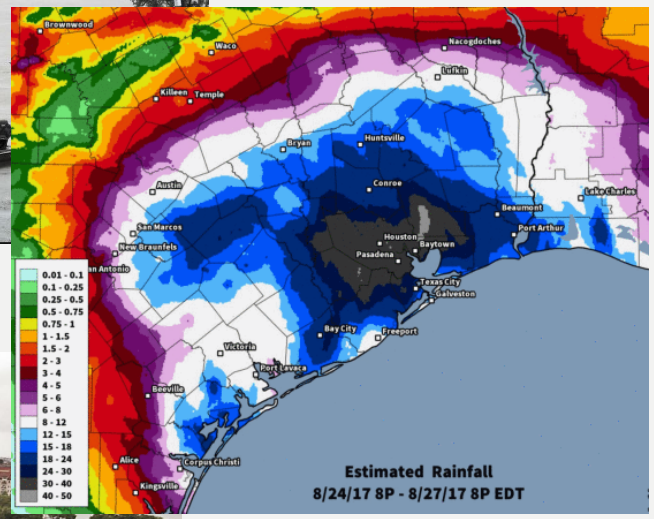
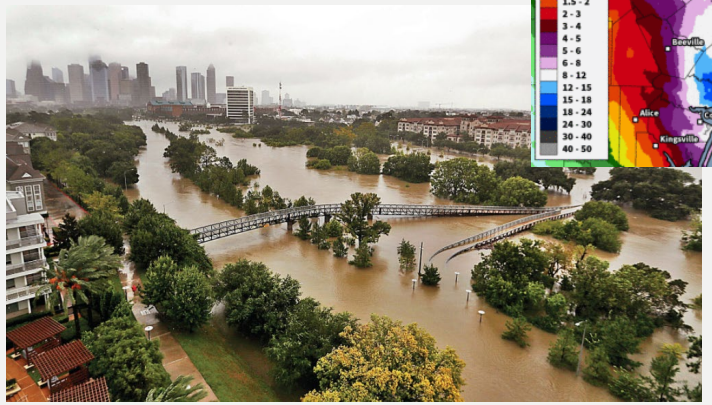
City of Houston Climate Action Plan

Mayor's Stakeholder Meeting
1/28/2019

Why Cities are taking Climate Action





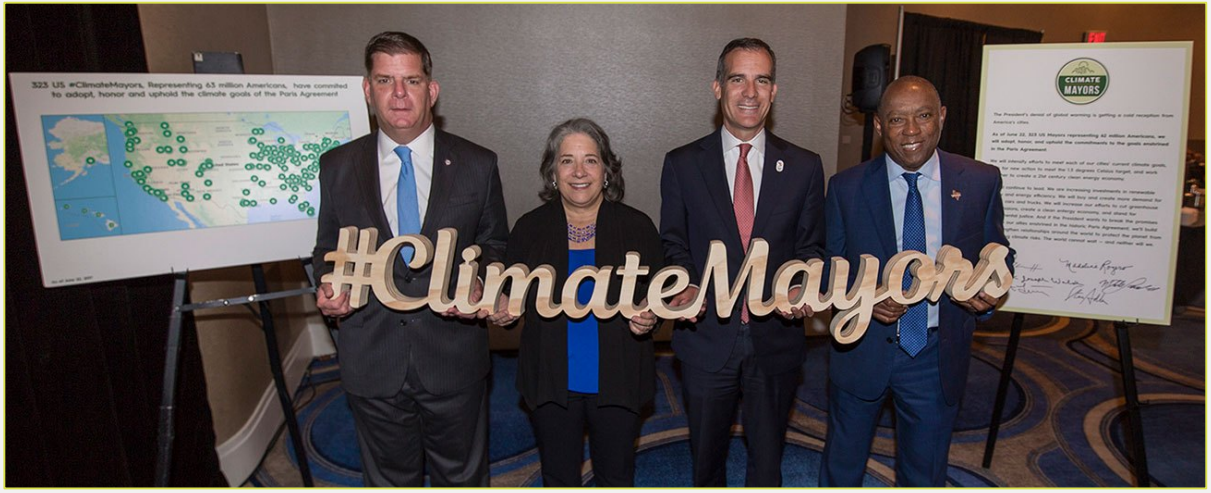
Hurricane Harvey

Source: World Bank Group

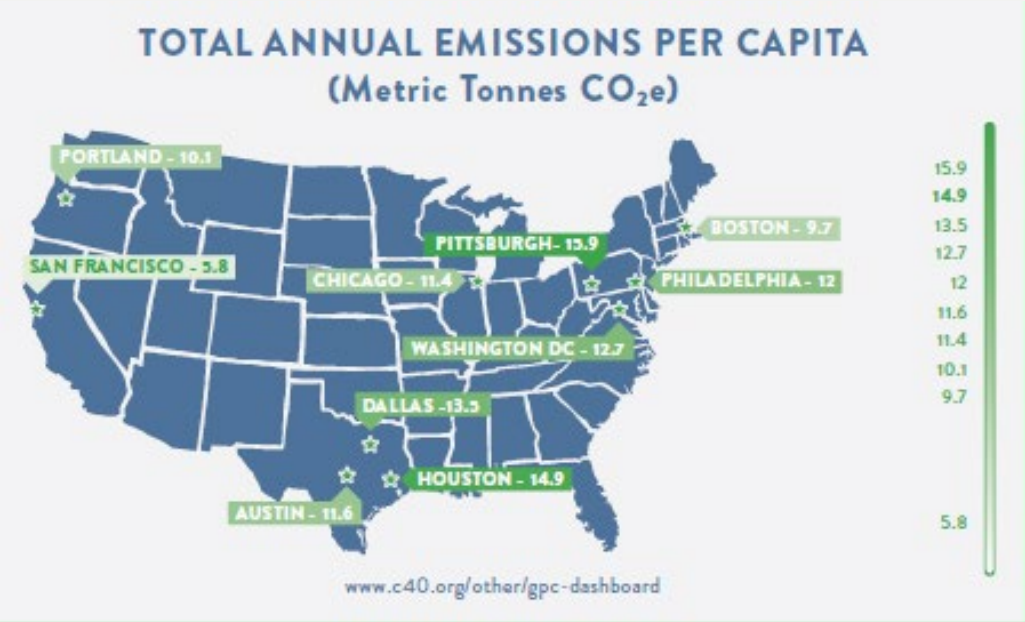
Houston's Commitment to Climate Action

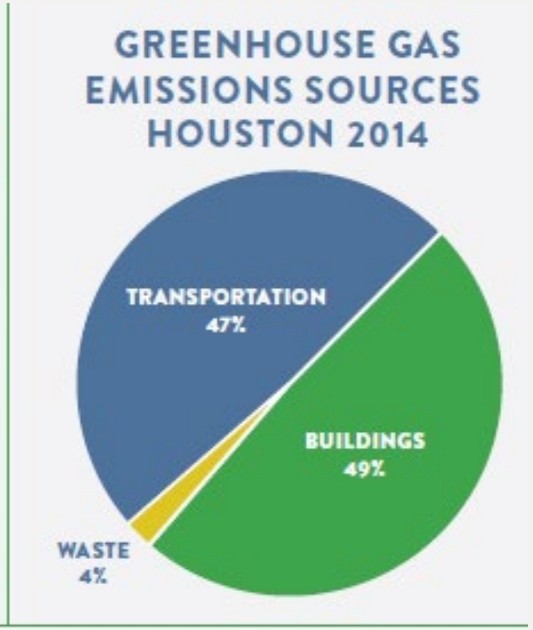
June 1, 2017: **The U.S withdraws from the 2015 Paris Agreement**

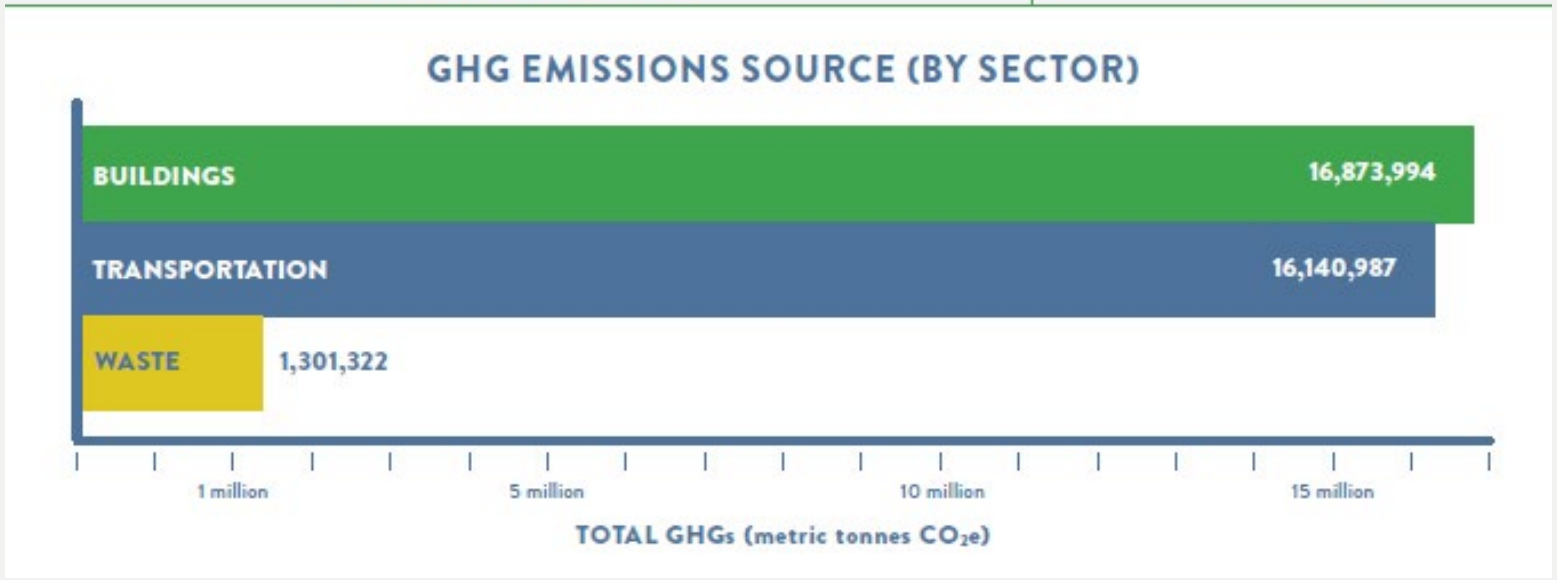
June 24, 2017: **Mayor Turner, co-chair of Climate Mayors, commits to adopt Paris Agreement goals in Houston**



Houston Community Greenhouse Gas Emissions

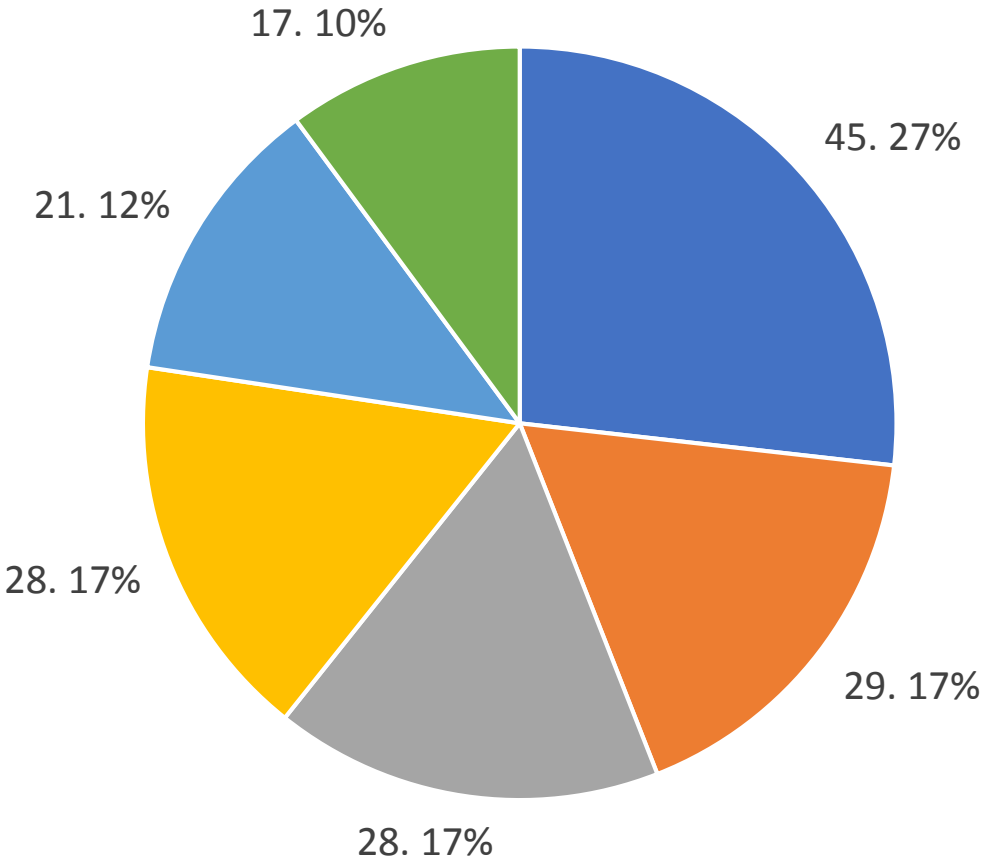






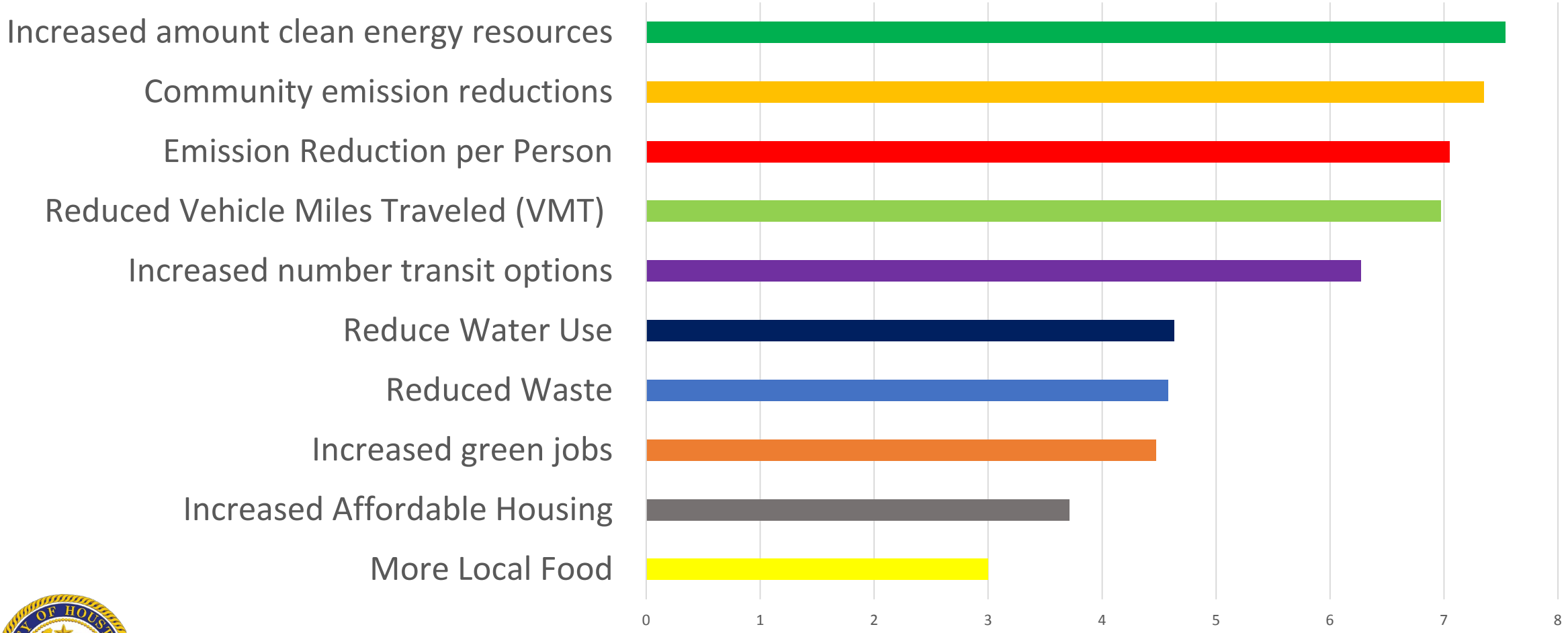
Stakeholder Survey Results

Community Stakeholder Priorities



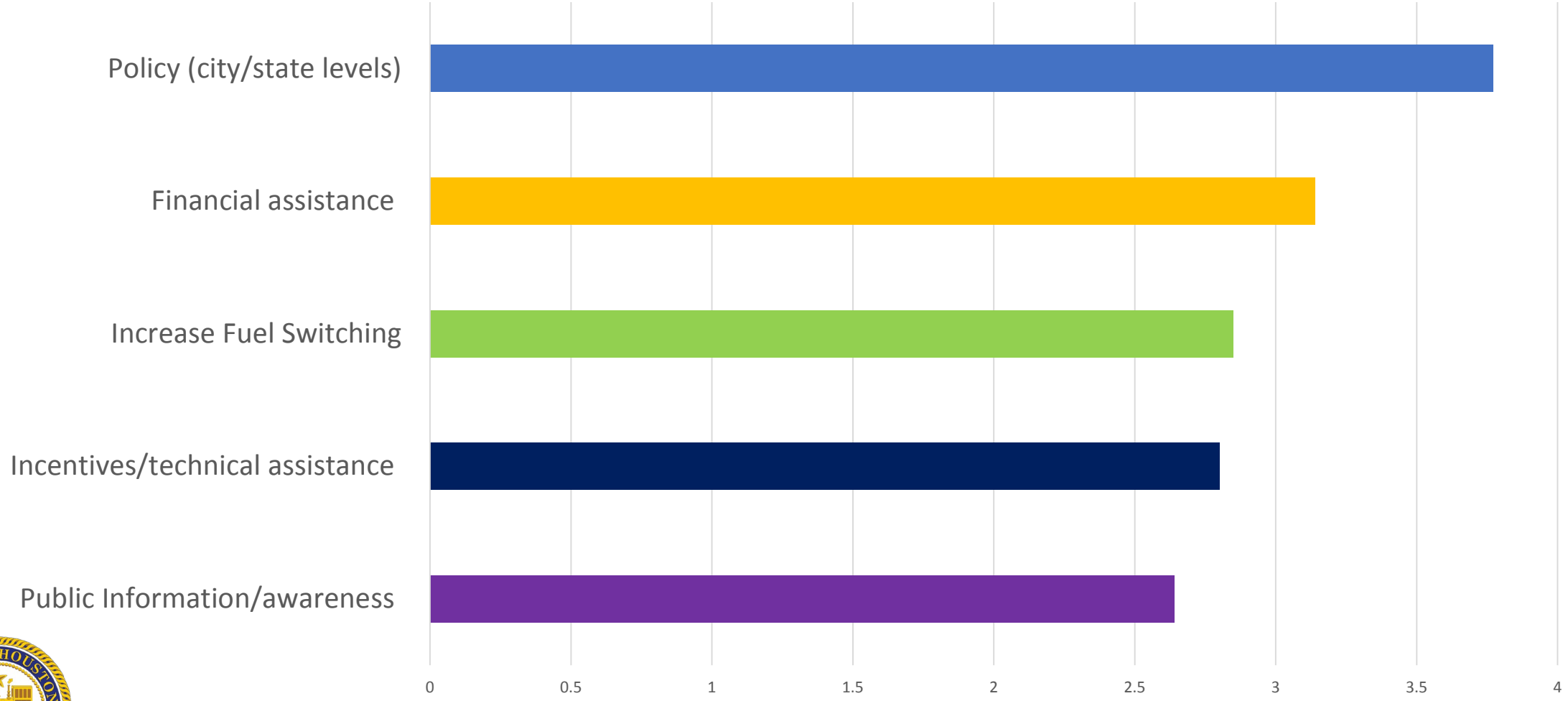
N = 93 Respondents from Stakeholder Survey

Stakeholder Ranking of Most Significant Measures



N = 93 Respondents from Stakeholder Survey

Stakeholder Ranking of Effectiveness of Measures



N = 93 Respondents from Stakeholder Survey

Climate Action Plan

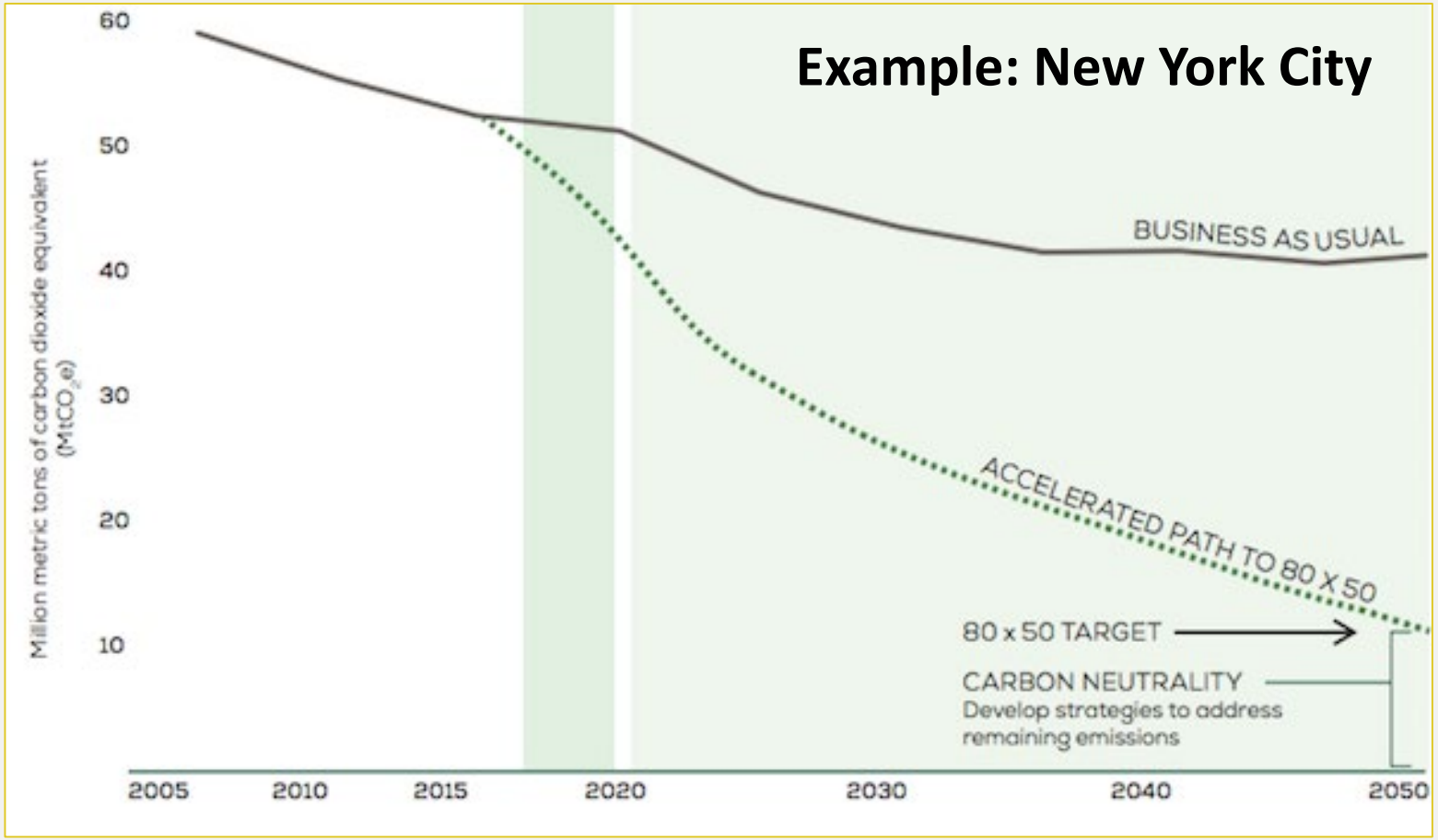
What is a Climate Action Plan (CAP)?

- A climate action plan should address the need to reduce greenhouse gas emissions, adapt to the impacts of climate change and deliver wider social, environmental, and economic benefits.

- **Objectives of plan are to:**
  - Decrease traffic congestion
  - Improve air quality
  - Provide better access to green space
  - Improve quality of life
  - Reduce energy costs through energy efficiency and renewable energy
  - Increase resilience

Goals of the CAP

- **Goal:** Lay the foundation for actions that will make the City carbon-neutral by 2050.

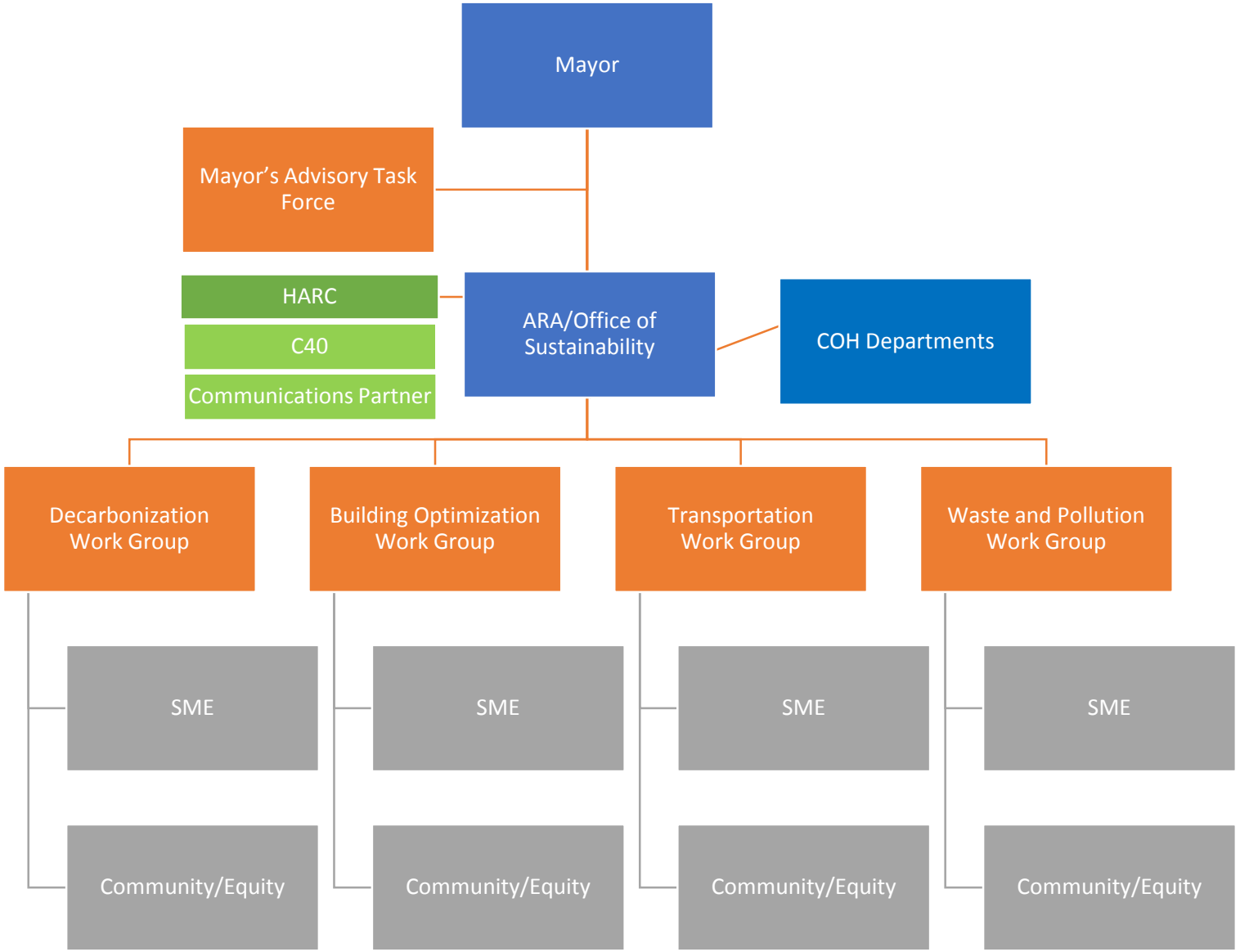


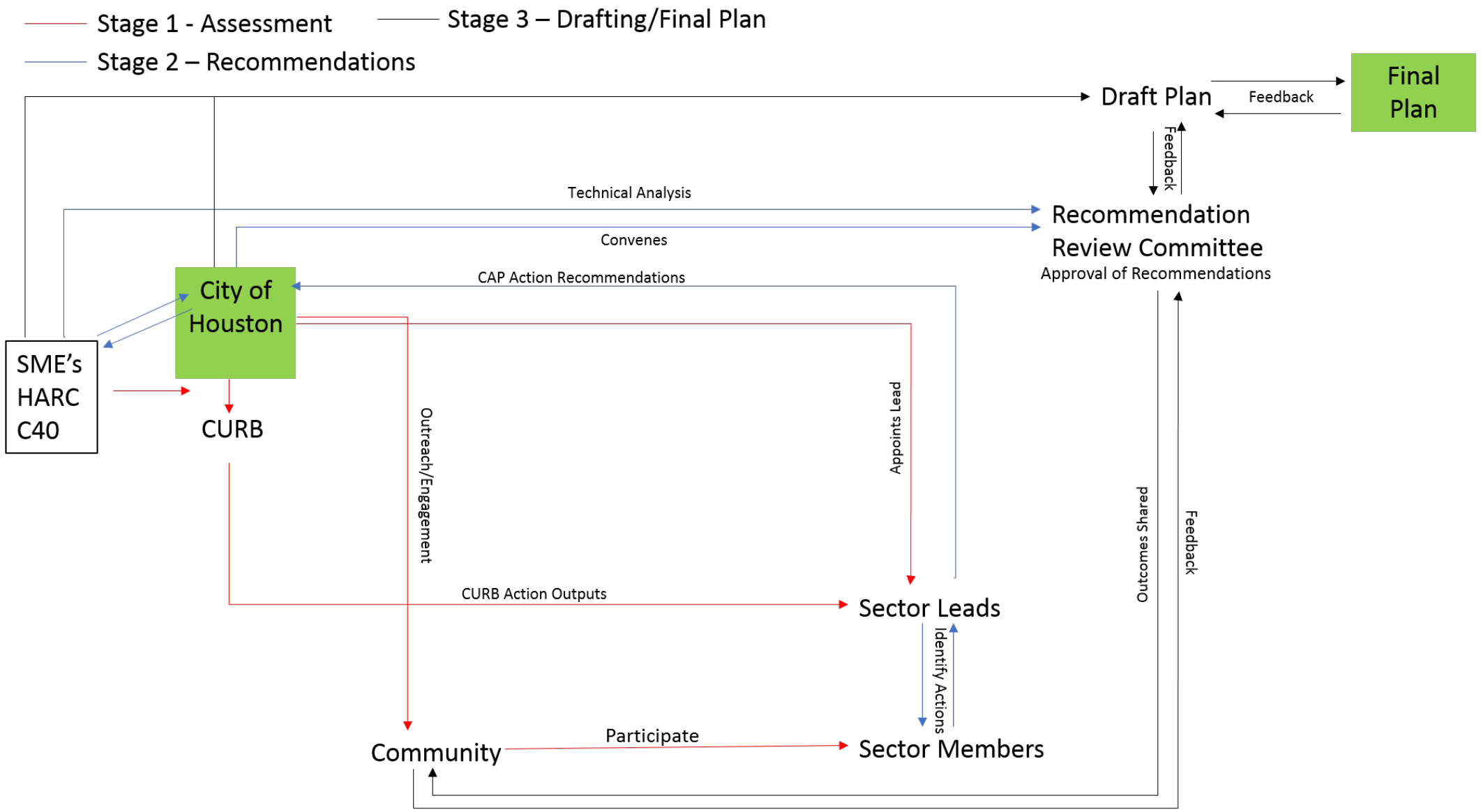
Leading by Example

- **Renewable Energy:**
  - The City is the largest municipal purchaser of renewable energy for city operations, receiving 92% of its power from renewable energy
- **Building Optimization**:
  - Since 2004, the City has required all new buildings to be LEED Certified; currently have 37 LEED buildings
  - Since 2007, the City has invested $70 million in energy efficiency retrofits: 6 million square feet; achieving greenhouse gas emission reductions of 35%
  - Converted ~175,000 streetlights to LED technology; reducing the City's streetlight energy usage by ~50%.
- **Transportation**
  - 6.3% of the City's fleet is hybrid.
  - Working to develop ambitious fleet electrification goals.

Climate Action Plan Structure and Process

Planning Organizational Structure




Stage 1 - Assessment
Stage 2 – Recommendations
Stage 3 – Drafting/Final Plan
Draft Plan
Feedback
Final Plan
Feedback
Technical Analysis
Recommendation Review Committee
Approval of Recommendations
Convenes
CAP Action Recommendations
City of Houston
SME's HARC C40
CURB
Outreach/Engagement
Appoints Lead
Outcomes Shared
Feedback
CURB Action Outputs
Sector Leads
Identify Actions
Community
Participate
Sector Members

Climate Action Plan
Technical Approach

Process for Plan Development

1 COMMIT & COLLABORATE

- Establish Plan Governance and Coordination
- Equitable Engagement and Communications

2 DEFINE & ANALYZE

- Data Gathering
- Climate Risk Prioritization
- Evidence-Based Scenario Development

3 PRIORITIZE & IMPLEMENT

- Initial Implementation Planning
- Accelerate Actions
- Monitor, Evaluate and Revise

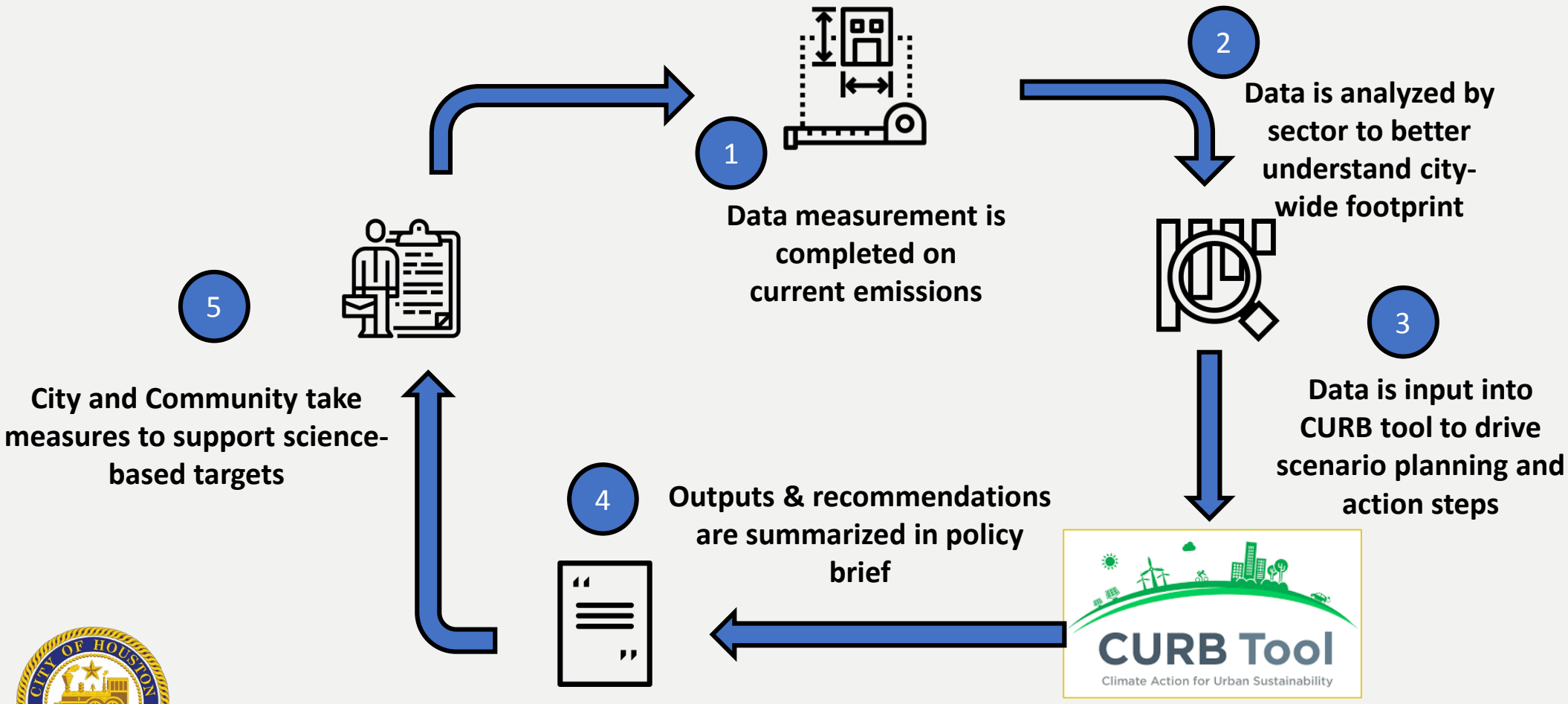
Technical Assistance:

HARC

C40 CITIES
CLIMATE LEADERSHIP GROUP

CURB Tool
Climate Action for Urban Sustainability

Using Scenario Planning to Drive Policy



Overview of CURB Model

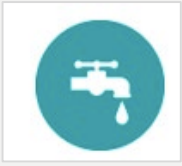
- **The CURB tool** is an integrated model that measures GHG emissions among 6 different sectors

Private Building Energy

Municipal Buildings & Lighting

Electricity Generation

Solid Waste


Water & Wastewater

Transportation

- Model is **data-driven and city-specific** with 500+ data fields to complete
- CURB uses population growth, GDP growth or International Energy Agency's methodology to estimate future emissions
- 100+ cities have adopted the CURB model, allowing for comparability and benchmarking

Timeline

FALL 2018
PLAN
• Finalize baseline
• Stakeholder engagement and task force
• Kick-off workshops
• Governance and Communication
WINTER 2018
MODEL
• Preliminary modeling
• Scenario development
• Stakeholder engagement
SPRING-FALL 2019
ENGAGE
• Stakeholder dialogue
• Community town halls
• Incorporate feedback
• Draft CAP plan
WINTER 2019
COMPLETE
• Stakeholder plan review
• Stakeholder meetings
• Mayor approval
SPRING 2020
IMPLEMENT
• City and Community action

Thank you! Questions?

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Learn more:

http:/bit.ly/Houston-CAP