

CITIES

RACE TO ZERO



© Henning Witze



Agenda

- 01 Overview of the Race to Zero
C40
- 02 Resources available to cities
ICLEI USA and CDP
- 03 Reporting for Race to Zero
CDP
- 04 Q&A

What is the Race to Zero ?

The Race to Zero is a global campaign organized by the UN High Level Climate Champions for Climate Action.

The 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.

Collectively these actors now cover nearly 25% global CO2 emissions and over 50% GDP.



791
Cities



3,067
Businesses



633
Universities



31
Regions

What is the Cities Race to Zero ?

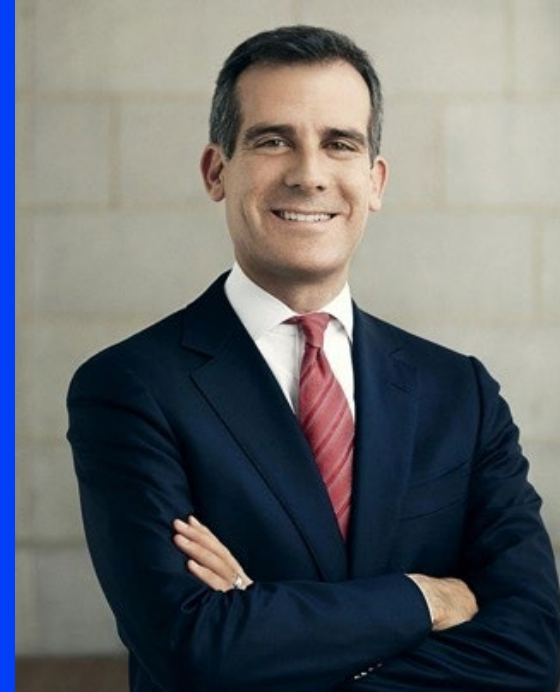


The Cities Race to Zero is the city-specific track of Race to Zero, with the goal of recruiting over 1,000 cities to join the umbrella Race to Zero Campaign.

The Cities Race to Zero aims to deliver a better future by **addressing equity together with the environment and to build broad coalitions** across business, labor unions, youth and civil society.



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

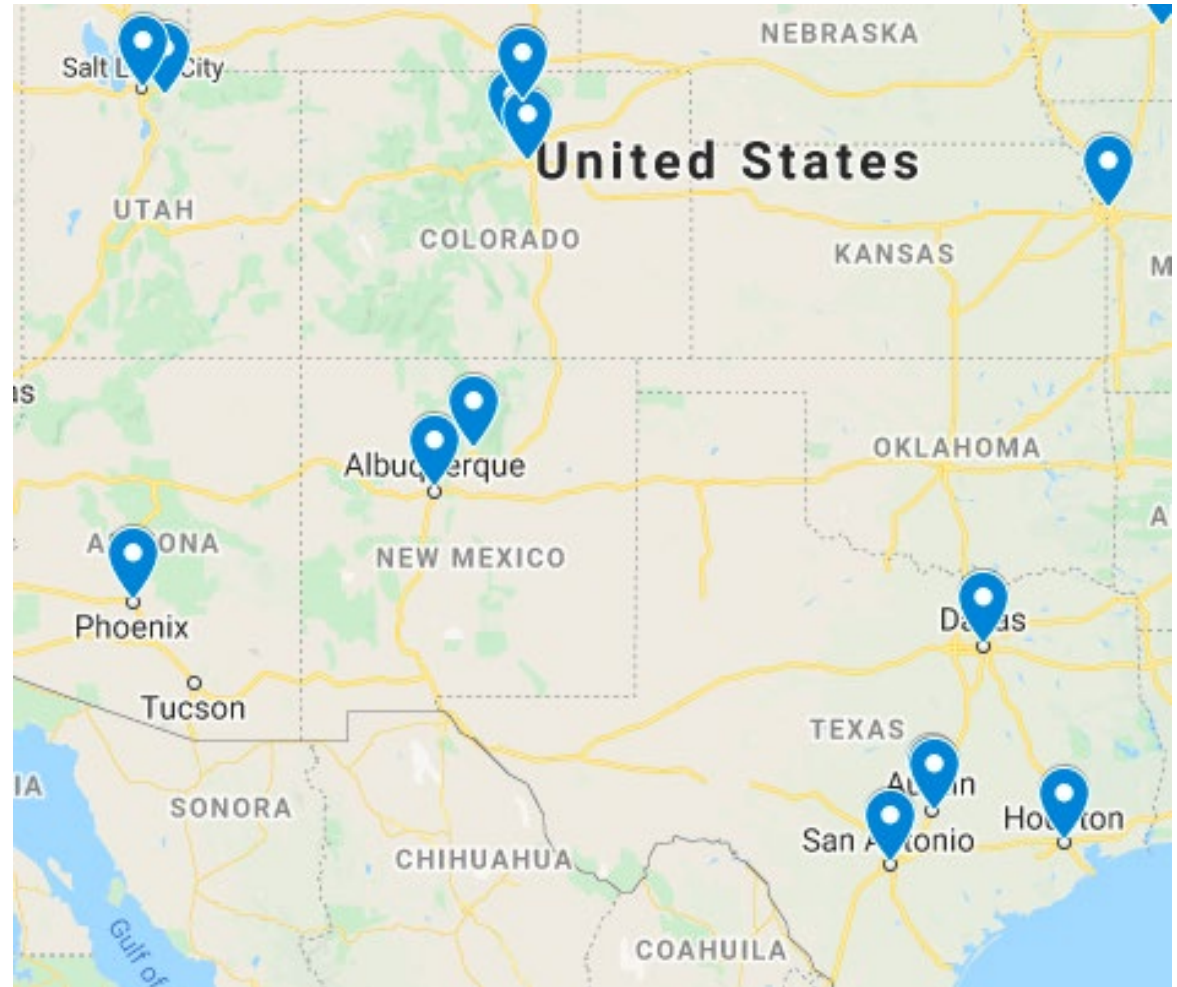


*“As the first generation of leaders to recognize the scale of the impending climate crisis and the last generation to be able to prevent it, I invite you to join the **Cities Race to Zero**”.*

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

Who has already joined the Cities Race to Zero in the US?

*A total of **88 cities in the US** have joined Cities Race to Zero...with 1 city in Arizona committed*





“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.

US Infrastructure Bill to provide funding to cities to meet their climate goals

WE BUILT THIS CITY

The federal infrastructure bill is a big win for US cities

Bloomberg Green

Politics

Infrastructure Deal Includes Billions to Fight Climate Change

By [Ari Natter](#)

August 1, 2021, 10:09 PM EDT

THOMSON REUTERS
FOUNDATION NEWS

Home Coronavirus Women LGBT+ **Climate** Economies Technology

U.S. infrastructure bill aims to cool heat inequity in cities

by [David Sherfinski](#) | [@dsherfinski](#) | Thomson Reuters Foundation

Thursday, 19 August 2021 17:30 GMT

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%

40.2-64.9%

63.2% Average 63.3% Median

59.7% Average 60.3% Median

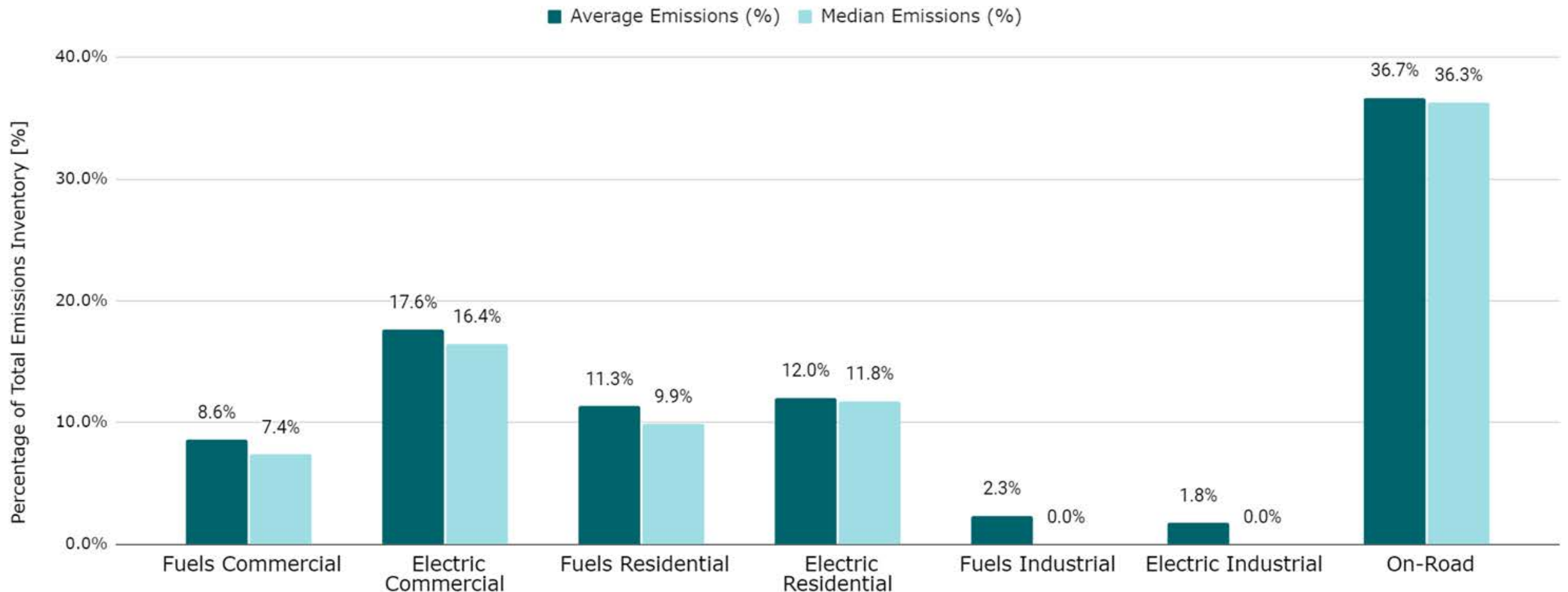


General Principles

1. It is critical to have a **2030 SBT**
2. Planning should incorporate rapidly **changing trends**
3. Programs should take a **holistic approach**, including health, resilience, and equity
4. Local government can't do it alone. **Collaboration with state and utilities** is essential
5. Inventories provide the foundation for **informed decisions and transparency**

Inventory Analysis: 100 US City Emissions Overview

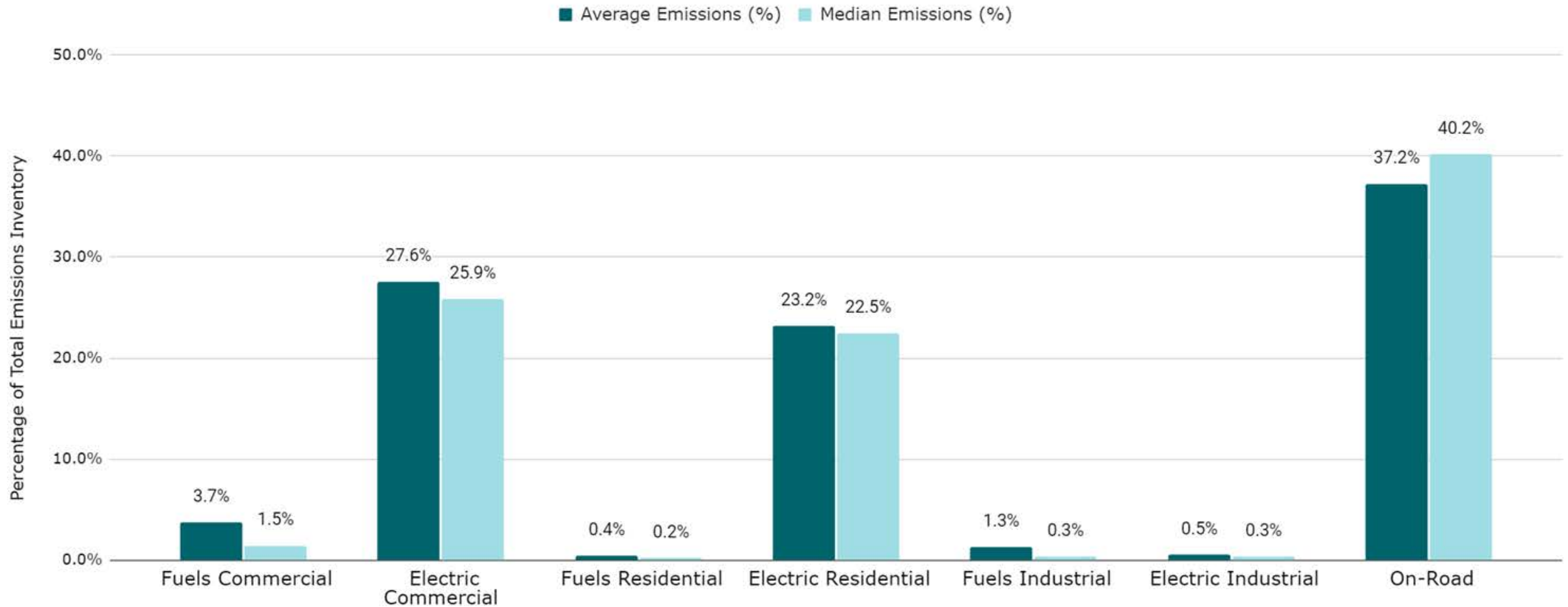
Breakdown of Average and Median Emissions by Sector for 100 City Analysis



Inventory Analysis: FLA Cities Overview

(10 cities, pop: 19.5k to 2.7MM)

Breakdown of Average and Median Emissions by Sector for Florida Cities Analysis



High Impact Action Pathways

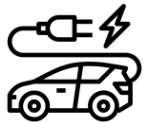
Accelerating



Renewable Energy



Building Electrification (and Efficiency): New and Existing



**EV Transition
(and VMT Reduction)**

Supporting



Waste and Methane



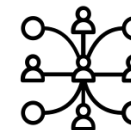
Nature-Based Solutions



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...



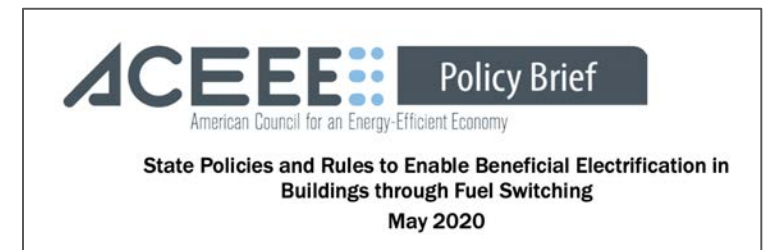
Clean energy
standards,



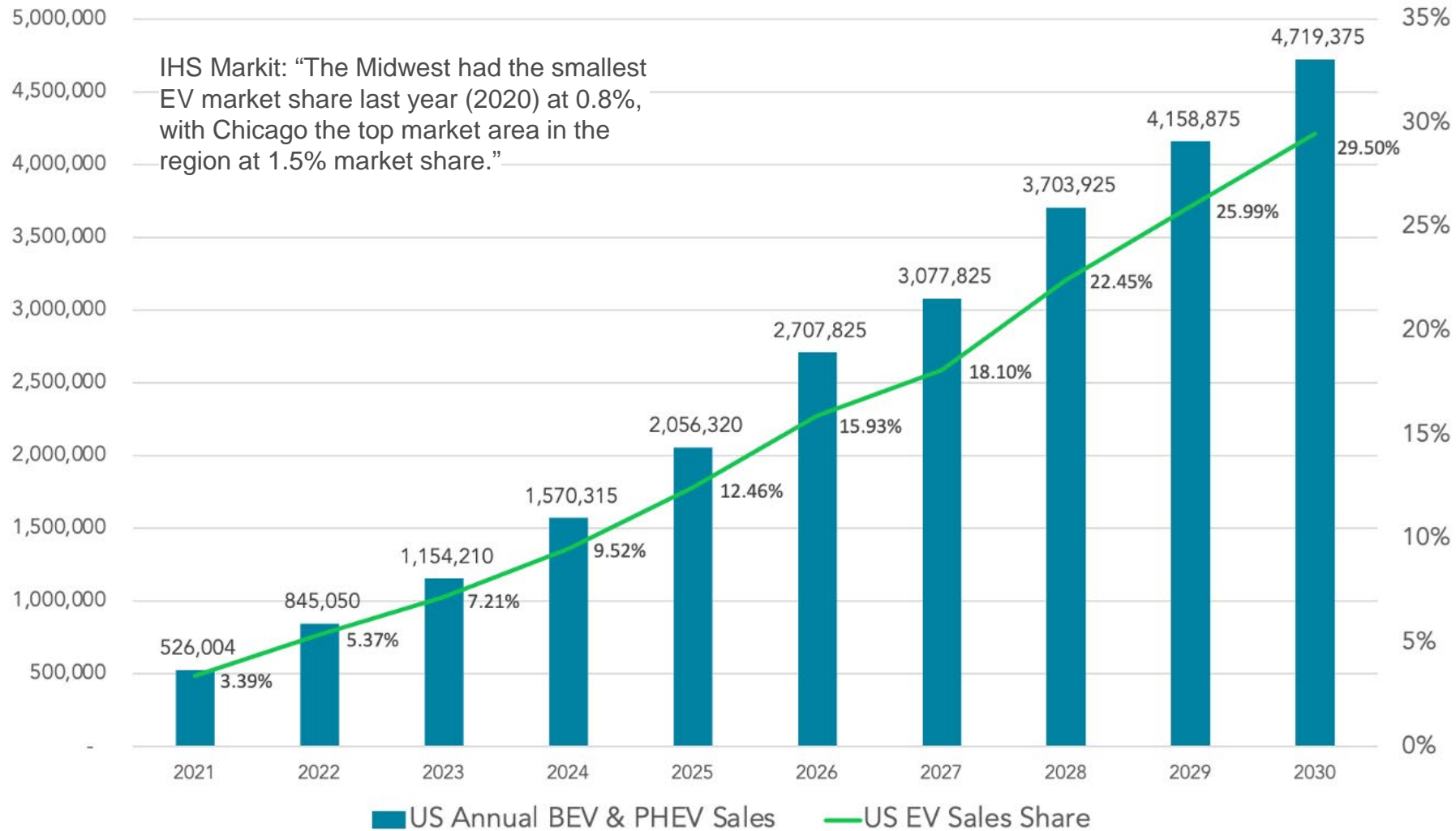
allowing utilities to invest
in EV infrastructure, &



enabling utilities to
value electrification



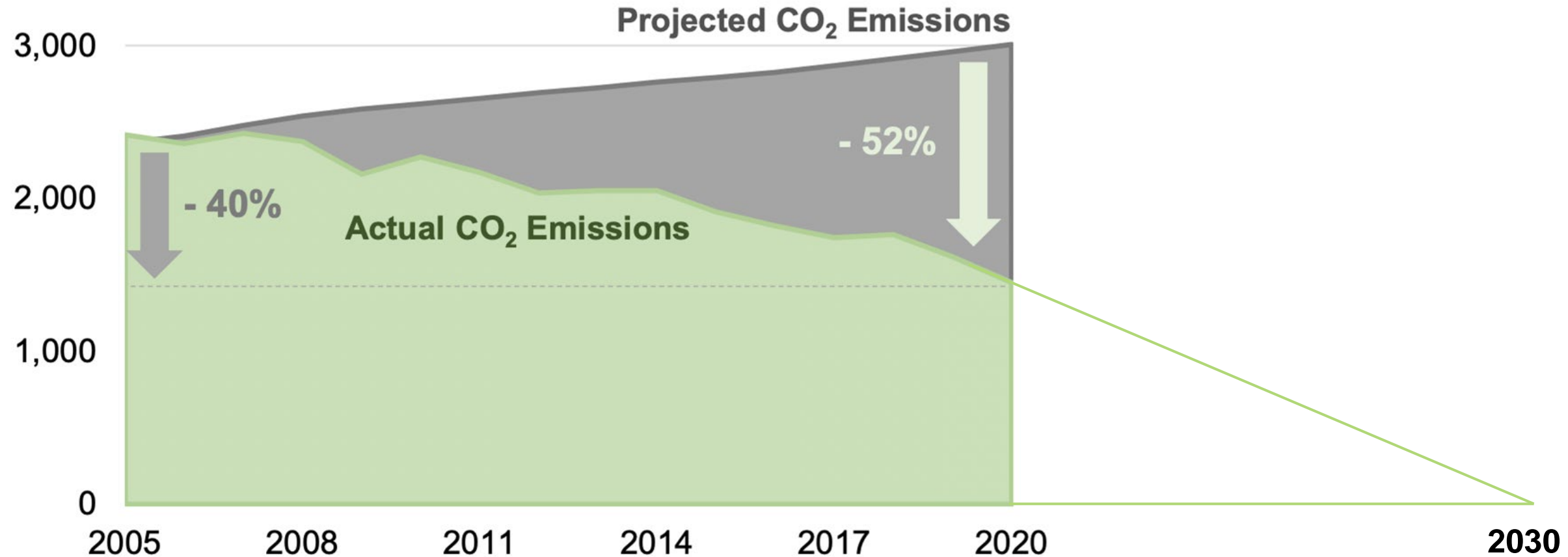
US EVs (BEV & PHEV) Sales & Sales Share Forecast: 2021-2030



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

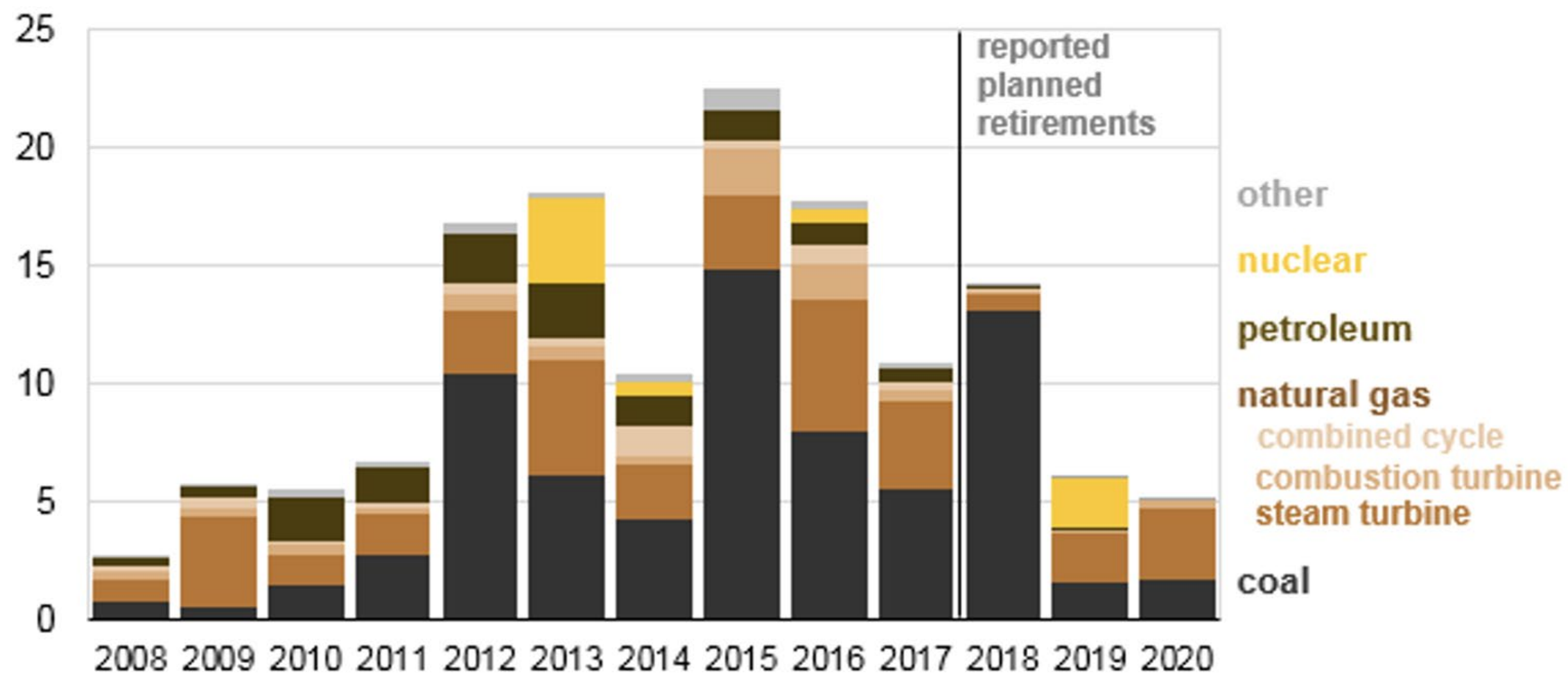
Analyze Changing Grid Scenarios

Electricity-Related CO₂ Emissions (MMT/yr)



U.S. utility-scale electric generating capacity retirements (2008-2020)

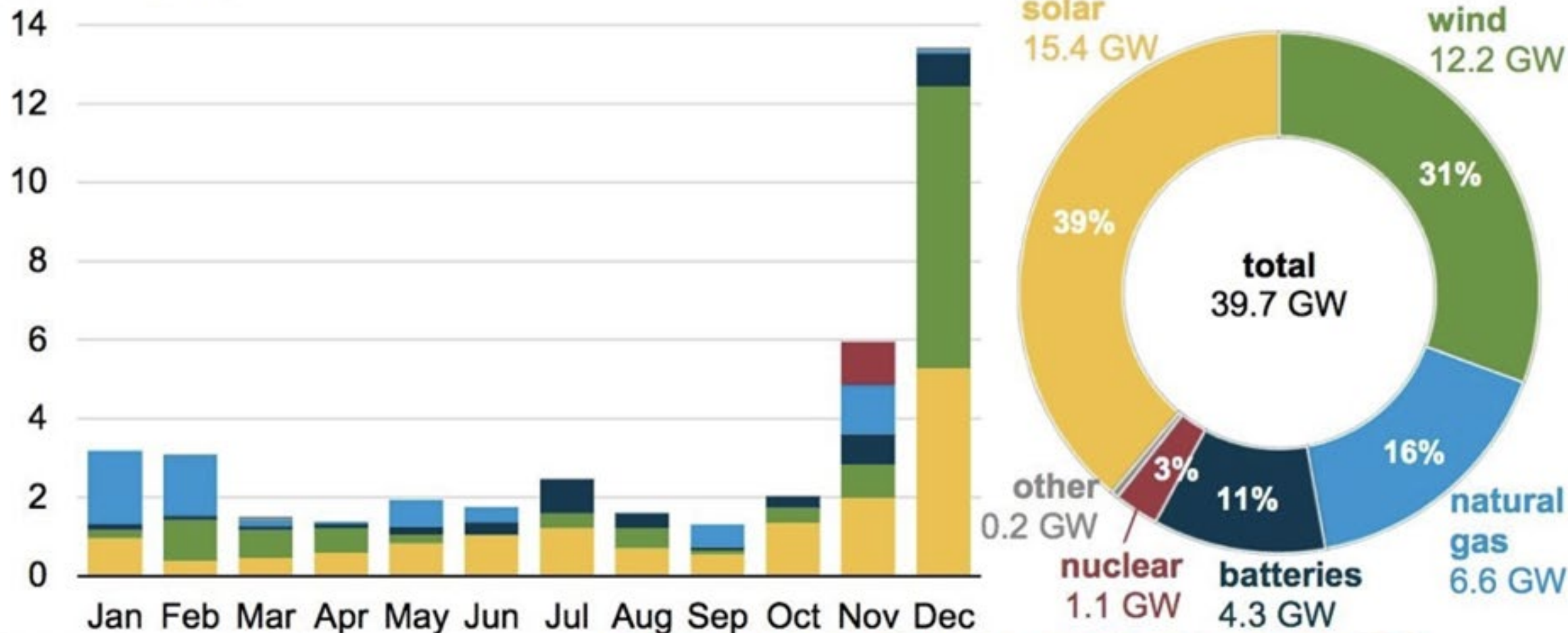
gigawatts



Planned U.S. utility-scale electricity generating capacity additions (2021)

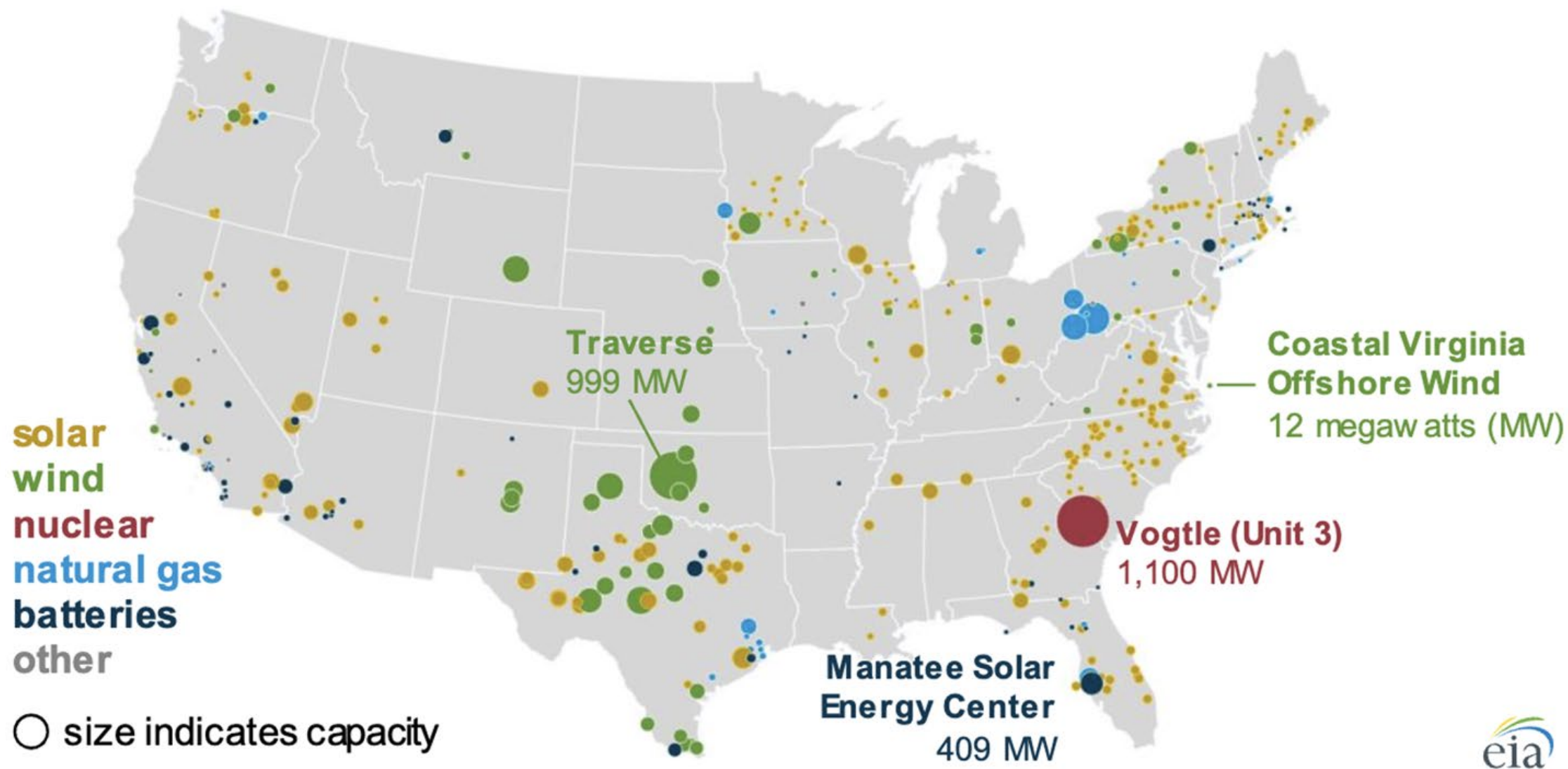


gigawatts (GW)



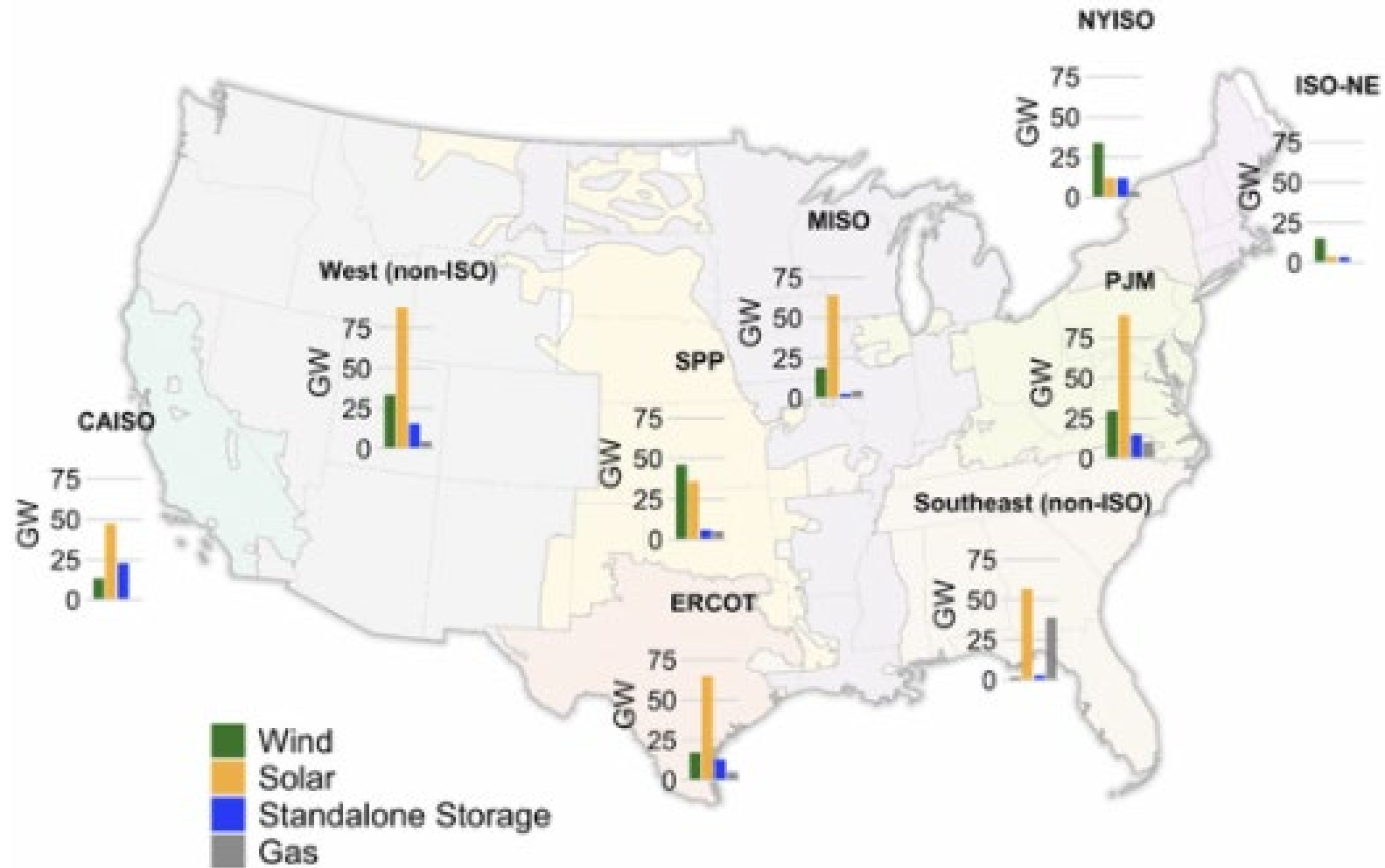
Source: U.S. Energy Information Administration, [Preliminary Monthly Electric Generator Inventory](#), October 2020

U.S. electric generating capacity additions (2021)



Source: U.S. Energy Information Administration, [Preliminary Monthly Electric Generator Inventory, October 2020](#)

The good news and bad news for clean energy from LBNL's nationwide interconnection study



1) The clean energy projects in queues today could get the U.S. more than halfway to net-zero electricity

Image credit: LBNL

AZ Energy



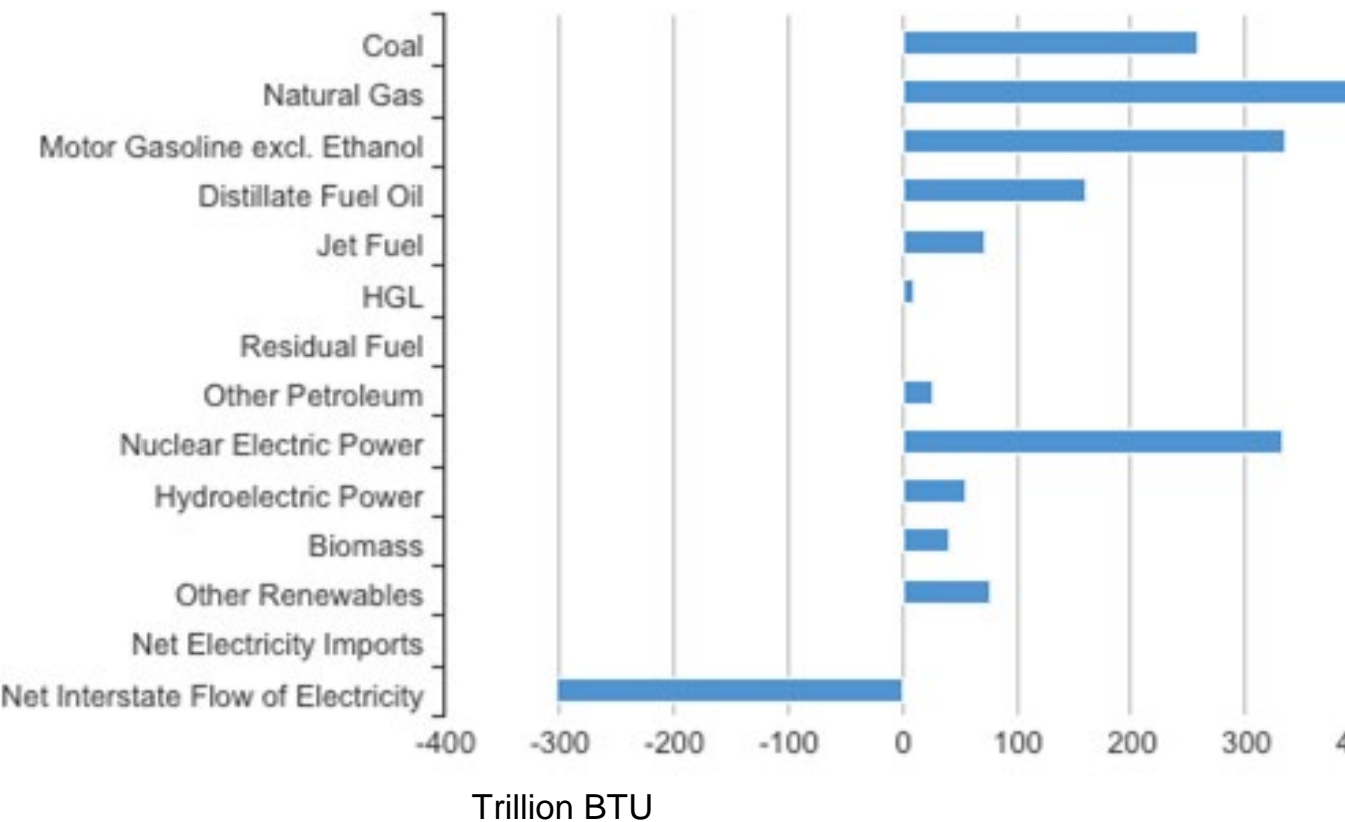
- Largest Nuclear Power Plant (Palo Verde), 2nd largest US power plant overall
- Top 5 Solar Power Plant (Agua Caliente)
- 2nd in net generation from solar (3rd in capacity)
- 2nd best solar resource in the US

Profile Overview:

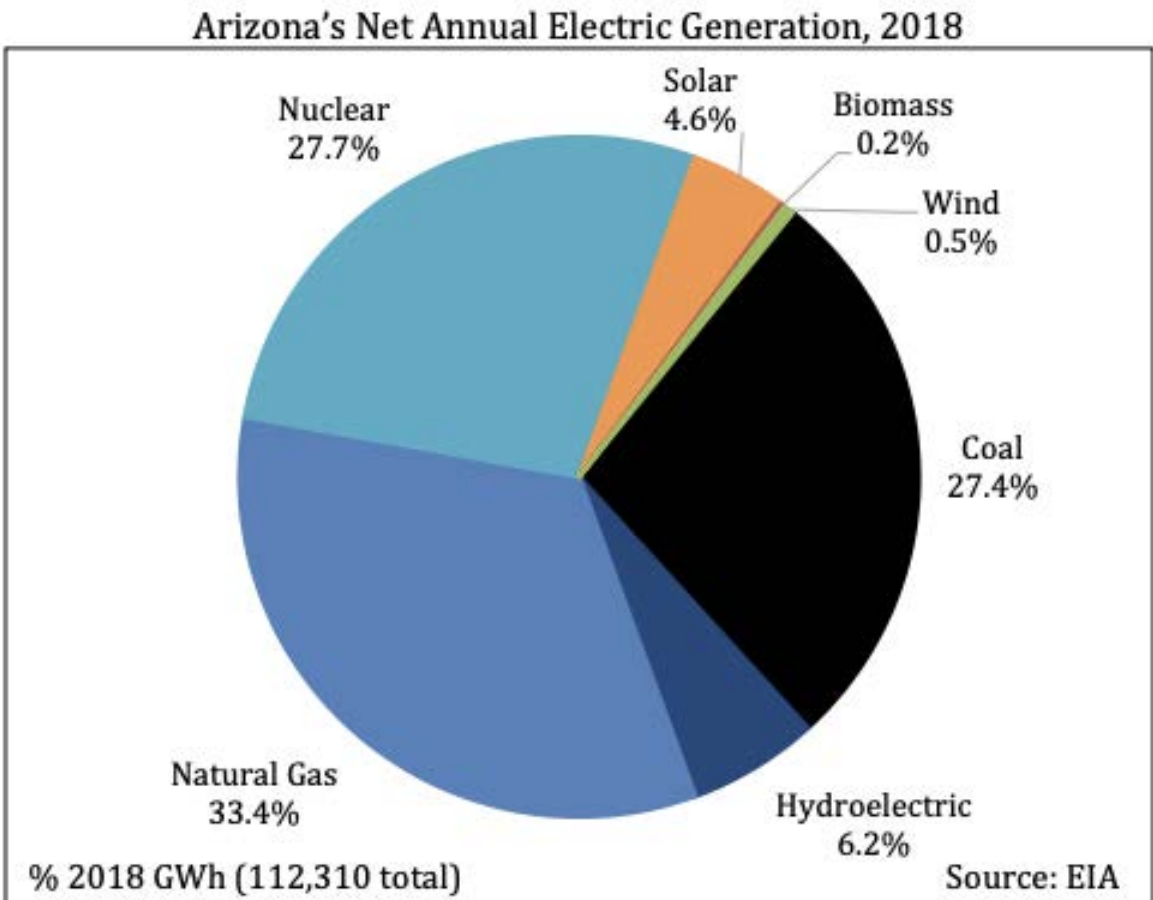
https://cnee.colostate.edu/wp-content/uploads/2020/07/State-Brief_AZ_July-2020.pdf

Arizona Energy Consumption Estimates, 2019

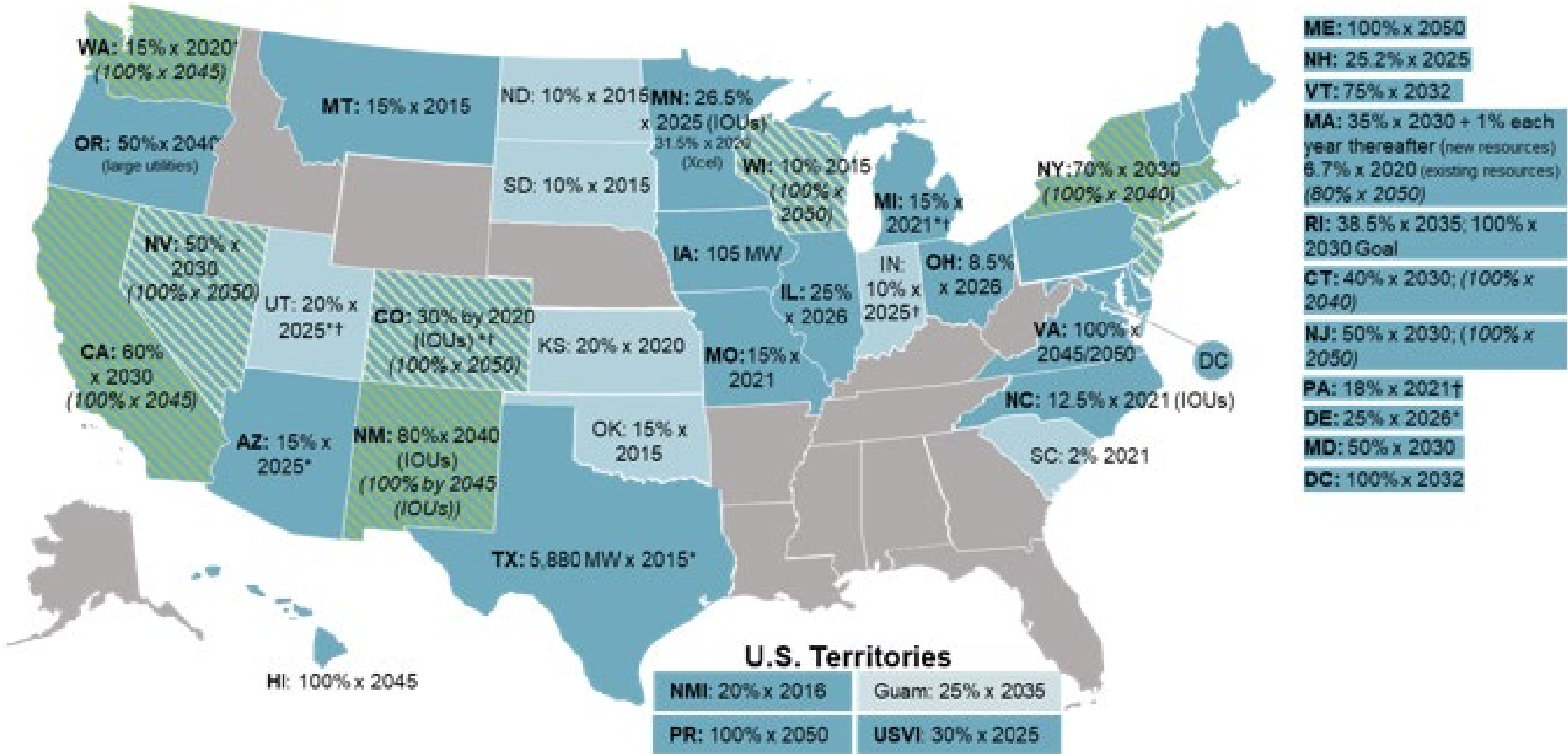
 [DOWNLOAD](#)



 Source: Energy Information Administration, State Energy Data System








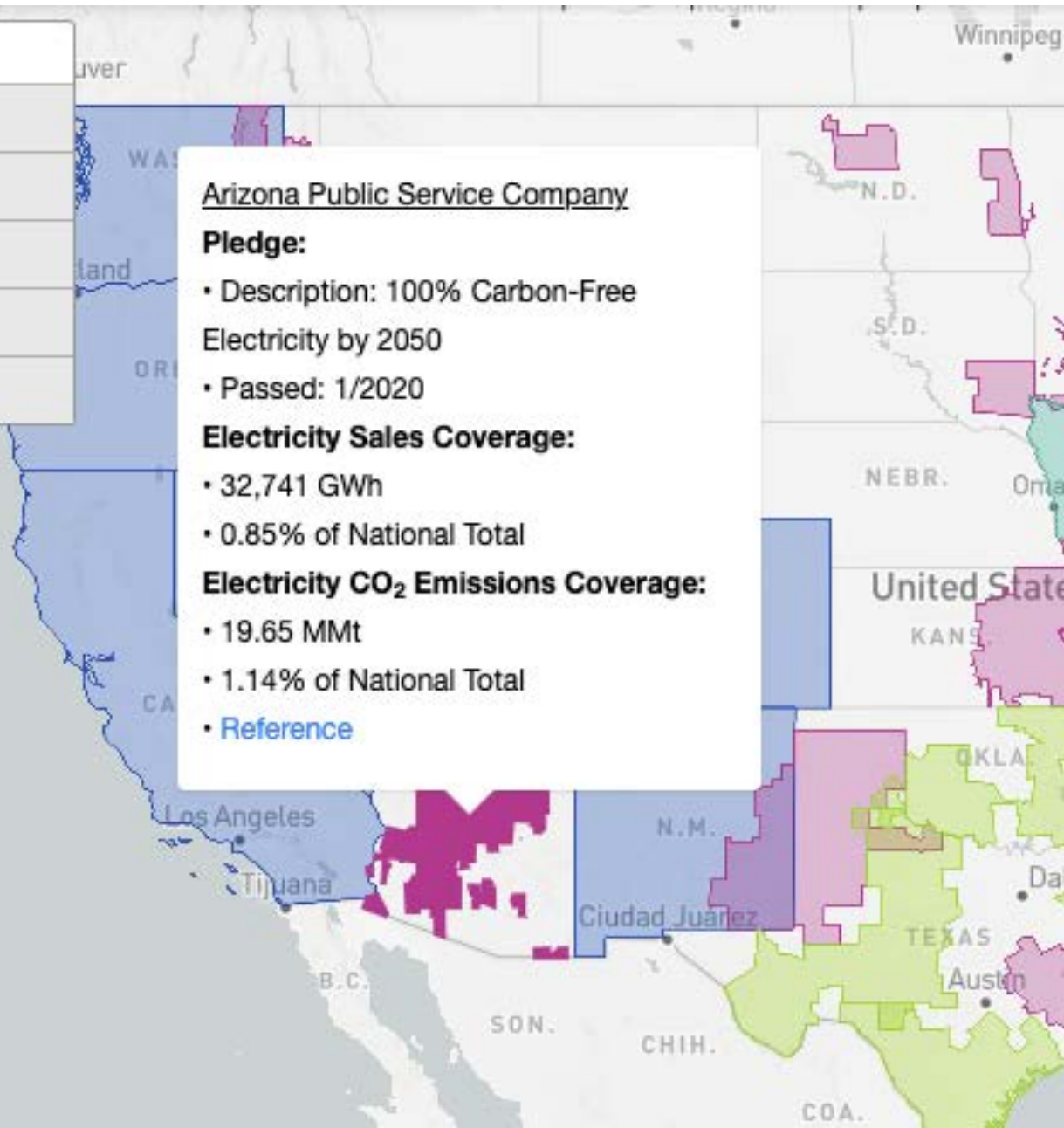
Renewable Energy Standards



■ Renewable portfolio standard ■ Clean energy standard * Extra credit for solar or customer-sited renewables
■ Renewable portfolio goal ■ Clean energy goal † Includes non-renewable alternative resources

Renewable Energy Commitments

Electricity Standards/Pledges	
	States with Legally Binding 100% CES
	States with Legally Binding 100% RPS
	Utilities with 100% CES
	Utilities with 100% RPS
	Utilities with 80-99% CES or RPS



Arizona Public Service Company

Pledge:

- Description: 100% Carbon-Free Electricity by 2050
- Passed: 1/2020

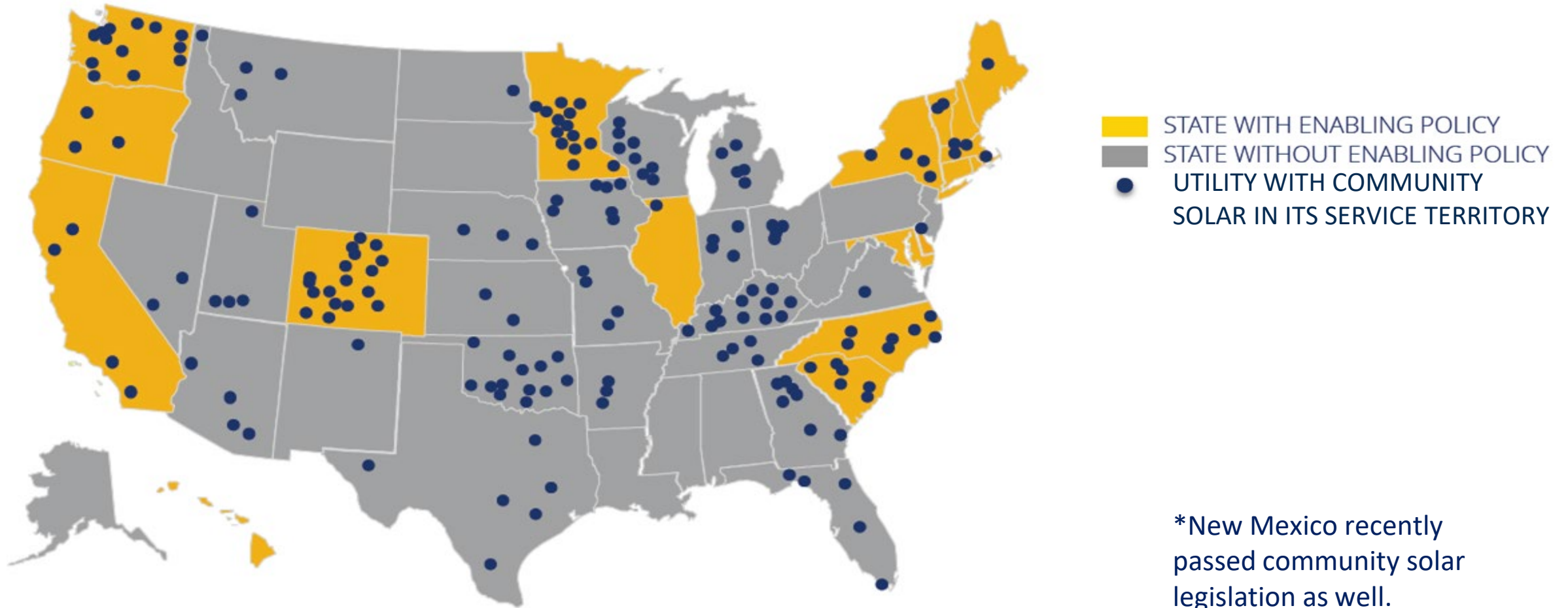
Electricity Sales Coverage:

- 32,741 GWh
- 0.85% of National Total

Electricity CO₂ Emissions Coverage:

- 19.65 MMt
- 1.14% of National Total
- [Reference](#)

Community solar is available in 17 states and many other utility territories in the U.S.



Source: SEPA community Solar Database, Data up to date as of September 31, 2017.

Community Choice Aggregation (CCA), which is authorized in 10 states, allows cities to purchase electricity on behalf of citizens who agree to participate

Authorized in 10 States:

- California
- Illinois
- Maryland (Montgomery Co. Pilot)
- Massachusetts
- New Hampshire*
- New Jersey
- New York
- Ohio
- Rhode Island
- Virginia*

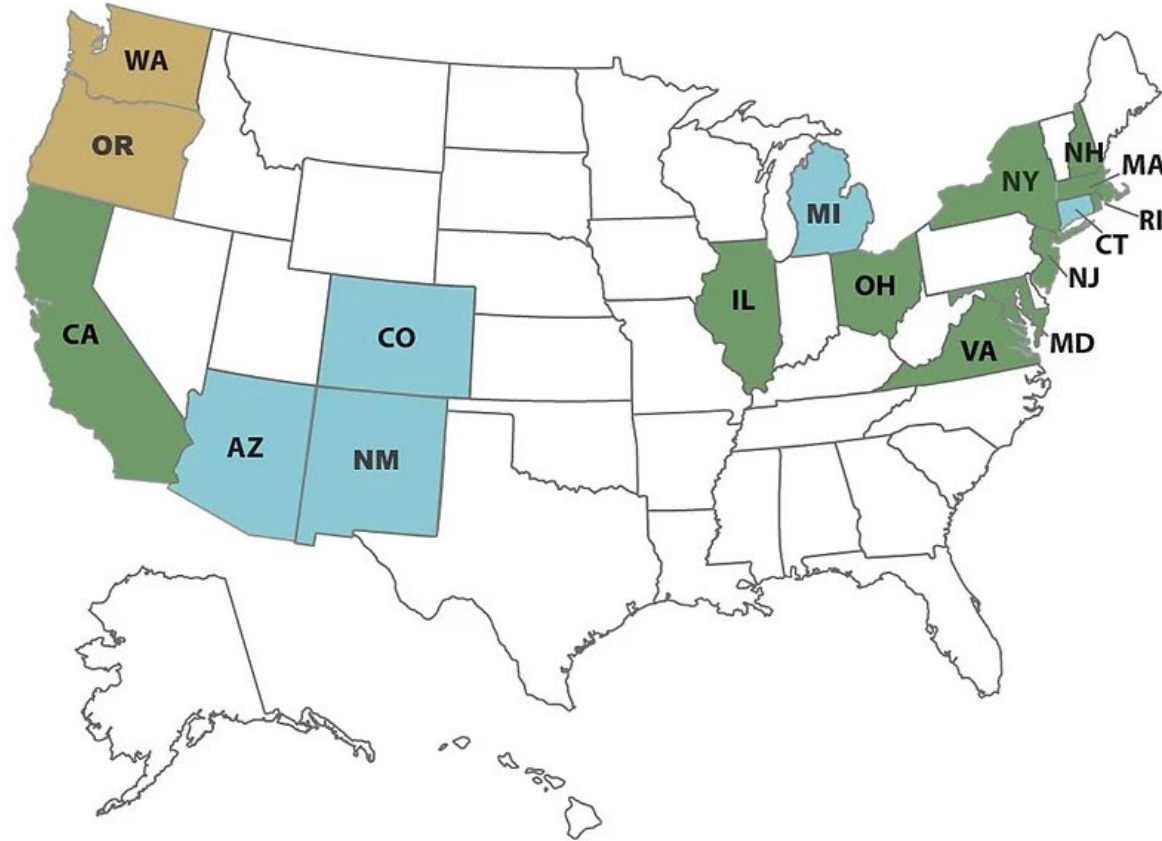
Actively Investigating:

- Arizona
- Colorado
- Connecticut
- Michigan
- New Mexico

Watch List/Potential:

- Oregon
- Washington

* Not yet implemented



Source: Lean Energy, <https://www.leanenergyus.org/cca-by-state>

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

Florida High Impact Action Analysis (10 Cities)



HIA Category	Business As Usual (BAU)	Low Renewable Energy Cost, Moderate Actions	Low Renewable Energy Cost Grid, Mixed Actions	Clean Energy Standard Grid, Mixed Actions	Clean Energy Standard Grid, Aggressive Actions
Grid	BAU	Low RE Cost	Low RE Cost	CES	CES
VMT Reduction	BAU (0% VMT Reduction Annually)	Moderate (10% VMT Reduction Annually)	Moderate (10% 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)	Moderate (4.5% Annual Growth)	Moderate (4.5% Annual Growth)	California-BAU (6% Annual Growth)
Residential Building Electrification	New Buildings, All Electric	5% EB Electrified	New + 6% EB Electrified	New + 6% EB Electrified	New + 11% EB Electrified
Residential Building Efficiency	IECC 2018	5% EB Renovated	IECC New + 10% Existing	IECC New + 10% Existing	IECC New + 10% Existing
Commercial Building Electrification	New Buildings, All Electric	5% EB Electrified	New + 6% EB Electrified	New + 6% EB Electrified	New + 11% EB Electrified
Commercial Building Efficiency	IECC 2018	5% EB Renovated	IECC New + 10% Existing	IECC New + 10% Existing	IECC New + 10% Existing
% of Florida Cities that reach 2030 SBT	0%	0%	20%	90%	100%
2030 Average Per-Capita Emissions Reductions for Florida Cities	23.3%	45.8%	52.7%	67.7%	72.7%

Next Steps



CDP 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 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.

WHAT KIND OF CITY ARE YOU?



Cities that already have a 1.5°C aligned science-based target should report it. If you have never reported before, we will help you.



Cities that are not sure if their target is 1.5°C aligned science-based target should report it and we can check for alignment.



Cities that do not have 1.5°C aligned science-based targets should start developing one or update to an SBT, we will help you.

CDP SUPPORT FOR FINANCING CLIMATE ACTION

The Matchmaker Program helps you find investors for your projects



HOW MATCHMAKER WORKS



1

Cities disclose
project data to CDP
and our partners.

2

Matchmaker analyzes
project data and consults
with cities.

3

Matchmaker subscribers gain exposure
to investment opportunities and CDP insights
through the project dashboard.

FINANCING EXAMPLE - PHOENIX

- Read the [full post here](#)
- Phoenix Sustainability Bond to fund drought resiliency projects
- CDP Disclosure referenced in Use of Proceeds for the bonds
- Issuance totalling approximately \$400 million, in a certified Sustainability Bond series and a “vanilla” series
- The Sustainability Series was 4.3x oversubscribed, and the regular series was 4.1x oversubscribed

5 ways Phoenix is leading on water security

Richard Freund, Manager, Sustainable Infrastructure, Capital Markets NA & Christina Copeland, Associate Director, Water Security
August 28 2020



Race to Zero Reporting

CDP



WHY REPORTING IS IMPORTANT FOR RTZ



Show leadership through the actions that you are implementing



Provide accountability to back up your commitments and stay on track



Contribute information that helps RTZ partners **shape global policy**



Continually **monitor your progress** towards climate objectives & find data gaps

Starting in 2022, reporting will be **mandatory** as part of your Race to Zero commitment.

ADDITIONAL BENEFITS OF REPORTING



Join the **CDP community**
of over 950 cities disclosing
globally



Report your data to our
**network of partner
organizations**



Participate in our **webinars
and workshops**



Receive **individual
feedback** on your climate
progress and reporting

REPORTING IN ARIZONA



2020 AZ-Based Corporations Disclosing

Amkor Technology
Avnet
Caliente Construction
First Solar
Microchip Technology
On Semiconductor
APS
Republic Services



2021 AZ Cities Disclosing (so far!)

Flagstaff
Phoenix
Tempe
Mesa

AZ Climate Risks

Drought
Extreme heat waves

AZ Climate Opportunities

Green Jobs
Infrastructure investment
*2021 disclosers reported projects
totaling \$160 million*

REPORTING IN 2021



Cities should **report data for 2021 even if it is incomplete.**

If you've already reported:

- Amazing, thank you!
- If you have not opted in to Race to Zero on your dashboard, we will fix that for you when you officially sign on.

If you haven't reported yet:

- The CDP scoring deadline has passed (July 29).
- For GCOM or OPCC cities, the reporting deadline is **Aug 31**.
- Otherwise, report by **Dec 10** at the *very latest* to count for 2021.

HOW TO REPORT



- ▶ If you do not have a CDP account, email citiesNA@cdp.net and we will assist you.
- ▶ There is **no fee** to participate in CDP reporting.
- ▶ Opt-in to Race to Zero from your reporting dashboard.
- ▶ Complete the CDP Questionnaire, focusing especially on section 5, as explained in our [Reporting Guidance for Race to Zero and Race to Resilience](#).
- ▶ There are no additional questions beyond the standard CDP questionnaire.
- ▶ There are no minimum requirements to submit – just fill out what you have!
- ▶ For RTZ, reporting must be **public**.
- ▶ If you have questions, email us and we are here to help you.

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

CITIES

RACE TO ZERO

Thank you

info@citiesracetozero.org

www.citiesracetozero.org

