

PUBLIC MEETING AGENDA

Sustainability & Resilience Commission

MEETING DATE

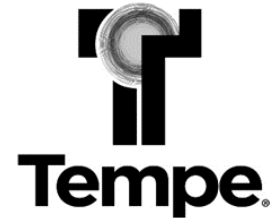
Monday, November 20, 2023
4:30 pm – 6:00 pm

MEETING LOCATION

[Click here to join the meeting](#)
Meeting ID: 225 486 248 85
Passcode: opUGKh
[Download Teams](#) | [Join on the web](#)
Or call in (audio only)
[+1 480-498-8745,8219046#](#) United States, Phoenix
Phone Conference ID: 821 904 6#

AGENDA ITEM	PRESENTER	ACTION or DISCUSSION
1. Welcome and SRC Mission	Kendon Jung, Commission Chair (4:30 – 4:35 pm)	
2. Public Appearances The Sustainability Commission welcomes public comment for items listed on this agenda. There is a <i>three-minute time limit</i> per citizen	Kendon Jung, Commission Chair (4:33 – 4:35 pm)	
3. Review of Meeting Minutes The Commission will be asked to review meeting minutes from the October 16, 2023 meeting.	Kendon Jung, Commission Chair (4:35 – 4:37 pm)	Action
4. Youth Climate Action Coordinator Update	Evelyn Brumfield, Youth Climate Action Coordinator (4:37 – 4:55 pm)	Discussion
5. Climate Action Plan Highlight Action – Resilience Hubs	Carissa Fowler, Heat Mitigation and Resilience Specialist (4:55 – 5:20 pm)	Discussion
6. IgCC Municipal Policy and Implementation	Brianne Fisher, Climate Action Manager (5:20-5:35)	Discussion
7. SRC Annual Report	Brianne Fisher, Climate Action Manager (5:35-5:45pm)	Action
8. Sustainability and Resilience Office Updates and Housekeeping Staff Updates Commission Composition Timeline	Brianne Fisher, Climate Action Manager (5:45 – 5:55 pm)	Discussion
9. Future Agenda Items - Commission may request future agenda items.	Kendon Jung, Commission Chair (5:55 – 6:00pm)	Action

According to the Arizona Open Meeting Law, the Sustainability Commission may only discuss matters listed on the agenda. The City of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.



Minutes

City of Tempe Sustainability Commission October 16, 2023

Minutes of the Tempe Sustainability Commission meeting held on Monday, October 16, 2023, 4:30 p.m. at a virtual meeting on MS Teams, through City Hall, 31 E. 5th Street, Tempe, Arizona.

(MEMBERS) Present:

Barbie Burke (Vice Chair)
Natalie Mendoza
Katja Brundiers
Ben Paulat
Taylor Conley

Morgan Winburn
Jake Swanson
Shawn Swisher
Erin Boyd
Joshua Randall

(MEMBERS) Absent:

Kendon Jung (Chair)

City Staff Present:

Eric Iwersen
Brienne Fisher
Andy Escobar
Maddie Mercer
Evelyn Brumfield
Carissa Fowler
Tom Duensing
Richard Adkins

Guests Present:

Quinton Olson

Agenda Item 1 – Welcome New Members and SRC Mission

Vice Chair Barbie Burke called the meeting to order at 4:30 p.m.

Agenda Item 2 – Public Appearances

No public comments were shared

Agenda Item 3 – Approval of Meeting Minutes

Vice Chair Barbie Burke called for a motion to approve the meeting minutes from September 18, 2023.

Motion: Jake Swanson

Second: Katja Brundiers

Decision: Approved 10-0

Agenda Item 4 – Youth Climate Action Coordinator Update

Maddie Mercer, Neighborhood Resilience Coordinator, gave a presentation to update the Commission on the Rain to Roots Master Plan. She was joined for part of the presentation by Urban Forester Richard Adkins. This plan works to integrate stormwater, urban forestry, and urban cooling efforts in the city. This plan addressed three performance measures: 1.27 City Infrastructure & Assets, 4.03 Water Conservation and Efficiency, and 4.11 Tree Coverage. The plan also aligns with the Tempe's Climate Action Plan Update highlight actions around strategies for green codes and standards. Mercer went over a basic definition of Green Stormwater Infrastructure (GSI) and listed its benefits. Overall, the Rain to Roots Master Plan is focused on expanding GSI, cross-departmental coordination, and identifying opportunities for long-term funding. Mercer also provided an overview of the partners involved in this project, both internal and external – with one major goal of better coordination.

The overall plan has several components: the first of which is an assessment of the current state of urban forestry, stormwater, and sustainability initiatives in Tempe. Other parts of the Master Plan include

- Developing new codes and standards for adoption, implementation, and maintenance of GSI work.
- Updating the Urban Forestry Master Plan
- Identifying a funding strategy for the long-term.

Throughout the plan there will be new pilot projects coupled with public outreach through an ambassador program. This current presentation to the Commission will focus on that first step of assessing the current state. Current research is being done as to existing programs and initiatives, previous GSI projects, as well as data around stormwater, urban forestry, heat, and equity.

Urban Forester Richard Adkins explained in more depth about the assessments happening regarding urban forestry. To update the Urban Forestry Master Plan, recommendations will be solicited from consultants and the public. New data sets will provide a more accurate picture of landscape and land use patterns (with an additional eye to expanding green space). Additionally, examples of other related national and regional codes and standards will be studied to promote sustainable green development and tree maintenance.

After Urban Forestry, the next assessments cover stormwater initiatives. Mercer explained that this includes interviews with staff, drainage studies, and reviewing capital improvement plan. Next steps for stormwater include promoting stormwater quality, managing quantity, supporting MS4 Permit compliance, and integrating GSI to proposed stormwater capital improvement projects.

Adkins also summarized the current state analysis of GSI policies for codes and standards. With all the project components being discussed – augmenting and updating development codes and standards will be an important part of this plan. Practices and design criteria must be amended and improved, and to illustrate this point, Adkins refers to Tempe Fire Station #7. The landscaping planning and vegetation is appropriate for GSI, but also features a drywell which would prohibit the rainwater infiltrating to the soil. Next steps for this part of the plan include developing standards of care, as well as a native vegetation and biodiversity toolkit. Additionally, integration of GSI standards into existing Tempe codes is an important next step.

Assessing existing and new GSI projects via site visits is a recently-completed stage in this assessment process. The WERK consultant team were able to see how GSI projects were effective in spaces around Tempe and gain some valuable insight to best practices. For next steps around pilot projects, the goals are to design materials that highlight projects with GSI best practices, create a new GSI map that includes important data, and develop a tool to prioritize future pilot projects. In developing pilot projects, the main goals will be to demonstrate how GSI can be integrated into different project types, test new codes and standards, and build inter-departmental connections within Tempe.

Future funding strategies are another part of the plan to be explored. The next steps include a utility feasibility study – reviewing other cities' strategies for funding, as well as identifying other funding solutions for future projects. One crucial next step will be to coordinate with the water rate study with Municipal Utilizes.

The final large component of this Master Plan is public outreach through community engagement. The main avenue for that work is the Rain to Roots Ambassador Program;

that program's goal is to make the Plan accessible and easy to receive feedback. Having this Ambassador program makes the work more transparent and builds in advocacy for this work with an eye to future adoption and funding strategies. Ambassadors have the opportunity to learn about stormwater and cooling initiatives, review and give feedback on project materials, participate in site visits, and advise on policy recommendations. There has been growing interest and positive feedback. Ambassadors come from a range of backgrounds and interests.

Project outcomes from this Plan, at a high level, include GSI pilot project designs, updated codes and standards, updated Urban Forestry Master Plan, and identifying a sustainability funding strategy. Mercer also shared the next three Ambassador meetings dates & topics with the Commission.

Questions: Vice Chair Burke relayed some questions from the chat:

- Commissioner Natalie Mendoza asked if Green Stormwater Infrastructure would also include collecting excess stormwater and storing it for future use. Mercer replies that at this stage, the focus is to use landscape (rather than infrastructure) to manage stormwater. But long-term strategies could include tanks like Commissioner Mendoza references.
- Commissioner Katja Brundiers asked what was the contribution to cooling identified on the 25 sites on the fieldtrip? Mercer explained that the cooling benefits provided were a mixed bag. Sites planned with trees had larger cooling benefits as opposed to just vegetation cooling. A finalized site assessment report will be forthcoming and will have more details and benefits outlines.
- Commissioner Brundiers followed up by asking about what challenges this work has faced. One major challenge has been a lack of and need for coordination between partners and departments. Better communication between folks, such as Environmental Services, Engineering, Multi-Use Path teams; those who work on landscapes could use an opportunity to integrate GSI elements into their work and partner with other departments. Another challenge has been maintenance of these projects – ie planning for long term vegetation health and unobstructed flow of water. The responsibility for some of this maintenance isn't always clear.
- Commissioners Jack Swanson had two questions to pose:
 - o Would there be a document to clearly explain trade-offs of choosing non-native trees vs native ones (Commissioner Swanson mentioned the related discussion that took place around Mill Avenue tree selection)? Would it be communicated that this Plan took into account the trade-offs and assessed what would be most effective? Mercer agreed that the idea of a trade-offs fact sheet would be a beneficial part of a proposed toolkit.

- Commissioner Swanson also asked if this Plan would address deforestation projects, like the one that occurred west of Tempe Town Lake? Tradeoffs were assessed and there was much community concern – does this plan clarify when tradeoffs occur so public is aware? Making sure that this is communicated is key to bolstering support for this Plan. Mercer replied that the Ambassador program is a good opportunity to talk about contentious choices, should they arise.
- Vice Chair Burke asks what the impacts of this exceptionally dry and hot summer monsoon season may be on this Plan. Mercer replied that it will be invaluable to communicate that valley rains can be disruptive and affect hardscapes, which is why GSI is so helpful, even when rain is infrequent.

Agenda Item 5- Climate Action Plan Highlight Action – Resilience Hubs

Brianne Fisher, Climate Action Manager, explained that every Board and Commission is charged with producing an annual report. The format is consistent among all Boards and Commissions, and every report is compiled into one large document that is provided to Mayor and Council. The report is due at the end of the calendar year, and Fisher will draft language that the Commission will provide notes on what is to be added or emphasized. Feedback can be sent to Fisher directly in addition to conversations at upcoming Commission meetings. Fisher will be updating attendance tracking and has already gathered some noteworthy accomplishments to show the Commission. Highlights include Commissioner Swisher's design competition, the letter of support for from the Commission to Council for the International Green Construction Code, and the significant work the Commission undertook regarding the General Plan. Goals for the upcoming years are also included in this report, and include topics such as resilient energy hubs and resilience hubs, transportation demand management and mobility hubs, and green stormwater infrastructure.

Agenda Item 6- IgCC Municipal Policy and Implementation

Eric Iwersen, Director, started the office updates by outlining the new staff that will be joining the Sustainability & Resilience office. A new Policy and Grants Coordinator has been hired and will start on Oct 30th. That position is shared with the Strategic Management and Innovation Office. SRO is also hiring a Management Assistant (starting in mid-November) who will be shared with the Economic Development Office. The entire team is currently housed in the Tempe Transportation Center and the space is shared with the Economic Development and Transportation departments. Later on, Iwersen also noted the Heat Mitigation and Resilience Specialist who was hired earlier in the fall.

Iwersen also provided an update on the timeline to change the code around the Commission composition. Changing the code requires two hearings in front of Council and

is slated for November 16th 2023 and November 30th 2023. Iwersen also noted that the Commission will elect new officers in January 2024.

Iwersen reported that he and Community Development Deputy Director Mike Baxley presented the first hearing of the International Green Construction Code to Council on October 12th 2023. (The second & final hearing will be November 30th 2023.) It was well received, and it's nearing adoption for Tempe. Commissioner Swisher spoke in support of the Code at that meeting; Public and Council dialogue at the meeting revolved around pushing this from being voluntary to mandatory. Conversations with developers will be ongoing as this Code gets adopted, and a green-plan specialist will be hired to serve as an ombudsman to encourage IGCC use. Iwersen also laid out the future timeline for early 2024, and the Commission should expect an update around how success would be measured and other goals of this Code as it's in use. At the final hearing, Iwersen will be asking the Council to support a resolution dictating that future City buildings will engage IGCC to lead by example.

The last housekeeping item is the city budget forecast. Iwersen explained how changes at the state legislature will affect Tempe's budget. The state has prohibited the collection of residential rental tax by cities, and this will result in a loss of revenue of about \$20 million from the city's general fund. In order to accommodate this change, there will be no supplemental budget items for the next fiscal year; new positions or large financial requests won't be fulfilled. SRO has already started to share positions and will continue to pursue federal dollars as well. Deputy City Manager Tom Duensing elaborated that his office will present the forecast to Council at the November 2nd 2023 meeting. The decision to prohibit rental tax collection will disproportionately impact Tempe, as there are many rental properties within the city. The budget may be lean for several years as the city accommodates the change. Commissioner Brundiers asked if there are options for fees that would benefit the Sustainability office and its goals? Could the Commission assist in exploring fees or funding that would benefit sustainability, resilience, and equity programming? Duensing answered that at this point, city departments would be seeking direction from Council on how this is addressed. Additionally, the issue needs to be properly set up and explained before strategies can be explored. Iwersen mentioned that similar funding strategy discussions are happening within Transportation and Water, and SRO would look to those conversations as well.

Agenda Item 7 – Annual Report

Monday November 20th is the date of the next Commission meeting, which is the week of Thanksgiving. Vice Chair Burke asked Commissioners for ideas for future meetings via email.

Agenda Item 8 – Sustainability and Resilience Office Updates and Housekeeping

Monday November 20th is the date of the next Commission meeting, which is the week of Thanksgiving. Vice Chair Burke asked Commissioners for ideas for future meetings via email.

Agenda Item 7 – Future Agenda Items

Monday November 20th is the date of the next Commission meeting, which is the week of Thanksgiving. Vice Chair Burke asked Commissioners for ideas for future meetings via email.

Commissioner Brundiers motions to adjourn the meeting at 5:32 p.m.

Motion: Katja Brundiers

Second: Taylor Conley

Decision: Approved 10-0

Prepared by: Carissa Fowler

Reviewed by: Brianne Fisher

Addendum – MS Teams Chat:

[10/16 4:40 PM] Natalie Mendoza (Guest)

Would GSI also include collecting and storing excess stormwater for later use? I ask because the plants may only need so much water at any given time and we could always use more water overall.

[10/16 4:57 PM] Katja Brundiers

Thank you for the presentation! What was the contribution to cooling identified on the 25 sites on the fieldtrip?

[10/16 4:58 PM] Katja Brundiers

You mentioned you've identified the challenges that have sometimes prevented the work from going forward. From your research, what strategies have you identified that may be able to help with addressing some of these challenges?

[10/16 4:59 PM] Natalie Mendoza (Guest)

Thank you. And wonderful presentation.
heart 1

[10/16 4:59 PM] Fisher, Brianne

Storage could be a good option to explore for private development (AKA IgCC)
heart 1

[10/16 5:03 PM] Katja Brundiers

Sustainability Commission, October 16, 2023

Thank you so much Maddy and Richard for the presentation and the very thoughtful research and careful approach to coordination that you both apply. I also greatly appreciate how you center the heat equity data in the work and the prioritization tool. Thank you!

heart 3 2757_heavyexclamationmarksymbol 1

[10/16 5:15 PM] Katja Brundiers

Congratulations to your excellent abilities to grow the team of the SRO and for creating these liaising positions to foster cross-departmental collaboration.

heart 3

[10/16 5:23 PM] Brumfield, Evelyn

resilient!

heart 4 like 1

[10/16 5:27 PM] Fisher, Brianne

The Rain to Roots feasibility study is looking at various projections

[10/16 5:27 PM] Fisher, Brianne

So the answer is specific to our Department. Looking for revenues NOT dependent on the General Fund

like 3

[10/16 5:28 PM] Katja Brundiers

As the SR commission we could look into sustainability-related measures that incentives sustainability.

[10/16 5:30 PM] Fowler, Carissa

Thanks Eric!

heart 1

[10/16 5:30 PM] Katja Brundiers

Thank you Eric and Tom for your insightful responses.

[10/16 5:32 PM] Fisher, Brianne

Meeting adjourned at 5:32

[10/16 5:32 PM] Natalie Mendoza (Guest)

Thank you.

[10/16 5:32 PM] Erin Boyd (Guest)

thank you all

[10/16 5:32 PM] Katja Brundiers

Thank you SRO staff and others presenting! We appreciate you!

heart 1

[10/16 5:32 PM] Mercer, Madeline

Sustainability Commission, October 16, 2023

Have a good night, all!

[10/16 5:32 PM]

Erin Boyd (Guest) left the chat.

[10/16 5:32 PM]

Natalie Mendoza (Guest) left the chat.

[10/16 5:33 PM] Taylor Conley (Guest)

Thank you!

Youth Climate Action Update

Sustainability & Resilience Commission
November 20, 2023



Youth Climate Action - the agenda



Youth Agenda

Tempe youth are advocates of climate action and have the ideas and perspectives necessary to move climate action forward in our city. The Sustainability and Resilience Office hosted a series of engagement events throughout the summer of 2021 to allow youth to highlight topics important to them. These included food and transportation access, equity, partnerships with school boards and leaders, and Green Stormwater Infrastructure (GSI) solutions. In attendance were Tempe high school students, recent college graduates, and engaged community members who work with Tempe youth.



Students plant native vegetation at McClintock High School.

“Middle school, high school, and college **students are leading a passionate call for change** and deeper investment in climate action. You will hear their voices in this document. For example, they want the city to **expand climate action** to include **transportation** equity, **food** access, and more **changes in their schools**. Adults must listen and respond”

Mayor Corey Woods

Why this investment matters:

- Youth are:
 - Passionate, vocal about sustainability & the climate
 - Vested in the successful future of Tempe
 - Underrepresented in decision-making at most levels.
- Schools are:
 - Trusted institutions.
 - Already embedded in communities.
 - Asset-focused and equipped for involvement.

How we got here:

- “Cool Kids, Cool Places, Cool Futures” grant from the Robert Wood Johnson Foundation
- **Moving away from individual heat responsibility toward a future of community resilience.**
- Youth Climate Action Coordinator position
- Deep work in the past and future at McClintock High School
- Approached by Tempe Elementary District #3 and other community partners

McClintock High School



- Longstanding partner with Sustainability & Resilience Office
- Inclusion in the RWJF Grant
- Inclusion in Grow Local Tempe Grant



• **Sustainability Club - Spring 2023**

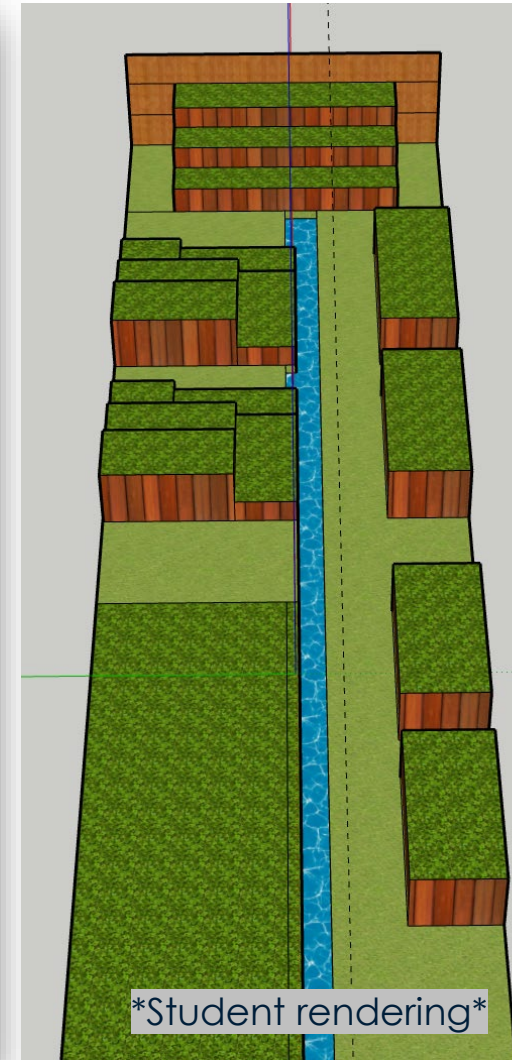
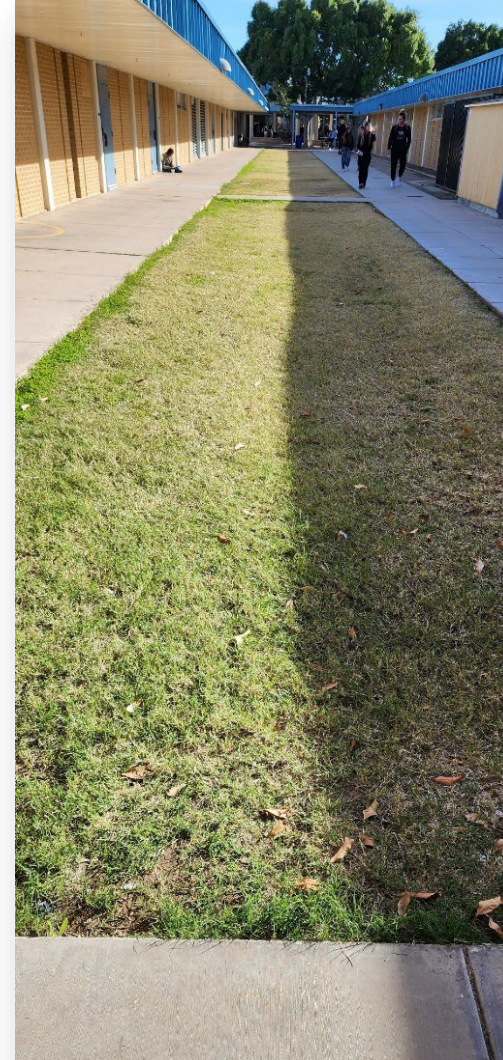
- Vegan/Vegetarian foods in the cafeteria
- Greenhouse repair for use by environmental science classes, Susty Club, and for propagation.
- Replanting the desert pollinator garden along McClintock Dr
- Native garden in boxes near greenhouse



McClintock High School



- **Sustainability Club - Fall 2023**
 - Co-creation of a school green space with indigenous help.
 - Pop-up Clothing store to address dress code and upcycling
 - Expanded cafeteria options
- **Future work:**
 - Comprehensive look at CoT energy efficiency upgrades & rebates, water use rebates.
 - Shade & cooling improvements.
 - Microgrid and Resilience Hub



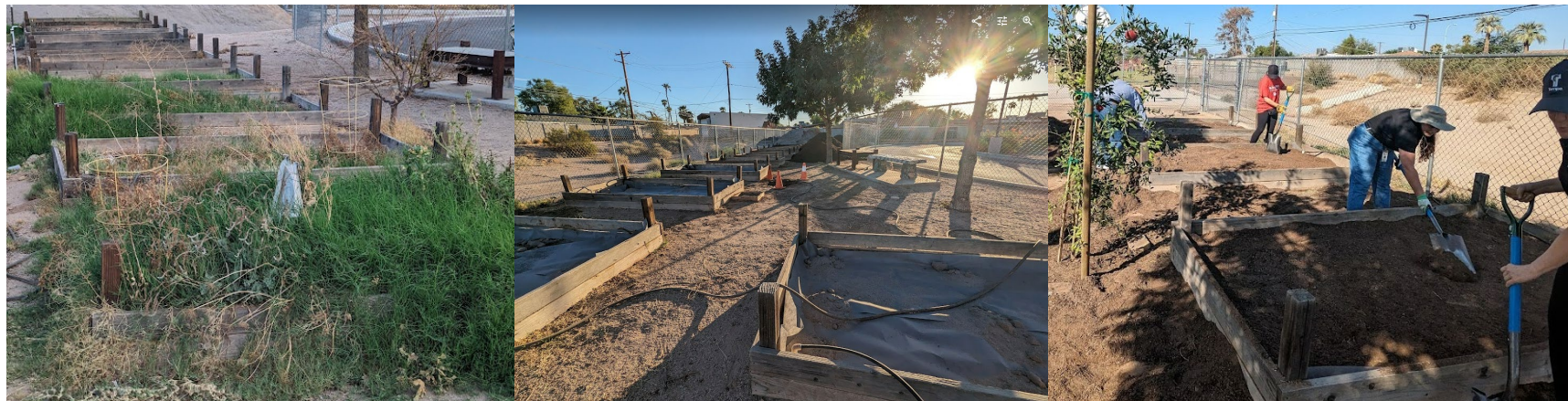
Tempe Elementary District #3

- Greening investments, district guidance:
 - Tree-a-thon: Spring 2023
 - Garden renovation & trees planted: Fall 2023
- Future work:
 - Garden investment for capacity
 - Grow Local Tempe pilot projects



Trees planted, community garden refreshed at Tempe school

City of Tempe teamed up with ASU HeatReady Schools, Trees Matter and Tempe Elementary School District for project at Cecil Shamley School



COMMUNITY FOOD WORKSHOP



Are you interested in...
Learning how to grow your own food?
Creating shade that you can eat?
Supporting local farmers?

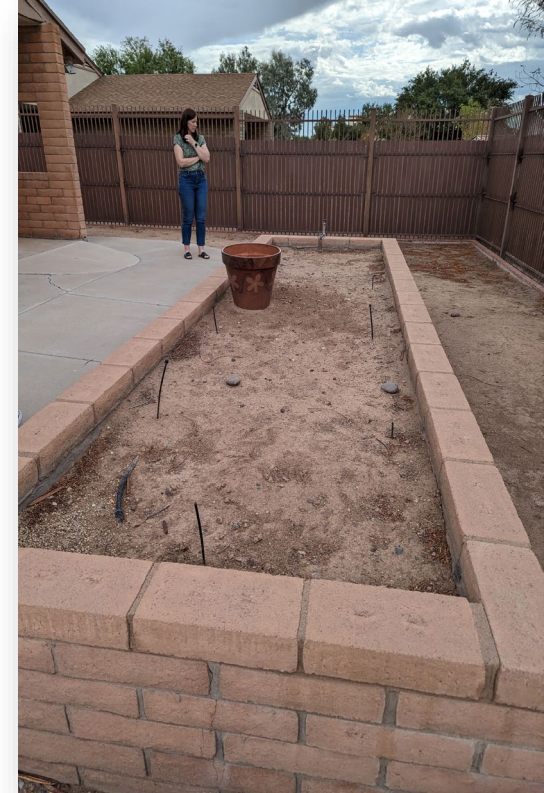
Join the City of Tempe's Sustainability & Resilience Office at our upcoming workshop to help grow our community food system!

Mayor's Youth Advisory Commission



Environmental justice is defined by the Environmental Protection Agency as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws." **Social justice is a priority of both MYAC and the City of Tempe**, so looking at sustainability through an equity lens while collecting data and subsequently while creating recommendations came naturally.

- 40-year-old commission, comprised of 18-30 high schoolers.
- Yearly priorities: gather feedback and make recommendations to Mayor & Council.
- **Greater appetite for projects and work within the community**
- **Stakeholder Group for Rain to Roots.**
- **SME for the Environmental Sustainability & Justice subcommittee.**



Rain to Roots Ambassador Program

Rain to Roots Ambassadors will provide feedback throughout the planning process and the development of GSI pilot projects.

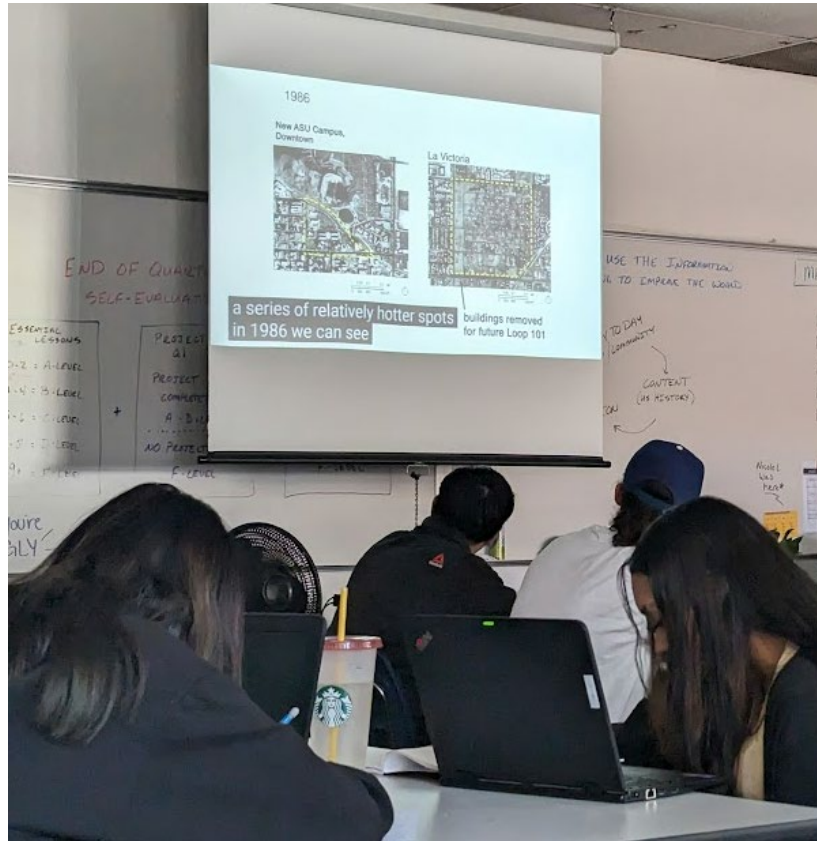
Ambassadors will...

- Learn more about the city's stormwater management, urban forestry, and sustainability initiatives.
- Review materials developed by the Rain to Roots consultant team.
- Attend site visits for the GSI pilot projects.
- Advise on the direction of programs and policy recommendations for Tempe City Council.

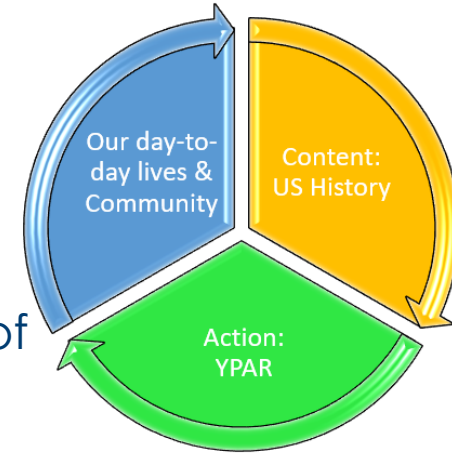
Tempe High School



Research and Recommendation Pilot Project



- ~90 High school juniors, in AZ & American History Class
- Learning American history and linking the lessons of history to current inequalities.
- **How: Youth Participatory Action Research partnership with ASU**
- They are being given an opportunity to apply these lessons to sustainability topics in Tempe. This semester, they will present findings or suggest recommendations to city staff.



"How can we use the information we are learning to impact the work around us?"

Innovation Center - TUHSD



- Project-Based Learning coordinated with businesses and learning facilitators. Students earn credits via real-world projects.
- Currently in the first semester!
- **Businesses pitch problems for groups of high school students to work on.**
- **Sustainable garden project on IC campus, currently a small group.**



RCE Greater Phoenix

- Co-creating new formal & non-formal education programs - as well as mobilizing the existing ones - with all community members, through meaningful, equitable and participatory learning experiences to contribute to a more sustainable future in the region.



Education for Sustainability

AZ Youth Climate Coalition

- Youth-led organization fighting for climate justice across AZ. Through a combination of tactics ranging from direct action, mutual aid, civic engagement, education, and more, they are building a movement of young people to fight the climate crisis.
- Strike demands around renewables, the energy sector, transportation, water, legislation, cap and trade and heat waves.



Future work



- Program that supports school gardens – comprehensive partnership
- Funding and plan to create cooler, more sustainable campuses
- **Deeper relationship with McClintock: Resilience hub with a microgrid**



Step Outside

Bringing the Outdoors to Life in Your Teaching

Program Description and Incentives

The Step Outside Project is a collaboration to develop teacher capacity across Arizona in the teaching of K-12 curriculum standards, with an emphasis on science, literacy, and the outdoors. We are recruiting teachers for our first cohort, starting December 7th, 2023. We offer you many benefits, lightly covered below. More details [here](#).



GROWING SCHOOL GARDENS SUMMIT

The Growing School Gardens Summit is hosted by the Sprouts Healthy Communities Foundation in Partnership with [Life Lab](#) and the [School Garden Support Organization \(SGSO\)](#) Network. Learn more about this collaboration. Sponsorship and collaboration inquiries – LyndseyWaugh@sprouts.com Media inquiries – MollyBrown@sprouts.com




Resilient Schools



Planning Introduction	Go to intro
Hazards	Go to hazards
School Details	Go to school details
Key Staff Contact Details	Go to key staff contact details
Evacuation Points	Go to evacuation points
Fire Procedures	Go to fire procedures
Earthquake Procedures	Go to earthquake procedures
Lockdown Procedures	Go to lockdown procedures
Reunification Procedures	Go to reunification procedures
Advice for other hazards	Go to advice for other hazards
Emergency Preparedness	Go to emergency preparedness
Call Defence Centres	Go to call defence centres
Print your plan	Go to print your plan
Emergency Drills	Go to emergency drills

Actively supported by the Ministry of Education



City of Tempe Resilience Hub Network

Sustainability and Resilience Committee

November 20, 2023





Tempe Climate Action Plan Update

Highlight Actions Update

The Sustainability and Resilience Commission identified immediate highlight actions in the first plan that still need policy adoption and investment:



Green Codes and Standards (Green Stormwater Infrastructure and International Green Construction Code adoption):
To establish resilience to extreme heat in new construction 16



Transportation Demand Management and Mobility Hubs:
To increase convenience of low carbon transportations options 19



Resilient Energy Hubs and Resilience Hubs:
To increase community connections and the ability to support survival during disasters 21

Adopted in March 2022



Related Tempe Performance Measures

- **3.34 Community Health and Well-Being**

Achieve health and wellbeing of the community indicated by the Cantril Self-Anchoring Striving Scale with increases in the category of thriving and decreases in the categories of struggling and suffering as measured by the Community Survey.

- **4.18 – Community Carbon Neutrality**

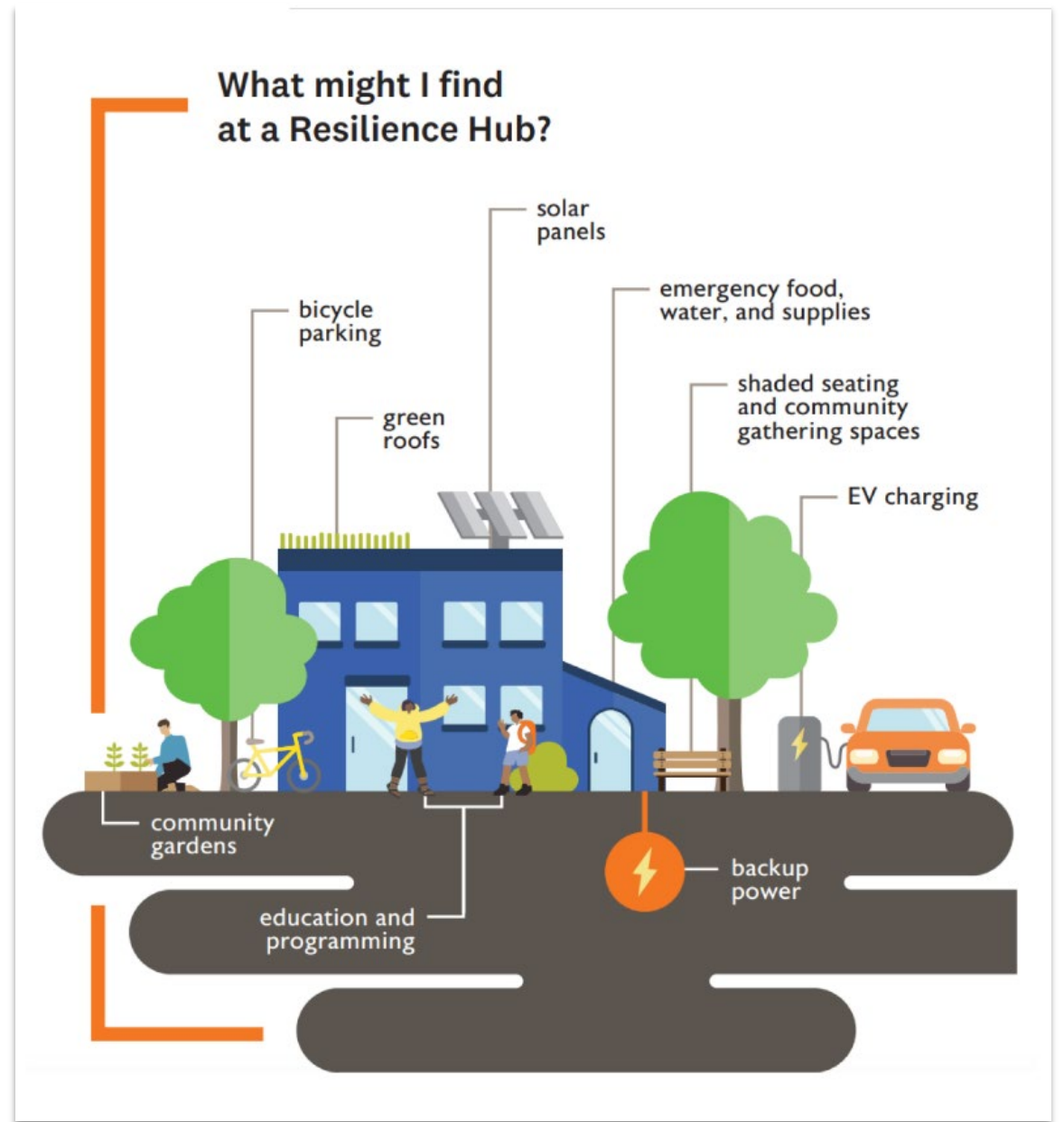
Achieve community carbon neutrality by 2050 with equitable outcomes

- **4.19 – Municipal Carbon Neutrality**

Achieve the City Council goal of carbon neutrality in municipal operations by 2050 with a strategy of 100% renewable energy by 2035

Resilience Hubs

- Supports residents during three operating conditions:
 - Everyday: A place to mobilize to reduce socio-economic vulnerabilities and promote equity
 - Disruption: Central point for gathering, assembling information, accessing information during an emergency
 - Recovery: Plays a critical role in post-emergency recovery and ongoing communication needs.



Local Approach to Emergency Management

Bottom-up, grassroots approach:

- Shifts power to residents and community-based organizations
- Community led and coordinated efforts with government support when feasible
- Community utilization of assets can ensure quick and effective emergency response

WHAT IS A RESILIENCE HUB?

OFF GRID SOLAR POWER

Designed to provide power during an emergency and reconnect to the grid once power is restored.



COMMUNICATION HUB

A single point for access to news and information before, during, and after an emergency.



RISK REDUCTION AND DISASTER TRAINING

Access to risk mitigation and response best practices to better prepare for future emergencies.



POTABLE WATER

Reinforces existing water systems so communities have access to safe drinking water in case of emergency.



EXISTING COMMUNITY CENTER RESILIENCE HUB



COMMUNITY GARDEN AND FARMING RESOURCES

Rehabilitate and/or develop farming projects as well as help small farmers to recover lost supplies, seed, and crops.



Existing Network Best Practices



City of Baltimore

- **Focused on non-profit & faith-based organizations**, currently has 18 in the network.
- Participating organizations partner with the city to coordinate resilience and emergency efforts (provides training). **City helps with providing resources when possible, including submitting grants on behalf of the network.**
- Allows **participation at the capacity the facility can handle**, and the city offers initial resilience hub orientation



City of Austin

- 6 Pilot sites are **City-Owned Community Centers**.
- Has a **Community Advisory Committee** (Universities, CBOs, NGOs, and Leaders) where participating hub faculty and community leaders **can participate, coordinate, and work on resilience projects.**
- Has a resilience hub **checklist/inventory** to identify capacity to respond in an emergency.

Resilient Energy Hubs and Resilience Hubs Roadmap

Through following Orlando's example of Resilient Energy Hubs and Baltimore, Austin and Puerto Rico's approach to Resilience Hubs, Tempe can advance its approach to community resilience and emergency management.

EXCEPTIONAL

Puerto Rico

- **Network:** Transformed seventeen local community centers into resilience hubs
- **Multiple services:** Hubs are equipped with combinations of solar energy, water storage, gardens, communications systems, emergency kits, and psychological services
- **Always active:** Provides critical services absent of disaster

Mercy Corps resilience hub include food, water and emergency preparedness solutions.

ADVANCED

Baltimore, MD

- Has twelve resilience hubs
- Placing hubs in different types of buildings, not just city buildings
- Provide food, education, health resources, and more

Fan and food distribution at a resilience hub in Baltimore, MD.

INTERMEDIATE

Austin, TX

- Creating two resilience hubs by the end of 2023
- Engaging with community to create a people-centered resilience hub plan
- Granted \$3M from American Rescue Plan to build resilience hubs

Mendez Middle School, a potential resilience hub in Austin, TX.

BEGINNER

Orlando, FL

- Developing six resilience hubs
- Hubs will provide services to lower-income communities after extreme weather events
- Will take time to develop

LEED-certified neighborhood center with rooftop solar array.

NOVICE

Tempe, AZ

- First resilience hub will open in 2022
- Constructed to support workforce development and housing assistance during normal times and can act as an emergency cooling center

Community members outside EnVision Tempe, a resilience hub pilot.

Microgrid Feasibility Study

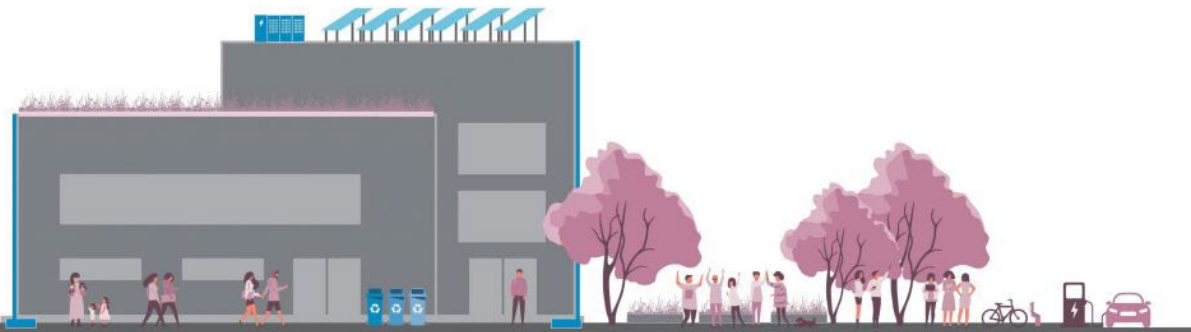
Resilient Hub Master Plan

Develop a master plan to assess the feasibility and opportunities for microgrids at up to 30 sites



Microgrid Assessment Locations

- Police/Fire (10)
 - Main Police Courts Building Complex
 - Apache PD Substation
 - South PD Substation
 - Fire Stations 1, 2, 3, 4, 5, 6, 7
- Community Centers (10)
 - Tempe Library
 - Kiwanis Recreation Center
 - Escalante Multi Gen Center
 - North Tempe Multi Gen Center
 - West Side Multi Gen Facility
 - Pyle Adult Recreation Center
 - Edna Vihel Center for Arts
 - Clark Park Recreation Center
 - Tempe Family YMCA
 - Guadalupe Library
- Community-Led Facilities (~10)
 - TBD





Identifying Community Led-Facilities for Microgrid Assessment

Pursuing facilities that...

- Are in heat priority areas
- Are newer, with stronger infrastructure
- Is a larger facility that could shelter residents in an emergency
- Has at least one bathroom
- Is easily accessible by the community
- Already offers community programming and services
- Can possibly perform at least one resilience hub function:
 - Cooling Center, Supply Distribution, Refuge/Shelter, Reunification Site, or Communication Site

... through direct communication with facility faculty.



Ideal Components of a Resilience Hub

Base	Optimal	Ideal
<p>Trusted, Community Focused Facility</p> <p>Supported by Local Institutions (nonprofits, local governments, or faith-based)</p> <p>Offers Daily Programming and Services outside normal business operations</p> <p>Interested in adopting more sustainable practices/engaging in resiliency work</p>	<p>Can operate in an emergency as one or more of the following:</p> <ul style="list-style-type: none"> • A shelter • Cooling Center • Food or medical distribution site • Reunification Site • Communication site <p>Offer Emergency Preparedness training</p> <p>Facility has an emergency operations plan in place</p>	<p>Has sustainable renovations, improvements, and upgrades</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> • Energy efficiency upgrades and weatherization • Community Gardens • GSI • Reliable Energy (Microgrid = solar + battery storage)

Model for Resilience Hubs

Community-Led Facility | Local Institutional Support

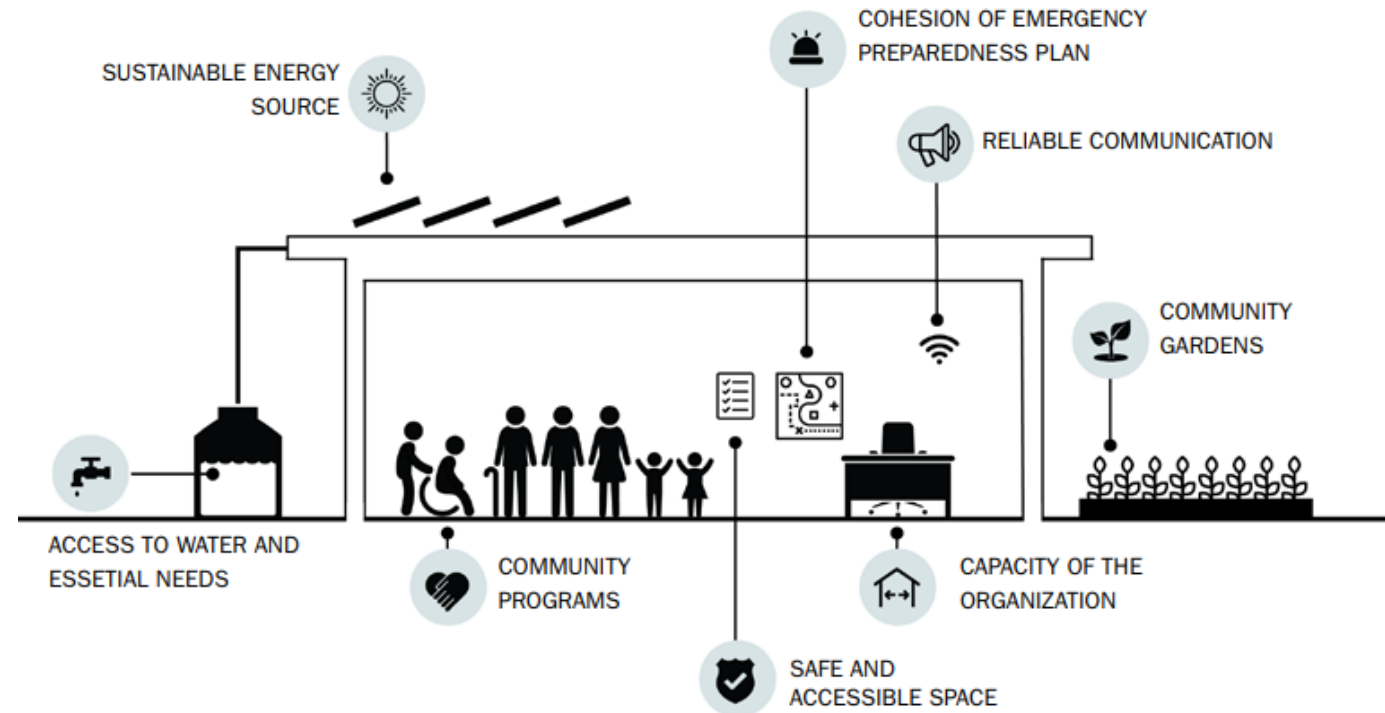


Continuous Improvement to Ideal State →

Goals for our Resilience Hub Network

Bring together key stakeholders to bridge social gaps to improve resource coordination and collaboration for emergency preparedness and everyday programming and services.

- **Participation** in emergency response level **based on capacity** of organization and facility
- **City coordinated meetings** for participating hubs and organizations to **coordinate efforts**
- Apply for **grants** to support efforts and get each hub closer to the **ideal phase**
- Hold **emergency preparedness trainings** at hubs both for residents and faculty
- Have an interactive Resilience Hub Network **map** that discloses programming, emergency response, and infrastructure





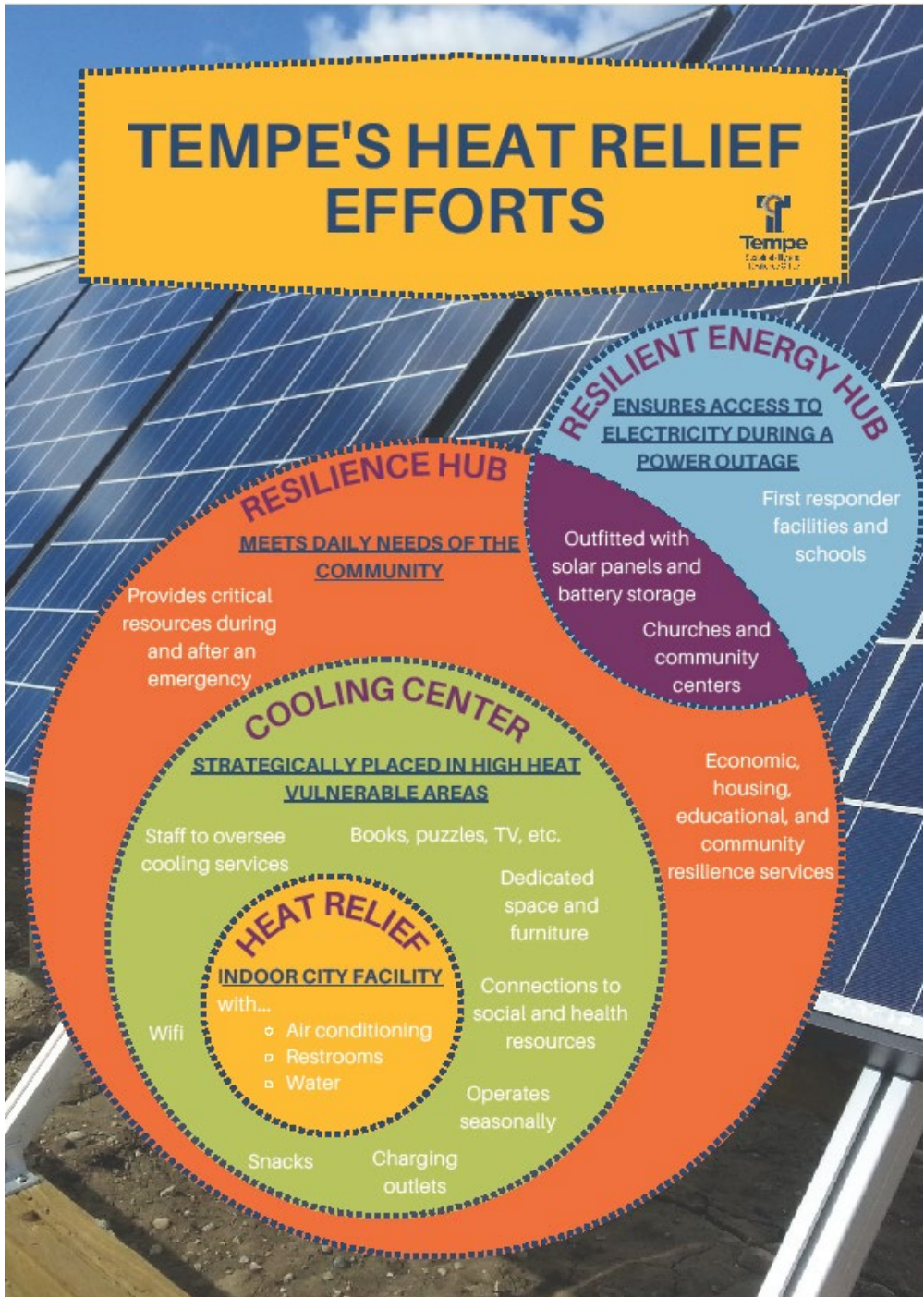
Our Approach

Phase 1 December	Phase 2 January	Phase 3 February-March	Phase 4 April-
<ul style="list-style-type: none">• Engage with community-owned facility site partners• Develop a Facility Inventory Checklist• Develop 2 GIS maps• Marketing for public meeting• Have city-owned facilities fill out Inventory Checklist	<ul style="list-style-type: none">• Host a public meeting on January 30th at EnVision Tempe• Host first Resilience Hub Network meeting with chosen microgrid site facilities (Date TBD, will be virtual)	<ul style="list-style-type: none">• Assess 30 sites for microgrid feasibility• Conduct RH inventory assessment on Community-Owned facilities• Develop plan for Emergency Preparedness Workshops• Marketing for workshops• Host another Resilience Hub Network meeting	<ul style="list-style-type: none">• Host Emergency Planning Workshops at all resilience hub sites• Start hosting consistent Resilience Hub Network meetings with stakeholders to coordinate efforts• Allow for additional community-owned site participation

EnVision Tempe

- Operated as a Cooling Center June-September
- Interior design – ongoing
- Apache Central Development Team – selected
- Community Kitchen – cost assessment
- January 20 Activation – Grow Local Tempe
- Programming – ongoing
- Grand Opening – TBD





Questions?

Contact Carissa Fowler,
 Sustainability & Resilience
 Office

Email:

carissa_fowler@tempe.gov

Phone: 480-350-8832

International Green Construction Code (IgCC)

November 30, 2023/2nd Hearing

Mike Baxley, Deputy Community Development
Director

Eric Iwersen, Sustainability & Resilience Director



IgCC / Questions from 1st Hearing & Next Steps

- Engage Tempe School Districts & ASU construction
- Adoption of 2018 IgCC version
 - Updated to new IgCC in 24/25 when all City building building codes are updated
- Hire “green” planner/building safety staff liaison
- Continue leading with municipal buildings & creating stronger community-wide culture of support
- Engage developers
 - IgCC as a tool in development agreement negotiations
- Track use of IgCC
 - What works/what doesn’t, cost effectiveness etc.
 - How many developments using green code
- Annual reporting to Council
 - Work towards increasingly more elements becoming mandatory (e.g. EV charging)
 - Explore possible full mandatory IgCC adoption after minimum of one complete code cycle (3 years)



ASU Walton Center

RESOLUTION NO. R2023.xx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, ADOPTING THE CITY OF TEMPE GREEN BUILDING POLICY.

WHEREAS, the City of Tempe is committed to high-quality construction, greenhouse gas reduction, and resilience to extreme heat;

WHEREAS, in November 2019, the City Council adopted the Climate Action Plan, and Climate Action Plan Update in April 2022, which recommended the use of the International Green Construction Code in City operations and as an option in private development;

WHEREAS, the City's Engineering and Transportation Department currently designs City buildings using the International Green Construction Code to guide design; and

WHEREAS, this Resolution and its actions are for the benefit of persons living, working, or visiting in the City of Tempe;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, HEREBY:

Section 1. That the Tempe City Council hereby adopts the "City of Tempe Green Building Policy." This policy reflects the City's commitment to encouraging environmentally sensitive construction practices in the City of Tempe by adopting design and construction practices of the International Green Construction Code (IgCC) as modified by the City of Tempe in Ordinance No. O2023.xx as amended.

Section 2. That the Tempe City Council hereby declares that whenever project resources and conditions permit, all new, occupied (as defined by the City's building code) City of Tempe buildings, of any size, will be designed, contracted, and built to comply with the IgCC as modified by the City of Tempe in Ordinance No. O2023.xx as amended.

Section 3. That the Tempe City Council, to maintain cost control of City building projects, qualifies Section 2 of this Green Building Policy to require a return on investment period of no more than seven (7) years for project elements or technologies in the IGCC. Where the return on investment for elements or technologies of the project is anticipated to be more than seven (7) years, City staff is directed to engage a green rating system such as LEED, Envision or Green Globes for alternatives to that element or technology.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, this ____ day of MONTH, 2023

Corey D. Woods, Mayor

ATTEST:

Kara DeArrastia, City Clerk

APPROVED AS TO FORM:

Sonia M. Blain, City Attorney

SUSTAINABILITY COMMISSION 2023 ANNUAL REPORT -



Description as Defined in Ordinance:

The Tempe sustainability commission shall have the following powers and duties:

(1) To research, advise, and recommend to the city council policies and programs that advance sustainability in Tempe, with particular attention to sustainability in the following areas:

- a. Energy management (city operations and the city as a whole);
- b. Climate-action plan with a roadmap of actions to be recommended;
- c. Local food and agriculture;
- d. Livable neighborhoods and happy communities;
- e. Land use and development;
- f. Building practices;
- g. Purchasing practices;
- h. Economic development (green jobs);
- i. Solid waste, recycling, and hazardous waste;
- j. Water and wastewater management;
- k. Transportation;
- l. Dark skies;
- m. Air quality;
- n. Environmental justice; and as of June 2015
- o. Preparedness and resiliency.

(2) Assist city departments in executing approved policies and programs;

(3) To support education and outreach related to the city's sustainability practices;

(4) To identify potential sustainability partnerships with public, private and educational entities; and

(5) To recommend for city council consideration a comprehensive sustainability plan with measurable goals and benchmarks to ensure year-to-year progress. (Ord. No. O2015.24, 6-25-15)

TCC § {City Code, Chapter 2, Article V, Division 21 }

List of Board and Commission Members, Including Attendance and Service Dates:

<u>Board/Commission Members:</u>	<u>Service Dates:</u>	<u>Attendance Record:</u>
Kendon, Jung	12/31/2023	Attended 09 Meetings out of 11
Winburn, Morgan	12/31/2024	Attended 10 Meetings out of 11
Swisher, Shawn	12/31/2023	Attended 11 Meetings out of 11
Boyd, Erin	12/31/2024	Attended 08 Meetings out of 11
Burke, Barbie	12/31/2022	Attended 11 Meetings out of 11
Mendoza, Natalie	12/31/2022	Attended 09 Meetings out of 11
Brundiers, Katja	12/31/2023	Attended 10 Meetings out of 11
Swanson, Jake	12/31/2023	Attended 09 Meetings out of 11
Randall, Joshua	9/01/2023	Attended 02 Meetings out of 02
Paulat, Ben	9/1/2023	Attended 02 Meetings out of 02
Conley, Taylor	9/1/2023	Attended 02 Meetings out of 02

Name of Chair and Vice Chair:

- Chair – Kendon Jung
- Vice Chair – Barbie Burke

Staff Liaisons and Contact Information:

<u>Staff Liaison:</u>	<u>Department:</u>	<u>Phone:</u>	<u>Email:</u>
Brianne Fisher	Office of Sustainability	480-350-8959	Brianne_fisher@tempe.gov

Meeting Frequency and Location:

Meetings in 2023 were virtual via Microsoft Teams. Meetings are typically held the third Monday of the month at 4:30 p.m.

Number of Meetings Cancelled and Reason for Cancellation:

July meeting was cancelled for summer vacation.

Vacancies and Duration of Vacancies:

Three vacancies occurred partly through 2023 with positions being filled in September 2023.

Subcommittee and Subcommittee Activity:

Did the Board/Commission have any subcommittees active during the reporting period? YES NO

Mission Statement:

The mission statement of the Sustainability Commission is to be a culture-catalyst to provide leadership, education, and guidance on sustainability programs and policies to City Council and for our entire community to transform Tempe into a healthy and resilient city that inspires the region, the nation and world.

Accomplishments (Past 12 Months):

Since the passing of Tempe's first Climate Action Plan (CAP) in November 2019, the Sustainability Commission has been working with staff to guide the implementation of the highlight actions outlined in the Climate Action Plan Update including: resilient energy hubs, transportation demand management, green infrastructure standards and the adoption of the international green construction code.

CAP Highlight Actions:

The Sustainability and Resilience Commission organized and supported the first design competition in partnership with American Institute of Architects - Phoenix Metro and the American Society of Landscape Architects – Arizona Chapter. The goal of the competition was to be able to show the transformative possibilities of the Climate Action Plan through physical interventions of architecture, landscape architecture, and mater planning, ensuring the City and its residents will have a greater understanding of the potential impacts of Green Codes, Green Stormwater Infrastructure, and Resilient Energy Hubs. The competition provided winners with a monetary prize and the City of Tempe hosted an awards ceremony at the Tempe Center for the Arts. The Commission will continue to discuss how to use the winning designs can educate, visualize, and push for innovative city planning.

Sustainability and Resilience Office staff worked with Building Safety, Community Development to move the voluntary 2018 International Green Construction Code initiative forward. The Commission was provided several presentations and provided a letter of support outlining the importance of this work and the necessity of an incremental approach to updating the building code, specifically creating a culture in the development sector to support the cities vision for sustainable built environment. The Commission also advocates sustainability and resilience elements to be included in citywide planning, policy, and infrastructure.

General Plan 2050:

The Commission was active in supporting the approval of the General Plan 2050. Commission Shawn Swisher and Chair Kendon Jung were active members of the stakeholder group that meet regularly to get updates on individual chapters.

The Commission provided a letter of support to the Development Review Commission and attended their meeting in person to speak to the points outlined in the letter. Additionally, meetings with individual members of Council were held prior to the General Plan 2050 vote going to Council. The Commission's active participation led to stronger language in the General Plan and approval by Council.

Other:

The Commission voted to approve changes to City Code Chapter 2, Article V, Division 21 – updating the composition of the membership to the Sustainability and Resilience Commission. The new recommendations allow for all of the eleven seats to be less specific expertise to allow for additional diversity of perspectives amongst the Commission.

Goals Related to City Council Strategic Priorities, if Applicable (Next 12 Months):

Climate Action Policy

The Commission seeks to support Mayor, Council and city staff in passing climate action policy, programs and infrastructure that moves forward the implementation of the Climate Action Plan and more specifically, focusing their efforts on progress towards the three highlight actions in the Climate Action Plan Update including:

- Resilient Energy Hubs and Resilience Hubs
 - Support staff and stakeholders on Resilience Hub master planning and the development of a community network including sharing public meeting and providing feedback on approach.
- Transportation Demand Management and Mobility Hubs
 - In partnership with business organizations such as the Chamber of Commerce and Downtown Tempe Authority, find private-public partnerships that help communicate and advocate the goals of improved transportation systems and policies.
- Rain to Roots (green stormwater infrastructure)
 - Support, participate and provide direction to staff in regard to elements of the Rain to Roots master planning, specifically updating engineering standards and private development codes, and the utility feasibility study.
- International Green Construction Code Implementation Updates
 - Receive updates from staff about the use of the voluntary code including the metrics, costs, and challenges.

Sustainable Sources of Funding

- Advise and support the Office's initiatives on federal funding that support the goals in Climate Action Plan and bring to life new and innovative partnerships.
- Advocate and support the development for dedicated funding to support the office's programs, infrastructure, and policies.

More consistent communication and joint activity with Council and other Commissions

The Sustainability Commission is dedicated to more consistently coordinating with Mayor and Council and other Commissions. The Commission fully supports the creation of a Council Committee on Carbon Neutrality and Resilience that would include emissions reductions in transportation, energy, water conservation, resilience to extreme heat and urban forestry.