

CCES Annual Report 2024

Chair: James L. Sell, PhD

Members:	Vanessa Gallego	Ward 1
	Adriana Bachmann	Ward 2
	Ojas Sanghi	Ward 3
	James Sell	Ward 6
	Dan Stormont	City Manager
	John Eisele	City Manager (Term Ended Dec. 2024)
	Garrett Weaver	City Manager
	Camila Martins-Bekat	City Manager
	Alma Lizette Anides-Morales	Mayor's Office (Resigned June 2024)

Designated number of members: 11

Actual number of members: 6 (as of Dec 31, 2024)

Current Vacancies:

- 1- Mayor (Open since June 2024)
- 1- Ward 4 (Open since August 2023)
- 1- Ward 5 (Open since October 2023, filled as of January 2025)

Meetings: 10 convened
 2 canceled for lack of quorum
 1 canceled for summer hiatus (July)

Officers:

James Sell, Chair, May 24, 2023
 Adriana Bachmann, Vice Chair, December 14, 2023
 Garrett Weaver, Secretary, December 14, 2023

Mission and Purpose of CCES

As stated in our bylaws approved in 2018, CCES mission and purpose is to “advise the Mayor and Council on:

A. The most effective and efficient methods of meeting the climate, energy and sustainability goals outlined in the City's General Plan.

B. Methods for improving the City's climate and environmental impact and adaptability in its operations: and

C. Achieving the incremental as well as transformative systemic outcomes necessary to respond to climate, energy and broader sustainability challenges in our region.

2024 Speakers:

Lisa Shipek, Watershed Management Group. Role of Watershed Management Group and Tour of the Facility

Natalie Shepp, Environmental Planning Manager, Pima County. Joint-City County Federal Grant Proposal.

Sandy Bahr, Sierra Club. Issues of Concern to Sierra Club That Could Affect Local Environmental Planning.

Cody Hooven, Evolution Affairs. Community Choice Energy

Fatima Luna, City of Tucson. Heat and Climate Mitigation Strategies.

Jennifer Shopland, Friends of Rio Vista Park. Issues about Planning and Implementation of the Rio Vista Natural Resource Park.

Howard Choy, Amber Gschwend, GDS Consultants. Energy Sourcing Study for Tucson.

Actions:

Community Engagement and Communications Subcommittee is compiling a list of climate/ environmental organizations in the region, to help organize outreach activities

Memorandum to Mayor and Council about Rio Vista park planning, to help ensure that newly planted vegetation will be able to survive.

Memorandum to Mayor and Council commending Fatima Luna and Michael Catanzaro as leaders in City action for climate planning

Discussions on the the development of key performance indicators for climate/environmental dashboard for the City of Tucson Climate Action Hub. This

discussion is ongoing, although a set of energy related indicators are being used as an initial dashboard.

Engaged in Energy Sourcing discussion, which is ongoing and to be discussed again at the March 2025 meeting.

Members participated in Environmental Day on January 25, 2024, and the Southern Arizona Heat Planning Summit on February 3, 2024. The Community Engagement and Communications Subcommittee also tabled with Chief Resilience Officer, Fatima Luna, at the EGTSS Summit on Climate Action, Sustainability, and Eco-Justice at Pima Community College, May 10, 2024.

Narrative Report: 2024 Themes and Future Plans

2024 was the first year with average global temperatures over 1.5°C above the preindustrial mean. The World Meteorological Organization confirmed that global average temperatures for the last 20 years were 1.55°C over the preindustrial level. This limit is not arbitrary — it means that to continue above that range for any length of time will result in irreparable damage to natural environments and human societies.

For Tucson, these indicators are more ominous. The average temperature rise in Tucson is 2.7°C (4.9°F) since 2001, which already exceeds this limit. In addition, Tucson broke the previous record set in 2020 with 112 days of temperatures over 100°F.

At a local level this means we can expect to see more environmental damage, such as floods and fires, as well as social damage such as heat-related deaths and the increasing burden of energy for air conditioning inflicted on those who can ill afford it. A key indicator of the human effect is the number of heat related deaths in Pima County, which is increasing rapidly. To prevent these effects, Tucson must rapidly shift energy grids to run on clean power and retrofit buildings to use less energy. We also need to prepare for a hotter world and adapt our communities to respond.

The CCES main interests for 2024

Build on the 2023 Microgrid Research White Paper to examine how it fits into a community choice energy structure

Develop a set of key performance indicators for energy use and greenhouse gasses for the City's Climate Action Hub dashboard

Evaluate community plans (e.g., Plan Tucson, The Heat Action Roadmap, Rio Vista Park Master Plan) for climate resilience

Maintain and strengthen our partnership relationship with the City Energy Office and Chief Resilience Officer.

Develop a strong community engagement program with a database of relevant agencies, tabling at climate related events, exploring the possibility of partnerships with local non-profits, and working together with the City to communicate with the public using such tools as social media, email newsletters, a website and other current and developing channels of communication.

CCES Goals For 2025

Evaluate the Plan Tucson Update and the GDS Energy Sourcing Study.

Expand the key performance indicator list to tie into relevant aspects of the community climate plans.

Continue to build on the microgrid research to examine how distributed energy systems can be used to benefit the twin goals of creating non-fossil fuel energy and keeping energy costs low for consumers.

Create a library of local environmental planning documents and their relationship to current plans

Define and refine our outreach efforts to execute our primary function of researching and exchanging information.

Research models of community engagement in other cities to develop a report to the Mayor and Council on best practices.

General Comments

In our seven years of existence, we have often found ourselves operating as a channel between members of the community who have issues related to climate, energy, and sustainability and City government. Members of the public have used our Call to Audience section to express concerns about such topics as zoo and park planning, poor landscaping practices, community choice energy options, waste management. We have done our best to respond to those concerns as they relate to our mandate, but

they do point to a need for more City engagement with community members. We will continue to perform that function.

We have also been discussing inclusion of Indigenous nation representatives on CCES, specifically with the Office of the Mayor. It is our hope that we can include a representative from the Tohono O'odham or Yoeme (Yaqui) Nation.

We have also encountered challenges in coordinating with government agencies and local non-profits in our quest to improve quality of life in Tucson. It has become quite evident to us that the rules of operations, as expressed in the Boards and Commissions Handbook, need to be updated to better reflect the uses of social media and partnerships to reach the community.

Our commission has seen its role as gathering and sharing research with the the Mayor and Council expand as we build more contacts with members of the Tucson community. Those people are coming to us for information. Because of this, we see the need to allow members to post information on social media and gather feedback, in a similar manner as we do at the "Call to the Audience" sections in our meetings — compiling public comments without responses from commissioners.

Appendix 1

Community Engagement and Communications Subcommittee Report

Subcommittee Members: Adriana Bachmann (Chair), Garrett Weaver, Jim Sell

- **2024 Highlights**

- **Subcommittee Established:** Commissioners agreed to establish a Community Engagement & Communications Subcommittee to set up a webpage, do social media, participate in events like tabling, form connections with the media, and look at ways to involve the community in climate action plan implementation.
- **Commission Promotional Poster:** Commissioner Bachmann designed a poster for CCES that includes a description of the commission's mission and a QR code that leads people to a webpage on her personal website that includes commission bios and links out to agendas and minutes hosted on the City's website. This poster will be used for tabling events.
- **Climate Action, Sustainability, Eco-Justice Summit:** Supported the City of Tucson by tabling at the Climate Action, Sustainability and Eco-Justice Summit on May 10, 2024 with Fatima Luna, *Chief Sustainability Officer*, to gather input from the public about ways the City could better

manage extreme heat in preparation for the publication of the Heat Action Roadmap. We took the chance to let the community know about the work our commission does and invite them to our monthly meetings.

- **Latino Conservation Week:** Worked with local community members and organizations to plan an event for Latino Conservation Week. However, grant funding fell through and we were unable to move forward with the event.
- **Community Resource Database:** Working to create a database of local (city, county, region) companies and non-profit organizations who work to support positive climate and sustainability efforts. Commissioner Bachmann took on the project and is continuously adding to it with organizations and points of contact. This database will be used to identify experts we can look to for assistance with research for reports to the Mayor & Council (M&C) and invite to meetings as guest speakers.
- **Research on Models of Engagement in Other Cities:** Each subcommittee member started researching engagement and communication efforts in other cities. Commissioner Bachmann focused on New York City, Commissioner Weaver on San Diego and Commissioner Sell on multiple Arizona cities. We will use this research to suggest strategies to M&C that are working in other areas that we can incorporate in Tucson.

Appendix 2

Memoranda to Mayor and Council

1. Commendation of Fatima Luna, Chief Resilience Officer, and Michael Catanzaro, City Energy Manager



Dr. James Sell (Chair)
 Garrett Weaver
 Adriana Bachmann
 John Andrew Eisele
 Vanessa Gallego
 Camila Martins-Bekat
 Daniel Stormont
 Ojas Sanghi

Commission on Climate, Energy, and Sustainability
 December 20, 2024

The Commission on Climate, Energy, and Sustainability would like to acknowledge two members of the Climate Action Team, Michael Catanzaro and Fatima Luna, for the excellent work they have been doing for the City and Community of Tucson. Both been leaders in the implementation of the Tucson Resilient Together Climate Action Plan, and strong actors in the progress Tucson has been making in creating a better living environment for everyone.

In the six years Michael Catanzaro has been City Energy Manager, his office has been able to use Solar Service Agreements to install 18 MegaWatts of Solar Photovoltaic panels, with another 8 MW — with no upfront costs for the City — for a total savings of about \$800,000 in energy costs. His office has also installed five Electric Vehicle charging stations. In addition, he worked with other City and County staff to apply for multimillion dollar grant funding, which, although it was not successful, is a strong indication of initiative and cooperation with local agencies.

Fatima Luna has been on the job for one year, and has demonstrated her organizational skills by implementing a strong outreach effort, culminating in the Heat Action Roadmap. This process started in January 2024 and resulted in the organization of the Citizen's Heat Advisory Committee, with representatives from academia, emergency responders, unions, and business. It meets quarterly, and works to prioritize actions in the Heat Action Roadmap.

Also noteworthy is Ms Luna's efforts in community outreach, with quarterly reports on community climate action, as well as organizing the City Climate Action Team to report directly to the community, as in the "Climate Stakeholder Conversation" of September 25, which included staff reports on energy, climate education, bus stops, the sustainability campus, and the heat action roadmap. To our knowledge, this is an innovative approach that allows staff to report on their work in an informal setting. We hope to see more of these events.

The Commission sees this approach to public outreach and engagement as transformational because it creates a conduit between local government and the community around an effective response to our changing climate. We see tremendous potential with citizens' advisory committees for climate action because they consistently engage community members in influencing how plans are implemented.

It is important to note that these staff members accomplished their work with office staffs of three (Energy Office) and two (Resilience Office — although two more staff have just been added). In contrast, the City of Flagstaff Sustainability Office has 14 personnel, for a city 1/7 the size of Tucson.

Thanks to your leadership, and the hard work and dedication of staff, the City of Tucson is a leader in climate action. Effective citizen engagement is key to shaping plans and actions that best meet the needs of our community. The City of Tucson is taking decisive steps towards effective climate adaptation and mitigation, and we encourage continued work in this direction.

Sincerely,

Members of the City of Tucson Commission on Climate, Energy, and Sustainability

By Unanimous Vote

2. Evaluation of Rio Vista Natural Resource Park Plan



Dr. James Sell (Chair)
Garrett Weaver
Adriana Bachmann
John Andrew Eisele
Vanessa Gallego
Camila Martins-Bekat
Daniel Stormont
Ojas Sanghi

December 20, 2024

Tucson Commission on Climate, Energy, and Sustainability

The Tucson Commission on Climate, Energy, and Sustainability (CCES) received the attached letter, dated August 19, 2024, that was transmitted to us through the City Clerk's Office. The letter discussed concerns over the planning of the Rio Vista Natural Resource Park by a member of a public non-profit (the Friends of Ro Vista).

The main points of concern were as follows:

1. A concern about "safety and sustainability issues created by the plan."
2. Lack of response by Tucson Parks and Recreation (TPRD) staff
3. Questions over the trail design, which may be unsafe and cause erosion.
4. Questions about the revegetation plan, "conflicting information on whether these plants will be irrigated or otherwise watered during establishment." The Friends representative was told by TPRD staff that "the department does not have a maintenance plan or annual budget for these plantings."

The CCES has been concerned with the issues relating to revegetation and low-water use landscaping as part of its mandate to advise Mayor and Council on matters relating to those elements in the general and climate action plans, notably the CR (Community Resilience) sections of the Climate Action Plan, and the GI (Green Infrastructure) sections of Plan Tucson. So a subcommittee consisting of Dan Stormont and James Sell investigated the situation with a review of the plan documents and meetings of principal personnel, including two walk-throughs with representatives from the Friends and TPRD staff.

The CCES is quite aware that the Rio Vista Plan has been approved by the Tucson Parks and Recreation Commission (2022) and Mayor and Council (2023), and so our examination must

rest, not with the plan itself, but its implementation and importance to the community. The plan is quite good. It does address the main needs of the park — revegetation using native desert plants, reduction of pedestrian and equestrian trails (to provide opportunities for reestablishment of a desert ecosystem) , and a very strong public participation element concentrating on the nearby neighborhoods.

We address the concerns expressed in the letter from the Friends of Rio Vista as follows:

1. **Safety/Sustainability.** We have not seen much in the way of safety and sustainability issues created by the plan. Since this is a reclamation of a desert environment, this needs monitoring.

2. **TPRD Staff Response.** At the time the letter was sent to us, the manager in charge of the park planning was just being hired and needed some time to learn the situation. So the lack of response from TPRD may have been because of the transition in personnel. We have met with them and done a walk-through of the park. The two TPRD people we talked to were quite transparent about the issues and how they are addressing them. They have maintained contact with the local neighborhood groups and have noted they depend upon the public for volunteer help and engagement.

3. **Trail Design.** The trail design and layout is in accordance with the California trail design standards (cited below), which, along with the standards implemented by the National Park Service, are to our knowledge, the state of the art in trail design. They are as safe as can be made, considering they need to serve pedestrians and horses.

[https://www.parks.ca.gov/pages/1324/files/Chapter 5 - Principles of Trail Layout and Design.FINAL.04.03.19.pdf](https://www.parks.ca.gov/pages/1324/files/Chapter%205%20-%20Principles%20of%20Trail%20Layout%20and%20Design.FINAL.04.03.19.pdf).

4. **Plant Survival.** The concern expressed in the letter about the survival of new plantings has been addressed by the contract requirement that all new plants that do not survive within a year must be replaced by the contractor. It is to be expected that there will be attrition. The US Forest Service urban forestry research estimates range from 1-5% attrition rate over the first five years in less extreme climates than ours; it will be interesting to see how desert plants hold up under the increasingly brutal Tucson summer. That will be well worth collecting long-term data.

To summarize, the plan has been completed and approved by Mayor and Council, with the support of the Parks and Recreation Commission, as well as the local neighborhoods. The plan is being executed and the role of the CCES in this situation needs to be to encourage this project as a means of revegetating the Tucson landscape as well as educating the public about the advantages of natural environments.

There are about 130 City Parks in Tucson, using the usual grass and sports model. There are now three natural resource parks under development. The Tucson Parks and Recreation Department is pioneering new ground by dedicating land to the preservation and reconstruction of desert environments, and managing public use of natural environments. This is an important step in moving Tucson to a more sustainable community and appropriate re-vegetation of the urban landscape. Because it is a new approach, mistakes can be expected. That new frontier requires a strong monitoring program. Rainwater harvest basins should be monitored for efficiency during rainfall episodes, and modified appropriately.

The CCES mandate is to advise Mayor and Council on climate change and so is more oriented toward future actions that can move the Tucson community toward policies that can adapt to and mitigate climate change. We think this is a good step in the right direction and hope to see more efforts of this sort in the future.

In short, the work done on the Rio Vista Park is using the best standards available, and we think the City is getting a really professional level job.

Addendum: Landscaping Maintenance.

We received photos of the effects of vegetation cutting in the park by a contractor for a utility that indicates little concern for aesthetics or plant well-being. As CCES has noted in a memorandum of August 2021 that landscapers need to be trained to properly trim and cut desert plants. The City Urban Forester has an education program, and it is essential that, not just City-employed contractors, but also utility or other contractors, be trained before they are allowed to work on City-owned property.

Sincerely,

Members of the City of Tucson Commission on Climate, Energy, and Sustainability
By Unanimous Vote