

# **CECAP: Resilient and Energy Efficient Buildings Powered by Sustainable, Renewable, Energy**

## **Environment & Sustainability Committee**

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**February 3, 2020**



# **City of Dallas**

# Overview

- Background
- Dallas Green Energy Policy
- Community Feedback
- Draft CECAP Building and Energy Objectives



# Background

- Current electricity contract is 100% green energy through renewable energy credits (RECs)
- City of Dallas is highly ranked among U.S. Environmental Protection Agency's Green Power Partnership participants
  - #2 on top 30 Local Government List
  - Recipient of 2019 Excellence in Green Power Use Leadership Award from EPA



# Dallas Green Energy Policy

- Requires 100% renewable energy use for municipal operations
- Set up energy management program
- Directs exploring feasibility of on- and off-site solar and renewable energy projects

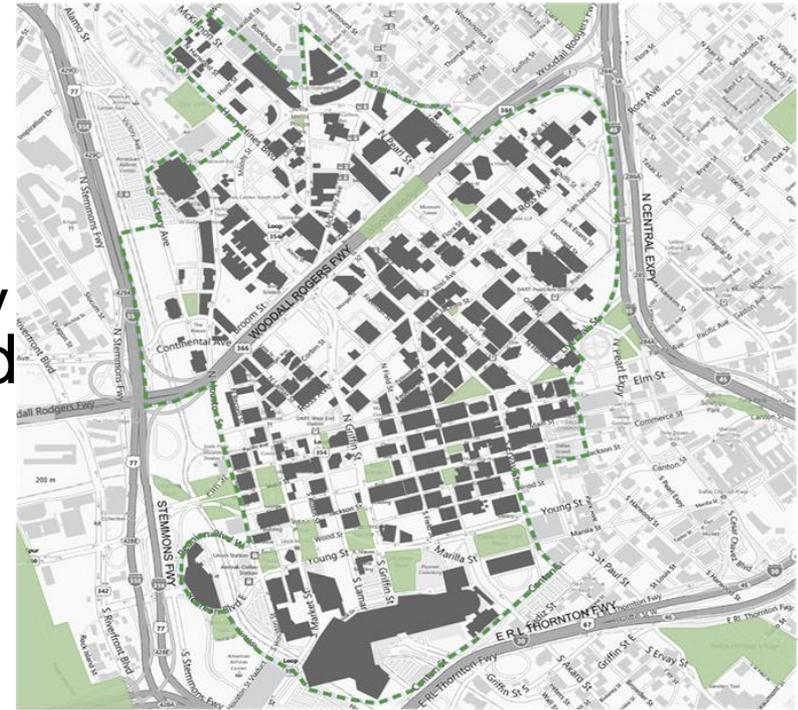


# Dallas Green Energy Policy

- Adopted by City Council in April 2019 and is the City's first energy policy
- Adopted in part to address climate risk
- Provides template for other governmental entities to transition to clean energy
- Does not apply to community energy use

# DALLAS 2030 District

- The Dallas 2030 District national, public-private organization effort to reduce Central Business District energy and water use 50% by 2030 and promote transit.
- City facilities:
  - City Hall
  - Dallas Convention Center
  - J. Erik Jonsson Central Library
  - Meyerson Symphony Center
  - Dallas Museum of Art
  - And others....

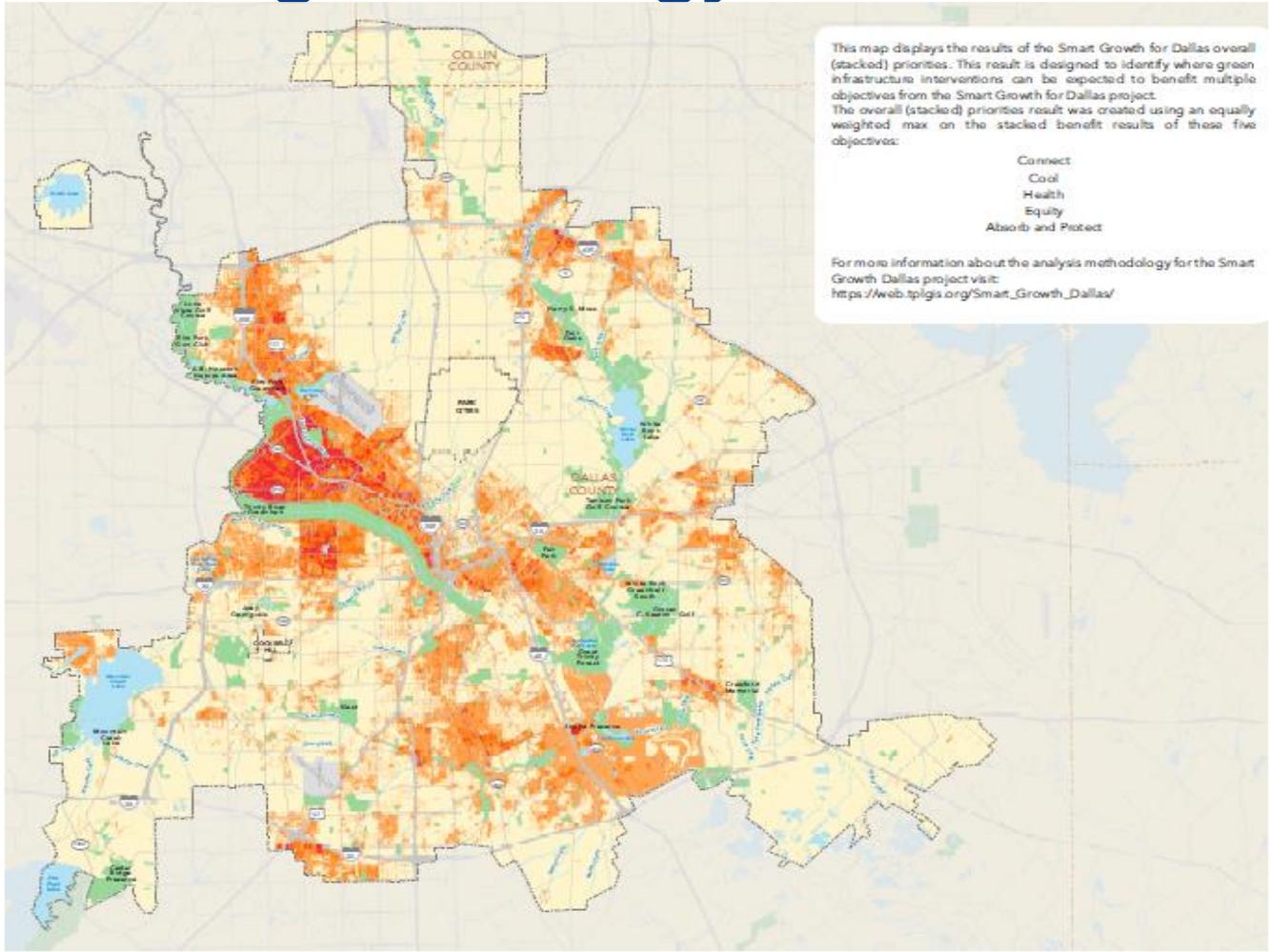


DALLAS  
2030 DISTRICT®  
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# Draft Plan Focus & Goals

- *Dallas uses renewable, reliable, and affordable **energy***
- *Dallas' **buildings** are energy efficient and resilient*
- Dallas communities have access to energy efficient, affordable **transportation** options
- Dallas is a **Zero-waste** community
- Dallas protects its **water** resources and its communities from flooding & drought
- All Dallas communities have access to healthy, local **food**
- All Dallas communities breathe clean **air**
- Dallas protects its **ecosystems** that in turn, protect public health

# Buildings & Energy Under Climate Equity Lens



“Climate change affects all, but not all people are affected equally.”  
- Jacqueline Patterson, Director of the NAACP Environmental and Climate Justice Program

# Ideas from Community Outreach Efforts

## Energy

- Promote solar energy and renewables
- Implement stricter regulations
- Support tax incentives for energy efficiency
- Promote alternative financing or rebates for solar panels

## Buildings

- Require new construction to meet high energy efficiency standards
- Promote rebate programs to upgrade homes to be more energy efficient
- Convert streetlights to LED light fixtures
- Improve building and lighting efficiency

# Action Development Process

Plan Review



Public Input



Benchmarking



Objectives/  
Strategies



Screening



DRAFT  
PLAN



# CECAP Energy Sector Objectives



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

# Draft Energy Objectives + Actions

*Maintain a high degree of reliability during extreme weather events*

- Maintain a high degree of reliability in the electric delivery grid through cooperative actions between the City and Oncor.
- Evaluate the potential for the City invest in energy storage technologies for resilience and renewable energy development



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# Draft Energy Objectives + Actions

*Encourage investment in, and greater use of, renewable energy*

- Continue partnership with Oncor and other Public Utility Companies on renewable energy education
- Work with local community colleges to train local workforce focused on renewable energy technologies.
- Build a regional strategic partnership to promote renewable energy
- Continue to implement City's Green Energy policy



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# Draft Energy Objectives + Actions

*Ensure affordable access to renewable electricity*

- Extend partnership with Oncor, PACE, and other Public Utility Companies to provide further incentives for renewable energy.
- Establish and invest in renewable energy hubs
- Extend City efforts to develop more renewable energy projects on City facilities.



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# CECAP Building Sector Objectives



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

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# Draft Building Objectives + Actions

## *Increase energy efficiency of existing buildings/facilities*

- Demonstrate leadership in developing a carbon neutrality plan for municipal operations.
- Maintain Level 3+ Airport Carbon Accreditation for DFW; achieve Level 3+ accreditation - Love Field; consider for Dallas Executive Airport
- Develop clear and comprehensive building energy efficiency educational program
- Implement a citywide building weatherization program with community organizations
- Identify new finance mechanisms to accelerate energy efficiency improvements
- Establish building electrification program to replace appliances/ systems with electric options
- Increase participation and scope of the Dallas Green Business Certification program
- Do a Better Buildings Challenge to take 2030 District goals beyond Downtown Dallas
- Establish a point-of-sale/point-of-lease home energy rating and disclosure educational program for single-family homes
- Implement a benchmarking and disclosure ordinance for commercial buildings

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# Draft Building Objectives + Actions

*Ensure that new buildings are constructed sustainably and are carbon neutral*

- Update the building code to require wiring for solar photovoltaics and electric vehicle charging infrastructure
- Evaluate and consider a Zero Net Energy (ZNE) code for all new buildings and substantial renovations by 2030.



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# Draft Building Objectives + Actions

*Increase climate resilience for new and existing buildings through structural and operational improvements*

- Establish urban greening factor for new developments to quantify project contributions to urban greening, reducing stormwater runoff and urban heat island impacts.
- Promote passive building design (e.g. orientation, shading devices) through the City's design standards.
- Evaluate potential city-owned properties for the creation of 'resilience hubs'.



# Next Steps

- Deeper dive into focus and goals over next committee meetings
  - March 2<sup>nd</sup> - Urban Agriculture/ Zero Waste
  - April 6<sup>th</sup> - Review full Draft Plan
  - April 22<sup>nd</sup> - Council Resolution for CECAP Approval
- Draft Plan Review: February 3 - March 3, 2020

# Questions and Comments

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