



Austin Community Climate Plan

Lessons Learned

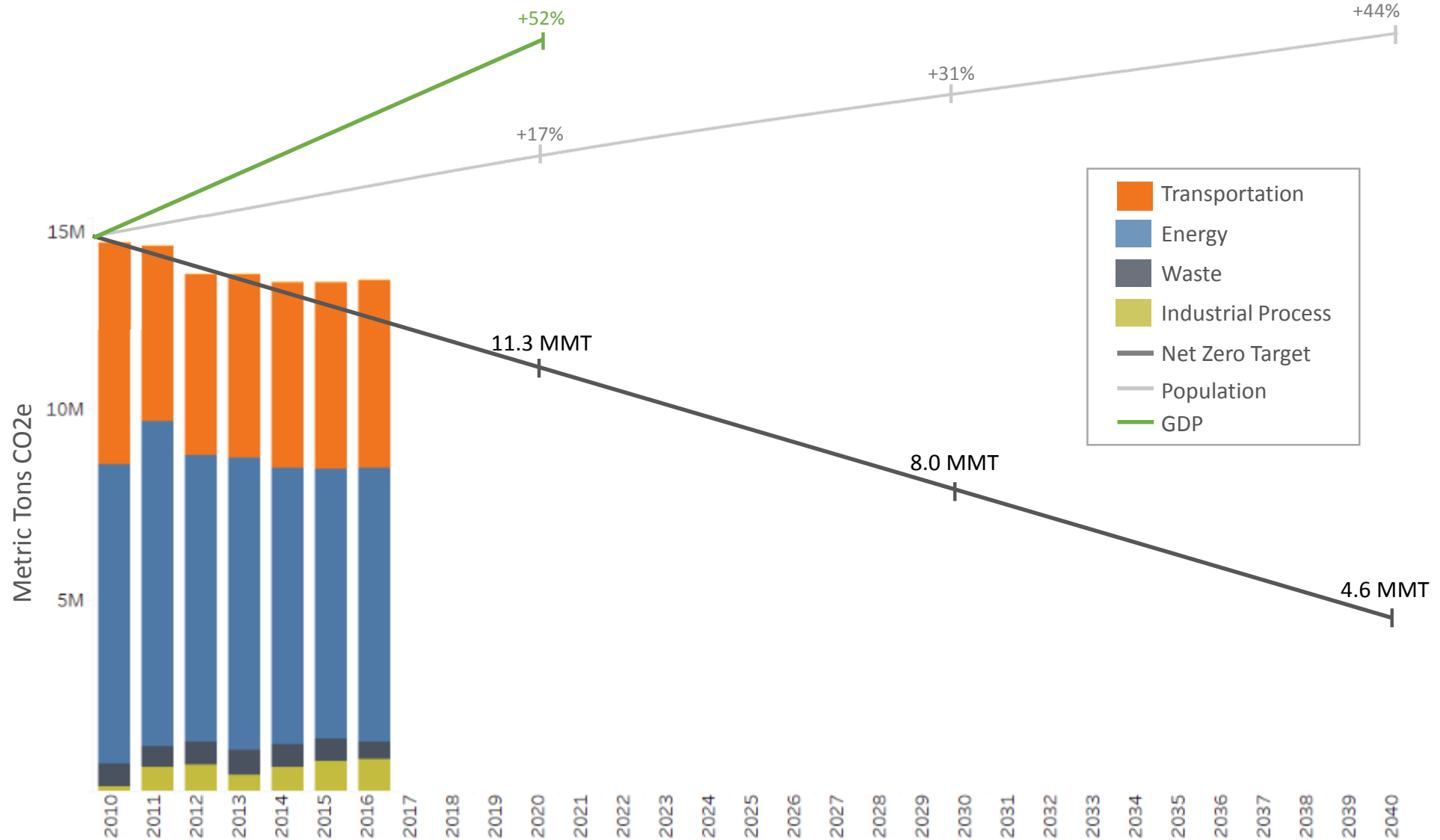
August 28, 2019



Time to pause and review where we've been

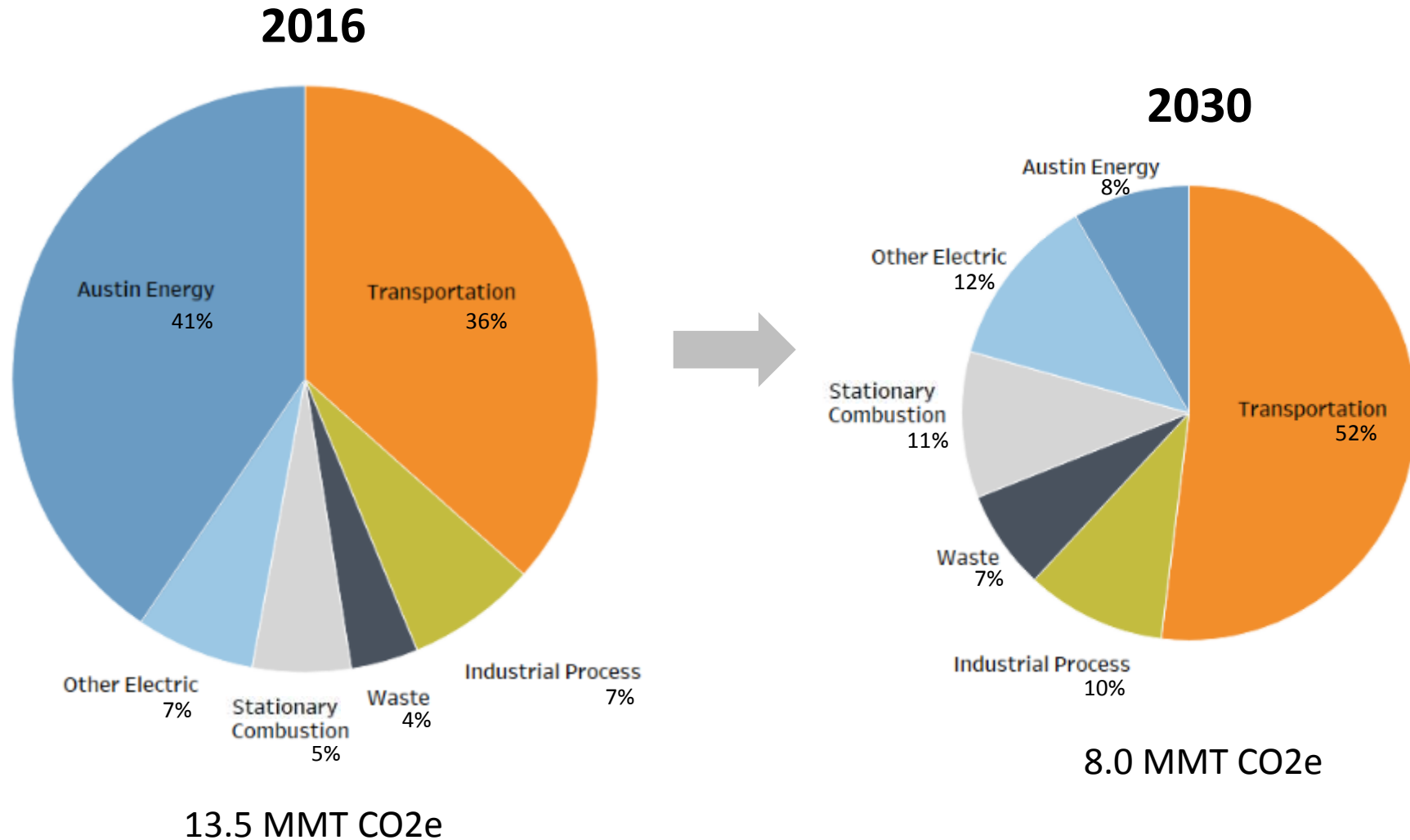
- Austin Community Climate Plan was created in 2014-15, the 5 year revision is due to Council in 2020
- A lot has happened since 2014
 - Major progress with renewable energy
 - New technology (batteries, EVs, solar, etc.) is continuing to decrease in cost
 - Equity is now a focus, not an option
 - 7 at large to 10-1 Council
 - Entirely new set of City Management
 - Strategic Direction 2023
 - People keep moving here!
- Lets assess where we've been, in hopes that it can inform where we are going

Travis County Projected Trends



Source: Texas State Data Center, BEA

2016 → 2030 inventory



Outline

- Big Picture Thoughts
- Overall assessment on implementation
- Sector Summaries (analysis, wins, challenges, next steps)
 - Electricity and Natural Gas
 - Transportation and Land Use
 - Materials and Waste Management
 - Carbon Impact Statement
- Next Steps

What did we do?

- Developed a questionnaire for the three main sections of the plan asking whether actions were attempted, if they should be continued, estimated GHG impact and how these actions could adversely impact low-income, communities of color
- Responses were evaluated for successes, pain points and potential modifications to help develop valuable strategies moving forward
- Held additional meetings and calls with departments to discuss findings and develop final thoughts

Analyzing the 2015 Community Climate Plan

Pros

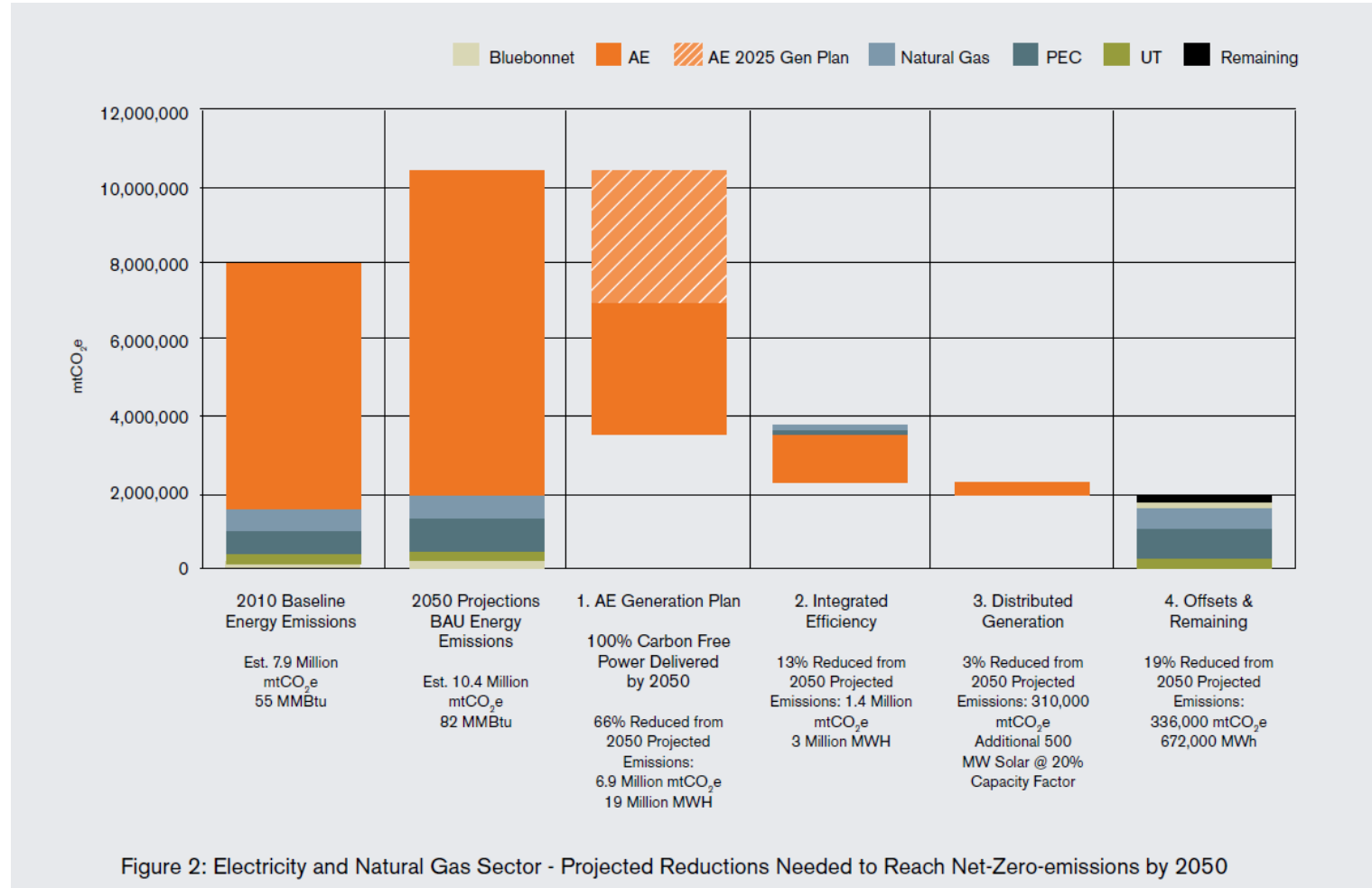
- Plan was created and approved by council
- Plan was adaptive
- Progress has been made; not static
- Process to create generally positive
- Supported departmental initiatives
- Incorporated all the benefits of a planning process
- Integrating plans/processes as a positive
- Alignment with other initiatives

Cons

- Integrating plans/processes was a challenge
- Actions were too specific
- Implementation and measurements unclear
- External communications plan not as robust as it could have been
- Hard to utilize the plan
 - Were there any incentives to actually complete actions? Did the language used lead to action?
- Lacking in community focus
- JSC not part of process at the time
- Affordability not addressed

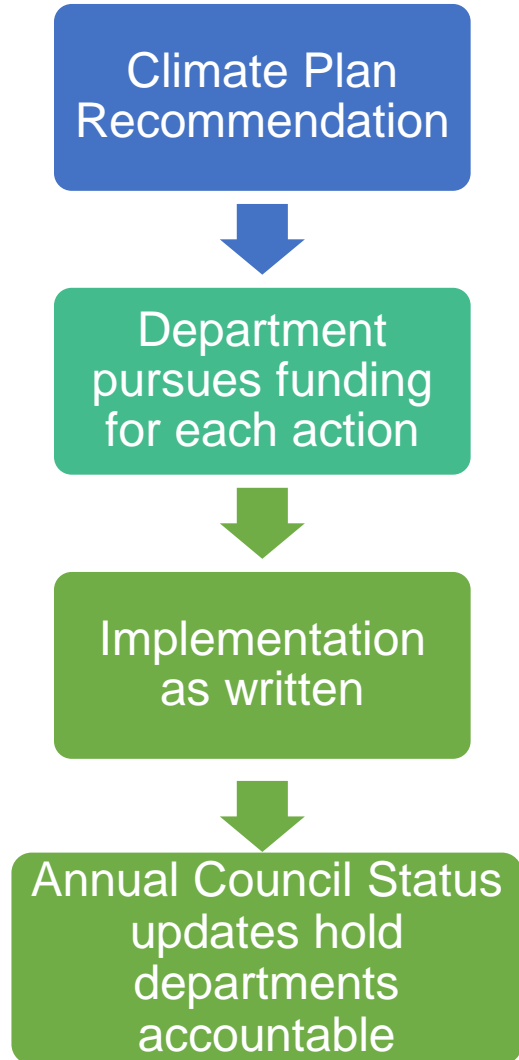
Quantification in the First Plan

- Did not quantify the emissions impact of individual actions
- Completed big picture 2050 waterfall analysis
- No secondary targets in any of the sectors (besides AE with % renewables)

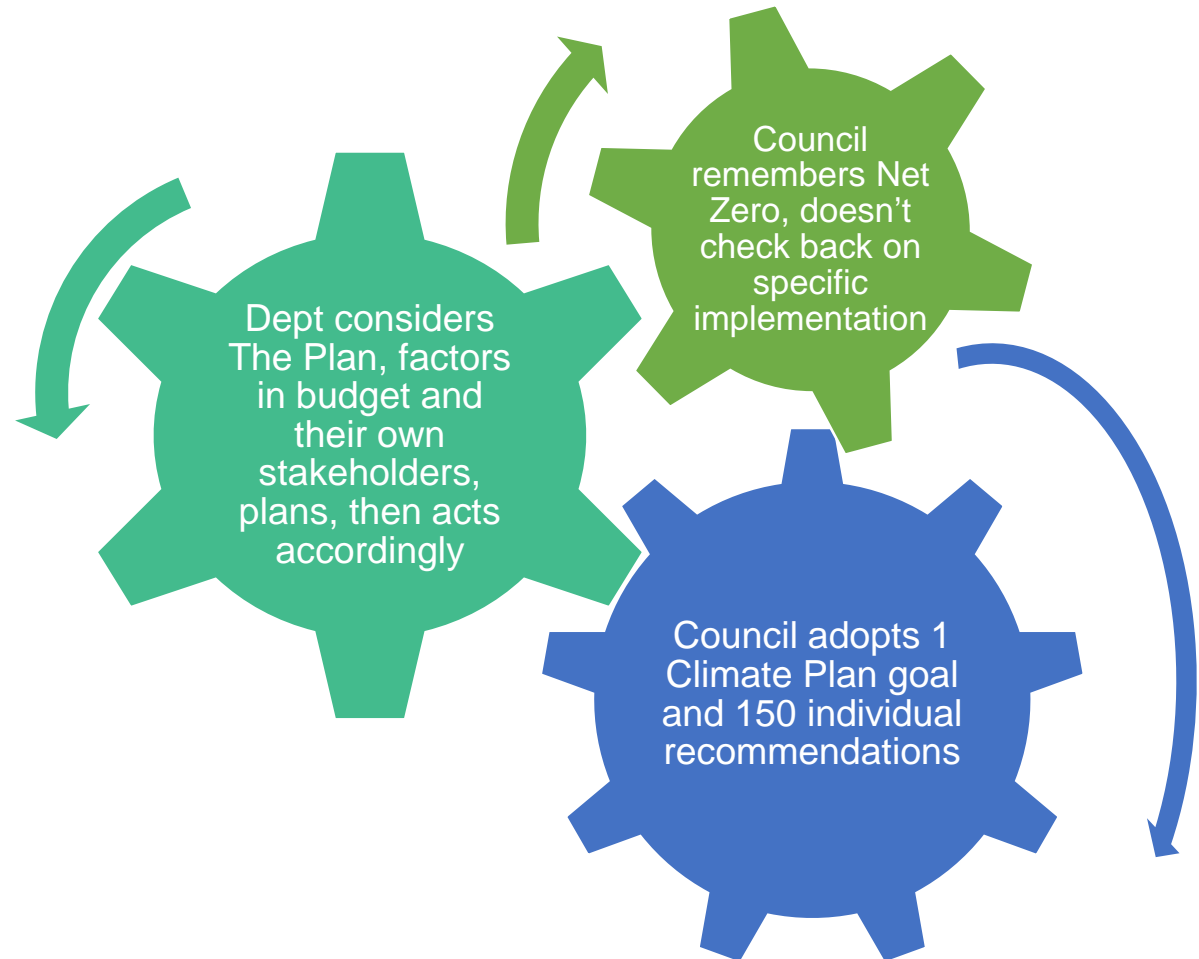


The Reality of Implementation

Expected process

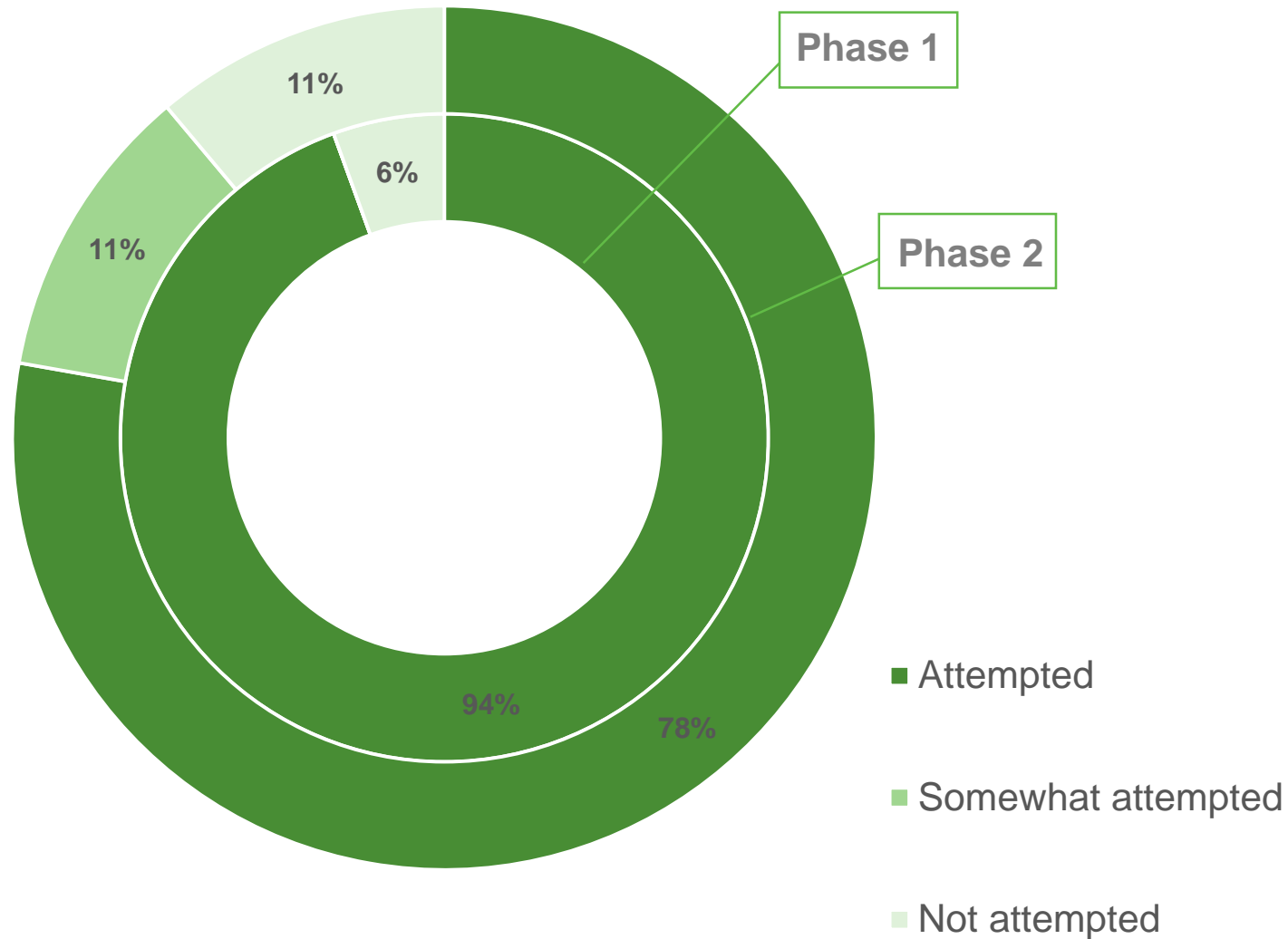


Realized process



Sector Summaries

Electricity and Natural Gas Sector Strategies and Actions



* Data was not provided for 2/29 strategies in ENG section.

Electricity and Natural Gas Overall Reflections

- Fully attempted by category:
 - Behavior Change and Education: 100%
 - Buildings and Integrated Efficiency: 81%
 - Resource Technologies: 71%
- Equity issues surround the increased cost of incorporating programs, which are spread across customers, but may bear a disproportionate burden on low-income populations

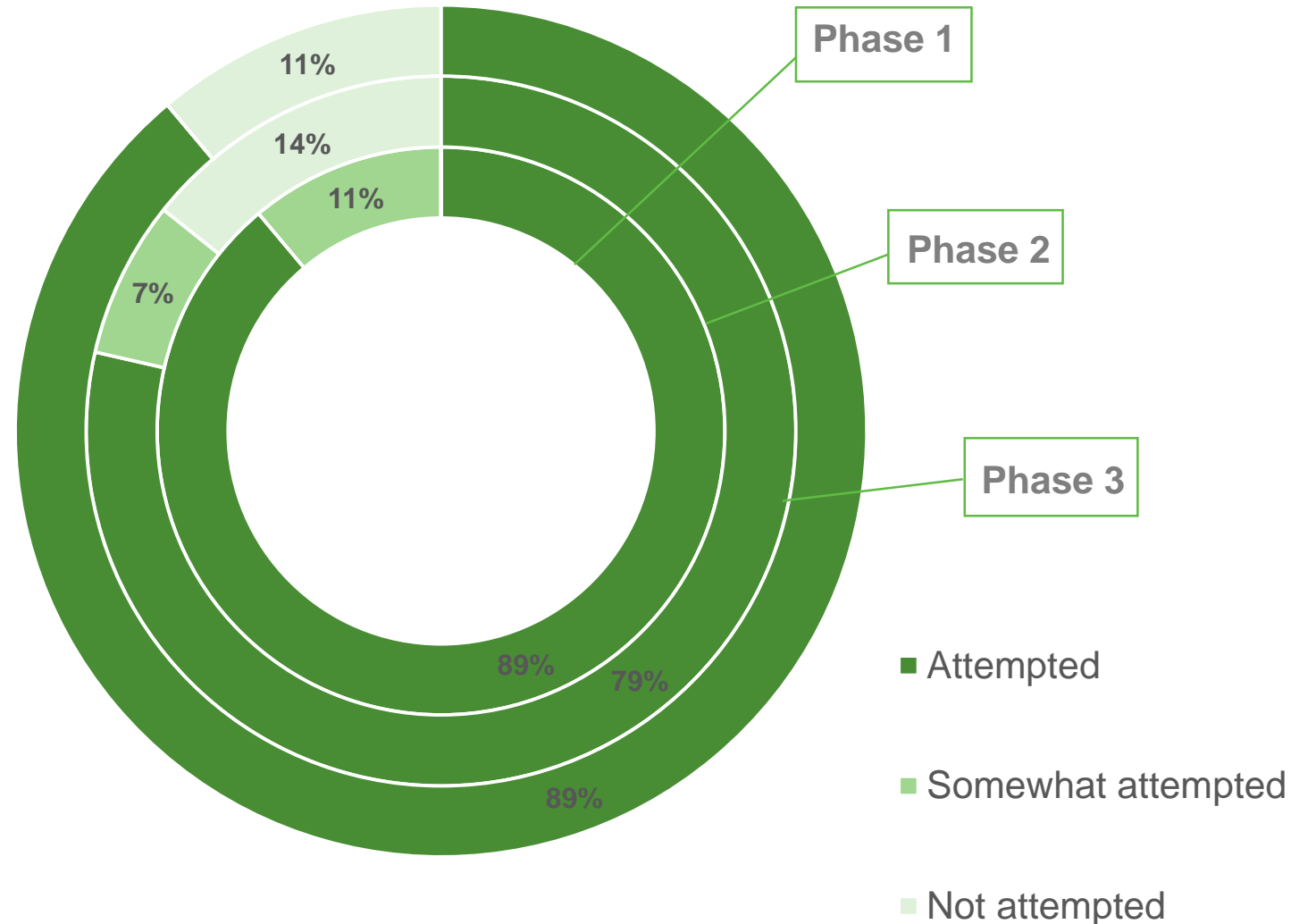
Challenges

- Time of Use – not enough wholesale energy price variability to support widespread dynamic rates
- Net-zero on *all* new construction– unrealistic to push this due to affordability issues
- No desire for creating minimum “standard” for existing building use
- Neighborhood weatherization program – door to door not recommended; risk of non-AE employees impersonating
- Passive solar into street/lot orientation
 - Physical constraints (e.g. trees), density and affordability are challenges

ENG - Overall Recommendations for Improvement

- Provide overarching vision and goals with less directives on how to achieve these
- Allow freedom for department leadership and subject-matter experts to develop strategies that fit their organizational capabilities and structure

Transportation and Land Use Sector Strategies and Actions



* Data unavailable for 11/52 strategies in TLU section.

Transportation & Land Use Overall Reflections

Fully attempted by category:

- Infrastructure and Services: 60%
- Land Use: 57%
- Policy and Planning: 80%
- Technology Solutions: 50%
- Transportation Demand Management: 92%
- Vehicles and Fuel Efficiency: 50%
- Economic and Pricing Systems: 60%
- Equity concerns surrounding affordability (increased property values and fees), lack of access to technology and disproportionate impact of air pollution

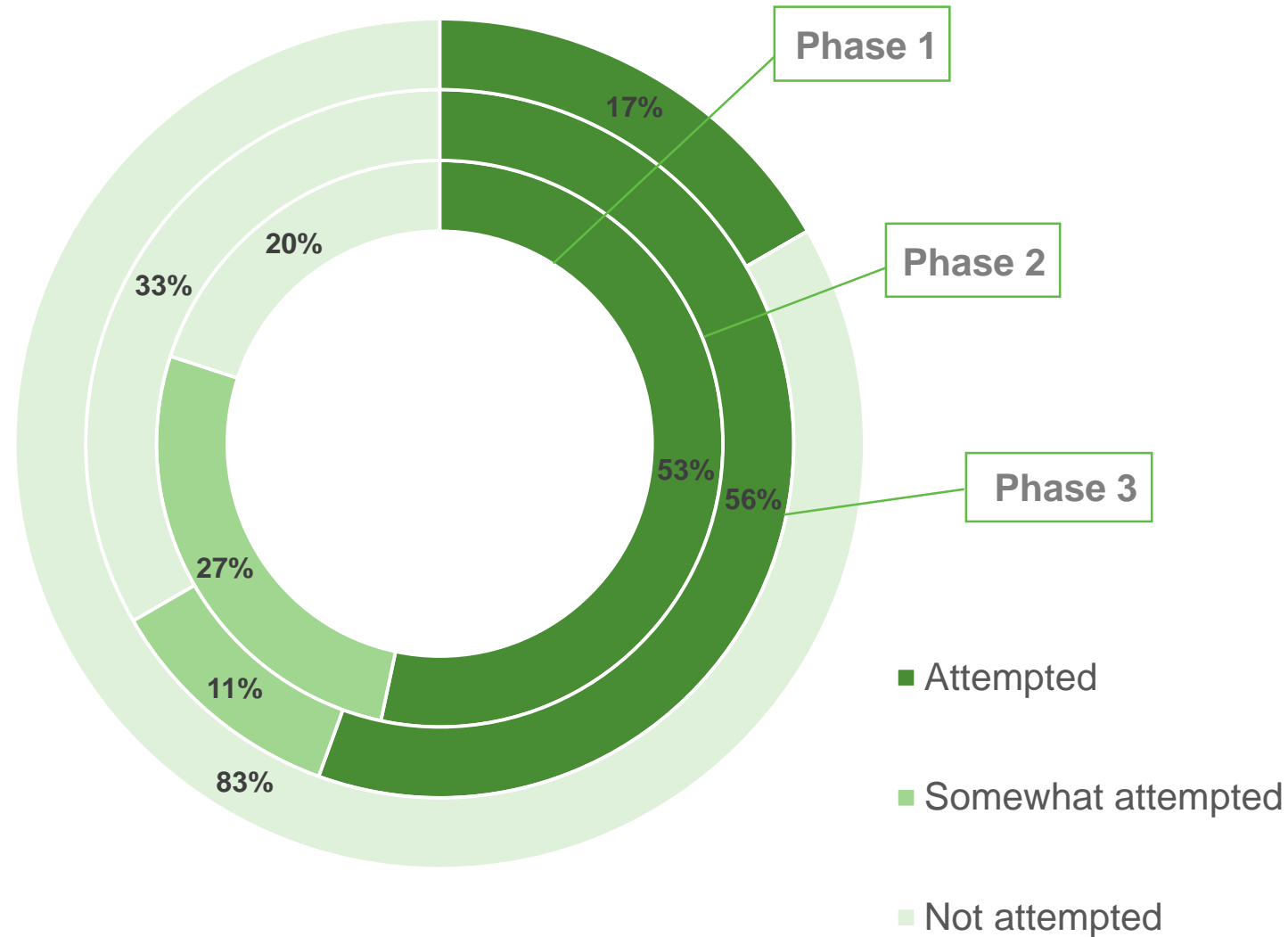
Challenges

- Infrastructure & Services – room for enhanced communication with TXDOT
 - IS 4: High occupancy vehicle lanes
 - IS 5: Smoother pavement
 - IS 9: Plan, finance, design and build toll and/or managed lanes
- Opportunities to enhance multi-modality with new land code revision
- Project Connect
 - Future efforts should pursue more collaboration in goals and strategies
- Mobility as a Service (MaaS) + Chariot pilot
 - Whole Foods Market & GSD&M
 - Low continuous use and high cost (3X more expensive than monthly cost of parking)
 - Chariot business discontinued

Transportation and Land Use - Overall Recommendations for Improvement

- Consider barriers involved on issues that can't directly be addressed by city agencies and pursue ongoing collaboration with TXDOT and CAMPO
- Need to emphasize TDM, land use and multimodal improvements in the 2045 Regional Transportation Plan
- Develop way to calculate emissions reductions per strategy in a more accurate way
- Utilize emerging technology to achieve TDM goals

Materials and Waste Management Sector Strategies and Actions



* Data was not provided for 6/54 strategies in MWM section.

MWM Overall Reflections

- Fully attempted by category:
 - Organics Diversion: 40%
 - Purchasing: 17%
 - Methane Management: 0%
 - Recycling: 64%
 - Reduction/reuse: 50%
- Equity concerns surrounding potentially increased costs/fees

Challenges

- Lack of control was an overarching challenge
 - Purchasing Strategies
 - PU-1: Have CoA construction materials specs call for reclaimed materials
 - PU-2: Adopt specifications for material reuse, reduced packaging, recycled content, etc.
 - PU-5: Move from purchasing products to purchasing services
- Methane management
 - Landfill gas quality doesn't warrant further expense, landfill operator capture somewhat in process
- ReManufacturing Hub
 - Funding for a proposed city-owned green industrial park failed to be approved by city council in 2016

MWM - Overall Recommendations for Improvement

- Consider options for residents living in multifamily properties to access composting or increased recycling
- Support City initiatives to divert material from the landfill (e.g. sustainable procurement)
- Research and assess feasibility of implementing innovative reuse strategies to move the City toward a more circular economy (e.g. promotion of repair over disposal)

Origin of the Carbon Impact Statement




Austin COMMUNITY
2015
CLIMATE PLAN



- Adopted by City Council via Resolution 20150604-048.
- Recommendation #3:
*“Determine the feasibility of a **carbon impact statement** that could be used to inform policy makers of the greenhouse gas (GHG) emissions impacts of major City decisions.”*

The Carbon Impact Statement (CIS)



Carbon Impact Statement Project:

Scoring Guide:

1-4: Business as usual

5-8: Some positive actions

9-12: Demonstrated leadership

Transportation	Response: Y=1, N=0	Documentation: Y/N
T1: Public Transit Connectivity	<input type="checkbox"/>	<input type="checkbox"/>
T2: Bicycle Infrastructure	<input type="checkbox"/>	<input type="checkbox"/>
T3: Walkability	<input type="checkbox"/>	<input type="checkbox"/>
T4: Utilize TDM Strategies	<input type="checkbox"/>	<input type="checkbox"/>
T5: Electric Vehicle Charging	<input type="checkbox"/>	<input type="checkbox"/>
T6: Maximize Parking Reductions	<input type="checkbox"/>	<input type="checkbox"/>
Water + Energy		
WE1: Onsite Renewable Energy	<input type="checkbox"/>	<input type="checkbox"/>
WE2: Reclaimed Water	<input type="checkbox"/>	<input type="checkbox"/>
Land Use		
LU1: Imagine Austin Activity Center or Corridor	<input type="checkbox"/>	<input type="checkbox"/>
LU2: Floor-to-Area Ratio	<input type="checkbox"/>	<input type="checkbox"/>
Food		
F1: Access to Food	<input type="checkbox"/>	<input type="checkbox"/>
Materials		
M1: Adaptive Reuse	<input type="checkbox"/>	<input type="checkbox"/>
Total Score:		

The Carbon Impact Statement calculation is a good indicator of how your individual buildings will perform in the Site Category of your Austin Energy Green Building rating.

Notes: Brief description of project, further explanation of score and what it means

T1. Is any functional entry of the project within 1/4 mile walking distance of existing or planned bus stop(s) serving at least two bus routes, or within 1/2 mile walking distance of existing or planned bus rapid transit stop(s), or rail station(s)?

T2. Is there safe connectivity from the project site to an "all ages and abilities bicycle facility" as listed in the Austin Bicycle Master Plan?

T3. Is the property location "very walkable" with a minimum Walk Score of 70 (found at walkscore.com), or will the project include at least five new distinct basic services (such as a bank, restaurant, fitness center, retail store, daycare, or supermarket)?

T4. Does the project utilize two or more of the following Transportation Demand Management strategies: unbundling parking costs from cost of housing/office space, providing shower facilities, providing secured and covered bicycle storage, and/or providing 2+ car sharing parking spaces for City-approved car share programs?

T5. Will the project include at least one DC Fast Charging electric vehicle charging station?

T6. Does the project utilize existing parking reductions in code to provide 20% less than the minimum number of parking spaces required under the current land development code (or 60% less than the code's base ratios if there is no minimum parking capacity requirement)?

WE1. Will the project include on-site renewable energy generation to offset at least 1% of building electricity consumption?

WE2. Will the project include one or more of the following reclaimed water systems: large scale cisterns, onsite grey or blackwater treatment, and reuse or utilization of Austin Water Utility's auxiliary water system to eliminate the use of potable water on landscape/irrigation?

LU1. Is the proposed project site located within one of the centers or corridors as defined in the Imagine Austin Comprehensive Plan Growth Concept Map?

LU2. If located in an Imagine Austin activity center or corridor, will the proposed project use at least 90% of its entitled amount of floor-to-area ratio?

F1. Will the project include a full service grocery store onsite, or is one located within 1 mile of the project, or will the project integrate opportunities for agriculture to the scale as defined by Austin Energy Green Building?

M1. Will the project reuse or deconstruct existing buildings on the project site?

- Checklist tool that provides a series of strategies to reduce GHG emissions.
- Currently implemented as a part of PUD applications.
- Purely advisory, valuable in terms of demonstrating "superiority" but no teeth.
- Note: 25% of new single family home construction in the past 12 years was part of a PUD.

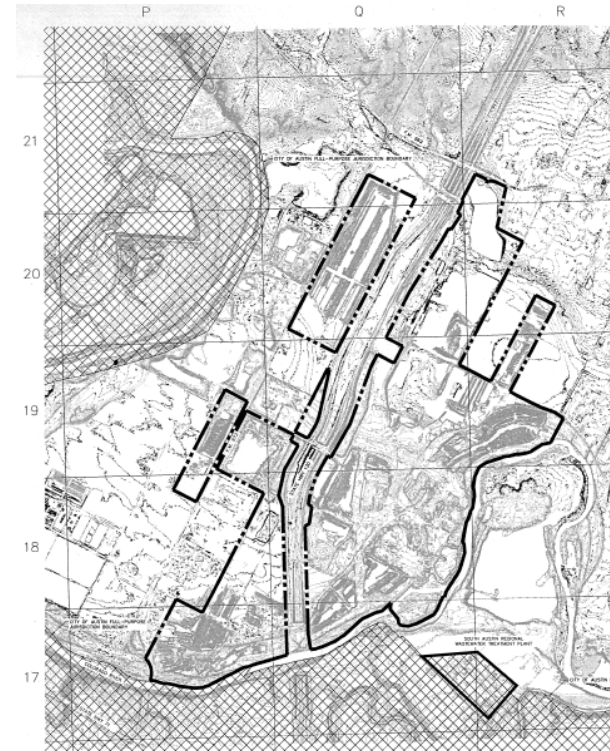
Scores from Recent Projects

Name of projects	T1 Public Transit Connectivity	T2 Bicycle Infrastructure	T3 Walkability	T4 Utilize TDM Strategies	T5 Electric Vehicle Charging	T6 Maximize Parking Reductions	WE1 Onsite Renewable Energy	WE2 Reclaimed Water	LU1 Imagine Austin Activity Center or Corridor	LU2 Floor-to-Area Ratio	F1 Access to Food	M1 Adaptive Reuse	Total	
1 Holdsworth Center PUD	0	0	1	1	1	1	0	1	0	0	1	1	7	
2 425 W. Riverside Drive	1	1	1	1	1	1	0	0	1	1	1	1	0	9
3 Goodnight Ranch	1	1	1	1	1	1	1	0	1	1	1	1	0	10
4 Austin Green	0	1	1	1	1	1	1	0	1	1	1	0	0	8
5 Camelback	0	1	1	1	1	1	1	1	1	0	0	1	0	8
6 COTA	0	1	0	1	1	1	1	0	1	1	1	0	0	7
7 2018 S. Lamar	1	1	1		1		0		1	1	1	1	0	7
	3	6	6	6	7	5	1	6	5	5	5	1		

- Transportation and reclaimed water most common – availability of existing infrastructure?
- Renewable Energy not common
- Adaptive reuse not common – mostly green field or empty lots downtown.

Assessment & Feedback Takeaways

- Lack of information available at the time of PUD application.
- Some of the elements are not applicable to suburban projects (of which many PUDs are).
- Just another box to check, gets lost in the PUD documentation.
- Emissions reduction not a priority/not on top of mind for development community.
- Provides a set of best practices, but is not a quantifiable reduction in GHG emissions.
- Is a snapshot in time, does not track over time to show how actions lead to GHG emissions reduction.



Level of detail and information provided in a PUD application vs. at site plan.

Recommendation going forward

As part of PUDs

- Continue using the CIS for PUDs but only ask for a minimum score commitment as part of the application and work out strategies at Site Plan.

Beyond PUDs

- Codify into zoning code and make part of the City's site plan process for all projects.
- Incorporate into an expedited zoning program.
- Create a voluntary program for "CIS Certified" communities.

Equity

- Equity concerns surrounded issues of affordability, accessibility, displacement and disproportionate impact of air pollution
- Many respondents were unsure of strategy impact on low-income communities of color
- Determined importance of developing evaluation criteria for each action in future plan
- OOS working with Equity Office to form steering committee and technical advisory groups



Discussion Questions (if necessary)

What happens to everything in the first plan?

Based on what you heard, how can we improve the new plan?

If you could chose one action that could be unilaterally implemented and adopted, what would it be?



Questions and Discussion