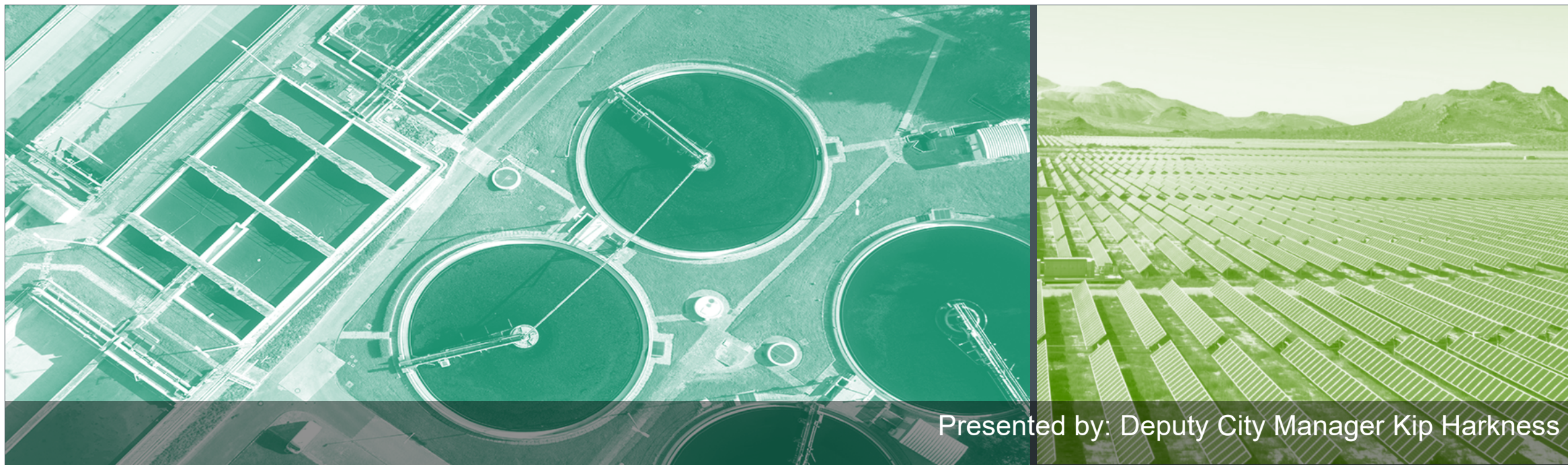


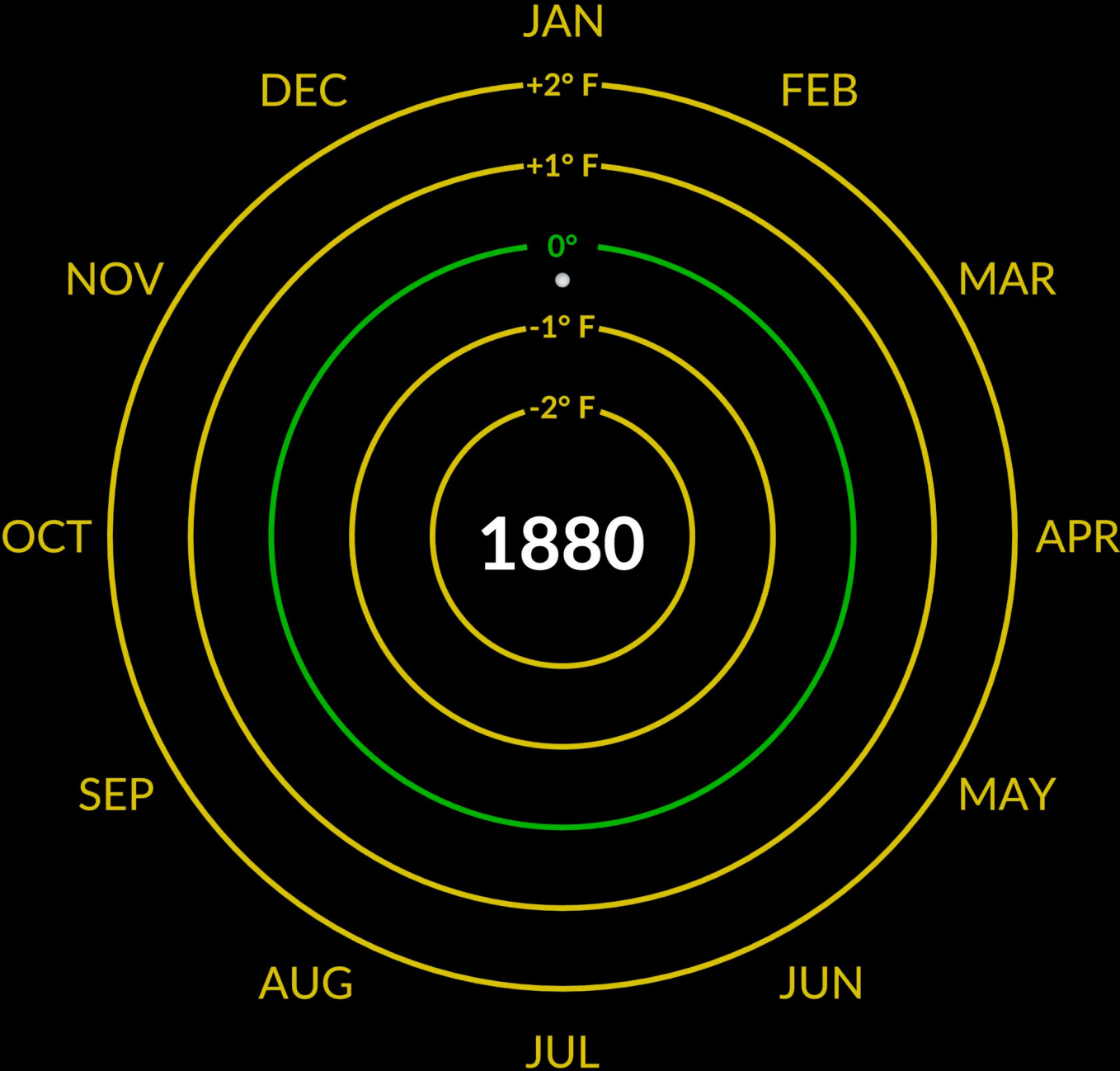
# CITY INITIATIVES ROADMAP: RESILIENT AND SUSTAINABLE CITY INFRASTRUCTURE AND EMERGENCY PREPAREDNESS ENTERPRISE PRIORITY OVERVIEW REPORT

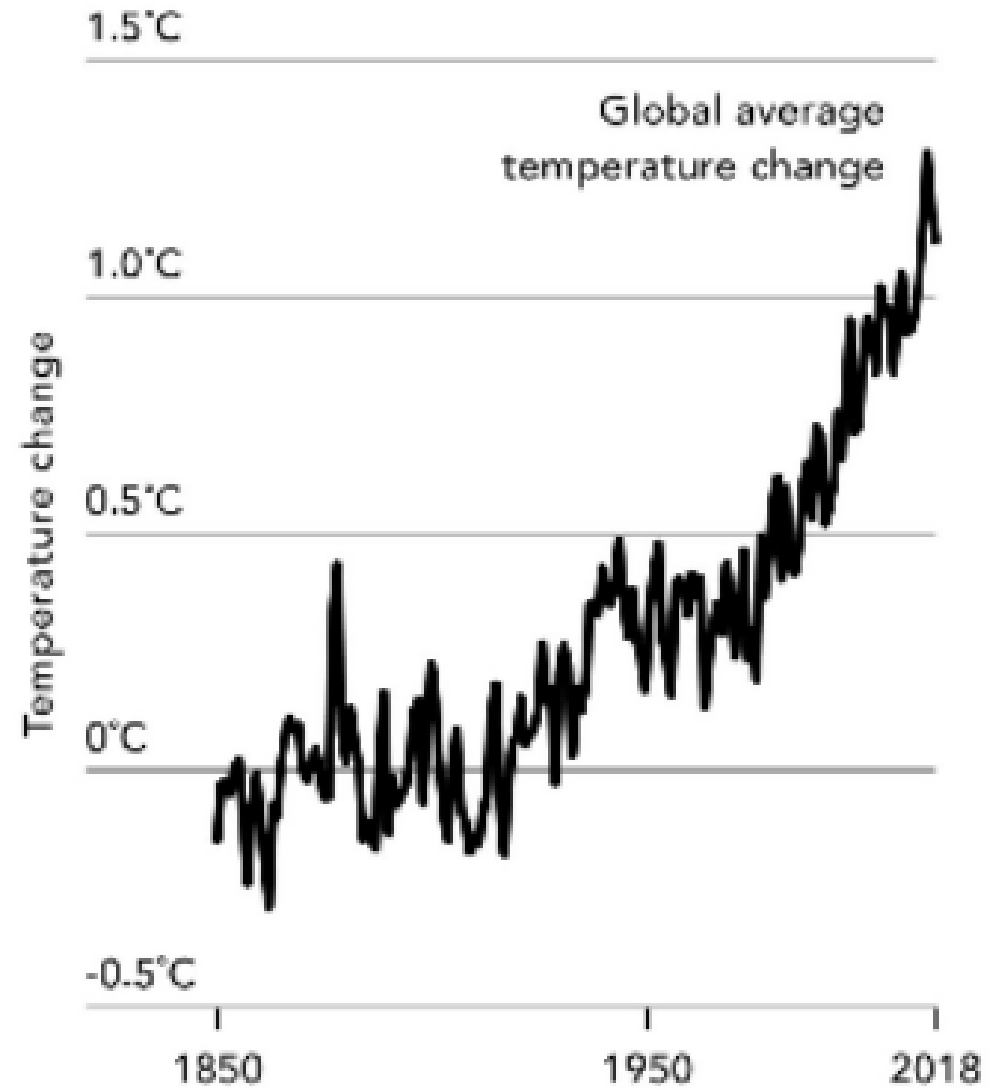
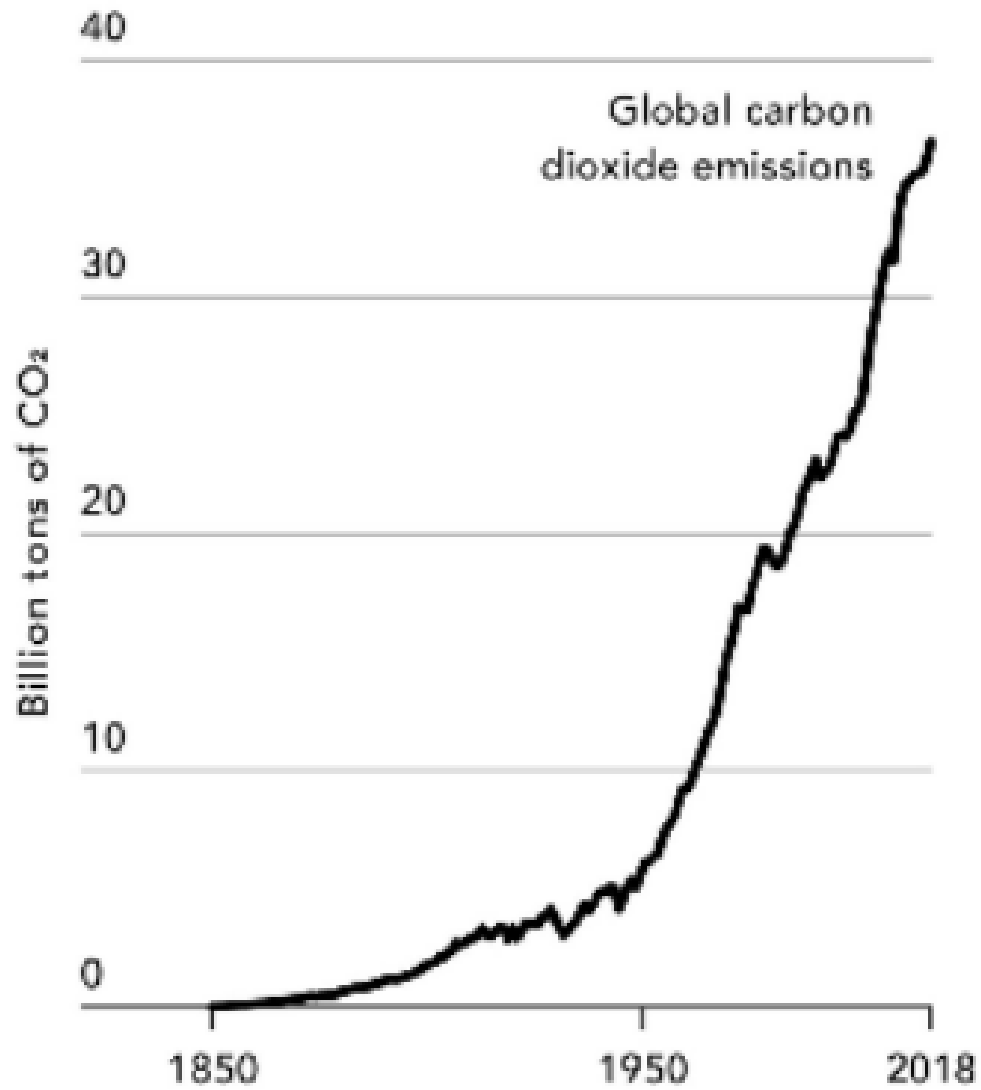
TRANSPORTATION AND ENVIRONMENT COMMITTEE, ITEM D(2).



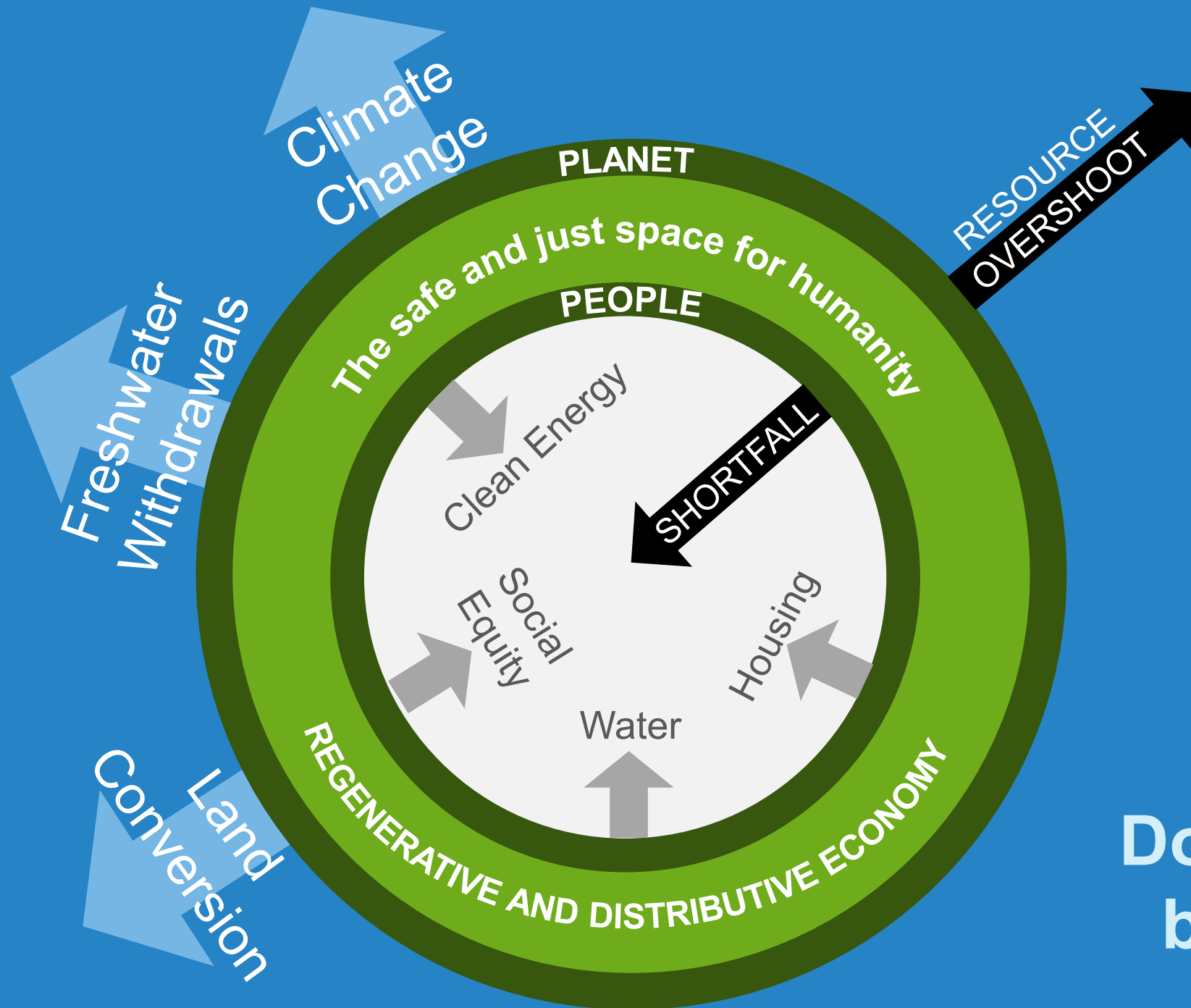
Presented by: Deputy City Manager Kip Harkness

# Monthly Global Temperature Anomalies 1880 - 2021





Gates, Bill. (2021). *How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need*.



# Donut Economics by Kate Raworth

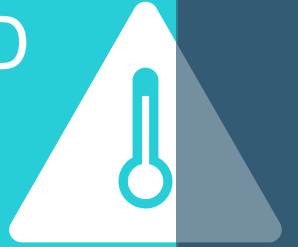
# AS A CITY, WE NEED TO SHIFT OUR THINKING

## CHANGE IN MINDSET

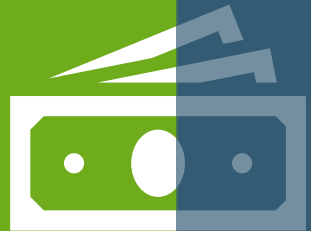
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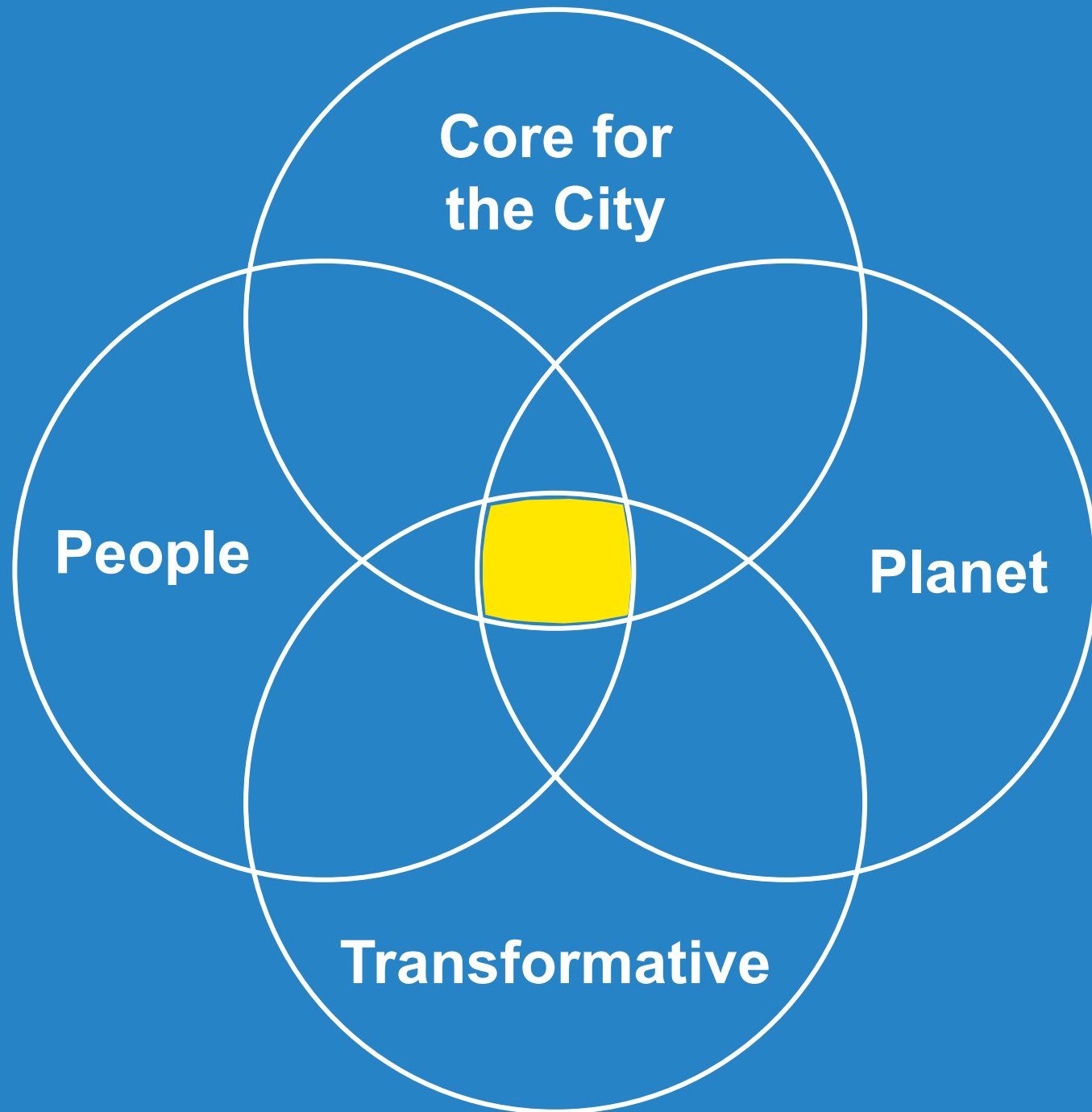
EXPANDING BEYOND  
SUSTAINABILITY TO  
ADAPTATION



INNOVATIVE & BOLD  
APPROACH TO  
FUNDING CAPITAL  
INFRASTRUCTURE








WHAT  
is our  
**focus?**








# Sustainable & Resilient City Infrastructure and Emergency Preparedness

FY 2022-2023

Objectives	<b>Disaster Ready &amp; Climate Smart</b> 	<b>Infrastructure Resilience</b> 	<b>Clean Energy Resilience</b> 	<b>Water Resilience</b> 	<b>Natural Environment Restoration</b> 
Workstreams & Drivers	Prepare the City for the Next Disaster Jay McAmis	Complete Funded Projects (Measure T) Katherine Brown	Deploy Micro Grids for Resilience Walter Lin	Rebuild Regional Wastewater Facility Mariana Chavez	Restore the Urban Tree Canopy Rick Scott
	Seismically Safe “Soft Story” Apartments Lisa Joiner	Address Infrastructure Backlog + O&M Mathew Nguyen	Downtown Large Project Electrification Jim Caldwell	Create New Water Supply Opportunities Jeff Provenzano	Protect Coyote Valley Open Space Michael Brilliot
	Climate Smart Decarbonization & Mitigation Julie Benabente	Seek New State/ Federal Funding & Policy Zane Barnes	City Wide Building Electrification Julie Benabente	Sustainable Sewers - Sanitary & Storm Mathew Nguyen	
	Understand Sea-Level Rise Mathew Nguyen	Ensure Cybersecurity Marcelo Peredo	Electric Vehicle Charging Zach Struyk	Green Infrastructure (Stormwater) Mathew Nguyen	

# There is a range in capability and maturity of workstreams

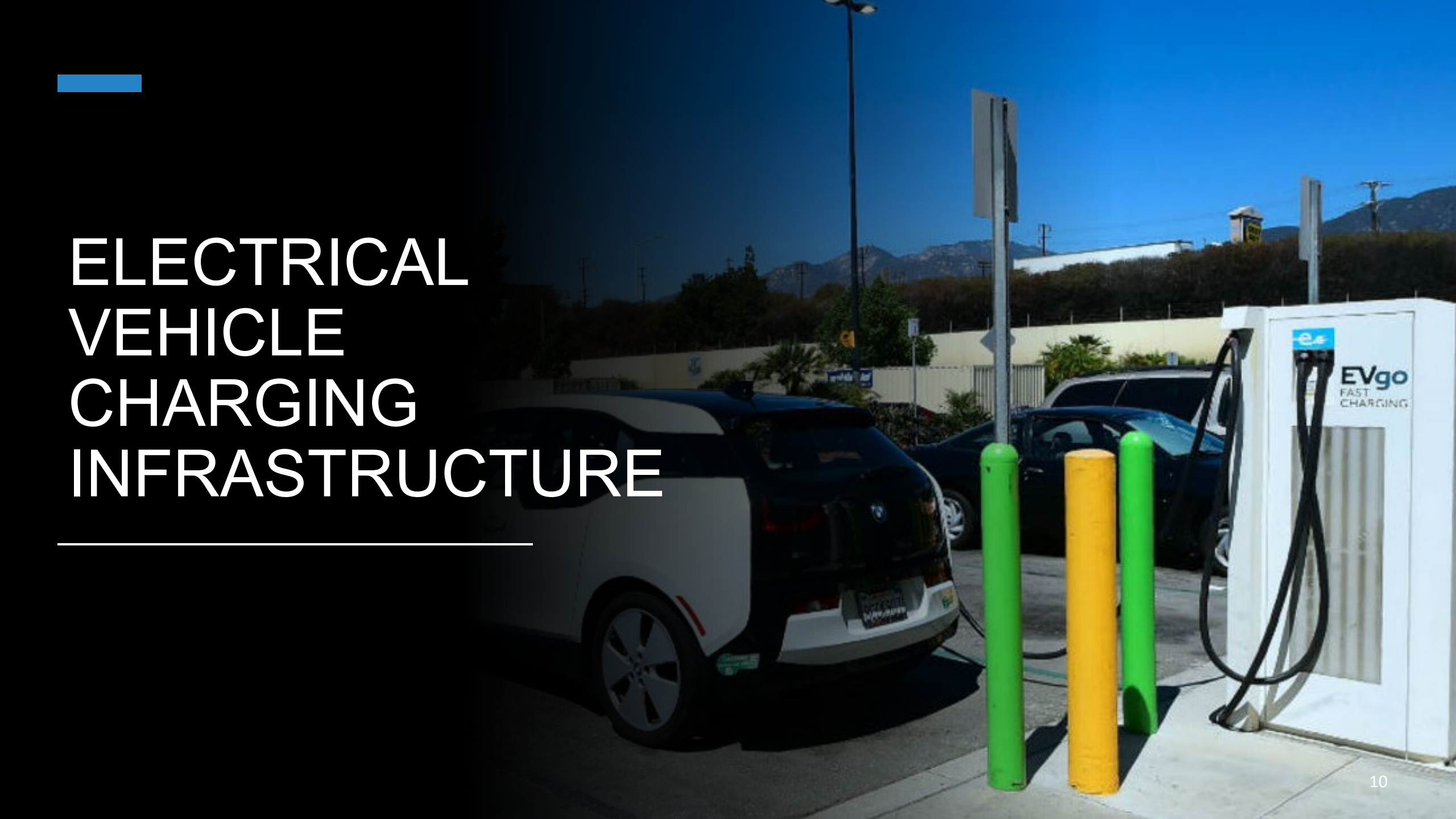
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REBUILD  
REGIONAL  
WASTEWATER  
FACILITY

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# ELECTRICAL VEHICLE CHARGING INFRASTRUCTURE

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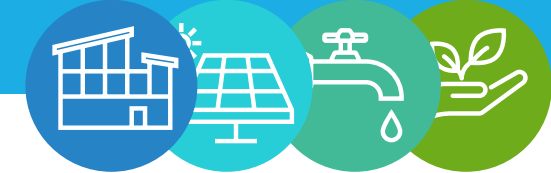


ADDRESS  
INFRASTRUCTURE  
BACKLOG + O&M

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Objectives

## Disaster Ready & Climate Smart



Annual Goals

### Prepare the City for the Next Disaster

Update current Emergency Operations Plan and Annexes. Complete After-Action Review for COVID-19 pandemic. Multi-Year Exercise and Training Program (MYTEP) for EOC personnel. Expand the CERT program. Completion of the EOC.

### Seismically Safe “Soft Story” Apartments

Create Soft Story structures inventory. Council approval of ordinance for mandatory soft story seismic retrofits. Identify funding mechanisms to assist property owners with financing of the retrofits.

### Climate Smart Decarbonization & Mitigation

Update the building reach code ordinance. Bring Climate Smart Natural and Working Lands and Zero Waste Elements to Council

### Understand Sea-Level Rise

Gain common understanding amongst city departments and leadership regarding, conceptually, potential sea level rise and potential risks to City

Objectives

## Infrastructure Resilience



### Complete Funded Projects (Measure T)

Complete and open new EOC and FTC. Award construction contracts for FS8, FS32, PD Air Support Hangar, PD Training. Secure land for FS 23. Continue progress on remainder of projects.

### Address Infrastructure Backlog + O&M

Convene 1 interdepartmental working session to level set on challenges and opportunities for infrastructure backlog

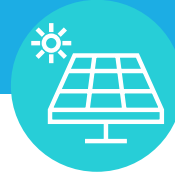
### Seek New State/Federal Funding & Policy

Evaluate funding streams for existing and future infrastructure needs, and work collaboratively and creatively with City departments in resolving infrastructure funding gaps. Secure new funding for projects identified in the City's Strategic Project List.

Annual Goals

## Clean Energy Resilience

Objectives



### Deploy Micro Grids for Resilience

Hire staff in PW to lead public facility microgrid effort. Develop clear strategic goals and objectives for Microgrids on city facilities. Begin design of microgrids on EOC/FTC, Happy Hollow Park & Zoo, Roosevelt Community Center.

### Downtown Large Project Electrification

Case Study presented to City Council defining the benefits and risks of creating a municipal utility to serve new development. Formation of municipal utility to serve new development recommended to Council

### City Wide Building Electrification

Begin building electrification and workforce development accelerator program. Support submissions for at least \$1M in external funding for building electrification in San Jose

### Electric Vehicle Charging Infrastructure

Present financial analysis and pilot recommendation of Direct Current Fast Charging (DCFC) Hub to City Council and complete DCFC Hub pilot installation. Form a comprehensive strategic plan and implementation framework in collaboration with DOT & PW.

Annual Goals

## Water Resilience

Objectives



Annual Goals

### Rebuild Regional Wastewater Facility

Achieving substantial construction completion for 3 major projects by end of FY2022-23. Award \$69.6M for future projects in FY 2022-23. Finalize comprehensive flood protection strategy for the RWF to address both riverine and coastal flooding.

### Create New Water Supply Opportunities

Lead recruitment of FUSE Fellow and Principal Engineer. Begin water supply strategy efforts. Explore funding strategies to increase recycled water usage.

### Sustainable Sewers - Sanitary & Storm

Finalize equity analysis on funding prioritization for cast iron sewer pipe replacement.

### Green Infrastructure (Stormwater)

Facilitate interdepartmental cooperation regarding progress on meeting consent decree requirements. Identify sufficient projects to meet consent decree goals. Coordinate with Budget Office and partner department to identify sufficient budget to meet consent decree goals.

Objectives

## Natural Environment Restoration



### Restore the Urban Tree Canopy

Hire newly budgeted staff to increase program capacity. Develop an efficient tree planting and maintenance program to plant up to 2000 trees and maintain 1/12th of the city-owned inventory annually. Establish Community Forest Advisory Committee (CFAC) to guide urban forestry improvements

### Protect Coyote Valley Open Space






Monterey Coyote Corridor Study: Retain consultant team, Complete Existing Conditions/ baseline analysis. Complete first Community Workshop.  
Align City with County Agricultural Zoning: Complete Assessment of County's proposed AG zoning update and where the City should consider amending its AG zoning for to achieve alignment.

Annual Goals



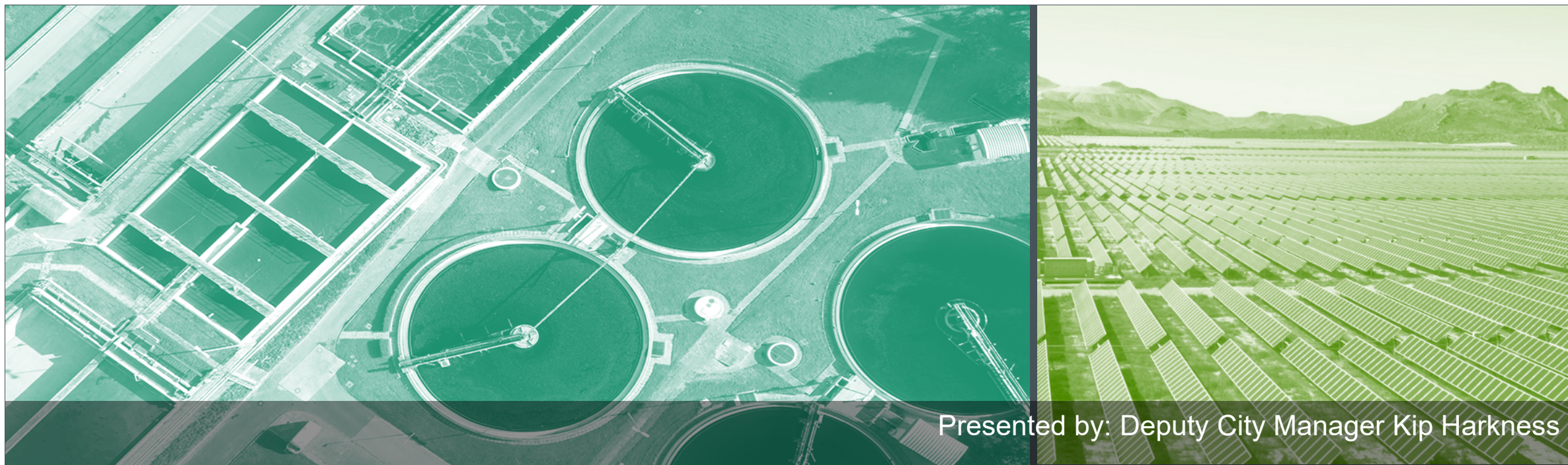
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# T&E COMMITTEE, ITEM D(2).

CITY INITIATIVES ROADMAP: RESILIENT AND SUSTAINABLE CITY INFRASTRUCTURE AND EMERGENCY PREPAREDNESS ENTERPRISE PRIORITY OVERVIEW REPORT



Presented by: Deputy City Manager Kip Harkness

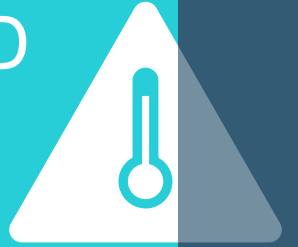
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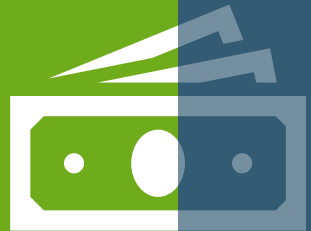
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EXPANDING BEYOND SUSTAINABILITY TO ADAPTATION



INNOVATIVE & BOLD APPROACH TO FUNDING CAPITAL INFRASTRUCTURE



Objectives

## Disaster Ready & Climate Smart



### Prepare the City for the Next Disaster

1. Complete one workshop for the EOP and each Annex (4). 2. Provide feedback on draft COVID-19 AAR. 3. Obtain feedback for the MYTEP. 4. Conduct 2 CERT programs in language other than English. 5. Reach 75% completion on EOC construction

### Seismically Safe “Soft Story” Apartments

1. Create a draft list of potentially affected soft story properties. 2. Begin analyzing the properties to create typologies of similar structures/resident risk. 3. Identify at least 3 different potential financing mechanisms for property owners, for further investigation. 4. Submit Phase 1 Grant Extension request to CalOES/FEMA

### Climate Smart Decarbonization & Mitigation

1. Bring phase 1 administrative reach code update (solar and electrification readiness, EV charging infrastructure and equipment) to City Council for approval. 2. Complete final versions of NWL and ZW Elements

### Understand Sea-Level Rise

Identify key experts (ie. Valley Water, Army Corps of Engineers, etc.) that have knowledge in topic that could present to City in Q3.

## Infrastructure Resilience



### Complete Funded Projects (Measure T)

1. Complete designs for following projects: FS 8, FS 32, PD Air Support Hanger & PD Training & Academy. 2. Identify multiple funding strategies to fully deliver all projects, present options to Budget & CMO. 3. Identify best site option for relocation of FS 23

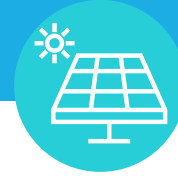
### Address Infrastructure Backlog + O&M

No action. Expect to have an interdepartmental working session in Q3

### Seek New State/ Federal Funding & Policy

1. Develop and execute advocacy strategy for the Federal Safe Streets for All grant application which builds off successful \$10m earmark with the aim to use this earmark as a federal match. 2. In concert with City departments, evolve the legislative program to ensure infrastructure priorities are reflected in LP. 3. Meet with two members of Congress to clearly articulate infrastructure priorities and solicit their assistance in competitive Federal grant applications. 4. Conduct legislative advocacy day with state delegation in Sacramento to highlight infrastructure priorities

## Clean Energy Resilience



### Deploy Micro Grids for Resilience

1. Hire Program Manager. 2. Submit CA Resilience Challenge grant. 3. Determine FUSE fellow start

### Downtown Large Project Electrification

1. Conduct Study Session on Downtown West Electrification. 2. If it's a go, then form the Utility. 3. Determine City's role in construction of CAISO lines

### City Wide Building Electrification

1. Execute contract with BlocPower to implement the existing building electrification program. 2. Support submission for at least \$500,000 in external funding

### Electric Vehicle Charging Infrastructure

1. Present Financial Analysis of DCFC Hub to City Council 12/6. 2. Recommend Pilot DCFC Hub to City Council 12/6.

## Water Resilience



### Rebuild Regional Wastewater Facility

1. Complete substantial construction completion for Advanced Facility Control and Meter Replacement Phase 1 and Blower Improvements by Dec 2022.

### Create New Water Supply Opportunities

Complete FUSE Fellow recruitment and onboarding.

### Sustainable Sewers - Sanitary & Storm

Working with CAO, ESD and BO on equity analysis and determine how special fund restrictions may impact the prioritization and selection of sanitary sewer projects, particularly for cast iron sewer line replacement. Likely no other action this year.

### Green Infrastructure (Stormwater)

1. Continue to bring awareness and provide update to CMO and Budget Office through Measure T semi-annual report. 2. Identify at least one additional project

## Natural Environment Restoration



### Restore the Urban Tree Canopy

1. Two Assistant Arborists/one Program Manager Hired. 2. Award purchase orders for tree planting/maintenance services, and agreement with OCF on stewardship program. 3. Final 2 CFAC positions filled, first meeting scheduled

### Protect Coyote Valley Open Space

Consultant team under contract to initiate Coyote Valley Monterey Corridor study.

Key Results