

Pima County Climate Action Plan for County Operations – Metrics Prepared for Pima County Board of Supervisors Meeting - August 18, 2025



Framework and Goals

Climate Action Plan for County Operations

Develop a plan that is representative of mitigation strategies to directly reduce the County's impact on climate change, while enhancing adaptation strategies to support climate response and preparedness. As a County we can build strategies that are cross-sector and regional to enhance County and Community resilience for long-term climate action and investment.

Areas of Focus:

Mitigation (reducing our impact)

Carbon and Greenhouse Gas Emissions, Water Use, Waste and Materials

Adaptation (adjusting to the impacts of climate change)

Extreme Heat and Wildfire / Invasive Species, Materials, Landscapes

Climate Resilience

Water Working Group, Pima Prospers, Conservation / Land Spaces, Green Infrastructure

July 31st Climate Action Workshop -

Data, Metrics and Evaluation for Climate Plan and Adjust Strategies / Targets as needed



Carbon CAPCO and CCAP Goals

Reduce Carbon Impact by 60% for 2030 to reach Carbon Neutrality by 2050 (County and Community-wide)

Pima County
Operations
Carbon
Inputs



Pima County
Regional
Carbon
Inputs



Reduce 60% by 2030



Pima County Facilities (46-48%)

2021 ~39,000 MTCO2E



Pima County Regional Wastewater and Reclamation (45-46%)

2021 ~43,000 MTCO2E



Pima County Fleet (under 10%)

2021 ~5,500 MTCO2E



Pima County Commuter Emissions

2021 ~8,094 MTCO2E

Transportation Emissions (48%)

2021 ~5.5M MTCO2E



Residential Energy (23%)

2021 ~2.7M MTCO2F



Industrial Energy (14%)

2021 ~1.6M MTCO2E



Commercial Energy (12%)

2021 ~1.4M MTCO2E

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Water and Wastewater Reclamation (3%) Solid Waste (1%)

2021 ~300,000 and ~88,000 MTCO2E, respectively



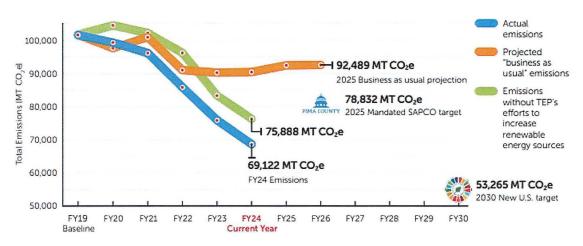


Data Reductions

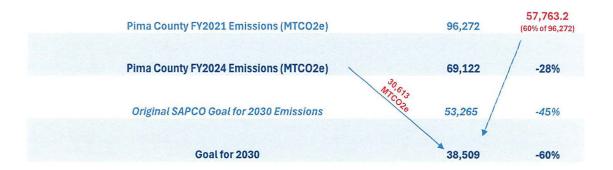
Reducing by 60% is ~31,000 MTCO2e – an average of 6,122 annually



PIMA COUNTY OPERATIONS EMISSIONS⁴



^{*} This graph illustrates total emissions from carbon sources. The graphic represents actual emissions with and without renewable energy from the utility. This graphic represents actual measurements through the proposed reporting period.

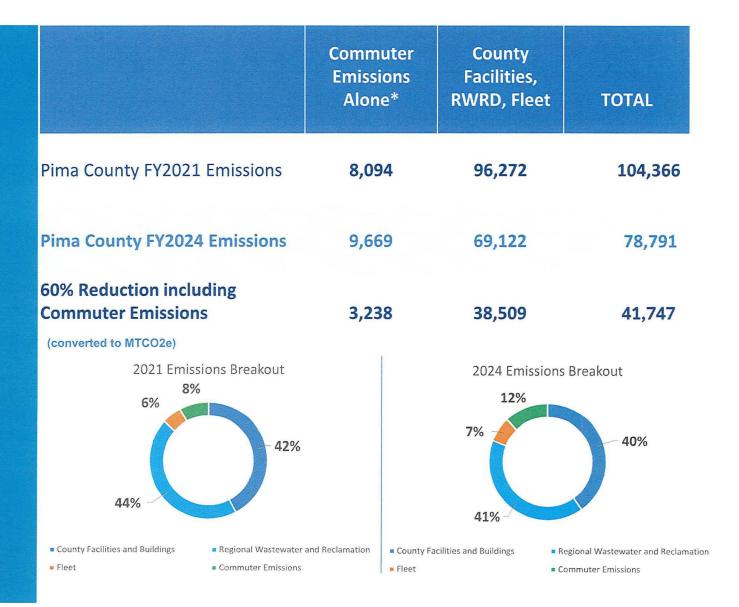




Data by Sector to

include

Commuter Emissions





Data by Sector – Performance Based Estimates

GHG Emission Reduction (Average Annual Reduction)				
Fiscal Year	Actual Emissions FY18/19	Actual Emissions FY23/24	% Annual Change	Ave Annual Reduction
Buildings and Facilities	46,025	31,572	-7%	-2,891
RWRD	49,576	32,102	-6%	-3,495
Fleet	6.314	5.447	-3%	-173

~6,559 MTCO2e collective average annual reduction

Discussion:

Based on the recent 6 years of annual average MTCO2e reductions, continued investment in energy efficiency, renewable energy and partnership with TEP for renewable enhancements will enable the County to meet its GHG Emissions reduction goals of 60% by 2030.



Emissions – Priorities into Strategies

Target:

Goal is to reduce the emissions derived from County Facilities and Buildings by 60%

Methodology

- Audit & Inventory County facilities portfolio energy use & utilization
- 2. Look at the County's Space Utilization
- Measure and Report Energy Use and Performance
- Determine Energy Efficient Standards
 Existing design standards
- Return on Investment Strategies
 Investments to improve performance and get portfolio to higher rate of energy standard metrics
- 6. Innovation in Renewable Energy to maximize performance
- Demonstrated Cost Savings Realized Fiscal impact of energy use reduction
- Energy Use Communications to Promote Behavior Change

Carbon / Energy Strategies

- 1. Improve Building Efficiency
- 2. Expand Renewable Energy Capacity,
- 3. Improve energy conservation practices

Carbon / Energy Strategies RWRD

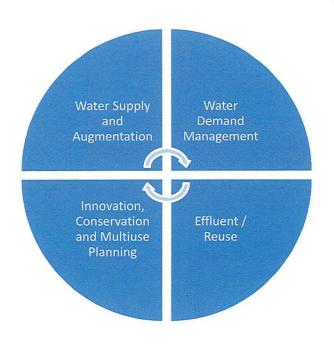
- 1. Include beneficial use of Biogas
- Equipment / Facility Upgrades that promote Energy Efficiency – Improved Aeration
- 3. Improved processing efficiency such as AI

Carbon / Energy Strategies Fleet

- Assess remaining Fleet conversions to either EV or Hybrid
- 2. Enhance County charging sites
- Enhance route efficiency through Fleet / GIS data



Water Working Group Discussion Prompts



Water Working Group Strategies

- Supply: Groundwater Replenishment & Increase use of rainwater / storm water for recharge – increase opportunities in County projects / County-owned space
- 2. Demand: Reduce Water Use in Facilities & County Turf and Landscapes (Turf and Landscapes to convert to effluent / reclaimed where appropriate)
- Enhance use of Effluent / Reclaimed Water
 Uses at County Operations and other identified
 large-scale water users
- 4. Expand number of Green Infrastructure projects and measure impact



WATER MANAGEMENT

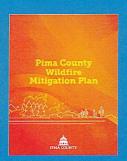
Target:

- Reduce use of potable water in County Facilities
- Enhance number of Green Infrastructure Sites
- Maintain or increase acreage of restored habitat and vegetation that is served by non-potable water



Adaptation – Extreme Heat & Invasive Plants





Extreme Heat – County Operations

- Evaluate and monitor the Heat Protection Administrative Procedure
- Evaluate and monitor the Pima County Heat Ordinance
- Support interagency connectivity to expand Heat Response Initiatives such as Cooling Center Network, Community Action Agency, Home Weatherization programs
- Support the Green Infrastructure goals Carbon Sequestering, Shading,
 Cooling

Wildfire Mitigation Invasive Species – County Operations

- Support the growth of GIS mapping efforts for invasive mitigation
- Number of sites treated for exotic plant (see Wildfire Mitigation)
- Enhance County employee engagement in Invasives
- Environmental Education Programs about Climate Change and Invasive Risk

Target: Manage Natural Areas for Resilient Ecosystems



Adaptation into Resilience



Target: Conserve Native Wildlife, Plants and Areas

- Groundwater depth and surface water monitoring (tied to Water priorities)
- Acres of Natural Habitat Conserved
- Miles of major riparian corridor added (County Owned)
- Number of Restoration Projects (tied to Water priorities)

Target - Urban Areas

- Plant at least 10,000 trees (closed out SAPCO at ~7,000)

Target: Maintain or Expand Conservation Ranching – Open Space

- Stabilize ecosystems by focusing on habitat management, environmental stability, and animal welfare.
- Maintaining carbon sequestration, vulnerability to invasives, reduces probability of sheet erosion



Materials and Waste Priorities into Strategies





Waste Management





Target:

- Reduce Volume / Weight of Waste going to Landfill by 20% (maintained from SAPCO)
- Recycle Industrial Waste by 100%
- Increase Green Purchasing by 20%
- Enhance opportunities to use sustainable materials for operations

Waste and Materials Strategies

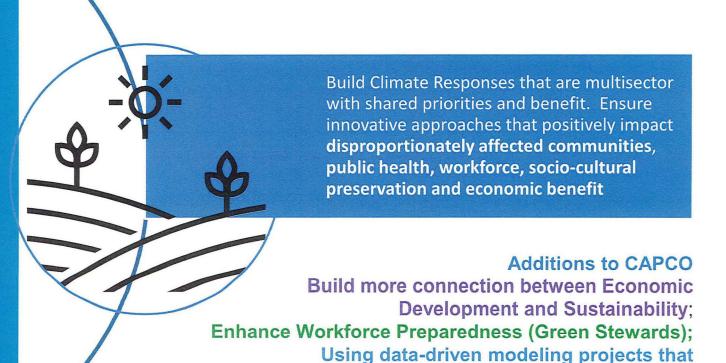




- 1. Contract requirements for Recycling
- 2. Enhance knowledge across workforce for recycling
- 3. Reduce waste surplus, printing
- Expand workforce knowledge on materials, waste, reuse at the workplace and at home
- 5. Enhance sustainable materials across larger industry e.g., cool pavement, soy tires



Climate Resilience



demonstrate impact on vulnerability;

Return on Investment



Thank you!



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Jennifer Allen, *Vice Chair*, District 3
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Steve Christy, District 4
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