



Sustainability & Resilience Commission

MEETING DATE

Monday, August 15, 2022 4:30 pm – 6:30 pm

MEETING LOCATION

Microsoft Teams meeting
Join on your computer or mobile app
<u>Click here to join the meeting</u>
Or call in (audio only)

+1 480-498-8745,,565023865# United States, Phoenix

Phone Conference ID: 565 023 865#
Find a local number | Reset PIN
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AGENDA ITEM	PRESENTER	ACTION or DISCUSSION
Public Appearances The Sustainability Commission welcomes public comment for items listed on this	Kendon Jung, Commission Chair	Action
agenda. There is a <i>three-minute time limit</i> per citizen.	(4:30 – 4:33 pm)	
2. Approval of Meeting Minutes The Commission will	Kendon Jung, Commission Chair	Action
be asked to review and approve meeting minutes from the June 22, 2022 meeting.	(4:33 – 4:35 pm)	
3. Grass Clippings	Craig Hayton, Deputy Community Services Director – Parks and Recreation	Discussion
	Jake Hoselton	
	(4:35 – 5:00pm)	
4. Sustainability and Resilience Office Reporting –	Henry Pearson, Climate Action Fellow	Discussion
Carbon Disclosure Project and LEED for Cities	Grace Kelly, Energy Manager	
	(5:00 – 5:30pm)	
5. EV Ready Code Update	Brianne Fisher, Climate Action Manager	Discussion
	(5:30 – 5:45pm)	
6. Housekeeping Items Highlight Action Updates	Kendon Jung, Commission Chair (5:45 – 6:15 pm)	Discussion
7. Future Agenda Items Commission may request future agenda items.	Kendon Jung, Commission Chair (6:15 – 6:25 pm)	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 June 22, 2022

Minutes of the Tempe Sustainability Commission meeting held on Wednesday, June 22, 2022, 3:30 p.m. at a virtual meeting on MS Teams and at Tempe City Hall, 31 E. 5th Street, Tempe, Arizona.

(MEMBERS) Present:

Kendon Jung (Chair) Natalie Mendoza

(MEMBERS) Absent:

Katja Brundiers (excused)

Shawn Swisher
Barbie Burke
Meaghan Coon (virtual)
Jake Swanson

City Staff Present:

Brianne Fisher
Henry Pearson
Braden Kay
Eric Iwersen
Timara Chiclow
Christy Pribish
Elizabeth Kulaga

Guests Present:

David Sokolowski Matt Smith Lauren Kuby

Chair Jung called the meeting to order at 4:31 p.m.

Agenda Item 1 – Public Appearances

David Sokolowski spoke about EV vehicles.

Agenda Item 2 – Approval of Meeting Minutes

Chair Jung called for a motion to approve the minutes from May 16, 2022.

Motion: Shawn Swisher Second: Barbie Burke Decision: Approved 6-0

Voted to Approve:

Kendon Jung (Chair) Natalie Mendoza Shawn Swisher Barbie Burke Meaghan Coon Jake Swanson

Agenda Item 3 – Ice Breaker

Tamara, Christy, and Elizabeth introduced themselves and spoke about the neighborhood justice project. They will be going to high schools to teach students how to be climate activists. They are in the planning phase of the curriculum.

They showed an activity that they did with their fellows as an icebreaker.

<u>Agenda Item 4 – CAP Highlight Action Strategy Session</u>

Brianne introduced the interim director of the office of sustainability, Eric Iwersen. He spoke about his history with the city in the transportation department for 25 years.

Brianne introduced the goals of the retreat. They want to think strategically on how volunteers can make an impact. They will be talking about the three highlight actions in the CAP update that they must progress on.

Chair Jung mentioned that it is important to be clear on what the goals are. This will allow members to articulate what the commission is working on to the average person.

Brianne laid out the approach they will take. They will review the action, ask questions, think through what type/level of engagement, then select a leader and plan next 1-2 steps. She

organized the levels of engagement into easy, medium, and hard, and suggested each action should have one of each level of engagement.

Strategy Session

Highlight Action 1: Green codes and standards

Step 1: Outline

Brianne laid out what these are:

- IGCC, Solar Ready, other codes. IGCC is the end goal.
- Green stormwater infrastructure. Replacing funnels with sponges.
- Youth agenda was particularly passionate about GSI.

Shawn asked why IGCC will be voluntary while GSI will be mandatory

- Kendon answered that mandatory IGCC does not have public support that it needs, while GSI will only be utilized by the city.
- Braden said that with GSI we can change the engineering criteria (how Tempe builds infrastructure) and change private development code.

Shawn asked what the pathway for incentivizing developers to adopt IGCC is.

- Braden said the adoption of the codes would make the path easier to navigate.
- Flagstaff allows IGCC buildings to have additional height.
- There are potential legal challenges to incentives. Right now is just getting the IGCC on the books.
- Residents can advocate for IGCC buildings in their neighborhood.
- Braden acknowledged that many developers will not follow the codes without incentives, and that is the next step. They need to spend at least the next 3-5 years building these types of buildings.

Shawn asked how the commission can have feedback on development agreements.

- Braden said they should push for more dialogue with the DRC.
- They can go through council as well.
- Kendon mentioned design competitions and listening sessions.

Brianne outlined areas of opportunity for GC&S

- Solar Ready Code
- EV Ready Code
- IGCC
- Resilient Tempe Masterplan
 - $\circ\hspace{0.4cm}$ There is 400,000 of funding for plan and infrastructure.
 - Infrastructure Assessment

- Connecting work to Urban Forestry MP
- Utility Feasibility Study is the financial aspect.
- GSI Standards/Codes

Timeline:

- 2022/2023 data collection, analysis, pilot projects.
- 2024 policy decisions and adoption.

Step 2: Brainstorm

Idea 1: Student Outreach/Citizen Science

- How can we involve students in Tempe to teach them about the process of data collection so they can see how it Tempe is addressing their issues.
 - Braden said that involving students is piloted in neighborhood justice at McClintock HS.

Idea 2: Design Competition for future projects

- Shawn mentioned the idea of design competitions to provide visuals for a project as well as crowdsourcing ideas for the project. Gave Phoenix Metro as an example.
 Specifically, can be done with resilience hubs, GSI, etc.
 - He has worked on three of these programs.
 - The winner usually received a prize. Ideally committed professionals will submit their entries.
 - A CAP can be hard to visualize for people. These contests provide aspirational visions of what implementation can look like. This can inspire people to push for more aggressive measures.
 - o These contests provide attention to the project which can spur action.
 - There can be a series of contests.
 - o Can input like this be given to the Coyotes development?
 - Kendon has inquired but not heard back, but that is a great idea for future large developments. He worries they may be too late to do that for the arena.

Step 3: Level and Type of Engagement

Brianne said that citizen science/youth engagement is already underway, so that would be easier to implement. The competition seems harder to do but would be great.

Student Outreach

- Natalie mentioned an idea for outreach: Putting some sort of educational packet for students. What it is, why it is important. Then have them brainstorm ideas and pressure leaders. Have them interact with buildings around Tempe and collect data that way.
 - Braden said that approach is written into the Resilient Tempe MP. They have not done it with the IGCC or buildings yet.
 - Kendon asked if she is comfortable couching the idea to have that support resiliency work. She agreed.

Competition

- Brianne said that the idea fits well into the first year of engagement. She asked what that would like in 2022/23 timeline.
 - Shawn said that if they want to work with AIA they would need to engage with them as soon as possible. That can tell them who will be interested. Usually the summertime is when it is announced, Oct/Nov deliverable and announcement of winners. They would need to start engagement soon. A good way to get people interested is show that the City of Tempe is involved in it.
 - The link that Shawn shared shows past year examples. It shows entry fees, schedule, submissions requirements, and award amounts. \$5000 total prize money.
 - o In addition to the award could they offer a tree from the city to plant?
 - Shawn liked that idea, sometimes multiple people in an office work so it could be hard.
 - They could plant a tree in that persons honor.
 - Shawn mentioned having a professional division and a citizen division. These ideas can be very different.
 - Kendon said that is a great way to engage the neighborhood advisory.
 - Even though citizens ideas might not be applicable, they are engaging and providing input. This can help inform decision making by showing what people really want in their neighborhood. This can be incorporated into the neighborhood awards.
- Brianne asked if we engage with AIA and others and they are not interested, can Tempe do their own competition?
 - Shawn said yes, we can do that. We can still do a professional and citizen contest. The issue would be getting the message out to people. There are websites that advertise architecture competitions which could be useful, but you may get fewer local applicants.
- Brianne asked when asking AIA to help, what type of information would be needed?

- Shawn said the first part is engaging in a conversation with interested parties to hear what they need to know. They would probably want to hear that the City of Tempe sponsors the contest. This could be monetarily or through advertising and supporting the contest.
- The first step could be writing a letter to council asking for support. Shawn said there is no necessity for Tempe to actually put money into the prize pool, but it could be a good incentive. Kendon said a letter to council is not necessary. They can ask for a letter of support, but they do not need approval from council.
- What are some specific ideas about a specific projects?
 - Shawn said the resilience hubs are a good candidate. EnVision center, other districts with resilience hubs (maker district). The contest can be restricted to a single building, or give them an entire area to work with and let them put any aspect of the CAP they want.
 - GSI could bring landscape architects into a contest. They can start with one contest to test, then see if it is something they want to keep doing.
 - Brianne said the contest is better positioned for GSI because it is harder for people to visualize GSI.
 - Kendon asked the timeframe of a contest.
 - Registration in Summer, announced before that.
 - Due in October, winner in November.
 - Kendon said this will probably be an entire year of work.

Kendon nominated Shawn as a project lead.

- Shawn will determine next steps.

Brianne said a citizen lead contest will be more work. If the AIA is willing to help, it will be simpler, and if not it will be more difficult.

Highlight Action 2: TDM and Mobility Hubs

Step 1: Outline

Brianne went through the roadmap:

- Eventually they would like to have multiple mobility hubs on a regional level. Current focus is on Tempe.
- Transportation is working on locations for the hubs. Cul de Sac and Tempe Transit
 Hub are the primary locations at the moment.
- Business Agenda is the community that felt the strongest about mobility hubs.

Where does the commission feel like they can be helpful in engaging businesses and communities?

It would be interesting to have GIS mapping to highlight mobility hubs and other places like a bike shop. This can provide comfortable waiting spaces and help people map routes. Tempe can provide a program to show people what transit options they can get from one place to another. The public transportation system can be difficult to figure out how when the light rails and busses come and go.

Kendon said that education and awareness for businesses is something they should work on. Brianne agreed that this need was identified.

Eric provided two ways he thinks the commission could influence this highlight action:

- Transportation is taking the TDM to form the TMA. They are getting a coalition of private businesses to educate and inform their employees on how they can get to their work site from home other than driving alone. The S&RC can participate in that program.
- Mobility Hubs are being fleshed out. 15 minute city concept is attached to these. Cul de Sac will be a mobility hubs, getting residents in Fall. They want to promote that throughout Tempe. He thinks the commission could partner with them to promote it, talk about what it is and why it is important. It is materializing now and the timing works well.
 - o Barbie said going into further southern neighborhoods to educate them.

Kendon asked should Tempe's TMA audience be? Large employers and their employees? Or should it be small businesses and residents? They could choose to go after one or the other. Local First engages with small businesses, but is there someone in the city government that works with large employers?

- Barbie said Deloitte is moving here and could be good to reach out to.
- Eric said economic development initiated the TDM and TDA and they work with all the large companies downtown. DTA is a great resource for small companies.

Ideas for implementation:

- Brianne said a ride-along type program to show people how they can travel around the city. Eric said the scope is yet to be determined for the TMA.
- Shawn said a trip planner tool could be integrated into the TMA. Eric said there is a route planner on the valley metro website but it is not very good.
- Jake said emphazing language integration is important. Show people their options. Could break it up into areas and show how to get from one area to another. Show

people where the 15 minute city extends to and show more people are in it than they think.

- Kendon said they can comb through the data that Tempe has to create examples of routes that are within 15 minutes and highlight them for businesses.
- Shawn mentioned showing how someone can get from point A to point B with as much shade as possible. This can incentivize lower shade areas to implement GSI and shade projects. Kendon said there are shade tours at ASU to show freshman how to get around with as much shade as possible.

Eric asked if Jake wanted to be the lead for the project, and he agreed. Kendon asked Jake to synthesize the notes and come with a recommendation for the commission. He also asked Shawn to do that for his section.

PIZZA BREAK from Spinatos

Councilwoman Kuby invited members to come to her party for the end of her time on the council.

Highlight Action 3: Resilient Energy Hubs

Step 1: Outline

EnVision starting as regular hub, working towards energy hub. Projected to open in the Fall. Solar/backup energy later in the year.

Resilience Hub is a USDN concept: Local approach to emergency preparedness. Trustworthy and safe spaces. EnVision Center is a HUD concept. Centralized facilities to provide access to economic, health, and social services.

Main finding from outreach:

- Health and wellness
- Workforce development/affordable housing
- Emergency management/community resiliency

Overview

- Opening in Fall with job services, housing services, parenting assistance, heat relief.
- Resilient Hub and microgrid: Up to 20 sites, solar and battery systems.
- Five-Year CIP for battery components: \$1,300,000.
- There are many sources of money many for different components, including the State Farm grant. They read the CAP update and wanted to help.

Kendon asked how much total funding the office has: 3.5 million dollars. Kendon asked if there is overlap between what State Farm funds and what council funds. They are not sure but will work to fix and overlap.

Brianne listed the schedule for the activities occurring around the opening of EnVision:

- Fall Opening Celebration
- Programs and Services
- READI Volunteer Program (neighborhood resiliency)
- GI Investment
- Battery Storage
- Affordable Housing adjacent to the hub
- Solar Powered
- Master Planning City-Wide

Neighborhood and Climate Justice Agendas are most interested in Resilient Hubs.

Step 2/3: Brainstorm and Levels of Engagement

Kendon asked where Envision Hub is: Dorsey and Apache

Emergency preparedness could be good to involve youth in. Have them go into their communities and connect them. This could work with the Cool Kids neighborhood justice work.

Braden showed a pilot project from Cool Kids emergency management:

- They created 600 heat relief ready bags to be handed out at shelters in the summer. They can be handed out at the EnVision.

What are the 20 potential sites? The 20 sites include first responder sites, such as fire or police stations. That number can go up as more potential sites can procure.

How many hours per day will EnVision backups run?

Technology is limited. The freezer and a couple other elements are the goal. An HVAC cannot be run off of solar/battery. They need to push the market and policy to make these things feasible. They are 10-20 years away from having affordable microgrids that we need. This project is intended to force the market to support investments in this space.

(Microphone cut out for a brief time)

Kendon said the ultimate goal is to have these hubs be resilient to energy black outs and provide various services. Right now they are demonstrating feasibility and incorporating things that can be built out in the future. Capacity cannot be built without the pilot projects.

Brianne said the long term vision is emergency preparedness in collaboration with the resilience hubs can provide asset assessment in neighborhoods. The gaps in these assets can be targeted by the city in a more effective way. The grassroots level of asset management and tracking as well as the work of the resilience hub.

Braden said the social infrastructure must be built to achieve the demand for physical infrastructure.

Do we know what the gaps in the communities are? Could we survey the communities to see what they need?

- Braden said that is exactly what Unlimited Potential did. They did a workshop at the site to see what people needed from the hub. They found that many residents were worried food security. They used that information to apply for a USDA grant, which they received. They have a kitchen on site, they need more money for a walk in to provide ice. Community Resilience Coordinator will be in charge of doing these listening sessions around Tempe.

Local First AZ has a community kitchen system which brings people to that site. Tempe will be putting out an RFP for that type of work.

Kendon asked what needs to be done for this work.

- Brianne said that learning the opportunities for engaging and celebrating the opening and communicating the larger vision is a good opportunity.
- Learning about the READI program and having influence on grassroots community work.
- Braden said they can help with the Fall open, then have Michelle come report formally about what is happening with READI. There are only a few residents with interest and hasn't figured out how to grow. The commission can provide input on how to engage with more people and expand the program. The program is more of an adult program.
- Kendon said working with the neighborhood and schools around EnVision could be useful. Or they could work with the superintendent to work with teachers.

They could talk about READI at the EnVision opening and inform residents there.

Natalie will be the project lead.

Agenda Item 5 – Housekeeping items

July meeting will be cancelled. Resume August 15th. Kendon will reach out to have 1 on 1 touch base conversations with each commissioner.

Agenda Item 6 – Future Agenda Items

Chair Jung called for a motion to adjourn.

Motion: Shawn Swisher **Second:** Jake Swanson **Decision:** Approved 6-0

Voted to Approve:

Kendon Jung (Chair)
Natalie Mendoza
Shawn Swisher
Barbie Burke
Meaghan Coon
Jake Swanson
The meeting was adjourned at 5:51 pm.

Prepared by: Henry Pearson Reviewed by: Brianne Fisher



GRASS CLIPPINGS at ROLLING HILLS MODERNIZING GOLF

PRESENTATION OUTLINE

- 1. Turf Quality
- 2. Night Play
- 3. Food & Beverage
- 4. Renderings
- 5. Site plan & Excess Property
- 6. Sustainability Initiatives
- 7. Questions or Comments

TEMPE, ARIZONA

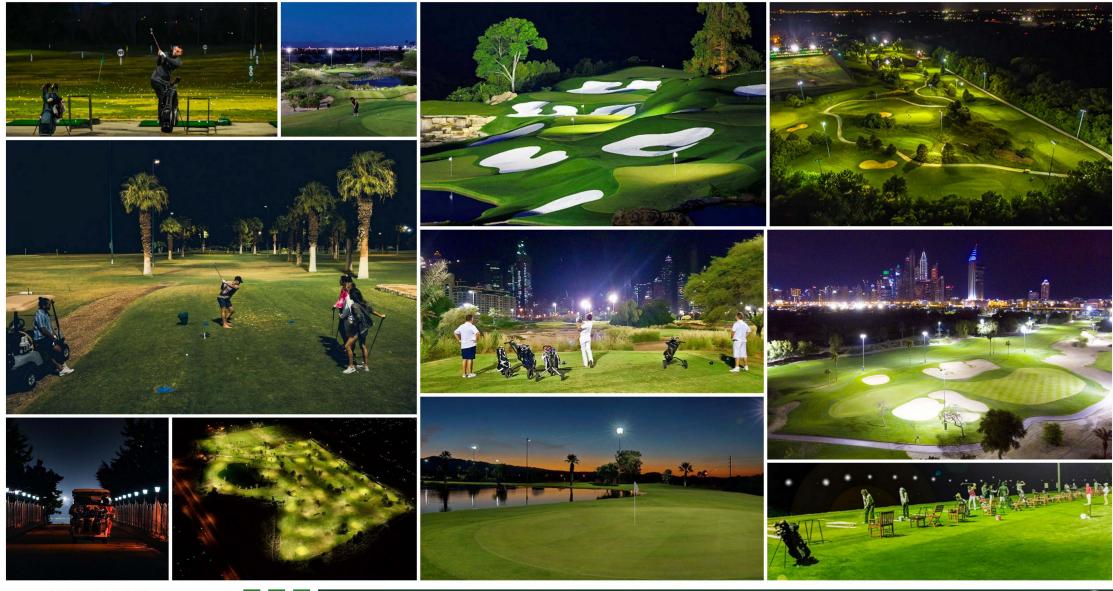








TEMPE, ARIZONA





TEMPE, ARIZONA





































FOOD & BEVERAGE 16

TEMPE, ARIZONA



















FAMILY ACTIVITY LAWN





ROLLING HILLS TEMPE, ARIZONA DAY & NIGHTTIME PAPAGO PRESERVE GOLF PLAY SCORECARD HOLE 1 - 140 SRP FACILITY HOLE 3 - 102 PHX ZOO MAINTENANCE HOLE 4 - 160 **HOLE 5 - 154 HOLE 6 - 130 HOLE 7 - 119** HOLE 8 - 170 FOOD/BEVERAGE STATIONS **HOLE 10 - 107 HOLE 11 - 095** PHX ZOO HOLE 13 **HOLE 14** -HOLE 17 - 103 HOLE 18 - 300 HOLE 19 - 119 MAINTENANCE-**TOTAL - 2563** TOTAL PHX ZOO — EQUESTRIAL ±93 ac LIGHTED DRIVING RANGE PARKING IMPROVED CLUBROUSE - FAMILY ACTIVITY LAWN MILL AVE WITH COMMUNITY ROOM

CONCEPTUAL PLAN

ROLLING HILLS TEMPE, ARIZONA DAY & NIGHTTIME PAPAGO PRESERVE GOLF PLAY SCORECARD HOLE 1 - 140 HOLE 2 - 129 SRP FACILITY HOLE 3 - 102 HOLE 4 - 160 **HOLE 5 - 154 HOLE 6 - 130** HOLE 7 - 119 **HOLE 8 - 170** FOOD/BEVERAGE STATIONS **HOLE 10 - 107** PHX ZOO **HOLE 13 - 136 HOLE 14 - 120** EXCESS L HOLE 17 - 103 HOLE 18 - 300 HOLE 19 - 119 MAINTENANCE-TOTAL - 2563 TOTAL PHX ZOO -EQUESTRIA ±93 ac LIGHTED DRIVING RANGE FAMILY ACTIVITY LAWN

WITH COMMUNITY ROOM

CONCEPTUAL PLAN OVER EXISTING AERIAL

MILL AVE



Sustainability

Water

- We are excited to add a new metric to the golf sustainability equation;
 Gallons Per User
 - Rolling Hills current gallons per user is 1,068 gallons (65,170,200 gallons per year with roughly 50,000 rounds per year + roughly 11,000 buckets of range balls)
 - Grass Clippings at Rolling Hills is expecting to attract roughly 2x to 3x the amount of people to visit the property—via night golf and additional amenities outside of just golf
 - By increasing the number of users and playing on a smaller footprint, Grass Clippings at Rolling Hills expects to create a 50% decrease in the number of Gallons Per User
- Grass Clippings is designing the golf course to anticipate future reductions in water use for recreational amenities

Land & Turf

Land Use

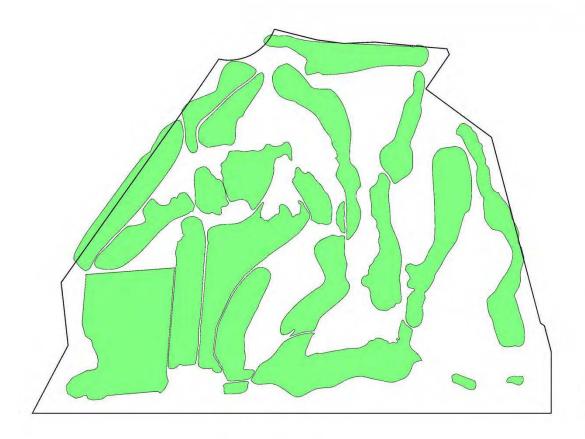
- Grass Clippings' conceptual siteplan reduces the amount of land use for golf opening opportunities for additional recreation and/or the restoration to natural desert
 - Grass Clippings at Rolling Hills uses +/- 75 acres
 - Grass Clippings at Rolling Hills opens +/- 15 acres for additional use

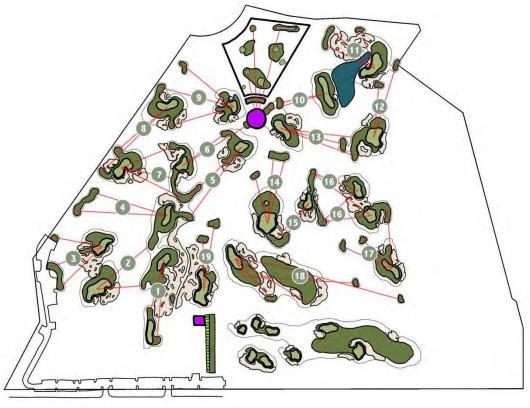
Turf Acres

- Existing Rolling Hills uses roughly 46.04 turf acres
- Grass Clippings at Rolling Hills uses roughly 20 turf acres
- A smaller turf footprint allows for more natural desert restoration

Turf Quality

- Grass Clippings at Rolling Hills will use the highest of turf quality
 - Hybrid Bermuda variety such as Tif Tuft, Tahoma, or 419
 - Greens will be an ultra dwarf Bermuda variety such as mini verde
 - These grasses have been bred specifically to perform well in desert climates and are adapted to be extremely drought tolerant conditionals while providing excellent playing surfaces. These newer varieties also require less fertility, pesticides, and fungicides from a management standpoint.





EXISTING

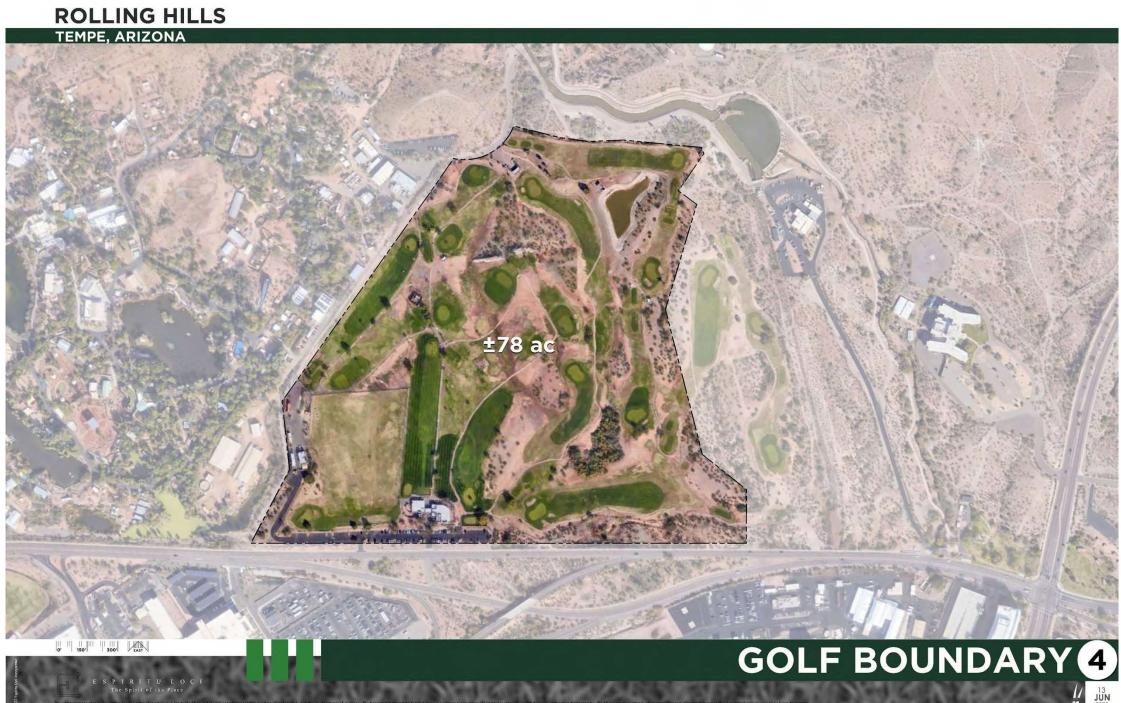
TURF = ±46 ac

PROPOSED

TURF = <30 ac

Best Management Practices

- Grass Clippings at Rolling Hills will be designed and managed using Best Management Practice's (BMP's) that are most appropriate for the property. The BMP's will be published within the first year of opening and will serve as an road map for all operations moving forward with respect to environmental stewardship and sustainability by;
 - protecting native species of plants and animals
 - not negatively impacting the natural drainage and washes of the property in the surrounding area
 - relying on cultural practices to minimize chemical inputs
 - monitoring and tracking all irrigation water used nightly, monthly, and annually to comply with all local, state, and national requirements
 - overseeding the golf course in a manner that promotes water conservation and utilizing the best suited turfgrasses based on scientific evaluation
 - serving as a contingency plan during times of drought, natural disasters, or any special circumstances





Additional Sustainable Practices

- Electric Car Charging Stations
- Community Compost
- Erosion
- Water Harvesting
- Trees & Landscaping
- Water Usage Tracking

Questions, Comments, and Suggestions

LEED For Cities Overview

April 27, 2022 Council Committee



What is LEED for Cities?

- LEED: A USGBC program focused on buildings (Tempe Transit Center)
- Certifies Cities in the same way- Certified to Platinum
 - Prerequisites and Credits
- Based on overall sustainability of the city, with many factors
 - Social
 - Economic
 - Environmental



Certification Benefits

- Creates a benchmark for improvement
- Improves data collection and tracking
- Allows us to compare ourselves to other cities
- Helps us develop action planning and investment strategies for the future

Tempe's LEED Process

- Initial data collection began in mid 2021.
- Began work on 'credits' in September.
- Data collection and credit write-ups continued through May.
- Review and submittal at the end of May.
- Currently in the initial review phase.

LEED in the Valley

- Certified (STAR):
 - Peoria
 - Tucson
 - Chandler
- Platinum:
 - Phoenix
- Our Goal: Silver or Gold









Strengths and Weaknesses

Strengths	Weaknesses
Quality of Life - Environmental Justice - Improving trends	Waste Programs and Data - C&D - Recycling/Reuse
VMT	Water Usage
Innovation - Cool Kids	Comprehensive Ecosystem Assessment

What's Next?

- Initial review process- 5 weeks
- Final Review and certification
- Public announcement
- Gap analysis and improving our score







Sustainability & Resilience Commission August 15, 2022



Carbon Disclosure Project (CDP)

- What is it?
- Background
- Timeline
- Data reported
- Annual submittal -6th year
- Score comparison



CDP, ICLEI & GCOM









- Global Covenant of Mayors (GCOM) is a global alliance for city climate leadership
- ICLEI software Clearpath used to conduct Community and Municipal GHG inventories
- Carbon Disclosure Project (CDP) coordinates global environmental reporting for companies, cities and governments
- CDP, ICLEI and Global Covenant of Mayors partner to help cities measure and take action to reduce GHG

Carbon Emissions Reporting



- 2016: City joined Global Covenant of Mayors, commitment to reduce GHG emissions
- 2017: first GHG inventory done using ICLEI Clearpath software
- 2018: Municipal target for carbon neutrality
- 2019: Council approved first Climate Action Plan & target
- 2021: second GHG emissions inventory done
- 2022: Council approved second Climate Action Plan & new target

What data is reported?

We report to CDP:

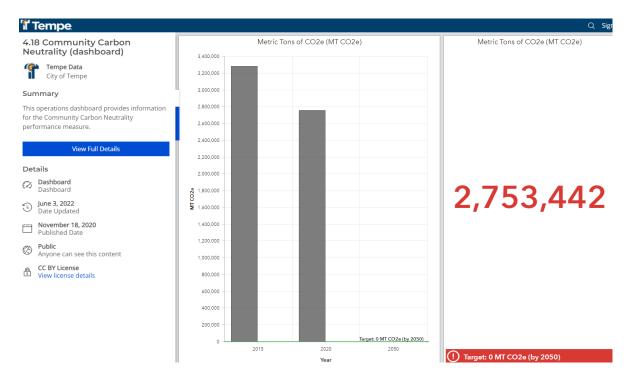
- Greenhouse gas emissions inventory
- Climate Risk and Vulnerability
- Targets
- Mitigation goals & actions
- Adaptation goals & actions

Where data is sent:

CDP forwards our report to:

- CDP Cities
- Global Covenant of Mayors
- Race to Zero
- Carbonn Climate Registry

Reporting



Previous annual reports

Response	<u>Year</u> ∨	Response type	<u>Status</u>	Score
Cities 2021	2021	Public	Submitted	В
Cities 2020	2020	Public	Submitted	В
Cities 2019	2019	Public	Submitted	D
CDP Cities 2018	2018	Public	Submitted	D
CDP Cities 2017	2017	Public	Submitted	Not Scored



Next Steps

- Submitted CDP Report August 4th
- Continue to work on Climate Action Plan Update actions
- Continue annual reporting to show progress



August 15, 2022
Sustainability and Resilience
Commission



CAP Update Highlight Actions







Green Codes and Standards (Green Stormwater Infrastructure and International Green Construction Code adoption):



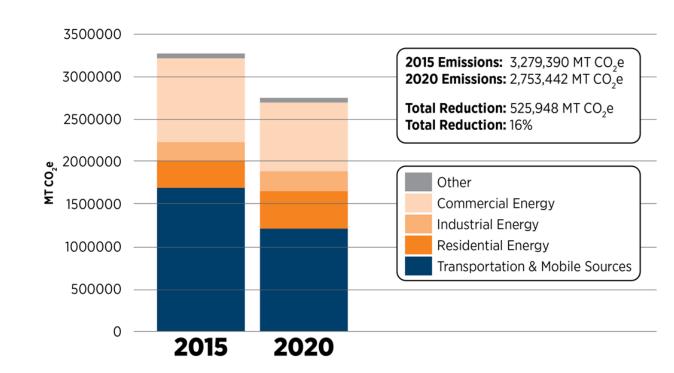
Transportation Demand Management and Mobility Hubs:
To increase convenience of low carbon transportations options





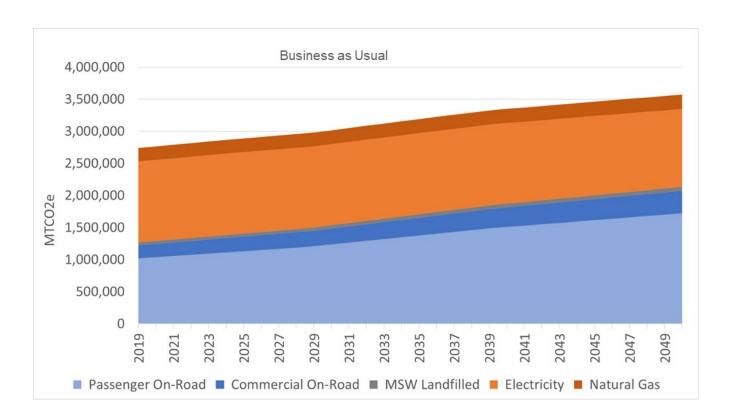


Community GHG Emissions





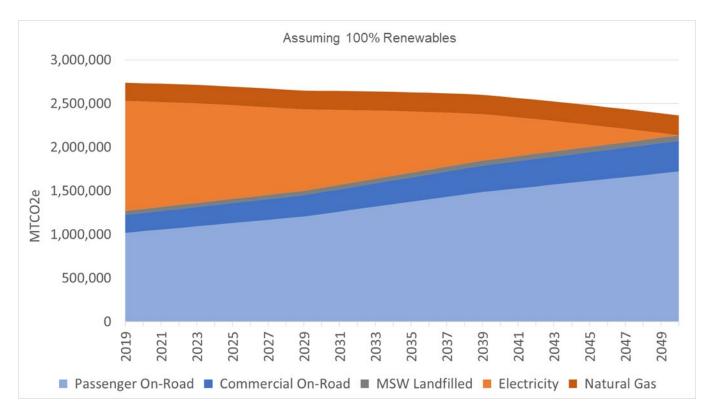




Without local action over 3.5 million metric tons of GHG emissions in 2050



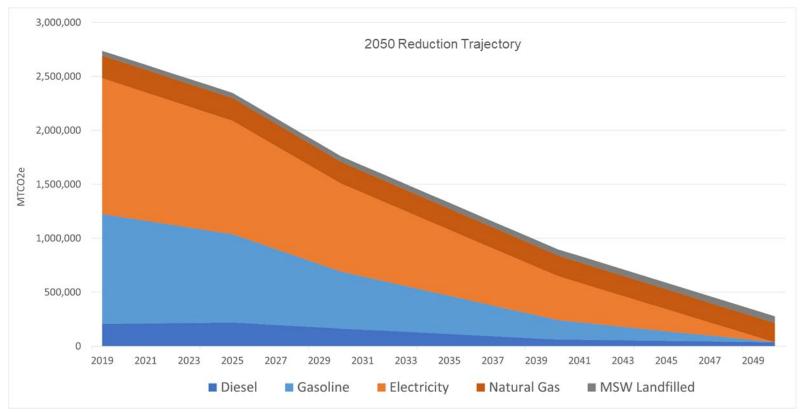
Business As Usual with Renewable Energy



Tempe's community will produce 2.3 million metric tons of GHG emissions in 2050.

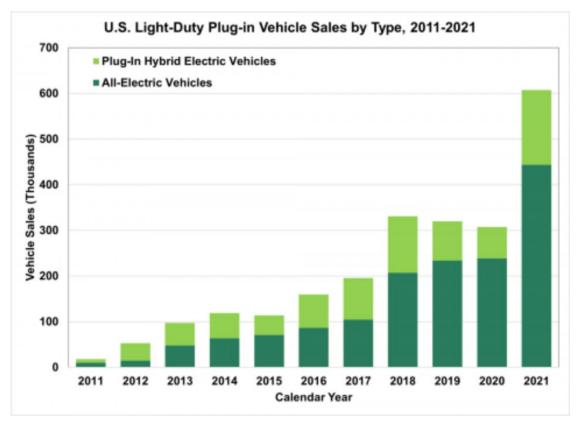






National & Local Trends – Federal

- President Biden has set an ambitious target of 50% of all new vehicles sold in the U.S be zeroemissions vehicles by 2030
 - \$5 Billion dollar plan to build EV Charging Network
- EV sales grew by 85% from 2020 to 2021





State Trends – Companies Located in Arizona

- Zero Electric Vehicles
- Nikola Motor
- Electra Meccanica
- Lucid Motors
- Local Motors
- ChargePoint
- Li-Cycle
- Kore Power





State Trends – ADOT Draft EV Deployment Infrastructure Plan

Statewide FV

Registration

2019: 28,770

2020: 34,898

2021: 40,964

Figure 10: Expected EV Adoption in Arizona 2020-2040 by New Sales

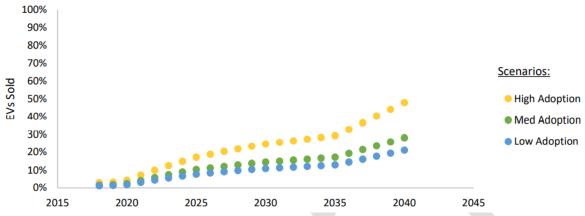
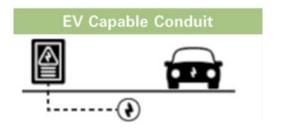


Table 16: Expected In-State EV Adoption

	EV Estimate 2030		EV Estimate 2040	
Growth Scenario	EVs Registered	In-state EV Market %	EVs Registered	In-state EV Market %
Low	307,897	6.4%	864,991	18.0%
Medium	402,293	8.3%	1,145,084	23.8%
High	678,920	14.1%	1,944,045	40.3%







EV Capable

Installed electrical panel capacity with conduit from the panel to a future EV parking space.



EV Ready

Installed electrical panel capacity and raceway with conduit to terminate within reach of EV parking space.



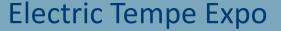
EV Installed

Installed charging station accessible to an EV parking space.



National & Local Trends – Spectrum of EV Policy

Municipality	State	Year Adopted	Location	Single-family	Multi-family	Commercial
<u>Sedona</u>	AZ	2019	IECC Appendix (2018)	1 EV-Capable space per dwelling unit	-	5% EV-Capable
<u>Flagstaff</u>	AZ	2019	IECC Appendix (2018)	1 EV-Ready space per dwelling unit	3% EV-Ready	3% EV-Ready
						Commercial 5%-EV Ready, 15%- EV Capable, 0% Installed,
<u>Tucson</u>	AZ	Proposed	IECC Model Language (2021)	-	10%-EV Ready, 15% EV Capable, 0% EV Installed	Retail 5% Ready, 0% EV Capable, 5% EV Installed
			un a fun a			
<u>Denver</u>	СО	2020	IBC/IRC	1 EV-Ready space per dwelling unit	5% EV-Installed, 15% EV-Ready, 80% EV-Capable	5% EV-Installed, 10% EV-Ready, 10% EV-Capable
5 11 1		2022		50% of parking spaces	500/ 6 11 / 1 65 1510	500/ (1:
<u>Portland</u>	OR	2022	Ordinance	(min of 6 spaces) EV Ready	50% of parking spaces (min of 6 spaces) EV-Ready	50% of parking spaces (min of 6 spaces) EV-Ready
Seattle	WA	2019	Ordinance	1 FV Boody one on par dysalling unit	100% EV-Ready up to 6 space, 20% for parking lots with 7+ space	s 10% EV-Ready
<u>Seattle</u>	VVA	2019	Ordinance	1 EV-Ready space per dwelling unit	100% EV-Ready up to 6 space, 20% for parking lots with 7+ space:	S 10% EV-Ready
Boulder	со	2020	IBC/IRC	1 EV-Ready space per dwelling unit	5% EV-Installed, 15% EV-Ready, 40% EV-Capable (25+ spaces)	5% EV-Installed, 10% EV-Ready, 10% EV-Capable
Boulder		2020	ibe/inc	124 heady space per dwelling diffe	370 EV Installed, 1370 EV Reddy, 4070 EV Capable (231 Spaces)	370 EV HIStalica, 1070 EV Heady, 1070 EV Capable
Madison	wı	2021	Ordinance	-	2% EV-Installed, 10% EV-Ready (increases by 10% every 5 years)	1% EV-Installed (increases by 1% every 5 years), 10% EV-Ready (increases by 10% every 5 years)
St. Louis	МО	2021	Ordinance	1 EV-Ready space per dwelling unit	2% EV-Installed, 5% EV-Ready (increases to 10% in 2025)	2% EV-Installed, 5% EV-Ready
<u>Chicago</u>	IL	2020	Ordinance	-	20% EV-Ready (5+ spaces)	20% EV-Ready (30+ spaces)
Salt Lake City	UT	Pending	Ordinance	-	20% EV-Capable	-
San Fransisco	CA	2017	IBC/IRC	1 EV-Ready space per dwelling unit	10% EV-Ready, Panel Capacity for 20%, Raceway for 100%	10% EV-Ready, Panel Capacity for 20%, Raceway for 100%
Fort Collins	CO	2022	IBC / IRC	1 EV-Capable space per dwelling unit	10% EV-Installed, 20% EV-Ready, 40% EV-Capable	5% EV-Installed, 15% EV-Ready, 20% EV-Capable





- Over 15 EV Economy Vendors
- Partnership with Local First Tempe
- Promotion of benefits of EVs for businesses
- Promotion of EVs as green jobs
- Promotion of Stakeholder Survey



Stakeholder Outreach To Date

May

• 5/25: Meeting with Tucson re process for developing code

June

- 6/1: Meeting with Flagstaff re process for developing code
- 6/14: DTA, Chamber, Tourism
- Tempe Today article re EV Code Development process

uly

- 7/27: TESLA
- 7/22 at 11am Arizona Multi-Housing Authority
- 7/29 at 9am-11am Electric Tempe Expo

August

- 8/10: Ryan Company
- 8/11: Sunbelt Holdings and Evergreen
- 8/1 -8/31: Business/Stakeholder survey
- 8/23 at 12:00pm Stakeholder Meeting (virtual)
- 8/23 at 6pm at Tempe Public Library (in person)



EV Ready Schedule

Activity	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.
Research								
Business Outreach								
Stakeholder Outreach								
Public Outreach								
Develop Draft Code Language								
Boards and Commissions								
Council Approval								

Discussion

Sustainability and Resilience Commission

Highlight Action Project Tracking



Project Title:	Project Lead Name:
EnVision and READI	Natalie Mendoza

Project Goal Statement:

To draw attention and garner public support for the community approach to emergency response and resilience program (READI) and EnVision Tempe, the first resilience energy hub.

Objectives:
Objective 1: To discover ways to support the promotion and diverse outreach of READI and Resilience Energy Hubs including EnVision Tempe.
Resilience Lifergy Hubs including Lifvision Tempe.
Objective 2: To assist staff with any support and/or advocacy and/or grassroots organizing they need the Commission's help or support for READI and EnVision.
the commission shelp of support for NEADI and Envision.
Objective 3:

Partners

Name	Organization	Email	Phone Number
Michelle	READI		
	Unlimited Potential		602-305-4742
	Local First AZ		(602) 956-0909

Sustainability and Resilience Commission

Highlight Action Project Tracking



Timeline:

Fall 2022 – begin working with city staff on where the Commission could work on advancing the work
being done for EnVision and READI.
Winter 2022 – xxx
Spring 2023 – xxx
Summer 2023 – xxx
Fall 2023 – xxx

Budget:

2 4 4 6 c c .
State Farm Grant Money
Next Steps:
Create: xxx
Meeting: Meet with staff to determine where the Commission can best help with the READI and EnVision highlight action.
Research: xxx

AGENDA ITEM 6 – HOUSEKEEPING



Sustainability and Resilience Commission

Highlight Action Project Tracking

Project Title:	Project Lead Name:
Design Competition with AIA highlighting LID	Shawn Swisher
and CAP	

Project Goal Statement:

To create greater awareness and understanding of the Climate Action Plan through the envisioning of an architectural or urban design competition. Through this competition, the City would gain new perspectives on how the goals of the CAP could manifest into physical interventions within our city. In doing so, the broader community can galvanize around a vision of a sustainable, resilient future.

Objectives:

Objective 1: Through the competition, collect various ideas and new perspectives on how to implement the CAP (in this case, GSI/LID).

Objective 2: Utilize competition entries to complement and communicate the CAP to the community and develop feedback loop of community input and design competition.

Objective 3: Use competition entries to spark pilot projects for deploying the CAP.

Partners

Name	Organization	Email	Phone Number
John Czarnecki	American Institute of	john@aia-arizona.org	
	Architects		

AGENDA ITEM 6 – HOUSEKEEPING



Sustainability and Resilience Commission

Highlight Action Project Tracking

Timeline:

Fall 2022 – Engage with AIA and begin the conversation for AIA planning. Develop outline of competition brief.

Winter 2022 – Draft competition brief developed. AIA and other organization partnerships solidified if not agreed upon. Begin identifying competition jury.

Spring 2023 – Finalize competition brief and, with AIA, distribute to design community (local/national/international)

Summer 2023 – Launch design competition.

Fall 2023 – Competition concludes. Jury meets and determines winner(s). Award ceremony. Begin marketing of competition winners. Begin discussions for 2024 competition (if desired)

Budget:

Undetermined. Design competitions often have entry fees that can cover part of any potential cost. The AIA usually carries a line item for funding the cash awards for the competition, which are the primary cost. Other costs may include honorariums for jurors, venue rental costs for the award ceremony, and marketing for the winning entries.

Next Steps:

Next steps.
Create: Outline competition brief.
Meeting: Meet with AIA to review competition brief and discuss next steps.
wieeting. Weet with AIA to review competition brief and discuss flext steps.
Research: Previous competition brief formats and ways of framing competition.