



MEMORANDUM

To: Mayor and Council Members

CC: Marc A. Ott, City Manager; Michael McDonald, Deputy City Manager; Sue Edwards, Assistant City Manager; Robert Goode, Assistant City Manager; Anthony Snipes, Assistant City Manager; Rey Arellano, Assistant City Manager; Bert Lumbreras, Assistant City Manager; Ray Baray, Assistant to the City Manager

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

Date: August 29, 2014

Subject: **Progress Updates on Community Climate Resolution 20140410-024 and Austin Climate Protection Resolution 20070215-023**

In April 2014, City Council passed a resolution establishing the goal of net zero community-wide greenhouse gas emissions by 2050, with a stated preference for achieving this objective as soon as it is feasible. The Office of Sustainability has been working with key Departments and members of the community to develop a Net Zero Community Climate Plan that will incorporate electricity and natural gas, transportation, materials management, and industrial sector-based action plans for emissions reductions to meet the resolution target.

This memorandum provides an update on the planning process, stakeholder group organization, framework for greenhouse gas emissions reductions, and public input approach. Detailed information on the community climate planning process can also be found at <http://austintexas.gov/page/community-greenhouse-gas-emissions>. This memo also includes documentation of the progress made toward targets set forth in the 2007 Austin Climate Protection Resolution 20070215-023 (see **Attachment A**).

Community Climate Plan Steering and Oversight

The Office of Sustainability has convened a Community Climate Steering Committee to provide leadership and oversight in the creation of a Net Zero Community Climate Plan. Steering Committee members were selected by the Office of Sustainability with input from Council offices, City departments, and the community (the full list of participating members is included as **Attachment B**). The Committee conducts bi-weekly meetings that are open to the public; locations and meeting agendas are posted on the public webpage listed above. Three co-chairs were selected by Steering Committee members to work closely with the Office of Sustainability in setting meeting agendas and leading committee discussions. The co-chairs are Al Armendariz, Senior Campaign Representative with the National Sierra Club; Joep

Meijer, founder of Climate Buddies; and Francois Levy, a local architect with a practice centered on sustainable design.

A charter statement has been drafted for the Steering Committee which states:

The Community Climate Steering Committee is convened to lead and guide the development of a plan to achieve net zero community-wide GHG emissions by 2050 (or sooner) in order to reduce the negative economic, health, and environmental impacts from climate change. This plan will be developed in a way that is open and transparent, balances the interests of the Austin community, is realistic within the constraints of currently available information, provides clear and compelling implementation pathways, maintains Austin’s position as a climate leader, and gains support and adoption by the City Council in 2015.

Technical Advisory Groups Organization

Four Technical Advisory Groups (TAGs) have been convened to create long-term action plans for each of the major emission sectors in Travis County:

Technical Advisory Group (TAG) Focus	Department Leading/Facilitating TAG
Electricity and natural gas usage in the residential, commercial, and industrial sectors	Austin Energy
Transportation of people, goods, and services occurring in and through Travis County	Austin Transportation Department
Materials management, including wastewater treatment plants, composting, recycling and landfills	Austin Resource Recovery
Industrial emissions at semiconductor and lime production facilities	Office of Sustainability

TAG members were selected by the Office of Sustainability, Austin Energy, Transportation Department, and Resource Recovery, with input from Council offices, City departments, and the community. Each is comprised of subject-matter experts who bring a strong understanding about the overall sector they represent, as well as the interests of residents, non-profits, businesses, and City departments related to greenhouse gas emissions reduction strategies in that sector. The full list of TAG members is included as **Attachment C**. To date, each TAG has met four times and will continue with bi-weekly meetings throughout the planning process.

Geographic Scope and Boundary of Analysis

As of 2010, greenhouse gas emissions in Travis County were estimated to be 15 million metric tons of carbon dioxide-equivalent (CO2e) per year. Approximately 53% of those emissions were created by electricity and natural gas usage, 37% from transportation and mobile sources, 7% from industrial processes, and 3% from local landfills and wastewater treatment.

The Office of Sustainability is currently working to update this inventory based on more recent source data using the 2012 ICLEI U.S. Community Greenhouse Gas reporting protocol. This methodology is used by other cities and communities within the U.S.; the protocol follows a geographic source basis to inventory direct emission sources within a specified jurisdiction. The Office of Sustainability has used Travis County as the primary geographic boundary for inventory and reporting purposes based on data availability and the City of Austin's ability to influence policy and behavior within that geographic area.

As part of this current planning process, TAGs have identified a parallel approach to greenhouse gas emissions accounting that involves quantifying the consumption of goods and services and estimating emissions based on economic input / output factors. This approach captures the impact of food and goods purchased within Travis County that are created and shipped from somewhere else; these would not otherwise be captured in the geographic approach described above, but do have an impact on the community-wide carbon footprint. There are challenges with this approach related to ready availability of accurate data, as well as the level of influence the City would have in effectively influencing emissions reductions in these areas. TAGs are researching if and how this approach could be utilized to inform planning for the Austin area more broadly.

Planning Framework

TAGs are tasked with developing recommendations for emissions reduction targets for their specific sectors, as well as the associated strategies and actions to achieve them. These recommendations will be reviewed by the Steering Committee and Office of Sustainability and evaluated for inclusion in the final plan. TAGs are focusing their efforts on three timeframes:

- Short-Term 2015-2020
- Mid-Term 2020-2030
- Long-Term 2030-2050

Strategies and actions will be assessed qualitatively in terms of anticipated stakeholder participation, ownership, technology, and behavior change as well as quantitatively in terms of potential greenhouse gas reduction and cost. Based on this analysis, the Office of Sustainability and the Steering Committee will determine the appropriate actions, their feasibility, and timeframes for implementation to reach the interim as well as long-term targets.

In addition, the Steering Committee will work with the Office of Sustainability to determine when and how annual progress reports should occur, as well as the frequency for conducting comprehensive updates to the Net Zero Community Climate Plan.

Public Input and Engagement Approach

The Office of Sustainability has created a draft public engagement plan in collaboration with the Corporate Public Information Office, with input and feedback from the Steering Committee. The goals of the public engagement plan are to provide transparency throughout the planning process, obtain public comment and input from a diverse set of stakeholders, and gain an understanding of resident and business behaviors to inform development of a realistic plan that can be successfully implemented. Public input has been proposed using the following methods.

- Citizen communications at Steering Committee meetings and emails received through the Community Climate Plan webpage (underway)
- General resident feedback through the online survey tool SpeakUp Austin, in-person interviews during a SPEAKweek effort to be scheduled this fall, and at least one Steering Committee meeting that will be solely devoted to public input (in planning)
- Targeted outreach presentations at regularly scheduled organizational meetings of neighborhood associations, neighborhood planning teams, nonprofits and community organizations, chambers of commerce, and business associations (in planning)
- Presentations to appropriate Boards and Commissions (TBD)

Input and feedback using these methods will be collected and shared with City departmental staff, the Steering Committee, and the TAGs to inform development of the Net Zero Community Climate Plan.

Next Steps

The Steering Committee and TAGs will continue to meet bi-weekly to develop strategies and actions that will be included in the Net Zero Community Climate Plan. The general schedule is outlined below:

August 2014 – TAG and Steering Committee briefings on planning efforts done to date, pertinent issues, and the potential for emissions reductions

September 2014 – Preliminary identification of sector-specific strategies and actions

October 2014 – Strategy and action distillation and refinement (quantitative and qualitative)

November/December 2014 – Draft Plan development, solicit stakeholder feedback, identify necessary Plan revisions

January/February 2015 – Draft Plan presentations to Boards and Commissions

February 2015 – Plan revisions based on feedback

March 2015 – Final Plan completed and presented to City Council

Attachments

Attachment A – Resolution 20070215-023 Annual Progress Report

Attachment B – Steering Committee Members

Attachment C – Technical Advisory Group Members

Goal 1: Make all City of Austin facilities, fleets and operations totally carbon neutral by 2020.		
OVERALL PROGRESS: The City’s non-regulated municipal carbon footprint has decreased from 226,000 metric tons of CO2 in 2007 to 80,338 in 2013. These reductions were achieved through energy efficiency measures and the use of zero-carbon renewable electricity at City facilities, as well as by using less gasoline and diesel and more B20-biodiesel, E85-ethanol, propane, compressed natural gas, and electric powered vehicles.		
GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<u>OBJECTIVE 1:</u> Power all City facilities with renewable energy by 2012;	100% GreenChoice	In 2011, the City of Austin became the largest local government in the U.S. to subscribe to 100% renewable energy to power all City-owned buildings and facilities. In 2013, we continued this commitment and purchased 436,615,872 kilowatt hours of GreenChoice electricity, making the City the largest Austin Energy GreenChoice customer. By making the switch to renewable energy, the City avoided over 233,000 metric tons of CO2-equivalent emissions.
	Solar PV on City facilities	In 2013, 297 kilowatts (AC) of solar photovoltaic (PV) systems were added to 3 City-owned facilities. By the end of 2013, the City of Austin owned a total of 33 solar PV installations, which will generate over 1,538 megawatt hours annually.
<u>OBJECTIVE 2:</u> Make the entire City fleet of vehicles carbon neutral by 2020 through the use of electric power, non-petroleum fuels, new technologies, mitigation, and other measures as necessary, prioritizing the earliest possible conversion to such fuels and technologies and establishing timelines and benchmarks for such conversions;	Austin Energy and City-owned EV charging stations	Austin Energy’s Plug-In EVERYwhere™ Network had 186 electric vehicle charging stations at the end of CY 2013, each powered by 100% renewable energy through the GreenChoice™ program. In 2013, 25,121 charging events occurred, consuming 159 megawatt hours of electricity and resulting in almost 67 metric tons of CO2 savings.
	Develop a purchase/conversion plan for fleet carbon neutrality by 2020	In 2012, Fleet Services and the Office of Sustainability delivered the 2020 Carbon Neutral Fleet Plan to City Council. Emissions from the vehicle fleet decreased from a 2007 baseline of over 52,166 metric tons of CO2 to 45,517 in 2012 (a 12.7% reduction). As of early 2014, over 71% of the 5,000+ unit City fleet is alternatively fueled or a hybrid vehicle.

GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 3:</u> Develop and implement departmental climate protection plans, including policies, procedures, targets, benchmarks, and reporting for maximum achievable reduction of greenhouse gas emissions and energy consumption in all City departments;</p>	<p>Develop carbon footprint analysis/audit</p>	<p>Over the last year, the Office of Sustainability and Building Services have worked together closely to coordinate city facility natural gas and energy use in the on-line building management tool, FM Systems. FM Systems, in conjunction with the Fleet Services fuel and vehicle tracking database, provide timely and actionable energy usage and carbon footprint information to the Office of Sustainability and City departments.</p>
	<p>Develop Departmental Climate Protection Plans</p>	<p>City departments are in the implementation phase of their Climate Protection Plans. Each plan includes actions related to water, waste, transportation, procurement, energy, and education. Over the past year the Office of Sustainability held briefings with Directors and / or Division Managers of Public Works, Animal Services, Austin Water, Austin Resource Recovery, and Austin Energy to discuss their department-specific carbon footprint trends as well as actions to reduce greenhouse gas emissions. The Office of Sustainability continues to coordinate quarterly, cross-departmental Climate Action Team meetings to share sustainability best practices. Climate Action Team meetings in 2013 and 2014 have also been hosted by Austin Public Libraries, Watershed Protection, Austin Water, Austin Energy, and Austin Resource Recovery.</p>
<p><u>OBJECTIVE 4:</u> Develop an employee climate protection education program, programs and incentives to help employees reduce their personal impact on climate change, and training to help employees engage in community outreach for climate protection.</p>	<p>Help staff understand personal carbon footprints</p>	<p>To date, approximately 75% of City of Austin employees have received some form of climate training. During FY 2013-14, 15 in-person training presentations were conducted on climate change that reached approximately 847 employees.</p>

Goal 2: Make Austin Energy the leading utility in the nation for greenhouse gas reductions.

GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 1:</u> Achieve 800 MW of new savings through energy efficiency and conservation efforts by 2020;</p>	<p>Demand side management (DSM) programs</p>	<p>In FY 2013, 57.4 megawatts of peak demand were avoided through energy efficiency programs. By the end of FY 2013, Austin Energy had cumulatively achieved 374 megawatts of the 800 megawatt target (or 47%).</p>
<p><u>OBJECTIVE 2:</u> Meet 35% of energy needs through the use of renewable resources by 2020, including at least 200 MW of solar power;</p>	<p>Austin Energy generation mix</p>	<p>In FY 2013, Austin Energy’s generation mix included 21% renewable energy resources comprised of the following:</p> <ul style="list-style-type: none"> • 13.5 megawatts of installed rooftop solar capacity minus losses (MW-AC) • 850.9 megawatts of wind power • 30 megawatts of utility-scale solar • 111.8 megawatts of biomass
<p><u>OBJECTIVE 3:</u> Establish a CO2 cap and develop and implement a CO2 reduction plan for existing utility emissions;</p>	<p>Austin Energy long-term generation planning</p>	<p>Austin Energy established a goal in 2010 to reduce CO2 emissions from power plants to 20% below 2005 levels by 2020. In CY 2013, the total CO2 stack emissions from City-owned generation units was 4,859,502 metric tons, for a 12% reduction below 2005 levels.</p>
<p><u>OBJECTIVE 4:</u> Achieve carbon neutrality on any new generation units using carbon-based fuels through the utilization of lowest-emission technologies, carbon capture and sequestration (if it is proven to be reliable), mitigation, and other prudent measures.</p>	<p>New generation options for carbon neutrality</p>	<p>In 2013, Austin Energy did not add any fossil-based generation capacity.</p>

Goal 3: Implement the most energy efficient building codes in the nation and aggressively pursue energy efficiency retrofits and upgrades to existing building stock.		
GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 1:</u> Implement building codes requiring all new single-family homes to be zero net energy capable by 2015;</p>	<p>Zero energy capable homes</p>	<p>The first phase of the Zero Energy Capable Homes initiative involved adoption of the 2006 International Energy Conservation Code (IECC) with local amendments as the City of Austin Energy Code in October 2007. The second phase included adoption of the 2009 IECC with local amendments in April 2010. These code improvements reduced the energy used by new single-family homes by 31%, which is in line with goals set by Council in 2007. In 2013, Austin Energy Green Building staff facilitated the adoption of the 2012 IECC with local amendments. To date, energy use reductions due to the Zero Energy Capable Homes initiative is 33.3%. This reduction is less than in previous code cycles due to a residential requirement for mechanical ventilation which significantly increased HVAC energy use. The success of the Zero Energy Capable Homes initiative will depend on the adoption of more stringent appliance efficiency standards nationally. The next round of HVAC efficiency improvements are scheduled to take effect in January, 2015.</p>
<p><u>OBJECTIVE 2:</u> Implement building codes to increase energy efficiency in all other new private and public sector buildings by at least 75% by 2015;</p>	<p>City of Austin Energy Code changes</p>	<p>As with Objective 1 above, meeting this goal is based on development, adoption and implementation of the IECC. Calculating energy efficiency improvements in the commercial sector is complex because code requirements vary depending on building construction type and their use or occupancy. Austin Energy currently calculates energy efficiency improvements for three building uses: offices, retail, and restaurants. Based on current modeling techniques, energy savings for the commercial sector are estimated to be: 27.4 % for office uses, 24.7% for retail uses, and 20.3% for restaurants.</p>
<p><u>OBJECTIVE 3:</u> Implement policies, identify opportunities for energy efficiency retrofits and upgrades, and require cost-effective retrofits and upgrades for all properties at the point of sale;</p>	<p>Energy Conservation Audit and Disclosure Ordinance</p>	<p>City Council approved the Energy Conservation Audit and Disclosure Ordinance in 2008 (as well as a revised version in April 2011) to improve the energy efficiency of single family, multi-family, and commercial properties. In 2013 there were:</p> <ul style="list-style-type: none"> • 14,117 single family homes sold; 5,719 were exempt from ECAD and 4,344 conducted energy audits as required • 1,361 multi-family properties in Austin; 312 were exempt and 839 completed audits • 804 commercial properties larger than 75,000 square feet; 274 of those facilities reported their energy usage using EPA Portfolio Manager. Of the buildings between 30,000 and 75,000 square feet, 280 out of 1,076 reported their energy use. Altogether, nearly 81 million square feet of commercial building space is in compliance with the ECAD Ordinance.

GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 4:</u> Develop enhanced technical assistance, marketing incentives, and standards for the Green Building Program, develop policies requiring achievement of upper-tier ratings in cases where green building is mandated as a product of City programs or negotiations, and develop an optional "Carbon Neutral" certification to accompany green building ratings.</p>	<p>Enhance technical assistance, marketing incentives, and standards for the Green Building program</p>	<p>In 2013 all three Austin Energy Green Building (AEGB) rating systems – Commercial, Multi-family and Single Family – were revised to reflect changes to the City Energy Code, as well as standard best practices in water conservation, building materials efficiency, site improvements and indoor environmental quality. These changes were implemented in October of 2013. AEGB created a new design for ratings plaques to more effectively recognize projects that received higher level ratings, produced the 2013 Cool House Tour in partnership with the Texas Solar Energy Society, created content for a 13-page section in the 2013 Austin Environmental Directory, and completely revamped the AEGB Case Study process and format.</p>
	<p>Develop policies requiring achievement of upper-tier ratings in cases where green building is mandated as a product of City programs or negotiations</p>	<p>In 2013, Austin Energy Green Building worked with the Planning & Development Review Department to develop green building criteria for the proposed Density Bonus Program. Under that program an AEGB 2 Star Rating or LEED Certification meets "gatekeeper" requirements, while a 3 Star Rating is an option for earning additional bonus density. The Planned Unit Development (PUD) Ordinance also gives projects the option of earning a 3 Star Rating to achieve Tier 2 PUD status.</p>
	<p>Develop carbon-neutral certification to accompany applicable green building ratings</p>	<p>There have been no resources allocated to this objective.</p>

<i>Goal 4: Establish an interdepartmental Climate Action Team responsible for creating an inventory of greenhouse gases generated from all sources community-wide, working with stakeholders and technical advisors, establishing short-term and long-term targets for reducing these emissions, and reporting back to the City Council in no more than one year with a comprehensive plan for meeting those targets.</i>		
GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 1:</u> Create a greenhouse gas emissions inventory from all sources community-wide against which progress in meeting reduction targets can be measured;</p>	<p>Greenhouse gas emissions inventory</p>	<p>In 2008, the Office of Sustainability completed the first Travis County community greenhouse gas inventory with 2007 data; emissions were estimated to be 14,633,035 metric tons of CO2-equivalent, with major sources of the emissions being energy usage, waste, and transportation. Based on 2010 data, community-wide emissions were estimated to be 14,943,190 metric tons of CO2-equivalent in 2011. Approximately 52% of those emissions were created by energy use, 36% from transportation, and 12% from local landfills and manufacturing processes. The community greenhouse gas emissions inventory is currently being updated using 2013 data.</p>
<p><u>OBJECTIVE 2:</u> Work with stakeholders and technical advisors to establish short-term and long-term targets for reducing these emissions;</p>	<p>Establish targets for reducing greenhouse gas emissions</p>	<p>On April 10, 2014, Austin City Council passed Resolution 20140410-024, which establishes a new long-term goal of reaching net zero community-wide greenhouse gas emissions by 2050, or earlier if feasible. City staff and community stakeholders are in the process of identifying measurable interim greenhouse gas reduction targets beginning in 2020, with additional periodic goals through 2050.</p>
<p><u>OBJECTIVE 3:</u> Report back to City Council in no more than one year with a comprehensive plan for meeting those targets.</p>	<p>Comprehensive Community Climate Plan</p>	<p>A Community Climate Steering Committee has been convened to lead and guide the development of a comprehensive plan to achieve net zero community-wide greenhouse gas emissions by 2050. Technical Advisory Groups (TAGs) have been formed for each of the major emissions source sectors: Electricity and Natural Gas, Transportation, Materials Management, and Industrial. The members of each TAG represent the practical considerations and technical issues associated with each sector; these stakeholders will develop specific actions for the Steering Committee to consider including in the comprehensive climate plan. TAG action plans will also include targets for sector-specific factors such as renewable energy, building energy use reductions, vehicle miles traveled, waste diversion rates, etc. The comprehensive climate plan is being developed in a way that is open and transparent, balances the interests of the Austin community, is realistic within the constraints of currently available information, provides clear and compelling implementation pathways, and maintains Austin’s position as a climate leader. Meeting times, locations, backup documents, notes, and progress on the planning process can be found here: http://austintexas.gov/page/community-greenhouse-gas-emissions</p>

Goal 5: Develop and implement a program to assist all citizens, businesses, organizations and visitors in achieving carbon neutrality.

GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><i>OBJECTIVE 1:</i> Develop an Austin-specific, on-line "carbon footprint calculator;"</p>	<p>Carbon calculator</p>	<p>An Austin-specific carbon calculator has been made available by the City's Climate Program since January 2010. From 2010 – 2012, the Climate Program contracted with a software developer for a custom, web-based carbon calculator that was used by more than 1,100 people. Responding to cost concerns, changing technology, and the community's desire for a calculator that can be applied to businesses, churches, etc. as well as individuals, a flexible, spreadsheet-based tool was developed by the Office of Sustainability and made available on the City's website in the fall of 2012.</p>
<p><i>OBJECTIVES 2 and 4:</i> (2) Develop a menu of greenhouse gas reduction strategies for local implementation that citizens and organizations can fund through the purchase of "carbon offset" credits, thereby reducing their own carbon footprint; (4) Promote the concept of carbon neutrality to visitors by offering carbon offsets for purchase by travelers, conventions, tradeshow, and festivals;</p>	<p>Positive Impact on Climate and Community</p>	<p>The Office of Sustainability worked with C3 Presents, South by Southwest LLC, Austin City Limits Live at the Moody Theatre, Circuit of The Americas, and the Environmental Defense Fund to develop the Positive Impact on Climate and Community program in 2012. Funds will be collected voluntarily from event and festival attendees, with 50% of the proceeds spent on third-party-verified carbon offset projects located in the State of Texas, and 50% spent on local sustainability projects in Austin that produce tangible benefits for the community.</p> <p>C3 Presents was the first event organizer to raise PICC funds in conjunction with the 2013 Austin City Limits Music Festival. \$6,141 was collected voluntarily from event attendees; 50% of the funds raised were spent on permanently retiring 1,435 metric tons of CO2-equivalent from the third-party-verified Southtex Greenwood Farms Landfill Gas to Energy project. The other 50% was donated to support design and construction of the Violet Crown Trail by Hill Country Conservancy.</p>

GOALS & OBJECTIVES	ACTION ITEMS	PROGRESS
<p><u>OBJECTIVE 3:</u> Develop a program for recognition of households, businesses and other organizations achieving carbon neutrality;</p>	<p>Austin Green Business Leaders</p>	<p>The Austin Green Business Leaders (AGBL) program was launched in 2012. As of August 2014, over 400 businesses have downloaded the AGBL scorecard and 137 have been recognized as Green Business Leaders. These member businesses represent 14,000 employees, over 10 million square feet of office space, and have collectively taken over 4,600 actions supporting sustainability. This year to date, the Office of Sustainability has held three member networking events, six information sessions for businesses wishing to join the program, and four public presentations about the program. In June, the Office hosted an annual recognition ceremony, which was attended by over 150 people, and launched a new AGBL scorecard, which was revised and improved based on AGBL member feedback.</p>
	<p>Bright Green Future Grants</p>	<p>Launched in 2012, the Bright Green Future Grants program was designed to recognize and support innovative projects that will inspire students at local K-12 schools to become lifelong environmental stewards. Through a competitive process, projects are selected that promote hands-on sustainability education opportunities, as well as measureable impacts to the environment. Three \$3,000 grants were awarded for the 2012-2013 school year. Through funding from multiple City departments, nineteen \$3,000 grants were awarded for the 2013-2014 school year. Project details can be found here: http://www.austintexas.gov/brightgreenfuture</p>
<p><u>OBJECTIVE 5:</u> Cooperate with other local and regional entities to provide technical and investigational assistance and to coordinate region-wide greenhouse gas reduction strategies;</p>	<p>Regional coordination</p>	<p>The Office of Sustainability regularly participates in information sharing activities with sustainability directors in El Paso, Dallas, Houston, and San Antonio. Conference calls and meetings are focused on climate change research and activities, as well as sustainability-related topics and efforts.</p>
	<p>Community training</p>	<p>Since 2008, the City has offered a speakers bureau and climate protection training for interested groups in Austin. Between October 2013 and August 2014, the total number of community members reached through climate protection and sustainability messaging was 9,212 (K-12 students = 6,396; general community = 2,816).</p>
<p><u>OBJECTIVE 6:</u> Support all appropriate Federal and State policies and legislation that will lead to the reduction of greenhouse gas emissions.</p>	<p>National collaboration - Urban Sustainability Directors Network</p>	<p>Climate Program Manager Zach Baumer is an active member of the Urban Sustainability Directors Network. This network of over 100 cities across the U.S. works to advocate for solutions to sustainability challenges, including reducing greenhouse gas emissions on the national scale. In addition, the City participates in the C40 Cities Climate Leadership Group, a network of large and engaged cities from around the world working on climate change issues.</p>



ATTACHMENT B
Community Climate Steering Committee

Name	Organization, Title
Roger Duncan	University of Texas Energy Institute, Research Fellow
Brandi Clark Burton	Austin EcoNetwork, Founder
Mike Blackhurst	University of Texas School of Engineering, Professor
Joep Meijer, Co-Chair	Climate Buddies, Founder
Al Armendariz, Co-Chair	National Sierra Club, Senior Campaign Representative
David Cortez	Austin Interfaith Network, Member
Kaiba White	Public Citizen, Energy Policy and Outreach Specialist
Pam Reed	Texas Climate & Carbon Exchange, Chief Experience Officer
Vanessa Sarria	Community Advancement Network, Executive Director
Mitch Jacobsen	Austin Technology Incubator, Clean Energy Portfolio Co-Director
Francois Levy, Co-Chair	Francois Levy Architect
Tim Mohin	AMD, Director of Corporate Responsibility
Jere Locke	Texas Drought Project, President
Kevin Tuerff	EnviroMedia Social Marketing, President
Todd Hemingson	Capital Metro, Vice President of Strategic Planning & Development
Jim Marston	EDF, Vice President of Energy
Jeremy Martin	Greater Austin Chamber of Commerce, Senior Vice President, Government Relations

ATTACHMENT C

Electricity and Natural Gas Technical Advisory Group

Name	Organization / Title	Stakeholder Group
Matt Russell	Austin Energy, Environmental Services Manager	Electric Utility
Jeff Vice	Austin Energy, Director of Local Government Relations	Electric Utility
Babu Chakka	Austin Energy, Energy Market Analysis Manager	Electric Utility
Richard Morgan	Austin Energy, Director of Green Building	Electric Utility
Larry Graham	Texas Gas Service, Manager of Regulatory Affairs	Electric Utility
Gurcan Gulen	University of Texas Jackson School, Researcher	Academia
John Hoffner	Renewable and Sustainable Design Consultant	Business, Renewable Energy
Morgan Stinson	Energy Engineering Associates, Principal	Business, Commercial Energy Efficiency
Henry Eby	Consultant (former LCRA Manager of Environmental Affairs)	Business, Sustainability and Renewables
Michelle Van Hyfte	Seton Healthcare, Environmental Stewardship Manager	Commercial Customer, Green Building, Generation Plan Task Force
Peter Pfeiffer	Barley & Pfeiffer Architects, Principal	Business, Residential Energy Efficiency, Green Building
Doug Lewin	South Central Partnership for Energy Efficiency as a Resource (SPEER)	Non-profit, Energy Efficiency Coalition
Jeff Clark	Wind Coalition, Executive Director	Non-profit, Wind Power

Transportation Technical Advisory Group

Name	Organization / Title	Stakeholder Group
Karla Taylor	Austin Transportation Department, Chief of Staff	Government
Terri McManus	Austin Transportation Department, Principal Planner	Government
Cari Buetow	Austin Transportation Department, Environmental Program Coordinator (Air Quality Program)	Government
Pharr Andrews	Austin Transportation Department, Environmental Program Coordinator (Air Quality Program)	Government
Kane Carpenter	Austin Bergstrom International Airport, Environmental Program Manager	Government
Surbhi Bakshi	Planning and Development Review, Senior Planner	Government
Cathy Stephens	CAMPO, Planning and Environmental Program Manager	Government
Jon White	Travis County, Director of Natural Resources & Environmental Quality Division	Government
Bonnie Lister	TXDOT, Transportation Planner	Government
Dennis Perkinson	Texas A&M University, Transportation Institute Program Manager	Academia
Rob Borowski	Capital Metro, Sustainability Officer	Government
Billy Fields	Texas State University, Resilient Communities	Academia
Tom Wald	Bike / Pedestrian Community (former Executive Director of BikeAustin)	Non-profit
Karl Popham	Austin Energy, Emerging Technologies and Electric Vehicles Manager	Utility
Glenn Gabdois	Movability Austin, Executive Director	Non-profit
Keree Brannen	HNM Global Logistics, VP Marketing and Corporate Development	Business

Materials Management Technical Advisory Group

Name	Organization / Title	Stakeholder Group
Andrew Dobbs	Texas Campaign for the Environment, Central Texas Program Manager	Non-profit
Adam Gregory	Texas Disposal Systems Inc., Business Development Specialist	Business
Ashley Faseler	Waste Management, Senior Sustainability Consultant	Business
Shaun Auckland	Travis County, Transportation and Natural Resources Conservation Coordinator	Government
David Hogan	Austin Zero Waste Alliance	Non-profit
Woody Raine	Austin Resource Recovery, Senior Waste Diversion Planner	Government
Gena McKinley	Austin Resource Recovery, Environmental Conservation Program Manager	Government
David Greene	Austin Water Utility, Engineer	Utility
Jody Slagle	City of Austin – Hornsby Bend, Engineer	Government
Donald Hardee	City of Austin – FM812 Landfill, Division Manager	Government

Industrial Technical Advisory Group

Name	Organization / Title	Stakeholder Group
Nadia Tamby	Samsung, Environmental Engineer	Business
Britt Taylor-Burton	Spansion Inc., Senior Environmental Engineer	Business
Robert Castor	Freescale, Environmental Engineer	Business
Robin Smith	RMS Interests, Principal Consultant	Business