

# Priority Climate Action Plan

MVRPC Water and  
Environment Sub-Committee

January 2024



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PCAP process

Overview of GHG Inventory

Mitigation measures

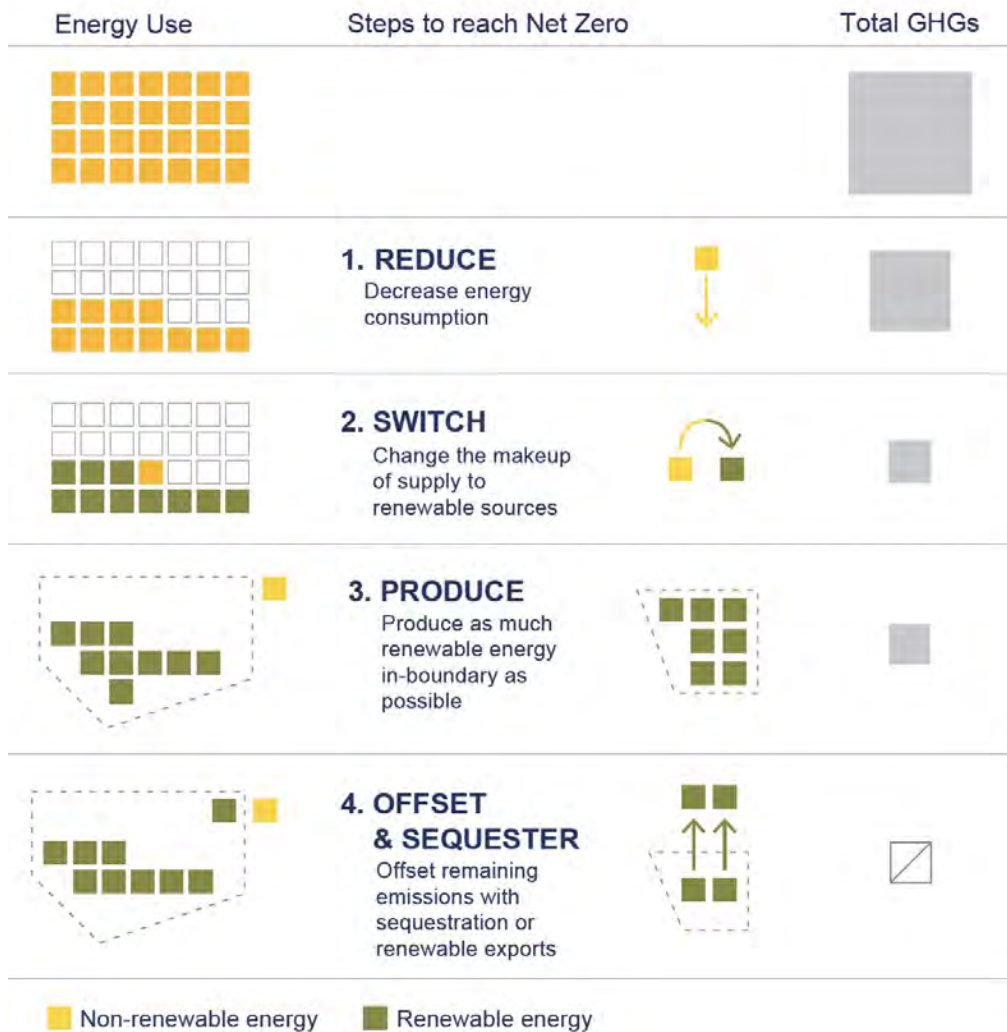
The CCAP



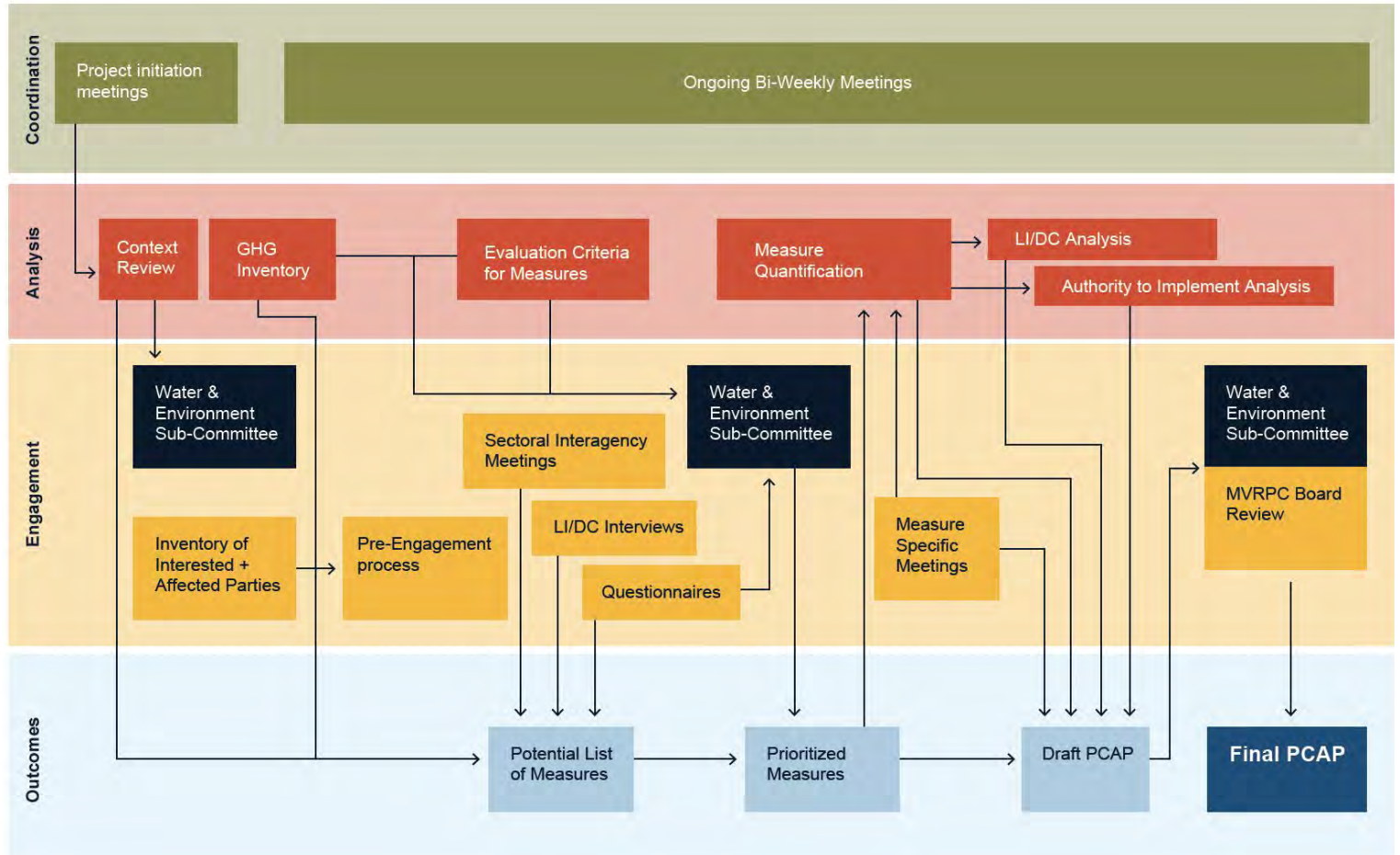
## The PCAP

identify near-term, high-priority,  
implementation ready measures  
to reduce GHG emissions

# A systematic approach to reducing GHG emissions



# The PCAP



**PCAP**

GHG Inventory

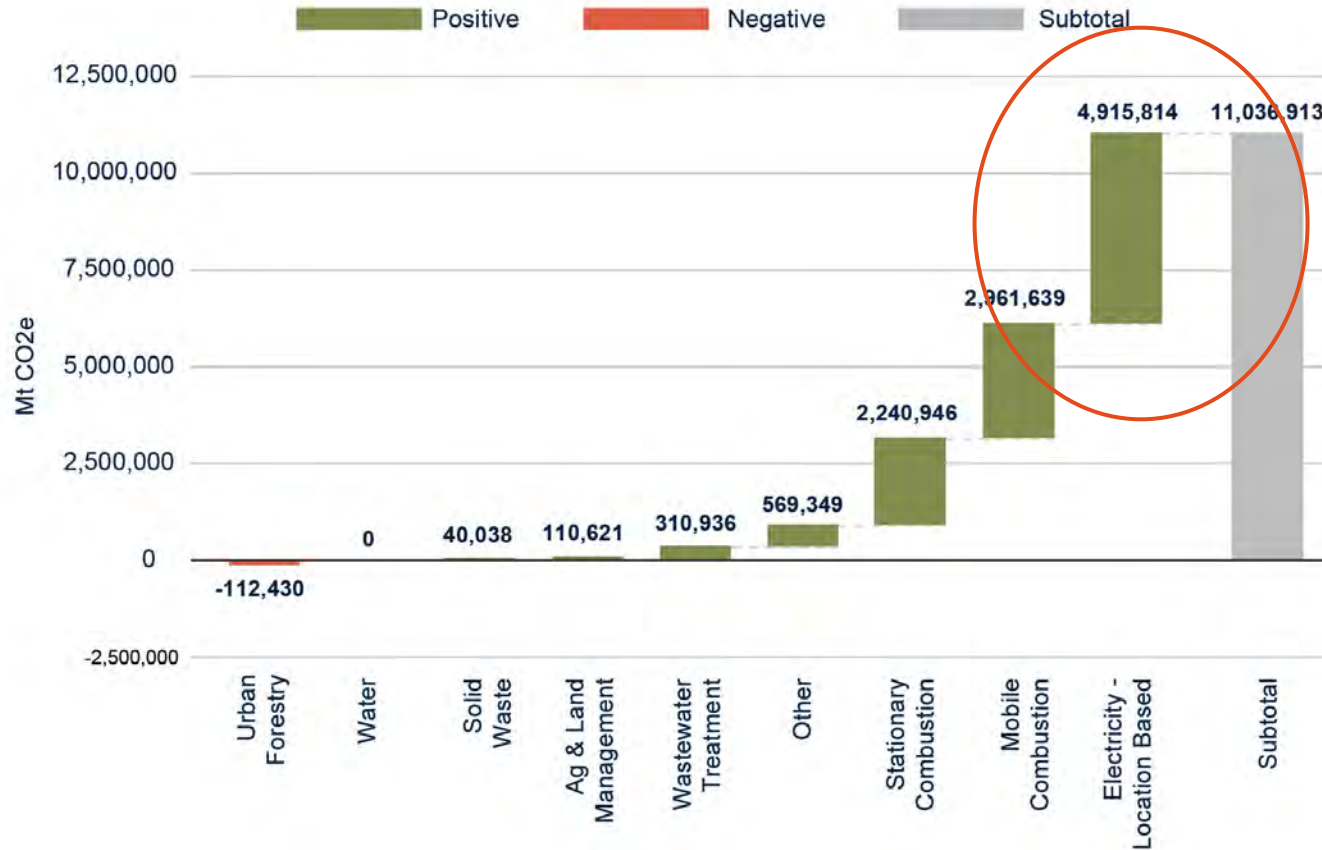
**SSG**

# Emissions by sector



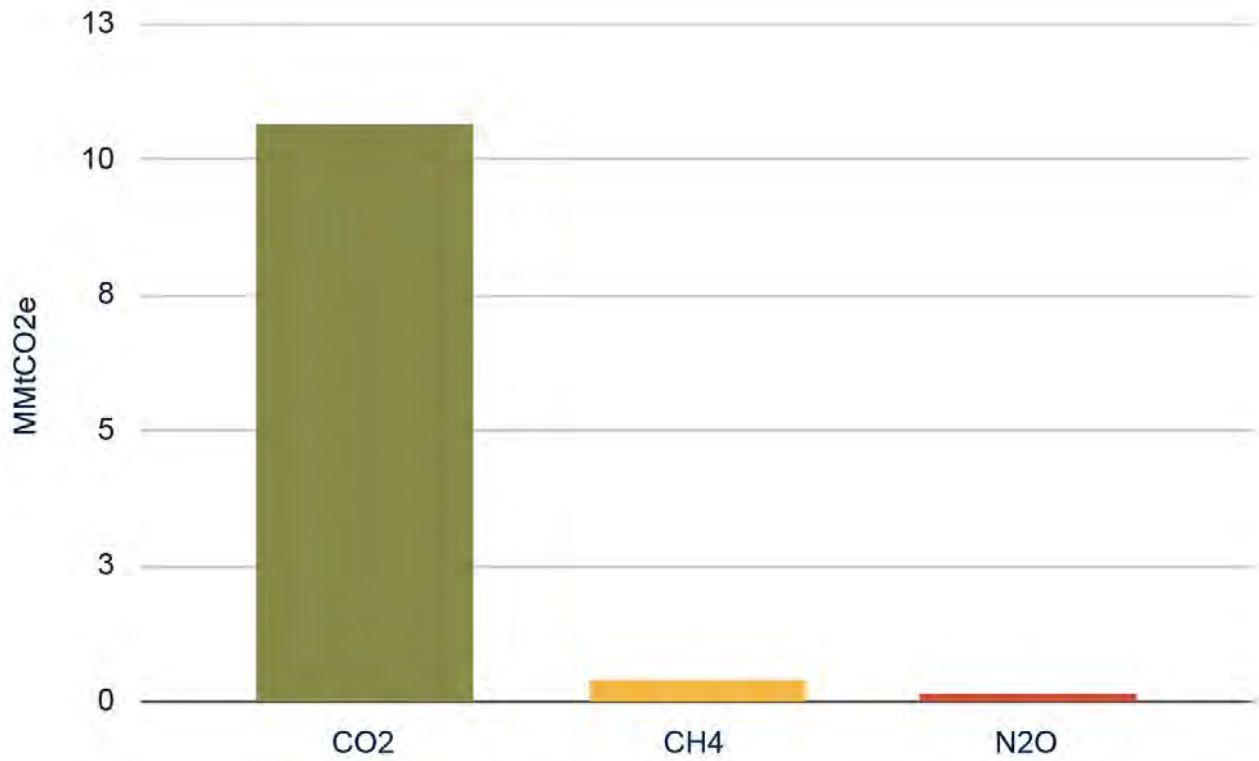
\* Excluding agriculture and forestry

# Emissions by sub-sector

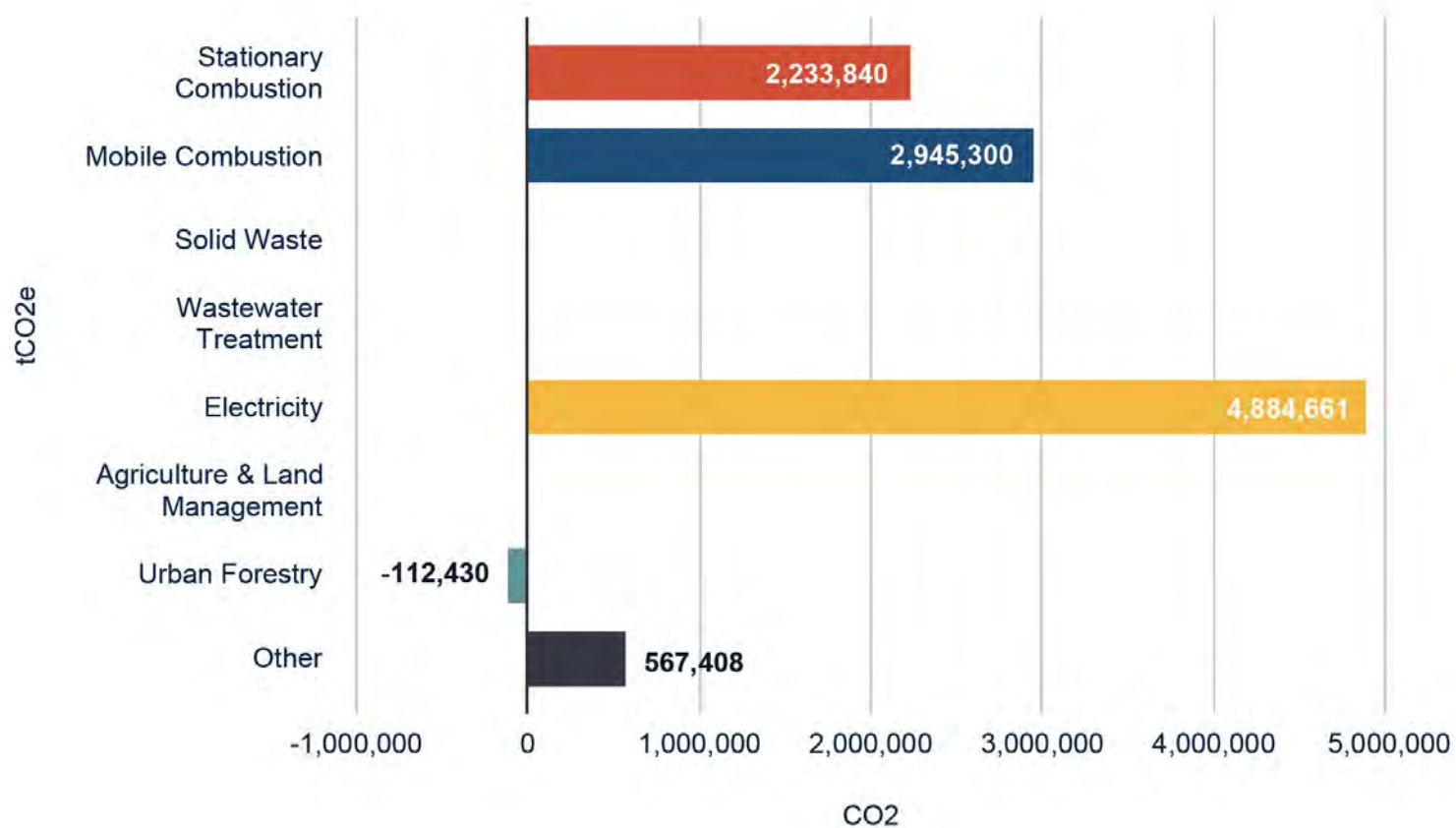




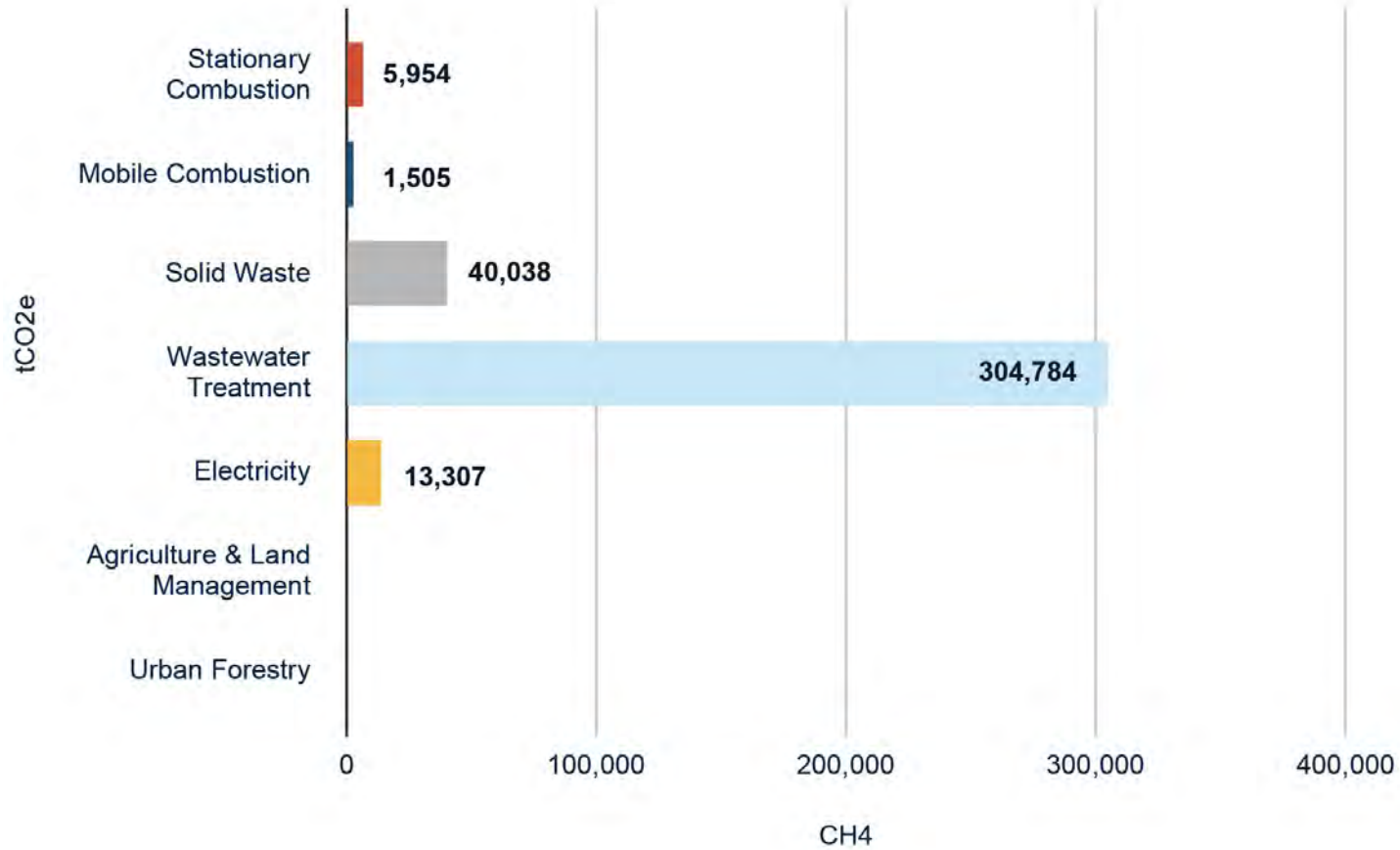
# Emissions by greenhouse gases



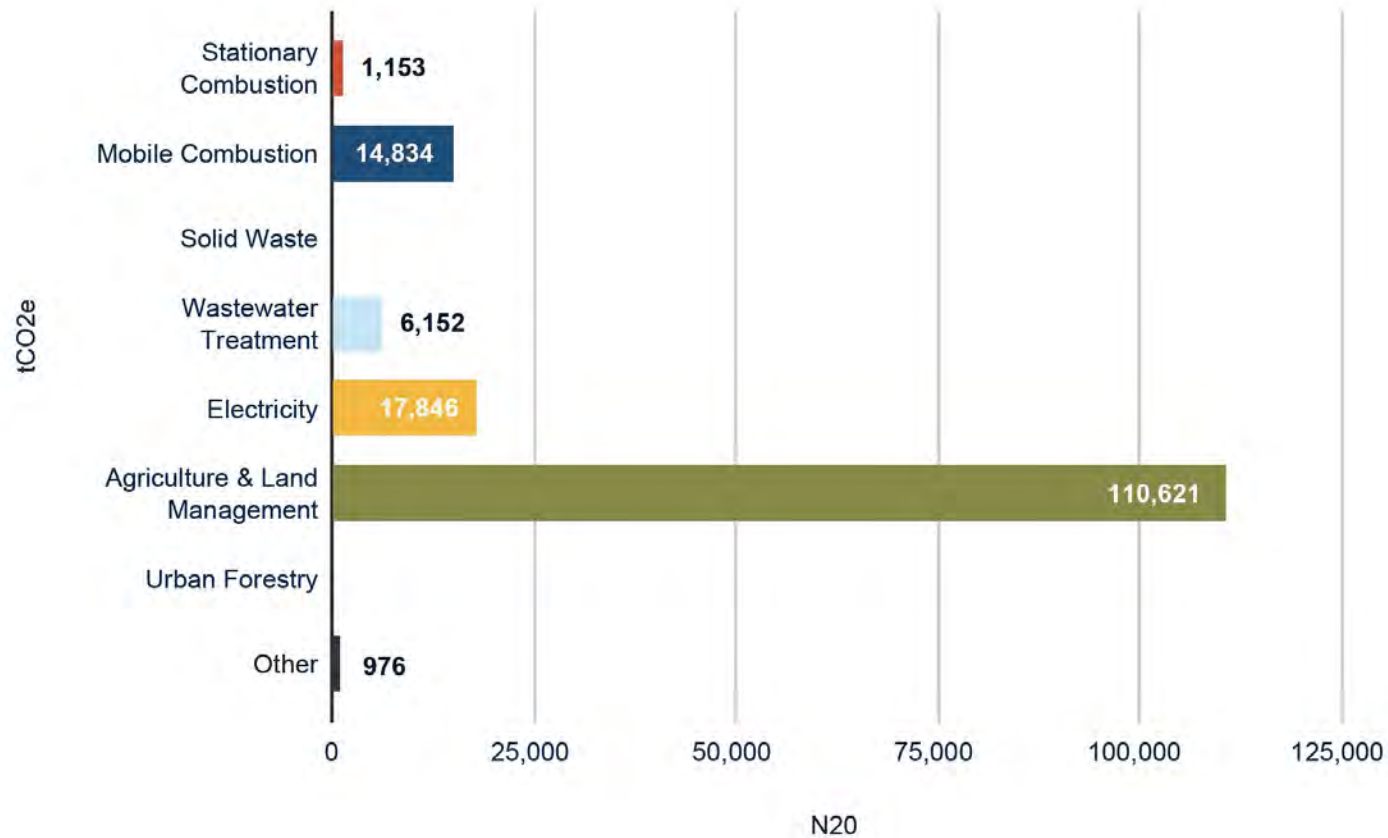
# Overall GHG emissions - CO<sub>2</sub>



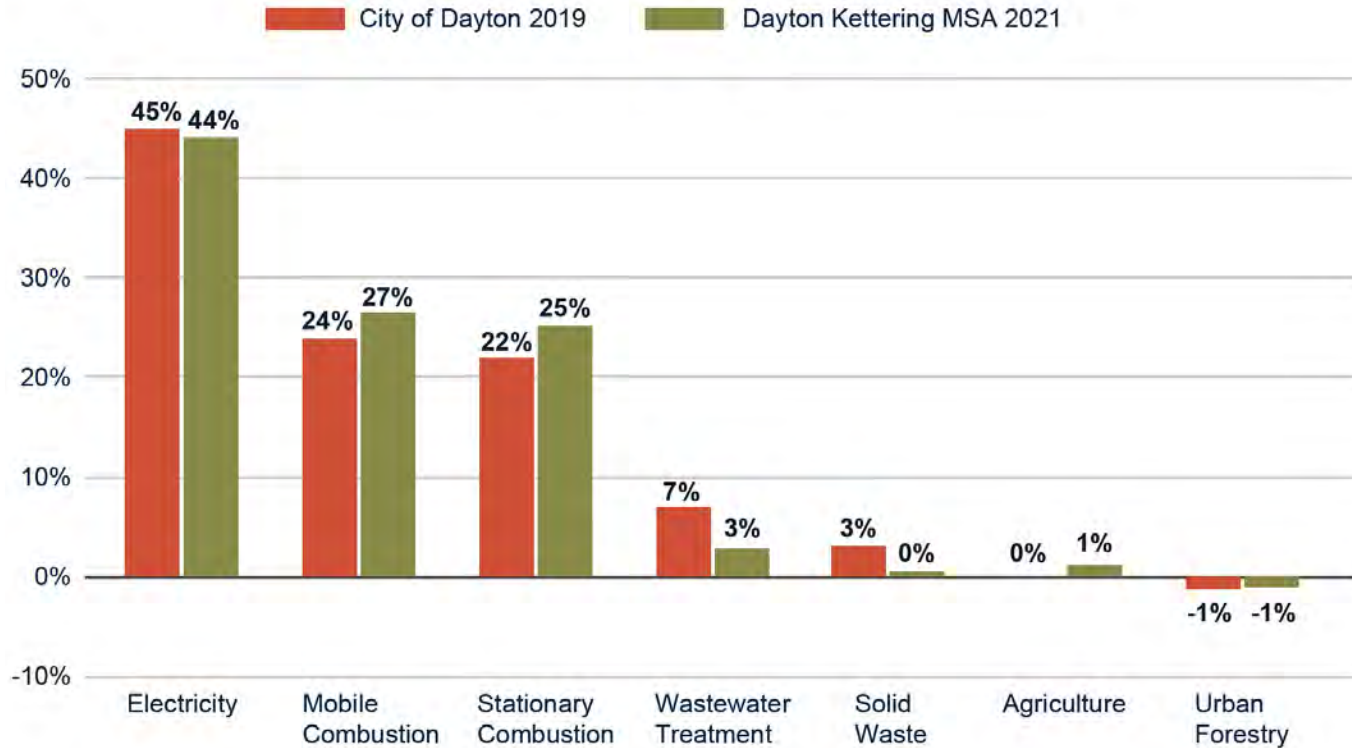
# Overall GHG emissions - CH<sub>4</sub>



# Overall GHG emissions - N<sub>2</sub>O

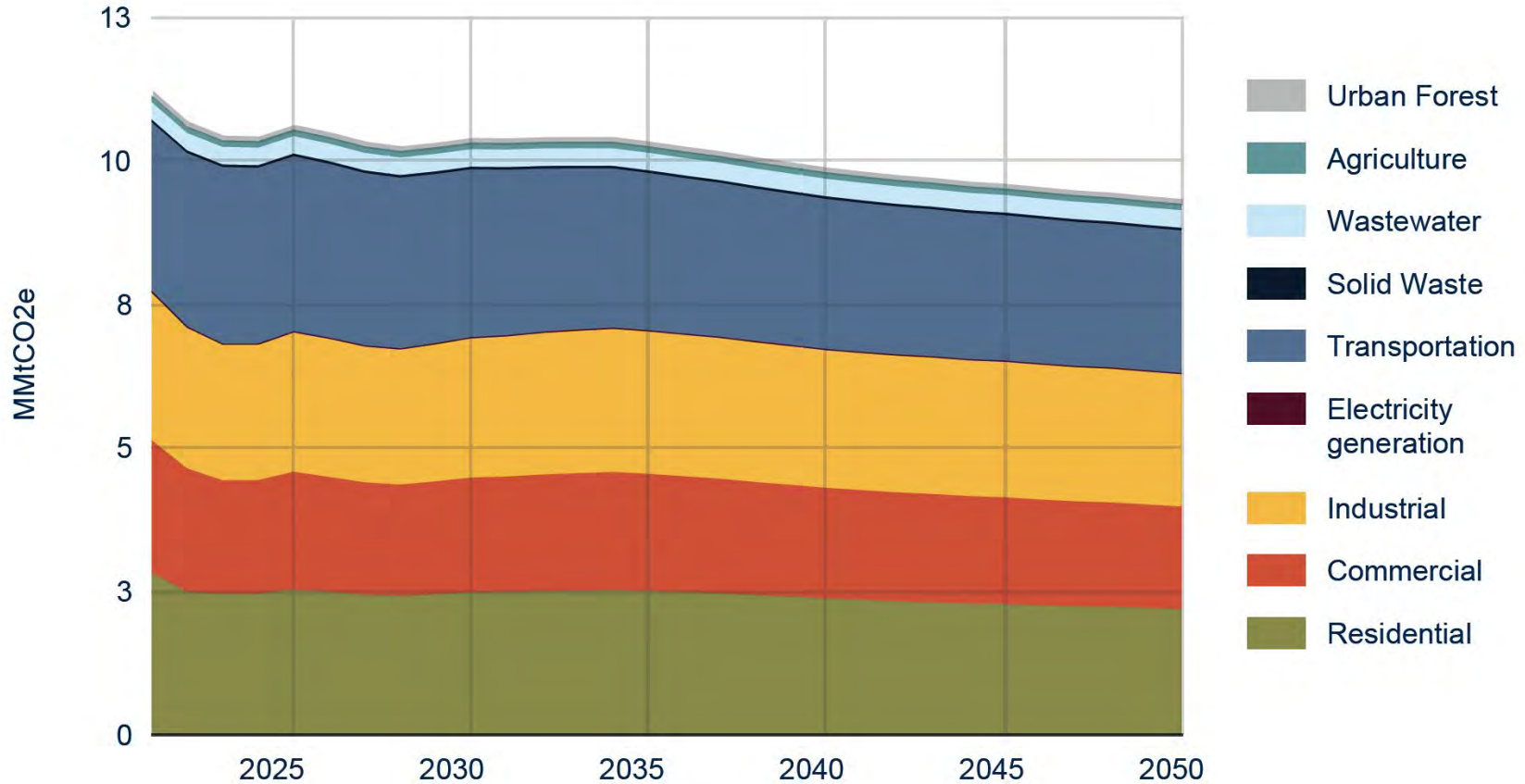


# Comparing with Dayton GHG inventory...

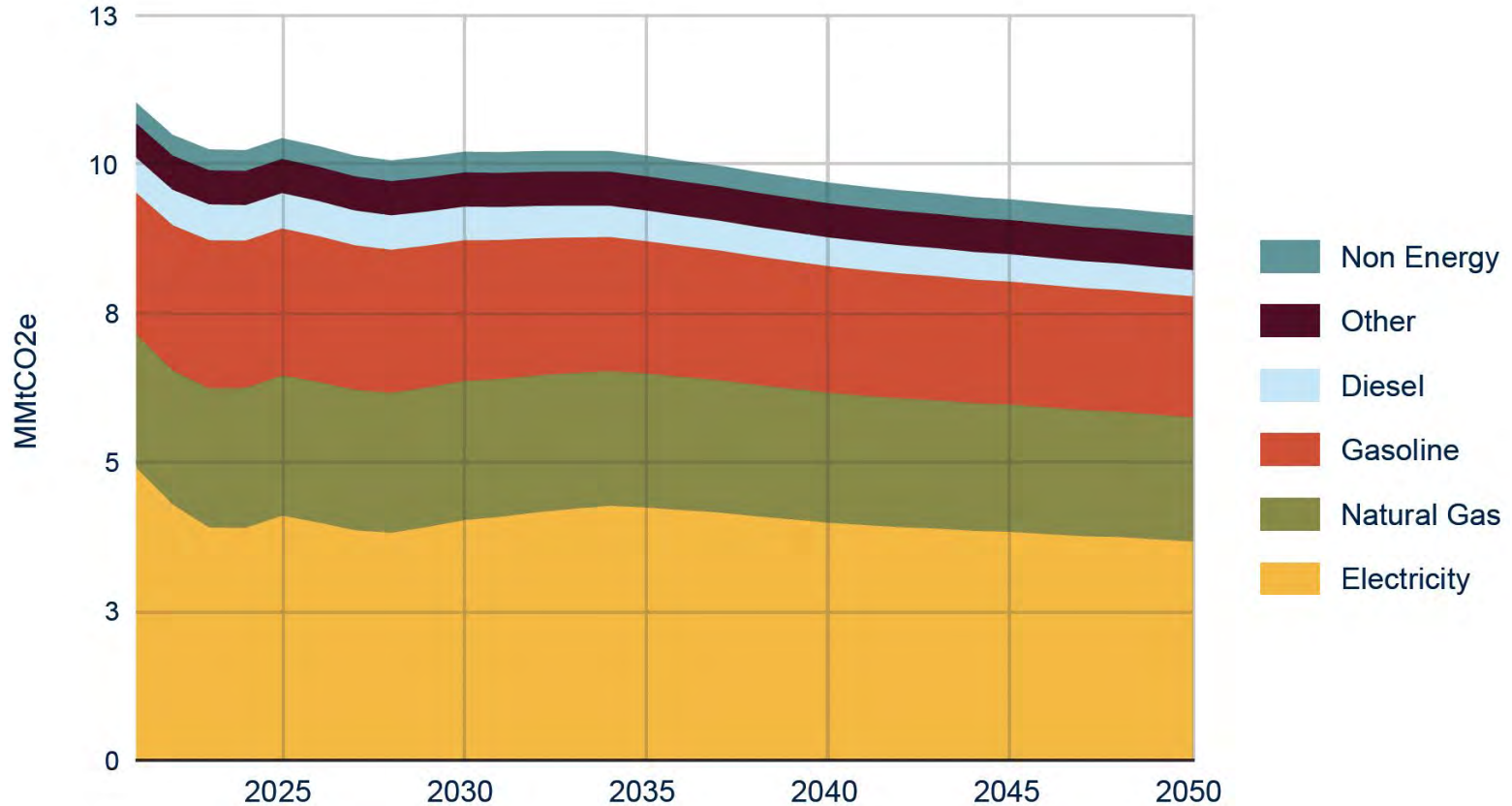


Percentage of Gross Emissions by Source

# And by sector

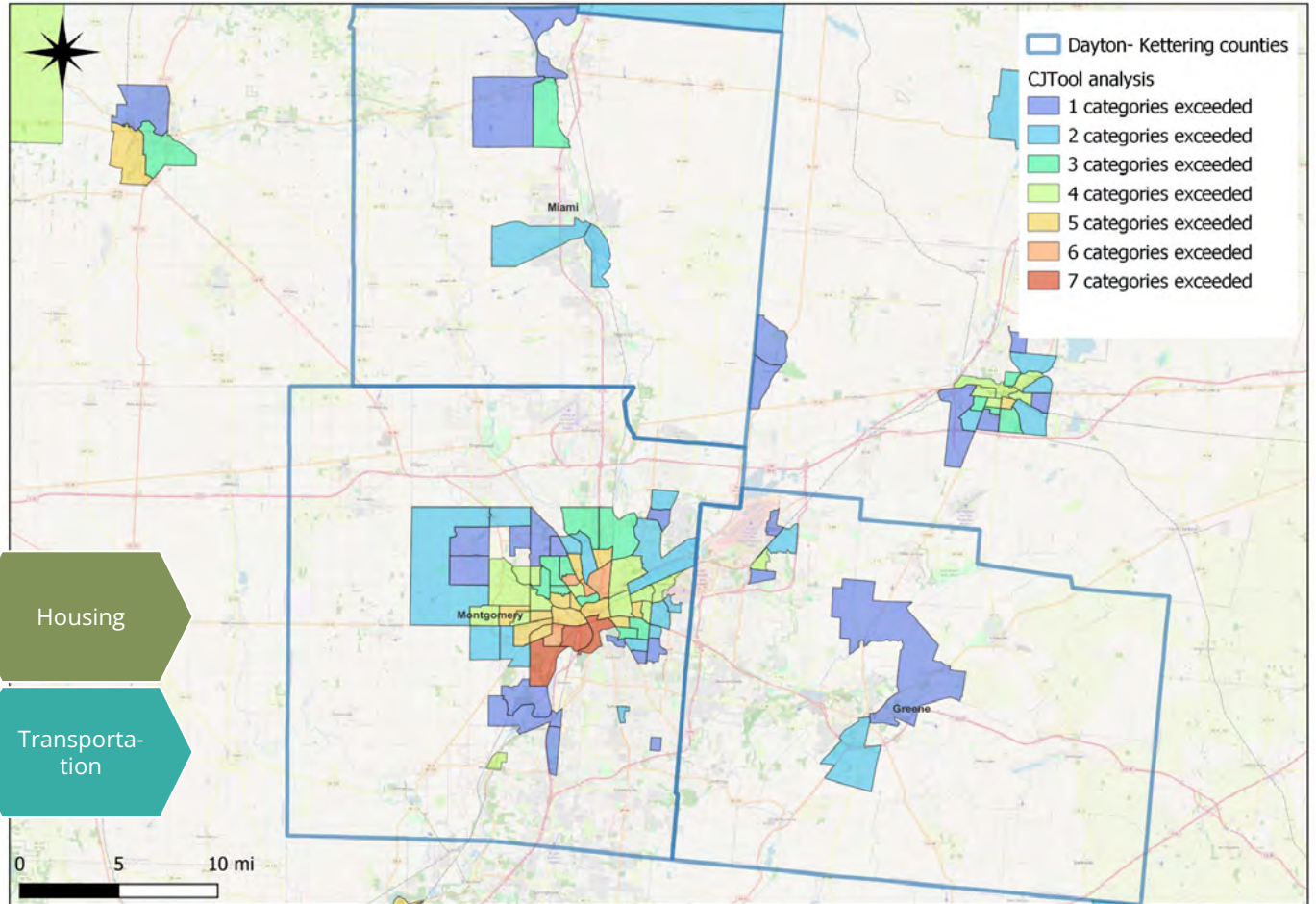
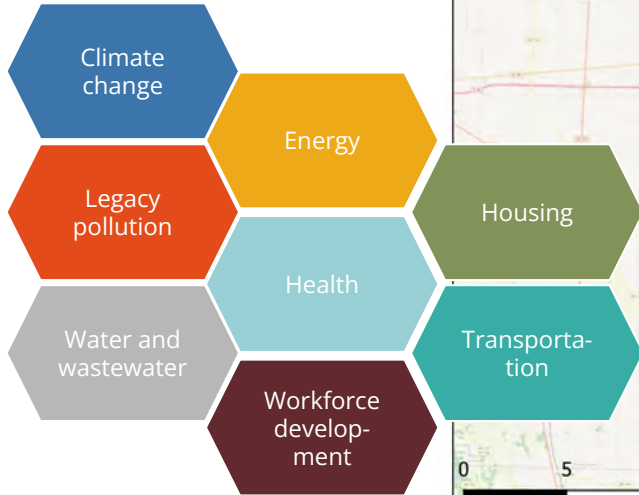


# BAU by fuel and non-fuel



\* GHG emission reduction results from cleaner electricity

# Mapping LIDACs in Miami Valley





**PCAP**

Projects

**SSG**

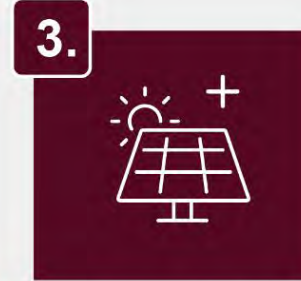
# PCAP Priority Projects



Clean fleets



Virtual Power Plants



Virtual Power Plants Plus



Neighborhood Deep  
Retrofit Program



Sugarcreek Waste  
Facility Upgrade



Transit transformation



Carbon sequestration




Clean cars for all




Active transportation

# PCAP Priority Projects

1.  **Clean fleets**


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2024-2030: 375 MT CO<sub>2</sub>e  
2024-2050: 1,546 MT CO<sub>2</sub>e

2.  **Virtual Power Plants**


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2026-2030: 164,569 MT CO<sub>2</sub>e  
2026-2050: 1,472,575 MT CO<sub>2</sub>e

3.  **Virtual Power Plants Plus**


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+ 2026-2030: 3,899 MT CO<sub>2</sub>e  
2026-2050: 45,899 MT CO<sub>2</sub>e

4.  **Neighborhood Deep Retrofit Program**

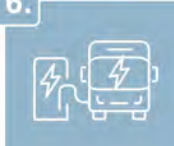
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2026-2030: 2,545 MT CO<sub>2</sub>e  
2026-2050: 32,194 MT CO<sub>2</sub>e

5.  **Sugarcreek Waste Facility Upgrade**


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2025-2030: -5,969 MT CO<sub>2</sub>e  
2025-2050: -25,866 MT CO<sub>2</sub>e

6.  **Transit transformation**


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2024-2030: 1,429 MT CO<sub>2</sub>e  
2024-2050: 6,535 MT CO<sub>2</sub>e

7.  **Carbon sequestration**


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2025-2030: 40 MT CO<sub>2</sub>e  
2025-2050: 3,949 MT CO<sub>2</sub>e

8.  **Clean cars for all**

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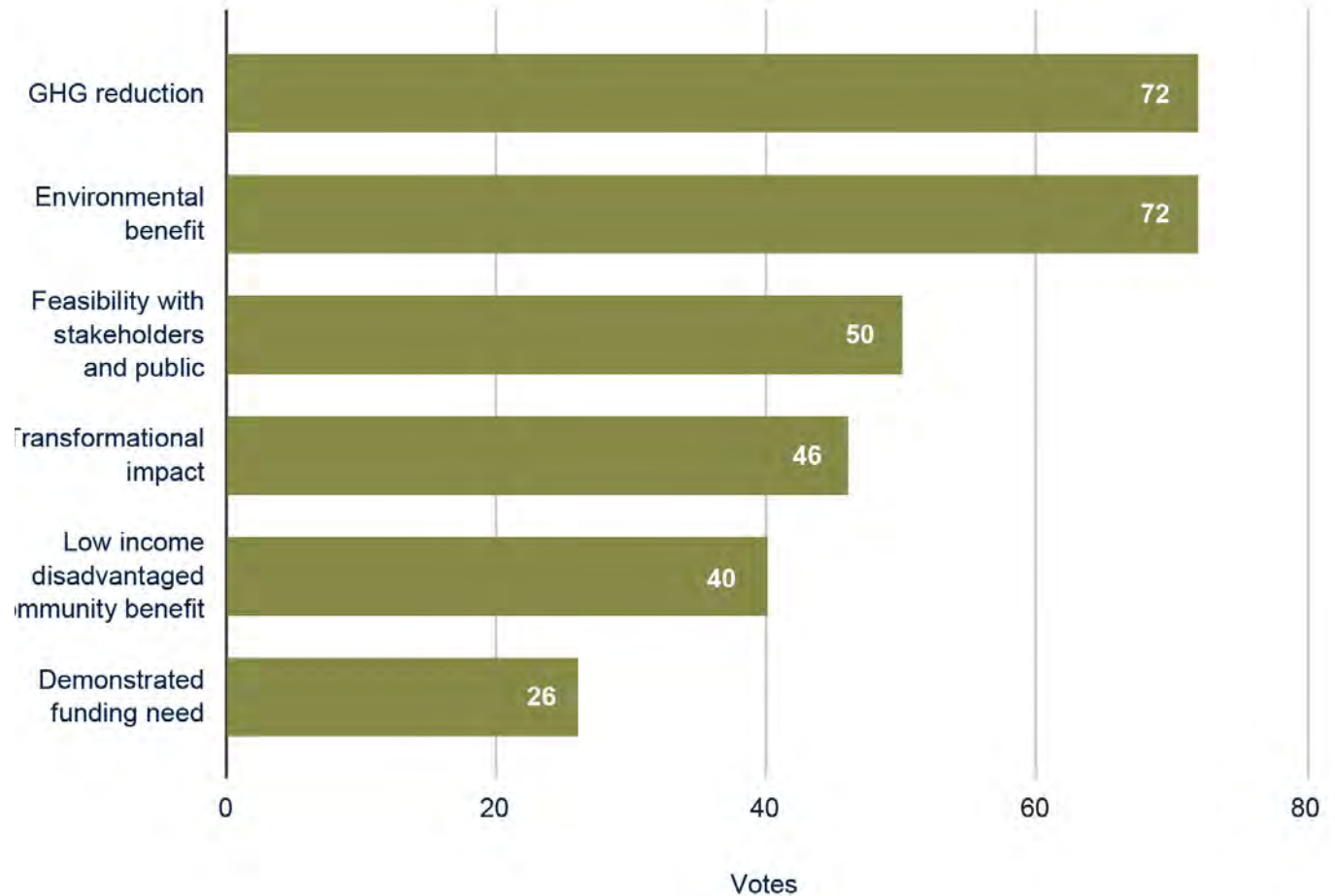
2027-2030: 9,733 MT CO<sub>2</sub>e  
2027-2050: 98,056 MT CO<sub>2</sub>e

9.  **Active transportation**

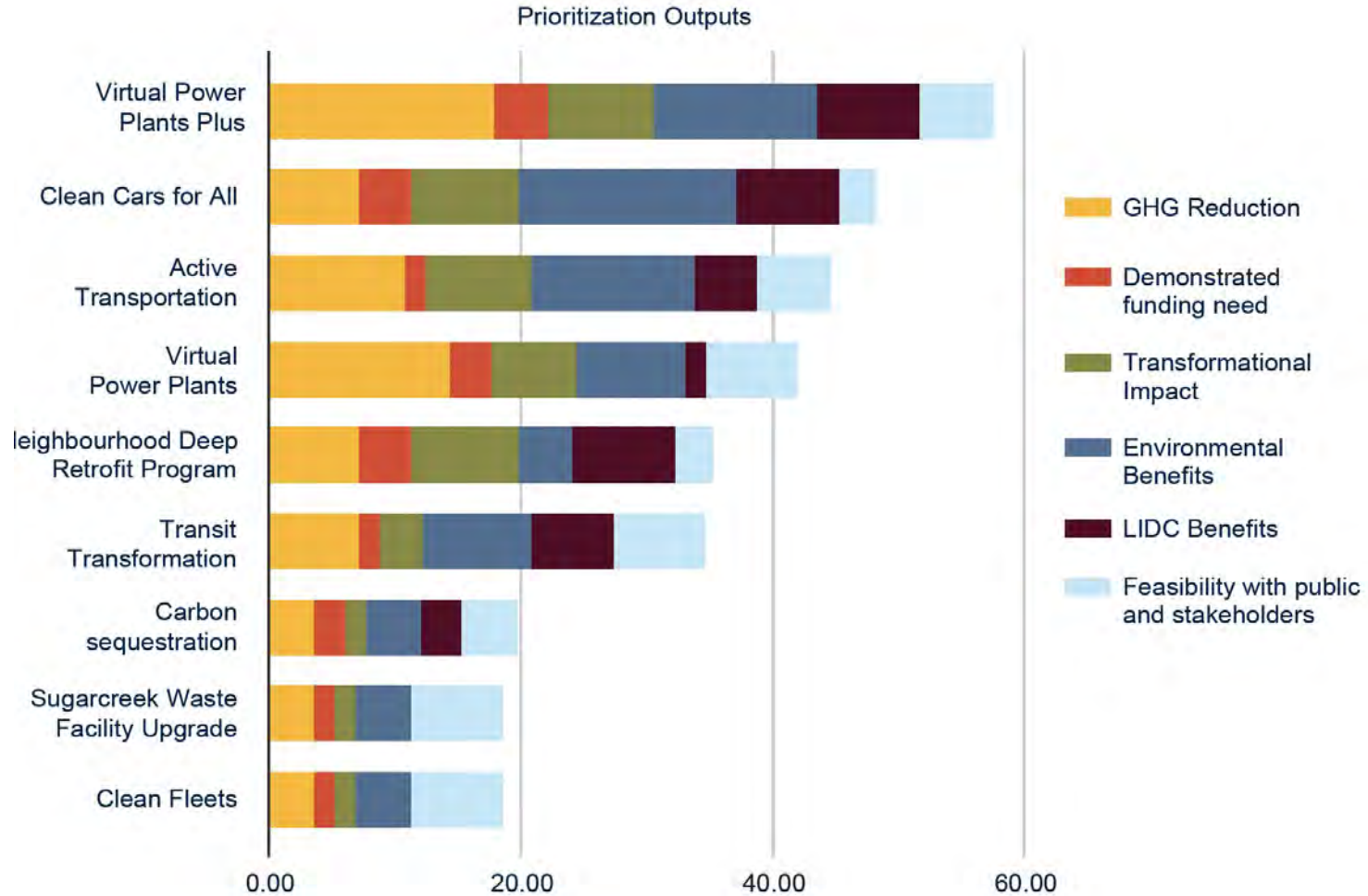
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2025-2030: 8,386 MT CO<sub>2</sub>e  
2025-2050: 36,339 MT CO<sub>2</sub>e

# Weighing the priorities for the PCAP measures



# PCAP measures scores



# CCAP

Recommendations and next steps

SSG

# PCAP and CCAP

## PCAP

- ❑ Evaluated the impact of specific measures
- ❑ Highlights benefits to LIDAC neighborhoods both directly and indirectly

## CCAP

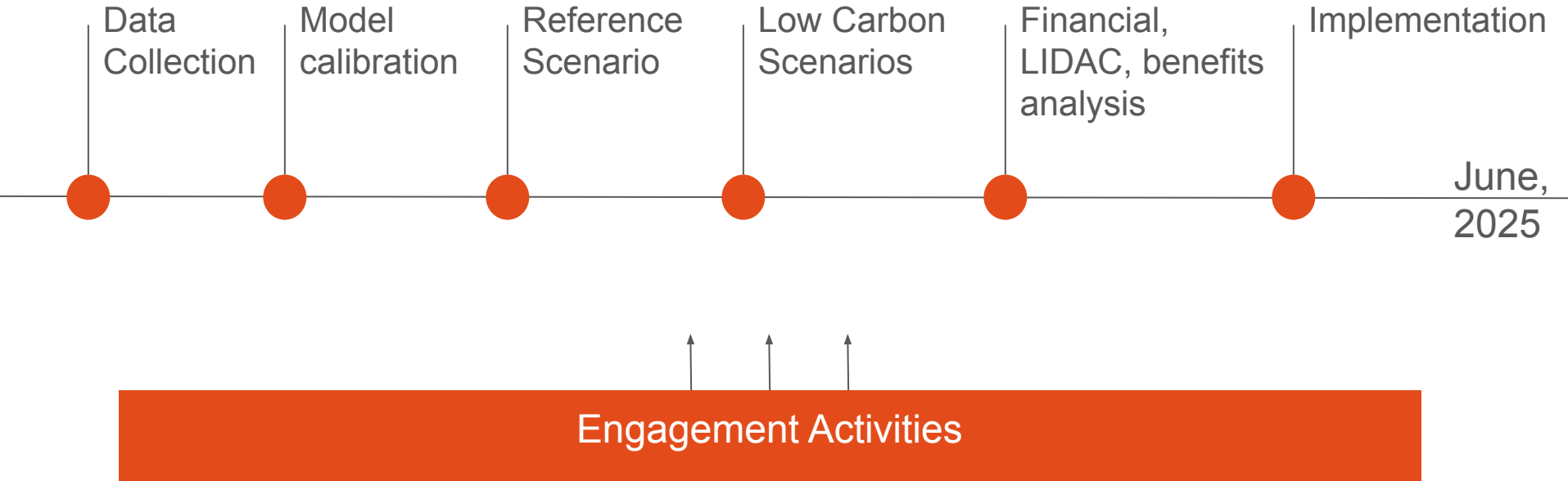
- ❑ Will construct a model of the Miami Valley
- ❑ Evaluate actions GHG impacts
- ❑ Financial analysis and implementation mechanisms
- ❑ Extensive engagement process

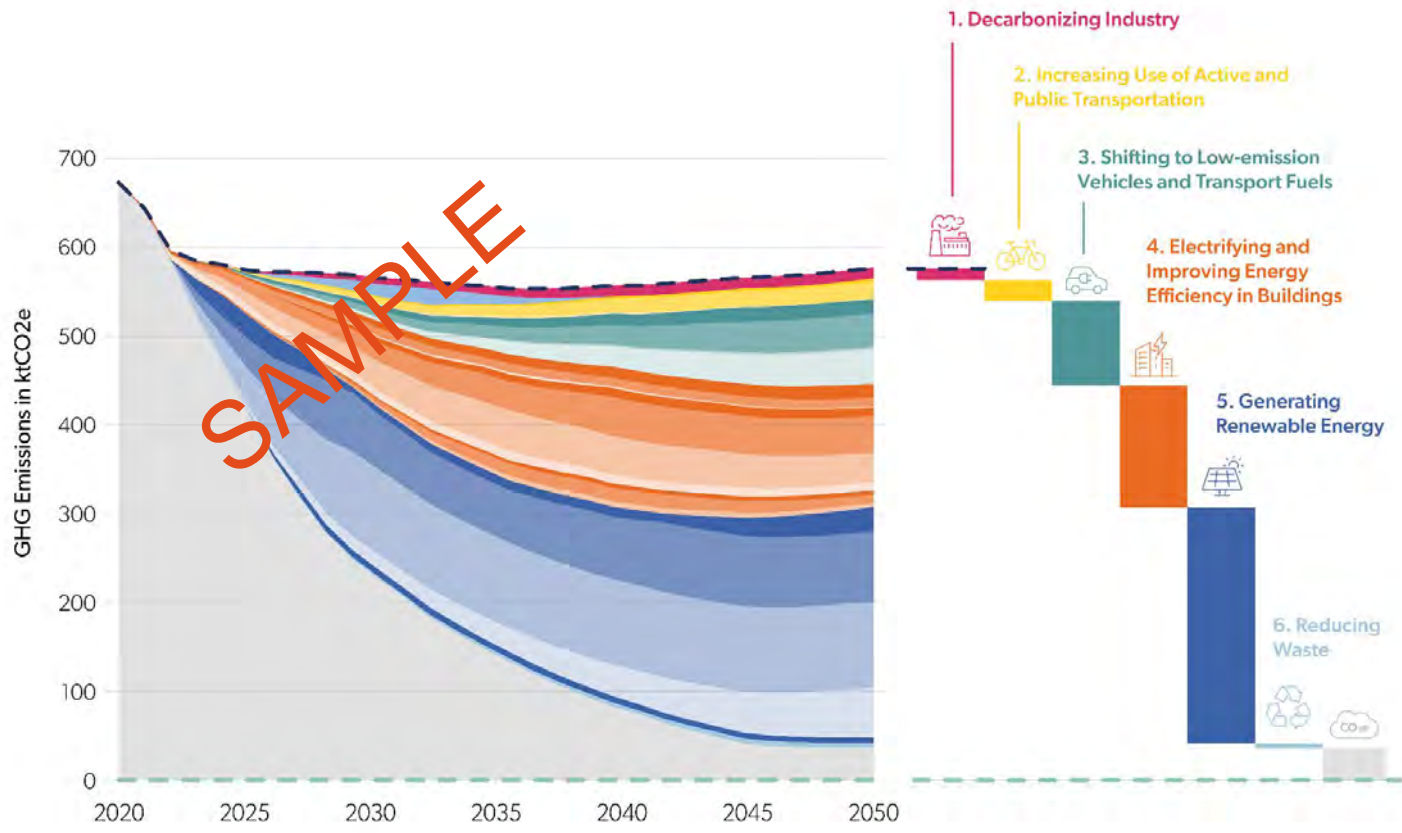
# Recommendations

- Evaluate the compounding and integrated benefit of electrification;
- Identify mechanisms to specifically target LIDAC (policies, incentives, investments);
- Directly involve LIDAC representatives in designing policies and mechanisms;
- Identify transportation options for rural areas;
- Mechanisms to scale building weatherization or retrofits across the region;
- Leverage the opportunity of SOPEC
- Evaluate a scenario for concentrated development across the region as a strategy to systematically transform transportation in Miami Valley.



# CCAP Process







**THANK YOU**

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