



# AUSTIN COMMUNITY CLIMATE PLAN

## PROGRESS UPDATE MARCH 2016





The 2015 Austin Community Climate Plan identified 130 actions to meet the goal of net-zero community-wide greenhouse gas emissions by 2050. These actions were prioritized as Phase 1, Phase 2, or Phase 3 actions. The 58 actions designated as Phase 1 are to be implemented between 2015 and 2020, and meet one or more of the following criteria:

- The action is already underway.
- The action has low barriers to implementation.
- The action would likely reduce emissions quickly.
- The action is critical in meeting the first interim emissions reduction target set for 2020.

Funding and implementing each of the Phase 1 actions is essential to meeting the long-term net-zero target. In addition to achieving emissions reductions, these actions will also create community co-benefits that include improved public health, greater affordability for all, reduced traffic congestion, reduced pollution, and a thriving local economy, among many others.

The Office of Sustainability has been working closely with staff from Austin Energy, Austin Transportation, Planning and Zoning, and Austin Resource Recovery, as well as other community organizations, to develop a Phase 1 Implementation Plan. This inter-departmental, multi-stakeholder effort included:

1. Determining whether or not a current program exists to support each action.
2. Identifying funding shortfalls and developing as much cost information as feasible for each action.
3. Quantifying the potential carbon reductions associated with each action.
4. Categorizing implementation status and impact to reach the 2020 interim reduction target based on the information above.

Detailed information about each action is provided in the attached *Phase 1 Implementation Plan*.

The following pages provide an overview of the progress made in each emissions source sector, as well as programs that need continued support to maintain the momentum in emissions reductions. Phase 1 actions that require continued or additional funding, staff resources, and/or policy direction to begin implementation or scale up current efforts have been identified as **Actions for Focus**.

Updates about community outreach efforts and investigations underway to assess the feasibility of a carbon impact statement and a local carbon fee or cap-and-trade investment program are also provided in this progress update.

## SUMMARY OF ALL PHASE 1 ACTIONS FOR FOCUS

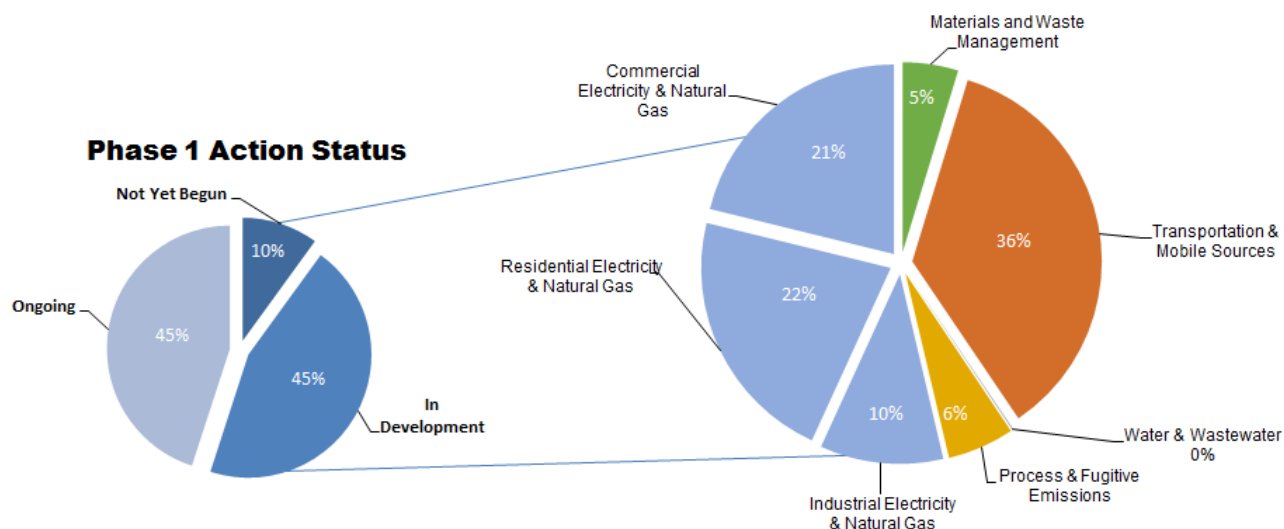
Of the 58 Phase 1 actions, only 13 have been designated as **Actions for Focus**. Next steps are summarized below.

- **Buildings and Integrated Efficiency Actions 3, 7, and 8, and Behavior Change Actions 1, 2, and 4:** Austin Energy is currently evaluating behavioral, renewable energy and metering programs that will utilize energy usage data to benefit both customers and emissions reduction targets. This evaluation process will continue through FY17.
- **Transportation Demand Management Actions 1 and 8:** The Smart Trips initiative and others like it need to be continued and expanded to achieve the greatest emissions reduction.
- **Purchasing Actions 1 and 2:** In order to make significant progress in this area, dedicated staff time is needed to develop and implement a city-wide Sustainable Purchasing Policy.
- **Methane Management Action 2:** The City of Austin will continue to encourage the landfill operators to increase the capture and destruction of landfill gas in Travis County.
- **Recycling Action 4 and Organics Diversion Action 1:** Continued investment in marketing and outreach efforts must be made to realize the goals of the Universal Recycling Ordinance, as well as related emissions reductions.



# ELECTRICITY AND NATURAL GAS

## 2013 Austin Community Carbon Footprint



To date, 90% of the Phase 1 actions identified to reduce emissions resulting from electricity and natural gas sources are part of ongoing programs or are in development.

### Early Activities:

- Since adoption of the Austin Community Climate Plan, Austin Energy has signed four major power purchase agreements in excess of 580 megawatts of combined utility scale solar. In addition, Austin Energy is developing the first community solar program in Texas, starting with a 1-2 megawatt project at the Kingsbery substation in East Austin. These new renewable resources could avoid over 5 million tons of greenhouse gas emissions over the next 10 years from conventional resources on the ERCOT grid.
- Austin Energy received a \$4.3 million award from the Department of Energy to develop and test emerging technologies that optimize distributed renewable energy resources such as rooftop solar and battery storage; those resources have the potential to avoid energy generation from conventional carbon-emitting resources on the ERCOT grid.

### Needs Continued Support:

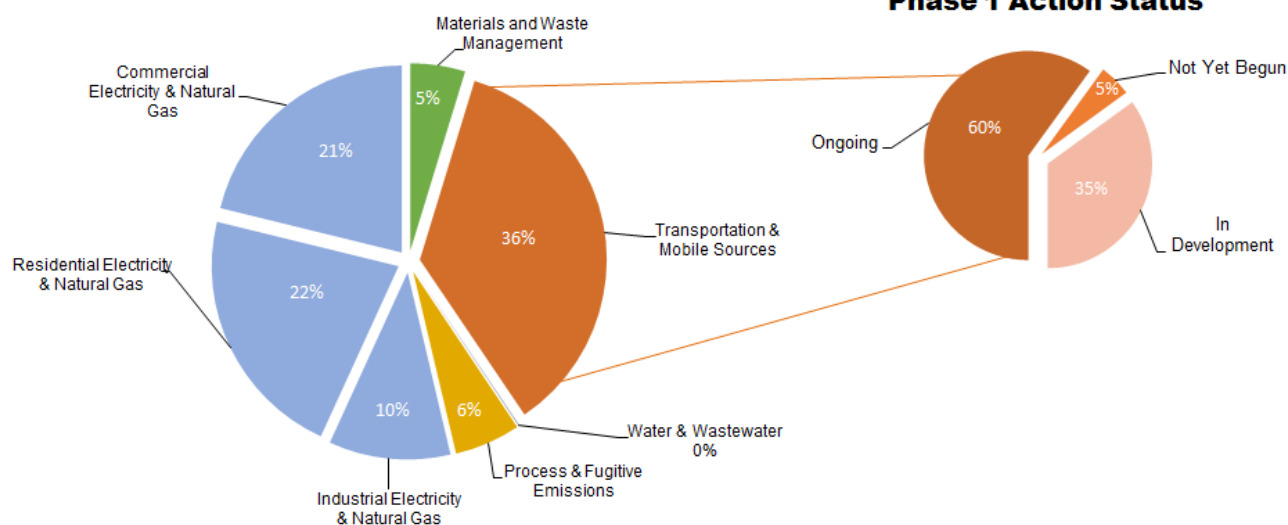
- Ongoing Austin Energy programs related to energy efficiency, demand response, green buildings, local solar, and electric vehicle charging infrastructure directly result in avoided energy consumption and generation from carbon-emitting resources on the grid.

Actions for Focus:

- **Buildings and Integrated Efficiency Actions 3, 7, and 8, and Behavior Change**  
**Actions 1, 2, and 4** depend on full implementation programs based on the functionality of advanced meters and support systems. Austin Energy continues to update its Advanced Meter Infrastructure. This system of meters and supporting technology enables Austin Energy to record and report energy usage in 15 minute intervals (or less), which is a capability needed to provide customers with actionable data and to support detailed behavioral programs in which customers can rapidly respond to changing energy needs or plan for upcoming energy events. Austin Energy is currently evaluating traditional and Distributed Energy Service metering programs that will utilize energy usage data to benefit both customers and emissions reduction targets. This evaluation process will continue through FY17.

# TRANSPORTATION AND LAND USE

## 2013 Austin Community Carbon Footprint



Currently, 95% of Phase 1 actions identified to reduce greenhouse gas emissions from transportation and land use sources are in development or part of ongoing programs.

### Early Activities:

- As part of the 20/20 Mobility Challenge and the Transportation Congestion Action Plan, the City and the downtown Transportation Management Association (Movability Austin) are working with City employees and other major employers to reduce peak-hour drive alone commuting. To date, City employees have reduced peak-hour drive along commuting by 23%.
- In 2015, the Active Transportation Division of the Austin Transportation Department coordinated Bike Month activities, the National Association of City Transportation Officials annual conference, and the fourth annual VIVA! Streets Austin event to support transportation demand management and reduce traffic congestion.

### Needs Continued Support:

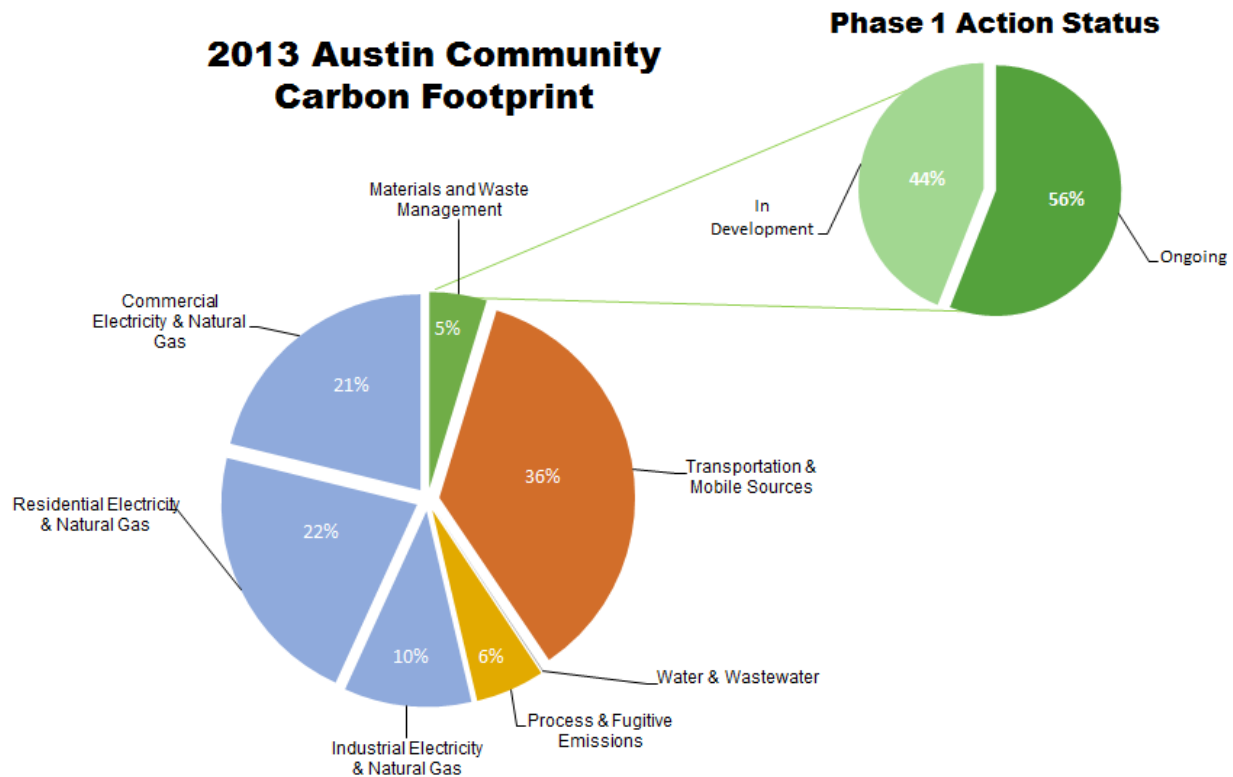
- Land use regulations that encourage compact and connected development patterns are a major component of a strong Transportation Demand Management program. CodeNEXT and Small Area Planning efforts are underway that will direct future land use and development to reduce sprawl and enhance mobility options. In addition, many long-range plans for the region that also support community-wide emissions reduction are in various stages of implementation.

- Austin Transportation continued implementation of the Bicycle Master Plan, as well as programs related to transportation demand management and signal enhancements.
- Austin Transportation is updating the 1995 Austin Strategic Mobility Plan. The plan will have a strong focus on transportation demand management, including strategies to expand non-drive alone options, improve parking management, provide education, create incentives, and identify land use policy.
- Capital Metro is currently developing its Connections 2025 plan that will identify infrastructure and service priorities; Austin Transportation will support this effort.

Actions for Focus:

- **Transportation Demand Management Actions 1 and 8:** These two actions are focused on reducing single-occupancy vehicle trips. Austin Transportation is currently piloting a new program called Smart Trips, which involves meeting with individual residents and businesses to identify the best transportation options for their specific daily activities and commutes. The Smart Trips initiative and other Transportation Demand Management efforts need to be continued and expanded to achieve the greatest emissions reduction.

# MATERIALS AND WASTE MANAGEMENT



100% of the Phase 1 actions identified to reduce emissions from materials and waste management sources are in development or underway as part of ongoing initiatives.

## Early Activities:

- Austin Resource Recovery has initiated a study to determine ways of beneficially using methane at the City's closed landfill.
- On October 17, 2015, Austin Resource Recovery combined and expanded the Household Hazardous Waste and Resource Recovery Center into the Reuse and Recycling Drop-Off Center. The Center accepts household hazardous waste and hard-to-recycle items, such as Styrofoam, plastic film, and electronics. A similar facility will be located at the future northeast Austin service center scheduled to open in 2018.

## Needs Continued Support:

- Implementation of the Universal Recycling Ordinance is underway; compliance with the terms of the ordinance will ensure a reduction in emissions resulting from materials and waste management.



Actions for Focus:

- **Purchasing Actions 1 and 2:** These actions are centered on creating sustainable purchasing specifications and guidelines to reduce waste and prioritize locally-sourced materials. In order to make significant progress in this area, dedicated staff time is needed to develop a city-wide Sustainable Purchasing Policy.
- **Methane Management Action 2:** The City of Austin will continue to encourage the landfill operators to increase the capture and destruction of landfill gas in Travis County.
- **Recycling Action 4 and Organics Diversion Action 1:** These actions will ensure that businesses and multi-family properties maximize diversion of organics and recyclable materials. Continued investment in the necessary resources, as well as marketing and outreach efforts, must be made to realize the goals of the Universal Recycling Ordinance and associated emissions reductions.

## COMMUNICATIONS AND OUTREACH EFFORTS

The Office of Sustainability has identified six key objectives for communications and public outreach related to the Austin Community Climate Plan:

1. **Inform:** Provide information about the City of Austin's history of climate leadership and commitment to net-zero community-wide emissions.
2. **Report:** Share progress updates toward meeting targets for emissions reductions.
3. **Educate:** Explain terminology about climate science, carbon footprints, and net-zero emissions.
4. **Empower:** Provide resources and tools to make it easy for everyone to take action.
5. **Inspire:** Motivate local businesses, organizations, and residents to take action to help meet the net-zero goal.
6. **Engage:** Provide opportunities for active participation in behaviors that reduce or avoid emissions.

During FY16, efforts will be concentrated on creating a "Take Action" toolkit that can be shared at community events and other outreach opportunities. In addition, Climate Program web pages will be redesigned to offer educational content, tips, and resources to assist the community in taking action, as well as to provide transparency around implementation of the plan. Social media and existing City communication outlets will be used to promote these online resources.

In January, the Office of Sustainability launched a social media campaign called **Net Zero Heroes** that will feature a series of inspirational community member profiles that illustrate how simple actions can make a real difference when everyone joins in. These profiles will be included in the Office of Sustainability bi-monthly newsletter, blog, and as Facebook posts. On the first day of the Net Zero Heroes campaign, the post had a total reach of 7,133 and 119 "Likes" on Facebook.



## CARBON IMPACT STATEMENT

The Austin Community Climate Plan recommended exploring the creation of a Carbon Impact Statement for City leadership to use in making decisions related to capital improvements, large expenditures, land use, energy and water resources, and other major policy and program directives. A Carbon Impact Statement would provide decision-makers with the greenhouse gas emissions impacts associated with various choices; this would allow informed discussions about options and alternatives based on potential outcomes.

The Office of Sustainability has engaged with researchers from Texas State University and the University of Texas to identify best practices and further develop how a Carbon Impact Statement might be applied for the City of Austin. This work has identified other governmental entities that have attempted to use similar tools (triple-bottom-line analysis or Sustainability Assessment Tools); however, more research must be done before a proposal can be made for the development and use of a Carbon Impact Statement.

#### LOCAL CARBON FEE OR CAP-AND-TRADE INVESTMENT PROGRAM

The Austin Community Climate Plan also recommended determining the feasibility of a local carbon fee or trading and investment program that would establish a price for carbon-intensive activities occurring community-wide. This would incentivize low carbon activities and create a disincentive for high carbon activities.

Working with the same student researchers from Texas State and the University of Texas, various approaches utilized at the local, state, and federal level have been explored. Office of Sustainability staff need additional time to gain a better understanding of the regulatory, financial, and legal aspects of local carbon fees or trading and investment programs, as well as to develop options for consideration. Staff plans to provide a full report on this topic later this year.

#### NEXT STEPS

The Office of Sustainability will continue to lead efforts in:

- Developing a more complete set of quantitative tools, metrics, and reporting mechanisms to track greenhouse gas reductions.
- Completing the full study of Carbon Impact Statement and Carbon Fee or Cap-and-Trade Investment program best practices and opportunities.
- Identifying budget gaps for Phase 1 Action implementation and supporting Departments in their efforts to secure funding.



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Austin Transportation Department