



# **City Climate Action Planning**

# By the end of this guide, users will:

- Understand how climate and development goals can be jointly achieved
- Be familiar with common elements of climate action planning: visioning, planning, and implementing.
- Understand the three steps within each element

# **Course Content**

#### What is a Climate Action Plan?

A climate action plan creates a framework for cities to reduce or "mitigate" greenhouse gas emissions in coordination with other city plans for development, transport, health, and other issues.

#### By the end of this guide, users will:

- Understand how climate and development goals can be jointly achieved
- Be familiar with common elements of climate action planning: visioning, planning, and implementing
- Understand the three steps within each element

Note: This version is a DRAFT. We welcome feedback to help us improve the content.

#### **Climate Action Plans Can Address Two Areas**

City climate action plans can address:

- Mitigating climate change by assessing and reducing greenhouse gas emissions, and/or
- Adapting to climate change by assessing the vulnerabilities of city locations and determining how to adapt them to flooding, drought, temperature fluctuations, or species changes caused by climate change.

This guide focuses on mitigation but many city plans include both.

Most mitigation climate plans contain:

- a city-wide emissions mitigation goal,
- actions to reach the goal, and
- indicators to track progress toward the goal.

Actions can be anything from enacting a more stringent building code to promoting public transport.

Some examples of city climate change plans:



**Baltimore's plan** focuses on inclusive processes and programs to improve sustainability awareness, education, and training.



**<u>Copenhagen's plan</u>** has an aggressive target to reach carbon neutrality by 2025.

Johannesburg's climate action plan includes both mitigation and adaptation goals.

#### Why Take Action on Climate Change?

A climate action plan can create shared vision around a climate goal.

It can align climate policies with social and economic development goals, unlocking complementary social and economic benefits for cities.

Here are some examples:

• Improving energy efficiency can reduce municipal budgets and household energy bills over the long term.

- Expanded bus service not only conserves energy but also reduces traffic-related injuries and fatalities.
- Reducing air pollution improves health outcomes and cuts health care costs.

For more examples, see **Opportunity 2030: Benefits of climate action in cities**, and "The economic development side of sustainability: growth versus smart growth." In **Taking sustainable cities seriously: Economic development, the environment, and quality of life in American cities**.

#### Can You Achieve Both Climate and Development Priorities?

Actions that reduce greenhouse gas emissions can also improve environmental and social outcomes. For instance, <u>Yokohama's</u> conversion to a denser urban structure will both support an aging population and reduce emissions.



#### Source: City of Yokohama, 2015

What Makes a Good Climate Action Plan?

	<b>Ambitious</b> : Setting goals and implementing actions that evolve iteratively towards an ambitious vision.
	<b>Inclusive</b> : Involving multiple city government departments, stakeholders, and communities (with particular attention to marginalized groups) in all phases of planning and implementation.
<b>1</b>	<b>Fair</b> : Seeking solutions that equitably address the risks of climate change and share the costs and benefits of action across the city.
-	<b>Comprehensive and integrated</b> : Coherently undertaking adaptation and mitigation actions across a range of sectors within the city, as well as supporting broader regional initiatives and priorities of higher levels of government when possible and appropriate.
(!)	<b>Relevant</b> : Delivering local benefits and supporting local development priorities.
$\rightarrow$	<b>Actionable</b> : Proposing cost effective actions that can reasonably be implemented by the actors involved given local mandates, finances, and capacities
Q	<b>Evidence-based</b> : Reflecting scientific knowledge and local understanding, and using assessments of vulnerability and emissions and other empirical inputs to inform decision making.
	<b>Transparent and verifiable</b> : Following an open decision-making process and setting goals that can be measured, reported, independently verified, and evaluated.

### Source: UN Habitat, 2015

# What Are the Main Elements of Climate Action Planning?

The three main elements of Visioning, Planning, and Implementing, and the steps in each, will be discussed in this guide. The important element of Stakeholder Engagement must be carried out simultaneously with all three.



### **Engaging Stakeholders is Essential**

IAP2 Spectrum of Public Participation

Engaging stakeholders underlies all phases of climate action planning. It improves the legitimacy of the plan and enables better decision making. Cities can identify key stakeholders and encourage them to take part in the process.

The chart below by the **International Association for Public Participation (IAP2)** shows how public participation efforts can range from informing the public to empowering stakeholders, which means actually including them in decision making. Many efforts stop at providing information, but those that move further toward empowerment usually gain greater stakeholder involvement.

lap

#### public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world. INCREASING IMPACT ON THE DECISION CONSULT INVOLVE COLLABORATE INFORM EMPOWER To provide the public with balanced and To obtain public To work directly with To partner with the To place final decision the public throughout the process to ensure that public concerns feedback on analysis public in each aspect making in the hands of of the decision including the objective information alternatives and/or the public to assist them in decisions development of understanding the and aspirations are consistently understood and considered. problem, alternatives alternatives and the opportunities and/or solutions. identification of the preferred solution. PUBLIC We will keep you informed, listen to and acknowledge concerns and aspirations, and We will keep you We will work with you We will look to you for We will implement advice and inno in formulating solutions and UBLIC informed to ensure that your concerns and what you decide aspirations are **IISE TO THE** provide feedback on directly reflected in incorporate your how public input influenced the decision. the alternatives advice and developed and provide feedback on how public input influenced recommendations into the decisions to the maximum extent the decision. possible.

IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the

Source: International Association for Public Participation (IAP2)

# Quantify City Greenhouse Gas Emissions



Climate action planning starts by assessing current levels of greenhouse gas emissions.

• This "inventory" of emissions will help identify the economic sectors in the city that provide the greatest opportunity to reduce emissions.

#### Assess the Universe of Potential Climate Actions



- Review completed, ongoing, and planned climate actions and assess what GHG emissions reductions and/or other benefits they accomplished.
- Look at what similar cities are doing and with what results.
- This review will help determine the city's climate mitigation goal and suggest new actions to achieve the goal.

The online Planetizen course, <u>Creating a Low-Carbon, Resilient City</u>, gives guidance on assessing actions.

#### Set an Emissions Reduction Target



- An emissions reduction target is a commitment to limit greenhouse gas emissions to a specific quantity by a specific date.
- Setting a quantifiable limit for emissions allows you to determine which actions will be necessary to meet it.

For more guidance, see chapter 4 in Mitigation Goal Standard.

#### Example: Rio de Janeiro



#### **Prioritize Climate Actions**



- Prioritize the possible climate actions that, in combination, will achieve the target. Priorities should be guided by the findings of the emissions inventory and the review of existing actions.
- Cities should also consider availability of funding, stakeholder input, balancing climate adaptation with mitigation goals, and synergies with local development priorities.

#### **Determine Actions**



Actions can be new policies, practices, or tools to reduce carbon emissions.

They should be:

- Specific enough that they can be readily implemented and measured
- Prioritized with clear timelines for implementation
- Assigned to specific agencies, organizations, or stakeholders that can be held accountable for implementation
- Evaluated for their net costs and benefits (both to the climate and otherwise), and potential sources of financial support

Climate actions defined in Washington DC's **Sustainable DC Plan** show the timeframe and responsible parties for each action.

Goal 1: Minimize the generation of greenhouse gas emissions from all sources					
ACTION	TIMEFRAME	LEAD AGENCY	PARTNER AGENCIES		
1.1 Create online tools that allow people to view and share greenhouse gas emissions data and make more informed choices.	Short	DOEE	осто		
1.2 Create financial tools that support climate protection programs by capturing the environmental costs of products and services.	Short	DOEE	OCTO, OP		
1.3 Report District emissions on a regular basis to track the reductions that can be attributed to specific initiatives.	Short	DOEE	DGS, DPW		

#### Target: By 2032, Reduce Greenhouse Gases by 50 Percent

*Source:* <u>Washington DC Department of Energy and the</u> Environment, 2012

#### Synergize Climate Action with Other City Priorities



The city climate action plan can be a stand-alone document or be integrated across other city plans, such as comprehensive plans, zoning or building codes, or capital projects programs.

The climate action plan can be integrated through the following strategies:

- Cross references: The climate action plan is cross-referenced by other city plans and vice-versa
- Appendices: The climate action plan is listed as an appendix in other city plans
- Chapters: City plans include a chapter on the climate action plan
- **Integrated**: Elements of the climate action plan, such as the emissions reduction target and specific actions, are directly integrated into city plans

### **Example: Paris**

Planning	
Prioritize climate actions	From 700 proposals, climate actions were selected based on the city's greenhouse gas inventory, a review of the previous 10 years of climate action, a study outlining possible climate trajectories, and input from a citizens' conference.
Determine actions	Actions were defined, given a timeline, and classified under one of the plan's key themes: carbon neutrality and renewable energy, resilience, the urban ecosystem, and ambition.
Synergize climate actions with other city priorities	The Paris climate action plan cross-references related city plans, such as the mobility plan and the local land use plan.

#### Learn more about this example.

#### **Create an Implementation Plan**



The implementation plan may include:

- The specifics defined for each action such as cost, responsibilities, and timelines
- Indicators that can track and assess action performance, such as progress toward completing the action, the GHG reduction impacts, and benefits from the action

#### **Monitor Implementation and Outcomes**



#### Cities can monitor the **progress of the implementation plan according to the designated indicators**. Implementation indicators can be a percent of the action achieved, or be more specific. For instance, indicators to support Washington DC's sustainability goal for increased urban density include

increasing affordable housing and restricting parking surfaces for large developments.

Cities can also monitor the **outcomes of actions over time**. Outcomes can be GHG emissions reductions and other benefits like jobs created or financial savings.

For more information, see chapters 5-14 of the **Policy and Action Standard**.

#### **Report Progress toward the Emission Reduction Target**



Cities can calculate overall progress toward achieving their emissions reduction target using the following steps:

- Calculate emissions during the target period or target year.
- Calculate the change in emissions since setting the target and calculate additional emission reductions needed to achieve the target.
- Assess why emissions have changed since the start of the target and whether the city is on track to achieve the target.

For more information on monitoring and reporting progress toward the target, see chapters 8 and 9 of the **Mitigation Goal Standard**.

#### **Example: Washington DC**



#### How Can National Governments Support City Climate Actions?

A national government can <u>act as a partner</u> on climate action planning by offering supportive national and regional policies and financing.

Policies can be direct such as setting energy standards for new buildings, or act as enablers, such as providing design planning tools to cities.

#### **Examples of Direct and Enabling National Policy Measures**

	Policy goal	Examples of policy measures
Direct interventions	Promote energy-efficient design of new buildings	<ul> <li>Establish national building energy codes</li> <li>Provide incentives for efficient building design and construction</li> </ul>
	Carbon pricing and fuel price reform	<ul><li>Remove fossil fuel subsidies</li><li>Institute carbon pricing</li></ul>
Enabling measures	Enhance the financial capacities of local governments	<ul> <li>Develop an enabling regulatory and legal environment for responsible sub-national borrowing</li> <li>Build local government capacities on finance and revenue generation</li> </ul>
	Build local administrative and technical capacity for low-carbon development	<ul> <li>Design planning tools for cities</li> <li>Provide training opportunities relating to low-carbon development</li> </ul>

## Source: Broekhoff, Piggot, & Erickson, 2018

#### Recap

A climate action plan creates a framework for cities to reduce climate impacts in coordination with other city plans such as those for development, transport, and health.

Most climate action plans contain a city-wide climate mitigation goal, actions to reach the goal, and indicators to track progress toward the goal.

Actions to reduce climate change impacts can create development benefits along with positive environmental outcomes.

#### Quiz Yourself - 1

 $\odot$  CAP goal of lower carbon emissions and CDP goal of better mass transit and reduced traffic congestion.

 $\odot$  CAP goal to save heating and cooling energy and CDP goal of compact urban building design for walkable neighborhoods.

 $\odot$  CAP goal of investments to attract wind and solar power manufacturing and CDP goal of attracting new jobs.

 $\odot$  CAP goal of increasing fuel efficiency of urban transit and CDP goal of building more roads.

#### Quiz Yourself - 2

- Implementation, visioning, planning
- $\bigcirc$  Planning, visioning, implementation
- $\odot$  Visioning, planning, implementation
- It doesn't matter

Quiz Yourself - 3

- Indicators showing progress toward goal
- $\odot$  Employee hours spent on the plan
- $\odot$  Changes in traffic congestion
- Complaints

#### **References and Climate Action Plans**

#### References

Bosewell, M., & T. Seale. n.d. *Creating a low-carbon, resilient city*. Planetizen Courses. <u>https://courses.planetizen.com/course/low-carbon-cities</u>.

Broekhoff, D., Piggot, G., & P. Erickson. 2018. "Building thriving, low-carbon cities: An overview of policy options for national governments." Coalition for Urban Transitions. London and Washington, DC. <u>http://newclimateeconomy.report/workingpapers/wp-content/uploads/sites/5/2018/02/Building-Thriving-Low-Carbon-Cities-An-Overview-Full-Paper-1.pdf</u>.

C40 Cities. 2018. Climate action planning

framework. https://assets.locomotive.works/sites/5ab410c8a2f42204838f797e/pages/5ae2f92374c4837e 195d0e00/files/CAP\_Framework\_20180608.pdf?1531218037.

Day, T., Gonzales-Zuñiga, S., Höhne, N., Fekete, H., Sterl, S., Hans, F., Warembourg, A., Anica, A., & van Breevoort, P. 2018. "Opportunity 2030: Benefits of climate action in cities." NewClimate Institute and C40 Cities. <u>https://c40-production-images.s3.amazonaws.com/other\_uploads/images/1668\_C40\_Opportunities\_</u> 2030\_report.original.pdf?1520440895.

Northrop, E., H. Biru, H., Lima, S., Bouye, M., & R. Song. 2016. "Examining the alignment between the intended nationally determined contributions and sustainable development targets." Working Paper. Washington, DC: World Resources Institute.

OECD (Organisation for Economic Co-operation and Development) & Bloomberg Philanthropies. 2014. *Cities and climate change: National governments enabling local action*. Policy Perspectives series. <u>http://www.oecd.org/env/cc/Cities-and-climate-change-2014-Policy-Perspectives-Final-web.pdf</u>.

Portney, K. E. 2013. "The economic development side of sustainability: Growth versus smart growth." In *Taking sustainable cities seriously: Economic development, the environment, and quality of life in American cities.* 2nd ed. Cambridge: MIT

Press. <u>https://mitpress.mit.edu/books/taking-sustainable-cities-seriously-second-edition</u>.

UN Habitat. 2015. *Guiding principles for city climate action* planning. <u>https://unhabitat.org/books/guiding-principles-for-climate-city-planning-action/</u>.

von Korff, Y., d'Aquino, P., Daniell, K., and R. Bijlsma. 2010. "Designing participation processes for water

management and beyond." *Ecology and Society*, 15(3):1. <u>https://agritrop.cirad.fr/557075/1/document\_557075.pdf</u>.

WRI (World Resources Institute). 2014. Global community-scale greenhouse gas emission inventories: An accounting and reporting standard for cities. Washington DC:
 WRI. <u>https://ghgprotocol.org/greenhouse-gas-protocol-accounting-reporting-standard-cities</u>

WRI (World Resources Institute). 2014. *The Greenhouse Gas Protocol Mitigation Goal Standard*. Washington DC: WRI. <u>http://www.ghgprotocol.org/mitigation-goal-standard</u>.

WRI (World Resources Institute). 2014. *The Greenhouse Gas Protocol Policy and Action Standard*. Washington DC: WRI. <u>http://ghgprotocol.org/policy-and-action-standard</u>.

### Examples of climate action plans

Baltimore Office of Sustainability. 2009. *Baltimore sustainability plan*. <u>https://www.baltimoresustainability.org/plans/sustainability-plan/</u>.

City of Cape Town. 2011. *Moving mountains: Cape Town's Action Plan for Energy and Climate Change*. <u>http://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%</u>20material/Moving\_Mountains\_Energy+CC\_booklet\_2011-11.pdf.

City of Copenhagen Technical and Environmental Administration. 2012. *CPH 2025 climate plan*. <u>http://kk.sites.itera.dk/apps/kk\_pub2/pdf/983\_jkP0ekKMyD.pdf</u>.

City of Rio de Janeiro. 2012. Greenhouse gas emissions inventory of the City of Rio de Janeiro in 2012 and updating of the Municipal Plan of Action for Emissions Reduction. http://www.rio.rj.gov.br/dlstatic/10112/1712030/4114527/CRJ\_InventarioGEE2012\_resumo\_tec nicoINGLESFINAL1.pdf.

City of Yokohama. 2015. *Hope for our Earth from Yokohama*. <u>https://www.city.yokohama.lg.jp/kurashi/machizukuri-kankyo/ondanka/jikkou/old/h26keikaku/k</u> <u>eikaku.files/h2603gaiyou-en.pdf</u>.

EcoMetrix Africa. 2015. *Climate Change strategic framework city of* Johannesburg. <u>https://www.globalcovenantofmayors.org/wp-content/uploads/2015/06/CCSF-CoJ-Final.pdf</u>.

Washington DC Department of Energy and the Environment. 2012. *Sustainable DC Plan*. <u>http://www.sustainabledc.org/wp-content/uploads/2017/03/SDC\_Plan\_2016\_compressed2.pdf</u>.

### Credits

Author: Carley Chavara, World Resources Institute

Editor: Mary Paden

This Learning Guide was developed by **WRI Ross Center for Sustainable Cities** in partnership with **Transformative Urban Mobility Initiative (TUMI)**.





**Transformative Urban Mobility Initiative** 

Visit other websites in our broader digital ecosystem:



WORLD RESOURCES | ROSS INSTITUTE | CENTER The City Fix

Copyright (c) 2023 World Resources Institute. All Rights Reserved. | Privacy Policy | Terms & Conditions

https://thecityfixlearn.org/courses/city-climate-action-planning