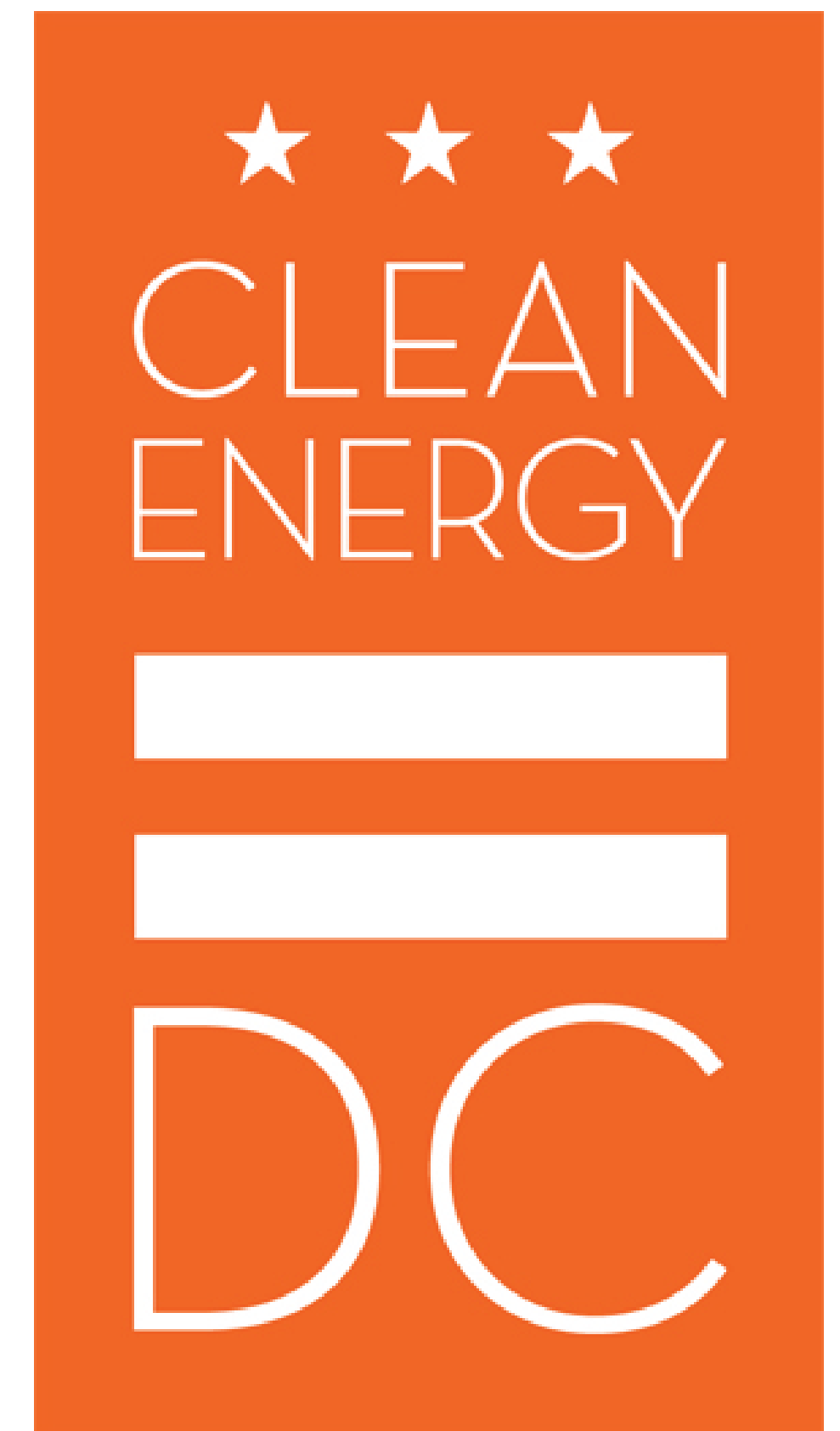


CLEAN ENERGY DC 2.0

THE DISTRICT OF COLUMBIA CLIMATE AND ENERGY PLAN

Public listening session



**Clean Energy
DC 2.0 Plan**

Context


Our Targets

Original CEDC Targets




50% reduction in
GHG emission **by**
2032

below 2006 levels




50% reduction in
per capita energy
consumption **by**
2032

below 2012 levels



50% of energy
derived from
renewable
sources **by 2032**

New Targets*



60% reduction in
GHG emission **by**
2030

from 2006 levels



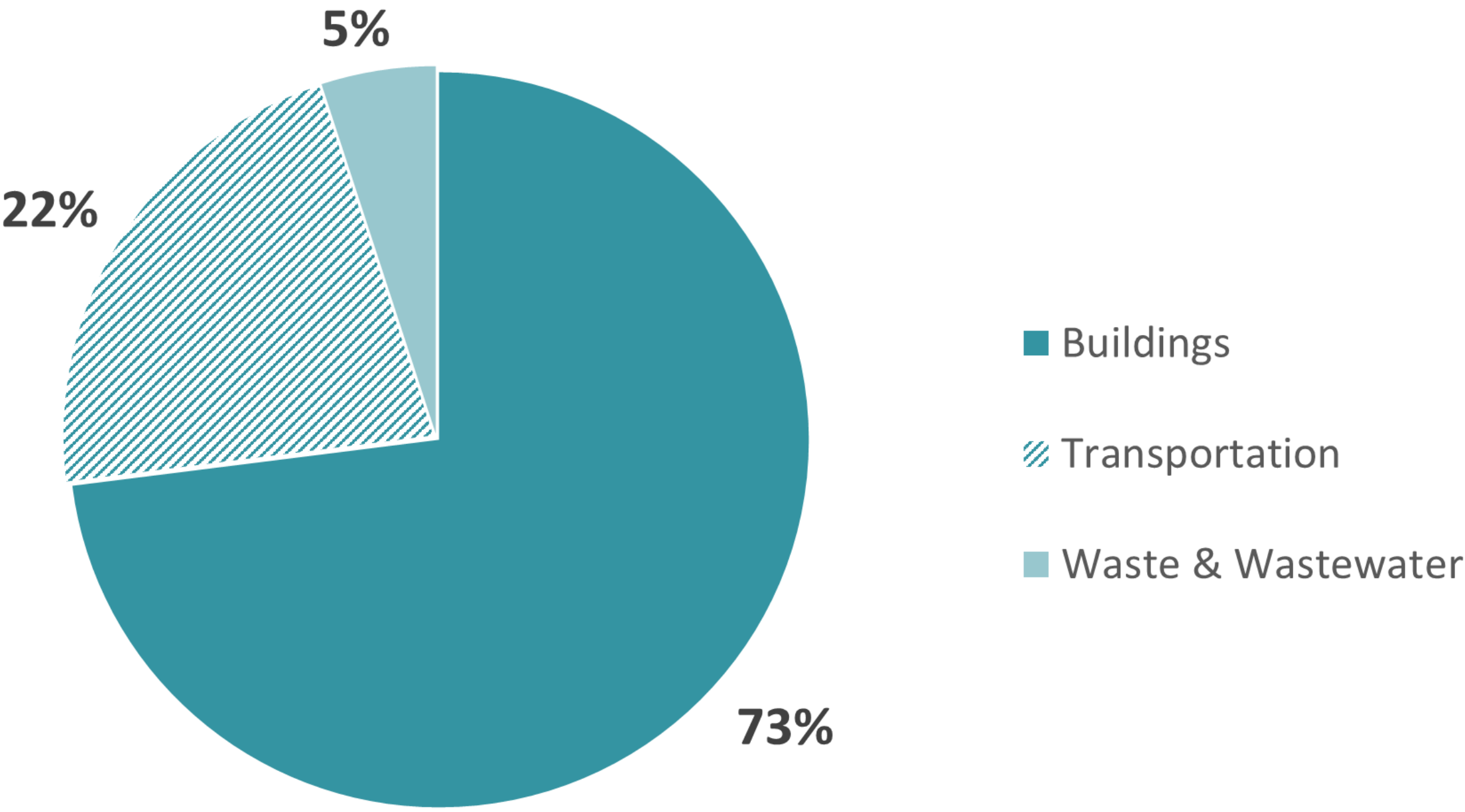
Carbon
neutrality by
2045

*New targets per the Climate Commitment Amendment Act of 2022 override previous GHG targets

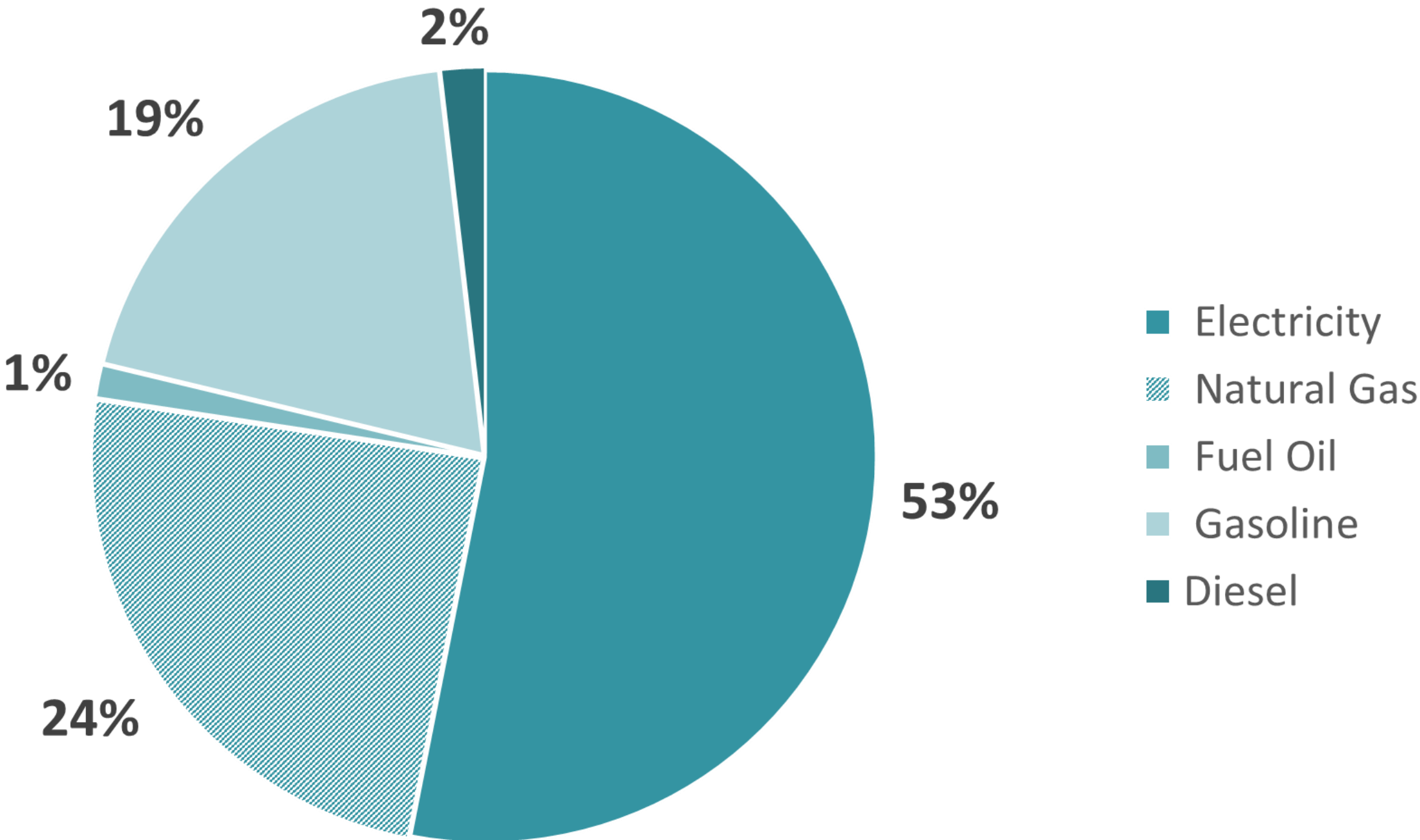
**The District has 22 years
to eliminate our GHG
emissions.**

Overview of greenhouse gas emissions by sector

Current Emissions



Emissions from energy use



Build off existing success

Buildings

- **Building Energy Performance Standards** and supporting programs (CEDC Act)
- **Net-zero building energy codes** (CEDC Building Codes Act)

Energy

- **100 % Renewable Energy Portfolio Standard** by 2032 (CEDC Act)

Transportation

- Set 2045 goal for decarbonizing certain buses and fleets (CEDC Act)
- Developed **Transportation Electrification Roadmap** (CEDC Act); **\$17m for charging infrastructure**



Implementation of Existing Clean Energy DC Plan

TURNING IDEAS INTO ACTION

- Clean Energy DC Omnibus Amendment Act of 2018
- Clean Energy DC Building Codes Amendment Act of 2022
- Climate Commitment Act of 2022
- Local Solar Expansion Act of 2022
- Federal funding (IRA, BIF, etc.)



Why is this plan needed?

Climate Change

As a result of climate change, the District will experience:

- Much warmer average temperatures
- Up 2-3 times as many dangerously hot days
- Longer, hotter, and more frequent heat waves
- More frequent and intense heavy rain events
- Higher tides as a result of rising sea level

Reducing GHG emissions helps lessen these impacts.



Why is this plan needed?

Public Health

Rate Per 10,000 Pediatric (Age 2-17) Asthma Emergency Room Visits

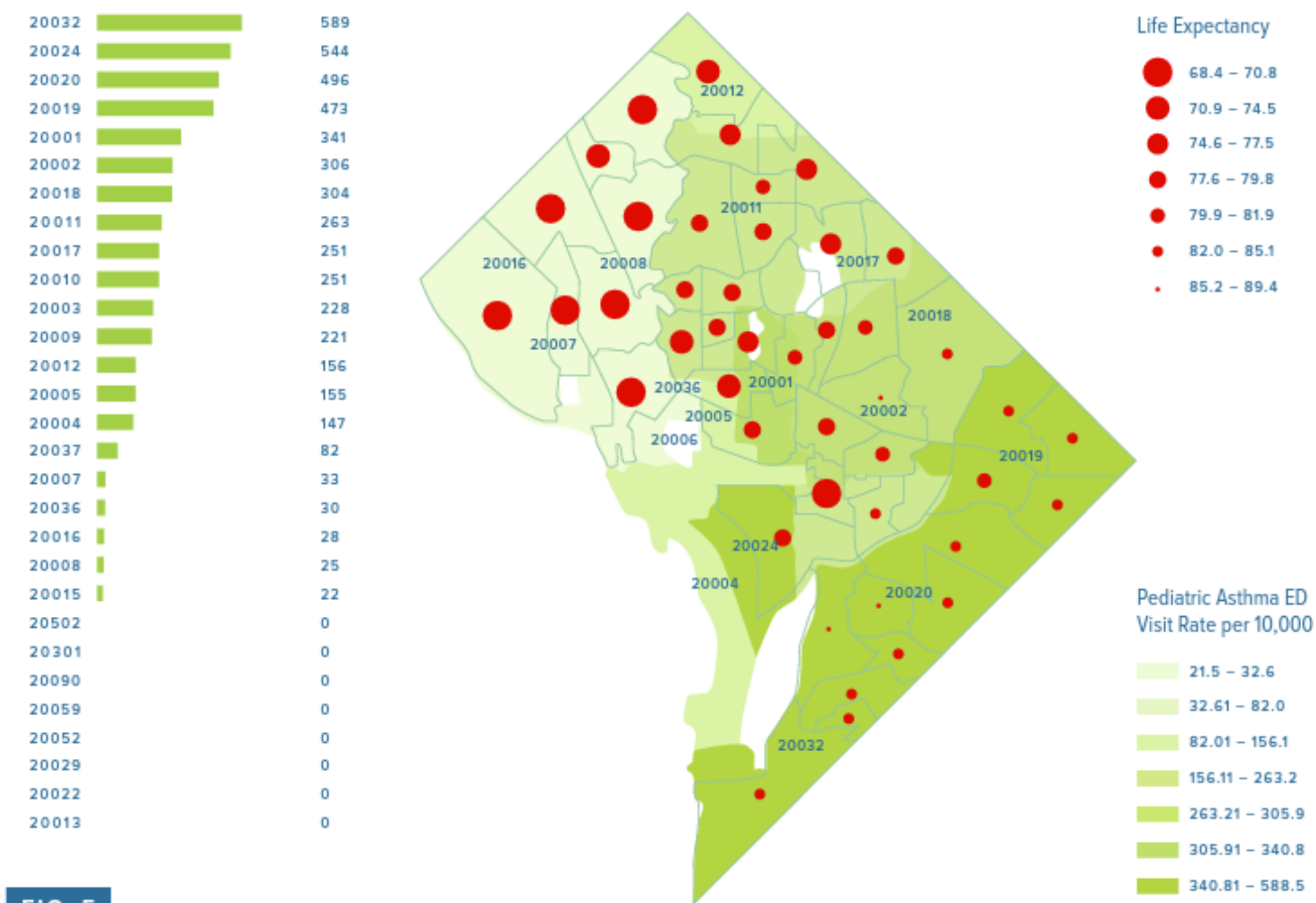


FIG. 5

Data Source Hospital Discharge Data 2014 – 2016, DC Hospital Association

Data Analysis Center for Policy, Planning and Evaluation, DC Department of Health

Clean transportation and all-electric, healthy homes can improve air quality and health outcomes.

Percent of childhood asthma attributable to gas-stove use

Study finds 13% of childhood asthma in U.S. caused by gas stoves, more in some states

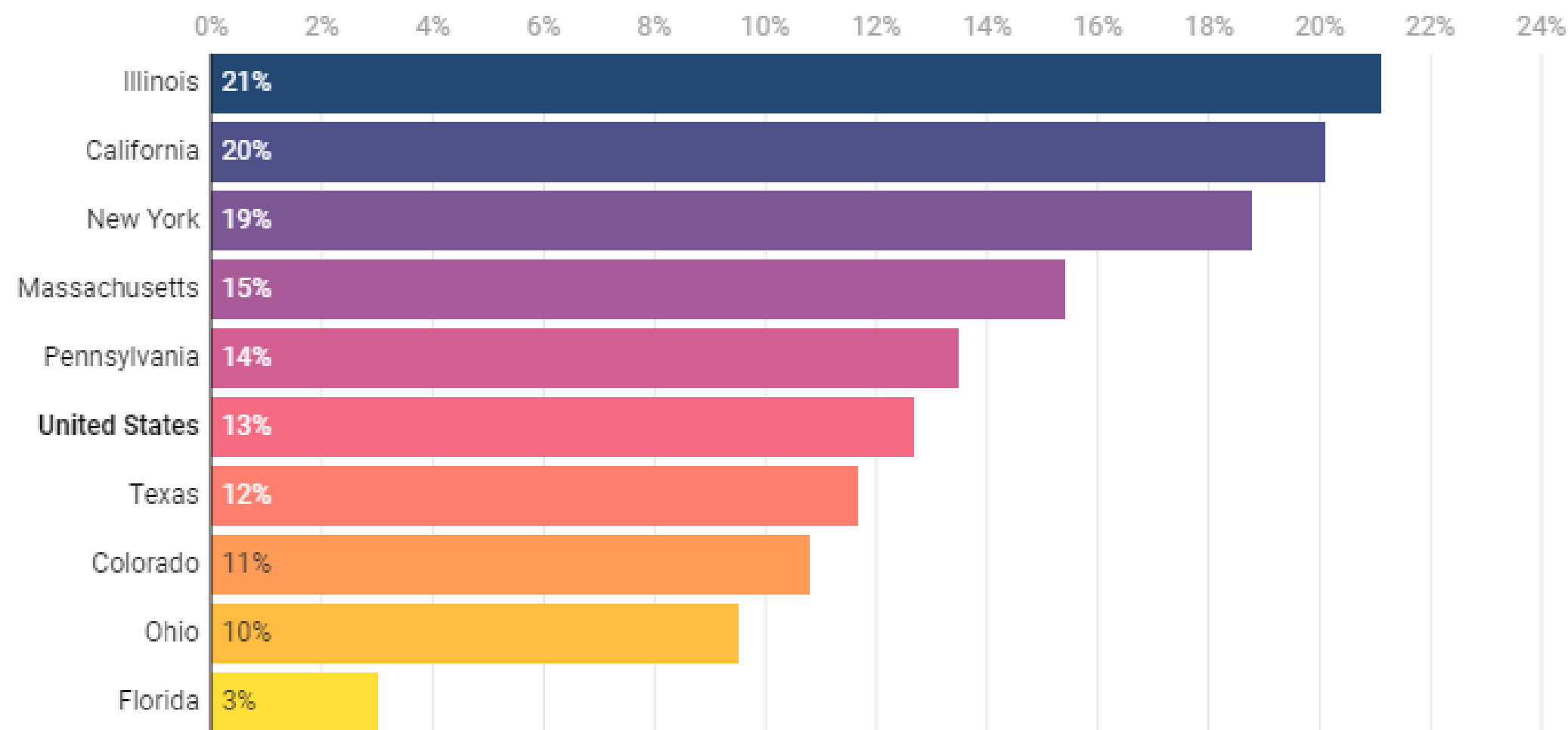


Chart: Canary Media • Source: Gruenwald et al., International Journal of Environmental Research and Public Health, 2023. • Embed • Download image

Why is this plan needed?

Resilient, reliable infrastructure

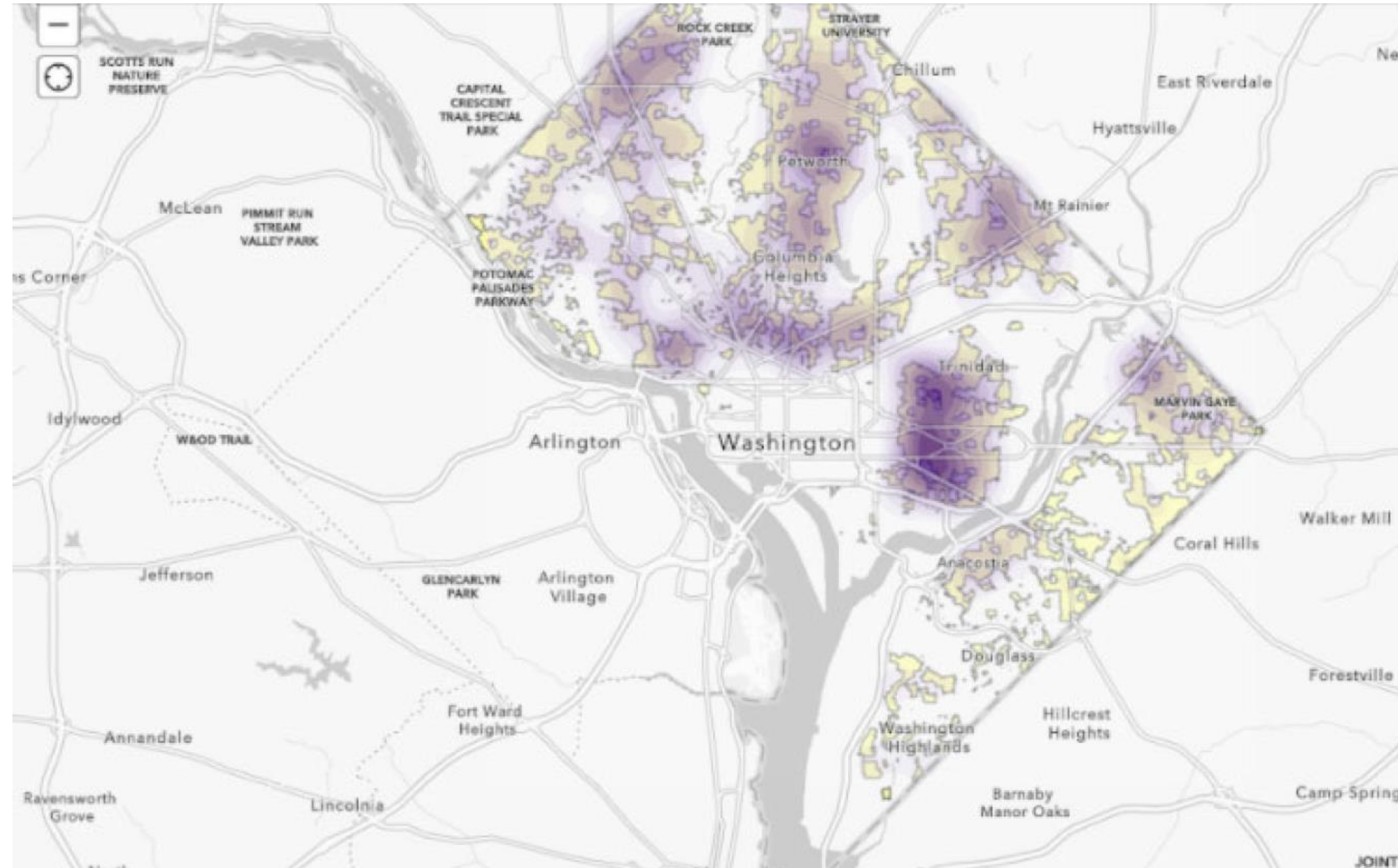


Figure 3. Density of methane emission point distributions.

Leaks from natural gas infrastructure contribute to climate change, damage trees, create potential safety risks, degrade air quality, and waste ratepayer money.



Aging electricity grid needs to be modernized to enable local renewables, improve reliability, maintain affordability and lower GHG emissions.

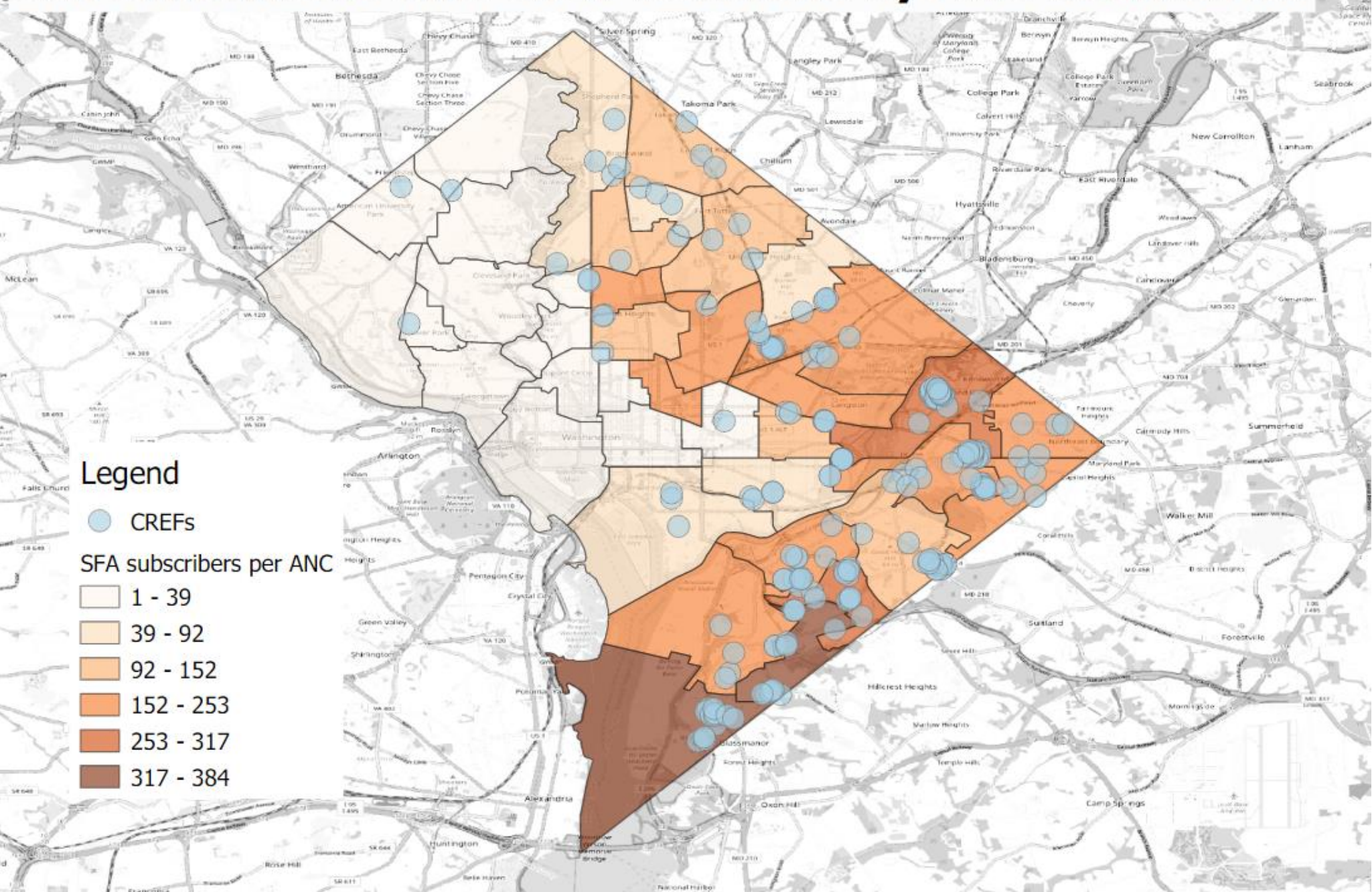
Why is this plan needed?

Local, clean, affordable energy

Local clean energy provides many benefits, from being affordable to emissions-free.

However, more work is needed to ensure affordable electric appliances and sustainable transportation modes are available to all residents, and to add more renewables to a fossil-fuel dominated grid

SFA subscribers and CREF locations by ANC boundaries



The Solar for All program brings the benefits of solar to low- and middle-income communities, and reduces energy bills by \$500/yr

2022 cost for a 5 kW system	
Out-of-pocket cost ?	\$14,195 – \$19,205
Net 20-year savings ?	\$41,920 – \$56,716
Payback period ?	3.9 – 5.3 years
Electricity bill offset ?	73 – 98 %

Why is this plan needed?

Economy and Jobs

Clean energy is an economic driver today

- 1,500+ solar jobs
- 11,000+ energy efficiency jobs
- 300 residents completed Solar Works training

More is needed to:

- Ensure inclusive opportunities
- Expand and train the workforce
- Attract high-value companies and startups



OVERVIEW OF CEDC 2.0

Vision for CEDC 2.0

Clean Energy DC 2.0 is a plan that reduces emissions, champions holistic solutions that improve efficiencies in DC's urban energy system, and makes the District a more livable, healthy, equitable and prosperous city.



Updating the Plan: The Role of CEDC 2.0

- **5-year plan** cycle
- Climate Commitment Act sets **new binding GHG reduction timetable**
- **Alignment with best practice and existing plans** such as Carbon Free DC, moveDC, Transportation Electrification Roadmap

What we've heard from the public...

Buildings	Energy	Transportation	Green Economy
<ul style="list-style-type: none">•Need to incentivize landlords and building owners to electrify•Lack of incentives for batteries, water heater replacement, other equipment needed for electrification•Equity lens regarding incentives – need dedicated resources for lower income homeowners and renters	<ul style="list-style-type: none">•Discomfort with natural gas, community desire to prevent WGL's Project Pipes•Interest in a working group to move Pepco and PSC along•Need for educational programs around the energy transition and less mainstream technologies such as geothermal	<ul style="list-style-type: none">•Need more public charging infrastructure•Need more connected transit options such as buffered bike lanes with dedicated bikes, especially downtown•Should be disincentives for larger vehicles•EVs should be prioritized for transit first, before private vehicles	<ul style="list-style-type: none">•Need a robust program for workforce transition as we move away from gas toward renewables•Green jobs should be framed as high quality, high paying jobs•Lack of contractor education and training is a barrier to electrification

Values and Co-Benefits



Equity and environmental justice – Potential to alleviate environmental burdens on low-income communities and communities of color and address systemic racial inequities through environmental, economic, and social and health benefits .



Public health – Potential to enhance healthy living, physical comfort, and mental wellness.



Economic prosperity – Potential to stimulate local business, economic development, and job opportunities.



Environmental stewardship – Potential to positively impact natural systems, biodiversity, air quality, and water quality.



Resilience and reliability – Potential to increase local adaptive capacity to respond to climate change impacts, and secure reliable energy services.

Planning Principles

Transformational

CEDC 2.0 should seek big, transformative solutions to fundamentally redesign and decarbonize the energy, buildings, and transportation sectors, in order to meet the goal of becoming carbon neutral by 2045.

Actionable

CEDC 2.0 should create real-world, tangible solutions that can be implemented by public and private sectors.

Coordinated and integrated

CEDC 2.0 should take a holistic approach, recognizing decisions made in one sector impact other sectors and the larger system; this plan will complement existing and ongoing initiatives.

Technical and data-driven

CEDC 2.0 should be a highly technical plan that will use the best available data to guide the actions and recommendations.

Participatory

CEDC 2.0 should prioritize community and stakeholder involvement. The level of transformation required to tackle climate change will impact all of us, and therefore decisions should be made in collaboration with our communities, particularly low-income communities and communities of color that have borne disproportionate share of burdens from climate pollution, and whose needs must be centered.

We need your input!

BUILDINGS + ENERGY DISCUSSION

Building and Energy Transitions

Rooftop solar panels
to generate
renewable power

Electric stoves and
water heaters
bring lower energy
costs and better air
quality

More green jobs to
support the transition

Better insulated
windows, doors,
and walls

Heat pumps to
provide heating
and cooling
efficiently

A cleaner power grid
supported by
renewable energy
generation

Addressing natural
gas infrastructure
safely and
equitably

A more reliable
power grid with
battery storage

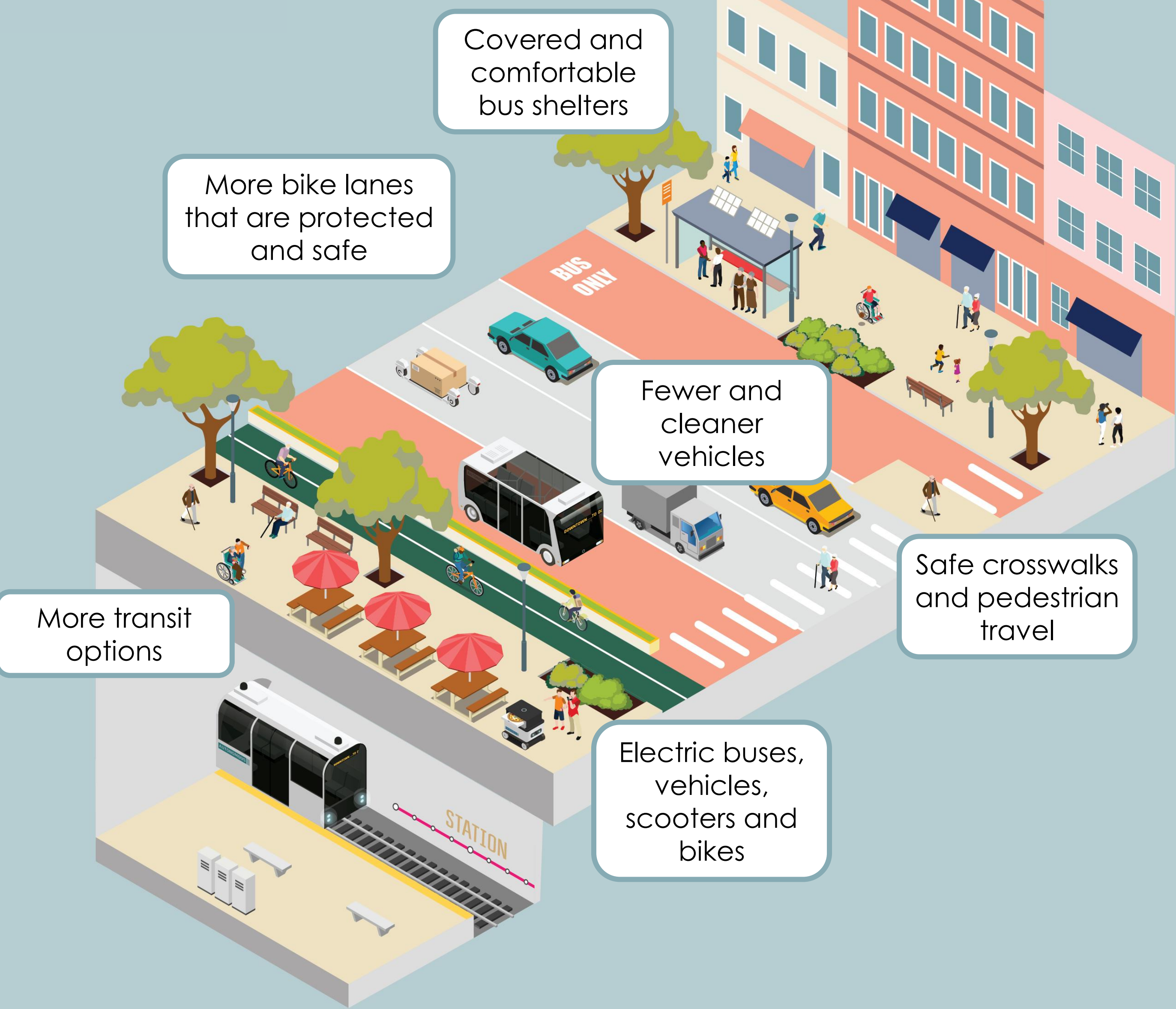
Geothermal energy
to use the natural
energy of the earth

Buildings and Energy Discussion

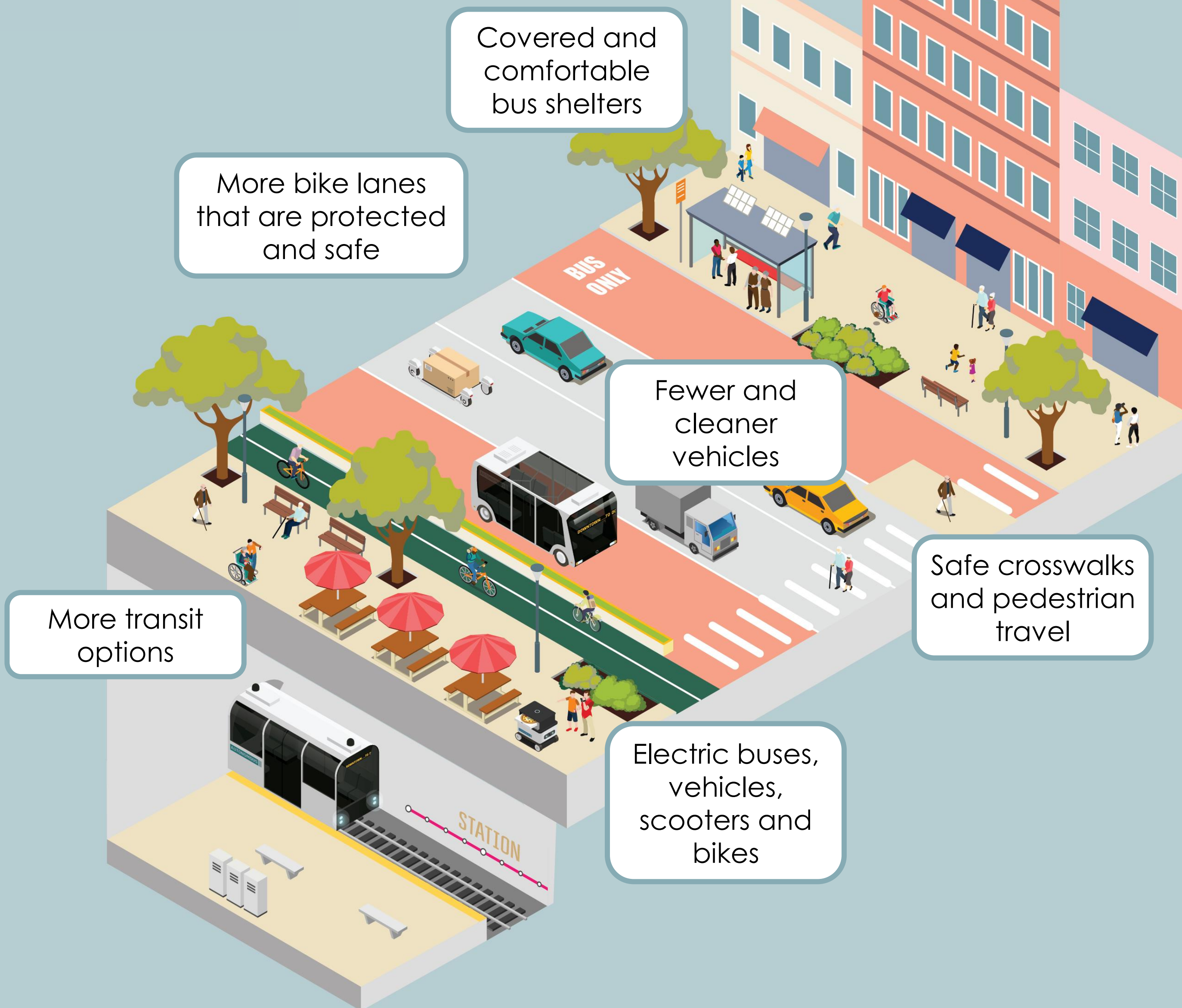
- What are your thoughts on converting your home or business from gas to electric?
- What are your perceptions of solar panels and their place in your home?
- What would incentivize you to make the changes to your home that would help advance some of these goals? What kinds of supports would you need? (for ex: removal of natural gas or adding solar panels)
- What do you know about the availability of green jobs? What would be helpful to know?
- How would these programs and topics be received in your community or neighborhood?

TRANSPORTATION DISCUSSION

Transportation Transitions



Transportation Transitions



- How can we encourage more public transit ridership? What would incentivize you to use public transit more often?
- How do you feel about more active transportation in DC (scooters, bikes, walking)?
- What does your community or neighborhood need in order to have better transportation options?
- What do you know about electric vehicles? What do you think their role is in the city's transportation infrastructure?
- What are your thoughts or experience with EV charging? How would you like to charge your car now or in the future?
- What should be the most important priorities for transportation in the District?

Next Steps

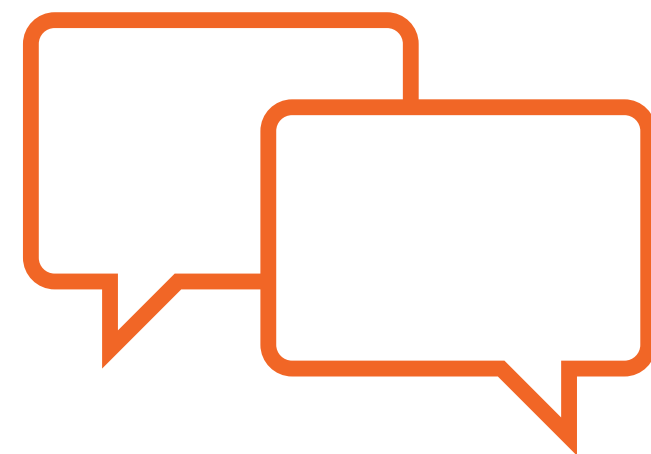
Upcoming Engagement Activities



Public Listening Sessions



In-Person District-wide Listening Session



Public Survey #2



Draft Report Review

Anticipated Timeline

Late Fall 2023

CEDC 2.0 Draft Review Period

Early 2024

CEDC 2.0 Published

How to Stay Engaged



Visit our website – and sign up for our newsletter!

Key Contacts

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