

City Scale Solutions Toward Net Zero

Featuring C40, ICLEI, City of Miami and City of Austin



Urban Sustainability Solutions Forum | July 21, 2021

This event is hosted by the LEED for Cities and Communities program at the U.S. Green Building Council.

Join the global movement of cities and communities advancing progress on urban sustainability.



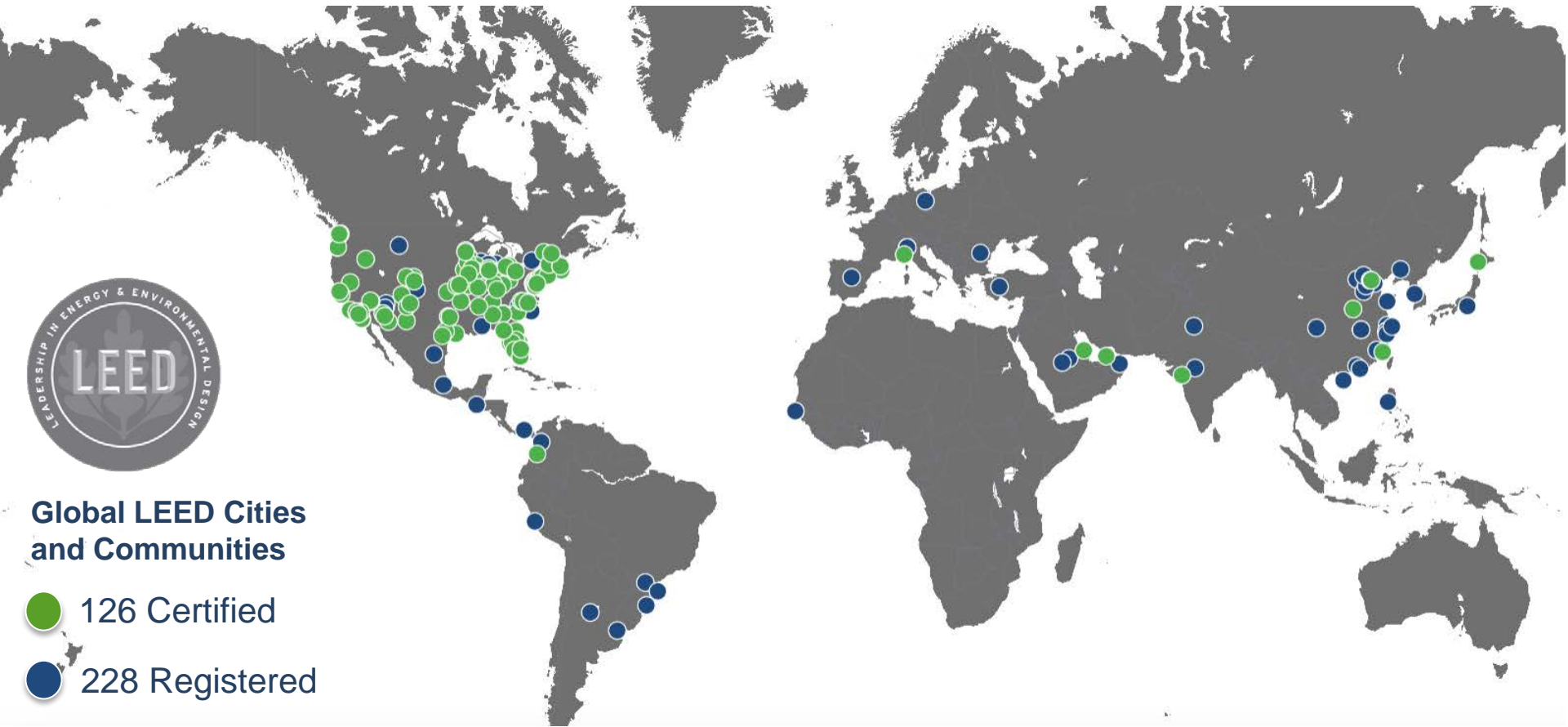
Global LEED Cities and Communities



126 Certified



228 Registered



Agenda

- Welcome
- Introduction of Speakers
- C40: Cities Race to Zero Campaign
- ICLEI: Science Based Targets
- Remarks City of Miami and City of Austin
- Moderated Discussion
- Questions from Audience

Our Speakers



Laura Jay
C40 Cities



Zach Baumer
City of Austin, TX



Jonathan Klopp
City of Miami, FL



Joshua Radoff
ICLEI USA

CITIES

RACE TO ZERO



© Henning Witze



Nations Unies

Conférence sur les Changements Climatiques

COP21/CMP11

Paris France



“Every country, city, financial institution and company should adopt plans for transitioning to net zero emissions by 2050 and take decisive action now to put themselves on the right path towards achieving this vision”. Antonio Guterres, Secretary General of the United Nations,

COP26

November 1-12, 2021

Glasgow, Scotland

The most important milestone since the adoption of the Paris Agreement: for the first time nations are expected to present new and enhanced pledges showing how they will reach net-zero emissions by 2050.

CITIES RACE TO ZERO

Official partner for cities into the global Race to Zero campaign run by the United Nations .

Race to Zero rallies cities, regions, businesses, and investors committed to the 1.5°C goal of the Paris Agreement and to achieving net zero emissions by 2050 at the very latest.



To join go to www.citiesracetozero.org and sign the **Cities Race to Zero pledge**.



*“As the first generation of leaders to recognize the scale of the impending climate crisis and the last generation to be able to prevent it, I invite you to join the **Cities Race to Zero**”.*

Eric Garcetti, Mayor of Los Angeles, Friend of COP26 & C40 Chair

Who is already in the Race?



758

Cities



3,067

Businesses



633

Universities



31

Regions



7%

Global CO2 emissions



0.62

Billion people



12%

Global economy US\$9.81 trillion
in revenue

Cities Race to Zero pledge:

5 REQUIREMENTS

01

Endorse the following principles:

- We recognise the global climate emergency.
- We are committed to keeping global heating below the 1.5°C goal of the Paris Agreement.
- We are committed to putting inclusive climate action at the center of all urban decision-making, to create thriving and equitable communities for everyone.
- We invite our partners – political leaders, CEOs, trade unions, investors, and civil society – to join us in recognising the global climate emergency and help us deliver on science-based action to overcome it.

02

Pledge to reach net-zero in the 2040s or by mid-century at the latest and limit warming to 1.5°C.

03

Plan to set an interim 2030 target consistent with a fair share of 50% global emission reductions.

04

Proceed to planning at least one inclusive climate action, eg. Procure only zero emission buses from 2025.

05

Publish your target and action to your usual reporting platform and report progress annually.

JOINING the Cities Race to Zero



The next decade will decide the future for humanity. **Delivering a green and just recovery to the COVID-19 crisis; creating strong, fair economies that serve everyone; and cutting greenhouse gas emissions quickly enough to limit global heating to the 1.5°C target of the Paris Agreement, are one and the same thing. None are possible without the others. Success in all is the only way to prevent a catastrophic crisis.**

C40 Cities, the Global Covenant of Mayors for Climate & Energy (GCoM), ICLEI – Local Governments for Sustainability (ICLEI), United Cities and Local Governments (UCLG), CDP, the World Wide Fund for Nature (WWF) and the World Resources Institute (WRI) have come together to mobilize an unprecedented coalition of cities committed to setting science-based targets and start implementing inclusive and resilient climate action ahead of and beyond the COP26 in Glasgow. This is the Cities Race to Zero effort, with the goal of recruiting 1,000 cities to the [Race to Zero](https://www.citiesracetozero.org), in support of the COP26 Roadmap of Local Governments and Municipal Authorities (LGMA) Constituency to the UNFCCC.

Join 'Cities Race to Zero'



www.citiesracetozero.org

1.

Pledge Form

On behalf of , I pledge the following:

1. Publicly endorse the following Principles:

- We recognise the global climate emergency.
- We are committed to keeping global heating below the 1.5°Celsius goal of the Paris Agreement.
- We are committed to putting inclusive climate action at the center of all urban decision-making, to create thriving and equitable communities for everyone.
- We invite our partners – political leaders, CEOs, trade unions, investors, and civil society – to join us in recognising the global climate emergency and help us deliver on science-based action to overcome it.

2. Pledge to reach (net)-zero in the 2040s or sooner, or by mid-century at the latest, in line with global efforts to limit warming to 1.5°Celsius.

3. In advance of COP26, explain what steps will be taken toward achieving net zero, especially in the short- to medium-term. Set an interim target to achieve in the next decade, which reflects a fair share of the 50% global reduction in CO2 by 2030 identified in the IPCC Special Report on Global Warming of 1.5°Celsius.

4. Immediately proceed to planning at least one inclusive and equitable climate action as listed on www.citiesracetozero.org that will help to place your city on a resilient pathway consistent with the 1.5°Celsius objective of the Paris Agreement and begin implementation no later than 2022.

5. Report progress annually, beginning no later than 2022 to your usual or the recommended reporting platform. Your 1.5°Celsius target and action commitment(s) should be shared through your regular channels of reporting. If you have not reported before, you will be contacted by partners for support.

Once adopted, I commit to report my target and action commitment(s) on the following platform:

2.



CREATE A MORE INCLUSIVE SOCIETY

- ☐ Collect information on the needs of frontline communities (including children, workers in transitioning industries, women, refugees, etc) with respect to climate planning and/or implementation.
- ☐ Collect spatial or disaggregated data to inform the design and/or monitor the implementation of climate actions.
- ☐ Demonstrate how actions contribute to delivering social and economic benefits, to reducing inequality and to driving a just transition for workers, through carrying out a wider benefits or equity assessments for at least 2 priority city-wide transformative climate actions.
- ☐ Take action to develop 15- or 30-minute neighborhoods (also known as complete neighborhoods) all throughout the city, where residents are able to meet most of their needs within a short walk or bicycle ride from their homes.

3.

Name of Sponsor (mayor, council leader or equivalent)

Title of Sponsor

Your Name (Person submitting this form)

Your Title

Your Email

Resources Available to Cities

ICLEI USA AND CDP



2030 Science-Based Targets (SBTs)



SBTs include a 2050 zero carbon goal and an interim 2030 goal.
To meet the Paris Agreement commitment of keeping warming below 1.5°C.



SBTs are significant because:

- It is important to have a short term goal.
- Most short terms goals aren't aligned with SBTs.
- Most analyses are outdated.



ICLEI's calculation methodology is based on the World Wide Fund for Nature's (WWF) One Planet City Challenge (OPCC) and uses inventories from between 2016 and 2019

SBT Overview



Per Capita SBT

Absolute SBT

National

62.8-63.4%

45.2-64.4%

63.3% Average and Median

60.7% Average **62.2%** Median

Florida

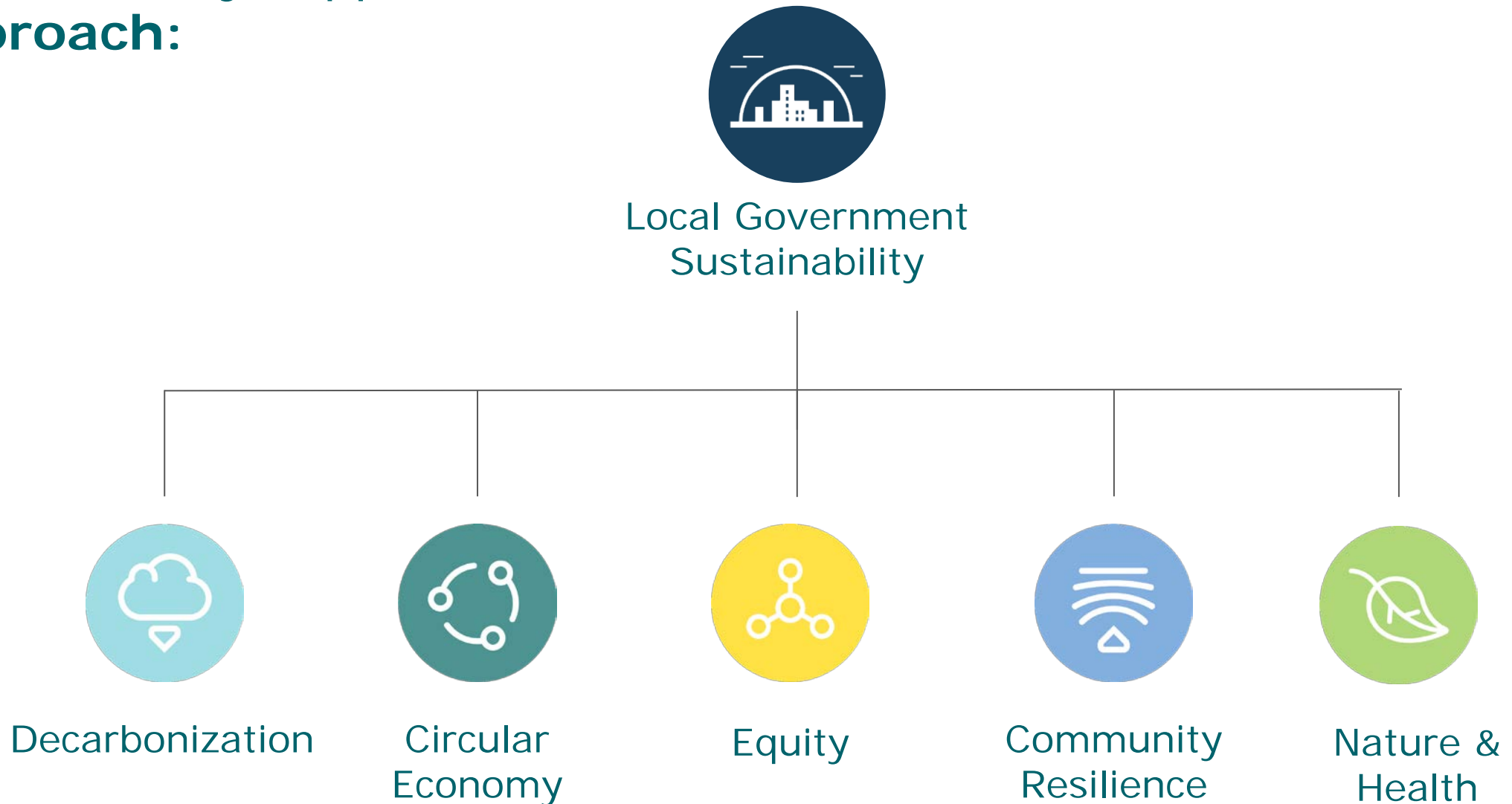
62.8-63.4%

49.3-63.1%

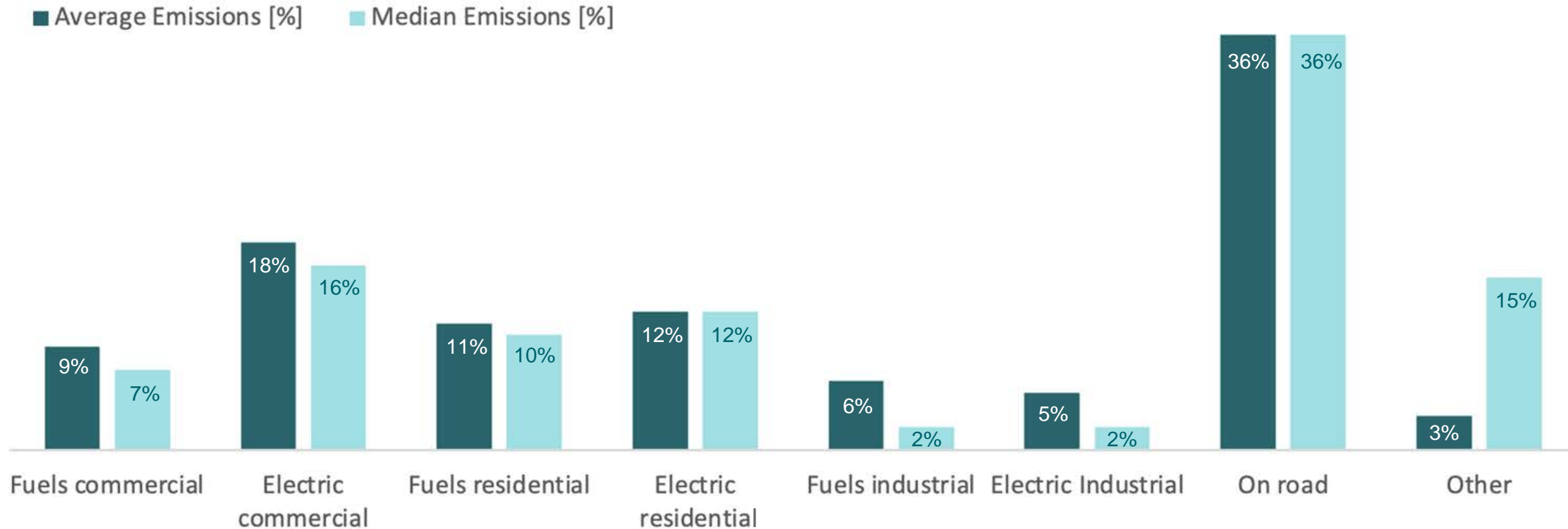
63.3% Average and Median

59.1% Average **62.9%** Median

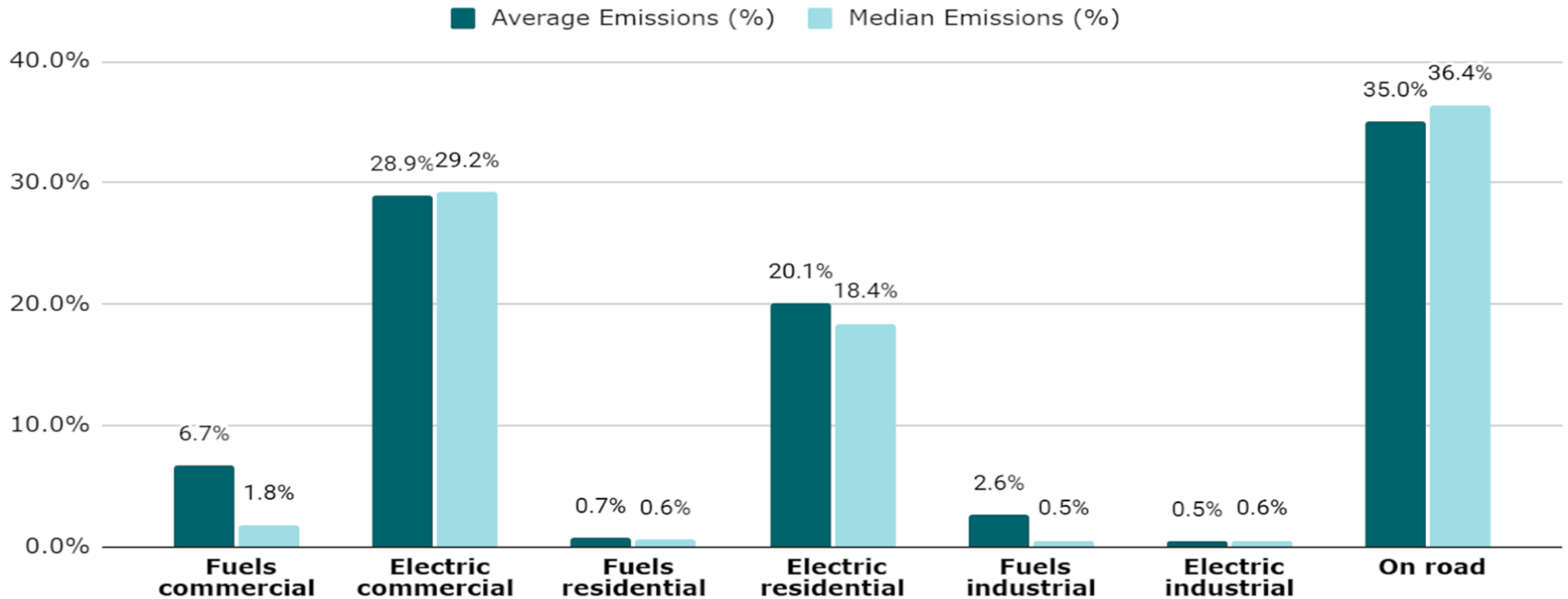
Holistic (and mutually supportive) Approach:



Inventory Analysis: 100 US City Emissions Overview



Inventory Analysis: Florida City Overview (Pop: 40k to 3MM)



High Impact Action Pathways

Accelerating



Renewable Energy



Building Electrification (and Efficiency): New and Existing



**EV Transition
(and VMT Reduction)**

Supporting



Waste and Methane



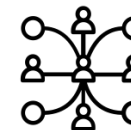
Nature-Based Solutions



Sustainable Food Systems



Circular Economy



**Community Resilience,
Health, and Equity (Just and
Equitable Transition)**

Cities Have an Important Voice at the State and Utility Level

For example...



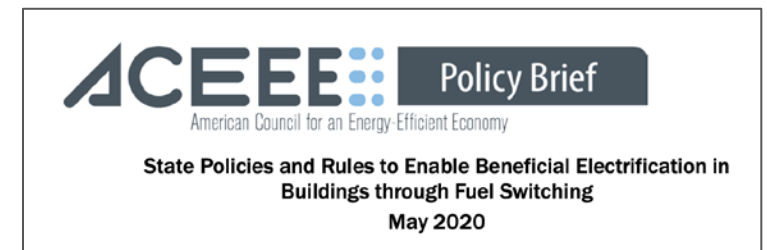
Clean energy
standards,



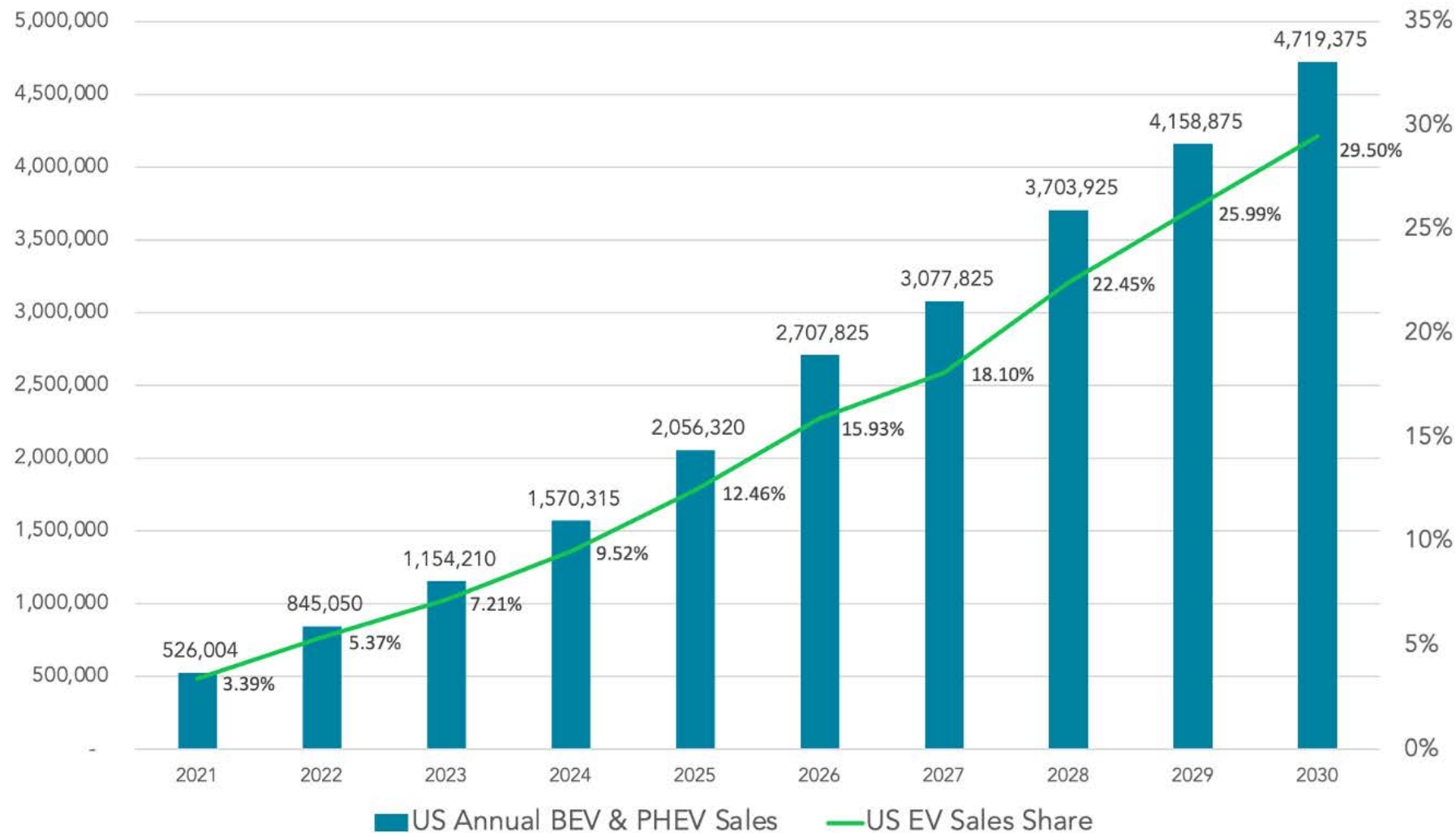
allowing utilities to invest
in EV infrastructure, &



enabling utilities to
value electrification



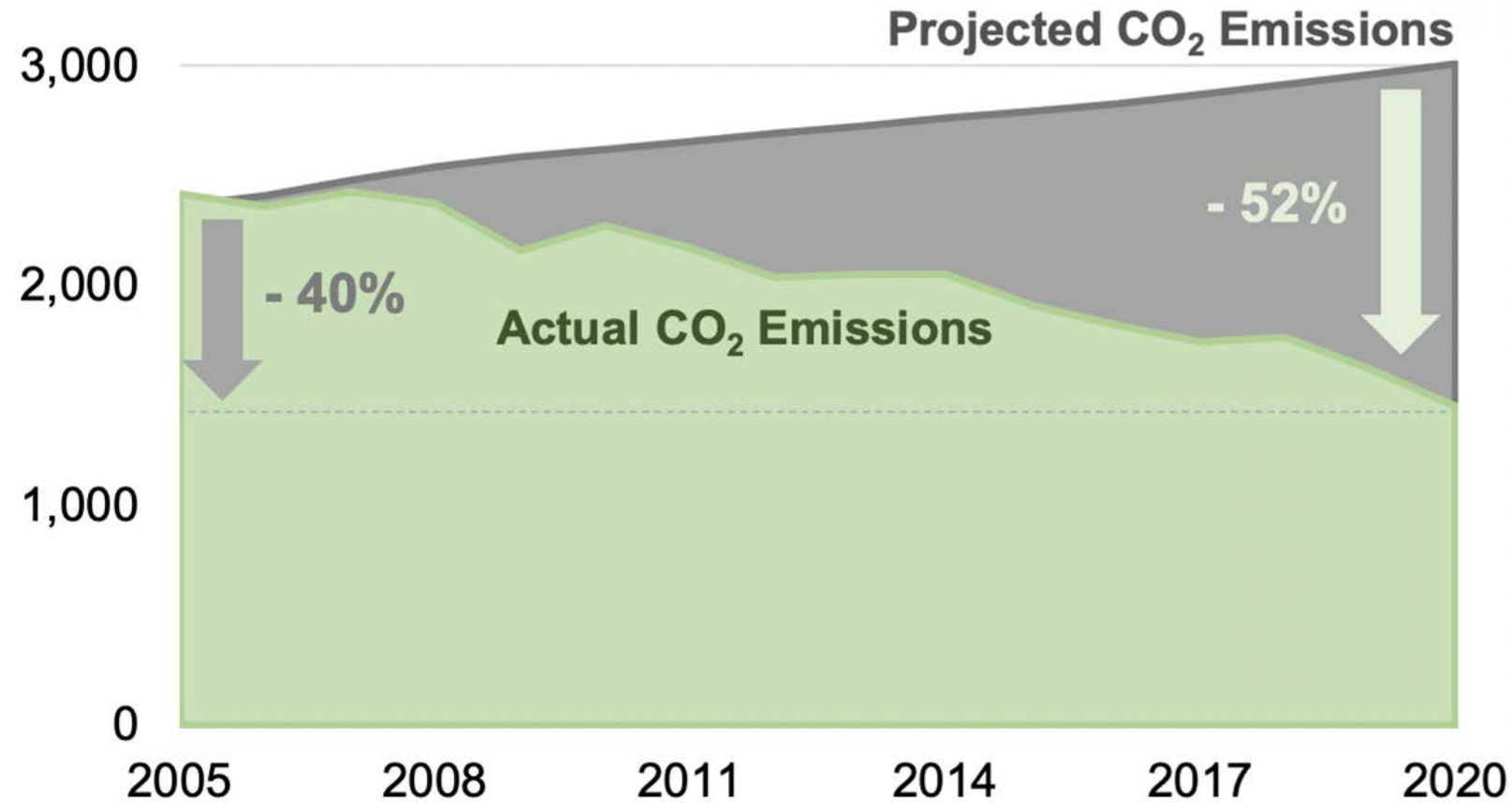
US EVs (BEV & PHEV) Sales & Sales Share Forecast: 2021-2030



Historical Sales Data: GoodCarBadCar.net, InsideEVs, IHS Markit / Auto Manufacturers Alliance,
Advanced Technology Sales Dashboard | Research & Chart: Loren McDonald/EVAdoption

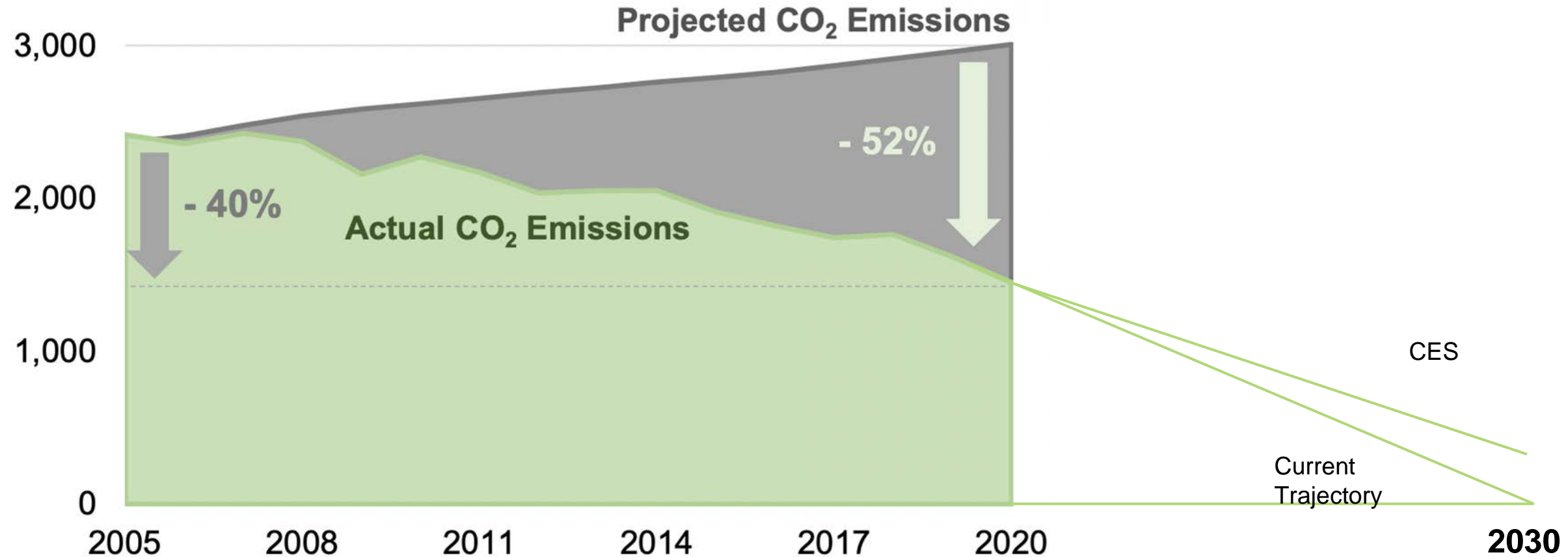
Analyze Changing Grid Scenarios

Electricity-Related CO₂ Emissions (MMT/yr)



Analyze Changing Grid Scenarios

Electricity-Related CO₂ Emissions (MMT/yr)



High Impact Action Categories:

1. Grid Decarbonization
2. VMT Reduction
3. Vehicle Electrification
4. Building Efficiency
 - a. New and Existing
5. Building Electrification (Heat Pumps)
 - a. New and Existing

Most important for
Florida Cities



Florida High Impact Action Analysis

	High Impact Action Category	Business As Usual (BAU)	Low Renewable Energy Cost, Moderate VMT Reduction & EV Adoption	Clean Energy Standard Grid, BAU Actions	Clean Energy Standard Grid, Moderate Actions	Clean Energy Standard Grid, Aggressive Actions
Grid	Grid	BAU	Low RE Cost	CES (80% GHGi Reduction)	CES	CES
Vehicles	VMT Reduction	BAU (5% VMT Reduction Annually)	Moderate (10% VMT Reduction Annually)	BAU (5% VMT Reduction Annually)	Moderate (10% VMT Reduction Annually)	Aggressive (20% VMT Reduction Annually)
	EV Adoption	US-BAU (3% Annual Growth)	Moderate (4.5% Annual Growth)	US-BAU (3% Annual Growth)	Moderate (4.5% Annual Growth)	California-BAU (6% Annual Growth)
Buildings	Residential Building Electrification	5% EB Electrified	5% EB Electrified	5% EB Electrified	New + 6% EB Electrified	New + 11% EB Electrified
	Residential Building Efficiency	5% EB Renovated	5% EB Renovated	5% EB Renovated	IECC New + 5% Existing	IECC New + 10% Existing
	Commercial Building Electrification	5% EB Electrified	5% EB Electrified	5% EB Electrified	New + 6% EB Electrified	New + 11% EB Electrified
	Commercial Building Efficiency	5% EB Renovated	5% EB Renovated	5% EB Renovated	IECC New + 5% Existing	IECC New + 10% Existing
	# of Florida Cities that reach 2030 SBT	0	1/5	3/5	4/5	4/5
	2030 Average Per-Capita Emissions Reductions for Florida Cities	26.9%	46.6%	64.1%	69.6%	76.7%

Next Steps



Upcoming High-Impact Action Workshops

Covering practical local actions within various scenarios and regulatory landscapes



Building Decarbonization - July 28, 2021 1pm ET

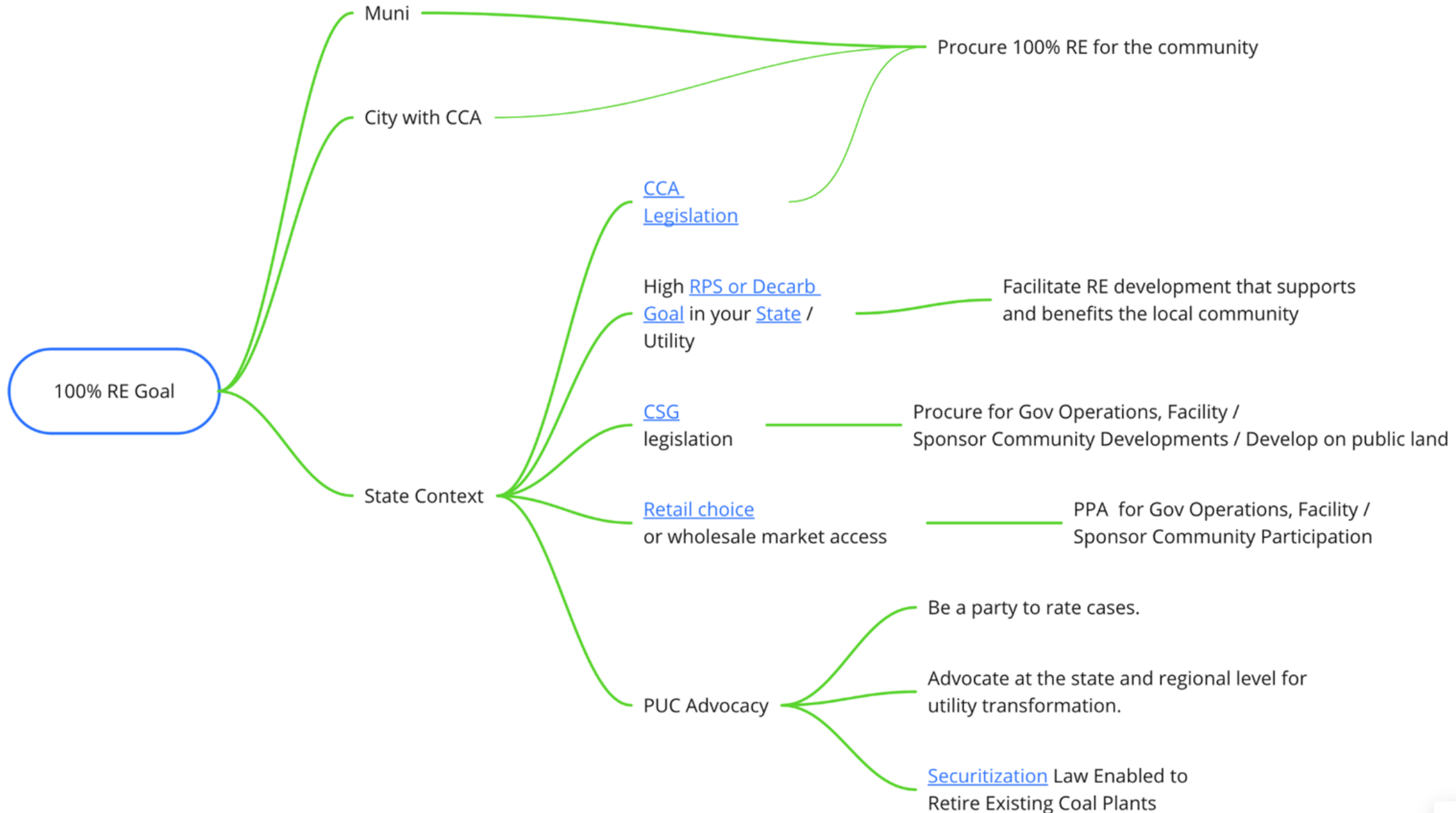


Decarbonizing the Grid - August 12, 2021 12pm ET



Vehicle Electrification - August 24, 2021 1pm ET

HIA Category 1: Renewable Energy



HIA Category 3: Vehicle Electrification



SCIENCE-BASED TARGETS SUPPORT

CDP is supporting cities to check/set science-based targets from 2021.



Guidance and Tools:

- Begin checking or setting your target by reading the [Science-Based Climate Targets Guide for Cities](#), produced by CDP and cities partners through the Science Based Targets Network.
- Check our [FAQs page](#), [SBT page](#); [Webinar Events page](#) for the latest event details.

Technical Support:

- Cities that are not in the ICLEI network can receive target setting support from CDP by contacting cities@cdp.net.
- ICLEI cities should reach out to their ICLEI contacts for supporting in setting science-based targets

Timeline

Report your current or updated target to the CDP-ICLEI Unified Reporting System in 2021.

CDP will review to see if it represents a fair share of 1.5 °C.

If your city does not have a target, please indicate why you have not yet set a target in your response.

CDP will contact you following disclosure to support you with next steps setting or updating your target.

CITIES

RACE TO ZERO

Thank you

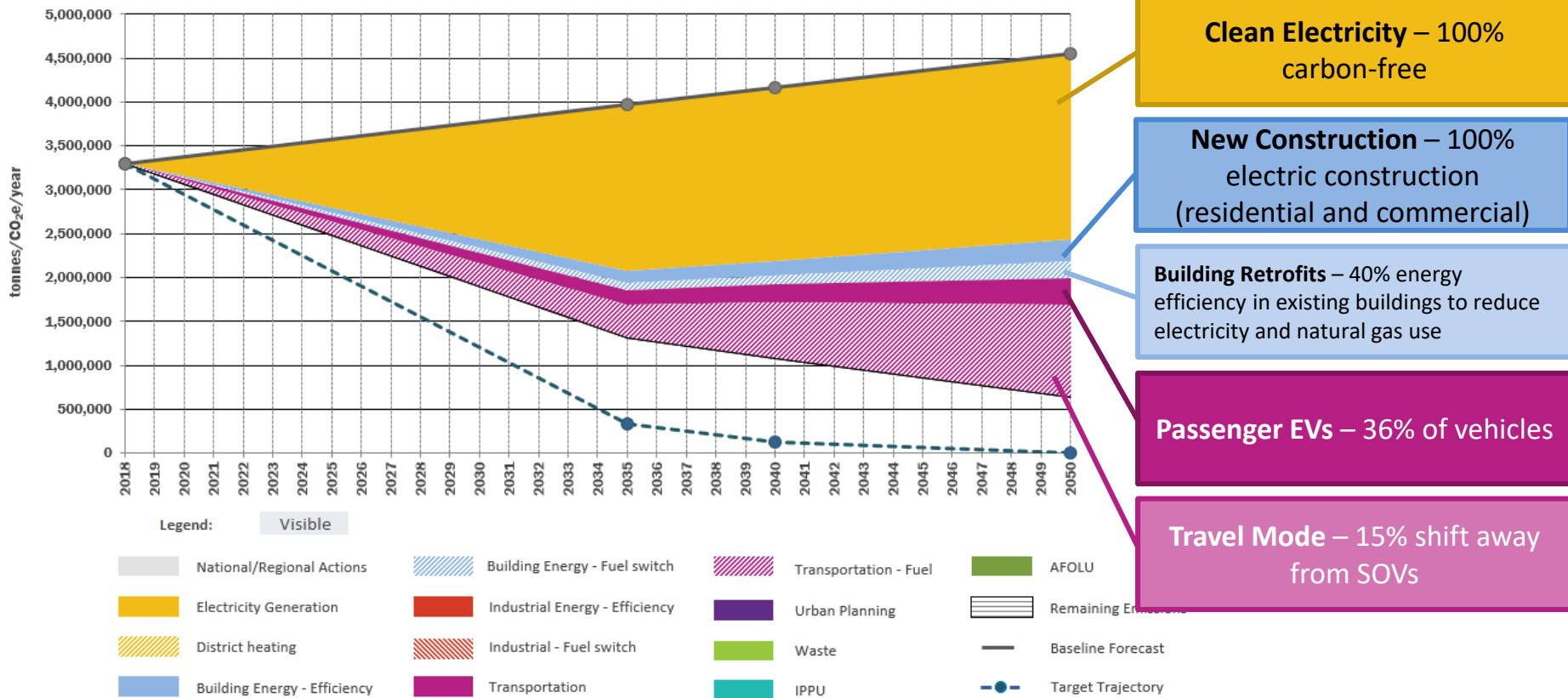
info@citiesracetozero.org

www.citiesracetozero.org





2035 GOAL – 60% REDUCTION



WE NEED TO GO GREEN

- **G**et around Miami
- **R**enewable Energy
- **E**Vs
- **E**nergy Efficiency
- **N**ew, Green Economy

*GREEN actions will spur the **green economy***

Action Evaluation: Co-Benefits



AUSTIN CLIMATE EQUITY PLAN 2020



OFFICE OF
SUSTAINABILITY

CITY OF AUSTIN

Zach Baumer

zach.baumer@austintexas.gov

Our Commitment to Climate Equity

Climate Change

Eliminate the use of fossil fuels for energy & transportation

- Energy efficiency
- Renewable energy
- Less dependence on cars
- Electric vehicles
- More trees & natural spaces
- Healthier consumer choices

Health

Affordability

Accessibility

Cultural Preservation

Community Capacity

Just Transition

Accountability

Racial Equity

Eliminate disparities that can be predicted by race

- Safety for all at all times
- No disproportionate economic outcomes
- Fair access to services for all
- Inclusive participation in our city
- Positive health outcomes for all
- Embrace culture & difference

If we're not proactively addressing equity, we're perpetuating injustice.

A Plan Among Plans

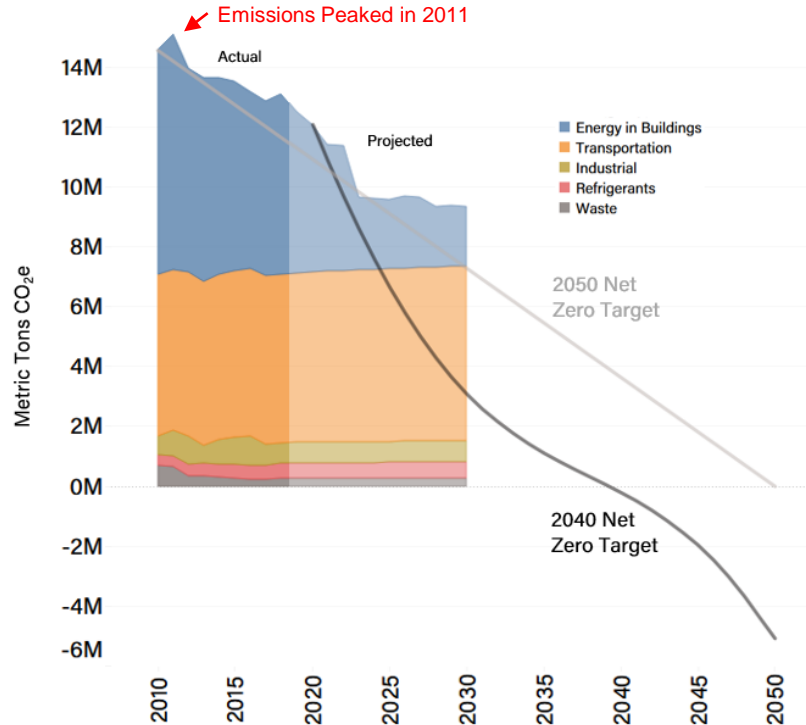
5 Plan Sections:

- Sustainable Buildings
- Transportation Electrification
- Transportation & Land Use
- Natural Systems
- Consumption



Net-zero by 2050 → Net-zero by 2040

Austin Community GHG Emissions



Net-zero means the Austin community will reduce direct emissions as much as possible and then employ carbon offsets or carbon dioxide removal to cancel out any remaining emissions (up to 10% of baseline).

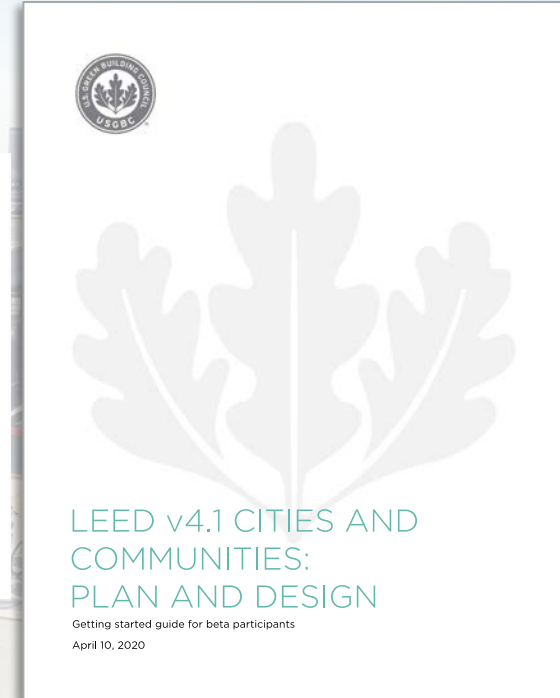
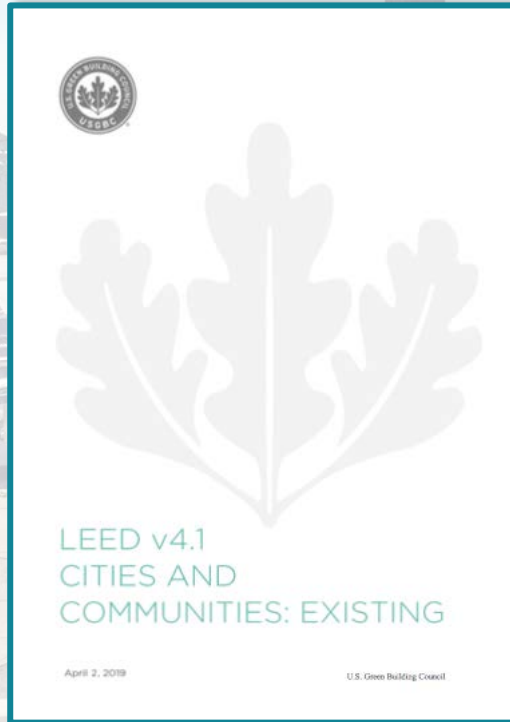
Moderated Discussion

- What do you think will be some of the most important barriers to overcome in your city over the next 10 years in order to achieve the scale of change needed?
- How have you seen the conversation change on climate change in your cities and communities? How has this influenced your work locally?
- What advice do you have for other cities who are starting on this journey of understanding what the steps to carbon neutrality look like for their city or region? How can they build off of the work done by cities like yours?

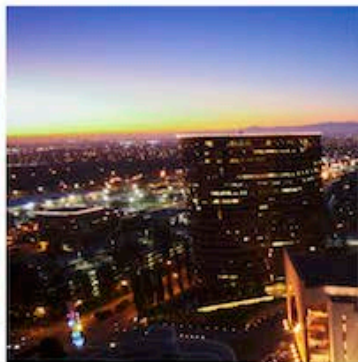
Q&A



Visit our website to download LEED v4.1 for Cities and Communities and other tools and resources.



<https://www.usgbc.org/leed/rating-systems/leed-for-cities>



Join our upcoming **LEED for Cities and Communities** forums:

- August 18th: Cities Transitioning to 100% Renewable Electricity with WRI
- September 15th: Roundtable discussion with Federal Agencies

Monthly series takes place on the 3rd Wednesday of the month

Municipal Government Leadership Forum

Tuesday July 27th from 3:00 - 4:30pm EDT

Visit usgbc.org/events for details and to register.

- Go to USGBC Events Calendar to register
- Go to Courses on Education @ USGBC for on-demand education and CEUs

The screenshot shows the USGBC homepage in a web browser. The browser's address bar displays 'usgbc.org'. A teal banner at the top of the page contains the text 'Take the USGBC and GBCI community survey by March 1.' and a 'Share your feedback' button. The main navigation bar includes links for 'About', 'LEED', 'Credentials', 'Education' (which is highlighted with a teal underline), and 'Membership'. To the right of these links are 'Store', 'Resources', 'Directory', 'Articles', 'Donate', and 'Account', followed by a search icon. A dark grey dropdown menu is open under the 'Education' link, listing the following options: 'Professional education', 'LEED v4.1 education', 'LEED exam prep', 'K-12 education', 'Higher education', 'Courses on Education @USGBC' (highlighted in teal), and 'Events calendar'. At the bottom of this menu is a 'Subscribe →' link. The background of the page features a large image of a city skyline with a solar panel array in the foreground. Overlaid on this image is the text 'e of USGBC+ is here' and a 'Read now' button. A small accessibility icon is visible in the bottom right corner of the page.

USGBC homepage | U.S. Green Building Council

usgbc.org

Take the USGBC and GBCI community survey by March 1. [Share your feedback](#)

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Events calendar

Subscribe →

e of USGBC+ is here

Read now

Call for Applications ~ LEED Committees and Working Groups



LEED Cities and Communities Working Group

<https://www.usgbc.org/articles/volunteer-leed-committee-2021>



Thank you for joining us!

Reach out to our team directly via email:

cities@usgbc.org

Visit our website for tools and resources:

usgbc.org/leed/rating-systems/leed-for-cities