



MEMORANDUM

Date: September 29, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry 
County Administrator

Re: **City of Tucson Resolution Regarding Climate Crisis**

We appreciate the City of Tucson's recent resolution declaring a climate emergency. Such has been evident for some time, which has led the County to develop and implement a sustainable action plan where County operations and actions would be guided by principles related to meet Paris Climate Agreements and environmental standards designed to promote sustainability.

Pima County's first Sustainable Action Plan was adopted by the County in August 2008, following adoption of Board Resolution No. 2007-84 and contained chapters focused on Alternative Fuel Vehicles, Green Building, Renewable Energy and Energy Efficiency, Green Purchasing, Land Conservation, Waste Reduction, Water Conservation, and Reducing the Carbon Footprint of County Government. That plan has been updated three times and continues to be implemented by the Board of Supervisors and County actions. To date, there have been significant advances by the County to meet appropriate and necessary environmental sustainability standards, energy conservation and to ensure our actions lead to sustainability of physical and economic resources. These actions and successes are included in Attachment A.

CHH/mp

Attachment

c: Jan Leshar, Chief Deputy County Administrator
Carmine DeBonis, Deputy County Administrator for Public Works

ATTACHMENT A

Noteworthy Pima County Sustainable Action Plan Successes (FY 2007 – 2019)

Renewable Energy and Reducing CO₂ Footprint

- FY 2010-11: 225kW of rooftop solar installed at Abrams Public Health Center
- By FY 2012-13: 16 electric vehicle stations were installed
 - Employee modes of alternative transportation increased by 41%
- FY 2015-16: Installed solar covered parking at 6 County facilities (provided over 600 spaces)
- FY 2016-17: Passed resolution 2017-39, the County's commitment to align operation efforts to Paris Agreement
- By FY 2017-18: Renewable energy portfolio: 13MW (solar and methane-electric)
 - Avoided more than 64,000 MTCO₂e
- By FY 2018-19, the County significantly dropped its emissions to 101,721 MTCO₂e – a 24% reduction.
- **Total MW solar installed to date: 9.2MW (86,877,473 kWh generated since 2011)**
- TEP: Solar installations to be considered by FMD in the future, in order of decreasing annual consumption (Medium or Large General Service)
 - Main Jail, 1270/1300 W Silverlake
 - Public Works Building/Garage, 60 W Alameda/201 N Stone
 - Green Valley Library, 601 N La Canada
 - PHN TB County Side (excluded, load is from Accelerate)
 - Sheriff's Annex, 1650 E Benson Hwy
 - Kirk-Bear Canyon Library, 8959 E Tanque Verde, in strip mall, PC owns building and 2 parcels
 - KSC Stadium North Fields, 3600 S Country Club
 - KSC FC Tucson Clubhouse, 3600 S Country Club, (excluded, load is based on FC Tucson)
 - Marana Sports Park (6901 N Casa Grande) high demand but varying low consumption, may be moved to Large General Service rate as demand exceeds 300 kW monthly but consumption can be between 11,000 kWh /month and 29,000 kWh/mo.
 - Adult Probation, 8180 E Broadway (borderline at 23,360 in July 2018, lower since) – 24,000 for 2 consecutive months in 12 month period to get net-metering on MGS rate
 - Sahuarita Library
 - Southeast Library
 - Northwest Service Center
 - Office of Children's Counsel
- TRICO: Solar installations to be considered by FMD in the future.
 - Corona de Tucson WRF (ground)
 - Green Valley Performing Arts Center (low end of canopy range when occupied or ground)
 - Picture Rocks Community Center (ground)

Energy Efficiency

- FY 2008-09: First LEED-certified building completed (Jackson Employment Center). It was built to LEED-Silver standards but received LEED-Gold certificate in FY 2009-2010
 - Energy-Star standards were also adopted for newly installed equipment and appliances
- FY2010-11: RWRD and Facilities enrolled in TEP DemandSMART program

- Facilities also started utilizing EnergyCAP, a building performance management software system.
- FY 2011-12: County partnered with City of Tucson to create New-Zero Energy Building Standard
- By FY 2012-13: Pima County achieved net savings of \$7.1 million on energy expenses
 - Strategies included: turning off HVAC after regular business hours, removing unnecessary appliances at work desks, updating sports lighting, power-saving computer program, switching physical servers to virtual)
 - “Lights-Off” program when office/ area is not in-use.
 - FMD upgraded light fixtures in downtown County buildings.
- FY 2015-16: County developed standards for building finishing that will help new construction projects meet LEED criteria
- By FY 2017-18: Four buildings achieved LEED silver certification or higher (Jackson Employment Center, Pima Emergency Communications and Operations Center, Fleet Services Building, Public Service Center)
- FY 2081-19: Pima County, City of Tucson, University of Arizona join Tucson 2030 District.
- Since 2019,
 - FMD tied in 33 N. Stone Ave into the chilled water loop, therefore no longer using the chillers and cooling tower, saving thousands of dollars electrically and approximately \$15k in maintenance and chemicals.
 - FMD continues to change lighting to LED when possible (Arivaca Library was the latest)

Fleet Services

- FY 2008-09: Added 88 alternative fuel vehicles to the fleet
- By FY 2012-13: 44% of fleet were alternative fuel vehicles
- FY 2014-15: Saw a 21% reduction in vehicle miles traveled
- FY 2015-16: Assed idling behavior and explored strategies to improve anti-idling policy
- FY 2016-17: Memorandum passed for County to purchase 20 additional electric vehicles
- **Electric vehicles to date: 97**
- **Number of EVs installed to date: 57**
- **Number of EVs planned by 2025: 276 (contingent on manufacture release of ½ ton electric truck in 2022)**

Water

- FY 2011-12: Low water-use and non-potable water use guidelines created and used (e.g. Department of Transportation uses Environmentally Sensitive Roadway (ESR) Guidelines)
- By FY 2017-18: Nearly 1,000 acres of natural habitat was established or maintained by County renewable water.
- Since 2019: FMD Measures to reduce potable water use include elimination of the cooling tower at 33 N. Stone, which will save thousands of gallons of domestic water annually. When designing new buildings: utilizing native, low water use plantings; standardized installation of low water use fixtures on all new and renovation projects including metered faucets, dual flush water closets and waterless urinals; and use of micro-basins for water harvesting landscape areas.
- **County’s allocation of reclaimed water used for groundwater recharge to date: 2,563 acre-feet.**

Materials

- FY 2008-09: BOS voted to distribute agenda packets electronically. Annual savings: \$40,000 in paper and printing; 2.28 tons of paper; and 16,000 gallons of water
- FY 2009-10: Janitorial services mandated to use green products where feasible and abide by 'green cleaning' requirements for LEED certification
- FY 2011-12: County began participation in TerraCycle pen Brigade program and collected 470lbs of waste by FY12-2013
- By FY 2012-13: County increased purchase of eco-friendly office supplies by 318%
 - 46% of waste was diverted from landfill (i.e. recycled)
- FY 2014-15: 91% of all copy/printer paper purchases were for recycled content paper (contains at least 30% recycled material)
 - Expanded use of 100% recycled content paper
- FY 2015-16: RWRD eliminated use of Styrofoam
- FY 2016-17: County worked with Staples to create pre-made list of green products
- By FY 2017-18: Diverted more than 1,700 tons of waste from landfills

Landscapes

- FY 2010-11: Construction of The Loop began
 - Freecycle @ Work program began
- By FY 2012-13: 27,354 acres of natural open space lands were acquired for conservation
 - 139 acres of cultural resources sites acquired
 - 1,273 acres of designated riparian habitat acquired
- FY 2016-17: Living River series - improvement in wetland health of the Santa Cruz River
- FY 2019: Conservation
 - Nearly 110,000 acres of natural habitat conserved to date as RFCD and County fee lands
 - Nearly 150,000 acres of grazing leases on working ranches
 - 16,011.89 acres of Important Riparian Areas (IRA) on RFCD and County fee lands
 - 34.69 miles of perennial and intermittent streamflow on RFCD and County fee lands
- FY 2018: Departments collaborated to produce the "Green Infrastructure Action Plan"
 - RFCD Green Infrastructure Projects since 2019
 - Cienega at Canoa Ranch
 - Pollinator Garden at Canoa Ranch
 - Richey Basin
 - Seneca Basin
 - Santa Cruz River - Ina to Canada del Oro
 - Agua Caliente Park
 - Veterans Gold Star Family Park
 - Shamrock Enhancement
 - *RFCD Acres of Green Infrastructure installed since 2019: **27.23 acres***
 - *RFCD Trees planted since 2019: **515***
 - DOT Green Infrastructure Projects completed or under construction since 2019
 - Valencia Road- Wade Road to Ajo Way
 - Cortaro Road- Camino De Oeste to Thornydale .
 - White-Pistor School Safety Project
 - Bopp Road - Sarasota Boulevard at Kinney Road

- Kolb Road - Sabino Canyon to Sunrise Drive
- Valencia Road Extension - Houghton Road to Old Spanish Trail
- *DOT Acres of Green Infrastructure installed since 2019: 11.4 acres*
- *DOT Trees planted/ planned since 2019: 3,032*
- FY 2018: Added "Food Systems" to SAPCO for tracking and supporting efforts
 - Las Milpitas de Cottonwood – Located on a nearly 9 acre RFCD parcel, near the Santa Cruz River, this community farm is a collaboration of RFCD, City High School, and the Community Food Bank for local residents to grow food for themselves, making healthy, local food more accessible to low-income families.
 - Mission Garden – A living agricultural museum of Sonoran Desert-adapted heritage fruit-trees, traditional local heirloom crops and edible native plants.
 - Rillito Park Farmers Market Pavilion – a state-of-the-art, permanent farmers market space with 3 shade pavilions (5,000 sq.ft. of shopping shade), center entertainment circle, public restrooms, and additional pads for over 80 small businesses.
 - The Garden Kitchen – Offers seed-to-table gardening and cooking education, nutrition education, and physical activity opportunities for community members as well as organizations and governments to deliver this programming throughout Pima County.

Education and Training

- FY 2008-09: Defensive driving course mandated before driving county vehicles, where employees are taught how to drive more efficiently and reduce travel miles
 - PDEQ began to publish articles on travel reduction and alternative transportation
 - Green building education talk series and employee environmental education started
- FY2010-11: PDEQ began giving presentations on alternative transportation at new employee orientations
 - Mandate began for employees with purchasing responsibilities to attend green products training
- FY 2011-12: BOS adopted Health and Wellness Chapter addendum
- FY 2014-15: Developed Tobacco-Free Healthy Workforce initiative and increased tobacco-free premium discount in FY 2015-16
- By FY2017-18: Number of tobacco-free employees (self-report) decreased by more than 40%
- FY 2016 - present: Offered 17 sustainability brownbag lunch presentations to staff
- FY 2017 - present: Produced 46 columns for Pima FYI

Current recycling efforts

- Blue recycling containers are placed in employee breakrooms, near copy machines and in any areas where recycled items could conceivably be generated following new construction or remodeling.
- Small recycling containers are made available to employees for their office areas.
- Large recycling totes are placed on office floors to encourage recycling.
- Paper generated from shredders is bagged and recycled.
- Cardboard boxes broken down and recycled.
- Large blue recycling dumpsters are located at Pima County buildings.
- Pima County janitorial and landscaping contractors are aware of our commitment to recycling and it is stressed that items should be disposed properly.

Awards

- FY 2012-13: National Excellence in Energy Code Compliance Award in the large jurisdiction category at the International Code Council annual conference in Portland
- 2018: Tucson 2030 District Changemaker Award
- 2019: AZ Forward 2019 Crescordia Award for SAPCO's Climate Change emphasis