

CITY COUNCIL STUDY SESSION | August 15, 2024



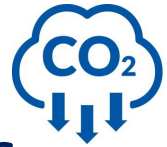
mesa·az

CLIMATE ACTION PLAN

For a Sustainable Community

CITY OF MESA CLIMATE ACTION UPDATE

Scott Bouchie, Energy & Sustainability Director
Laura Hyneman, Deputy Director, Environmental & Sustainability



Carbon Neutrality - Clean Energy, Zero Emissions

Community EV Master Plan – complete
Electric fleet vehicle charging, phase 3

Impact: MTCO₂e ↓

Electric fleet vehicles:

- 71 delivered, 19 on order

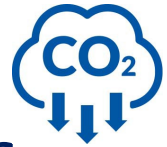
Impact: ~8.7 MTCO₂e/vehicle/year, ~\$1,800 fuel cost savings/vehicle/year

Employee workplace charging study

Impact: MTCO₂e ↓



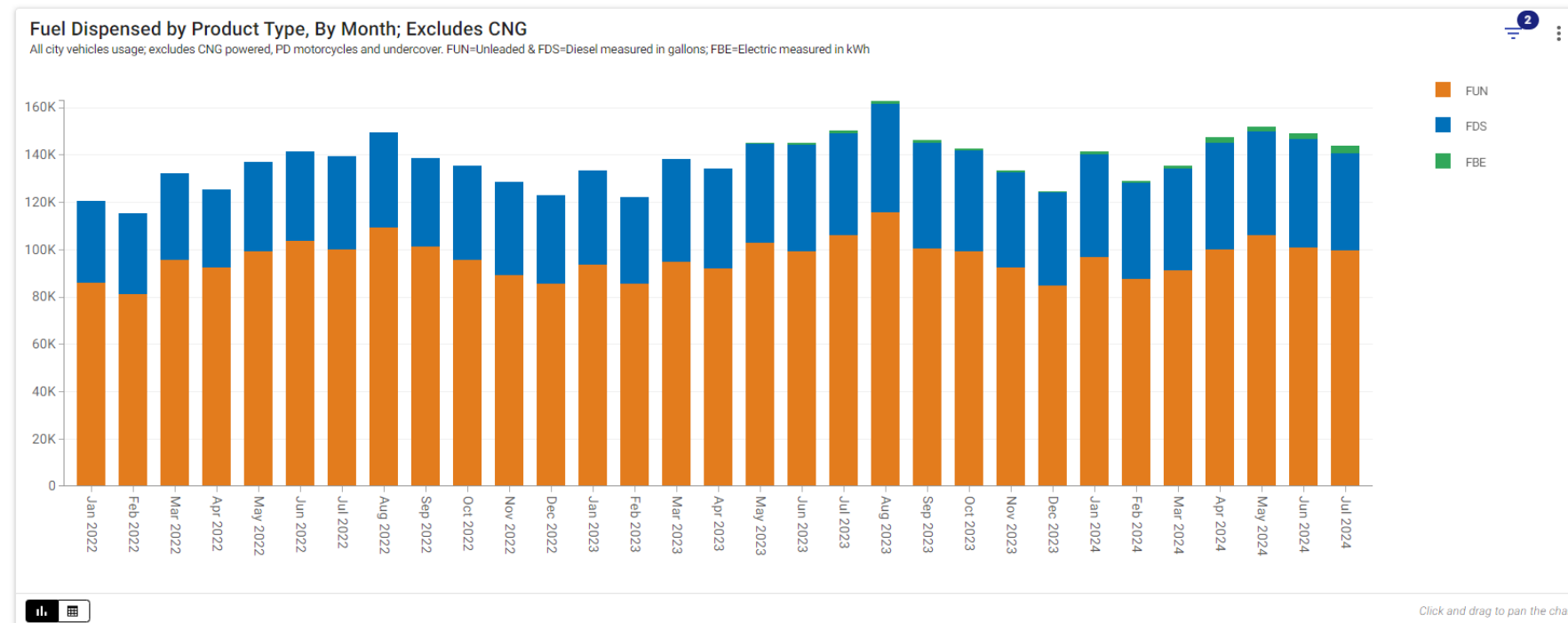
MCAP Strategy 1.2: Decarbonize
Transportation



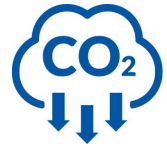
Carbon Neutrality - Clean Energy, Zero Emissions

Electric Fleet Vehicle Charging

City Operations & Community Data



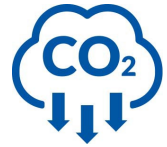
Data showing electricity as a fuel for fleet vehicles



MCAP Progress - data.mesa.gov

The screenshot shows the Mesa, Arizona website. In the top left corner, there are logos for 'mesa-az' and 'Mesa El Somero City 1979 • 2023'. In the top right corner, there is a navigation menu with links for 'Home', 'Browse', 'Developers', and 'Financial Transparency', along with a search icon and a 'Sign In' button. The main content area features a large photograph of a desert garden with cacti and succulents. Overlaid on the photo is the text 'Sustainable Environment' in a large, white, sans-serif font. Below the photo, on the left, is a green circular logo with three white leaves arranged in a circle. To the right of the logo is a green text block that reads: 'Mesa proactively and responsibly reduces urban heat, carbon emissions, and waste by protecting and conserving our valuable water supplies, environment, and other natural resources.' Below the logo and text is the text 'Sustainable Environment' in a bold, green, sans-serif font.

Public data portal shows progress on climate projects



Carbon Neutrality – Efficiency

Lighting at City Buildings – in progress
Lighting at RM Ballfields – complete
Lighting at Sports Fields – scoping

Impact: \$81,400 saved/yr, 1.1MWh ↓

Impact: \$90,000 saved/yr, 864 MWh ↓



MCAP Strategy 1.1: Reduce Energy Use and Decarbonize Buildings

Renewable Energy –



Clean Electricity, Renewable Natural Gas

Flare to Fuel – under construction

Impact: ~34,000 MMbtu/year

Solar, buy-downs and utility upgrades

Impact: ~7,000 MWh/year

Biomass Power Agreement – in place

Impact: 3,221 MWh (2023)



MCAP Strategy 1.2 & 1.3: Decarbonize Transportation and Increase Renewable Energy

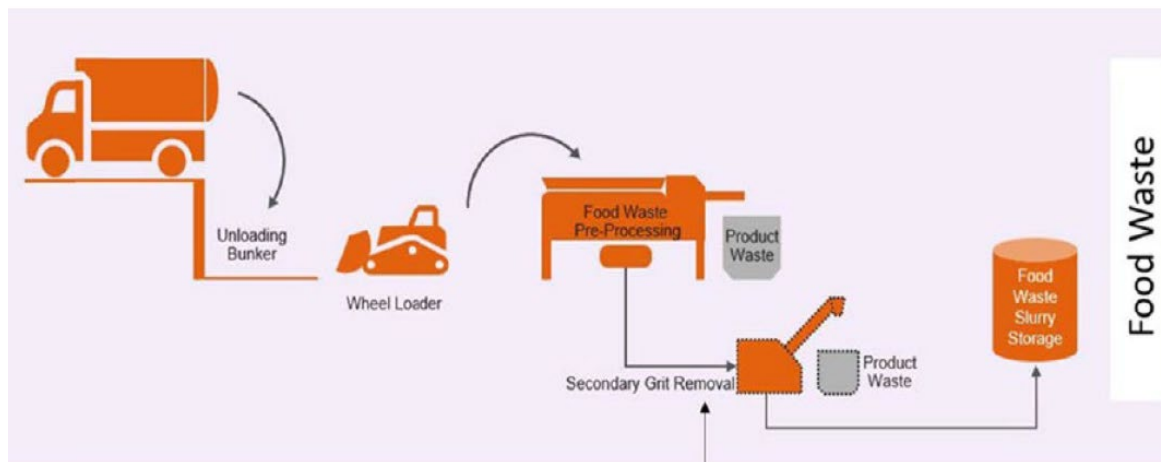


Materials Management – Resource Recovery

Food Waste to Energy Design – design phase

Impact: ~10,000 tons food waste diverted/year, potential 1,340 MTCO₂e/year ↓

Related Projects: Flare to Fuel, Energy Efficiency Projects, Biomass Agreement



MCAP Strategy 1.3 & 5.3: Increase Renewable Energy and Circular Economy

Climate Ready Community –



Water Conservation & Resilience

MCAP Funding:

- Water – Use It Wisely Marketing Enhancement – complete
Impact: 34,387,154 impressions, 9M more than est.
- Your Water, Your Impact Campaign – funding spent
Impact: >160,000 video views
- Grass-to-Xeriscape @ City Buildings – Predesign phase
Impact: gallons saved, cooler community

**TODAY'S
LESSON LESSON**

Use Mesa's **Water Calculator**
to lessen your home water usage.

[START NOW](#)

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WIFA Funding:

- Non-functional turf removal
Impact: 5.7 M gallons saved/year
- Commercial Grass-to-Xeriscape
Impact: Based on customers served

MCAP Strategy 4.1: Use Water Efficiently

Climate Ready Community –



Resilience, Urban Heat, Water, Air Quality

Trees:

- Shade Tree Events - 2 events held/2 events planned
- Neighborhood Planting Events - 4 events planned
- New City Trees and Irrigation – 2,400 trees planted

Impact: cooler neighborhoods, energy saved,
improved air quality



MCAP Strategy 3.1: Reduce the Urban Heat Island

Climate Ready Community –



Resilience, Urban Heat, Water, Air Quality

Additional Climate Projects:

- Infrastructure Resilience
 - City Department investments
 - Utility investments
- City Services
- Policies that increase resilience



Supporting a healthy, vibrant City
for future generations.

Climate Ready Community –



Keeping up the Pace

Community Engagement

- Partnerships and community building
- Grants and micro grants

Business Investment

- Sustainable Practices
- Support for community initiatives

Education K - 80

- Universities, Community College, and K-12 education
- Workforce development



**YOUTH CLIMATE
ACTION FUND**

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 **UCLG**
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Questions?



CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



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