



MEMORANDUM

TO: Mayor and Council

FROM: Lucia Athens, Chief Sustainability Officer
Zach Baumer, Climate Program Manager

CC: Marc A. Ott, City Manager; Sue Edwards, Assistant City Manager;
Robert Goode, Assistant City Manager; Rey Arellano, Assistant City Manager;
Bert Lumbreras, Assistant City Manager; Mark Washington, Assistant City Manager;
Ray Baray, Chief of Staff

DATE: September 16, 2016

SUBJECT: Resolution 20150604-048 Austin Community Climate Plan Update

Background:

In 2015, Council approved Resolution 20150604-048 which adopted the Austin Community Climate Plan. The plan contains over 130 actions that will reduce emissions from energy, transportation, and waste sources in Austin/Travis County to meet the goal of **community-wide net-zero greenhouse gas emissions by 2050**.

The Resolution also calls for semi-annual progress reports to Council. The last update occurred in March of 2016 and provided an updated Community Carbon Footprint for Austin/Travis County and a Phase 1 Implementation Plan to meet the interim emissions reduction target of 11.3 million metric tons of carbon-dioxide equivalent by 2020. The Office of Sustainability, Austin Energy, Austin Transportation, and Austin Resource Recovery are currently working to implement the more than 50 **Phase 1 Actions** identified to meet the 2020 target.

This update provides:

- Information about the expected **greenhouse gas emissions reductions for Phase 1 Actions**;
- An overview of the newly formed **Joint Sustainability Committee**; and
- A **Communications and Outreach Plan** for FY 2016-17, designed to inform and engage the community about climate change in Austin.

Projected Emissions Reductions for Phase 1 Actions:

Since the March 2016 Semi-Annual Progress Report, the Office of Sustainability has continued work to more precisely calculate the scale and scope of greenhouse gas emissions reductions associated with each of the Phase 1 Actions. By providing additional detail about the relative impact of these Actions, more informed decisions can be made about how to prioritize actions to reduce emissions.

Table 1 summarizes each Phase 1 strategy to reduce greenhouse gases from the emissions source; these strategies involve multiple actions for implementation. Detailed information about each of the actions associated with these strategies can be found in the Phase 1 Implementation Plan which can be viewed [here](#).

TABLE 1: Major Emissions Sources and Reduction Strategies

Emissions Source	Phase 1 Reduction Strategy
Electricity & Natural Gas	Increase Solar & Wind / Retire Coal & Gas Power Generation Decrease Energy Use in Buildings Energy Reduction from Advanced Electric Metering
Transportation & Land Use	Transportation Demand Management Programs Land Use Policy and Active Transportation Electric Vehicle / Alternative Fuel Programs
Materials & Waste Management	Landfill Methane Management Increase City-wide Recycling Rates Expand Organics Diversion from Landfills

Figure 1 shows the relative impact of each reduction strategy for the three emissions sources.

Greenhouse gas emissions from power generation are projected to decrease more than any other group. This reduction is driven by Austin Energy's recent solar power purchase agreements totaling 438 megawatts since 2014, combined with a steady increase in wind generation. Wind is projected to be the largest single power generation source in Austin Energy's portfolio by 2017.

Transportation Demand Management programs provide the second largest group of avoided emissions. These programs focus on reducing the number of vehicle miles traveled by Austin residents through ridesharing, use of public transportation, and alternative work schedules. If fully implemented, these programs will decrease greenhouse gas emissions resulting from transportation and land use sources by 19.6% by 2020.

FIGURE 1 Projected Emissions Reductions by 2020 for Phase 1 Strategies
(shown in Metric Tons of Carbon Dioxide-Equivalent)

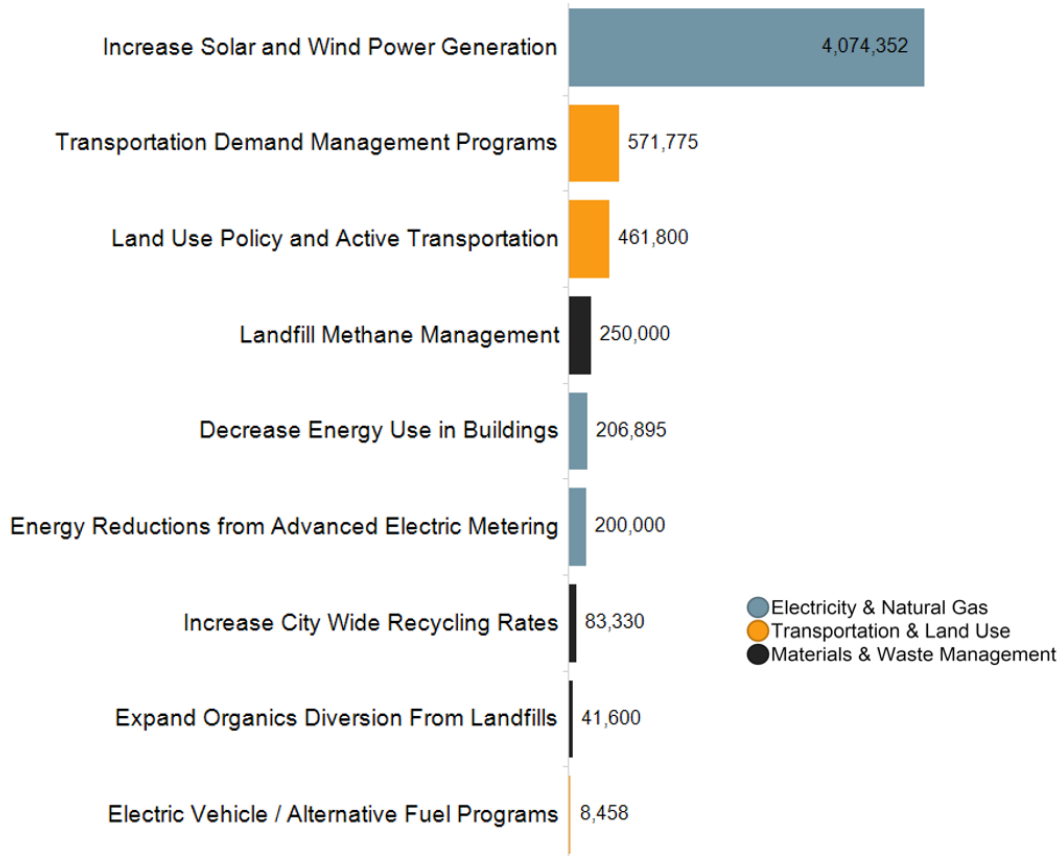
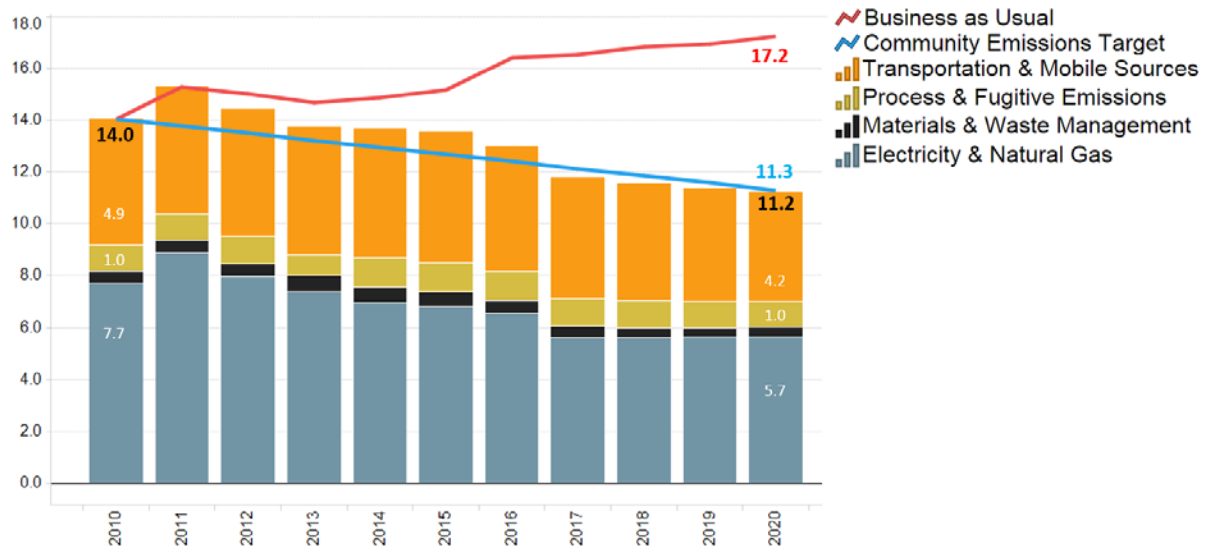


Figure 2 shows community-wide greenhouse gas emissions from 2010, projected through 2020. A Business as Usual baseline – the red line in Figure 2 – shows the projected amount of community-wide emissions if no Phase 1 Actions were implemented. In this scenario, total emissions would increase by 22.8% by 2020 based on current population growth projections.

The columns in Figure 2 reflect the reductions for each emissions source as identified in Figure 1, subtracted from the Business As Usual baseline. These estimates show that **the community-wide carbon footprint will surpass the 2020 interim reduction target** of 11.3 million metric tons of carbon-dioxide equivalent. Projected emissions based on taking these actions will be 34.9% lower than the 2020 Business as Usual scenario. This is a significant impact which demonstrates Austin’s leadership in greenhouse gas emissions reductions.

FIGURE 2 Community-wide Emission Reduction Projections through 2020
(shown in Millions of Metric Tons of Carbon Dioxide-Equivalent)



Joint Sustainability Committee:

The newly formed Joint Sustainability Committee met for the first time on March 30, 2016 and continues to meet bi-monthly. Jim Walker, Director of Sustainability at the University of Texas, was elected committee Chair, with Kaiba White of Public Citizen elected as Vice-Chair. At the July meeting, the committee passed several recommendations supporting further action to reduce community-wide greenhouse gas emissions.

Summary of Joint Sustainability Committee Recommendations related to the Community Climate Plan:

- Support of the FY 2016-17 Proposed Budget for Transportation Demand Initiatives.
- Support of the FY 2016-17 Proposed Budget to expand curbside organics collection to all residential customers by 2020.
- Support for a 2016 Mobility Bond.
- Support renegotiation of the joint participation agreement between the Fayette Power Plant and the Lower Colorado River Authority, and establishment of a dedicated debt defeasance fund that would allow the plant to be retired in 2023. *(As part of the Austin Energy Rate Case Settlement, a roadmap was developed that describes possible paths to meet City Council goals that are outlined in the Resource Generation Plan. The roadmap establishes a process for ending the use of coal by starting the retirement of Austin Energy's share of the Fayette Power Plant by the end of 2022. This could require the renegotiation of the joint participation agreement between the Fayette Power Plant and the Lower Colorado River Authority and establishment of a dedicated debt defeasance fund).*

- Support creation of a FY 2017-18 staffing and funding plan within the Development Services Department for Energy Code enforcement.

The Office of Sustainability will continue work with the Joint Sustainability Committee to ensure the successful implementation of the Austin Community Climate Plan.

Community Engagement:

Many of the actions identified in the Austin Community Climate Plan are being initiated by the City through projects and programs that will reduce community-wide emissions; however it will take more than City action to meet the net-zero target. Key to achieving this goal is active participation from residents and businesses to reduce their carbon footprints.

The following initiatives have been implemented to engage with the general public about the Austin Community Climate Plan and ways to take action:

- **Net Zero Heroes** – In January, the Office of Sustainability launched a series of inspirational community member profiles that show how the simple actions of one person can make a real difference. Net Zero Heroes feature people throughout Austin who are taking personal action around transportation, energy, and waste reduction to shrink their carbon footprint, as well as the footprint for the community as a whole.

These stories have been featured in Office of Sustainability bi-monthly newsletters, and as blog and Facebook posts; other City Departments have also featured Net Zero Heroes in their newsletters and social media outlets. To date, the series has featured nine community members and reached 47,662 people in the community with 93,850 impressions. Tracking indicators of engagement, such as Likes, Shares, Clicks, or Comments on social media, the series as garnered 2,373 actions that indicate engagement. Community members have also submitted nominees for the series. See the entire Net Zero Hero series [here](#).

- **Climate Action Tools and Resources** – The Office of Sustainability has developed a “toolkit” of educational materials, tips, and resources that can help the community take action and it is posted online: <http://austintexas.gov/climate>. This content will be shared at Town Hall Meetings, presentations to community groups, and various events over the next year.
- **Communications and Outreach Plan** – The Office of Sustainability developed strategies for engaging with audience segments representing a range of beliefs, behaviors, and lifestyles throughout Austin for FY 2016-17 (see *Attachment A*). This plan identifies specific messaging and communications channels that will best reach and engage with those audience segments to encourage behaviors and choices that reduce greenhouse gas emissions.

The Office of Sustainability will provide the next semi-annual update to Council in March of 2017.