



Austin

COMMUNITY 2015
CLIMATE PLAN

Open Space, Environment, and Sustainability Committee

May 27, 2015



AUSTIN TRANSPORTATION DEPARTMENT





Agenda

1. Climate Resolutions Background
2. Community Greenhouse Gas Inventory and Sources
3. Plan Development
4. Phase 1 Strategies and Actions
5. Next Steps

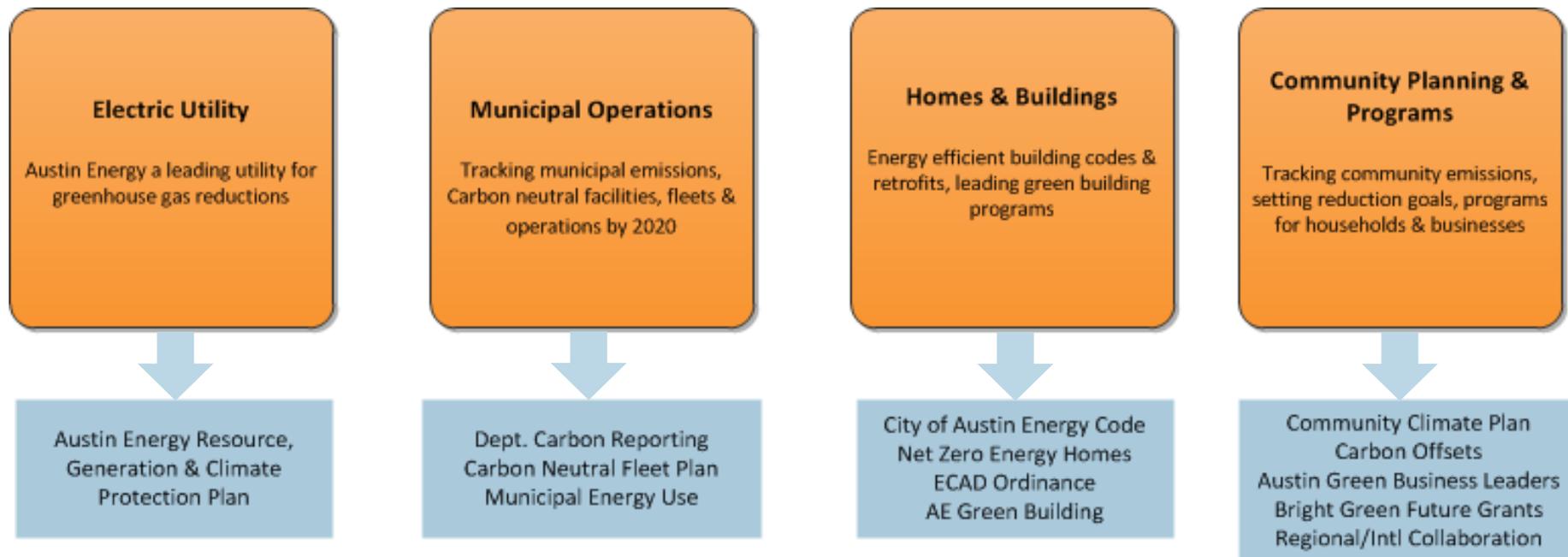




Council Resolutions

2007 Climate Protection Council Resolution:

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

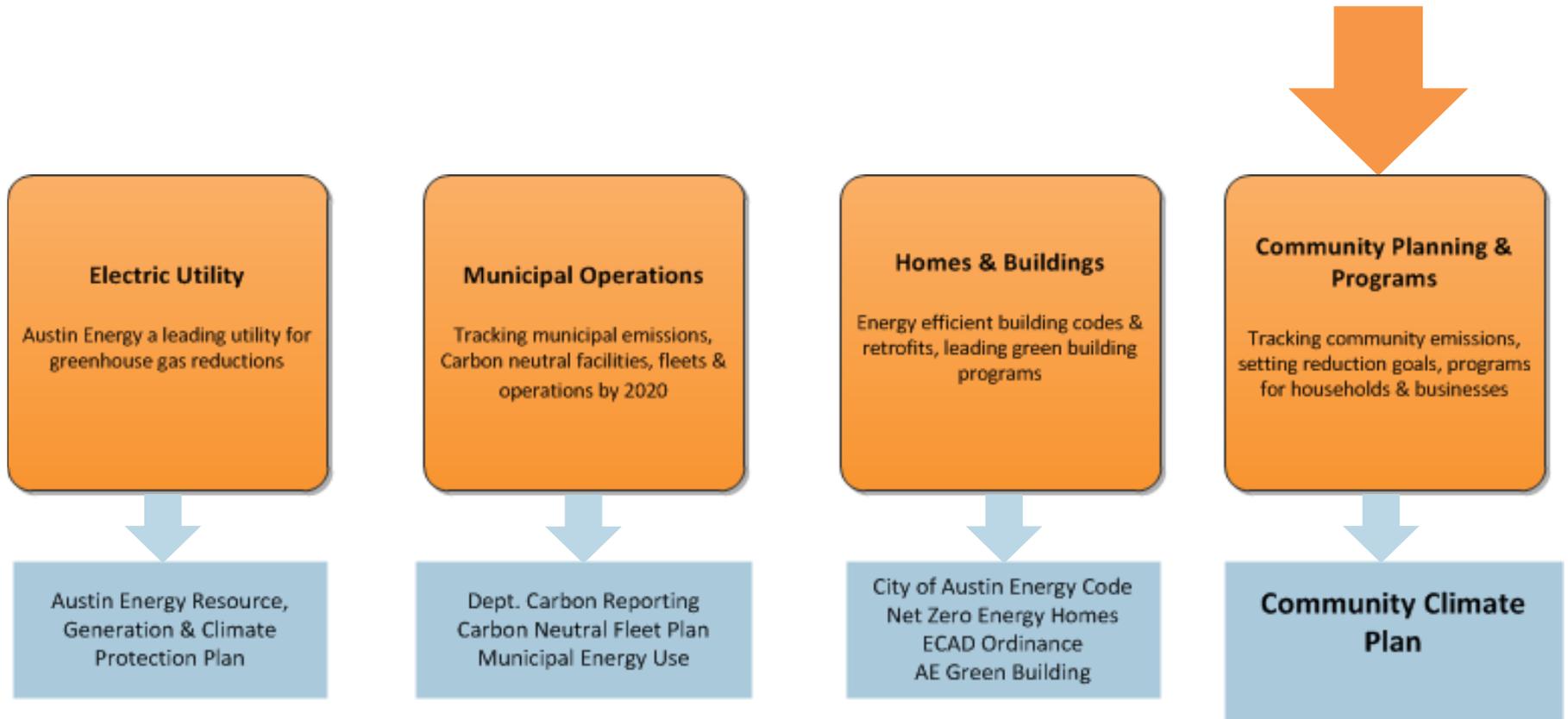




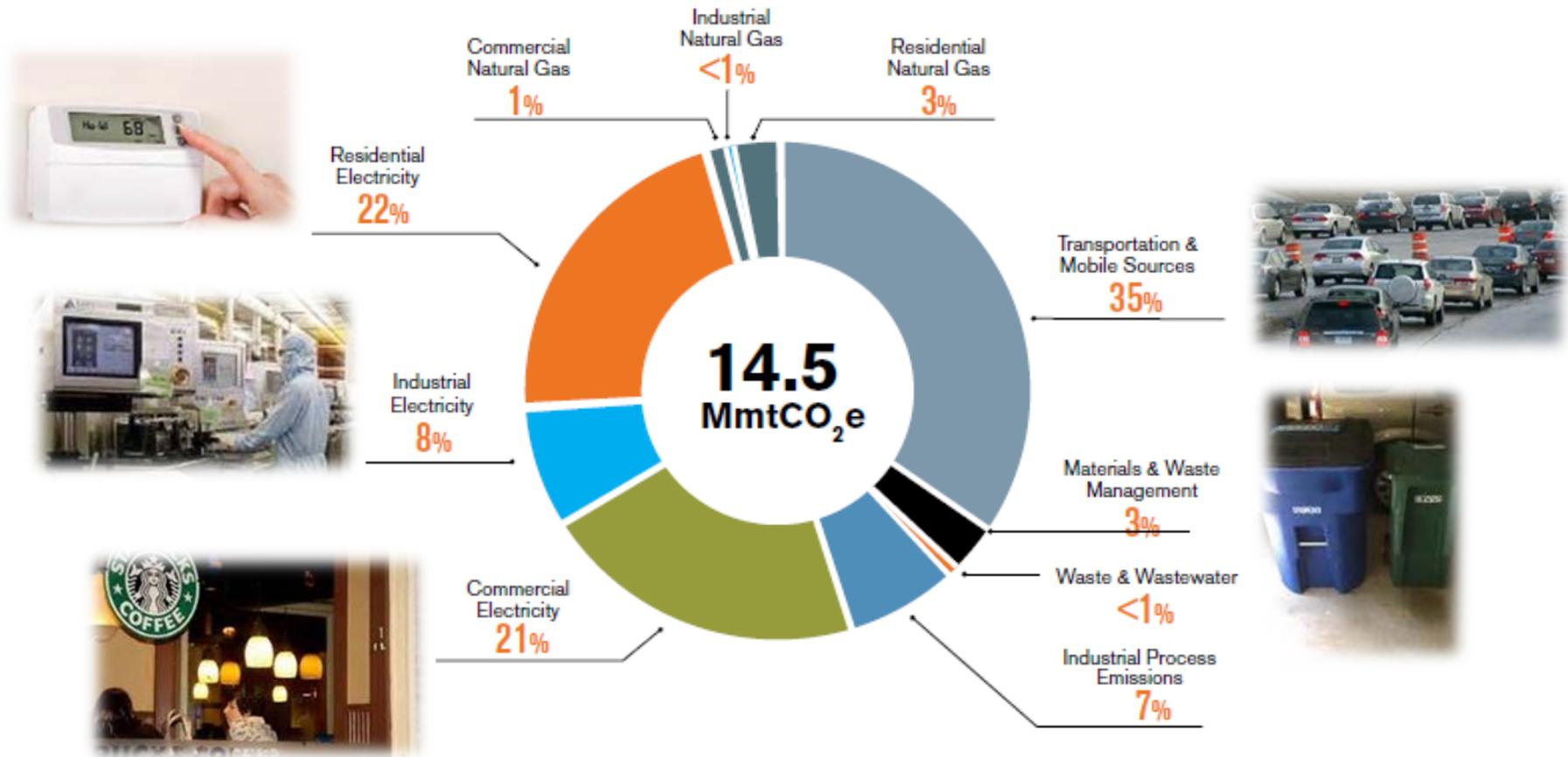
Council Resolutions

April 2014 Community Climate Council Resolution:

Net-zero community-wide greenhouse gas emissions by 2050, or sooner if feasible.



2010 Estimated Travis County Greenhouse Gas Inventory





Plan Development Process

Community Steering Committee

Technical Advisory Groups (TAGs)

- Electricity and Natural Gas
- Transportation
- Materials Management
- Industrial Process



What does net-zero in 2050 mean?



Image: Scientific American

Electricity and Natural Gas

- Not using fossil fuel for power

Materials Management

- Landfills capture and destroy all methane
- Major diversion and reuse of materials, especially organics

Transportation

- Major reduction in vehicle miles traveled
- Switch to active, renewably powered, and public transportation

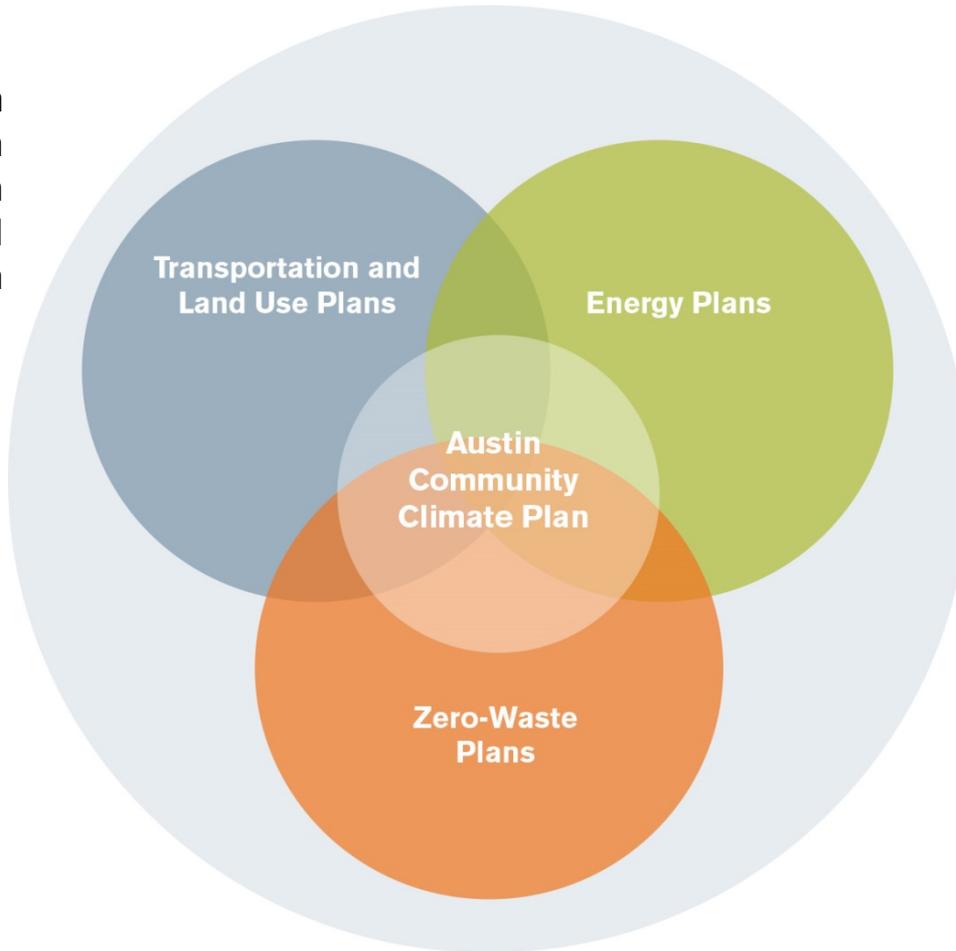
Industry

- Chemical replacements, new processes, and offsets



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

net-zero



Reduced energy costs



Improved energy security and reliability



Decreased risk of energy shortages or outages



Greater affordability for all



Reduced pollution



Improved air quality



Improved public health



Thriving local economy



Expanded local jobs creation



Enhanced transit system



Reduced traffic congestion



Safer streets



Improved disaster preparedness



Protected and enhanced ecosystems



Diminished water consumption by power plants



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 Strategies & Actions

Buildings and Integrated Efficiency

Explore financing mechanisms to enable:

- energy efficiency
- demand response
- distributed generation
- energy storage





Electricity and Natural Gas Strategies & Actions

Promote Behavior Change

Customer engagement / education efforts:

- energy efficiency and demand response
- transparency of energy costs in multifamily and commercial buildings
- neighborhood-wide energy efficiency challenges





Electricity and Natural Gas Strategies & Actions

Resource Technologies

Develop / Evolve Resource Technologies:

- smart grid / intelligent energy management systems
- electric vehicles





Transportation and Land Use: Strategies & Actions

Demand Management

Support trip reduction programs:

- Work with large employers and academic institutions to implement:
 - surveys
 - benefits
 - promotion of alternatives



Support first and last mile transit connections:

- support programs that help commuters
- promote first and last mile modes





Transportation and Land Use: Strategies & Actions

Vehicles and Fuel Efficiency

Support efforts that:

- expand electric / alternative fuel infrastructure
- consider incentives for electric / alternative fuel vehicle purchase





Materials and Waste Management: Strategies & Actions

Methane Management

- Refine local landfill gas capture and combustion systems





Materials and Waste Management: Strategies & Actions

Procurement

Adoption of City procurement specifications for:
materials reuse

- reduced packaging
- products with low embodied energy
- materials with recycled content
- locally manufactured products





Materials and Waste Management: Strategies & Actions

Recycling and Organics Diversion

Universal Recycling Ordinance implementation:

- businesses
- multifamily properties





Industrial Process: Strategies & Actions



Fuel Switching and
Process Optimization



Capture and Destruction
Local Offsets





Additional Recommendations

1. Determine feasibility of carbon impact statement for major City Council decisions.
2. Determine feasibility of local carbon fee or trading and investment program.
3. Continue climate research and resilience planning efforts.

Austin can expect more extreme weather in the future



high temperatures



extended periods of drought



increasing risk of wildfires



intense rainfall events



Next Steps

1. Develop implementation plan for Phase 1 actions by summer of 2016 that includes:
 - feasibility analysis
 - cost estimates
 - schedule
2. Provide annual progress reports to Council on actions implementation
3. Update Travis County greenhouse gas inventory (2019)
4. Revise plans based on community GHG inventory and actions implementation (2020)





Discussion

