



# City of Cincinnati

801 Plum Street  
Cincinnati, OH 45202

## Agenda - Final

### Climate, Environment & Infrastructure

*Chairperson, Meeka Owens*  
*Vice Chairperson, Mark Jeffreys*  
*Councilmember, Jeff Cramerding*  
*Vice Mayor, Jan-Michele Kearney*

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Tuesday, March 15, 2022

11:00 AM

Council Chambers, Room 300

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### "Renewing the Green Cincinnati Plan"

#### PRESENTATIONS

#### Greening Cincinnati: Building a sustainable, equitable, resilient city

Oliver Kroner, Sustainability Manager, Office of Environment and Sustainability

#### Sustainable Action in Cincinnati

Ryan Mooney-Bullock, Executive Director, Green Umbrella

#### AGENDA

- [202200597](#) **REPORT**, dated 3/9/2022, submitted by John P. Curp, Interim City Manager, regarding Curb Extension Options.  
**Recommendation** CLIMATE, ENVIRONMENT & INFRASTRUCTURE COMMITTEE  
**Sponsors:** City Manager  
**Attachments:** [Report](#)
- [202200614](#) **PRESENTATION**, submitted by Councilmember Owens from Ryan Mooney-Bullock, Executive Director, Green Umbrella entitled Sustainable Action in Cincinnati.  
**Sponsors:** Owens  
**Attachments:** [PRESENTATION](#)
- [202200617](#) **PRESENTATION**, submitted by Councilmember Owens from Oliver Kroner, Sustainability Manager, Office of Environment and Sustainability entitled Greening Cincinnati: Building a sustainable, equitable, resilient city.  
**Sponsors:** Owens  
**Attachments:** [PRESENTATION](#)

#### ANNOUNCEMENTS

Date: March 9, 2022

To: Mayor and Members of City Council  
From: John P. Curp, Interim City Manager  
Subject: CURB EXTENSION OPTIONS

202200597

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**Reference Document # 202200117**

The Council at its session on February 2, 2022, referred the following item for review and report.

MOTION, dated 1/12/22, submitted by Councilmembers Jeffreys and Owens, WE MOVE that, the Administration provide a report within thirty (30) days on the cost, design, and feasibility of alternative designs for curb extensions (bump-outs) based on inspiration from other cities. The Administration shall take into consideration a variety of tools and materials including, but not limited to concrete barriers, bollards, planters, and reflective paint.

**BACKGROUND**

A curb extension is an area of sidewalk that “bumps out” six to eight feet into the street, typically at a crosswalk or the beginning or end of a block. Curb extensions visually and physically narrow the roadway, calming traffic and creating shorter crossings for pedestrians. Curb extensions also make pedestrians waiting to cross the street more visible to drivers.

**APPLICATION**

The Department of Transportation and Engineering (DOTE) has installed curb extensions in several neighborhood business districts. To date, these curb extensions have been constructed out of concrete. Construction costs have increased exponentially over the last five years; the current cost is \$80,000 - \$100,000 for a pair of concrete curb extensions (one on each side of the street).

**ALTERNATIVE DESIGNS**

In 2021, DOTE piloted a new type of curb extension constructed of plastic paddles. The main benefit of the plastic paddles is cost. Plastic paddle curb extensions are significantly more affordable than concrete at an approximate cost of \$10,000 for a pair. Plastic paddle curb extensions offer an efficient design process, since no drainage modifications are needed. The disadvantage we foresee in using plastic paddles is longevity. It is unlikely that the plastic paddles will have the durability and longevity of concrete. The pilot project implemented in Northside last year will provide DOTE with data on durability and longevity of the plastic paddles.

DOTE is very interested in piloting additional types of curb extensions. Ideas include using readily available pre-cast concrete block, self-watering planters, landscape boulders, and pre-cast architectural concrete. All items will require some type of reflective tape or paint to ensure visibility for drivers in the dark. The design time for these pilot curb extensions will be less than concrete

curb extensions; however, the purchasing requirements will not change, so the implementation schedule will still be several months long. The table below summarizes the different types of curb extensions and the associated approximate costs. These costs do not include contractor mobilization or maintenance of traffic, which can be several thousand dollars on major streets.

<b>Item</b>	<b>Description</b>	<b>Cost for two curb extensions</b>
Pre-cast concrete block	2'x2'x6' concrete block with rebar on top	\$600
Self-watering planters	4'x21", plastic	\$7,000
Plastic paddles and curb	3' plastic paddles	\$10,000
Landscape boulders	Varies, approximately 3'x3'	\$11,000
Pre-cast architectural concrete	Varies (bollard, sphere etc)	\$12,000
Cast in place concrete	Typical concrete curb extension	\$80,000 - \$100,000

**SUMMARY**

DOTe is very excited and eager to utilize creative strategies and best practices to explore additional types of curb extensions. DOTe intends to install alternative curb extensions this year and will keep City Council updated on locations and timing.

cc: John S. Brazina, Director, Transportation and Engineering

# Sustainable Action in Cincinnati



Ryan Mooney-Bullock  
Executive Director, Green Umbrella

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**Green Umbrella**  
REGIONAL SUSTAINABILITY ALLIANCE

March 2022



# Agenda

## **Introduction**

What is Green  
Umbrella?

Our role in the GCP  
process and  
implementation

## **Highlights**

Food

Education

Energy & Built  
Environment

Natural Systems

## **Accelerating Progress**

Key targets for  
continued action for  
the coming year

## **Insights**

Community Education

Resource Allocation

Empower new  
champions

01

# Green Umbrella and the Green Cincinnati Plan

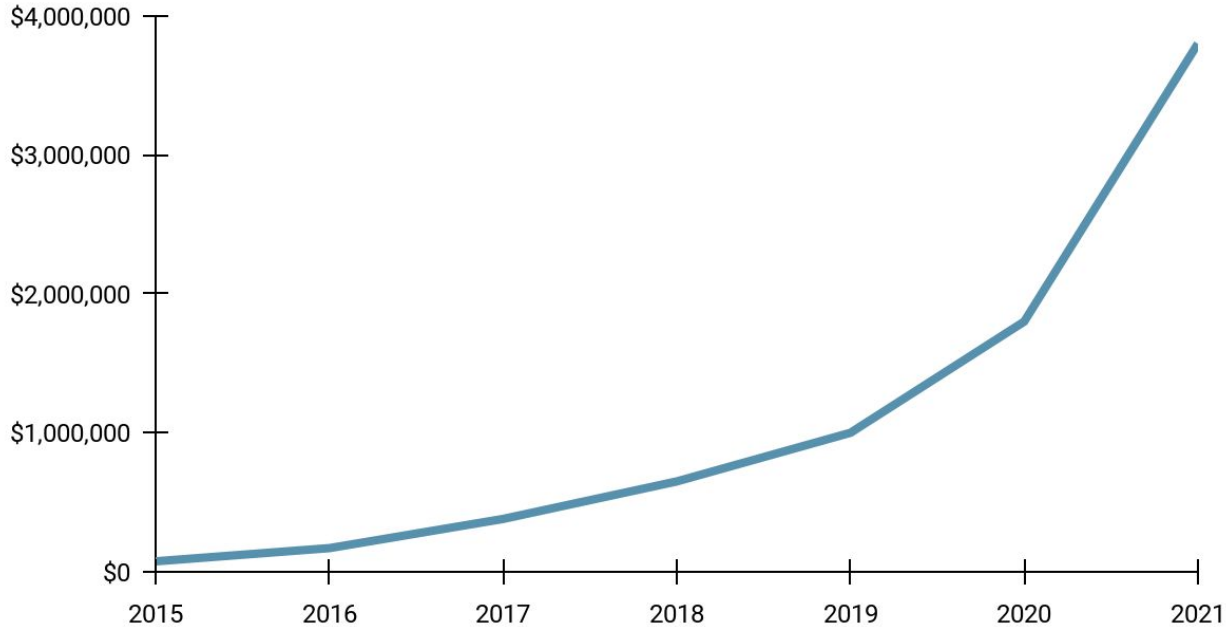
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# Highlights

# Food

## Sales of Local Food through Food Hubs

### Local Food Connection Sales



# Food

## Growing and Purchasing Healthy Food

- CPS Purchased >\$336K in local foods in 2021 alone
- 2019 Urban Agriculture Zoning Ordinance Revisions
- State of Urban Agriculture Report coming soon



Greater Cincinnati Regional  
**Food Policy Council**

# Food

## Growth of Food System Entrepreneurs & Neighborhood Food Access Points





# Food

Prevent, Recover, Recycle Wasted Food

- Food rescue and waste prevention process improvement work with pantries
- Beyond 34 plan to action
- Food Waste Matters Regional Initiative



# Education

## Expand Environmental Education in CPS

- Green Schoolyards Pledge and national technical assistance cohort
- District-wide approach to curriculum.
- Outdoor learning and play campus improvements
- Career pathways in green industries for urban youth





# Energy & Built Environment

Improve energy efficiency for low income households

EXPERT BLOG › EMILY BARKDOLL & KARI ROSS

## Cincinnati Commits to Low-Income Energy Efficiency

February 05, 2020

Emily Barkdoll & Kari Ross

## Cincinnati to Pilot Cost-Free Energy Efficiency Aid for Lower-Income Renters

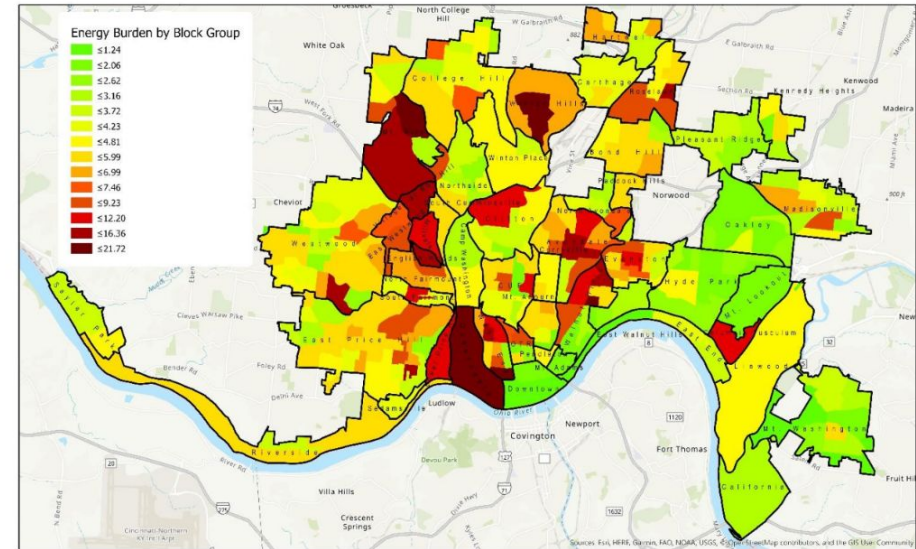
The WarmUp Cincy pilot program will help 65 low- and moderate-income renters in multi-family buildings with energy efficiency upgrades, energy education and financial assistance as needed. The city hopes to scale the program up after the pilot.

By [CityBeat Staff](#) on Tue, Feb 11, 2020 at 9:03 am

[SEND A NEWS TIP](#)



Figure 1: City of Cincinnati Energy Burden by Census Block Group



# Energy & Built Environment

Establish a Sustainability District

CINCINNATI  
**2030**  
DISTRICT<sup>®</sup>

AN INITIATIVE OF  Green Umbrella



Reduce energy  
50%



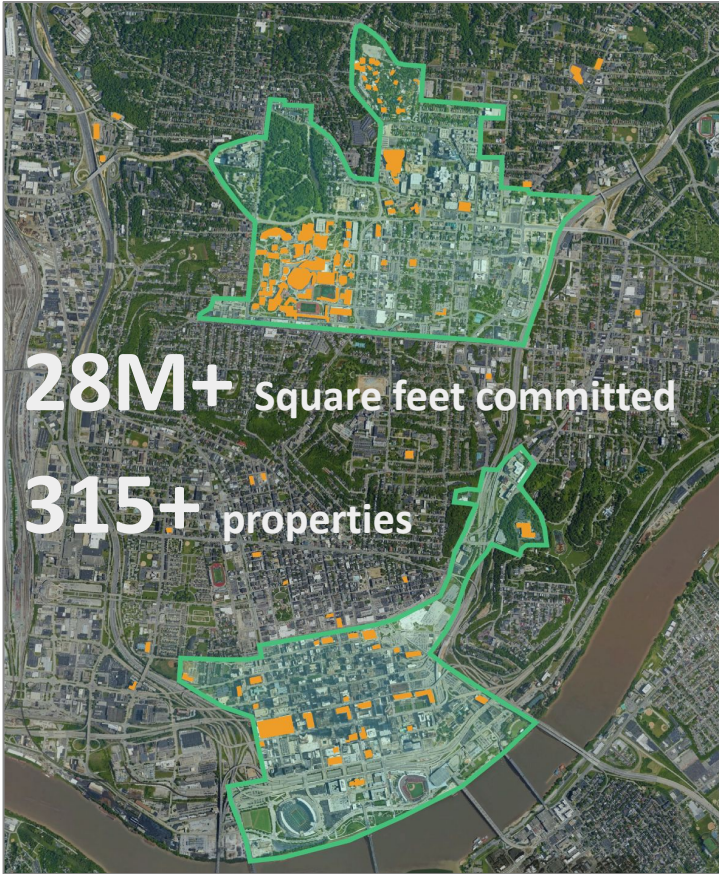
Reduce water  
50%



Reduce transportation  
emissions  
50%



Support occupant  
health





## Breakdown By The Numbers:

30.4%

Energy reduction from baseline for all participating buildings.

28.5%

Energy reduction from baseline for participating office buildings.

54,397.02

Metric Tons CO<sub>2</sub>e reduction.

\$3.05 M

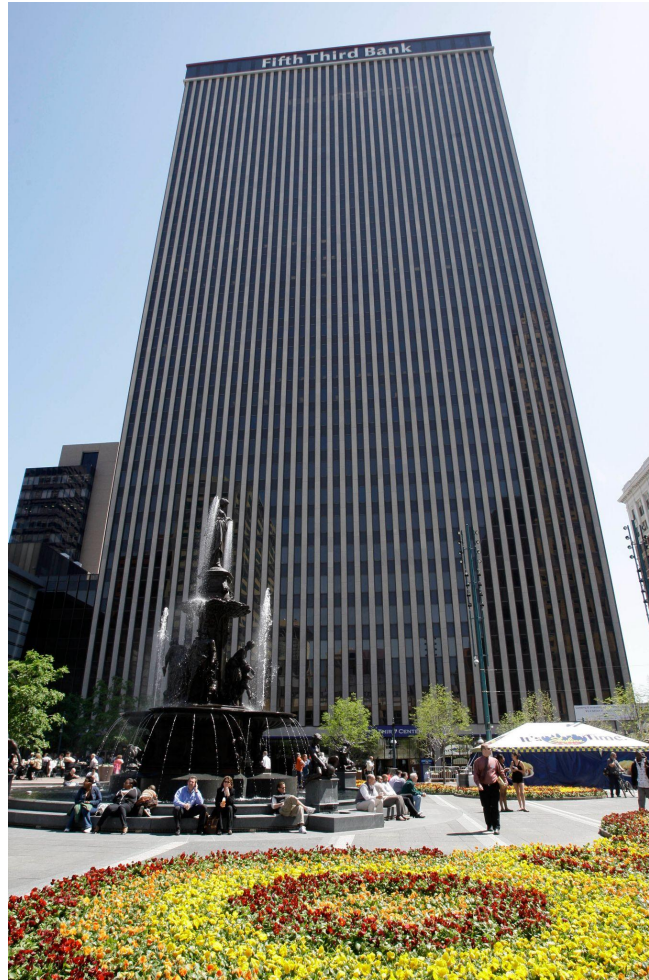
Dollars saved

Our participating buildings had a

516.6 M

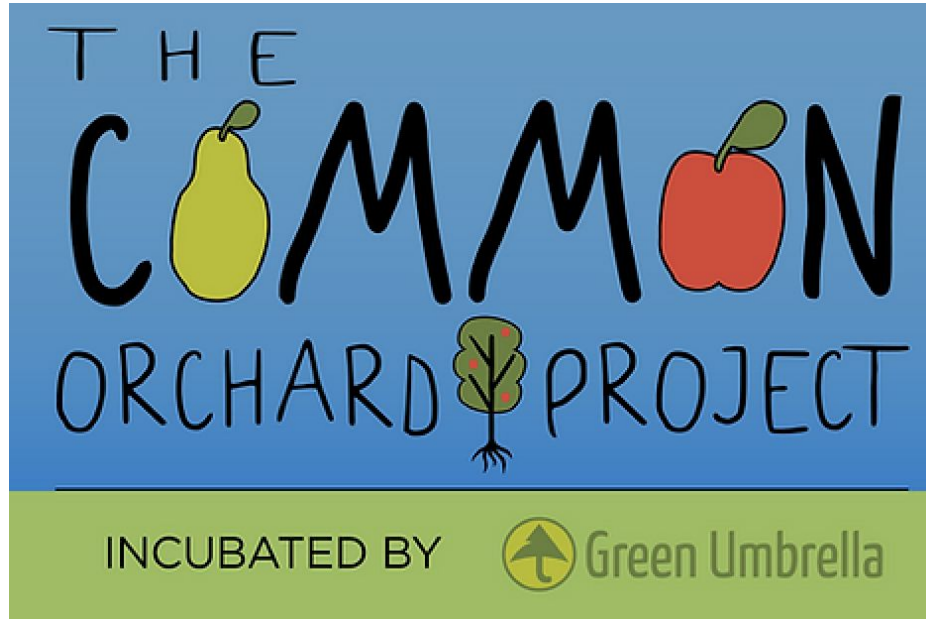
reduction from Baseline.

1,183,732,554.30  
kBtu (2020 total energy) - 1,700,375,406.71  
kBtu (baseline) = 516,642,852.41 kBtu reduction (30.4%).



# Natural Systems

Increase tree canopy & stormwater capacity, decreased mown grass



03

# Accelerating Progress





# Food Justice

Invest now in food security solutions

## Co-Op grocery store in Walnut Hills hopes to expand healthy food access

Group aiming for 2024 opening

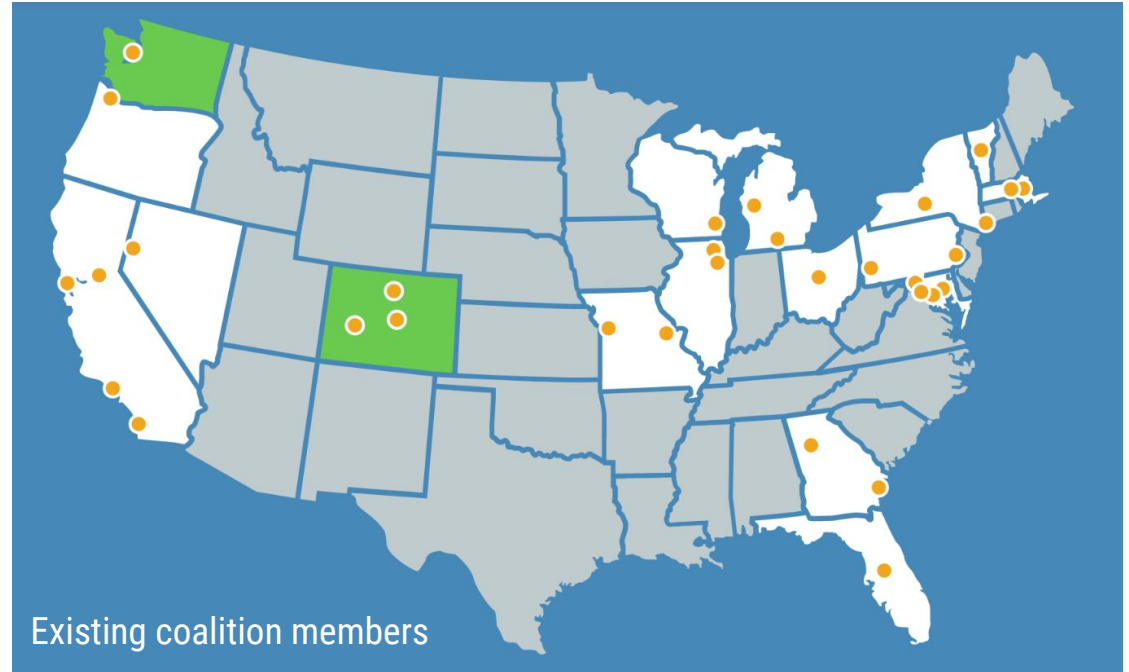


# National Building Performance Standards Coalition

Tap into assistance and funding to reduce emissions and energy burden

Opportunity for Cincinnati to join national coalition that positions it for technical support and prioritized funding.

Equity-focused energy efficiency work that grows jobs and reduces household energy burden for renters.



# Regional Climate Collaborative

Extend impact across the region

## Under the Green Umbrella, Sustainability Means Equity



February 10, 2022  
by Krystal-Rose Agu





04

# Insights

# Insights

## Preparing for the next Green Cincinnati Plan

- Community-wide education
- Be realistic about what external partners can accomplish and what resources they need
- Keep learning from peer cities: equity benchmarking
- Lift up BIPOC-led community based organizations to truly lead and be the messengers in their communities on food justice, resilience, energy, extreme weather.

Thank you!

[greenumbrella.org](http://greenumbrella.org)



Green Umbrella  
REGIONAL SUSTAINABILITY ALLIANCE



## Greening Cincinnati: Building a sustainable, equitable, resilient city.





# CLIMATE CHANGE IN CINCINNATI

HEAT



PESTS



HEALTH



STORMS



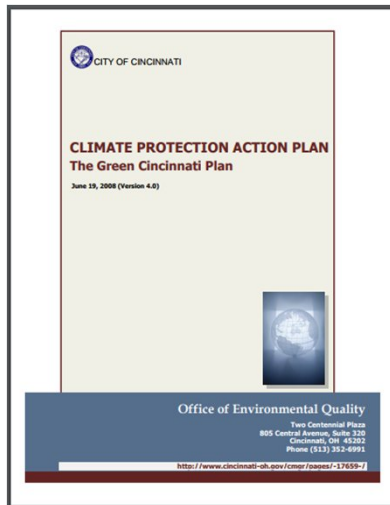
LANDSLIDES



SEWER BACKUPS



# 2018 GREEN CINCINNATI PLAN UPDATE



2008



2013



2018

- Mayor's motion July 2017 called for updated plan, including:
  - Carbon reduction goal: 80x50 – 80% emissions reductions by 2050
  - Renewable Energy: 100% by 2035
  - Steering Committee of organizational leaders to guide process

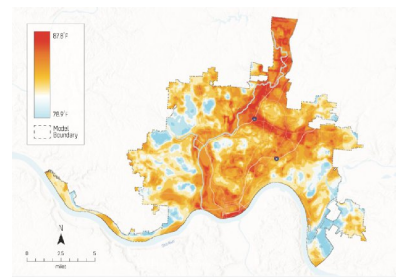




# 2018 Green Cincinnati Plan



# Community Vision







# GREEN CINCINNATI PLAN



BUILT ENVIRONMENT



EDUCATION & OUTREACH



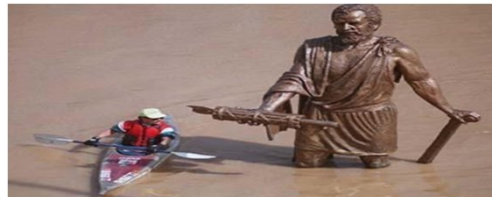
ENERGY



FOOD



NATURAL SYSTEMS



RESILIENCE



TRANSPORTATION



WASTE

80 Strategies to reduce carbon emissions 80% by 2050.

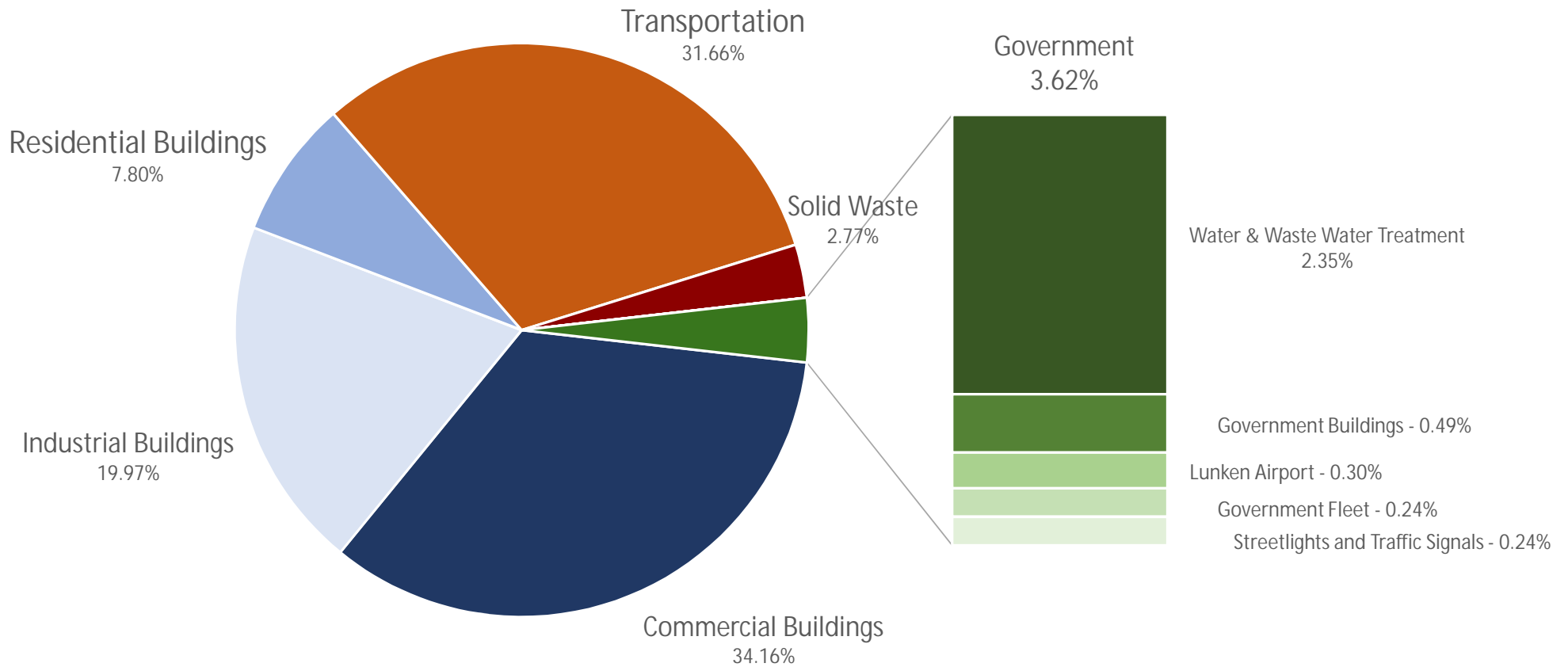
Sustainability. Equity. Resilience.



# Cincinnati Carbon Profile

# 7.6M

metric tons of carbon  
emitted in Cincinnati in 2015



# CINCINNATI'S CLIMATE CHANGE GOALS

As part of the Green Cincinnati Plan, we will....



Transition the city to  
100% renewable  
energy.



Improve energy  
efficiency of building  
stock.



Increase public transit,  
biking, and walking



Electrify transportation

# 100% Green Energy for the City

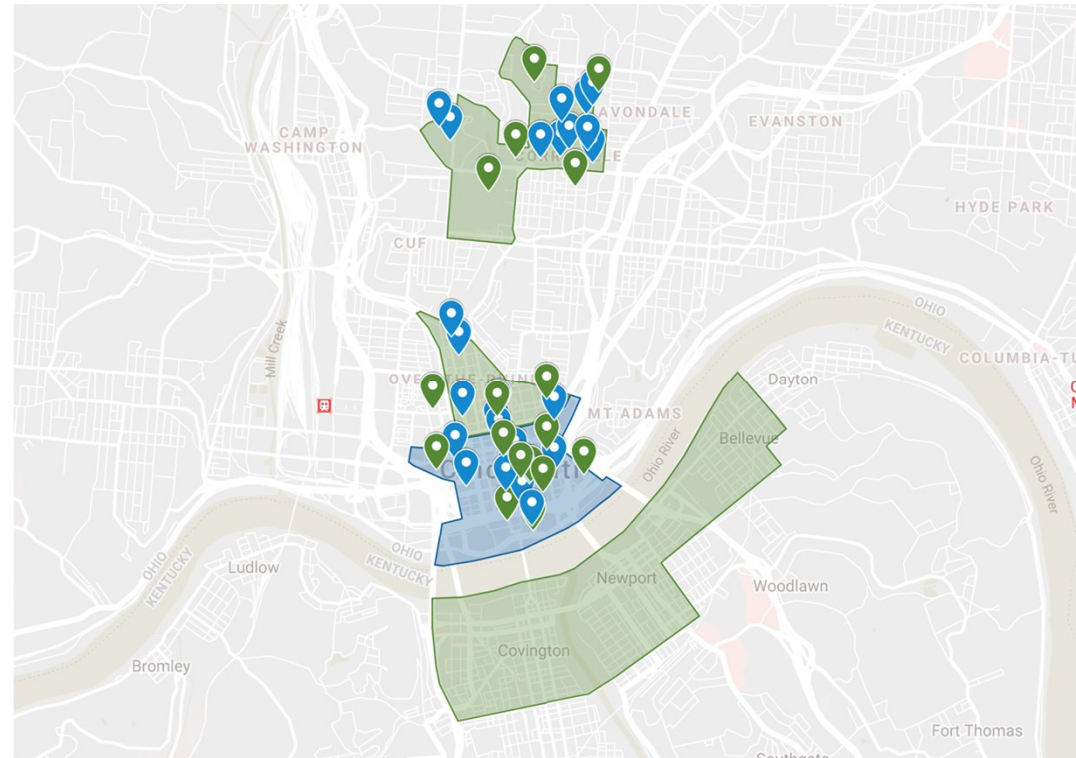
- 100 Megawatt solar farm under construction (Power Purchase Agreement)
- Energy Aggregation Program - Green energy delivered to ~80,000 homes and biz
- ~10% savings from conventional utility rate
- Workforce development program to grow solar sector employment





# CINCINNATI 2030 DISTRICT®

- 300+ Buildings
- 28.1M Square Feet
- 30.4% Energy Reduction
- \$3.1M in Energy Savings





## WarmUp Cincy

Energy Efficiency for Low-Income Apartment Buildings

- 1 in 4 Cincinnatians live in energy burden
- Cincinnati ranked **8th for highest energy burden in 2016** for low-income residents and renters of the top 50 metro areas in the U.S.
- Approximately 400 households benefiting from WarmUp energy efficiency programs





# Transit Sales Tax

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\$100-150M generated annually to improve transit and infrastructure





# Transportation:

## Vehicle Electrification



Charging ports installed in Cincinnati



Residents educated on electric vehicles



1,000 cars registered in EV free parking program



60 hybrid-electric vehicles for police



20 all-electric vehicles for city fleet





# Climate Safe Neighborhoods Equitable Community Engagement

- 6-week workshops with citizens who are paid to offer their community expertise on climate change impacts in their neighborhood
- Build relationships and trust and a better understanding of how to work together
- Empower community to take advantage of government and community programs
- Inspire and train climate advocates





# GREEN CINCINNATI PLAN



| BUILT ENVIRONMENT



| EDUCATION & OUTREACH



| ENERGY



| FOOD



| NATURAL SYSTEMS



| RESILIENCE



| TRANSPORTATION



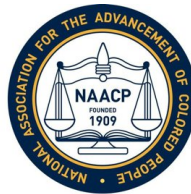
| WASTE

80 Strategies to reduce carbon emissions 80% by 2050.

Sustainability. Equity. Resilience.



# PLAN IMPLEMENTATION



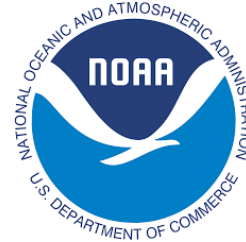
venture  
smarter





# Resources

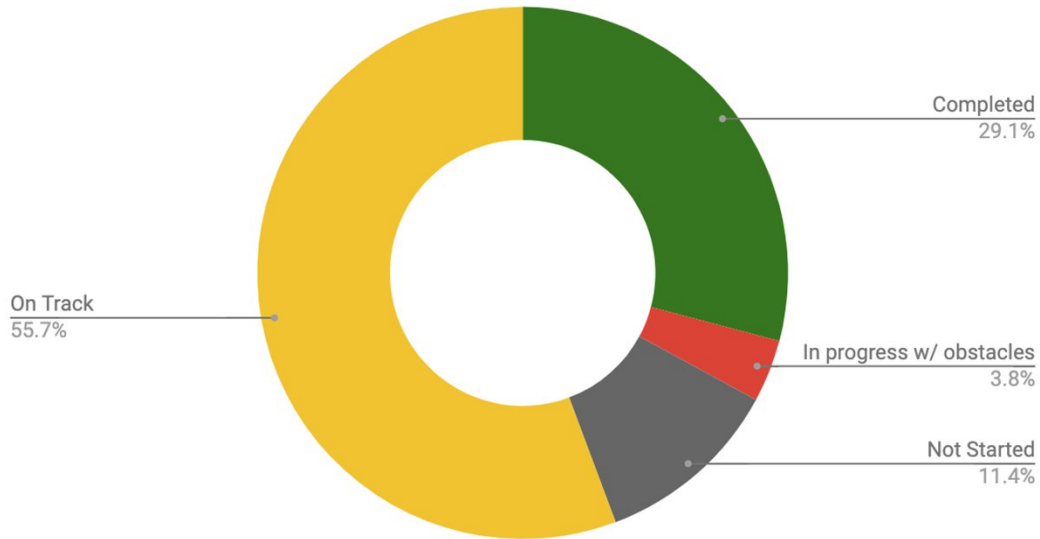
- Over \$4M in grant support to accelerate sustainability work



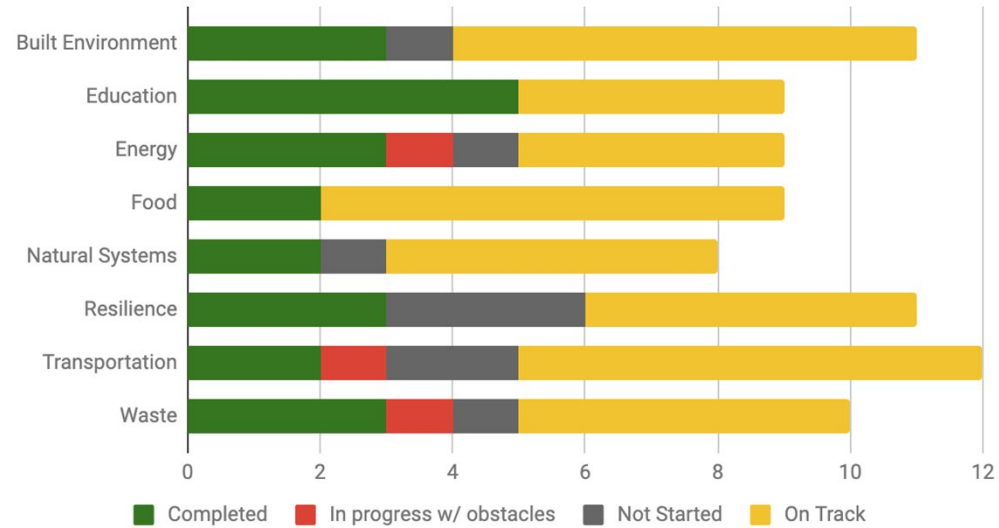


# Progress tracking

## Recommendation Progress

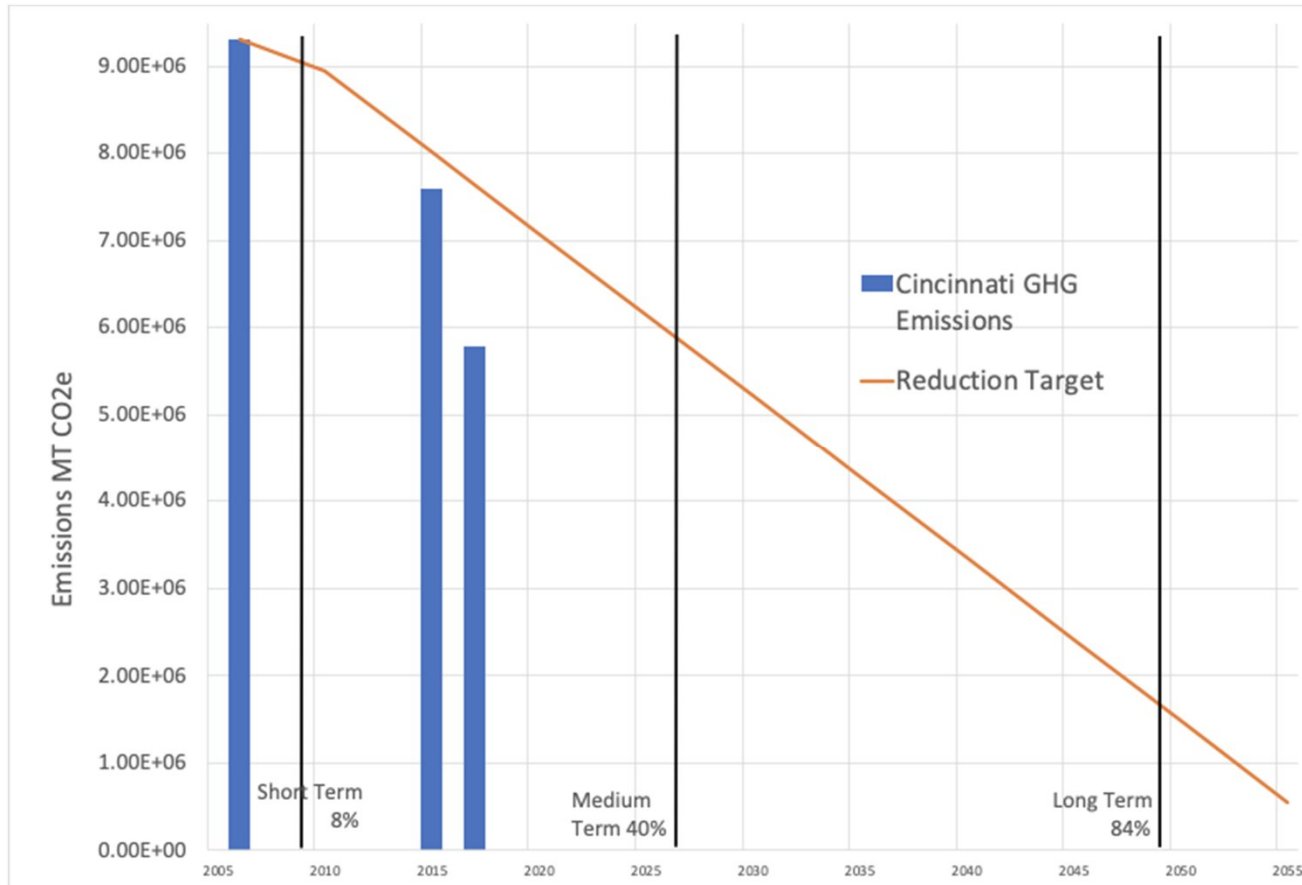


## Recommendation Progress by Chapter





# Cincinnati Carbon Emissions 2006-2017



**5.8 M**  
mt CO2e  
Annual Emissions

**-37.8%**  
emissions reduction  
since 2006

**19.3**  
mt CO2e per  
Cincinnati resident yearly  
(4.8 mt is global average)



# What have we learned

## Sticking Points

- Headwinds from state legislation
- Market forces are evolving
- Some recommendations require council policy for activation

## Keys to Success

- Deep community engagement catalyzes collective impact
- Bold aspirational goals, with pragmatic next steps
- Strong executive leadership is critical for transformative change





# Looking Forward: GCP2023

Plan Focus	From	To
Purpose	The community envisioned roadmap for collective <b>action</b> to address climate change and prepare for the local impacts.	
Focus	Sustainability, resilience, and equity	
Primary Goal	80% emissions reduction by 2050	100% Carbon Neutrality by 2050
Vision	Distributed incremental change	Focused transformational change
Equity Approach	Equity Advisor, "Keys to equity"	Paid Equity Advisory Board, Procedural, Distributional, & Structural equity
Progress Measurement	<ul style="list-style-type: none"> <li>• Qualitatively assessed</li> <li>• Manually managed with slight software support</li> <li>• Non-publicly viewable</li> <li>• Reported when requested</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitatively assessed</li> <li>• Manually managed with extensive software enabled support</li> <li>• Interactive public reporting</li> </ul>
Funding	<ul style="list-style-type: none"> <li>• Limited City operational funding</li> <li>• Ad hoc grant support</li> </ul>	<ul style="list-style-type: none"> <li>• Federal Infrastructure Funding</li> <li>• Dedicated operational funding</li> </ul>
Communication to Council	Annual GCP reporting to Council	Quarterly GCP reporting to Climate, Environmental, & Infrastructure Committee



# Looking Forward

- 2023 Green Cincinnati Plan Update
- \$1.2 Trillion Federal Clean Infrastructure Plan
- Transit Oriented Development Guidance
- Fleet Electric Vehicle and Facility electrification
- Electrification of City assets for the public
- Parks Tree Canopy Assessment – Climate Equity
- Next round of Climate Safe Neighborhoods