

City of Fort Lauderdale

# NET ZERO PLAN

March 4, 2025

City Commission Conference Meeting

Prepared by:



In partnership with the  
City of Fort Lauderdale



Building a Sustainable Fort Lauderdale

NETZERO

# Net Zero, Simply Stated:

**When the amount of greenhouse gases (GHG) produced equals the amount removed from the atmosphere.**

Achieving it requires cutting carbon emissions through various means to the extent practical, with the remainder managed so they can be absorbed and retained by nature, and other removal measures, leaving zero emissions in the atmosphere.







*Development of an Achievable Net Zero Plan*

**FORT LAUDERDALE'S NET ZERO PLAN ALIGNS  
WITH KEY CITY AND REGIONAL STRATEGIES**



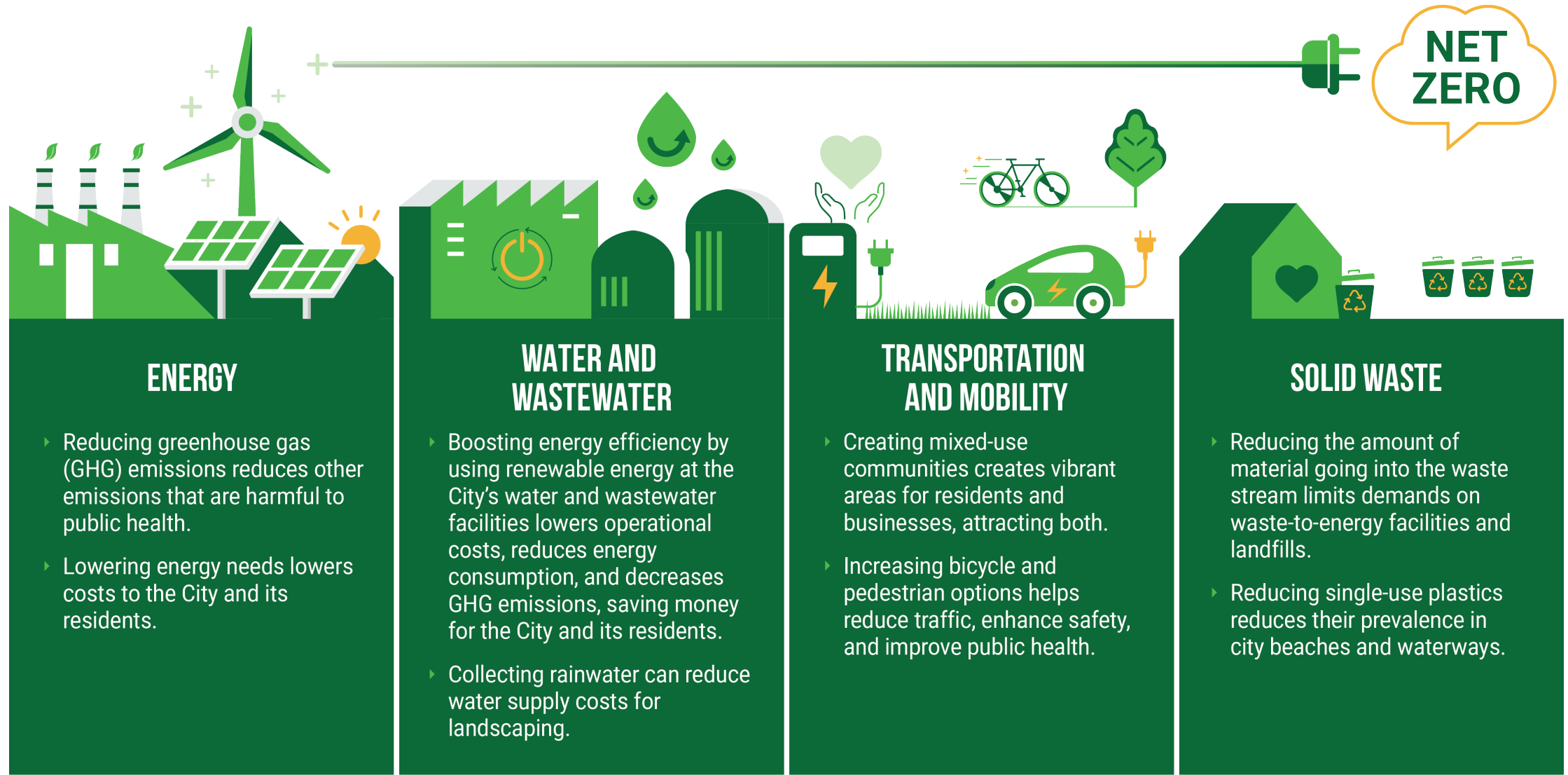
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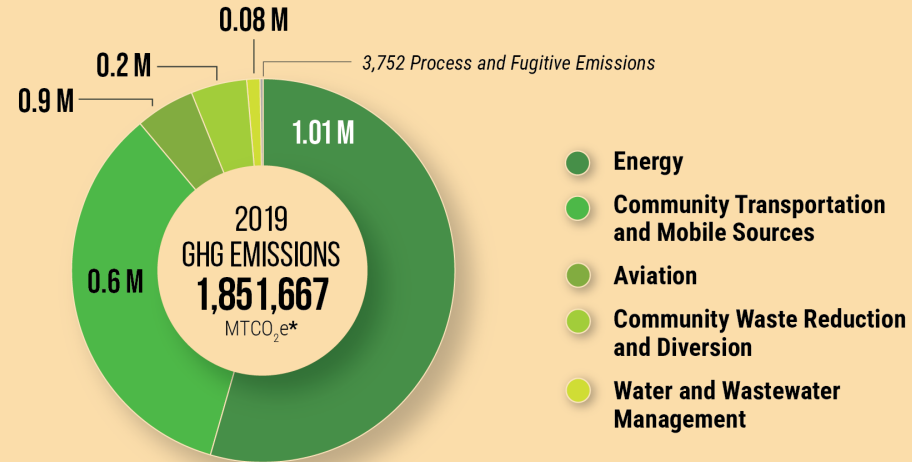
# This is Fort Lauderdale's **TIME TO LEAD**



# HOW NET ZERO WILL BENEFIT FORT LAUDERDALE

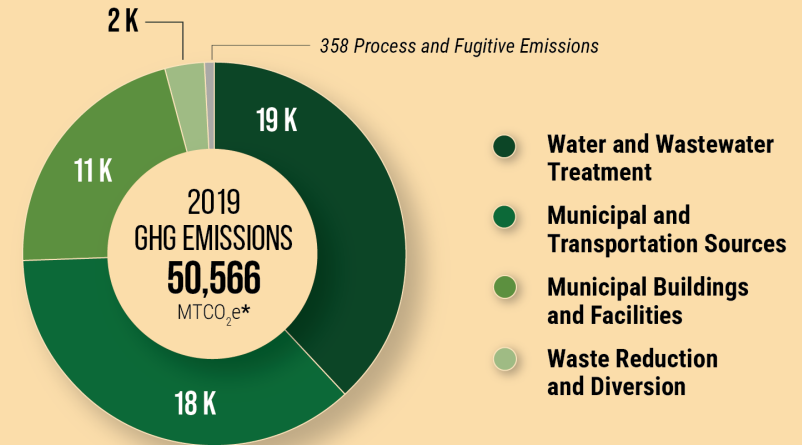


## 2019 COMMUNITY GHG INVENTORY



\*MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalent  
M = Millions  
K = Thousands

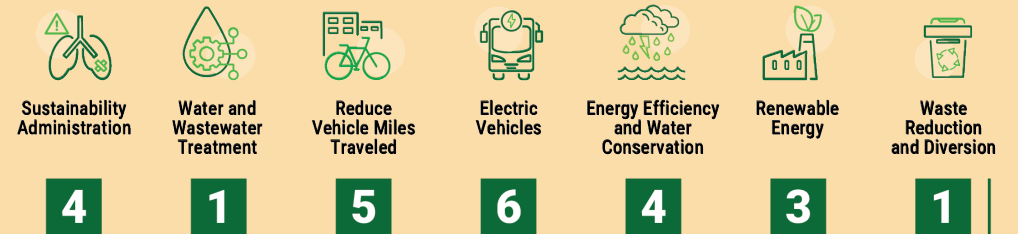
## 2019 MUNICIPAL GHG INVENTORY



### 8 COMMUNITY-FOCUSED STRATEGIES



### 7 MUNICIPAL-FOCUSED STRATEGIES



TOTAL 55 ACTIONS TO ACHIEVE NET ZERO

26%  
REDUCTION BY  
2030

70%  
REDUCTION BY  
2040

97%  
REDUCTION BY  
2050

PROJECTED  
GHG EMISSIONS  
REDUCTIONS

23%  
REDUCTION BY  
2030

69%  
REDUCTION BY  
2040

96%  
REDUCTION BY  
2050



# FUTURE EMISSIONS PROJECTIONS WERE MODELED UNDER TWO SCENARIOS

## Business as Usual → DO NOTHING

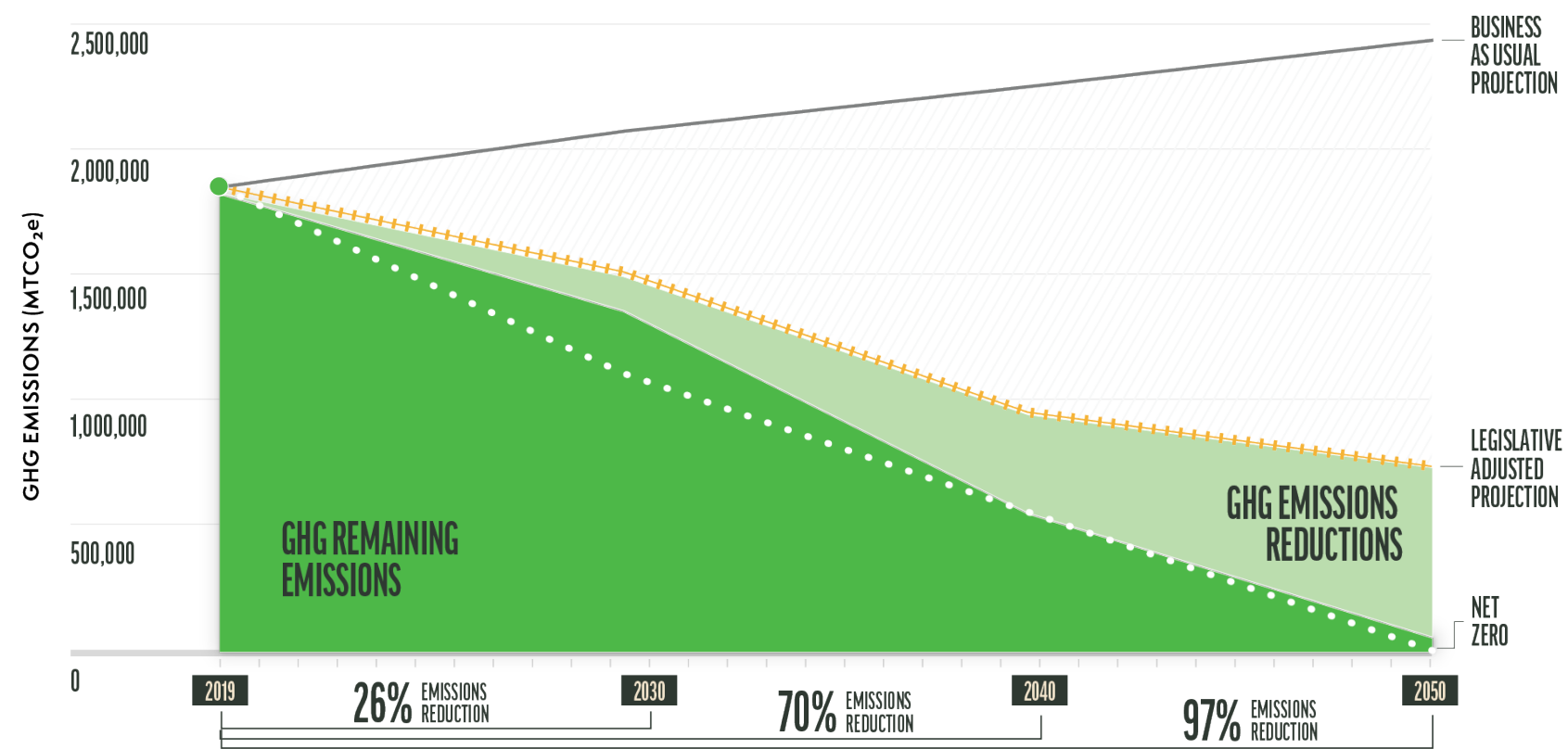
Assumes constant energy practices but accounts for increased demand due to factors including growth in the citywide population, workforce, vehicle usage, and projected airport activity.

### HOW FORT LAUDERDALE MODELS FUTURE EMISSIONS

## → Legislative-Adjusted LEVERAGE THE ACTIONS OF OTHERS

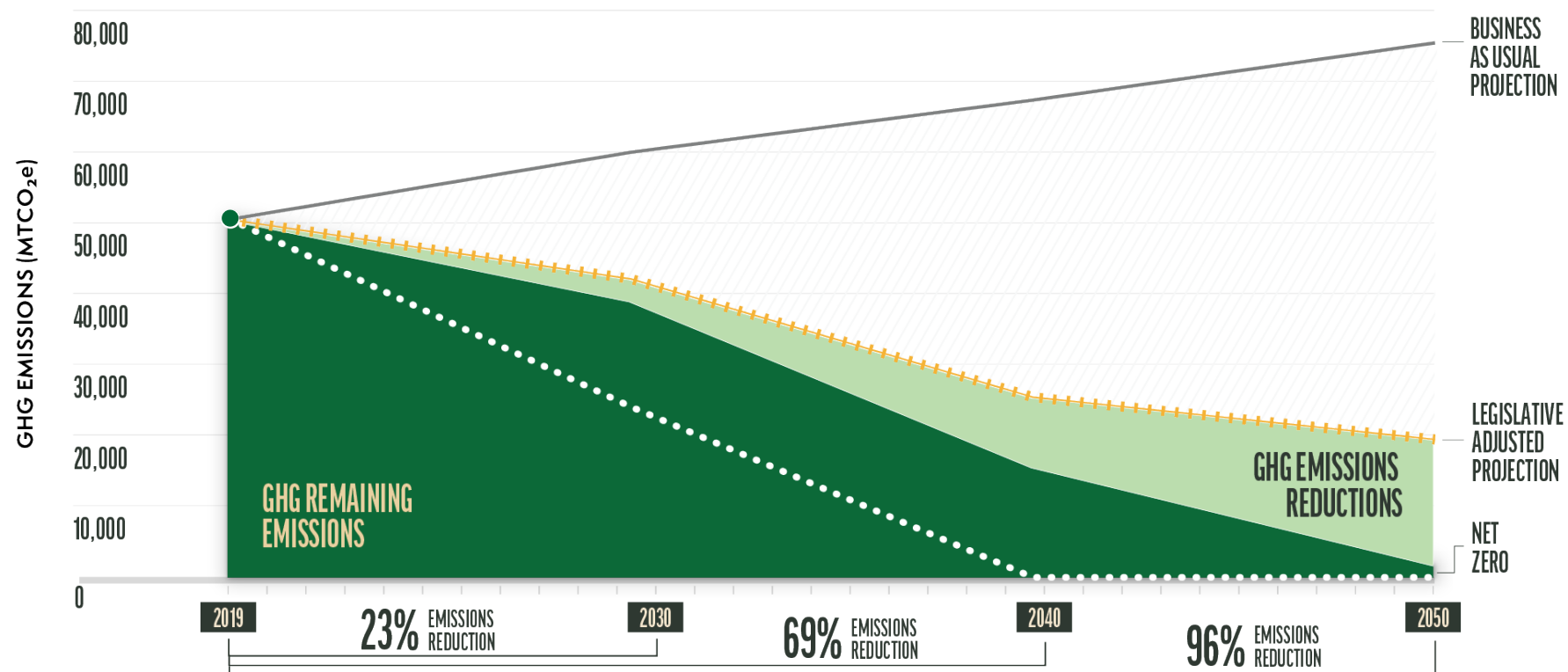
Assumes emission reductions relative to the business as usual scenario based on impacts from existing third-party commitments to decarbonize the grid and improve operational efficiency.

Includes projected impacts of Florida Power & Light's (FPL) Real Zero plan that commits to phasing out fossil fuels by 2045; the National Highway Fuel Efficiency Standards; and updates to the State of Florida Building Code regarding energy conservation.

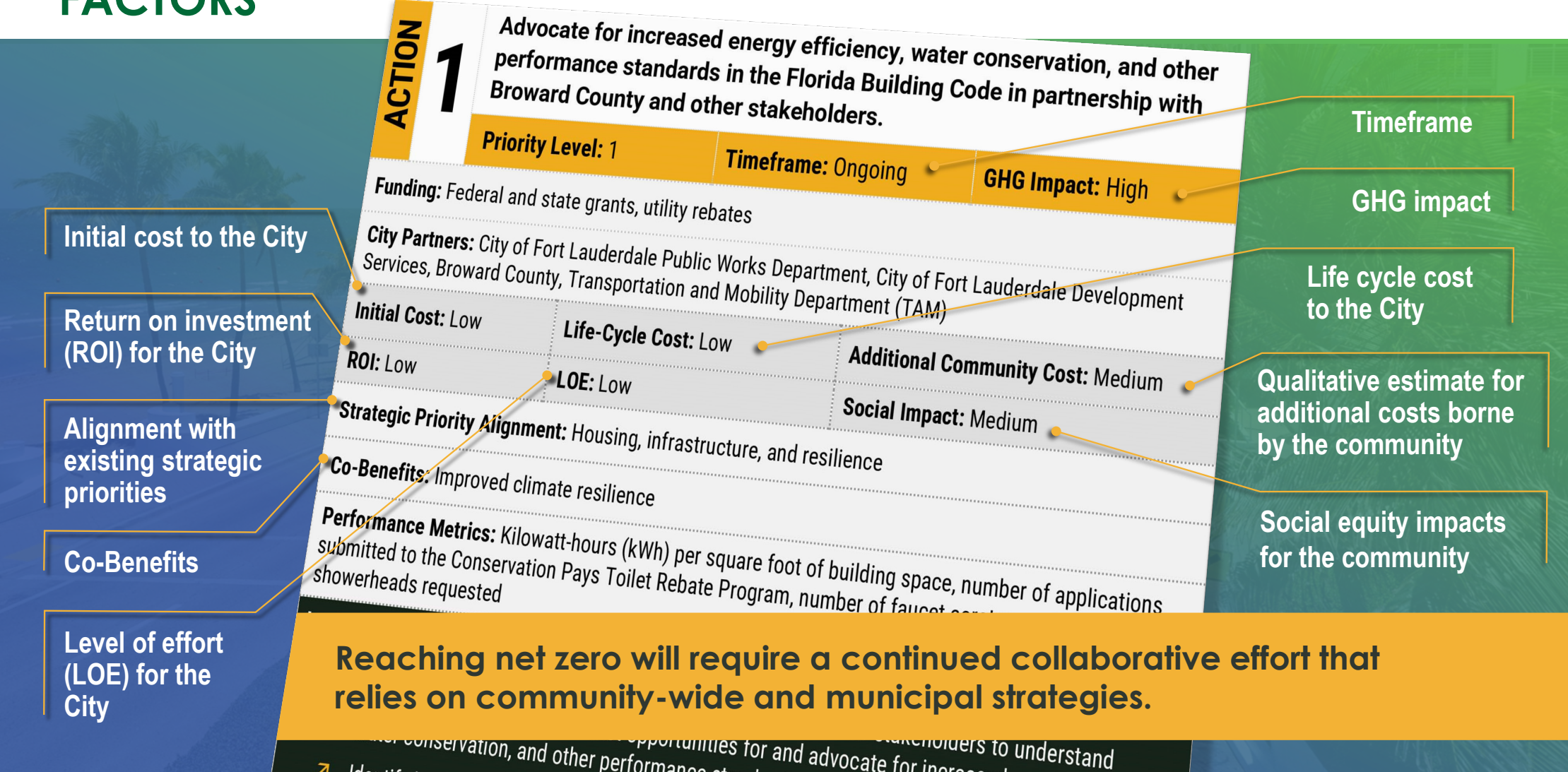




# Municipal Pathway to Net Zero Achieves **96% GHG REDUCTION**



# PRIORITIZATION OF ACTIONS IMPLEMENTATION CONSIDERS SEVERAL FACTORS





## COMMUNITY-FOCUSED STRATEGIES

NUMBER	ACTION	PRIORITY	IMPLEMENTATION TIMEFRAME
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### ENERGY

#### STRATEGY: ENERGY EFFICIENCY

Action 1	Advocate for increased energy efficiency, water conservation, and other performance standards in the Florida Building Code in partnership with Broward County and other stakeholders.	1	Ongoing
Action 2	Incentivize net zero development.		

## 55 ACTIONS TO ACHIEVE NET ZERO

Action 5	Increase awareness of energy efficiency.		
Action 6	Create a Fort Lauderdale sustainable tourism program.		

#### STRATEGY: RENEWABLE ENERGY

Action 7	Promote renewable energy improvements through financial awareness.		
Action 8	Support FPL efforts to decarbonize by 2045.		
Action 9	Participate in FPL SolarTogether® program.		

### FORT LAUDERDALE NET ZERO PLAN

## MUNICIPALLY FOCUSED STRATEGIES

NUMBER	ACTION	PRIORITY	IMPLEMENTATION TIMEFRAME
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### SUSTAINABILITY ADMINISTRATION

#### STRATEGY: SUSTAINABILITY ADMINISTRATION

Action 32	Create working groups to champion, drive, and report progress on each sector.	1	Short term
Action 33	Identify and establish funding streams to support net zero efforts in City operations and Citywide.	1	Short term
Action 34	Publicly report on progress on the Net Zero Plan.	1	Ongoing
Action 35	Support green workforce development.	1	Ongoing

### WATER AND WASTEWATER

#### STRATEGY: WATER AND WASTEWATER TREATMENT

Action 36	Prioritize energy efficiency and the integration of renewable energy at water and wastewater facilities.	2	Long-term
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### MUNICIPAL TRANSPORTATION AND MOBILE SOURCES

#### STRATEGY: REDUCE VMT

Action 37	Continue to enhance vehicle utilization tracking.	1	Ongoing
Action 38	Incentivize public transit and alternative transportation (bike/walk) for employees.	2	Short term
Action 39	Continue to monitor and reduce municipal vehicle idling.	2	Ongoing
Action 40	Expand implementation of virtual/digital monitoring of parking enforcement.	2	Ongoing

### FORT LAUDERDALE NET ZERO PLAN

# COMMUNITY-FOCUSED STRATEGIES

NUMBER	ACTION	PRIORITY	IMPLEMENTATION TIMEFRAME
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## ENERGY

### STRATEGY: ENERGY EFFICIENCY

Action 2 Incentivize net zero development.

1

Short term

### STRATEGY: RENEWABLE ENERGY

Action 10 Encourage, support, and expand private and community solar installations.

1

Medium term

## STRATEGY: REDUCE VEHICLE MILES TRAVELED (VMTs)

Action 15

Partner with developers, agencies, and businesses to incentivize and encourage alternative/public transit use and increase commuter carpooling.

2

Ongoing

## STRATEGY: WASTE REDUCTION AND DIVERSION

Action 27

Introduce innovative programs and technology for managing irregular waste streams.

3

Medium term

## STRATEGY: TREE CANOPY ENHANCEMENT

Action 30

Implement tree planting and preservation initiatives from the Urban Forestry Master Plan (UFMP) that will advance the Comprehensive Plan goal of 33% tree canopy coverage by 2040.

1

Long term



# MUNICIPALLY FOCUSED STRATEGIES

NUMBER ACTION

PRIORITY IMPLEMENTATION TIMEFRAME

## SUSTAINABILITY ADMINISTRATION

### STRATEGY: SUSTAINABILITY ADMINISTRATION

Action 33	Identify and establish funding streams to support net zero efforts in City operations and Citywide.	1	Short term
Action 35	Support green workforce development.	1	Ongoing

## STRATEGY: ELECTRIC VEHICLES

Action 42	Develop a comprehensive fleet electrification and EV infrastructure policy and program.	1	Short term
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## MUNICIPAL BUILDINGS AND FACILITIES

### STRATEGY: ENERGY EFFICIENCY AND WATER CONSERVATION

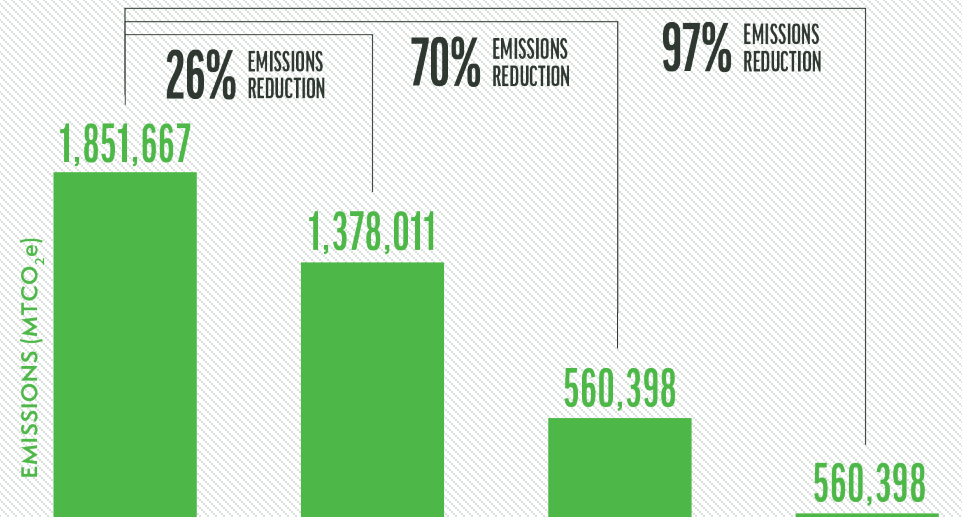
Action 50	Require all new buildings to be built to zero net energy standards starting in 2030. Retrofit existing municipal buildings to be all-electric and net zero energy by 2040.	1	Ongoing
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## STRATEGY: RENEWABLE ENERGY

Action 52	Install renewable energy systems and backup batteries at new and existing City facilities to create resilient net zero buildings.	1	Ongoing
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**NETZERO**

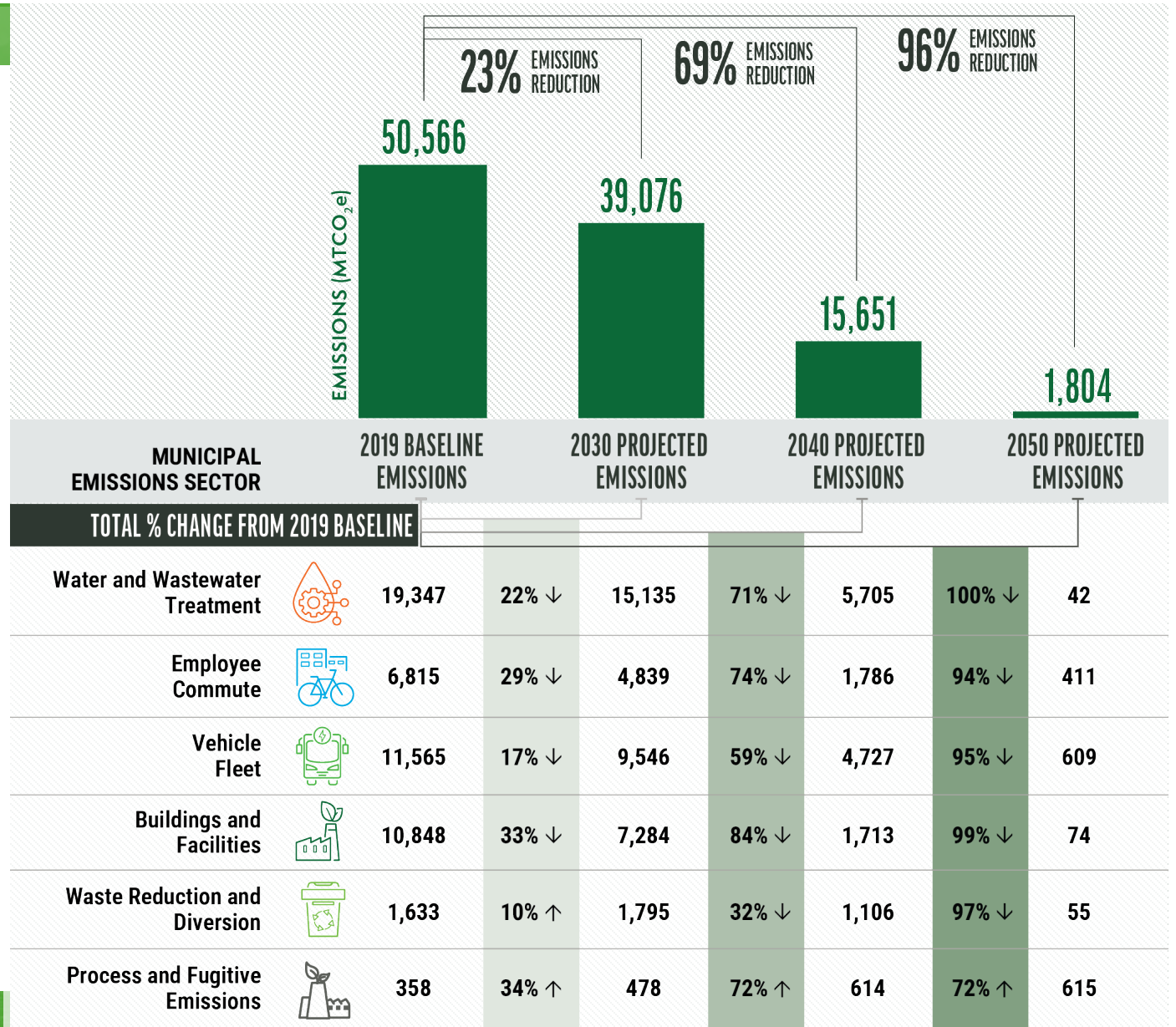


COMMUNITY EMISSIONS SECTOR	2019 BASELINE EMISSIONS	2030 PROJECTED EMISSIONS	2040 PROJECTED EMISSIONS	2050 PROJECTED EMISSIONS
TOTAL % CHANGE FROM 2019 BASELINE				
<b>Energy (Total)</b>	<b>1,010,934</b>	<b>-</b>	<b>740,279</b>	<b>-</b>
Commercial Energy	583,921	30% ↓	410,730	72% ↓
Residential Energy	388,710	23% ↓	300,735	72% ↓
Industrial Energy	38,303	25% ↓	28,814	66% ↓
<b>Community Transportation and Mobile Sources</b>	<b>638,092</b>	<b>31% ↓</b>	<b>441,156</b>	<b>80% ↓</b>
Sustainable Aviation	94,591	1% ↓	93,567	15% ↓
<b>Community Waste Reduction and Diversion</b>	<b>84,950</b>	<b>1% ↓</b>	<b>83,847</b>	<b>34% ↓</b>
Water and Wastewater Treatment	19,347	22% ↓	15,135	71% ↓
<b>Process and Fugitive Emissions</b>	<b>3,752</b>	<b>7% ↑</b>	<b>4,028</b>	<b>14% ↑</b>



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## Community-Focused Strategies:

Near-Term Cost Estimate Ranges

\$3 M - \$7 M  
each

*None of the community-focused strategies are expected to have a cost of > \$3 M.*

HIGH

\$1 M - \$3 M  
each

- ▶ Energy Efficiency: Commercial
- ▶ Renewable Efficiency: Commercial
- ▶ Renewable Efficiency: Residential
- ▶ Electric Vehicles
- ▶ Sustainable Aviation
- ▶ Community Waste Reduction and Diversion

MEDIUM

< \$1 M  
each

- ▶ Energy Efficiency: Residential
- ▶ Energy Efficiency: Industrial
- ▶ Renewable Efficiency: Industrial
- ▶ Reduce VMT
- ▶ Water and Energy Conservation
- ▶ Tree Canopy Enhancement

LOW

## Municipal-Focused Strategies: Near-Term Cost Estimate Ranges

VERY HIGH > \$2 M  
each

- ▶ Electric Vehicles
- ▶ Energy Efficiency and Water Conservation
- ▶ Renewable Energy

\$1 M - \$2 M  
each

- ▶ Sustainability Administration
- ▶ Water and Wastewater Treatment

HIGH

\$10,000 - \$1 M  
each

- ▶ Reduce VMT
- ▶ Municipal Waste Reduction and Diversion

MEDIUM

LOW - None

# Fort Lauderdale's vulnerability to climate change is evident in the increasing frequency and severity of extreme weather events



In April 2023, a 26-inch rainstorm in just 8 hours caused catastrophic flash flooding, inundating over 1,000 homes, rendering critical roadways impassable for up to 48 hours, and leaving some residential streets under 4-5 feet of water for nearly a week.



Record-breaking high tides in recent years have resulted in chronic flooding in low-lying areas, with 180 tide events exceeding the City's flood threshold in 2023 and 119 such tides recorded in 2024.



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While climate resilience has long been a City priority, this Plan is focused on proactive, targeted strategies and actions to effectively manage natural resources that will reduce GHG emissions.

To avoid the worst impacts of climate change, the City must be part of and demonstrate a commitment to regional, state, national, and global efforts to reduce GHG emissions.

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**TIME TO LEAD**