



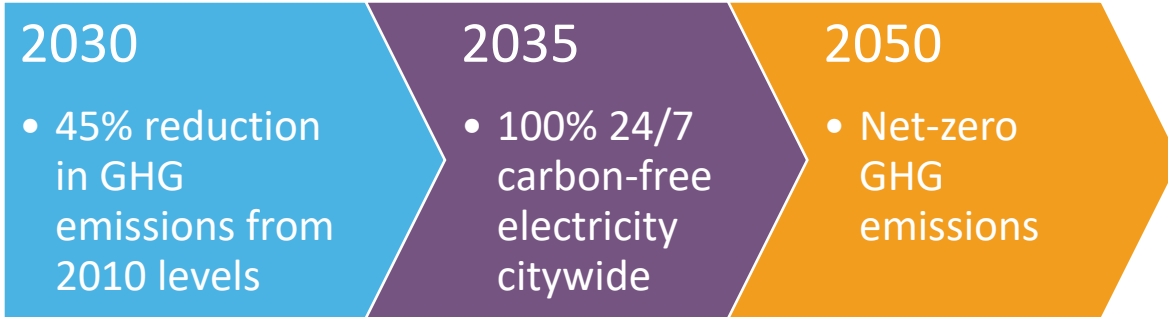
ADAPT DSM

CLIMATE ACTION FOR EVERYONE

MPO Technical Committee
May 4, 2022

Emissions-related goals

Existing Goals



Previous Goal



Stretch Goals

- Based on ICLEI Race to Zero Analysis
- Represents city's "fair share" of global emissions
- 2030
 - 62.8% reduction in per capital emissions
 - 58.2% reduction in absolute emissions



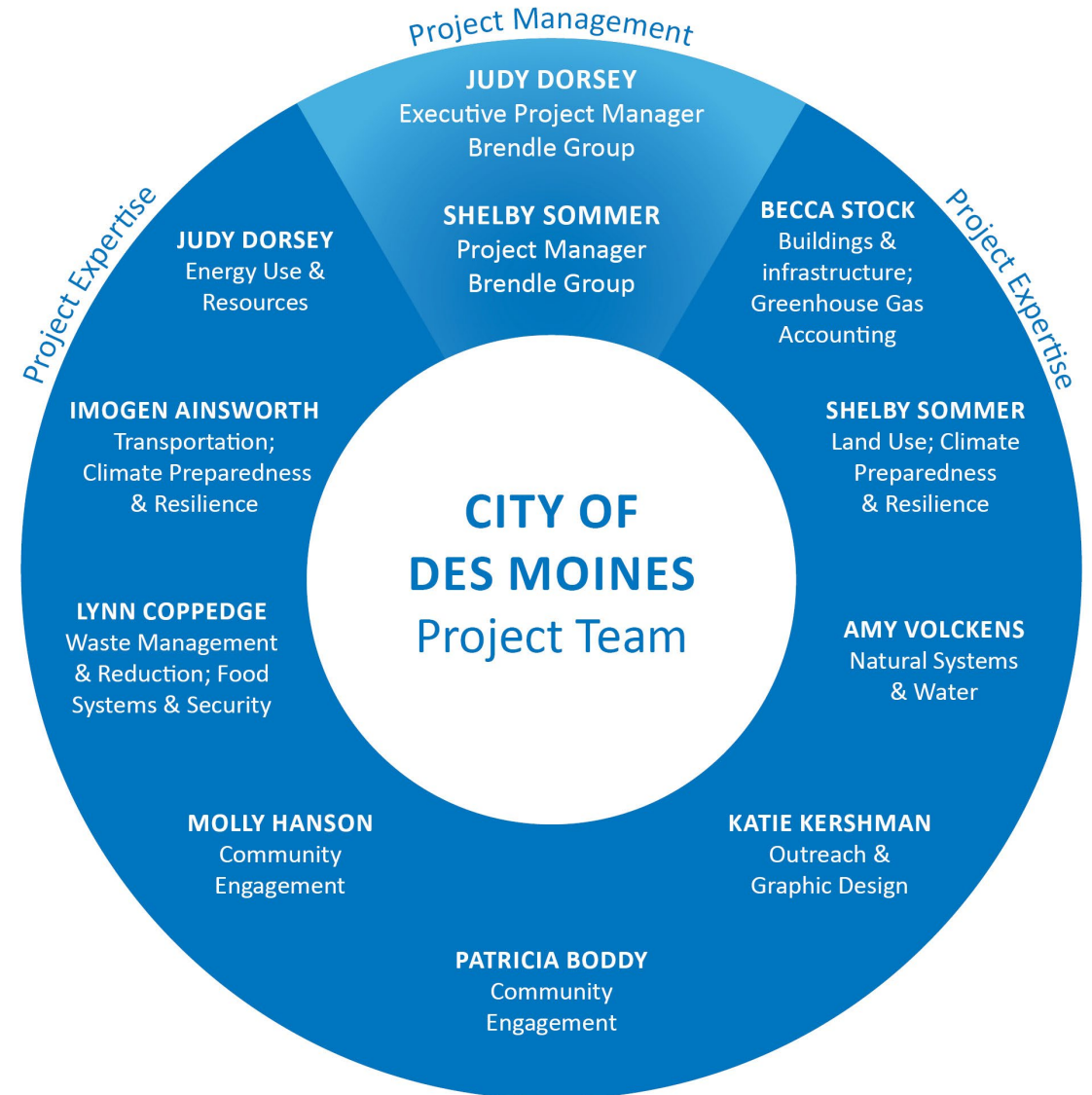
Core Project Team (CPT)

- City Staff
- Brendle Group
- RDG



Key Topic Areas

- Energy Use & Resources
- Buildings & Infrastructure
- Transportation & Land Use
- Climate Preparedness & Resilience
- Waste Management & Reduction
- Food Systems & Security
- Natural Systems & Water Resources



ADAPT DSM Official Committees



Core
Project
Team



Steering
Committee



Technical
Advisory
Group



Community
Climate
Allies

Guide DSM



City Government Vision 2031

Vibrant capital city

Great neighborhoods, alive downtown

Thriving regional economy

Recognized leader in community sustainability

Abundant opportunities for leisure

Effective transportation system connecting the region

Residents and businesses take tremendous pride in the Des Moines Community

City Government Goals 2021



In 2040, Des Moines will have...

- Vibrant, healthy, and walkable neighborhoods with a mixture of housing, recreational opportunities, public spaces, schools, and mixed-use commercial centers.
- Housing that offers a diversity of choices in housing styles and affordability that meets the needs of residents throughout their lives.
- A complete transportation system providing safe and efficient infrastructure for walking, bicycling, mass transit, and automobiles.
- A resilient economy with a robust job environment and the provision of necessary land and infrastructure for business development.
- Protected natural resources and sensitive ecosystems, and clean air and water.
- Enhanced opportunities for urban agriculture.
- Compassion and inclusion for the physically, intellectually, and economically disadvantaged through programs to ensure accessibility to City services and facilities that are available to the public.
- Sustainable governance recognizing that policies and decisions have environmental, social, and economic impacts on the overall quality of life.
- A vibrant and creative cultural and recreational environment that inspires us as a community, educates us, promotes health and wellness, and is available for all residents.
- A strong and supporting environment for global residents from all heritages. Investment in the youth of the City to ensure equal opportunities for education and job training

Scope Overview

1. Project Administration

- Kickoff meeting & schedule
- PM team meetings
- Project vision & goals

2. Risk & Vulnerability Assessment (RVA)

- RVA worksheets
- Community RVA analysis
- Municipal analysis & priorities
- Risk & vulnerability report

3. Climate Action & Adaptation Plan

- GHG inventory review & forecast
- Focus area & action identification
- Goal & target development
- Action development
- Preliminary draft CAAP
- Revised draft CAAP
- Final CAAP

4. Outreach & Engagement

- Outreach & engagement plan development
- Graphic & communication standard
- Project website
- Surveys
- Plan outreach toolkit
- Climate action toolkit

5. Monitoring, Evaluation & Reporting

- Metric review & screening
- Metrics recommendations
- Annual reporting template

6. Implementation Resource Analysis

- Action cost-benefit & co-benefit analysis
- Action staffing & resource analysis
- Climate Action Toolkit

Schedule Overview

Month No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	2022												2023					
Month	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Task 1.0 Project Administration																		
Task 2.0 Risk & Vulnerability Assessment																		
Task 3.0 Climate Action & Adaptation Plan																		
Task 4.0 Outreach & Engagement Process			Brand	Website	TAG #1 CSC #1 Survey	Online Workshop	Community Convos		CSC + TAG #2 Survey		Community Convos	Community Convos	CSC + TAG #3					
Task 5.0 Monitoring, Evaluation & Reporting																		
Task 6.0 Implementation Resource Analysis																		

Foundational
Work

Engagement
Round 1

Engagement
Round 2

Plan
Development

Plan Refinement &
Adoption

Initial Project Priorities (February – May 2022)

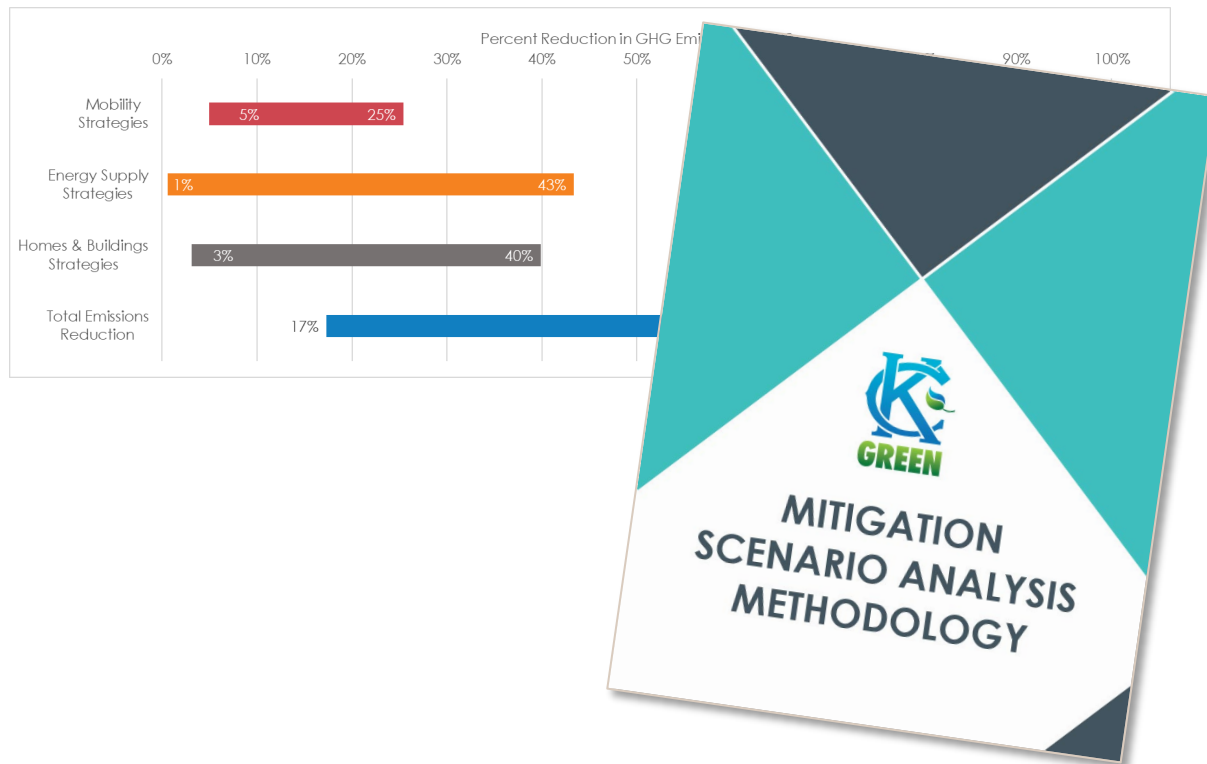
1. Project Administration	2. Risk & Vulnerability Assessment	3. Climate Action & Adaptation Plan	4. Outreach & Engagement	5. Monitoring, Evaluation & Reporting	6. Implementation Resource Analysis
<ul style="list-style-type: none">• Kickoff meeting & schedule• PM team meetings• Project vision & goals	<ul style="list-style-type: none">• RVA worksheets• Community RVA analysis• Municipal analysis & priorities• Risk & vulnerability report (outline)	<ul style="list-style-type: none">• GHG inventory review & forecast• Focus area & action identification• Goal & target development• Action development• Preliminary draft CAAP• Revised draft CAAP• Final CAAP	<ul style="list-style-type: none">• Outreach & engagement plan development• Graphic & communication standard• Project website• Surveys• Plan outreach toolkit• Climate action toolkit	<ul style="list-style-type: none">• Metric review & screening• Metrics recommendations• Annual reporting template	<ul style="list-style-type: none">• Action cost-benefit & co-benefit analysis• Action staffing & resource analysis

What other scheduling factors should we consider in this foundational phase?

CAAP Inspiration & Lessons Learned

A community-driven plan ...

Is technically credible
and accessible.



Shows how climate actions reflect
specific community priorities.

SOUTH KANSAS CITY

CLIMATE PROTECTION AND RESILIENCY PLAN NEIGHBORHOOD SUMMARY

STRATEGY M-5: REDUCE VEHICLE EMISSIONS THROUGH LOW- AND NO-EMISSION VEHICLES

Transition on-road vehicles to electric vehicles (EVs) or other low- and no-emission vehicles. This reduces GHG emissions and local air pollutants from vehicles; EVs cost about 40 percent less to maintain than conventional vehicles, lowering transportation costs (US Department of Energy, 2021).

ACTIONS

- M-5.1: Promote community-wide electric vehicle adoption.
- M-5.2: Expand the charging station network.
- M-5.3: Electrify public-serving fleets.
- M-5.6: Reduce the use of polluting lawnmowers and other landscaping equipment.







Specifically, near Ruskin High School, Hickman Mill, and Avila University.



CAAP Inspiration & Lessons Learned

The final plan should...

Be Reader-Friendly

Strategy Name	Strategy Description	Resiliency Priorities Supported
EW1. Expand Digital Equity, Access & Preparedness	Address regional digital inequities through targeted efforts prioritizing the most pressing needs: access to high speed internet, access to and affordability of web-enabled technology, and access to skill development.	 Economy & Workforce  Climate & Natural Hazards  Building & Infrastructure  Agriculture & Food  Housing Attainability  Community Capacity







Reflect the community's voice

“Urban neighborhoods are 10 - 20 degrees hotter due to all of the concrete and asphalt. Underserved neighborhoods do not have the same amount of tree cover you see on Rockhill Road and Ward Parkway.
– Imani, Community Member”

Launch the City and its partners into implementation

TABLE 3: Implementation Partners

Minority, Women and Disadvantaged Business Enterprises (MWDBE), organizations that are led by a person of color, and organizations with a mission directly tied to communities of color are **Blue and Bold**.

Entity						
After the Harvest						
Antioch Urban Growers						
BikeWalkKC						
Black Health Care Coalition						
Boys Grow						
City Staff						
Compost Connection						
The Conservation Fund						
Cultivate KC						
Bridging the Gap						
Deep Roots						
Economic Development Corporation of Kansas City						
Everygy						
The Giving Grove						
Greater Kansas City Food Policy Coalition						
Green Works in Kansas City						
Grow Food Not Lawns						
Foundation for Regeneration						
Habitat for Humanity						
Heartland Conservation Alliance						
Heartland Tree Alliance						
Jackson County Land Bank						
Kanbe's Markets						

CAAP Inspiration – Santa Monica, CA



COMMUNITY THEMES

Climate change and climate action affects all levels of City government and community issues. A plan that addresses climate change and community resilience is a plan that creates a more livable community.

SUSTAINABILITY, WELLBEING & RESILIENCE

Resilience is the ability of a community to withstand chronic stressors or sudden shocks, and grow and thrive beyond; and is a function of both wellbeing and sustainability. Wellbeing and environmental stewardship go hand in hand when fostering a more resilient city and improving quality of life.

Santa Monica's Wellbeing Index measures individual and community wellbeing to help improve peoples' lives. The Wellbeing Index and the Sustainable City Plan have been integrated into The Framework for a Sustainable City of Wellbeing to guide City decision-making and investments using performance-based metrics.

By strengthening our social connections, mobility systems, buildings and infrastructure, Santa Monica will enhance its ability to withstand and recover from earthquakes, drought and heatwaves.

EQUITY IN CLIMATE ACTION

Vulnerable groups are often the least able to access resources and least likely to have a seat at the table when policies are developed. In the transition to a low-carbon future, we must create a future that is accessible to all Santa Monicans.

The policies outlined in this plan will use an equity lens to prioritize the needs of low-income communities and communities of color ensuring the just distribution of the benefits while addressing unequal burdens from climate change.

The people who are the most impacted by climate change and the least likely to be engaged in civic affairs tend to be older, people of color, lower on the socio-economic spectrum, and/or don't speak English as their native language. Rising temperatures and worsening air quality disproportionately impact these vulnerable populations. Additionally, each of these communities have different needs.

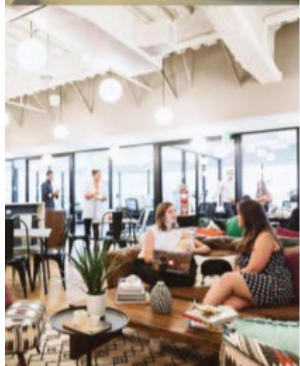
Policy-making and program design must address both the systems that worsen climate change and inequality while reducing the disproportionate impact of climate change on the vulnerable.

SMART CITY INNOVATION

This plan recommends that the City adopt a Smart City Strategy to advance technologies in City infrastructure and leverage public-private partnerships that foster community goals.

Smart technologies, such as cloud-based sensors for buildings, traffic signals and waste bins, can allow local governments to provide services faster and more efficiently while reducing energy use and carbon emissions.




Smart technologies and infrastructure will create opportunities to improve resource efficiency and performance, while enhancing customer service, safety and wellbeing in the digital age.



PLAN AT A GLANCE

The CAAP is a guiding document that provides overarching policy direction to achieve the interim goal of an 80% reduction in emissions by 2030 and to increase Santa Monica's resilience to climate change hazards and impacts. This plan supports and enhances many existing plans and initiatives within the City. The CAAP also suggests new plans and actions to supplement ongoing efforts and create new initiatives.

CLIMATE ACTION

SECTOR	OBJECTIVES	SUPPORTING EFFORT
ZERO NET CARBON BUILDINGS	 <ul style="list-style-type: none"> Achieve 100% renewable grid electricity Install 100 MW of local solar energy Reduce fossil fuel use 20% in existing buildings Discourage fossil fuels in new buildings 	<ul style="list-style-type: none"> Zero net energy for new residential construction (2017) Mandatory solar for new commercial construction (2017)
ZERO WASTE	 <ul style="list-style-type: none"> Divert 95% of materials from landfills 	<ul style="list-style-type: none"> Plastic Bag Ban (2011) Zero Waste Strategic Operations Plan (2014) Disposable Food Serviceware Ordinance (2018)
SUSTAINABLE MOBILITY	 <ul style="list-style-type: none"> Convert 50% of local trips to foot, bike, scooter & skateboard Convert 25% of commuter trips to transit Convert 50% of vehicles to electric or zero emission 	<ul style="list-style-type: none"> Land Use & Circulation Element (2010) Bike Action Plan (2011) Pedestrian Action Plan (2016) Electric Vehicle Action Plan (2017)

CLIMATE ADAPTATION

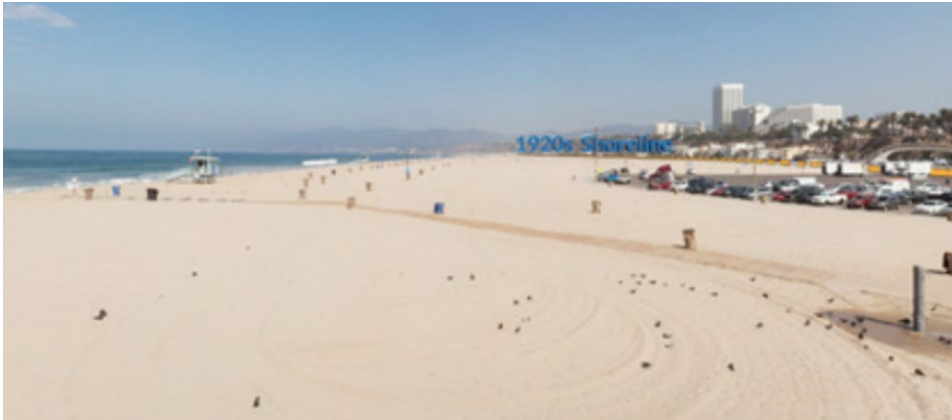
SECTOR	OBJECTIVES	SUPPORTING EFFORT
CLIMATE READY COMMUNITY	 <ul style="list-style-type: none"> Increase community resilience to climate change Protect vulnerable groups from impacts Integrate climate change impacts into City planning, operations & infrastructure projects 	<ul style="list-style-type: none"> All Hazards Mitigation Plan (2015) Santa Monica Organizations Active in Disaster (2018)
WATER SELF-SUFFICIENCY	 <ul style="list-style-type: none"> Achieve water self-sufficiency by 2023 	<ul style="list-style-type: none"> Water Neutrality Ordinance (2017) Sustainable Water Master Plan (2018)
COASTAL FLOODING PREPAREDNESS	 <ul style="list-style-type: none"> Enhance natural systems to prevent damage from coastal flooding Increase resilience of public and private assets in the coastal flood zone 	<ul style="list-style-type: none"> Local Coastal Program Land Use Plan (2018)
LOW CARBON FOOD & ECOSYSTEMS	 <ul style="list-style-type: none"> Increase self-reliance through local food production Reduce or sequester carbon emissions from food production, consumption, waste and landscape management and natural processes 	<ul style="list-style-type: none"> Urban Forest Master Plan (2015)

The CAAP is not an element of the City's General Plan or a regulatory document for the purposes of streamlining the California Environmental Quality Act (CEQA) process. Any policy or ordinance described in the CAAP must be developed and adopted through a public review process.

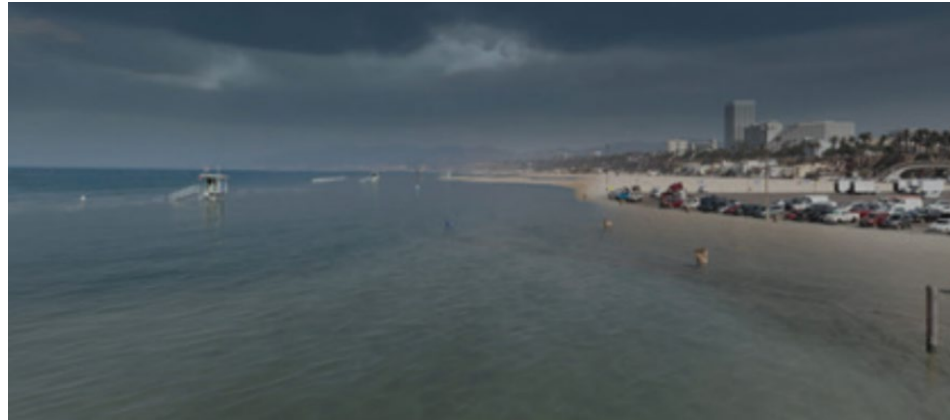


CAAP Inspiration – Santa Monica, CA

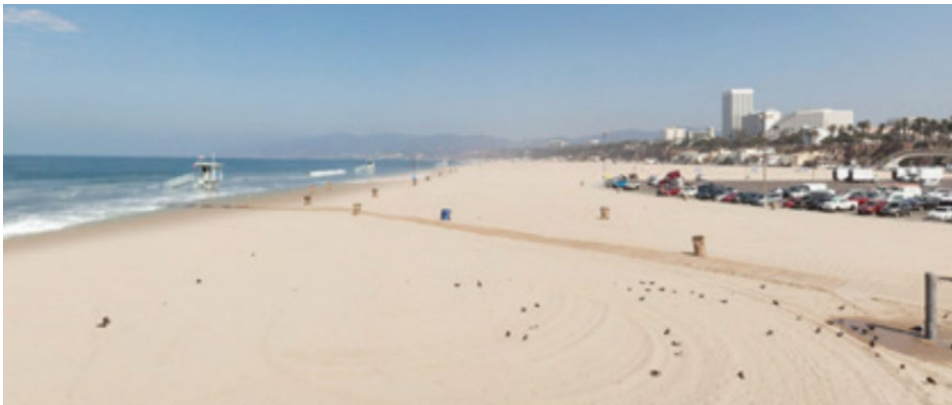
Beach today, and shoreline in 1920



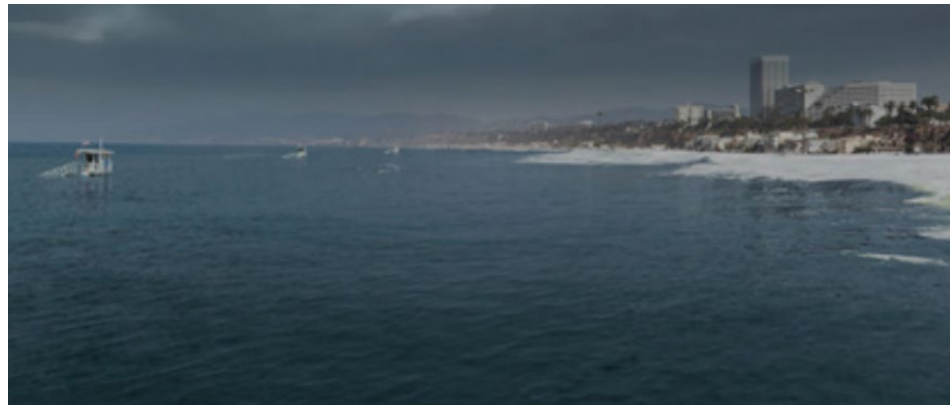
Current Wave Run Up during storms



Beach w/forecast 3 meters Sea Level Rise



Wave run-up w/3 meters Sea Level Rise



CAAP Inspiration – Portland & South Portland, ME



[HOME](#)

[ABOUT](#)

[REPORTS & RESOURCES](#)

[PROGRESS](#) ▼

[INITIATIVES](#)

[EVENTS](#)

[CONTACT US](#)

One Climate Future

A Joint Plan for Climate Action

[DOWNLOAD THE ONE CLIMATE FUTURE PLAN](#)



CAAP Inspiration – Portland & South Portland, ME

Vulnerabilities enhanced by climate hazards

Climate hazards, such as sea level rise and more extreme storms, will exacerbate vulnerability in our cities and put strain on our infrastructure, ecosystems, and community health. Below are ten of our top concerns for Portland and South Portland.

• See the One Climate Future Vulnerability Assessment at oneclimatefuture.org for more. •



BUILDING AND PROPERTY DAMAGE
Sea level rise and more extreme storms will damage buildings and decrease property values if we don't increase the resilience of existing buildings and new development.



MORE POWER OUTAGES
Extreme storms increase the likelihood of power outages, which can disrupt transportation, communication, and water systems, and create short- and long-term economic losses for businesses.



TRANSPORTATION CLOSURES
Sea level rise and storm surge are expected to increasingly flood roads, including portions of I-95. A Category 2 hurricane could cut off access to bridges between the two cities.



STORMWATER AND SEWER SYSTEM RISKS
Portions of the cities' sewer and stormwater systems along the coast are vulnerable to storms and sea level rise that may lead to pipe damage, saltwater infiltration, and failure of electrical pumping equipment.



ECOSYSTEM IMPACTS
Climate change will affect freshwater, marine, and land ecosystems by allowing new invasive species and pests to thrive. Sea level rise and more stormwater runoff can further degrade sensitive tidal ecosystems.



EXPOSURE TO HAZARDOUS WASTE
Without proactive preparedness, sea level rise and more extreme storms could increase our exposure to toxins from hazardous waste sites along the coast, posing a risk to human and environmental health.

Our plan for creating a thriving future

The communities of Portland and South Portland have developed **68 strategies** across **4 focus areas** that set us on a course to be thriving, inclusive, low-carbon cities. Three key components:

Meeting our greenhouse gas emissions goals

Through energy and emissions modeling, we evaluated the effects of a suite of policies on greenhouse gas emissions reductions, and identified implementation timelines and targets for meeting our climate goals.
[SEE PAGE 46](#)

Focusing on the potential for transformation

We looked beyond greenhouse gas emissions reductions, working to craft strategies that would help us become increasingly equitable, regenerative, and resilient cities.
[SEE PAGE 51](#)

Setting an achievable course for implementation

We outlined timelines, milestones, city stewards, and financing mechanisms to create a feasible course for implementation in the near-term and over the next thirty years.
[SEE PAGE 56](#)

STRATEGIES ACROSS 4 FOCUS AREAS



Buildings and Energy
[SEE PAGE 56](#)



Waste Reduction
[SEE PAGE 118](#)



Transportation and Land Use
[SEE PAGE 140](#)



Climate Resilience
[SEE PAGE 202](#)

The strategies are summarized in a **matrix** at the end of this chapter.
[SEE PAGE 262](#)

1,625
COMPLETED
SURVEYS
TAKEN IN 4 LANGUAGES

91
EVENTS HOSTED
OR ATTENDED
TO DISCUSS ONE CLIMATE FUTURE

57
VOLUNTEERS
TRAINED
VIA THE VOLUNTEER TRAINING

6
STREET TEAM
MEMBERS
PAID TO LEAD CLIMATE CONVERSATIONS

MEETING IN A BOX

The "Meeting in a Box" built local capacity by equipping community partners and volunteers with tools and content to host their own presentations and events. Discussion questions, handouts, survey, trivia questions, and other materials fostered robust conversations at neighborhood meetings and community gatherings across the two cities.

KEEP IN TOUCH!

oneclimatefuture.org
Check for updates on the One Climate Future website at oneclimatefuture.org where you can also download a copy of the vulnerability assessment and One Climate Future plan.

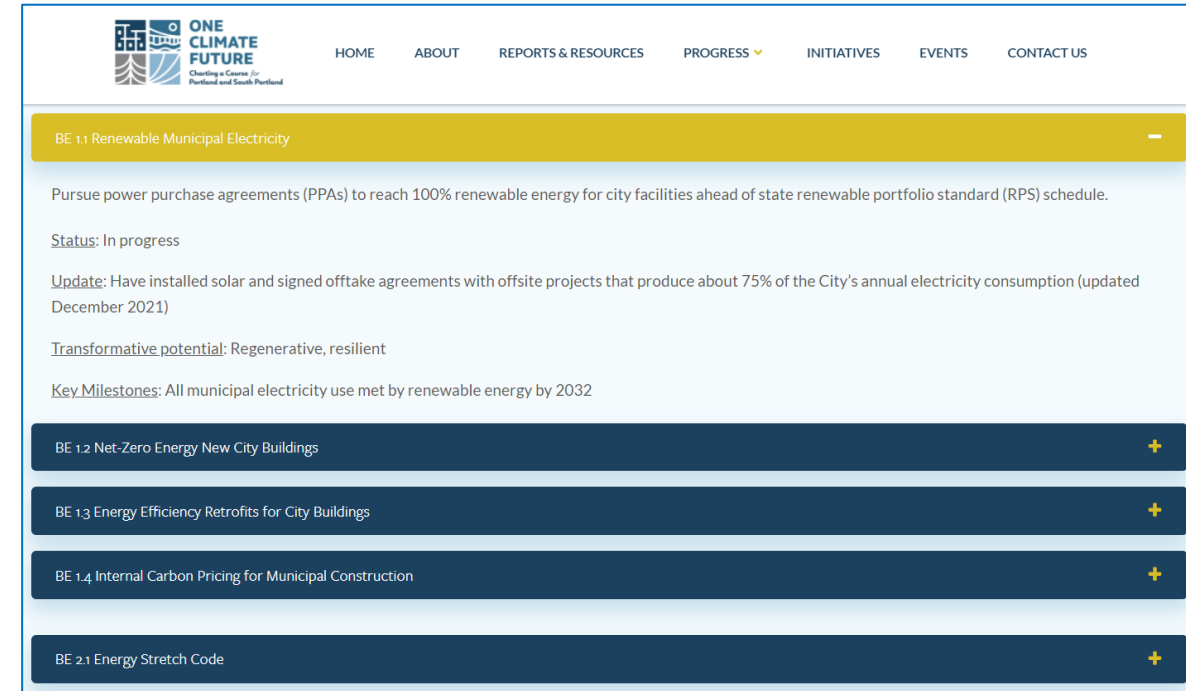
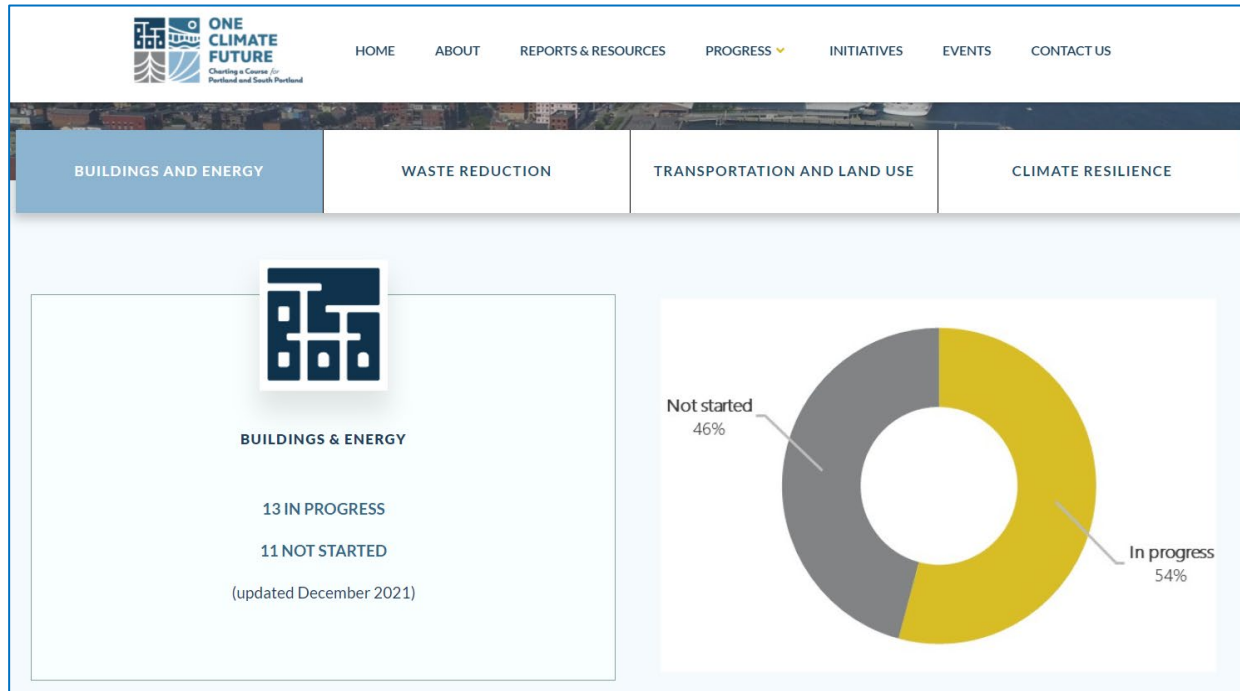
Community Newsletter
Sign up for the One Climate Future Community Newsletter via the sign-up form on the home page of the One Climate Future website at oneclimatefuture.org.

Follow One Climate Future:
[@sustainableportlandme](#)
[@sustainableportlandme](#)
City of Portland
Sustainability Office
City of South Portland
Sustainability Office
[@SustainPortME](#)

Action			Timeline			
#	Action Description	Action Subcomponents	By 2025	2026-2030	2031-2050	Milestones
BE 1 Municipal Buildings and Energy Supply						
BE 1.1	Renewable Municipal Electricity Pursue power purchase agreements (PPAs) to reach 100% renewable energy for city facilities ahead of state renewable portfolio standard (RPS) schedule.	a. Complete bulk solar power purchases currently underway.	●			● All municipal electricity use met by renewable energy by 2035
		b. Engage in further contracts to meet remaining municipal demand.		●		
BE 1.2	Net-Zero Energy New City Buildings Pursue net-zero energy (NZE) buildings for new city government buildings through performance-based procurement.	a. Use performance-based procurement for next city building.	●			● All newly constructed or gut-rehabbed city buildings to be NZE or NZE-ready starting in 2026
		b. Adopt NZE-ready (and NZE where possible) for all new city buildings.		●	●	
BE 1.3	Energy Efficiency Retrofits for City Buildings Develop a strategic energy management plan (SEMP) for all city facilities and lead by example by pursuing deep energy retrofits and electrification for large existing city buildings.	a. Benchmark and conduct annual quality control review of use data for buildings.	●	●	●	● SEMP's commissioned by 2025 ● Deep energy retrofits underway by 2026 ● All retrofits to be NZE by 2030
		b. Commission SEMP's for all city buildings.	●			
		c. Conduct deep energy retrofits for city buildings.		●	●	
BE 1.4	Internal Carbon Pricing for Municipal Construction and Operations Create either a shadow carbon price for evaluating all city decisions, and/or an internal carbon charge paid to a central climate emergency fund.	a. Conduct carbon price feasibility assessment to set appropriate price.	●			● Municipal shadow carbon price or carbon charge implemented by 2026
		b. Implement shadow carbon price or internal carbon charge.		●		



CAAP Inspiration – Portland & South Portland, ME



Other Unique Features of this Plan:

- Infographic fact sheets about aspects of plan and actions
- Coffee & Climate sessions
- Regularly published newsletter w/updates, events, and engagement opportunities for the community



Outreach & Engagement



Stakeholder Groups



Outreach Toolkit



Graphics & Communication
Standard

Stakeholder Groups

CAAP Steering Committee (CSC)

- City staff & external stakeholders
- 3 workshops (2 with TAG)

Technical Advisory Group (TAG)

- Subject matter experts
- 3 workshops (2 with CSC)

Community Voices (Outreach Partners)

- Organizational partners & interested stakeholders
- Help spread the word about engagement opportunities using Outreach Toolkit

Public

- Interested & effected community members
- 2 rounds of community conversations
- 2 surveys
- 1 online workshop



CSC & TAG Collaboration

Build Foundation & Connections

TAG Focus Groups

- Assess community risks and vulnerabilities
- Review previous and existing sustainability, emissions reduction, and adaptation efforts and metrics
- Share planned or potential emissions reduction and adaptation actions and metrics

Align Expectations & Approach

CSC Workshop 1

- Review the Outreach & Engagement Plan
- Discuss community risks and vulnerabilities
- Brainstorm potential emissions reduction and adaptation actions and metrics

Collaborate & Analyze

Joint CSC/TAG Workshop 2

- Review community and stakeholder feedback
- Discuss and confirm climate action goals and targets
- Conduct qualitative evaluation of actions by focus area to identify preliminary action priorities

Prioritize & Strategize

Joint CSC/TAG Workshop 3

- Confirm action recommendations
- Review preliminary resource analysis
- Discuss implementation resource opportunities and gaps



Outreach Toolkit

Contents

- Text & graphics for City website
- Social media content for City posting
- Project fact sheet/flyer
- Newsletter blurbs
- Survey announcement

Timeline

- Initial development (April 2022)
- Update 1 (September 2022)
- Update 2 (January 2023)



Brand & Communication Standard

- Align with existing DSM branding
- Uniform aesthetic and language for all materials
- Document templates



Look ahead

This week & next

- Finalize SC and TAG Members
- Draft Agendas for Workshop #1 and Focus Groups
- RVA Worksheets and Municipal Asset Analysis
- GHG Emissions Inventory Review
- Finalize Website Content and begin building website

May 2022

- Continue RVA Process
- Updated baseline GHG Emissions Forecast
- Finalize Outreach and Engagement Plan
- Begin Planning Community Conversations
- Finalize Community Survey #1



ADAPT DSM Ideas and Feedback

- What are some plans that have inspired you?
- What do you feel would be most useful to include in this plan?
- What else should the project team not forget?
- Who else should we make sure to include?

*Share verbally
or via chat*

