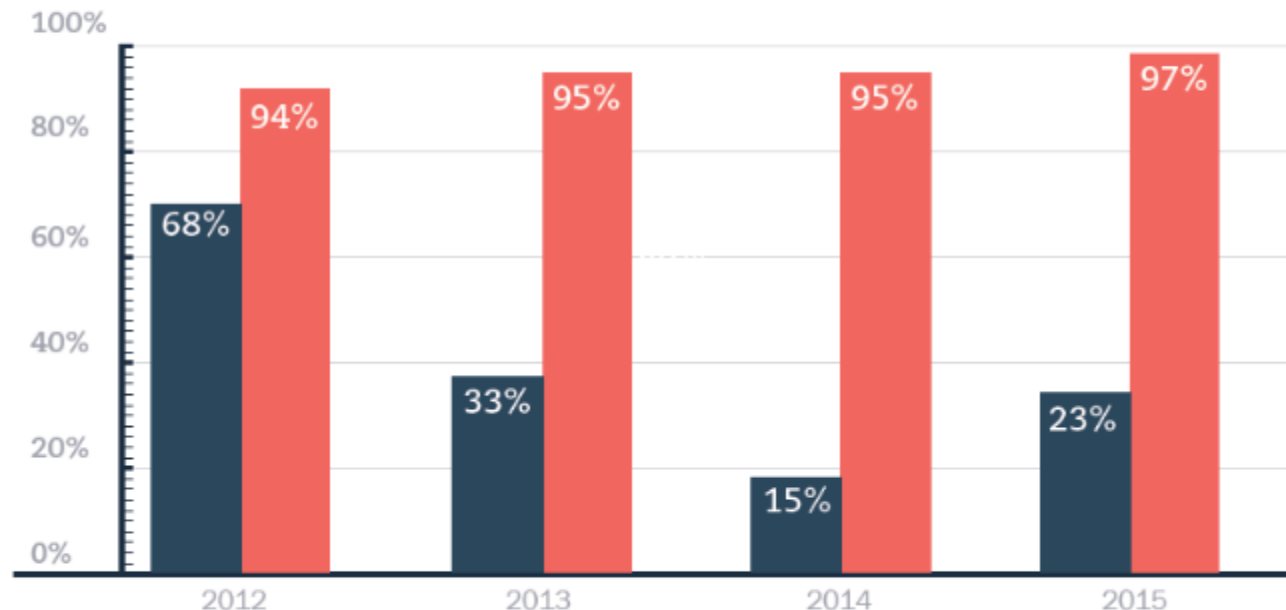
# Organizational Key Performance Indicator

## VEHICLES & EQUIPMENT

% Alternative Fuel or Hybrid Fleet Vehicles  
Purchased / % of Alternative Fuel Used



● Purchased ● % of Alt. Fuel Used



GOAL: 95% OF ALL NEW VEHICLE PURCHASES ARE ALTERNATIVE FUELED OR HYBRID

PERFORMANCE

TARGET MET

### SCOPE

Includes the entire  
5,000+ unit vehicle  
fleet

### KEY TAKEAWAYS

Meeting purchase  
goals

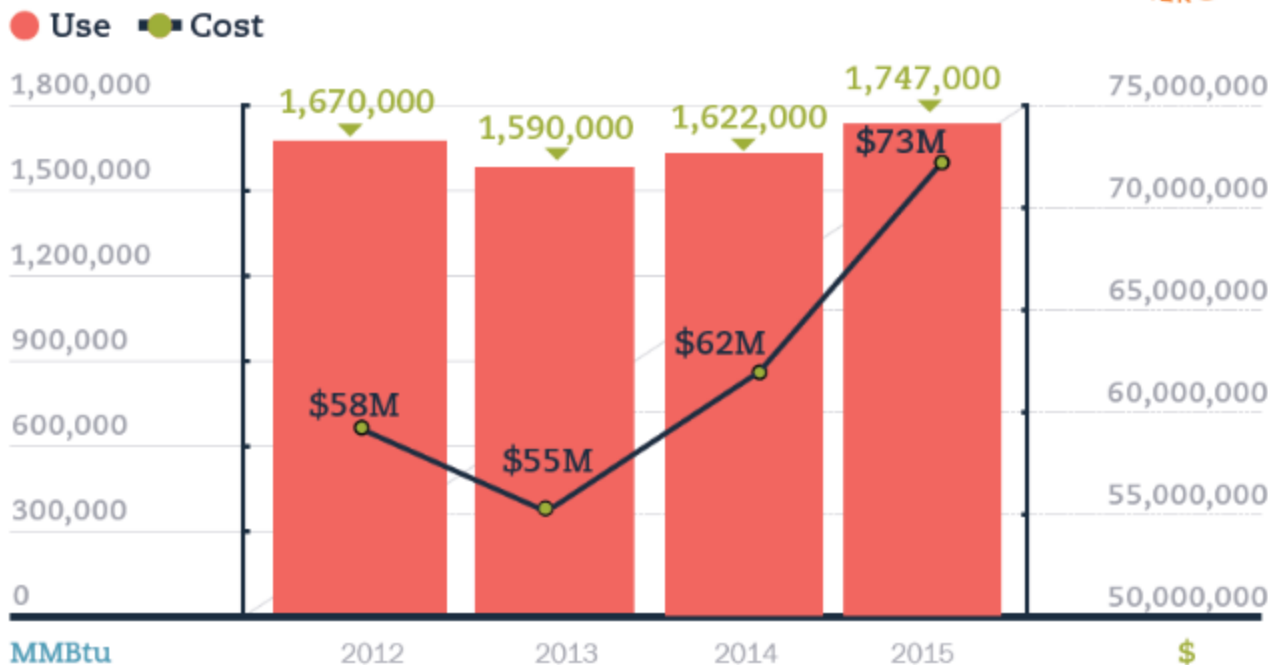
Need to increase  
overall fleet fuel  
efficiency and use of  
alternative fuels for all  
capable vehicles

Fleet training video  
released; Fleet Dept.  
converting fueling  
infrastructure; B2O  
back at stations; OoS  
light-duty purchase  
assistance

# Organizational Key Performance Indicator

## ENERGY

Annual Building Energy Use / Cost at Existing Facilities



GOAL: 5% ENERGY REDUCTION USE PER YEAR (SB 898)

PERFORMANCE

TARGET NOT MET

### SCOPE

Includes electricity and natural gas used in buildings, plus chilled water

### KEY TAKEAWAYS

State mandated goal

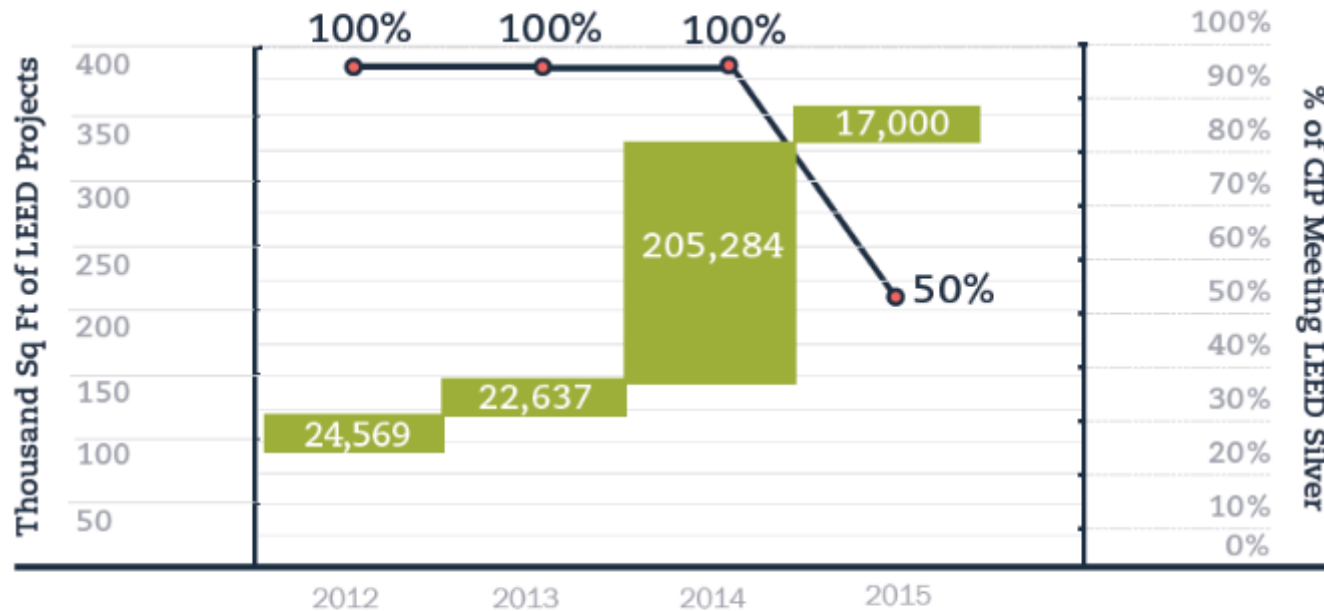
AE rate changes have increased City costs; demand charges a big factor

Opportunities with strategic facilities planning, capital project planning, retrocommissioning, education efforts with facility managers

# Organizational Key Performance Indicator

## GREEN BUILDING

% New CIP Meeting Minimum LEED Silver Certification /  
New Square Footage of LEED-Certified City Projects



GOAL: 100% COMPLIANCE WITH LEED SILVER OR BETTER FOR APPLICABLE PROJECTS

PERFORMANCE

TARGET NOT MET

### SCOPE

All new municipal buildings over \$2M and major renovations over \$300K

### KEY TAKEAWAYS

Two projects were required in 2015; only one met LEED Silver

Cross-departmental team analyzing the project review process that assesses whether the project needs to meet LEED Silver





A U S T I N C I T Y H A L L

## Discussion



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