

# Office of Sustainability Quarterly Update

Resource Management Commission

January 21, 2014

# Great Question Luke

- Are we a leader on climate?
- How do we compare to other cities in terms of results?

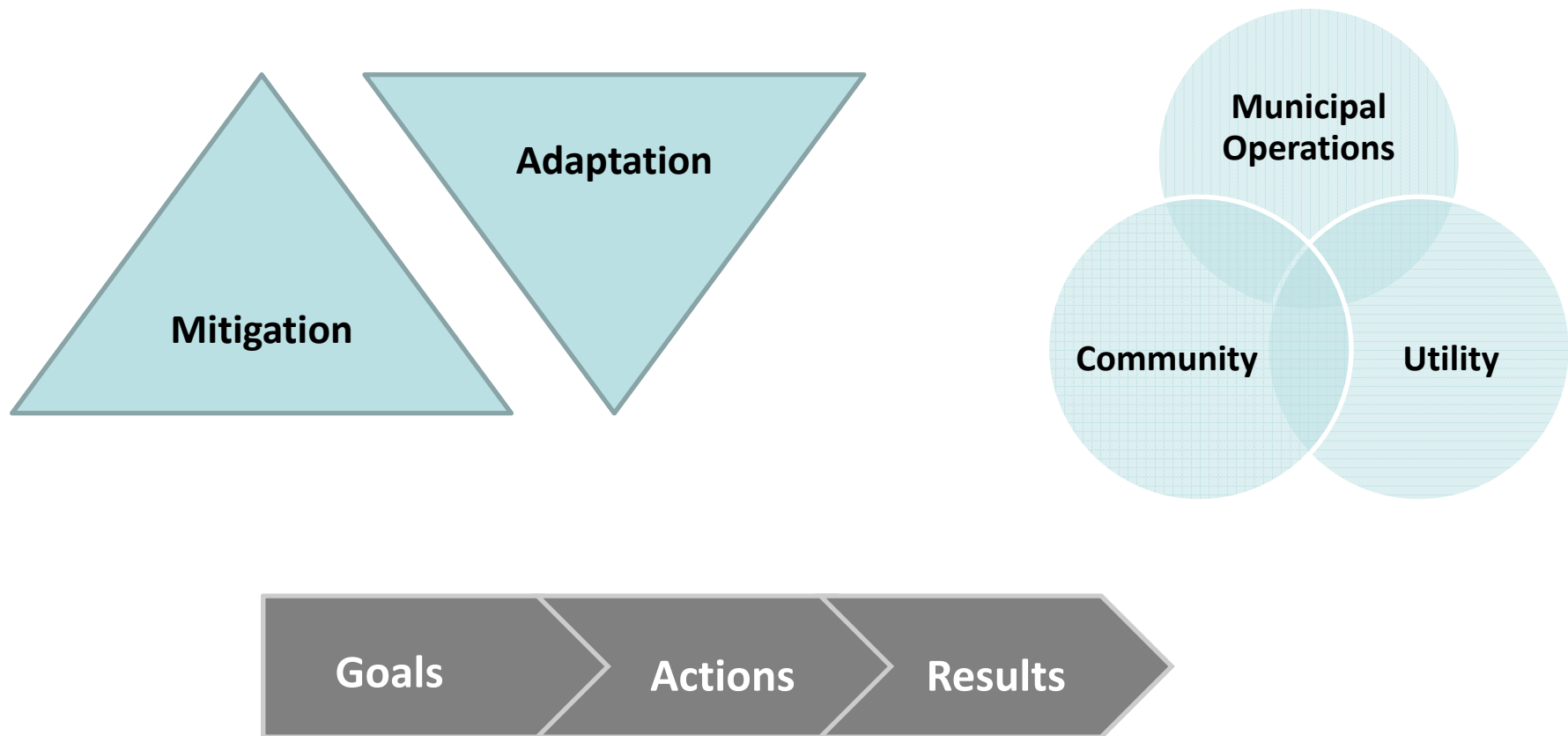
2007 Austin Climate Protection Plan Resolution: “make Austin the leading city in the nation in the effort to reduce and reverse the negative impacts of global warming”

- Reports already compare cities on climate – ACEEE, CDP, etc.
- Good opportunity to research and see what we find

# Agenda

- **Defining Climate Leadership**
- City of Austin Goals, Actions, and Results
- Our Research on other Cities
- Third-Party Reports
- Results and Recommendations

# What Makes a Leading City on Climate?



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- Defining Climate Leadership
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# City of Austin: Municipal Operations GHG Mitigation

<b>Goals</b>	Make CoA facilities, fleets and operations totally carbon neutral by 2020
<b>Actions</b>	<ul style="list-style-type: none"><li>• Solar PV Installations over 614.64 kW</li><li>• 23 Departments &amp; 5 buildings are implementing Climate Protection Plans</li><li>• Carbon Neutral Fleet Plan</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• 100% of city-owned facilities are subscribed to GreenChoice</li><li>• 2012 Scope 1 and 2 Municipal Operations Emissions in 2012 are 70% below 2007 baseline</li></ul>

# City of Austin: Electric Utility GHG Mitigation

<b>Goals</b>	<p>By 2020 - Make AE the leading utility in the nation for GHG reductions:</p> <ul style="list-style-type: none"><li>• 800 MW of EE and conservation</li><li>• 35% of all energy needs through renewable resources including at least 200 MW solar power</li><li>• Establish CO2 cap, develop and implement CO2 reduction plan for existing utility emissions</li></ul>
<b>Actions</b>	<ul style="list-style-type: none"><li>• Energy efficiency programs through AE</li><li>• Adding renewable capacity through wind, biomass and solar</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• 40% of 800MW has been avoided</li><li>• 23% renewables by the end of 2013</li><li>• On target to reduce CO2 emission from power plants to 20% below 2005 levels by 2020</li></ul>

# City of Austin: Community GHG Mitigation

<b>Goals</b>	<p>Building codes requiring all new single-family homes to be zero net energy capable by 2015</p> <p>Create an inventory of community greenhouse gases, establish short-term and long-term targets for reducing emissions, and develop a comprehensive plan for meeting those targets</p> <p>Develop and implement a program to assist all citizens, businesses, organizations and visitors in achieving carbon neutrality</p>
<b>Actions</b>	<ul style="list-style-type: none"><li>• Amended City of Austin Energy Code to adopt International Energy Conservation Code (IECC)</li><li>• Implementing the Energy Conservation Audit and Disclosure Ordinance</li><li>• Community Climate Roadmap analysis work with UT-Austin nearing completion</li><li>• GHG impacts included in multiple City plans for major sources of community emissions</li><li>• Bright Green Future Grants program in year 2</li><li>• Positive Impact on Climate and Community raising funds for carbon offsets</li><li>• In 2012, 7,821 community members reached with climate/ sustainability information</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• In 2012, 50% of non-exempt single family homes completed energy audits, 66% of non-exempt multi-family properties completed energy audits, and 80% of commercial space rated their building in portfolio manager</li><li>• Austin Green Business Leaders (AGBL) program with over 100 business participation</li></ul>



# City of Austin: Adaptation to Climate Change

- Likely climate stressors for Austin:
  - Extreme Heat and Drought
  - Intense Precipitation Events / Flooding
  - Wildfire
- Austin has plans that address adaptation issues:
  - Austin Energy - Energy Efficiency and Weatherization
  - Drought Contingency Plan
  - Wildfire Taskforce and Protection Plan
  - Hazard Mitigation and Emergency Operations Plans
- Currently - formal future projections of climate change are not included in planning (in progress)

## Recent Advancements

- CAMPO / FHWA Climate Vulnerability Assessment of the 6 County Transportation System
- Resolution 20131121-60—Departmental Climate Change Impacts Study

# 20131121-060 Resolution Overview

1. Analyze Climate Change Projections
2. Determine how departmental operations as well as future planning efforts integrate future impacts of climate change and could be enhanced
  - Transportation / Public Works
  - Austin Water
  - Watershed Protection
  - Austin Energy
  - Homeland Security and Emergency Management
  - Health and Human Services
3. Identify a process for performing departmental vulnerability assessments and recommend next steps to develop, prioritize, and implement strategies to increase resilience

**Report due to Council on May 1, 2014**

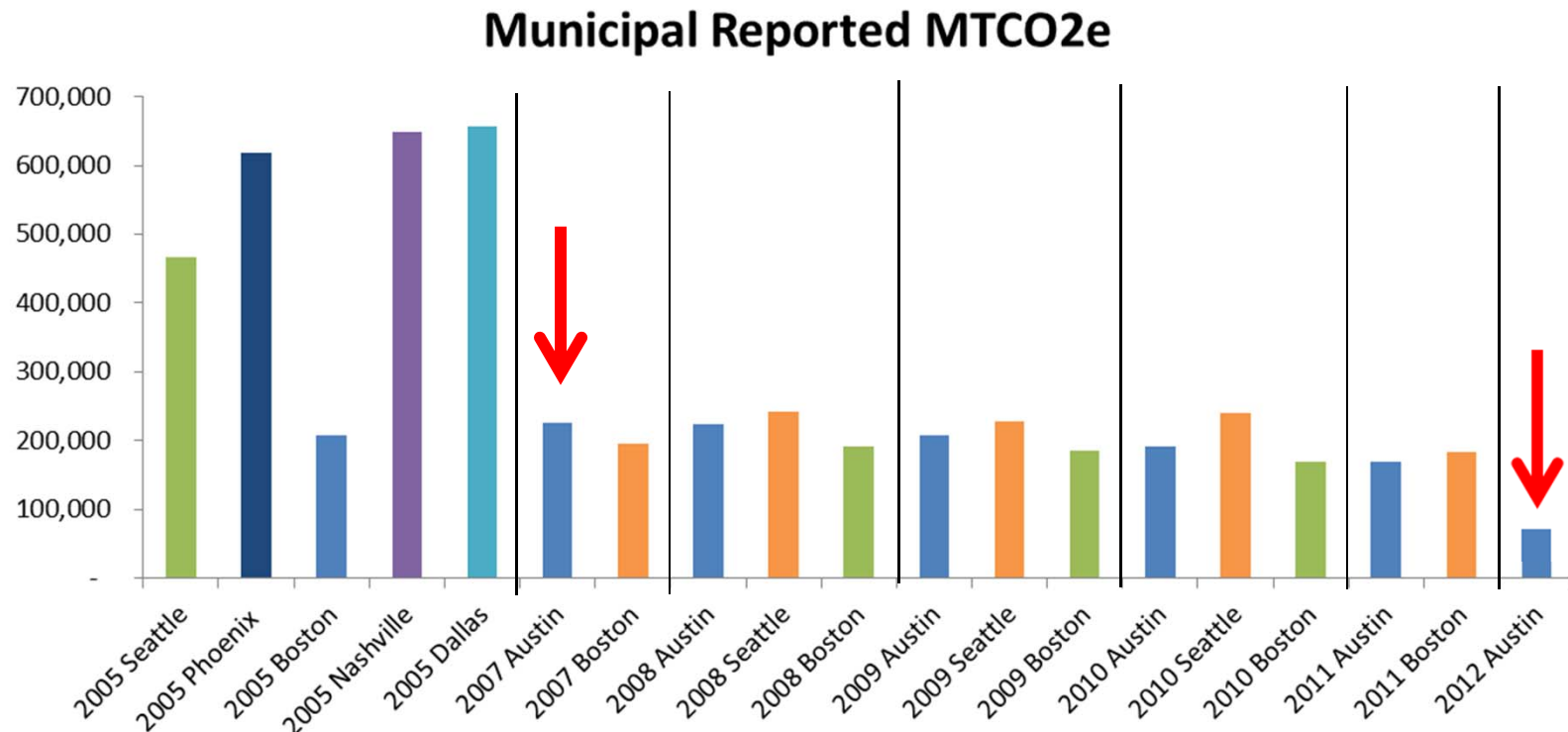
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# Most Aggressive Climate Goals

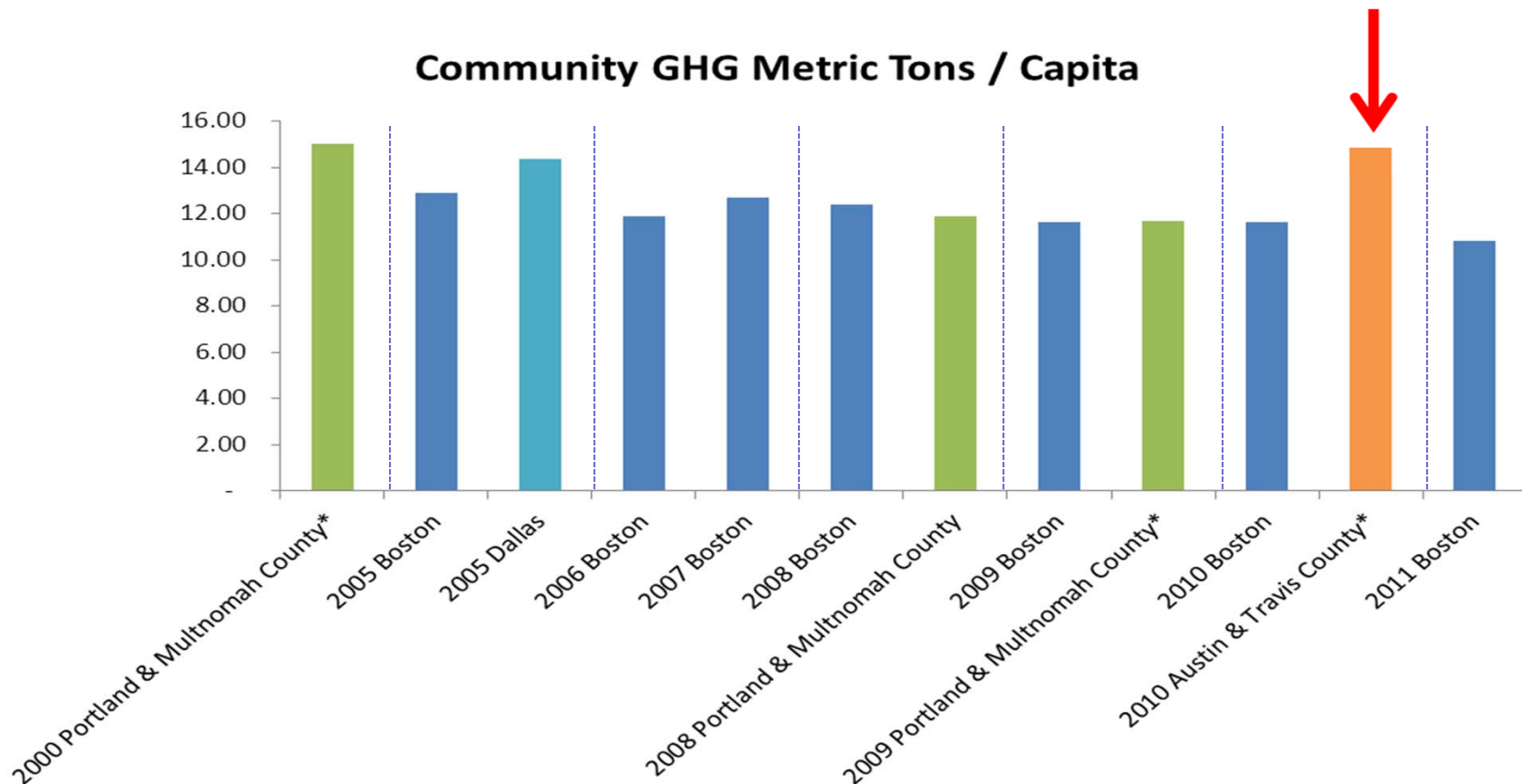
- ***Municipal GHG Reduction:*** Austin has most aggressive goals  
→ Carbon Neutral by 2020 *We're a leader*
- ***Electric Utility Renewables:*** Seattle City Light has a carbon neutral goal. Most aggressive target for comparable utilities is 35% renewables by 2020 (LADWP) *We're a leader*
- ***Community-wide GHG Reduction:*** Seattle - entire city Carbon Neutral by 2050  
Internationally accepted target: 80% reduction by 2050  
2010 Community Climate Workshop recommendation:  
Carbon neutrality by 2050 - *Not officially adopted by Council*

# Research: Municipal GHG Emissions



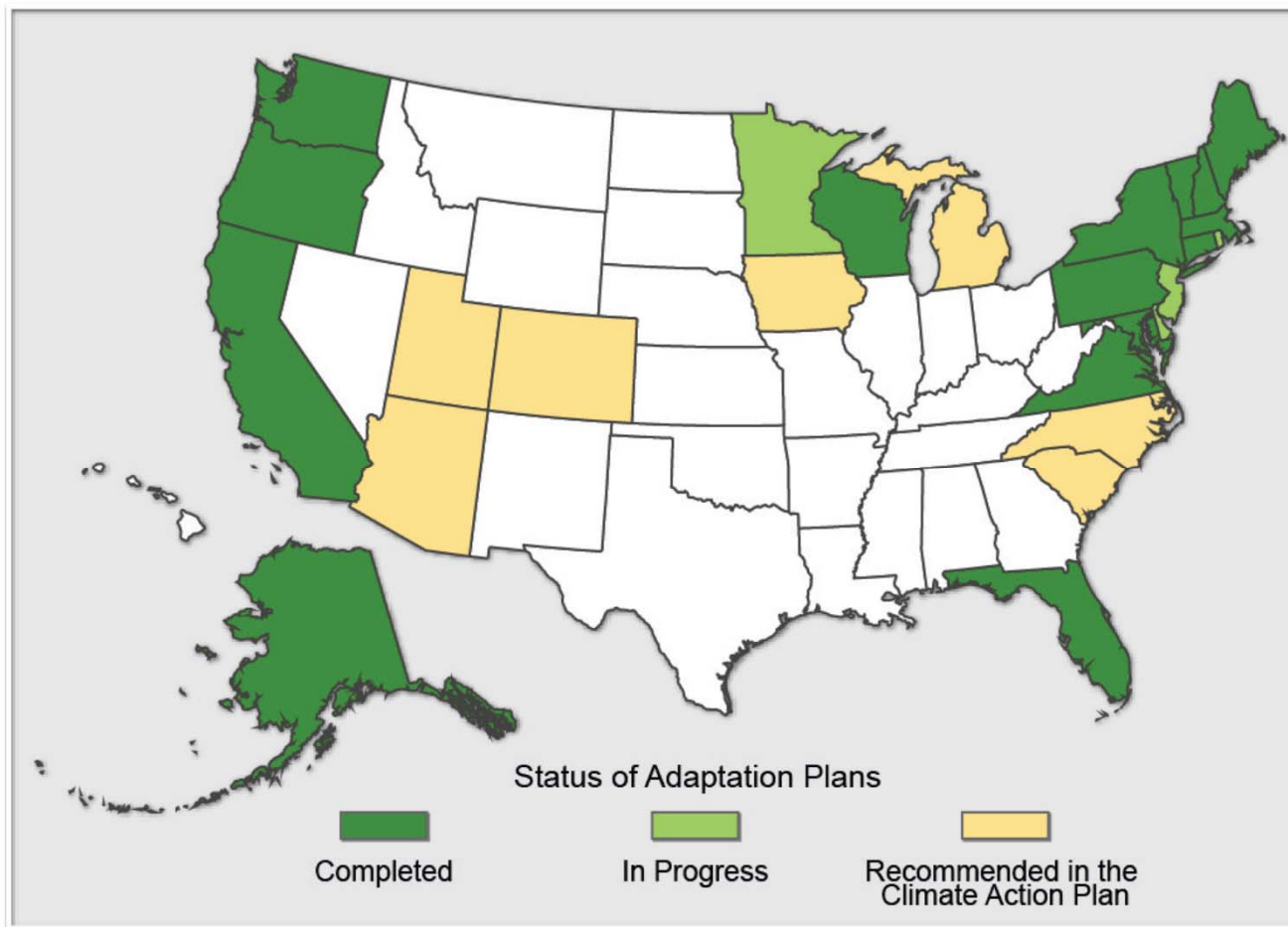
- Austin has achieved a 68% decrease in GHG emissions from the baseline in 2007
- Many cities have not publically reported since their 2005 baseline year
- Austin is tracking towards aggressive carbon neutrality in 2020

# Research: Community GHG Emissions



- Limited reporting of Community-wide GHG Emissions
- \* Not reported by per Capita, estimated based on population and GHG emissions reports

# Research: Adaptation



Major City  
Adaptation Plans  
Seattle, Boulder,  
New York, and  
Philadelphia

17 Cities include  
Adaptation  
strategies or  
climate in a  
General Plan

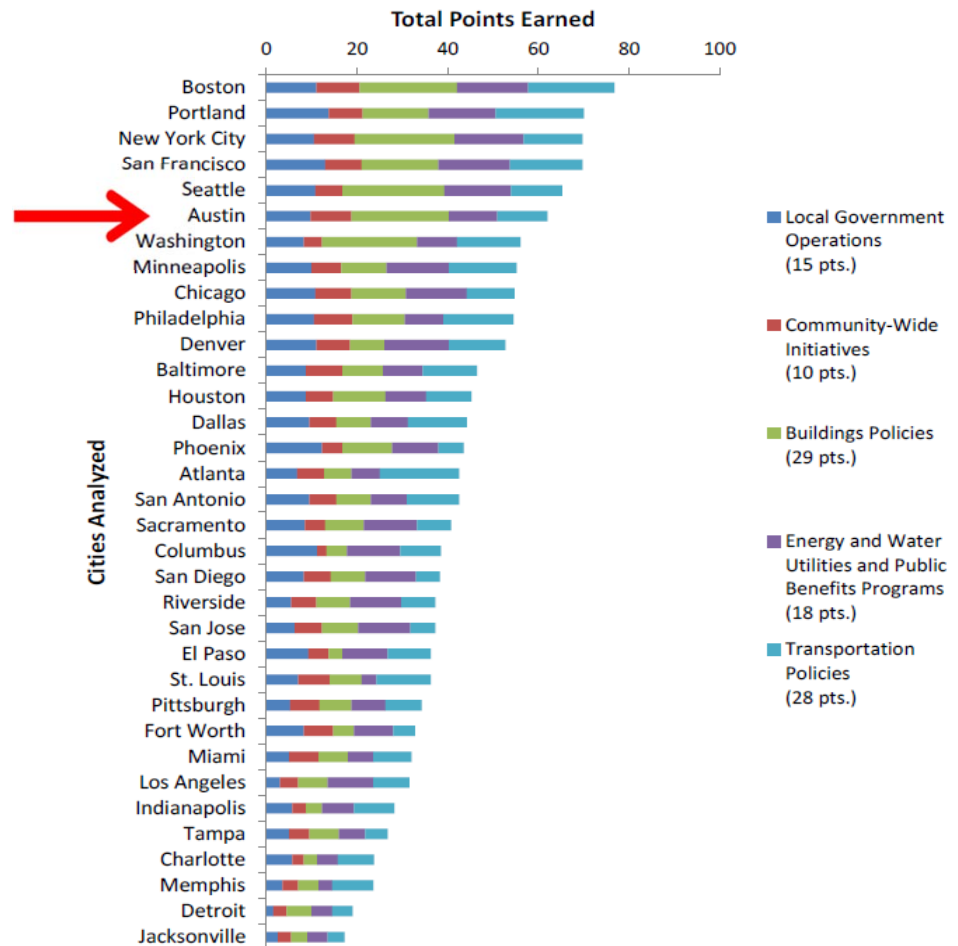
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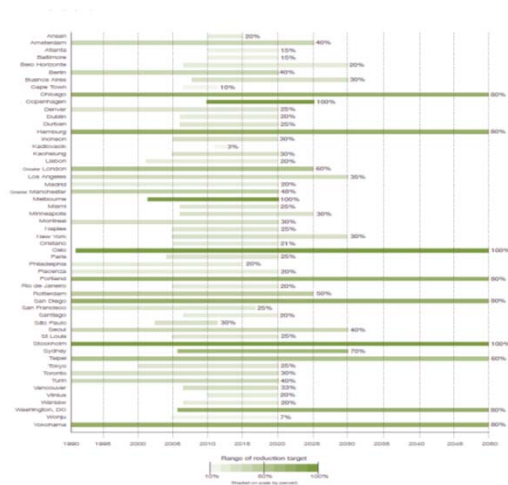
# Energy Efficiency Ranking

- Austin ranked 6<sup>th</sup>
  - 34 large cities
  - Based on five areas
    - Community initiatives (2<sup>nd</sup>)
    - Buildings (3<sup>rd</sup>)
    - Local government (12<sup>th</sup>)
    - Utilities & Public benefits programs (14<sup>th</sup>)
    - Transportation (15<sup>th</sup>)



# City Carbon Disclosure Project

- No rankings, just available for comparison
- 27 United States Cities reporting
  - 21 are reporting municipal emissions
  - 3 have 3<sup>rd</sup> party verified municipal emissions
  - 22 have municipal emission targets
  - 13 have a Climate Change Resilience plan
- City-wide GHG emission reduction goals:
  - International Community goal: Melbourne 100% by 2020
  - U.S.: Washington DC, Chicago, Portland and San Diego all have 80% reduction goal by 2050












### CDP City-Wide GHG Emission Reduction Comparison




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# Austin Climate Leadership Assessment

## Climate Mitigation

	Municipal Operations	Utility	Community
Goals			
Actions			
Results			

-  Leader
-  Follower
-  Needs Attention

## Climate Adaptation

	Municipal Operations	Utility	Community
Goals			
Actions			
Results			

# Opportunities

- Mitigation
  - Formalize community-wide GHG mitigation goal
  - Focus on community transportation emissions
- Adaptation
  - Obtain climate projections, study, and set goals per Resolution 20131121-060
  - Complete a departmental + City-wide vulnerability assessment and adaptation plan