SUMMARY

AUSTIN REGION PRIORITY CLIMATE ACTION PLAN

INTRODUCTION

The Priority Climate Action Plan, or PCAP, is the first deliverable for the Climate Pollution Reduction Grant program. The United States Environmental Protection Agency (EPA) funded this program to support regional collaboration in climate planning, specifically to reduce harmful emissions that lead to global warming. The City of Austin led planning efforts for the region, working with regional governments and collaborators to identify greenhouse gas reduction strategies.

The Austin-Round Rock-Georgetown region has been growing for years — in population, buildings, businesses, neighborhoods, restaurants, community groups, and more. At the same time, we've also been experiencing more frequent and extreme drought, winter storms, power outages, and unprecedented heat events. The climate is changing as greenhouse gasses become trapped in the atmosphere. These greenhouse gases have many sources, from the gas we use in our cars, to the production of electricity and natural gas for use in our buildings, to industrial processes. Climate change will not spare Texas, and communities that are marginalized through racial, economic, and other forms of discrimination will face the greatest burdens. Everything is bigger in Texas, and that includes our ambitious goals to take action on climate change.

The Priority Climate Action Plan has been developed to guide the region's short-term, high impact projects for GHG emissions reduction. Staff from four counties, nine cities, five utility and transit authorities, and two regional planning entities have teamed up to develop and implement this plan. A group of community members has guided the process, representing a diverse array of community interests, technical knowledge, and existing projects across the region.

Collaborators and Partners

COUNTIES
Hays, Bastrop, Travis, Williamson

CITIES
Austin, Kyle, Buda, San Marcos, Lakeway, Round Rock, Pflugerville, Cedar Park, Georgetown

REGIONAL ENTITIES
CAPCOG, CAMPO

UTILITIES
Austin Energy, Bluebonnet Electric Cooperative, Pedernales Electric Cooperative

TRANSIT AGENCIES
CapMetro, Capital Area Rural Transportation System (CARTS)

COMMUNITY
A Community and Stakeholder Advisory Group

View the full plan at AustinTexas.gov/CPRG

ABOUT THE CLIMATE POLLUTION REDUCTION GRANT

The Climate Pollution Reduction Grant (CPRG) program contains opportunities to develop and implement plans to reduce greenhouse gas emissions and harmful air pollution. In October of 2023, the City of Austin received a $1 million grant from the EPA, funded through the federal Inflation Reduction Act, towards the development of these plans. Austin's Office of Sustainability is leading the effort, using funds to collaborate with regional partners and neighboring cities to extend our climate planning and action beyond Austin's borders.

SPRING 2023

Priority Climate Action Plan

The first plan is called the Priority Climate Action Plan, or PCAP. It contains an inventory of Greenhouse Gas (GHG) emissions in the region, and a list of priority measures to reduce them. Measures included in this plan have a high impact on a short timeframe, and provide additional benefits to low-income and disadvantaged communities. This is a summary document for the PCAP.

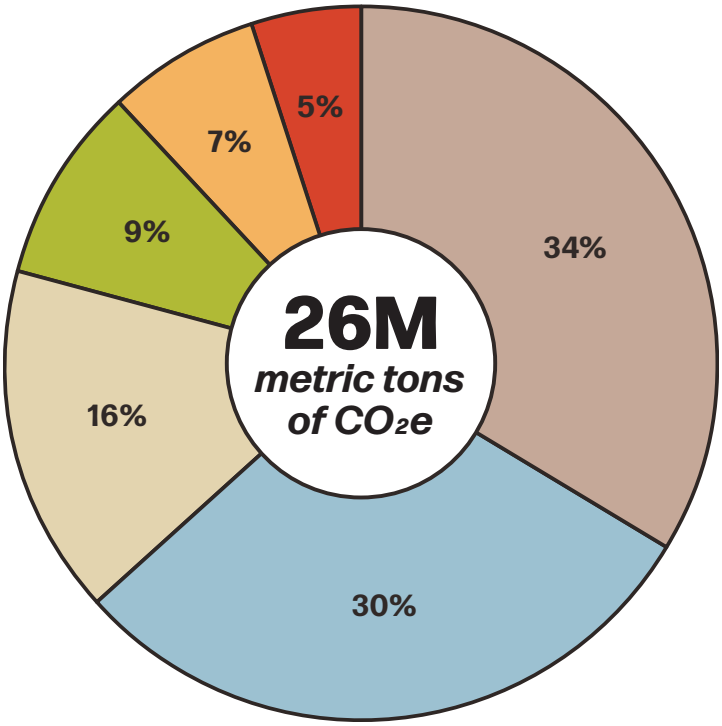
SUMMER 2025

Comprehensive Climate Action Plan

The second plan, the Comprehensive Climate Action Plan (CCAP), will be published in 2025. This plan will expand on the PCAP, with a more detailed GHG emissions inventory and a longer list of measures.

REGIONAL INVENTORY

For the Climate Pollution Reduction Grant program, the EPA required a regional inventory of greenhouse gases. The regional greenhouse gas inventory shows where our emissions are coming from by category or "sector." This information helps us understand where and how to focus our efforts on reducing emissions. Although some sectors pollute more than others, a small change can make a big difference.



34%
TRANSPORTATION

30%
ELECTRICITY

16%
NATURAL GAS

9%
INDUSTRIAL

7%
WASTE & WATER

5%
AGRICULTURE & LANDS

Knowing the source of our regional emissions helps us determine how we can reduce them.

Energy in Buildings

Energy in buildings emissions come from electricity (30%) and natural gas (16%) to combine for the largest source of GHG emissions in the region (46% total). Those emissions come from grid-supplied electricity and direct combustion of natural gas in buildings.

Transportation

Transportation contributes 34% of total regional GHG emissions, primarily from internal combustion engine vehicles using gasoline and diesel fuel on roads and highways.

Industrial Processes

Industrial processes, like semiconductor manufacturing, cement production, and other similar activities, account for 9% percent of all emissions.

Waste & Water

Waste and water emissions (7%) come from solid waste in our regional landfills and wastewater treatment facility byproducts.

Agriculture & Lands

Agriculture and lands create emissions (5%) in Central Texas through livestock, crop production – like corn and grain – and land use change. This sector presents an opportunity for GHG emission mitigation, as natural systems, like trees, can remove carbon from the atmosphere and yield other community co-benefits.

The region produces about 26 million metric tons of CO_2e.

That's about 10 metric tons per person living in the Austin-Round Rock-Georgetown MSA!

Our emissions per capita are lower than some cities, such as San Francisco, Chicago, or Nashville, but significantly greater than others — especially outside of the United States. The global average is about 5 metric tons per person.

GREENHOUSE GAS REDUCTION MEASURES

In this plan, the programs, projects, and strategies for GHG emissions reduction are referred to as 'measures.' From more than 100 proposed measures, six were selected based on several criteria that aligned with the EPA's guidance. Since this is a 'priority' plan, the most important criterion was for measures to have great emissions reduction potential in a short period of time. We also wanted to ensure that measures had willing implementation leads, regional benefits, and community support and/ or benefits.

The Austin Climate Equity Plan provided a basis for community values, and our Community and Stakeholder Advisory Group (CSAG) provided guidance specific to this PCAP. The CSAG helped our team ensure that measures will provide direct benefits to communities, especially low-income and disadvantaged communities. Community members could also contribute input through an online survey, offered in English and Spanish. A challenge our team faced was a compressed timeline that made deep community engagement difficult, with only five months available to complete the PCAP. For the next CPRG deliverable, the CCAP, our team intends to conduct more widespread community outreach across the region.

Regional Staff

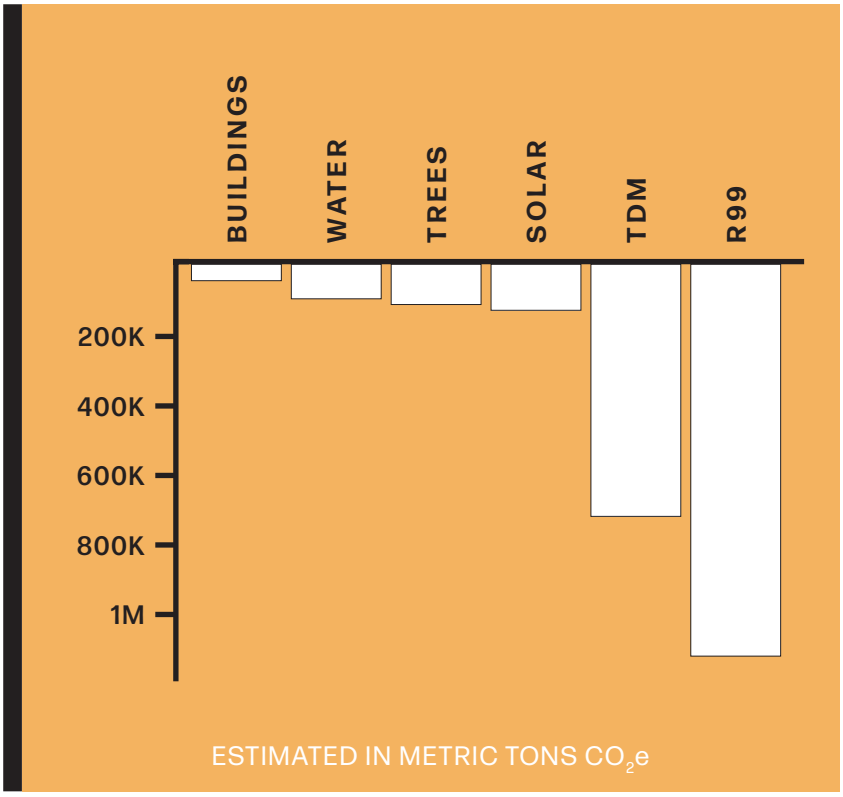
Engagement from regional governments and agencies was integral to the development of the PCAP. Regional staff met bi-weekly to propose, scope, and collaborate on measures. A workshop was held in December 2023, to encourage collaboration.

Community & Stakeholder Advisory Group

A call for Community and Stakeholder Advisory Group members was issued in October 2023. Personalized outreach was conducted, and a demographically diverse group was selected. The 36 CSAG members met monthly during PCAP development. The group provided guidance, input, and ideas for the direction of PCAP measures, and highlighted community-specific concerns and goals.

THE MEASURES

1. IMPLEMENT TRANSPORTATION DEMAND MANAGEMENT PROGRAMS
2. ENCOURAGE AND SUBSIDIZE RENEWABLE DIESEL (R99)
3. INSTALL COMMUNITY SOLAR AND BATTERY STORAGE
4. IMPLEMENT HOLISTIC BUILDING-WIDE UPGRADES TO MUNICIPAL BUILDINGS
5. IMPLEMENT WATER CONSERVATION PROGRAMS
6. IMPLEMENT COMMUNITY-DRIVEN TREE PLANTING & FOREST RESTORATION PROGRAMS



Estimated Greenhouse Gas Reductions

2031 – 2050

Municipal Building Upgrades
47,236 METRIC TONS

Water Conservation
99,379 METRIC TONS

Tree Planting
115,854 METRIC TONS

Community Solar
132,429 METRIC TONS

Transportation Demand Management (TDM)
725,426 METRIC TONS

Renewable Diesel (R99)
1,127,532 METRIC TONS

1

Implement Transportation Demand Management (TDM) programs

Expand existing Transportation Demand Management programs and implement new ones across the region to shift transportation behavior to low-emission modes (like walking, biking, and transit), reduce vehicle miles traveled, and shift commutes to off-peak periods. This measure would also include a dedicated strategy to manage transportation demand during the multi-year disruptions that will be caused by major construction projects, including the development of eight mobility hubs and other supportive infrastructure. A large-scale multilingual grassroots outreach and communications campaign would help inform community members about low-GHG emissions mobility options.

2

Encourage and subsidize renewable diesel (R99)

Provide financial incentives to suppliers and retailers to cover the extra costs associated with offering Renewable Diesel (R99) fuel, making it more competitively priced and accessible to consumers. This would likely be achieved through a combination of government or private subsidies aimed at offsetting the incremental costs incurred by fuel stations and suppliers for handling and selling R99. A regional coalition purchasing cooperative of large fuel users would be formed to demonstrate a willing market of buyers and support buying R99 in bulk. Renewable Diesel (R99) fuel is derived from biomass sources such as vegetable oils (e.g., canola, soybean), animal fats, and waste cooking oils, which are processed to produce a fuel that is chemically similar to petroleum diesel but with a significantly lower carbon footprint, as it utilizes carbon that is part of the current carbon cycle. R99 also has a cleaner combustion profile than conventional diesel, significantly reducing co-pollutant emissions and improving air quality.

3

Install community solar and battery storage

Install up to 35 megawatts of community solar at grade and on roofs, with a focus on low-income communities. Community solar is a solar power project shared by multiple participants who receive credits on their electricity bills for the energy produced, enabling access to solar energy without requiring personal solar panel installations. The community solar project would be co-located with 34 megawatt hours of battery storage, which reduces GHG emissions by storing excess renewable energy for use when production is low, decreasing reliance on fossil fuel power plants. Battery storage provides grid stability, voltage support, and load shaping, reducing the need for high-emitting peaking plants during high demand, further lowering GHG emissions. It also supports infrastructure and building resilience, and re-energizing support during power outages – reducing the reliance on fossil fuel-powered generators.

4

Implement holistic building-wide upgrades to municipal buildings

Establish a funding program for public-facing municipal facilities in the MSA to support retrofits that decrease greenhouse gas emissions by increasing building efficiency and weatherization. Buildings that serve communities identified as low-income, climate-vulnerable, or under-resourced may be considered for full project cost coverage, while others may receive either a fixed price or a percentage of their total project cost. Eligible initiatives include heat pumps, onsite battery storage, solar PV installations, district energy systems, lighting system retrofits, outside airflow controls, refrigerant replacement, and electrification of appliances and kitchens. These initiatives aim to yield measurable reductions in GHG emissions from participating buildings, with applicants required to provide baseline data and projections of reductions and savings. This measure will also support climate resilience through onsite battery storage and heat resilience plans for swimming pools.

5

Implement water conservation programs

Expand and regionalize existing water conservation programs, including rebates and incentives for water-saving fixtures, rainwater harvesting, water-efficient landscaping, education and outreach, tools and resources to help reduce water use, water benchmarking and audits, Artificial Intelligence (AI) strategies for leak detection, and support for on-site water capture and reuse. Because water consumption is energy and carbon-intensive to pump and treat, conserving water and reducing water consumption will mitigate GHG emissions from these processes. Co-benefits associated with reduced water consumption include increased resilience to drought conditions and affordability for consumers.

6

Implement community-driven tree planting and forest restoration programs

Support and expand existing programs for tree planting and forest restoration, which could be accomplished through a combination of funding, capacity-building activities, data collection, and regional collaboration. Various activities contribute to the support of tree planting and health, including raising saplings, planting trees, conducting monitoring and data collection, and implementing practices like tree watering, mulching, and soil enhancement. Mature, climate-smart trees play a crucial role in removing carbon dioxide from the atmosphere through sequestration. Within the Austin-Round Rock-Georgetown MSA, many community-based organizations are dedicated to promoting tree health and conducting planting activities.

WHAT'S NEXT?

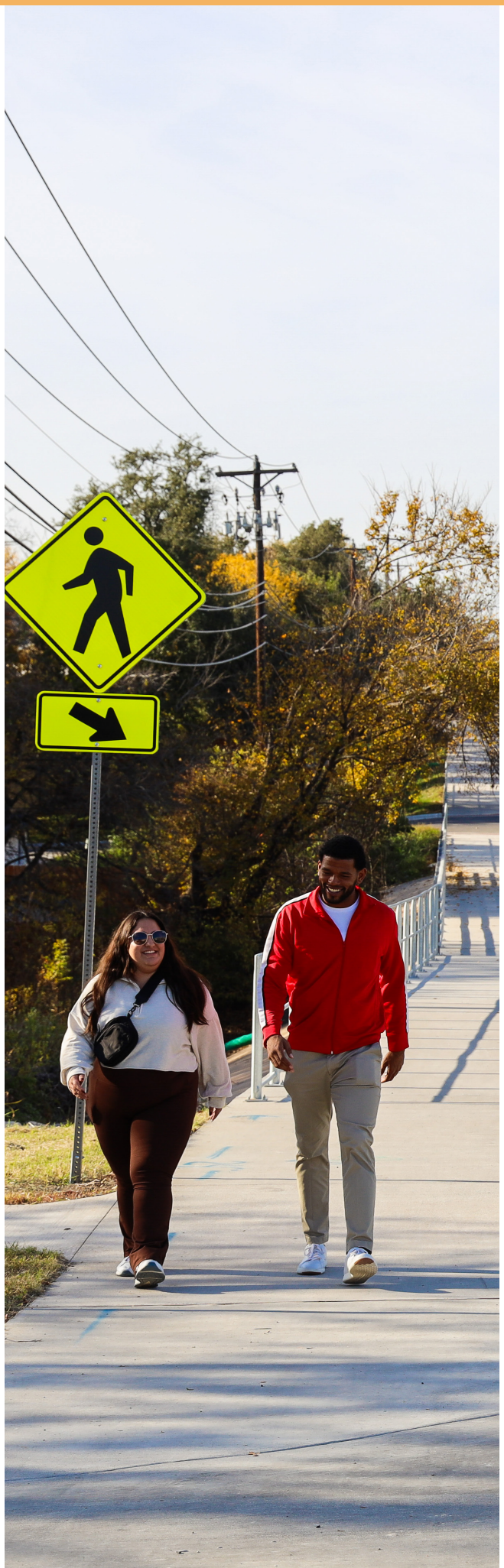
Our team is currently working with partners across the region to identify next steps for each of the priority greenhouse gas emissions reduction measures. Next steps include applying for grants, assessing staff positions and hours needed, supporting existing programs aligned with the measures, and engaging partners. Through joint efforts with the City of Austin's Transportation and Public Works Department and Travis County's Planning and Budget Office, we have advanced funding applications for measures related to transportation demand management and upgrades to municipal buildings.

2025

In 2025, the Comprehensive Climate Action Plan will be published. This plan will include near- and long-term emissions projections, a suite of emissions reduction measures, a robust analysis of measure benefits, plans to leverage federal funding, and a workforce planning analysis.

2027

In 2027, a status report detailing progress for measures included in the PCAP and CCAP will be published. The report will also include any analysis updates, future budget and staffing needs, and next steps for implementation.



OFFICE OF SUSTAINABILITY
CITY OF AUSTIN

MARCH 2024

Summary prepared by the City of Austin's Office of Sustainability on behalf of the Austin-Round Rock-Georgetown region as part of the EPA Climate Pollution Reduction Grant program.