

CECAP: Goals, Targets & Actions

Environment & Sustainability Committee September 21, 2021

Susan Alvarez, Assistant Director Office of Environmental Quality & Sustainability City of Dallas





Goals, Targets & Actions driving the Climate Plan:

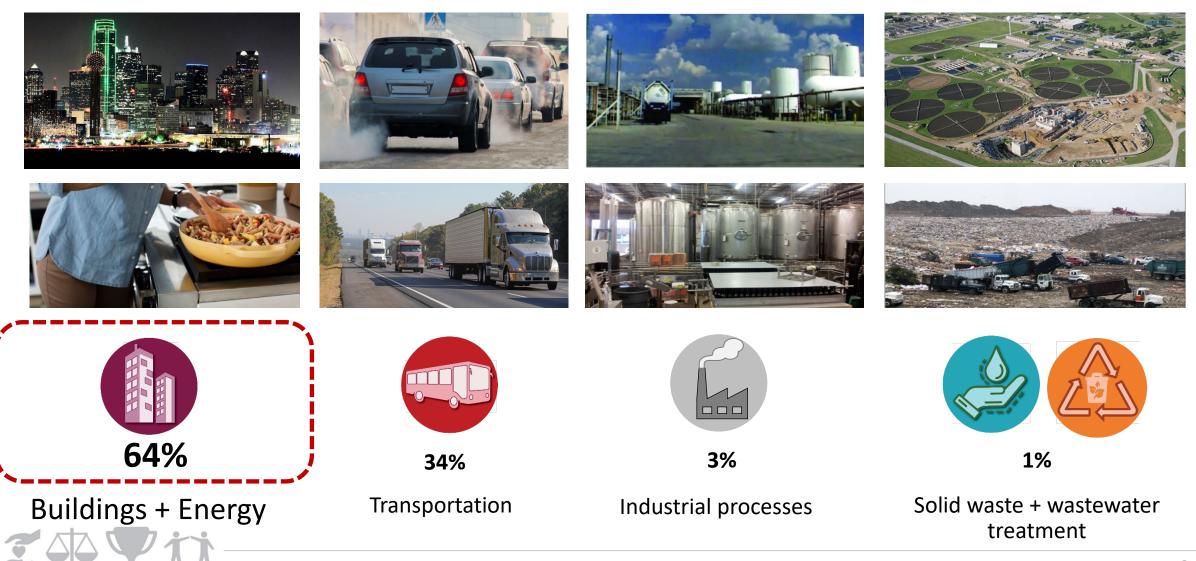
- Science-based targets
- o Basic plan framework
- Ongoing measurable goals and targets





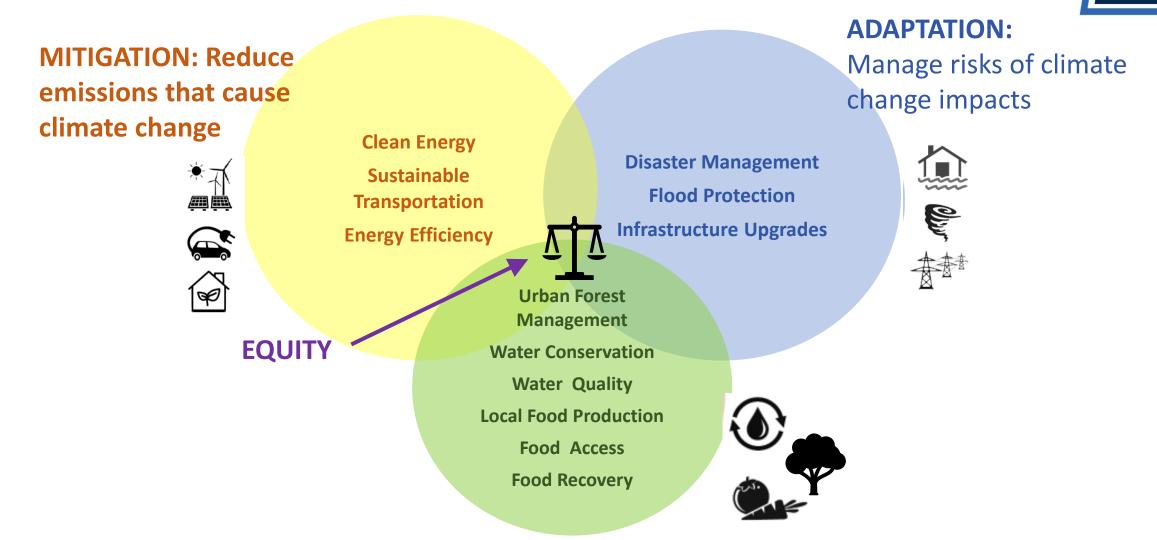
Greenhouse Gas Emissions





Approach to Planning





ENVIRONMENT: Improve Quality of Life + Public Health

CECAP Target Overview



DALLAS BUILDINGS ARE ENERGY-EFFICIENT AND CLIMATE RESILIENT:

100% Net Zero construction by 2030

Reduce energy in existing residential buildings:

- by 10% by 2030
- by 25% by 2050



DALLAS COMMUNITIES HAVE ACCESS TO SUSTAINABLE, RELIABLE AND AFFORDABLE TRANSPORTATION:

EV charging: 1,500 outlets to support 39,000 vehicles by 2030

Electric Fleet: All new transit vehicles by City, DART,

DISD by 2030/ 100% electrified fleet by 2040

Single Occupancy Vehicle Mode Shift: from 88% to

79% share by 2030/to 62% in 2050



Install Solar:

739 MW solar by 2030/ 3,695 MW by 2050 **Renewable electricity plans**:

- •20% residents + businesses by 2030
- •50% residents + businesses by 2050



DALLAS IS A ZERO WASTE COMMUNITY:

Organic Waste Diversion:

• 35% by 2030/ 80% by 2050

Paper Waste Diversion:

• 60% by 2030/ 90% by 2050

Landfill Diversion:

 35% reduction by 2030/ 45% reduction by 2050

CECAP Target Overview (Continued)





DALLAS PROTECTS ITS WATER RESOURCES, AND ITS COMMUNITIES FROM FLOODING AND DROUGHT:

- <u>Water Consumption</u>: % decrease(per capita/year)
- <u>Water for Reuse</u>: 5% by 2030/ 10% by 2050
- Impaired Waterbodies Listed: 30% by 2040/ 100% by 2050
- <u>GHG Emission Reductions from Water Processes</u>: 45% by 2030/ 100% by 2050



DALLAS COMMUNITIES HAVE ACCESS TO HEALTHY, LOCAL FOOD:

- <u>% Population with access to healthy</u> affordable food: 50% by 2030/ 100% by 2050
- Increase Acreage of Urban Gardens: 20% by 2030/75% by 2050
- <u>% Increase in food from local producers:</u> 10% by 2030/ 50% by 2050

- DALLAS PROTECTS AND ENHANCES ECOSYSTEMS, TREES AND GREEN SPACES THAT IMPROVE PUBLIC HEALTH:
- <u>Canopy cover citywide</u>: 33% by 2030/ 40%+ by 2050
- Urban Heat Island Index Reduction: 20% by 2030/75% by 2050
- <u>Park/Trail Access <1 mile walk</u>: 80% of population by 2030/ 95% by 2050



DALLAS COMMUNITIES BREATHE CLEAN AIR:

- <u>Ground Level Ozone Attainment</u>: Attain by 2030/ Maintain by 2050
- Maintain AQ Attainment for lead, Carbon Dioxide, Particulate Matter (PM10/PM2.5) and Sulfur Dioxide: Maintain through 2050.

CECAP Breakdown:

97 CECAP

Actions



SECTORS / GOALS

PRIMARY BENEFIT CO-BENEFITS 46 (Je IMPROVE PUBLIC HEALTH + WELL-BEING 40 **PROVIDE COST** SAVINGS 31 P IMPROVE AIR QUALITY 28 **PROVIDE EDUCATION,** SKILLS OR TRAINING **24** IMPROVE ACCESS TO EMPLOYMENT / JOB CREATION 15 **REDUCE INEQUALITY** + POVERTY 17 (₩Ŷ REDUCE GHG EMISSIONS **08** INCREASE NATURAL RESOURCE CONSERVATION

> 11 IMPROVE WATER QUALITY

13 REDUCE RESOURCE CONSUMPTION



10 PROMOTES ENVIRONMENTAL STEWARDSHIP

10 REDUCE VULNERABILITY







GOAL 1: DALLAS' BUILDINGS ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.



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Objectives

- Increase energy efficiency of **existing buildings** or facilities.
- Ensure that **new buildings** are constructed sustainably and are carbon neutral.
- Increase climate resilience for new and existing buildings through structural and operational improvements.



New Vickery Park Branch Library





GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE, AND AFFORDABLE ENERGY.



- Maintain a high degree of **reliability** during extreme weather events.
- Encourage investment in, and greater use of, **renewable energy.**
- Ensure **affordable acc**ess to renewable electricity.





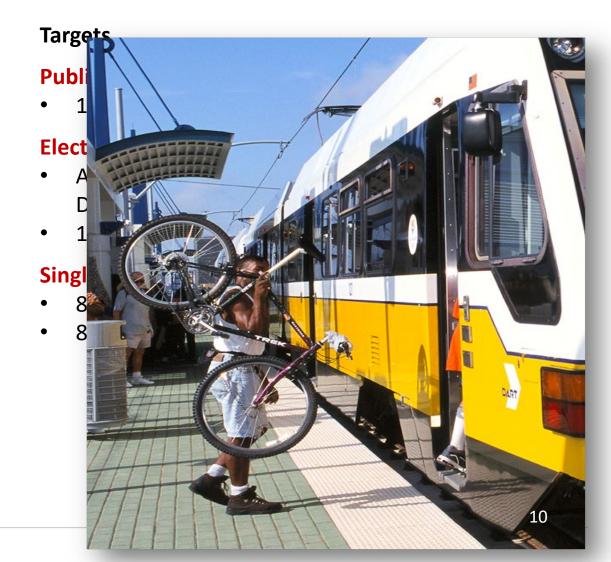


GOAL 3: DALLAS' COMMUNITIES HAVE ACCESS TO SUSTAINABLE, AFFORDABLE, TRANSPORTATION OPTIONS.

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Objectives

- Shift the surface transportation system to move people and goods in **fuel-efficient vehicles.**
- **Reduce trips** where people drive alone.
- Synergize jobs and housing with transportation infrastructure to increase access to walking and biking options, and public transit.
- Ensure that walking, biking, public transit, vehicular transportation **infrastructure is reliable and safe**.







Objectives

 Create opportunities to go beyond recycling and choose to refuse, reduce, reuse and repair.

GOAL 4: DALLAS IS A ZERO WASTE COMN

- Operate a clean, green and **efficient** waste system.
- Generate energy from organics.







GOAL 5: DALLAS PROTECTS ITS WATER RESOURCES AND ITS COMMUNITIES FROM FLOODING AND DROUGHT.

Objectives

- **Conserve and protect** our water resources through community stewardship, educational programs and best management practices.
- Protect neighborhoods from flooding and prepare them for droughts.
- Be a **regional leader** in water resilience by leveraging innovative approaches, strategies and technologies.

Targets



Water consumption

• 1% decrease (per-capita) annually

Water for indirect reuse

- 5% implementation by 2030
- 10% implementation by 2050

Impaired waterbodies

• 30%, 60% and 100% reduction by 2030, 2040 and 2050 *(DWU service area)*

GHG emissions from treatment facilities

- 45% reduction by 2035
- 100% reduction by 2050



GOAL 6: DALLAS PROTECTS AND ENHANCES ITS ECOSYSTEMS, TREES AND *GREEN SPACES* THAT IN TURN **IMPROVE PUBLIC HEALTH.**

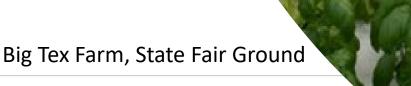
Objectives

- Leverage green spaces to provide climate adaptation benefits.
- Increase, enhance and maintain healthy forests, parks, and green spaces.
- Integrate **nature-based solutions** into the public realm as a public health strategy.



GOAL 7: ALL DALLAS' COMMUNITIES HAVE ACCESS TO HEALTHY, LOCAL FOOD.

- Build organizational capacity and partnerships.
- Improve food access in neighborhoods with low food access.
- Reduce food miles by encouraging local food production & consumption.
- Prepare the food system to be more resilient to extreme weather events.
- Prevent food waste through food donations, recovery, diversion and composting.



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GOAL 8: ALL DALLAS' COMMUNITIES BREATHE CLEAN AIR

- Work with TCEQ to expand regulatory air quality network
- Partner to install non-regulatory air quality sensors
- Continue to support NCTCOG Air North Texas Program
- Ensure new industries are an appropriate distance away from neighborhoods.



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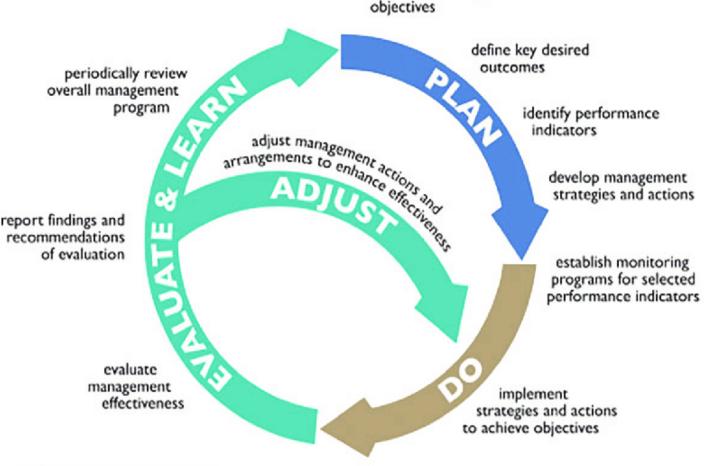
Neighborhood Air Quality Monitor near Exline Community Center



Approach to Implementation

- Update the GHG Inventory in 2021 using 2019 data
- Two-year updates will be included in CECAP
- Re-evaluate ERCOT, NCTCOG, and other data to update estimates
- Re-calibrate actions towards zero emission goals





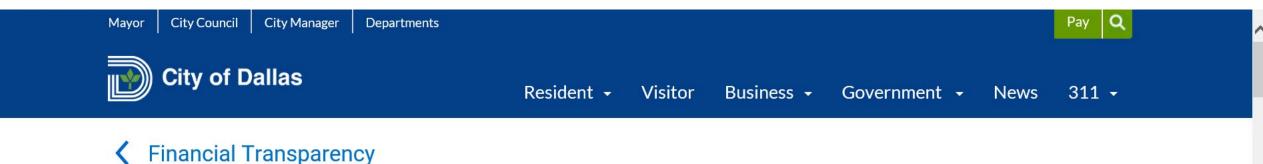
Source: DPIPWE 2014 after Jones 2005, 2009



DALLAS



New Performance Measure: 92% CECAP FY Milestones Implemented



Dedicated to "Service First"

The City of Dallas is committed to providing excellent service 24 hours a day, 7 days a week, 365 days a year. The Dallas 365 dashboard tracks our progress on 35 performance measures aligned to the City's six strategic priorities. Discover Dallas' story below, and stop by monthly to see the latest data.



CECAP FY 20-21 Implementation Work Plan



- Year 1 Focus Building Capacity
- 48 Actions with 136 Identified Milestones
- 19 City Departments involved

COMPREHENSIVE ENVIRONMENTAL AND CLIMATE ACTION PLAN



IMPLEMENTATION WORK PLAN Fy 20-21

BY OFFICE OF ENVIRONMENTAL QUALITY & SUSTAINABILITY WITH ENVIRONMENT & SUSTAINABILITY TASK FORCE AND LEADING ENVIRONMENTAL ACTION FORWARD

NOVEMBER 2, 2020



More information at DallasClimateAction.com



Dallas Climate Action

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DALLAS CLIMATE ACTION

YOUR CONNECTION TO THE CITY OF DALLAS **COMPREHENSIVE ENVIRONMENTAL & CLIMATE ACTION PLAN**



A Statement from the Mayor

On Climate Change:

"Dallas is a healthy, safe and economically vibrant city. But to be a truly resilient city, Dallas must prepare for the effects of climate change. I want Dallas to continue to be a leader in efforts to reduce emissions and improve our air quality. Through our collective efforts and a focus on common-sense, data-driven solutions, we can ensure that our great city continues to thrive in the decades to come."

- Mayor Eric Johnson

QUESTIONS?









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