

# SA CLIMATE READY Climate Action & Adaptation Plan Update

Presented by: Douglas Melnick, AICP, ISSP-SA, CNU-A Special Meeting April 8, 2021 Item #1



# Our Goals for Today

- Review San Antonio's climate goals and projected impacts
- Review 2019 Greenhouse Gas Inventory results
- Review 2021 SA Climate Ready and Sustainability priorities

#### **Paris Climate Agreement**

On June 22, 2017, City Council passed Resolution No. 2017-06-22-0031R in support of the Paris Climate Agreement, directing city staff to develop a plan to help San Antonio meet the objectives of this agreement.

After extensive public input, City Council adopted the SA Climate Ready Plan by Ordinance 2019-10-17-0840 on October 17, 2019.

President Biden rejoined the accord on January 20, 2021.



**United Nations** Climate Change

#### CoSA's Commitments



- Climate equity
- Carbon neutral by 2050
- Climate adaptation
- Reporting requirements

SA City Council Resolution in **Support of Paris Climate** Agreement Jun 22, 2017



President Biden rejoins Paris Climate Agreement January 30, 2021



**SA City Council Adopts CAAP** Oct 17, 2019

Carbon neutral by 2050

## **SA Climate Ready Initiatives**



**PASSED** 



Property Assessed Clean Energy (PACE)

**LAUNCHED** 



Mayor's Youth Climate Council

COMPLETED



Share the Streets Pilot Project

**LAUNCHED** 



**SA Climate Ready Communications Initiative** 

**ONGOING** 



**Electric Vehicle Programs** 

**ONGOING** 



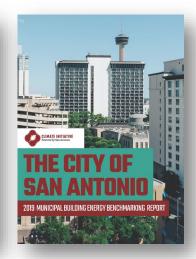
**All-CoSA Staff Climate Training** 

**LAUNCHED** 



**Climate Advisory Committees Established** 







SA Sustainability Dashboard sasustainability.com

## **SA Climate Ready Advisory Committees**



#### Quarterly Advisory Committee Meetings

**Kick-off Orientation Meeting** 

✓ November 17, 2020

**Climate Equity Advisory Committee** 

✓ March 2, 2021

**Tech & Community Advisory Committee** 

✓ March 3, 2021

#### Climate Change 101

Webinar with Dr. Andrew Dessler

✓ January 11, 2021

#### **Racial Equity Trainings**

Historical Truths Unveiled: An Intro to Racism in the U.S.

✓ January 16 & 23, 2021

**Examining Power and Its Impact** 

√ February 2 & 9, 2021

Race Equity Impact Assessment Tool

✓ February 24 & March 30, 2021

#### **Special Meeting**

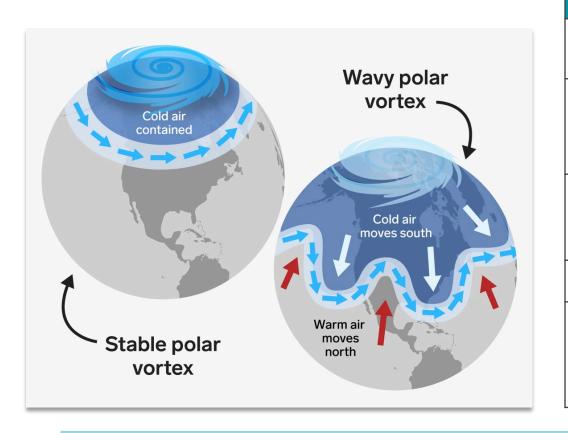
- 2019 Greenhouse Gas Inventory
- Cost-Benefit Analysis
- Priority Projects & Policies
- Chair & Vice-Chair Selection
- Meeting Frequency
  - > April 26, 2021

#### **Subcommittees**

- Communications & Engagement
- Data & Indicators
- Climate Equity Screening Tool & Best Practices

## **Climate Projections**





| San Antonio End of Century                  | Low<br>Emissions<br>Pathway | High<br>Emissions<br>Pathway |
|---|-----------------------------|------------------------------|
| Summer Maximum Temperature                  | + 6° F                      | + 10° F                      |
| Hot Days<br>(Maximum Temperature >100° F)   | + 48 days                   | + 94 days                    |
| Warm Nights<br>(Minimum Temperature >80° F) | + 10<br>nights              | + 55<br>nights               |
| Annual Precipitation                        | - 3 inches                  | - 4 inches                   |

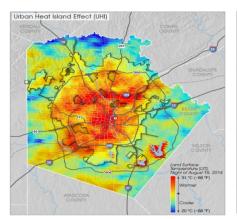
+ Increased flooding

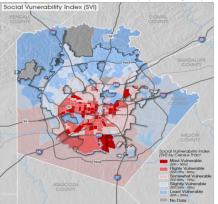
+ Increased extreme storms

+ Increased cold weather events

## Climate Impacts, Adaptation + Equity







Urban Heat Island Effect (UHI)

Social Vulnerability
Index (SVI)

#### **Priority Communities**

- Communities of color
- Low-income communities
- Seniors
- People with disabilities



Vulnerability to heat-related illnesses, respiratory illnesses, or vector borne diseases



Exposure to GHGs emissions and environmental pollution



Risks from extreme cold and impacts on housing lacking adequate weatherization



Higher utility bills



Negative impacts on transportation infrastructure resulting in reduced mobility choices



Compounded environmental and economic stresses



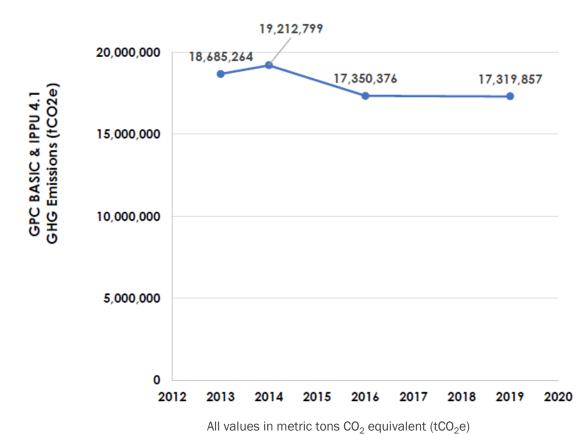
San Antonio
2019 GHG
Emissions
Inventory



## **Total Community Emissions**



#### Historic San Antonio Community GHG Emissions



Between 2016 and 2019, total GHG emissions

#### decreased 0.2%



**Population** increased 4%



Total **building energy consumed** increased



Transportation emissions increased

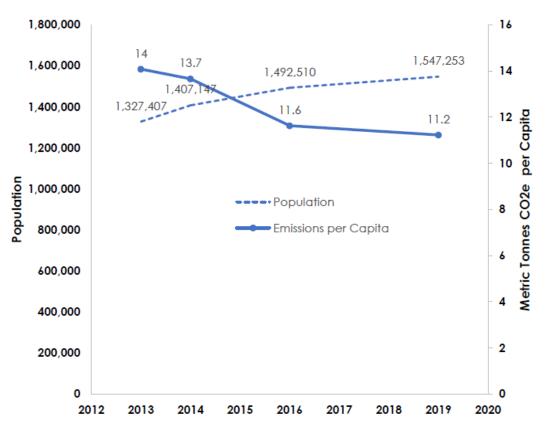


>10% reduction in CPS Energy's emissions intensity of electricity

## Per Capita Community Emissions



#### San Antonio Community GHG Inventory Emissions Per Capita



2019 population source: https://www.census.gov/search-results.html?q=san+antonio+tx+2016+population&page=1&stateGeo=none&searchtype=web&cssp=SERP

Between 2016 and 2019, per capita GHG emissions

#### decreased 4%



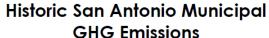
**Population** increased 4%

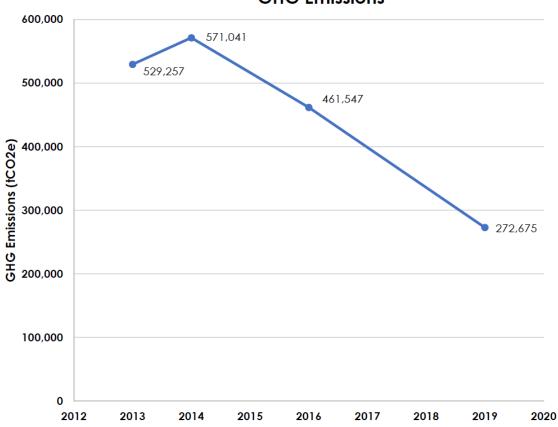


>10% reduction in CPS Energy's emissions intensity of electricity

## **Municipal Emissions**







All values in metric tons CO<sub>2</sub> equivalent (tCO<sub>2</sub>e)

Between 2016 and 2019, municipal GHG emissions

#### decreased 41%\*



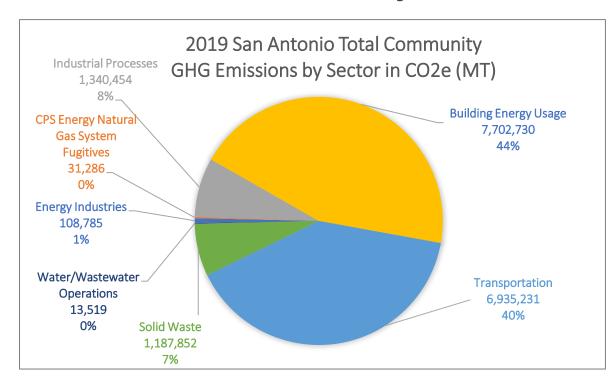


\*Decrease driven primarily by methodology changes to remain consistent with best practices

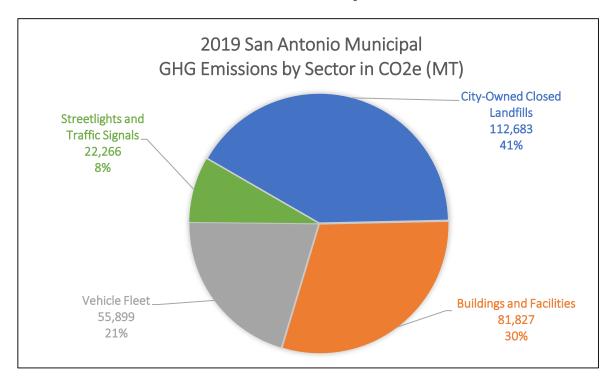
## **Emissions by Sector**



#### Community



#### Municipal

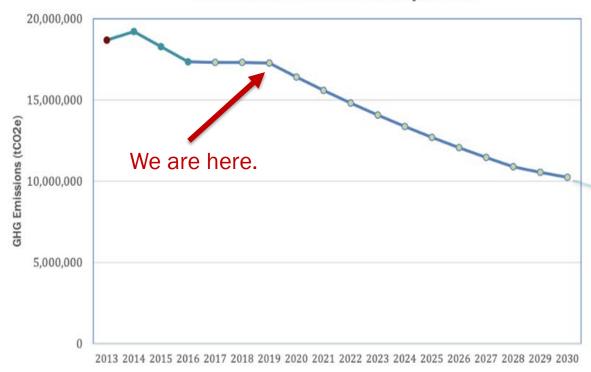


#### **Further Action Needed to Achieve CAAP Goals**



This graphic is illustrative, as the pathway may not be linear.

#### San Antonio Emissions: Pathway to 2030



Where do we need to be?

The blue line charts SA's anticipated pathway to the 2030 milestone. On average, it requires an annual decrease of 4-5%.

2040's milestone 5M tC02e

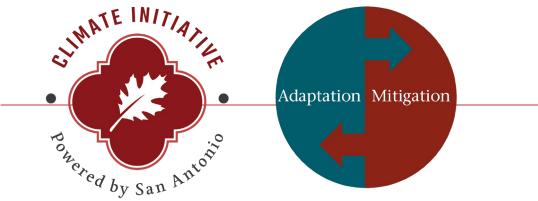
2050 milestone carbon neutral

All values in metric tons CO2 equivalent (tCO2e)





### **Priorities**



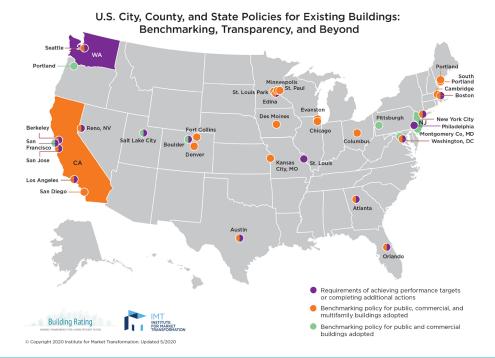
- Climate Action & Adaptation Policy
- Energy Efficiency
- Municipal Sustainability
- Clean and Green Transportation
- Education & Empowerment



## **Policy: Energy Benchmarking**







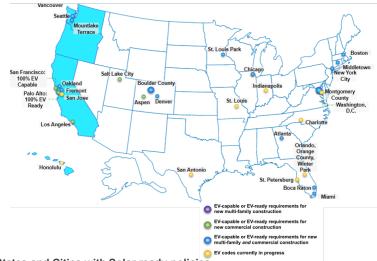
- ✓ Large commercial buildings benchmark energy use with EPA's ENERGY STAR® Portfolio Manager
- Public disclosure of results
- ✓ Realizes energy and cost savings
- ✓ Reduces energy demand & supports grid resilience
- ✓ Creates new jobs
- ✓ Improves public health
- ✓ Benchmarking Advisory Committee
- ✓ Education campaign with USGBC, ULI, AIA, and SA 2030 District
- April 2021 review with SA Climate Ready Advisory Committees
- ✓ Conduct equity assessment



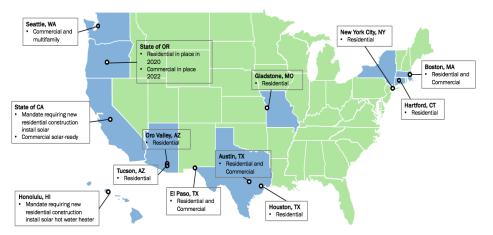
### **Policy: EV & Solar Readiness**



#### Cities that have adopted or are pursuing EV ready policies



States and Cities with Solar ready policies



- ✓ Minimal EV and solar infrastructure in new commercial and residential buildings
- ✓ Reduces future installation and retrofit costs
- ✓ Increases individual and community resilience
- ✓ Supports consumer choice and market shifts
- ✓ Reduces property owners' and tenants' energy bills
- > April 2021 review with SA Climate Ready Advisory Committees
- > Conduct equity assessment



## **Sustainability and Climate Initiatives**



#### Municipal Sustainability

- Energy Efficiency Fund Projects
- CoSA Delivery Teams
- Departmental SA Climate Ready Consistency Documents
- All-CoSA Staff Climate Training
- Municipal Energy Policy for City Buildings and Facilities
- Biden's America Jobs Plan

## Education & Empowerment

- SA Climate Ready Advisory Committees
- Mayor's Youth Engagement Council for Climate Initiatives
- SA Climate Ready
   Communications Initiative w/
   Texas Creative and CBOs
- Research and Data Analysis
- Race and Climate Equity
   Training

## Clean & Green Transportation

- EVSA Public Information Campaign (CMAQ Grant)
- Publicly Accessible EV Charging Infrastructure with Blink
- Fleet Environmental Acquisition Policy Update with BESD

