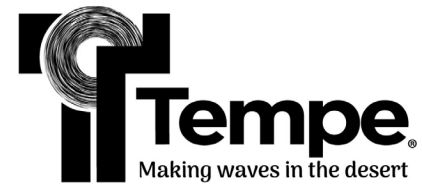


# PUBLIC MEETING AGENDA



## Sustainability & Resilience Commission

### MEETING DATE

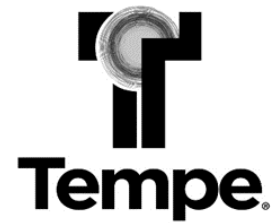
Monday, December 20, 2021  
3:30 p.m.

### MEETING LOCATION - Virtual Meeting

Microsoft Teams meeting  
Join on your computer or mobile app  
[Click here to join the meeting](#)  
Or call in (audio only)  
[+1 480-498-8745,,351150424#](#) United States, Phoenix  
Phone Conference ID: 351 150 424#  
[Find a local number](#) | [Reset PIN](#)

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
<b>1. Public Appearances</b> 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 (3:30 – 3:33 pm)	Information
<b>2. Approval of Meeting Minutes</b> The Commission will be asked to review and approve meeting minutes from the November 15, 2021 meeting.	Kendon Jung, Commission Chair (3:33 – 3:35 pm)	Action
<b>3. CLiPP Program</b> Guests will provide updates.	John Penry, Beth Penry-Dietz (3:35– 3:55 pm)	Action
<b>4. Sustainability &amp; Resilience FY 22-23 Budget</b> Staff will provide updates.	Braden Kay, Sustainability Director (3:55– 4:05 pm)	Action
<b>5. Climate Action Plan Update</b> Staff will provide updates.	Braden Kay, Sustainability Director (4:05– 4:25 pm)	Action
<b>6. Commission Communication</b> Staff will provide updates.	Kendon Jung, Commission Chair (4:25 – 4:40 pm)	Action
<b>7. Commission Retreat</b> Staff will provide updates.	Kendon Jung, Commission Chair (4:40 – 4:55 pm)	Action
<b>8. Housekeeping Items</b> - Joint Sustainability/NAC Commission meeting - Sustainability awards: application deadline date is February 15; Commission decision by February 22; Awards event is March 26;	Kendon Jung, Commission Chair (4:55 – 5:10 pm)	Action
<b>9. Future Agenda Items</b> Commission may request future agenda items.	Kendon Jung, Commission Chair (5:10 – 5:20 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 November 15, 2021

Minutes of the Tempe Sustainability Commission meeting held on Monday, November 15, 2021, 3:30 p.m. at a virtual meeting on MS Teams, through City Hall, 31 E. 5<sup>th</sup> Street, Tempe, Arizona.

**(MEMBERS) Present:**

Kendon Jung (Chair)  
Barbie Burke (Vice Chair)  
Jake Swanson  
Ryan Mores

Stephanie Milam-Edwards  
Gretchen Reinhardt  
Katja Brundiers  
John Kane

**(MEMBERS) Absent:**

None

**City Staff Present:**

Grace DelMonte Kelly  
Henry Pearson  
Braden Kay

**Guests Present:**

Natalie Mendoza  
David Sokolowski

Chair Jung called the meeting to order at 3:32 p.m.

**Agenda Item 1 – Public Appearances**

Chair Jung asked the guests to introduce themselves. Natalie Mendoza stated that she is observing the meeting because she is considering applying to the commission.

**Agenda Item 2 – Approval of Meeting Minutes**

Chair Jung introduced the minutes of the October 18, 2021 meeting. No amendments were made. Vice Chair Burke made a motion to approve the minutes. Commissioner Kane seconded.

**Motion:** Vice Chair Burke

**Second:** Commissioner Kane

**Decision:** Approved 8-0

**Voted to Approve:**

Kendon Jung (Chair)  
Barbie Burke (Vice Chair)

Ryan Mores  
Jake Swanson  
John Kane  
Gretchen Reinhardt  
Katja Brundiers  
Stephanie Milam-Edwards

Motion Passed 8-0.

### **Agenda Item 3 – Sustainability and Resilience FY 22-23 Budget**

Chair Jung gave a high-level context for the budget discussion:

- Success has come from engaging with council members/other commissions and establishing positive working relationships with them.
- This has led to Climate Action Plan, doubling carbon neutrality funds, and numerous other projects/grants.
- The budget is an essential tool for climate action to be passed.
- It is essential that commission members engage with the community to ensure the budget provides for climate action.

Sustainability Director Braden Kay spoke about the budget:

- What separates a great office of Sustainability from an okay one is how much the work shows up in the city budget.
- City budget reflects values.
- Quality is measured by how much money is in the budget.
- Collective lobbying work is the reason for many great climate action advancements in Tempe.
- This year's budget is really important for climate action momentum.
- There are 2 separate buckets of money: operating and capital.
- Operating pays for people and programs
- Capital pays for infrastructure and buildings.
- These have 2 separate processes. These are outlined on the city website.
- You are able to vote on what should be in the budget on the city website. This survey opens in January.
- Public budget forums are upcoming in February.
- On November 4th there was a work study program with long-term budget forecast. Braden went through the budget forecast:
  - The unassigned fund balance is around 50%, aims to be around 20%. The city is sitting on a reserve of cash and is deciding how quickly to spend this money.
  - Braden highlighted a chart that lays out how much money can be spent as a onetime expenditure and how much can be spent on recurring expenditures, as well as how many full-time positions can be added.
  - The chart shows there is money for \$6 million recurring, \$1 million one time, and 25 positions.
  - It is easier to get one-time money vs recurring money.
- Braden highlighted a strategy tool that city council uses.
  - These help council select performance measures.
  - 5 performance measures, sustainability is one of them.
  - S.T.A.R.T program.
- Next year
  - There will be a forecast update.
  - Staff will be making recommendations on the capital program.
  - Long way to go on argument for investment.

- February public forums.
- March there is a work study program.
- April the city manager will review the budget, review in May if needed.
- Tentative adoption May 26, final adoption June 9, and new budget year begins July 1.
- Intervention needs to happen before the work study sessions in late March/April.
- December 16 will tell us if our performance measures will be accelerated.
- Council should prepare strategy for results of START tool.

Commissioner Milam-Edwards, asked for an explanation of the performance objectives so she can get children to help write letters encouraging focus on climate:

- Chair Jung says that the commission can work on developing this.
- Braden provided a link to a resource: [performance.tempe.gov](http://performance.tempe.gov)
- Braden says CoolKids hopes to implement a program for letter writing, etc.
- Commissioner Reinhardt said that the existing website combined with age-appropriate questions related to community and quality of life could be implemented.
- Chair Jung challenged the commission to synthesize this information into talking points that can be shared with the community.
- Commissioner Brundiers suggest a shared document to share ideas and talking points to then summarize. Members could then bring this document to their communities and show them how they can make their voice heard.
  - Chair Jung added that laws do not allow collaborative projects with more than 3 people.
  - Chair Jung suggested an individual action item. Commissioners should think about and share tactics and what should be included in that language. Members should focus on their specific communities. They should do this within the next week then send their ideas to he and Vice Chair Burke through staff.
- Chair Jung emphasized that the commissioners should fill the gap between what staff can and cannot do.

#### **Agenda Item 4 – Climate Action Plan Update**

Braden spoke about the Climate Action Plan Update.

- Will be presenting to council on Wednesday.
- Focus of plan:
  - Emissions reduction
  - Resilience to extreme heat
- Update includes stakeholder agendas, GHG inventories, and policy recommendations.
- The presentation to the council on Wednesday will cover what constituents want.
- Listening and planning phases have ended, review and approval is in progress.
- 4 agendas- Business, Youth, Neighborhood, and Climate Justice.
  - Business: Mobility Hubs, Energy Efficiency
    - Partner with local businesses leaders.
  - Youth: Food and Transportation Equity
    - Partner with school boards and leaders.
    - Student involvement and outreach.
    - Highlight action: Green Stormwater Infrastructure
  - Climate Justice: Heat Awareness and Energy, Land Stewardship, Urban Forestry/Landscape
    - Partner with community-based organizations.
    - Highlight Action: Resilient Energy Hubs (EnVision Tempe)
  - Neighborhood: Resilience to heat, community-based organizations
    - Highlight action: Resilient hubs

- 
- Finalizing and reviewing plan in January. GHG emissions update and final recommendations will come in January.
  - Final approval in Feb/March.
  - April: budget supplemental for council.
  - February is the timeline for having everything prepared regarding lobbying.
  - Questions:
    - Commissioner Reinhardt said that a criteria-based approach is needed as opposed to NGO's/community organizations. She wants the presentations to emphasize the need to determine criteria for progress.
      - Chair Jung replied that the community was included to ensure that the community voices were heard.
      - Commissioner Brundiers asked Commissioner Reinhardt to clarify her question. She referenced equity maps that looked at different areas that are most vulnerable.
      - Commissioner Reinhardt stated that those maps are critical and other information like that should be emphasized. The problem is that people are not connected to community organizations. The data needs to be connected to the experiences of the community.
      - Braden agreed with Commissioner Reinhardt and replied that the challenge is a lack of representation for communities as there is no governance mechanism to have their voices articulated. Creating those organizations and building power in those neighborhoods is a way to change. He emphasized the difficulty of solving the problem. He said that departments taking time to listen to the community has yielded positive results. Gave the example of transportation department employees riding buses to understand problems with buses. Focus should be on populations that are not thriving in Tempe. He has seen investment in community organizations in other cities bring about change, but it is harder in Tempe. He prefers grassroots organizations as opposed to Unlimited Potential.
      - Commissioner Swanson shared his experience with a community organization in Phoenix.

### **Agenda Item 5 – Sustainability and Livability Council Committee**

Braden spoke about the committee

- There are a lot of new events in January
- Important to have good attendance as the committee will hear about potential new policies.
- Important to begin discussion during the first 3 months of the year.
- Solar building code, EV building code, sustainable building policy.
- Essentially there is one month to organize and coordinate everything for committee meetings.
- Braden will have the agenda for the Jan and Feb meetings. There are high profile issues going in front of that commission and that is where policy will be made.

Chair Jung spoke about spending time to queue up upcoming meetings

- He and Vice Chair Burke will work on detailing the date/time/link/method of involvement/scheduling for meetings.
- Commissioners should submit a comment card for these meetings.
- Braden said this Wednesday (Nov 17) is a good opportunity to fill out a comment card, and people really listen to comment cards. Not having comments when resolutions are read is not good. They are one of the most effective tools to get your voice heard in these meetings.
- Showing up to the meetings (virtually or in person) is very important as well.
- Braden mentioned that you must put the agenda item number on the comment card. He provided a link to the comment card: <https://www.tempe.gov/government/city-clerk-s-office/city-council-online-meeting-comment-card>
- And the agenda: <http://documents.tempe.gov/sirepub/mtgviewer.aspx?meetid=1650&doctype=AGENDA>

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### **Agenda Item 6 - Sustainability and Resilience Policy Update**

Braden had nothing to add for this item.

### **Agenda Item 7 – Commission Retreat**

Chair Jung spoke about the retreat

- He asks each member to reply to the email invitation for this meeting with their availability around and after the new year.
- It should be done on a weekend. This will be in addition to (not a replacement of) the regular commission meeting.
- He asks members to give their availability by the Monday before Thanksgiving.

### **Agenda Item 8 - Housekeeping Items**

Items:

- Comment card for Livability council this Wednesday.
  - They will provide talking points to base the comments on.
  - Deadline is 2 hours before the meeting on Wednesday @ 4 (due by 2 on Wednesday)
  - Anyone can submit a comment card on anything, even non-Tempe residents.
  - Commissioner Reinhardt wanted to stress that you can ask your peers to fill out the cards as well, and that those are the groups that they want to see responding.
- Talking points and ideas to Chair Jung and Vice Chair Burke through staff about general budget talking points for different groups.
- Chair Jung requests materials from the meetings that Grace and Braden will be having with council.

### **Agenda Item 9 - Future Agenda Items**

Chair Jung asked if anyone has any future items:

- Commissioner Milam-Edwards asked to discuss how to create language and talking points or topics to educate students.

Chair Jung called for motion to adjourn.

Commissioner Milam-Edwards motions

Commissioner Reinhardt seconds

**Motion:** Commissioner Milam-Edwards

**Second:** Commissioner Reinhardt

**Decision:** Approved 8-0

### **Voted to Approve:**

Kendon Jung (Chair)

Barbie Burke (Vice Chair)

Ryan Mores

Jake Swanson

John Kane

Gretchen Reinhardt

Katja Brundiers  
Stephanie Milam-Edwards

Motion Passed 8-0.

The meeting was adjourned at 5:04 pm.

Prepared by: Henry Pearson  
Reviewed by: Grace DelMonte Kelly

# CCLiP

Community Climate Livability Project





# What is CCLiP?

- Community based organization formed in 2019 to address the **emerging** urgent *threat* of climate change
- Goals: Work together as a community to significantly reduce the impact of climate change and prepare for extreme heat
  - Make renewable energy available to everyone to achieve net zero *carbon* emissions
  - Ensure every home and apartment has a mini-split air conditioner operated by solar
  - Assists community-based organizations to obtain solar as a place of shelter in heat BE A LITTLE MORE SPECIFIC. ARE YOU TALKING ABOUT PUBLIC BUILDINGS WHERE PEOPLE CAN SHELTER OPERATED BY COMMUNITY-BASED NONPROFITS?
- Efforts and Expertise
  - We've researched, met with experts, politicians, attorneys, and investors as we have developed different models to meet our goals
  - Our current members have backgrounds in energy, law, health, education, water-conservation, politics and community service

Green homes with energy efficient windows, insulation, solar ready electrical panels, roofs

- Add a mini-split A/C to create a cool space operated by renewable energy
- Obtain solar and battery storage to reach net zero grid dependency REWORD TO MAKE CLEAR IF WE ARE NOT PROPOSING TO REPLACE THE GRID, WHERE IT MAY CONTINUE TO BE MORE EFFICIENT IN NORMAL TIMES, BUT HELPING THE PUBLIC GET THROUGH HEAT EMERGENCIES SAFELY

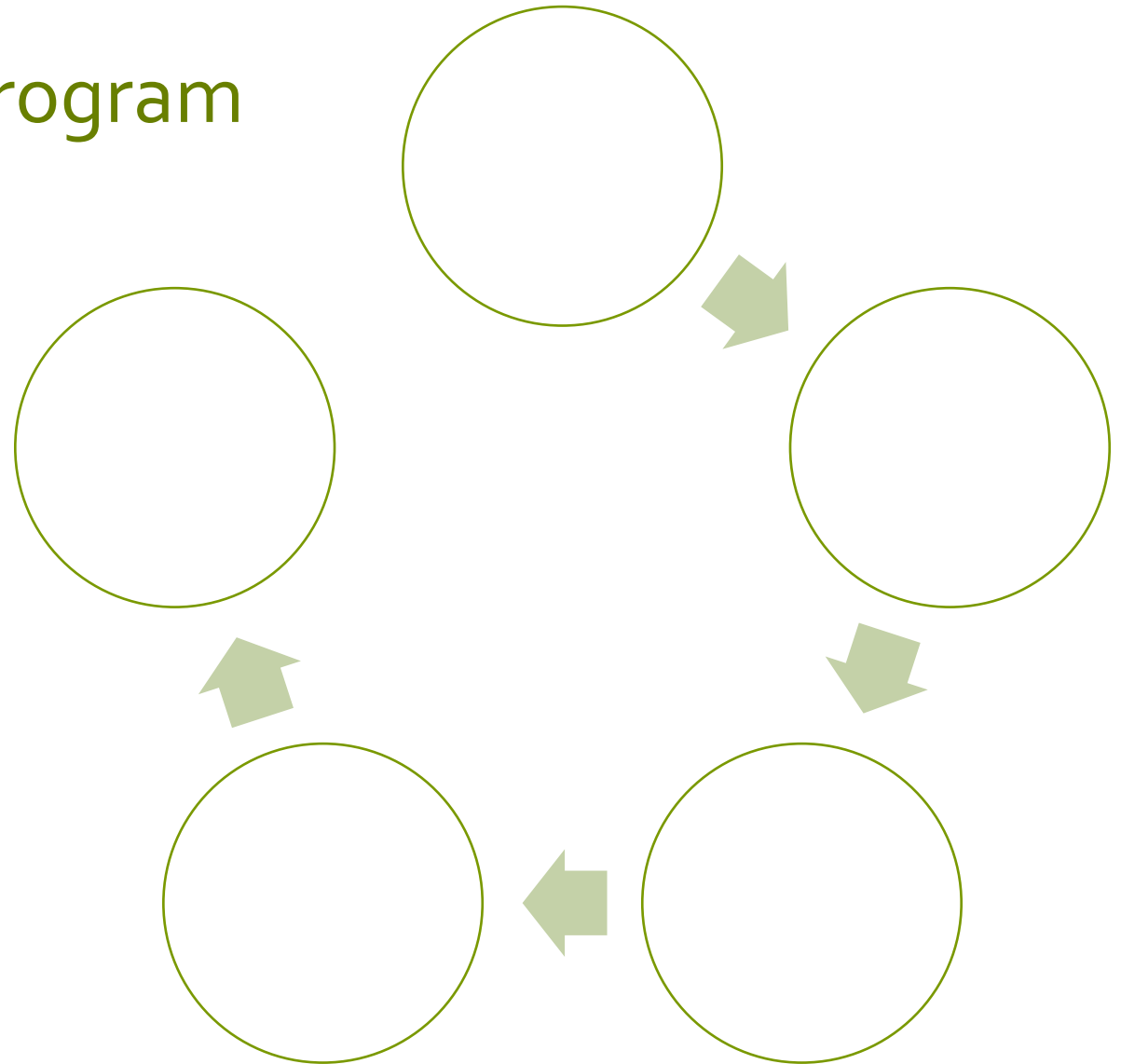
## CCLiP's Plan to Meet Goals

- Finance these projects with
  - Government Grants
  - Appliance Discounts
  - Contractor Management WHAT DOES THIS MEAN?
  - Financing offered through on bill payments through the water bill
- Accomplish Tempe's current Climate Action Plan Goals
  - Demand: Reduce Energy Needs through Greening Homes
  - Supply: Enable widespread solar plus battery adoption moving toward no centralized utility AGAIN, THEN WE ARE IN COMPETITION WITH SRP? I REALIZE THIS IS A TEMPE CLIMATE ACTION PLAN GOAL, BUT THE REST OF OUR PRESENTATION IS ABOUT SUPPLEMENTING THE GRID. WE SHOULD NOT HAVE A CONTRADICTION IN OUR MESSAGE.
  - Revolving Fund: Included in Funding Concepts
  - Sustainability Platform: Communicating Results through Energy Audit

# Steps for Implementing Program

## Program overview

- Appraise or audit current energy use
- Determine economic need
- Follow audit guidance to reduce energy consumption with insulation, better windows, new roof
- Install mini-split A/C system for efficient cooling
- Install solar plus storage to reduce carbon emission
- Ensure solar plus battery can operate mini-split if grid goes down
- Conduct subsequent audit to show energy reduction
- Add solar to virtual net meter



# Appraise and Audit Current Consumption

## Audit

- To create a baseline of energy consumption and carbon release, will use virtual and in person audits to inspect energy losses

## Redesign

- With smart systems and AI, design impactful changes that increase efficiency and livability while managing costs

## Token

- Keep record of beneficial changes to potentially “tokenize” the benefits that can potentially be sold helping to offset costs

## Aggregate

- With the proper reporting systems, aggregate the reserved energy created by solar and stored to get more economic value

## Demonstrate

- Demonstrate value of distributed generation and energy storage as a means to reduce peak power consumption which will reduce dependency on remote located power supplies and large bulk transmission

# Economic/Living Qualifications

Determine homeowner's economic ability to pay or get grants

Does the resident have special needs or emergency medical equipment?

Does the home need emergency repair such as roof damage or electrical panel replacement?

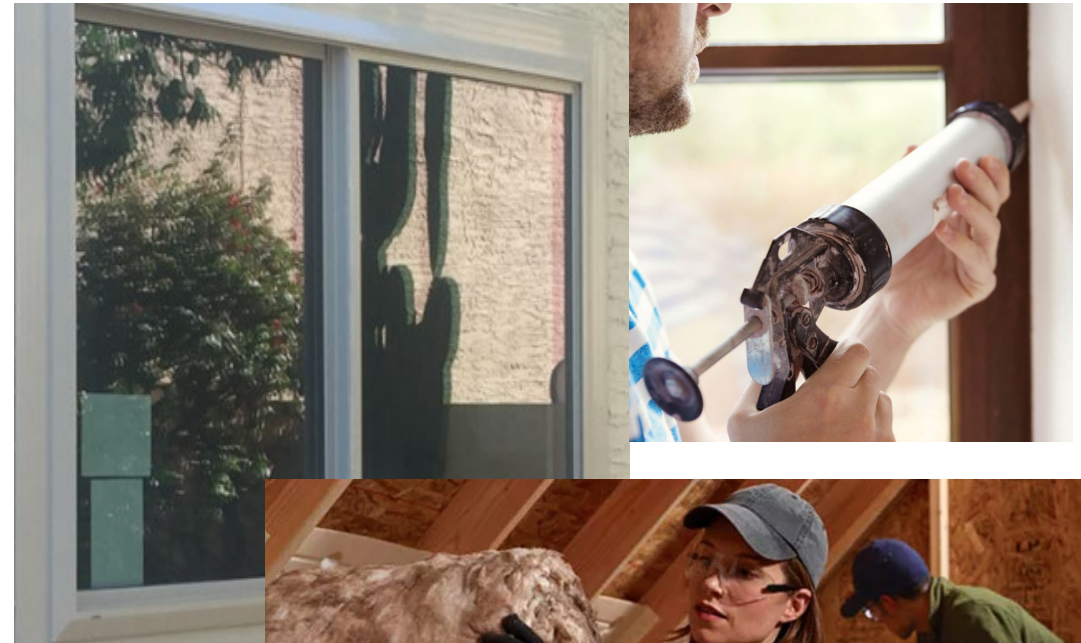
Does the resident have mobility issues that restrict ability to leave when the weather is dangerous?

Depending on grant program, if resident is 80% of median income or less, HUD may cover entire cost of repairing home.

On-bill financing by City of Tempe: helps economically disadvantaged groups by relying on payment history and not a credit score.

# “Seal the Envelope”

- Require an energy assessment
- Create a work plan that most effectively and efficiently reduces the home’s carbon output/energy consumption
- Select electrical panel upgrades that allow for battery storage and solar as a future option and increase safety
- Install smart thermostats that track consumption patterns and save money while keeping the home comfortable
- End with energy assessment to show carbon output/energy reduction



# Making a cool space

- A ductless or mini-split system installed for one or two rooms
- Very energy efficient
- Can be run on battery or solar power
- Lower cost of installation because there is no duct or venting, just a pipe to carry coolant and to remove water condensation



# Solar Plus Storage

- If possible, consider installing a solar power system plus battery backup
- Battery storage alone might help reduce peak power demand
- Enables the grid to respond more quickly
- Reduces the need for utilities to invest in more carbon intensive generation and additional distribution infrastructure





# Safety Considerations

According to the US Department of Energy, **fires caused by solar panels are very rare.** When a fire does occur, it is most often caused by a bad part or improper installation.

But other forms of back up generation are much worse...

- Diesel, propane and gas generators require maintenance and training for proper and safe use.
- All combustion fuel generators produce CO, a deadly gas, as a by-product.

And our current method is not sustainable...

- Pacific Gas & Electric Co. power lines have caused **more than 1,500 California wildfires** in the past six years – Business Insider
- August 19, 2020 - Salt River Project asked consumers to reduce consumption or face “rotating outages” because wildfires were threatening high voltage powerlines – AZCentral

Leaving our residents to deal with rising summer temperatures.

# Financing Options

## Federal Grants

- Infrastructure Investment & Jobs Act
  - WAP Funding increased from \$500 M to \$3 B
- HUD, USDA, FEMA
- CCLiP is willing to help apply!

## City of Tempe Revolving Fund

## Resident payment option:

- On-Bill Financing
  - National Energy Improvement Fund (NEIF)
  - Slipstream/Energy Financial Solutions (EFS)

## Rebates

- SRP Rebates – <https://srpnet.com/energy/default.aspx>
- Energy Star Rebates

# Similar Successful Programs

NYSERDA – Goal to have New York State be 50% renewable by 2030.

- Offers tax incentives to landlords and property owners to reduce energy consumption

City of Holland Energy Fund –a city of 35,000 residents

- Spend as much \$300,000 annually most of which is funded through HUD

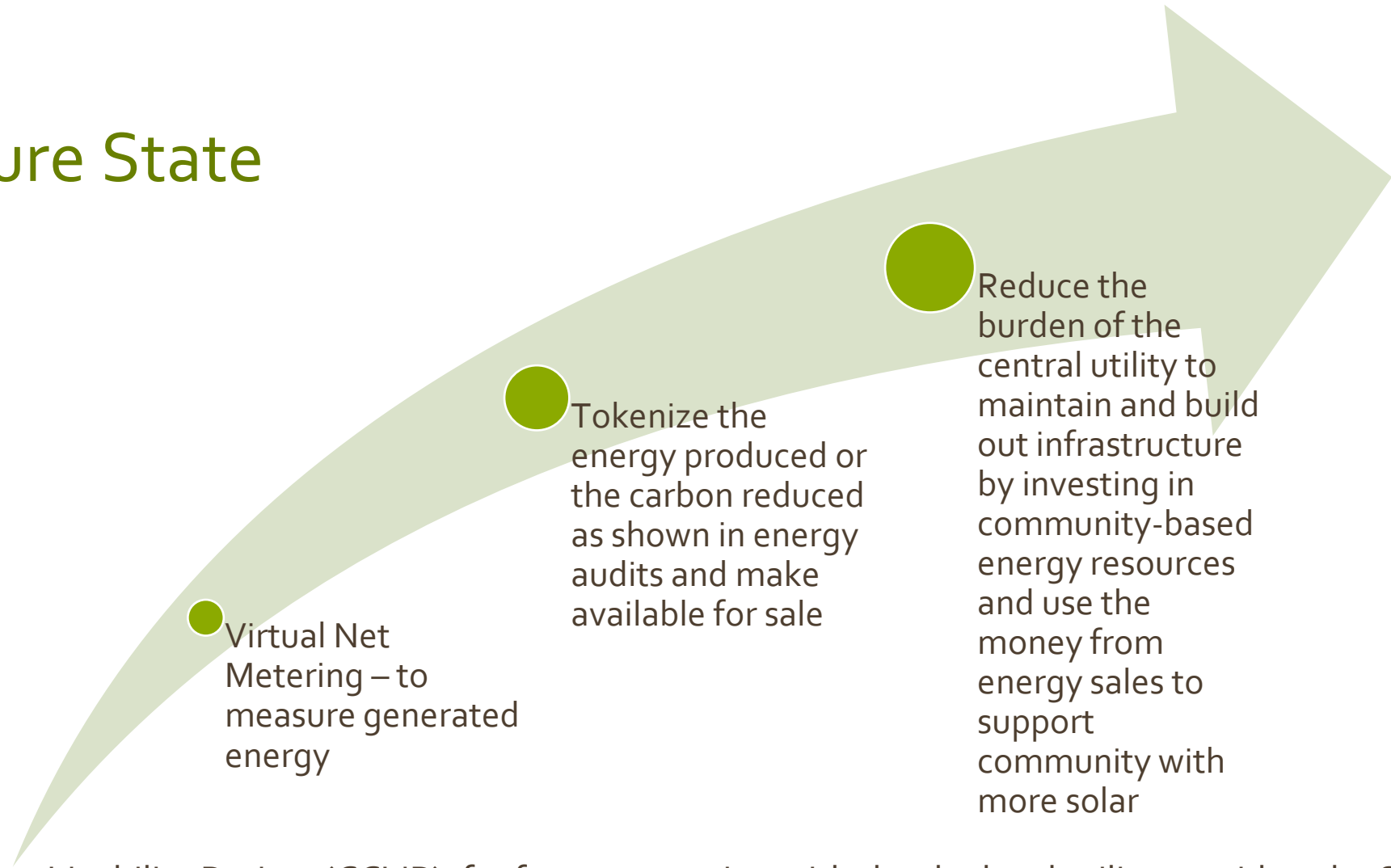
Ithaca, N.Y. Green New Deal – Plan to renovate 6,000 buildings

- BlocPower (also participates with NYSERDA)

Washington State Housing Finance Commission and Seattle City Light

- Created the Sustainable Energy Trust to bring low cost solar to affordable housing and qualifying nonprofits
- Arizona offers a similar program for making a down payment on a home, but not for solar or energy efficiency.

# Future State



The Community Climate Livability Project (CCLiP), far from competing with the the local utility provider, the Salt River Project, is to mitigate the threats to life and livability from increasingly severe summer heat waves expected in Tempe and the surrounding region play its role in the global effort to combat climate change. CCLiP’s plans include helping the public weatherize their houses limit energy use to cooling critical spaces, such as bedrooms, and add solar panels with battery storage that can run split the split be seen as competing with utility company revenues. However, when energy demand is especially high during heat waves or during homeowners to remain comfortable and safe, while moderating grid usage spikes so that utilities are not required to carry excessi